Utah Wildlife Board Meeting

January 4, 2022, Eccles Wildlife Education Center 1157 South Waterfowl Way, Farmington, Utah

The meeting can be viewed live at https://youtu.be/XeaH WIUU4E

Tuesday, January 4, 2022 - 9:00 am

1. Approval of Agenda ACTION– Kevin Albrecht, Chairman

2. Approval of Minutes ACTION

Kevin Albrecht, Chairman

3. Old Business/Action Log

— Randy Dearth, Vice-Chairman

4. DWR Update INFORMATIONAL

J. Shirley, DWR Director

5. Emerging Technologies Survey Results INFORMATIONAL

- Wyatt Bubak, Law Enforcement Captain

6. Big Game R657-5 Rule Amendments ACTION

- Covy Jones, Big Game Coordinator

7. Furbearer Season Dates and Bobcat Permit Recommendations ACTION

Darren DeBloois, Mammals Coordinator

8. Cougar Recommendations and Rule R657-10 revisions for 2022-2023 **ACTION**

- Darren DeBloois, Mammals Coordinator

9. R657-33 Black Bear Rule Amendments and Recommendations for 2022 ACTION

- Darren DeBloois, Mammals Coordinator

10. 1:00 p.m. Time Certain – Board Hearing

Eskelsen Orchards LLC

ACTION

- Kyle Maynard, Assistant Attorney General

11. Other Business CONTINGENT

- Kevin Albrecht, Chairman

Wildlife Board Motions

Following is a summary of Wildlife Board motions directing the Division to take action and the response to date:

Fall 2022 - Target Date - Progress on changes to statute for the poaching of a swan

MOTION: I move that we ask the division to look into changing statute to reflect a 7-year waiting period for poaching a swan and have the division report back. This is to be placed on the action log.

Motion made by: Karl Hirst Assigned to: Wyatt Bubak Action: Under Study

Status:

Placed on Action Log: December 2, 2021

<u>Fall 2022 – Target Date – Possibility of a 3-year season structure for Big Game seasons and hunter orange regulation reforms</u>

MOTION: I move that we ask the division to look into a 3-year season structure for big game season dates and the possibilities of hunter orange regulation reforms (including amount required, what other states allow etc.) This is to be placed on the action log.

Motion made by: Bryce Thurgood Assigned to: Covy Jones and Wyatt Bubak

Action: Under Study

Status:

Placed on Action Log: December 2, 2021

Utah Wildlife Board Meeting

December 2, 2021, Eccles Wildlife Education Center 1157 South Waterfowl Way, Farmington, UT 84025

The meeting will stream live at https://youtu.be/V7d0dHAZJNg

Thursday, December 2, 2021 - 9:00 am

Approval of Agenda Kevin Albrecht, Chairman	ACTION
2. Approval of Minutes – Kevin Albrecht, Chairman	ACTION
3. Old Business/Action LogRandy Dearth, Vice-Chairman	CONTINGENT
4. DWR Update– J. Shirley, DWR Director	INFORMATIONAL
5. Waterfowl Recommendations 2022-2024 - Rule R657-9– Blair Stringham, Migratory Game Bird Program Coordinator	ACTION
Big Game Application Timeline Lindy Varney, Wildlife Licensing Coordinator	INFORMATIONAL
7. Max Points Permits and OTC Elk Permit Recommendations – Rule R657-62- Lindy Varney, Wildlife Licensing Coordinator	ACTION
2022 Big Game Hunting Seasons and Key Dates - Covy Jones, Big Game Coordinator	ACTION
CWMU and Landowner 2022 Permit Recommendations - Chad Wilson, Public Wildlife/Private Lands Coordinator	ACTION
10. Once-in-a-Lifetime Species Season Date Corrections- Riley Peck, OIAL Program Coordinator	ACTION
11. Prohibited Species Request – Samantha Nelson– Justin Shannon, Wildlife Section Chief	ACTION
12. Other Business – Kevin Albrecht, Chairman	CONTINGENT

Draft 12/02/2021

Wildlife Board Motions

Following is a summary of Wildlife Board motions directing the Division to take action and the response to date:

Fall 2021 – Target Date – Resident Only permits for the Youth Elk hunt

MOTION: I move that we ask the Division to review the possibility of youth any weapon elk tags going to residents only, and bring back the information next year. This is to be placed on the Action Log.

Motion made by: Randy Dearth

Assigned to: Covy Jones/Lindy Varney

Action: Under Study

Status: To be updated December 2, 2021 Placed on Action Log: December 3, 2020

Fall 2021 – Target Date – Bonus Point Application

MOTION: I move that we direct the Division to investigate the playing field between Non-Residents and Residents on picking species bonus points. This is to be placed on the Action Log.

Motion made by: Karl Hirst Assigned to: Lindy Varney Action: Under Study

Status: To be presented November/December 2021

Placed on Action Log: August 26, 2021

Spring 2022 – Target Date – Progress on changes to the 2023 Draw Application Dates

MOTION: I move that we track the Division's progress of the 3023 draw application date changes with an update to the Wildlife Board in 1 year. This is to be placed on the Action Log.

Motion made by: Kevin Albrecht Assigned to: Lindy Varney Action: Under Study

Status: To be updated December 2, 2021 Placed on Action Log: April 29, 2021

Spring 2022 – Target Date – List of allocated permits by unit to be published on the Division website

MOTION: I move that we direct the Division to place a list of allocated permits by unit on the Division's website. This is to be placed on the Action Log.

Motion made by: Randy Dearth Assigned to: Justin Shannon

Action: Under Study

Status: To be presented April/May 2022 Placed on Action Log: April 29, 2021

Action Log Assignment

Utah Wildlife Board Meeting

December 2, 2021, Eccles Wildlife Education Center 1157 South Waterfowl Way, Farmington, UT 84025

Summary of Motions

1) Approval of Agenda (Action)

The following motion was made by Randy Dearth, seconded by Gary Neilson and passed unanimously.

MOTION: I move that we approve the agenda.

2) Approval of Minutes (Action)

The following motion was made by Wade Heaton, seconded by Karl Hirst and passed unanimously.

MOTION: I move that we approve the minutes of the September 30, 2021 Wildlife Board Meeting.

3) Waterfowl Recommendations 2022-2024 – Rule R657-9 (Action)

The following motion was made by Bryce Thurgood, seconded by Wade Heaton and passed unanimously.

MOTION: I move that we accept the recommendations as presented with the addition of a 3-year waiting period for youth and a 5-year waiting period for adults for those who harvest a trumpeter swan during the swan season, and a 7-year waiting period for those who fail to check in a harvested swan.

The following motion was made by Bryce Thurgood, seconded by Karl Hirst and passed unanimously.

MOTION: I move that we remove the 7-year waiting period for those who fail to check in a harvested swan from the previous motion, and instead follow the penalties as established in state law.

The following motion was made by Karl Hirst, seconded by Bryce Thurgood, passed unanimously, and placed on the action log.

MOTION: I move that we ask the Division to look into changing statue to reflect a 7-year waiting period for poaching a swan, and to have the Division report back.

4) Max Point Permits and OTC Elk Permit Recommendations – Rule 657-62 (Action)

The following motion was made by Randy Dearth, seconded by Karl Hirst and passed unanimously.

MOTION: I move that we not accept the recommendations to go to a draw, and instead keep any bull and spike elk permits over-the-counter.

The following motion was made by Karl Hirst, seconded by Gary Nielson and passed unanimously.

MOTION: I move that we stay with a 50/50 split on max points.

5) 2022 Big Game Hunting Seasons and Key Dates (Action)

The following motion was made by Bryce Thurgood, seconded by Wade Heaton, passed unanimously, and placed on the action log.

MOTION: I move that we ask the Division to look into a 3-year season structure for big game season dates and the possibilities of hunter orange regulation reforms (including amount required, what other states allow, etc.).

The following motion was made by Wade Heaton, seconded by Gary Nielson and passed unanimously.

MOTION: I move that we approve the recommendations as presented with the addition of the 2-day extension on the youth any bull elk hunt.

6) CWMU ad Landowner 2022 Permit Recommendations (Action)

The following motion was made by Randy Dearth, seconded by Bryce Thurgood and passed unanimously with 2 recusals (Wade Heaton and Bret Selman).

MOTION: I move that we approve as presented with the caveat that any additional public tags due from public land being traded out come from the private allocation, and to reconvene the CWMU Advisory Committee to reevaluate the rule.

7) Once-in-a-Lifetime Species Season Date Corrections (Action)

The following motion was made by Karl Hirst, seconded by Wade Heaton and passed unanimously.

MOTION: I move that we approve the corrected dates as presented.

8) Prohibited Species Request – Samantha Nelson (Action)

The following motion was made by Karl Hirst, seconded by Wade Heaton and passed unanimously.

MOTION: I move that we deny the variance request for the possession of a capuchin monkey.

Utah Wildlife Board Meeting

December 2, 2021, Eccles Wildlife Education Center 1157 South Waterfowl Way, Farmington, UT 84025 Attendance

Wildlife Board	RAC Chairs
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Kevin Albrecht – Chairman
Randy Dearth – Vice-Chairman
J. Shirley – Executive Secretary
Wade Heaton
Bret Selman

Karl Hirst
Central – Brock McMillan
Southern – Brayden Richmond
Southeastern – Scoot Flannery
Northeastern – Brett Prevedel
Northern – Justin Oliver

Division Personnel

Robin Goodman	Paul Gedge	Teresa Griffin
Ashley Green	Mike Christensen	Dax Mangus
Mike Canning	Staci Coons	Guy Wallace
Miles Hanberg	Paige Wiren	Virginia Stout
Ben Nadolski	Kyle Maynard	Jim Christensen
Jason Vernon	Lindy Varney	Rusty Robinson
Wyatt Bubak	Riley Peck	Phil Gray
Justin Shannon	Blair Stringham	Matt Briggs
Kenny Johnson	Covy Jones	
•	Chad Wilson	

Public Present

Tanner Carlson
Troy Justensen
Kevin Norman
Ben Lowder
Angela Wonnacott
Samantha Nelson
Alan Peterson

Utah Wildlife Board Meeting

December 2, 2021, DNR Auditorium 1157 South Waterfowl Way, Farmington, UT 84025 https://youtu.be/V7d0dHAZJNg

00:08:11 Chairman Albrecht called the meeting to order, welcomed the audience, reviewed the meeting procedures, and asked the Board and RAC chairs introduce themselves.

00:09:17 1) Approval of Agenda (Action)

The following motion was made by Randy Dearth, seconded by Gary Nielson and passed unanimously.

MOTION: I move that we approve the agenda.

00:09:45 Chairman Albrecht reverted to having the RAC chairs introduce themselves.

00:10:33 2) Approval of Minutes (Action)

The following motion was made by Wade Heaton, seconded by Karl Hirst and passed unanimously.

MOTION: I move that we approve the minutes of the September 30, 2021 Wildlife Board Meeting.

00:11:01 3) Old Business/Action Log (Contingent)

Vice-chairman Randy Dearth reviewed items from the action log and asked Division staff to give status updates.

00:22:12 4) DWR Update (Informational)

Director J. Shirley gave updates on all the Division sections: Administrative Services, Aquatic, Conservation Outreach, Habitat, Law Enforcement and Wildlife.

00:35:13 5) Waterfowl Recommendations 2022-2024 – Rule 657-9 (Action)

Migratory Game Bird Program Coordinator Blair Stringham reviewed the recommendations.

00:37:00 Board/RAC Questions

The Board asked how the trumpeter swan harvest quota is set, and if trumpeter swans are being targeted by hunters, especially on public shooting grounds, and asked if the Division might consider closing public shooting grounds. The Board asked what the process is for modifying or eliminating the quota, and asked about the impact of waiting periods on the regular swan hunt. The Board further asked how swans are identified when hunters bring them in to be checked.

The RACs asked the Division if it would consider modifying the swan season hunting dates on public shooting grounds.

00:50:57 Public Input

Director Shirley summarized the online public input on this agenda item.

00:51:56 Public Comments/Division Clarification

Public comments were accepted at this time. The Division provided clarification at this time.

00:59:21 RAC Summaries

All RACs unanimously passed the Division's recommendations. The Northern RAC chair explained why their region supported the idea of closing public shooting grounds to try and mitigate the problem of hunters targeting trumpeter swans.

01:06:01 Division Clarification

The Division provided clarification on some of the ideas being discussed.

01:07:23 RAC Summaries

Chairman Albrecht further summarized the RAC motions on this agenda item.

01:08:17 Board Questions/Discussion

The board discussed enacting waiting periods for hunters who took a trumpeter swan, to whom the waiting period would apply and for what length of time the waiting period would extend. The Board asked the Division to explain the harvest data reporting and check-in process, as well as how to visually differentiate between a tundra swan and a trumpeter swan.

The Division explained the law enforcement penalty incurred as a result of failure to check in a harvested trumpeter swan.

The Board asked what the Division's rule change process is, and Director Shirley explained penalties already in place for different kinds of hunting law infractions.

The Board discussed the social aspect of this agenda item, and asked what the process is to make a rule change.

Chairman Albrecht asked the RAC chairs if they would support addressing a rule change during this meeting.

The Board asked about the requirement to check in a swan within 72 hours of harvesting it, and asked if Division law enforcement would be able to identify which hunters were targeting trumpeters. The Division communicated what the penalty for poaching a swan is.

The Division clarified aspects of the discussion.

The following motion was made by Bryce Thurgood, seconded by Wade Heaton and passed unanimously.

MOTION: I move that we accept the recommendations as presented with the addition of a 3-year waiting period for youth and a 5-year waiting period for adults for those who harvest a trumpeter swan during the swan season, and a 7-year waiting period for those who fail to check in a harvested swan.

The following motion was made by Bryce Thurgood, seconded by Karl Hirst and passed unanimously.

MOTION: I move that we remove the 7-year waiting period for those who fail to check in a harvested swan from the previous motion, and instead follow the penalties as established in state law.

The following motion was made by Karl Hirst, seconded by Bryce Thurgood and passed unanimously.

MOTION: I move that we ask the Division to look into changing statute to reflect a 7-year waiting period for poaching a swan, and to have the Division report back.

01:42:38 6) Big Game Application Timeline (Informational)

Licensing Coordinator Lindy Varney summarized the informational presentation that was posted on the Division's website.

01:43:21 Board Questions

The Board asked questions about the implementation of the proposed timeline change.

01:45:46 7) Max Point Permits and the OTC Elk Permit Recommendations

- Rule R657-62 (Action)

Wildlife Licensing Coordinator Lindy Varney summarized the elk permit portion of this agenda item, as well as how this item was handled in the most recent RAC tour.

01:478:20 Board/RAC Questions

The Board and RAC asked about the technical problems that have arisen on high volume online permit sales days. The Board asked for any bull youth permit data.

01:58:56 Technical Issues

02:16:06 Public Input

Director Shirley summarized the online public input on this agenda item.

02:18:24 RAC Summaries

All RACs voted to oppose the Division's proposal.

02:26:20 Public Comments/Division Clarification

Public comments were accepted at this time. Clarification was given at this time.

02:32:02 Board Discussion

Chairman Albrecht further summarized the RAC motions.

The Board discussed the option of offering unlimited elk permits, and how that might affect a hunter's experience in the field, shared perspectives on the over-the-counter permitting process, and commented on the value of elk committee input.

The Board asked for last year's hunt data.

The Board discussed input from the public, as well as hunt quality. The Board and RACs discussed voting last year on unlimited permits.

The following motion was made by Randy Dearth, seconded by Karl Hirst and passed unanimously.

MOTION: I move that we not accept the recommendation to go to a draw, and instead keep any bull and spike elk permits over-the-counter

The Board discussed eliminating the multi-season permit.

03:00:33 Clarification

Wildlife Licensing Coordinator Lindy Varney summarized the max points permits portion of this agenda item, as well as how this item was handled in the most recent RAC tour.

03:03:55 Board/RAC Questions

The Board asked about selectively changing the split on premium units.

03:05:13 Public Input

Director Shirley summarized the online public input on this agenda item.

03:05:59 RAC Summaries

All RACs voted to oppose the Division's proposal.

03:08:45 Public Comments/Division Clarification

Public comments were accepted at this time. There was no clarification given at this time.

03:12:09 Board Discussion

Chairman Albrecht reiterated the outcomes of each RAC on this agenda item.

The Board expressed appreciation of the Division's having worked on this issue.

The following motion was made by Karl Hirst, seconded by Gary Nielson and passed unanimously.

MOTION: I move that we stay with a 50/50 split on max points.

03:15:04 LUNCH

04:10:52 Division Clarification

Law Enforcement section chief Wyatt Bubak and Licensing Coordinator Lindy Varney further clarified penalties that were discussed earlier relating to swan hunts.

04:20:55 8) 2022 Big Game Hunting Seasons and Key Dates (Action)

Big Game Coordinator Covy Jones summarized the online presentation that was

posted on the Division's website.

04:24:35 Technical Issues

04:31:20 Big Game Coordinator Covy Jones summarized the online presentation that was posted on the Division's website.

04:32:09 Board/RAC Questions

The Board asked questions about specific properties and hunts

04:35:56 Public Input

Director Shirley summarized the online public input on this agenda item.

04:36:57 RAC Summaries

All RACs passed recommendations with varying stipulations.

04:40:1 Public Comments/Division Clarification

Public comments were accepted at this time. Clarification was given at this time.

04:42:21 Board Questions and Discussion

The Board asked about hunter orange requirements, and also asked about hunting season structure.

The following motion was made by Bryce Thurgood, seconded by Wade Heaton and passed unanimously.

MOTION: I move that we ask the Division to look into a 3-year season structure for big game season dates, and the possibilities of hunter orange regulation reforms (including amount required, what other states allow, etc.).

The following motion was made by Wade Heaton, seconded by Gary Nielson and passed unanimously.

MOTION: I move that we approve the recommendations as presented with the addition of the 2-day extension on the youth any bull elk hunt.

04:50:53 9) CWMU and Landowner 2022 Permit Recommendations (Action)

Chad Wilson summarized the online presentation that was posted on the Division's website.

04:52:07 Board/RAC Questions

The Board asked questions about permit allocations on specific CWMUs, about which CWMUs will be reviewed by the CWMU committee, about identifying public versus private land in CWMUs, and about access to public land within a CWMU. The Board asked about the renewal process, and commented that the Division should clarify what a definable boundary is, as well as look at how multiple landowners coming together affects the landscape.

05:16:58 Public Input

Director Shirley summarized the online public input on this agenda item.

05:18:07 RAC Summaries

All RACs voted to accept the recommendations.

05:20:08 Board Discussion

The board discussed the importance of scrutinizing all the public land within CWMUs, as well as permit allocation. The Board also discussed not having public land at all in CWMUs.

The following motion was made by Randy Dearth, seconded by Bryce Thurgood and passed unanimously with 2 recusals (Wade Heaton and Bret Selman).

MOTION: I move that we approve as presented with the caveat that any additional public tags due from public land being traded out come from the private allocation, and to reconvene the CWMU Advisory Committee to reevaluate the rule.

05:31:15 10) Once-in-a-Lifetime Species Season Date Corrections (Action)

OIAL Program Coordinator Riley Peck presented the corrections to the Board.

05:32:14 Board/RAC Questions

There were no questions from the Board or RACs.

05:33:00 Board Discussion

The following motion was made by Karl Hirst, seconded by Wade Heaton and passed unanimously.

MOTION: I move that we approve the corrected dates as presented.

05:33:30 11) Prohibited Species Request – Samantha Nelson (Action)

Wildlife Board Coordinator Staci Coons presented the request for a variance to keep a prohibited species in the state of Utah, in this case, a capuchin monkey. The Division recommended denying the variance.

Animal owner and variance petitioner Samantha Nelson presented her argument to the Board.

Division Wildlife Veterinarian Dr. Virginia Stout contributed her opinion on the matter.

Board Ouestions/Discussion

The Board asked questions about previous variance requests for monkeys. The Board asked the monkey's owner questions about living conditions and general care of a capuchin monkey. The Board asked the Division about variance requests for other species.

The following motion was made by Karl Hirst, seconded by Wade Heaton and passed unanimously.

MOTION: I move that we deny the variance request for the possession of a capuchin monkey as presented.

06:14:24 12) Other Business (Contingent)

None.

06:14:42 Meeting adjourned.



Regional Advisory Council Meeting Summary of Motions

1) Big Game R657- Rule Amendments (Action)

CR **MOTION**: Modify Rule R657-5-2 night vision section to specifically exclude trail cameras as a night visions device in the trail camera section and accept the balance of the trail camera recommendations as presented.

PASSED: 9-1

MOTION: Not approve the DWR recommendations that archers don't need to wear hunter orange during the youth bull hunt.

PASSED: 5-4

MOTION: Accept the reminder of the DWR recommendations as presented – amended to include – if you draw a tag for bull moose or ram bighorn you are only allowed a bonus point for cow moose or ewe bighorn.

PASSED: Unanimous

NR **MOTION:** I move that a person shall not place, use or maintain any trail camera or non-held device to take or aid in the take of big game between July 31-January 31.

PASSED: Unanimous

MOTION: I move in Section Cii, add the words after "monitoring," in the Division's recommended language, to read "monitoring, taking nuisance animals, or in cases of depredation on active agricultural operations by operators or their agents on private or public lands.

PASSED: Unanimous

MOTION: I move to accept the remainder of the Division's

recommendations as presented.

PASSED: Unanimous

MOTION: I move that we modify the Division's recommendation to ban the use of transmitting and non-transmitting cameras for the take of big game from July 31st to January 31st, but allow livestock producers to use transmitting cameras to take depredating bears and cougars on public and private land.

PASSED: 9-1

SR

MOTION: I move that we accept the recommendation to require muzzleloaders to be loaded (ball and powder) from the muzzle, and ban the use of variable and fixed power scopes on muzzleloaders.

PASSED: Unanimous

MOTION: I move that we accept the recommendation as presented with the additional request to ask the Division of Wildlife Resources to come back with a proposal that would only allow an individual to apply for one (1) Once-In-a-Lifetime species regardless of sex.

PASSED: Unanimous

SER MOTION: To accept the recommendations regarding trail cameras as presented, with the exception of allowing livestock operators to use cameras for depredation and other livestock operation purposes.

PASSED: Unanimous

MOTION: To accept the recommendations regarding muzzleloaders as presented, with the caveat that the Board and the DWR conduct research on muzzleloader harvest data and get public input regarding further restrictions on muzzleloaders.

PASSED: Unanimous

MOTION: To deny the DWR's proposal on hunters orange changes at the end of the archery hunt, overlapping the youth annual elk hunt.

PASSED: 7-5

MOTION: To accept the remainder of the proposals as presented by the DWR.

PASSED: Unanimous

NER **MOTION:** To approve the Divisions recommendations as presented with the exception for the use of cameras on depredation issues.

PASSED: 6-1

2) Furbearer Season Dates and Bobcat Permit Recommendations (Action)

CR, NR, SER, NER

MOTION: I move that we accept the Division's recommendations as presented.

PASSED: Unanimous

SR MOTION: I move that we approved the recommendations as presented, but ask Darren DeBloois to meet with the Trapper's Association to discuss the use of processed game meat as bait.

PASSED: Unanimous

3) Cougar Recommendations and Rule R657-10 revisions for 2022-2023(Action)

CR, SER, NER

MOTION: I move that we accept the Division's recommendations as presented.

PASSED: Unanimous

NR MOTION: I move to allow the take of collared lions in areas where studies have

been terminated.

Passed: 7 in favor, 5 against

MOTION: I move to accept the remainder of the recommendations as

presented.

Passed: Unanimous

SR **MOTION:** I move that we accept the Division's recommendations as presented (Amended).

MOTION TO AMMEND: I moved that we ask the Director and the Wildlife Board to align the Cougar Spot and Stalk season dates with the Harvest Objective season dates.

AMENDMENT PASSED: 7-2 **MOTION PASSED:** Unanimous

4) R657-33 Black Bear Rule Amendments and Recommendations for 2022

CR MOTION: Accept changes from spot and stalk to HO and accept online

registration for bait stations

PASSED: Unanimous

MOTION: Not approve DWR recommendations on season changes (keep it status quo) that overlap seasons and let the bear committee work on it next year.

PASSED: 8-1

MOTION: Accept the remainder of the DWR's recommendations as presented.

PASSED: Unanimous

NR **MOTION:** I move that we accept the recommendations as presented.

PASSED: 10 in favor, 1 opposed, 1 abstention

SR MOTION: I move that we accept the Division's recommendation as presented,

but keep the 2020-2021 season dates adjusted for the calendar by year.

PASSED: Unanimous

SER MOTION: In South Slope Bonanza/Diamond Mountain/Vernal, South Slope

Yellowstone, Wasatch Mtn Avintaqiu/Current Creek accept Division's

recommendation. All other units retain last year's season dates.

PASSED: Unanimous

MOTION: To accept the remainder of the proposal as presented by the DWR.

PASSED: Unanimous

NER MOTION: To accept as presented by the division

PASSED: 6-1

RAC AGENDA - December 2021

Welcome, RAC Introductions and RAC Procedure 1. - RAC Chair WILDLIFE RESOURCES 2. Approval of Agenda and Minutes - RAC Chair 3. Wildlife Board Meeting Update INFORMATIONAL - RAC Chair 4. Regional Update INFORMATIONAL - DWR Regional Supervisor 5. **Emerging Technologies Survey Results** INFORMATIONAL - Wyatt Bubak, Law Enforcement Captain 6. Big Game R657-5 Rule Amendments ACTION - Covy Jones, Big Game Coordinator 7. Furbearer Season Dates and Bobcat Permit Recommendations ACTION - Darren DeBloois, Mammals Coordinator 8. Cougar Recommendations and Rule R657-10 revisions for 2022-2023 ACTION

Meeting Locations

R657-33 Black Bear Rule Amendments and Recommendations for 2022

CR RAC – Nov. 30th 6:00 PM Wildlife Resources Conference Room 1115 N. Main Street, Springville https://youtu.be/VB5Jf4haiK4

9.

- Darren DeBloois, Mammals Coordinator

- Darren DeBloois, Mammals Program Coordinator

NR RAC – Dec. 1st 6:00 PM
Weber County Commission Chambers
2380 Washington Blvd. Suite #240, Ogden
https://youtu.be/su83Hlzxq8c

SR RAC – Dec. 7th 6:00 PM DNR Richfield City Complex 2031 Industrial Park Rd., Richfield https://youtu.be/rDYjSozeazw SER RAC – Dec. 8th 6:30 PM John Wesley Powell Museum 1765 E. Main St., Green River https://youtu.be/Ulb4BroM4C4

NER RAC — Dec.9th 6:30 PM Wildlife Resources NER Office 318 North Vernal Ave., Vernal https://youtu.be/XTuiz0XhEB0

Board Meeting – January 4th 9:00 AM Eccles Wildlife Education Center, Farmington Bay https://youtu.be/XeaH_WIUU4E

ACTION

Central Region RAC Meeting

Video Conference November 30, 2021

The meeting streamed live at https://www.youtube.com/watch?v=VB5Jf4haiK4&t=5723s

Tuesday November 30, 2021 6:00 pm

1.	Approval of Agenda	ACTION
_	– Brock McMillan, RAC chair	
2.	Approval of Minutes – Brock McMillan, RAC chair	ACTION
3.	Wildlife Board Meeting Update – Brock McMillan, RAC chair	INFORMATIONAL
4.	Regional Update – Jason Vernon, Regional Supervisor	INFORMATIONAL
	Emerging Technologies Survey Results - Wyatt Bubak, Law Enforcement Chief	INFORMATIONAL
6.	Big Game R657-5 Rule Amendment - Covy Jones, Big Game Coordinator	ACTION
7.	Furbearer Season Dates and Bobcat Permit Recommendations - Darren DeBloois, Mammals Coordinator	ACTION
8.	Cougar Recommendations and Rule R657-10 revisions for 2022-2023 - Darren DeBloois, Mammals Coordinator	ACTION
9.	R657-33 Black Bear Rule Amendments and Recommendations for 2022 - Darren DeBloois, Mammals Coordinator	ACTION

Central Region RAC Meeting

November 30, 2021 Springville, Utah Summary of Motions

1) Approval of Agenda

The following motion was made by Ken Strong, seconded by Scott Jensen and passed unanimously.

MOTION: To approve to approve the agenda as presented.

2) Approval of Minutes

The following motion was made by Ken Strong, seconded by Scott Jensen and passed unanimously.

MOTION: To approve the minutes of the November 9th Central Region RAC meeting as transcribed.

3) Big Game R657-5 Rule Amendment

The following motion was made by Jim Shuler, seconded by Ben Lowder and failed 4 to 5.

MOTION: To accept the Division's recommendations as presented.

The following motion was made by Scott Jensen, seconded by Jim Shuler and passed 9 to 1.

MOTION: To modify rule R657-5-2 night vision section to specifically exclude trail cameras as a night visions device in the trail camera section and accept the balance of the trail camera recommendations as presented.

The following motion was made by Mike Christensen, seconded by Scott Jensen and passed 5 to 4.

MOTION: To not approve the DWR recommendations that archers don't need to wear hunter orange during the youth bull hunt.

The following motion was made by Chase Crandall, seconded by Ben Lowder and passed unanimously.

MOTION: To accept the remainder of the DWR recommendations as presented - amended to include – if you draw a tag for bull moose or ram bighorn you are only allowed a bonus point for cow moose or ewe bighorn

4) Furbearer Season Dates and Bobcat Permit Recommendations

The following motion was made by Jim Shuler, seconded by Eric Reid and passed unanimously.

MOTION: To accept the Division's recommendations as presented.

5) Cougar Recommendations and Rule R657-10 revisions for 2022-2023.

The following motion was made by Eric Reid, seconded by Mike Christensen and passed unanimously.

MOTION: To accept the Division's recommendations as presented.

6) R657-22 Black Bear Rule Amendments and Recommendations for 2022.

The following motion was made by Mike Christensen, seconded by Jim Shuler and passed unanimously.

MOTION: To accept changes from spot and stalk to HO and accept online registration for bait stations.

The following motion was made by Ben Lowder, seconded by Danny Potts and passed 8 to 1.

MOTION: To not approve DWR recommendations on season changes (keep it status quo) that overlap seasons and let the bear committee work on it next year.

The following motion was made by Ben Lowder, seconded by Scott Jensen and passed unanimously.

MOTION: To accept the remainder of the Division's recommendations as presented.

Central Region RAC Meeting

November 30, 2021 Online Attendance

RAC Members

Brock McMillan – RAC Chair Michael Christensen Eric Reid Ken Strong Chase Crandall Jim Shuler Scott Jensen Ben Lowder Danny Potts Josh Lenart (online) Luke Decker (online) Absent
AJ Mower
Steve Lund

Wildlife Board

DWR Personnel

Jason VernonScott RootWyatt BubackCovy JonesDarren DeBlooisJustin ShannonDale LiechtyMike ChristensenBlair StringhamWes AlexanderRusty RobinsonMatt Briggs

Total Public: 12

Public invited to join online: https://youtu.be/VB5J4hailK4

Central Region RAC Meeting November 30, 2021 Springville, Utah
https://youtu.be/VB5J4hailK4

06:02:25	RAC Chair Brock McMillan called the meeting to order. He called the roll of RAC members and indicated which UDWR personnel were present on the broadcast. He explained the process that there will be no live presentations and public comments will be taken during the meeting.
06:05:18	1) Approval of Agenda
	The following motion was made by Ken Strong, seconded by Jim Shuler and passed unanimously.
	MOTION: I move that we approve the agenda as presented.
06:05:18	2) Approval of Minutes
	The following motion was made by Ken Strong, seconded by Jim Shuler and passed unanimously.
	MOTION: I move that we approve the November 9th minutes as transcribed.
06:06:09	3) Wildlife Board Meeting (Informational)
	Wildlife Board meeting in two day from now, so no information at this time.
06:06:12	4) DWR Update (Informational)
06:12:06	Jason Vernon updated the RAC on all regional activities. 5) Emerging Technologies Survey Results (Informational) RAC members discussed survey results with Wyatt Buback.
06:22:54	6) Big Game R657-5 Rule Amendments (Action)
	A pre-recorded presentation was provided online on the Division website prior to the meeting: https://wildlife.utah.gov/agendas-materials-minutes.html .
06:12:36	RAC Questions
	The RAC members asked about drawing both male & female species in the same draw, duration of camera season justification, thermal imaging recovery, prohibited possession of other weapon types in the field, hunter orange during youth general season.
06:37:34	Public Questions
	Mark Dodd – Definitions for night vision device and trail camera clarification.
	Covy – Explained trail cameras did not qualify under night vision device, after discussion with the AG's office.
06:39:37	Jason Vernon summarized public comments received from the online presentation.
	Public Comment

Mark Dodd – As an attorney, I disagree with the Ag's interpretation. The easy fix is make an exception which states night vision doesn't include trail cameras. Would like to see more analysis done. Corey Huntsman – I oppose making any law changes to trail cameras. Brian Hoover - I agree applying this rule to bears and mostly lions does not cause fair chase. Troy Justensen/SFW – Supports the effectiveness of these cameras. I hold we maintain quality while increasing opportunity. SFE supports the ban. 06:49:26 **RAC Discussion** Clarification on lions and bears, Division's recommendations is a season on all transmitting trail cameras for the purpose of take, the sale and purchase of images, location and time is illegal. 06:58:20 Big Game R657-5 Rule Amendment **MOTIONS** The following motion was made by Jim Shuler, seconded by Ben Lowder and failed 4 to 6. MOTION: To accept the Division's recommendations as presented. In favor: Jim Shuler, Ben Lowder, Chase Crandall, Luke Decker Opposed: Mike Christensen, Josh Lenart, Danny Potts, Ken Strong, Scott Jensen, Eric Reid. The following motion was made by Mike Christensen, seconded by Danny Potts and is withdrawn. MOTION: To approve the trail camera portion of the Division's presentation as presented. The following motion was made by Scott Jensen, seconded by Jim Shuler and passed 9 to 1. MOTION: To modify rule R657-5-2 night vision section to specifically exclude trail cameras as a night visions device in the trail camera section and accept the balance of the trail camera recommendations as presented. In favor: Scott Jensen, Jim Shuler, Eric Reid, Chase Crandall, Ben Lowder, Danny Potts, Luke Decker, Josh Lenart, Mike Christensen Opposed: Ken Strong The following motion was made by Mike Christensen, seconded by Scott Jensen and passed 5 to 4. MOTION: To not approve the DWR recommendation that archers don't need to wear hunter orange during the youth bull hunt.

	In favor: Mike Christensen, Scott Jensen, Chase Crandall, Eric Reid, Josh Lenart
	Opposed: Ben Lowder, Danny Potts, Jim Shuler, Ken Strong
	(Luke Decker signed out of the meeting and is not included in this motions' vote)
	The following motion was made by Chase Crandall, seconded by Ben Lowder and passes unanimously.
	MOTION: To accept the remainder of the Division's recommendations as presented –amended to include – if you draw a tag for bull moose or ram bighorn you are only allowed a bonus point for cow moose or ewe bighorn.
07:33:45	7) Furbearer Season Dales and Bobcat Permit Recommendations (Action)
	A pre-recorded presentation was provided online on the Division website prior to the meeting: https://wildlife.utah.gov/agendas-materials-minutes.html .
07:33:55	RAC Questions
	None
07:34:32	Public Questions
	None
07:34:36	Jason Vernon summarized public comments received from the online presentation.
07:35:17	Public Comments
	Cody Bassett/UTA – Supports the Division's recommendations and the bobcat management plan.
07:35:41	RAC Discussion
	None
07:35:47	Furbearer Season Dates and Bobcat Permit Recommendations
	MOTIONS
	The following motion was made by Jim Shuler, seconded by Eric Reid and passed unanimously.
	MOTION: To accept the Division's recommendations as presented.
07:36:27	8) Cougar Recommendations and Rule R657-10 revisions for 2022-2023 (Action)
	A pre-recorded presentation was provided online on the Division website prior to the meeting: https://wildlife.utah.gov/agendas-materials-minutes.html .
07:36:36	RAC Questions
	None
07:36:56	Public Questions
	I .

	None
07:37:00	Jason Vernon summarized public comments received from the online presentation.
07:37:34	Public Comments Corey Huntsman/Hounds Association – Supports the Division's recommendations. Brian Hoover – Supports the trail camera portion. Cameras for lions is a lot different than trail cameras for deer, elk and other big game species. I do not believe trail cameras for lions is applicable as a fair chase.
07:38:47	RAC Discussion None
07:39:00	Cougar Recommendations and Rule R657-10 revisions for 2022-2023
	MOTIONS
	The following motion was made by Eric Reid, seconded by Mike Christensen and passed unanimously.
	MOTION: To accept the Division's recommendations as presented.
07:39:28	9) R657-33 Black Bear Rule Amendments and Recommendations for 2022(Action)
	A pre-recorded presentation was provided online on the Division website prior to the meeting: https://wildlife.utah.gov/agendas-materials-minutes.html .
07:39:41	RAC Questions
	The RAC members discussed the fall hunt choice between bait tag or hounds tag, removing spot and stalk from the draw to an over the counter harvest objective tag, elimination of spring/summer overlap on some units (season dates type error), three unit overlap changes, conflict documentation.
07:53:24	Public Questions
	Allison Jones – Unaware of presentations online. Darren gave her a brief overview.
	Corey Huntsman – Would the Division ever consider just letting everybody bait in the fall, including hounds?
	John Ziegler – With the number of bear tags, is that in large part based on the fact that the mule deer population is not where the DWR objective is? Is the current strategy in place for cougar numbers right now? Are the cougar numbers going up in this next year?
08:00:31	Jason Vernon summarized public comments received from the online presentation.
08:02:00	Public Comments
	John Ziegler – I think bear baiting should be outlawed in Utah. There is a bias against predators in the oversight of the wildlife management in the state.

08:38:41	Meeting adjourned.
	passed unanimously. MOTION: To accept the remainder of the Division's recommendations as presented.
	In Favor: Ben Lowder, Danny Potts, Mike Christensen, Eric Reid, Ken Strong, Jim Shuler, Chase Crandall, Scott Jensen Opposed: Josh Lenart The following motion was made by Ben Lowder, seconded by Scott Jensen and
	MOTION: To not approve the Division's recommendations on season changes (keep it status quo) that overlap seasons and let the bear committee work on it next year.
	The following motion was made by Ben Lowder, seconded by Danny Potts and passed 8 to 1.
	MOTION: To accept changes from spot and stalk to HO and accept online registration for bait stations.
	The following motion was made by Mike Christensen, seconded by Jim Shuler and passed unanimously.
	MOTIONS
08:32:55	R657-33 Black Bear Rule Amendments and Recommendations for 2022
	The RAC members discussed elimination of hound and bait overlap, documentation of conflict between bait hunters, houndsmen and archery hunters, bait for bait stations, predator issues, use of livestock, bait locations on private ground/federal ground notification.
08:15:45	RAC Discussion
	Corey Huntsman – Oppose the season date changes. Agrees with Brian to table this motion until reviewing the plan and work together.
	Brian Hoover – Would like to table this motion until after reviewing the plan further.
	hounding. Sundays Hunt/Humane Society state director – See attached handout
	Stacy Howell – Wildlife photographer and has never seen a black bear in this state. She feels we are being a little aggressive in the bear numbers. Opposes the bear baiting and
	Allison Jones – Worked on the black bear working group to rewrite the 2000 black bear management plan. Is concerned about the carrying capacity of black bears due to climate change. Would like to see some spatial analysis at USU or BYU and do some predictive modeling. Representing Western Wildlife Conservancy, we have more conflict with bears as our human population increases.



3

^{**}Note – You will have a maximum of three minutes per individual and five minutes per group to address the RAC.



Date Nov 30 242/	
Name Thoy Justenson	Phone Number <u>801-557-3362</u>
Address 2494 Remode	gn .
Who are you representing?	elf group <u>SFa</u>
Would you like to address the RAC too	day? yes no
Which agenda topic?	
COMMENTS	

^{**}Note – You will have a maximum of three minutes per individual and five minutes per group to address the RAC.

Date 11-30-21	
Name Cody Bassett F	Phone Number
Address	r' .
Who are you representing? self	group Utak Trappers Association
Would you like to address the RAC today?	yes no
Which agenda topic? Furbearer	
COMMENTS	

^{**}Note – You will have a maximum of three minutes per individual and five minutes per group to address the RAC.

4

Date 11 20 / 2021
Name Phone Number 801.451.9385
Address 1508 E. Jamestaun Dr.
Who are you representing?
Would you like to address the RAC today? yes no
Which agenda topic? Black Bear Proclamation
COMMENTS I will say it all in person "

^{**}Note – You will have a maximum of three minutes per individual and five minutes per group to address the RAC.

Date 11./30/21	
Name Cory Ahresman	Phone Number 8-01 875=5=36>
Address <u>France</u>	
Who are you representing?	group Wah Houndsmer Assocration
Would you like to address the RAC today?	yes no
Which agenda topic? Beans, Lion	1 Coneras
COMMENTS (4) (3)	

^{**}Note – You will have a maximum of three minutes per individual and five minutes per group to address the RAC.

Date 11. 30/2(
Name Sian Jooves Phone Number 801-560-4702
Address
Who are you representing?
Would you like to address the RAC today? yes no
Which agenda topic? Lion (BEAL /Trail Cem
COMMENTS LAON BEAR / Trail Cen
(3) (4) (1)

^{**}Note – You will have a maximum of three minutes per individual and five minutes per group to address the RAC.

COMMENT FROM RAC MEETING	
Date 1. 3021	
Name John Zieger Phone Number 435 901 166	2
Address	
Who are you representing? self group	
Would you like to address the RAC today? yes no	
Which agenda topic? BLACK BEAR	,
COMMENTS	

^{**}Note – You will have a maximum of three minutes per individual and five minutes per group to address the RAC.

Date 11.30.2
Name Stay Howdl Phone Number 801-703-0242
Address 9044 Daybreak Dr, Pank City VI 84098
Who are you representing? self group
Would you like to address the RAC today? yes no
Which agenda topic? Bleen Bears
COMMENTS

^{**}Note – You will have a maximum of three minutes per individual and five minutes per group to address the RAC.



Date 11/30/2021
Name Sundays Hour Phone Number 801-455-848
Address P.O. BOX 17008 HOWADAY, UT. 84117.
Who are you representing? self X group Humans Sovery V.S.
Would you like to address the RAC today? yes no
Which agenda topic? BLACK BEAR
COMMENTS ATTACHED

^{**}Note – You will have a maximum of three minutes per individual and five minutes per group to address the RAC.



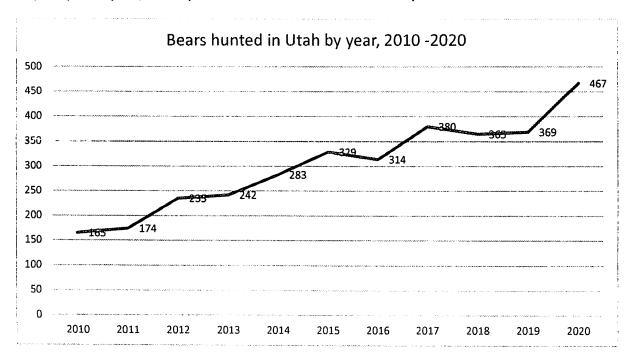
Utah Division of Wildlife Resources – Central RAC, Springville, UT Sundays Hunt, Utah State Director Testimony in opposition to Utah's black bear hunts

Good evening, Members of the Springville Resource Advisory Council. My name is Sundays Hunt, I'm the Utah state director for the Humane Society of the United States, and respectfully deliver these comments on behalf of our supporters in the state. Unlike almost any other state, Utah allows multiple black bear hunting seasons, including in the springtime when mother bears are coming out of their dens with young cubs. Utah also allows the unsporting use of bait and hounds. Spring and summer hunts, baits and hounds are not "fair chase" hunting methods¹ and should not be permitted. In a state survey, most Utahns, including most hunters, oppose hounding and baiting bears.²

The Utah Division of Wildlife Resources permits multiple hunting seasons starting in April and ending in November. The **liberal** amount of hunting in Utah is simply dangerous for black bear conservation, as bears cannot withstand such high levels of hunting.

In 2020, hunters killed a record 467 bears, the most in over a decade. This upward trend is unsustainable. Bears' biology will not permit this level of killing, especially as we head into hotter and drier summers with increasing fire dangers in the West.³ It's also important to note that this number does not include the numbers of bears killed each year for other reasons, including poaching.

Bears reproduce incredibly slowly; therefore, we must manage them conservatively. For example, a female black bear is not an adult until she is 4 to 5 years old. Then she will only give birth to a few litters in her lifetime, but only every 2 or 3 years, and only about 50% of cubs survive to their first year.⁴



In spring and summer, hunters kill mother bears resulting in orphaned cubs. Spring hunts occur when bears are physically stressed after months of eating nothing while in the den.⁵ And hunting bears in early summer is no better because orphaned cubs, who are under one-year will likely die from starvation, predation or exposure.⁶

Utah also allows up to 16 dogs to pursue a single bear. This amounts to mayhem in Utah's back country. Hounding is dangerous for bears, cubs, and the hounds themselves. The hounds may confront bears while they



are still on the ground, resulting in injuries or death to bears and especially to cubs.⁷ Hounds injured by bears can suffer broken bones, punctured lungs or even be sliced open.⁸ Hounding black bears during hot weather causes heat stress to both bears and hounds.⁹ Over-heated bears—because of their thick coats and the fat layers they build to survive hibernation can die from these chases. If the bear is pregnant, she could lose her embryos. Because hounds run across long distances, they invariably pursue and stress non-target animals including elk and deer.

Baiting bears is equally problematic. Bear-bait sites attract many species, most who are not bears. ¹⁰ Bait sites also concentrate bears, putting young bears in harm's way because adult bears may prey upon cubs or small bears. ¹¹ Spoiled baits, or baits containing chocolate or caffeine are also toxic and even fatal to bears and other wildlife. ¹² Utah even allows hunters to use domestic livestock or their body parts for bait. That is just a recipe for disaster because it teaches bears, coyotes and cougars to associate livestock as a food source. Bait sites concentrate wildlife of different species and thus increase the potential for disease and parasite transmission between species, especially rabies and chronic wasting disease, and potentially mange. ¹³

For all these reasons, we respectfully urge the RAC to request that the Wildlife Commission change its hunting regulations so they match the values of our citizens, who do not approve of these controversial killing methods on our beloved Utah bears.

¹ J. Posewitz, Beyond Fair Chase: The Ethic and Tradition of Hunting (Helena, Montana: Falcon Press, 1994).

² Tara L. Teel, Richard S. Krannich, and Robert H. Schmidt, "Utah Stakeholders' Attitudes toward Selected Cougar and Black Bear Management Practices," *Wildlife Society Bulletin* (1973-2006) 30, no. 1 (2002).

³ Jared S. Laufenberg et al., "Compounding Effects of Human Development and a Natural Food Shortage on a Black Bear Population Along a Human Development-Wildland Interface," *Biological Conservation* 224 (2018).

⁴ Heather E. Johnson, David L. Lewis, and Stewart W. Breck, "Individual and Population Fitness Consequences Associated with Large Carnivore Use of Residential Development," *Ecosphere* 11, no. 5 (2020).

⁵ Thomas D. Beck et al., "Sociological and Ethical Considerations of Black Bear Hunting," *Proceedings of the Western Black Bear Workshop* 5 (1995).

⁶ Ibid. M. C. Boulay, D.H. Jackson, and D.A. Immell, "Preliminary Assessment of a Ballot Initiative Banning Two Methods of Bear Hunting in Oregon: Effects on Bear Harvest," *Ursus* 11 (1999). K. H. Inman and M. R. Vaughan, "Hunter Effort and Success Rates of Hunting Bears with Hounds in Virginia," ibid.13 (2002). Personal communication, retired large carnivore biologist for Washington Department of Fish and Wildlife, Gary Koehler, Ph.D.

⁷ Beck et al., "Sociological and Ethical Considerations of Black Bear Hunting."; Boulay, Jackson, and Immell, "Preliminary Assessment of a Ballot Initiative Banning Two Methods of Bear Hunting in Oregon: Effects on Bear Harvest."; Inman and Vaughan, "Hunter Effort and Success Rates of Hunting Bears with Hounds in Virginia." Personal communication, retired large carnivore biologist for Washington Department of Fish and Wildlife, Gary Koehler, Ph.D.

⁸ Beck et al., "Sociological and Ethical Considerations of Black Bear Hunting."

⁹ Hank Hristienko and Jr. McDonald, John E., "Going in the 21st Century: A Perspective on Trends and Controversies in the Management of the Black Bear," *Ursus* 18, no. 1 (2007).

¹⁰ Ellen M. Candler, William J. Severud, and Joseph K. Bump, "Who Takes the Bait? Non-Target Species Use of Bear Hunter Bait Sites," *Human-Wildlife Interactions* 13, no. 1 (2019).

¹¹ M. Elfstrom et al., "Ultimate and Proximate Mechanisms Underlying the Occurrence of Bears Close to Human Settlements: Review and Management Implications," *Mammal Review 44*, no. 1 (2014).

¹² Dunkley and Cattet, "A Comprehensive Review of the Ecological and Human Social Effects of Artificial Feeding and Baiting of Wildlife."

¹³ Ibid; Inslerman et al., "Baiting and Supplemental Feeding of Game Wildlife Species. The Wildlife Society." Amanda Sommerer, "A Spatial Analysis of the Relationship between the Occurrence of Mange in Pennsylvania's Black Bear Population and Impervious Land Cover" (Indiana University of Pennsylvania, 2014); Rebecca Kirby, David M. Macfarland, and Jonathan N. Pauli, "Consumption of Intentional Food Subsidies by a Hunted Carnivore," *The Journal of Wildlife Management* 81, no. 7 (2017).

Regional Advisory Council Meeting

December 1, 2021

1.	Welcome, RAC Introductions and RA - RAC Chair	C Procedure		
2.	Approval of Agenda and Minutes - RAC Chair		ACTION	
3.	Wildlife Board Meeting Update - RAC Chair		INFORMATIONAL	
4.	Regional Update - DWR Regional Supervisor		INFORMATIONAL	
5.	Emerging Technologies Survey Resu - Wyatt Bubak, Law Enforcement Ca		INFORMATIONAL	
6.	Big Game R657- Rule Amendments - Covy Jones, Big Game Coordinator		ACTION	
7.	Furbearer Season Dates and Bobcat - Darren Debloois, Mammals Coordin		ACTION	
8.	Cougar Recommendations and Rule R657-10 revisions for 2022-2023 - Darren Debloois, Mammals Coordinator			
9.	R657-33 Black Bear Rule Amendments and Recommendations for 2022 ACTION - Darren Debloois, Mammals Coordinator			
Meeting Locations				
CR RAC -	Nov 30th, 6:00 PM Wildlife Resources Conf. Room 1115 N. Main Street, Springville https://youtu.be/VB5Jf4haiK4	SER RAC – Dec 8th, 6:30 PM John Wesley Po 1765 E. Main St. https://youtu.bd	well Museum	
NR RAC – Dec 1st, 6:00 PM Weber County Commission Chambers 2380 Washington Blvd. Suite #240, Ogden https://youtu.be/su83HIzxg8c		NER RAC – Dec 9th, 6:30 PM Wildlife Resources NER Office 318 North Vernal Ave., Vernal https://youtu.be/XTuiz0XhEB0		
SR RAC -	Dec 7th, 6:00 PM DNR Richfield City Complex 2031 Industrial Park Rd., Richfield	Board Meeting – January 4t Eccles Wildlife Education Cent https://youtu.be/XeaH_WIU	ter, Farmington Bay	

https://youtu.be/rDYjSozeazw

Regional Advisory Council Meeting Summary of Motions

1) Approval of Agenda and Minutes (Action)

The following motion was made by Randy Hutchison, seconded by Brad Buchanan and passed unanimous.

MOTION: I move that we approve the agenda and Minutes.

2) Big Game R657- Rule Amendments (Action)

The following motion was made by Randy Hutchison, seconded by Matt Klar and passed unanimous.

MOTION: I move that a person shall not place, use or maintain any trail camera or non-held device to take or aid in the take of big game between July 31-January 31st.

The following motion was made by Casey Snider, seconded by Matt Klar and passed unanimous.

MOTION: I move in Section Cii, add the words after "monitoring," in the Division's recommended language, to read "monitoring, taking nuisance animals, or in cases of depredation on active agricultural operations by operators or their agents on private or public lands.

The following motion was made by Randy Hutchison, seconded by Mike Laughter and passed unanimous.

MOTION: I move to accept the remainder of the Division's recommendations as presented.

3) Furbearer Season Dates and Bobcat Permit Recommendations (Action)

The following motion was made by Mike Laughter, seconded by Brad Buchanan and passed unanimous.

Northern Regional Advisory Council Meeting December 1, 2021

MOTION: I move that we accept the Division's recommendations as presented.

4) Cougar Recommendations and Rule R657-10 revisions for 2022-2023 (Action)

The following motion was made by Junior Goring, seconded by David Earl and passed For: 7 Against: 5. Randy Hutchison, Kevin McCloud, Nikki Wayment, Jaimi Butler, Paul Chase

MOTION: I move to allow the take of collared lions in areas where studies have been terminated.

The following motion was made by Brad Buchanan, seconded by Randy Hutchison and passed unanimous.

MOTION: I move to accept the remainder of the recommendations as presented.

5) R657-33 Black Bear Rule Amendments and Recommendations for 2022 (Action)

The following motion was made by Randy Hutchison, seconded by Kevin McCloud and passed For: 10 Against:1 Matt Klar Abstain: Jaimi Butler .

MOTION: I move that we accept the recommendations as presented.

Northern Regional Advisory Council Meeting

Weber County Commission Chamber Dec 1, 2021 Attendance

RAC Members

Justin Oliver – Chair
Kevin McLeod – Vice-Chair
Ben Nadolski – Exec Secretary

THE THE THE	
Brad Buchanan	Matt Klar
Jaimi Butler	Mike Laughter
Paul Chase	Darren Parry
David Earl	Casey Snider
Junior Goring	Nikki Wayment
Randy Hutchison	

RAC Excused

Ryan Brown Emily Jensco

Division Personnel and Wildlife Board Members

Jodie Anderson
Wyatt Bubak
Covey Jones
Darren Debloois
Mike Kinghorn
Dave Rich
Randall McBride
Jim Christensen
Paul Gedge
Mike Christensen
Blair Stringham
David Beveridge
Lindy Varney
Sydney Lamb
Devin Christensen

Bryce Thurgood

Bret Selman

Regional Advisory Council Meeting

December 1, 2021 Attendance https://youtu.be/su83HIzxg8c

1) Chairman Oliver called the meeting to order, welcomed the audience, reviewed the meeting procedures, and had the RAC members introduce themselves.

00:05:20 2) Approval of Agenda and the Minutes (Action)

The following motion was made by Randy Hutchison, seconded by Brad Buchanan and passed unanimous.

MOTION: I move that we approve the Agenda and Minutes as presented.

3) Wildlife Board Update (Informational)

Have not had Wildlife Board Meeting

00:07:00 4) Regional Update (Informational)

Aerial captures in Rich County, Hardware WMA and Richmond WMA. Upcoming captures work in Morgan, South Rich/East Canyon and Box Elder. Deer classifications ongoing. Pheasant release. Bighorn sheep survey on Newfoundland Mountain. Cinnamon Creek management area providing diverse habitat types. WMA beginner's pheasant hunt at Ogden Bay WMA. Trumpeter swan hunt information, targeting and quota issue.

5) Emerging Technologies Survey Results (Informational)

Presentations could be viewed at https://wildlife.utah.gov/agendas-materials-minutes.html

00:21:36 Questions from RAC Members/Public

Nevada style rules support or opposition, 3.1 weighted average. Rules specific to taking. Trail camera usage with scouting and hunting. Survey questions on long range rifle equipment. Private property on public land rules and regulations.

6) Big Game R657- Rule Amendments (Action)

Presentations could be viewed at https://wildlife.utah.gov/agendas-materials-minutes.html

00:37:00 Questions from RAC Members/Public

Survey issues related to probable cause and law enforcement. Enforcement mechanism with long range equipment and hunting. Trail camera technology and rule review. Addressing merging technology annually. Exemptions for agricultural operations and regulating for the purpose of take. Consideration of requiring permit for use of camera on public land. Research on technology for take. Hunter orange requirement with youth hunt, safety and data. Feedback and public knowledge. Advances in muzzleloaders and technology. Use of smokeless powder and safety. Trail camera regulation and enforcement. Law enforcement numbers statewide. Trail camera season concerns on public vs. private. Specific definition on trail cameras and difference in transmitting and non-transmitting. Clarification on transmitting cameras for agriculture purposes and depredation. Reason for January 31st extension date.

01:06:04 Electronic Public/Public Comment

6 strongly agreed, 2 somewhat agreed, 0 neither agreed nor disagreed, 2 somewhat disagreed, 8 strongly disagreed.

Comments about enforcement concerns. Exclusion of drones in discussion for take of wildlife. UWGA support recommendations with caveat of exemption of trail cameras for livestock producers. Concern with definition and questions with infrared technology. Specific verbiage with non-transmitting cameras being exempt. Support changes and clarify wording on public and private grazing allotments. Challenge sportsmen to take a step back and try not to be selfish. Comment regarding having no cameras on public land. Comment regarding Utah having a Nevada style season and agriculture community being exempt from the trail camera law. SFW supports Wool Growers recommendation of allowing cameras on public and private lands to handle predators. Self-constraint and limiting technology to help hunting quality.

01:19:52 RAC discussion/Division Clarification and Motions

Number of cameras and pressure after locating animals. Technological advances and unregulated technology. Forest Service supports proposal and making hunters aware of damage. Support divisions proposal with exception of producer's allowance of cameras. Many states addressing trail cameras. Taking the first step and the need to continue and become stronger and more restrictive. Commend division for engaging in this issue. HB295 clarification regulating baiting, trail cams and definitions within waterfowl management areas. Cameras do not lead to a fair hunt. Penalties included in

this proposal specific to trail cameras can range from a rule violation to third degree felony. Summary of Nevada regulations and laws.

The following motion was made by Randy Hutchison, seconded by Matt Klar and passed unanimous.

MOTION: I move that a person shall not place, use or maintain any trail camera or non-held device to take or aid in the take of big game between July 31-January 31st.

The following motion was made by Casey Snider, seconded by Matt Klar and passed unanimous.

MOTION: I move in Section Cii, add the words after "monitoring," in the Division's recommended language, to read "monitoring, taking nuisance animals, or in cases of depredation on active agricultural operations by operators or their agents on private or public lands.

The following motion was made by Randy Hutchison, seconded by Mike Laughter and passed unanimous.

MOTION: I move to accept the remainder of the Division's recommendations as presented.

7) Furbearer Season Dates and Bobcat Permit Recommendations (Action)

Presentations could be viewed at https://wildlife.utah.gov/agendas-materials-minutes.html

01:51:34 Questions from RAC Members/Public

Recommending season dates for next year, keeping things the same.

01:52:16 Electronic Public/Public Comment

2 strongly agreed and 1 somewhat agreed.

Trappers Association in favor of recommendations.

01:53:48 RAC discussion/Division Clarification and Motions

Timetable clarification on data for bobcats.

The following motion was made by Mike Laughter, seconded by Brad Buchanan and passed unanimous.

MOTION: I move that we accept the Division's recommendations as presented.

8) Cougar Recommendations and Rule R657-10 revisions for 2022-2023 (Action)

Presentations could be viewed at https://wildlife.utah.gov/agendas-materials-minutes.html

01:57:11 Questions from RAC Members/Public

Season overlap and eliminating the use of dogs for cougar hunting at the same time. Issue of chasing bears and lions at the same time.

02:01:05 Electronic Public/Public Comment

1 strongly agreed, 1 neither agreed nor disagreed and 1 strongly disagreed.

Comment regarding unlimited quota for lions or bears is irresponsible management. Limiting take of collared cats and depredation. Killing collared cats and predator management. Utah Houndsman Association supports divisions recommendations.

02:09:53 RAC discussion/Division Clarification and Motions

Cougar study still ongoing but wrapping up this month with data collection. Philosophical issue with what is happening and decision-making authority. Predator management and decision-making process. Study for cougars, the take of collared cats and active collar numbers. No logic in protecting animals out of the study. Purpose of studies for mountain lions. Discussion on process for determining populations of mountain lions in the state. Notifying hunters of studies. USU study objective, particularly kitten survival. Depredation compensation for confirmed losses.

The following motion was made by Junior Goring, seconded by David Earl and passed For: 7 Against: 5. Randy Hutchison, Kevin McCloud, Nikki Wayment, Jaimi Butler, Paul Chase

MOTION: I move to allow the take of collared lions in areas where studies have been terminated.

The following motion was made by Brad Buchanan, seconded by Randy Hutchison and passed unanimous.

MOTION: I move to accept the remainder of the recommendations as presented.

9) R657-33 Black Bear Rule Amendments and Recommendations for 2022 (Action)

Presentations could be viewed at https://wildlife.utah.gov/agendas-materials-minutes.html

02:41:48 Questions from RAC Members/Public

Clarification rationale for splitting out bait and hound season on some units and not others. Issue is statewide but not on all units. Bear plan expires in 2023 and the need to establish bear committee. Season dates are the same as the last 3-year cycle and be consistent statewide. Defining spot and stalk vs. summer pursuit season. Discussion about bears being harvested and checked. Ages of bears and numbers taken each year.

Bear baiting and camera issue. Discussion regarding hunting lions and treeing bears at the same time.

02:56:49 Electronic Public/Public Comment

1 strongly agreed, 2 neither agreed nor disagreed.

Western Wildlife Conservancy comments regarding population of species, individual animals' pain and suffering, development of animals. Humane Society comments regarding multiple black bear hunting seasons and unsporting use of baits and hounds. Need to manage conservatively. Urge RAC to request hunting regulations. Hounds Association approve most of the proposal except season changes on the spring hunt. Request to form a working group to work with bait hunters, division and law enforcement.

03:09:00 RAC discussion/Division Clarification and Motions

Respect everyone's thoughts and opinions. Concern about making rules for individual units vs. state rules. Consider tabling this issue to committee and implications. Citations and hunt structure, crowding issue. Grammar request and severity of charges. Global solution to the problem. Season date changes and to choose bait or hound permit in the fall and Bookcliffs Bittercreek south to separate hounds and bait. Individual recommendations for individual units.

The following motion was made by Randy Hutchison, seconded by Kevin McCloud and passed For: 10 Against:1 Matt Klar Abstain: Jaimi Butler.

MOTION: I move that we accept the recommendations as presented.

03:24:13 Meeting Adjourned.



Southern Regional Advisory Council Meeting December 07, 2021 6:00 p.m.

DNR Richfield City Complex 2031 Industrial Park Rd., Richfield Attendance

RAC MEMBERS

Nick Jorgensen (virtual) Chad Utley (virtual) Austin Atkinson Brayden Richmond Tammy Pearson Gene Boardman Chuck Chamberlain Verland King Riley Roberts

Bart Battista (virtual)

Dan Fletcher

Division Personnel

Kevin Bunnell Adam Kavalunas

Teresa Griffin (virtual) Alyssa Jackson (virtual) Barbara Sugarman (virtual) Paul Washburn

Wyatt Bubak Covy Jones Jeremy Butler **Brandon White** Levi Watkins Phil Tuttle

Darren DeBloois Jason Nicholes (virtual)

Michael Christensen

Wildlife Board Members

Wade Heaton (virtual) Karl Hurst (virtual)

00:00:00 1) Welcome

(Informational)

Chairman Brayden Richmond called the meeting to order, welcomed the audience, reviewed the meeting procedures, and had the Board and RAC Members introduce themselves.

00:02:53 2) Approval of Agenda and Minutes

(Action)

The following motion was made by Tammy Pearson, seconded by Verland King.

MOTION: I move that we accept the agenda and the minutes.

Motion passed unanimously.

00:03:33 3) Wildlife Board Meeting Update by RAC Chair -Chairman Brayden Richmond

(Informational)

Brayden Richmond: Kind of interesting, some of the RACs met before the Wildlife Board, so they didn't do this in their RACs, but we'll get the opportunity to do this. There is quite a long list here so be patient with me as we go through this. I'm just going to read the minutes just exactly how it was done at the Board meeting.

So, there was a motion to accept the recommendation as accepted with the addition of a three-year waiting period for youth, a five-year waiting period for adults for those that harvest a trumpeter swan during the swan season, and a seven-year waiting period for those who fail to check in a harvested swan. This was a really interesting discussion. I would encourage anyone who is curious to go and watch how this played out. I think it showed the process working correctly and showed a good solution for a developing situation. So, that motion passed unanimously.

Then there was another motion to move that we remove the seven-year waiting period for those who fail to check in a harvested swan from the previous motion, and instead follow the penalties established in state statute. There was some discussion on that on just trying to align, and also trying to stay on the side of statutes and how the rules and statutes work together. Again, the discussion and lessons to probably be learned there. It was interesting to watch how that all shook out. That was also passed unanimously.

Then there was a motion that we asked the Division to look into changing statute to reflect a seven-year period for poaching a swan and have the Division report back. That motion passed unanimously.

Then we move on to the elk permit recommendations. There was a motion to not accept the recommendation to go to a draw and instead keep any bull and spike elk permits over the counter. That motion passed unanimously. There was a motion that we stay with the 50/50 split on max points and that passed unanimously.

Next was a motion that they asked the Division to look into a three-year season structure for big game season dates and the possibilities of hunter orient regulation reforms; including amount required and what other states allow. That motion passed unanimously.

Next motion was that they move to approve the recommendations as presented with an addition of a two-day extension on the youth any bull hunt. That passed unanimously.

Then on to the CWMU and landowner permit recommendations. There was a motion that we approve as presented with the caveat that any additional public tags due from public lands being traded out, come from the private allocation and to reconvene the CWMU advisory committee to reevaluate the rule. There were two people that recused, and it passed unanimously.

Next motion was on the once in a lifetime season dates. There was a motion to approve corrected dates as presented, that passed unanimously. Then a motion to deny

the variance request for the possession of a Capuchin Monkey and that passed unanimously.

Any questions? There were a lot of motions in that meeting. It was a good meeting. As usual I was able to attend. There were some good discussions, well throughout. I guess I'd just commend the Board with how they proceeded in that meeting and how they approached it. It was a lot of issues, tweaks that needed to be done. So, any questions or comments on what happened? Ok, I'll turn it over to Kevin for an update.

00:07:32 4) Regional Update -Kevin Bunnell, SRO Regional Supervisor (Informational)

Kevin Bunnell: Okay, Paul or Carmen could we have the RAC update presentation pulled up please?

I wanted to start with this picture in recognition of today being Pearl Harbor Day. A day that I think we all should remember every year. Whether if affected us directly, it certainly did our country. I just wanted to make sure that was recognized.

From our wildlife section, deer classification will be wrapping up in the next couple of weeks and we'll be anxious to compile that data. We heard about deer captures, those are moving along ahead of schedule. I know that Teresa was reaching out to the RAC members. Has anyone gone out to the deer captures that have taken place? Brayden went part of a day. If you want to go, you better hurry, because they're going to finish tomorrow on the Pine Valley. They only have one area left; they'll be doing Motueka which is quite a way out there but an interesting area. A little bit later start out there, they'll be starting at about 10 o'clock because there is some maintenance that needs to be done on the chopper. I could put you in touch with Teresa if anybody has an interest.

Christmas bird counts will be going on over the next few weeks. You can get with Keith Day if you're interested in getting involved with that. That's why I had that picture at the beginning with the White Breasted Nut Hatch.

In our aquatics section, we have a new Lake Powell project supervisor. His name is Dan Keller, he's filling very big shoes with Wayne Gustavenson retiring. Wayne was at Lake Powell for 45 years. You can't replace Wayne, but Dan comes with a passion for Lake Powell. He's been going there since he was a teenager, still goes there several times a year with his family. We're excited to have him, he's also a veteran that served in Iraq and is a very well-rounded person.

Other projects, we're finishing up the marina projects up at Fish Lake. If you're familiar with Fish Lake and what it used to look like, you won't recognize the marinas anymore. They're bigger, they're deeper, they'll accommodate many boats. Lots of partners have gone into making that happen with the Division of Wildlife, the Forest Service, the County, the Sportsmen, grants that we've gotten through the Governor's Office of Recreation. There have been lots of partners there. I think the only thing that will be left after we finish up the last marina this year, the Bowery Marina is being finished up now, is there will be a fishing pier that will be built that we're still

fundraising for. It will be a huge addition at about 100-150 feet and get beyond the weed line and then we'll T and go 150 feet in either direction. It will allow handicap access and also a lot of fishing access. There is really no fishing from the shore at Fish Lake right now because of the weed barrier that circles the lake. This would allow people to get beyond that and fish from the shore.

Our habitat section. Lots of projects going on, I won't read all of those individually, but you can look through there. This is the time of year when we get that work done. Lots of chainsaws and track hoes and everything else out on the ground right now doing habitat projects.

From our WMAs we've cleaned sediment from irrigation pond at Elbow Ranch. We had a flooded end up there that put a lot of sediment into the pond. We've also been working on the irrigation ditch in Kingston Canyon.

Just as a reminder we'll have seasonal road closures that will begin January 1st on most of the WMAs in the southern region.

Outreach section, these pictures are from our Christmas party, and we gave out a couple of awards. On the left there is Mike Jensen, and then Mike Wardel. They both received what we call our Clint Meacham award. Those of you who remember Clint, he was an employee of the Division who passed away of cancer. Just loved and appreciated by everybody. So, we give an award at our Christmas party every year to honor other employees who exemplify the qualities that Clint had, which are honesty, kindness, and hard work, which are kind of the three basic qualities we look for in that.

That's the wrong picture. That should be a picture of Adam Kavalunas who's our new outreach manager. But he's here in person, so Adam if you'd stand up. Adam is filling the roll that Phil Tuttle used to fill in the region, he's our new outreach manager. We've also just hired Cody Evans to fill the volunteer service coordinator in the region. That's the position that deals with all the dedicated hunters. Many of you will get to know Cody, he's really great. Then a couple of events that are coming up, we have a Bald Eagle viewing day in early February. Then of course the Snow Goose Festival that takes place every year out in Delta will be February 18-19.

Law enforcement, you're going to see a really gory picture here. Paul sent me that picture but didn't send an explanation. Paul? What's that picture about? (inaudible). Ok, we're in the process of conducting interviews to place some open districts that we have. Stetson West who is our officer out of Fillmore received an award from the Highway Patrol called the "Lifesaving Award". He was one of the first on scene on that accident that took place between Kanosh and Meadow if you remember that earlier in the fall. Horrific accident, and he took some heroic measures there that saved the lady's life for sure and helped several others. Congratulation to Stetson for that award.

Our officers are wrapping up all their cases from October, that's a process that will go for the next several months. And we're looking at monitoring illegal traps set, this is the time of year when trappers are out trapping bobcats in particular. They'll be working to make sure those are legal traps and that traps are being checked as often as they need to be.

That's all I have; does anybody have any questions? Thank you.

Brayden Richmond: Thank you. If I could make a quick comment on that. That was neat to see the awards there. I had the opportunity to work with, work is probably the wrong term. I've had the opportunity to watch Mike Wardle work several times. And he does a great job. We really appreciate him; he's met with some public meetings I've attended several times and good to see the Division acknowledging that. I can attest to that. I really have a lot of respect for Mike, so good to see.

Let's go ahead and move onto agenda item number five. Our first informational item Emerging Technologies and Survey Results. I just want to clarify that this agenda item five is informational, and agenda item six, that's where we'll have an action item on the rule amendments. So, we'll get some information on why these rule amendments were suggested, but in agenda item six is when we'll actually make motions and hear from the public on that. So, if you want to give us just a brief summary of your presentation, that would be great. Thank you, Wyatt.

00:16:36 5) Emerging Technologies Survey Results -Wyatt Bubak, Law Enforcement Captain

(Informational)

Wyatt Bubak: Thank you. If I make it too brief, I guess we can ask follow up questions that will not make it brief.

Brayden Richmond: Something tells me it won't be brief.

Wyatt Bubak: This part should, the follow up is usually not. In March of 2021 the Division did an emergency survey that talked about a host of technology that we're starting to see in the field. And kind of put out information to see what the public felt as far as the use of those technologies with the taking of wildlife. After that survey was concluded the Wildlife Board then asked us to go back and do another survey specific to trail camera data which was included in the first survey, but they wanted a more in-depth survey on trail cameras. So, we ran that in the September/October timeframe of 2021 and this also part of this informational. Varying opinions on the technologies, but that's a quick summary on what this informational is about.

Brayden Richmond: Okay, thank you. Again, just a reminder on this one, this one is informational, but we will open it up to questions from the RAC then we'll have questions from the public. We won't have comments from the public. We'll save that to the next agenda item, but we will do questions on this one. So, any questions from the RAC on this?

00:18:04 Questions from the RAC

Austin Atkinson: Wyatt, can you explain to us a little bit how the surveys work in the department, in the Division specifically. I guess where I'm coming from, I've

talked to Matt a little bit and where the first survey came from, I understand. And he's the social science coordinator. But I noticed there are no third parties used, we don't use an outside University study group. Sometimes surveys come straight from you. So how does that work in the department and why is it you, Mr. Law Enforcement standing up with this survey?

Wyatt Bubak: So, I'll answer the last part first. Law enforcement tends to be, although we're certainly not the only ones that see and get the emerging technology stuff presented in the field, just interacting with the general public because they hunt or fish. So, we offered to kind of take the lead on this survey because we are familiar with the emerging technology and more commonly are the front line as far as the public presenting those questions to us. As far as the surveys conducted, I can only speak to this one. This is the one I've been most involved in, and I haven't' been involved in many other studies from the Division beforehand. However, we did specifically present the trail camera one. We offered to have that presented or looked over by the legislative person that conducts similar survey's or who they contract with; and they approve the use of that as far as making sure it was an unbiased and fairly presented survey. But our social scientist is a profession who that is what he does, and so the need to operate outside of that hasn't been needed. And in this case, it was approved as written.

Kevin Bunnell: Wyatt, can I add just a little but in there. Austin, with our surveys we have a huge data base of license holders and people who have applied in the big game draws and different ways we can segregate out our user base. When we do one of these surveys, we don't send them to everybody. We take a random sample of that database, and send it out, I don't know how many this went to, Wyatt.

Wyatt Bubak: I believe we were roughly about 10,000 for the trail camera one and I believe about 8,000 for the emerging technology one we did in March.

Kevin Bunnell: So, a random sample of our license and permit holders, we usually go back 3-5 years to identify those people. We take the random sample, and we try to make sure we get a sample size that is statistically valid; typically, that's around 30% is where we try to get to. All of our surveys that we've done have kind of met those standards to have those statistical validity. This makes us feel like we're getting real information from the public. Does that help?

Wyatt Bubak: Just to correct that number 6,000 for the emerging technology survey, and 10,000 that were sent out for the trail camera.

Austin Atkinson: One more question Wyatt. Can you define the definition used in the survey of the difference of using a trail camera for scouting vs using a trail camera for hunting? I know there was some confusion in the survey, at least there is in my mind in how law enforcement sees that.

Wyatt Bubak: So as far as a survey goes, and I wouldn't say the survey is written with the law enforcement opinion as a defining factor. But basically, are you using the

camera during the season? And I think you're right it's not defined in the survey, but if you're using the camera during the season you have the tag for that you would be hunting. If you're using it to categorize animals' preseason before your tag goes into effect, that would be more defined as scouting.

Brayden Richmond: Go ahead, just state your name and question into the mic.

Blake Stevens: I was just curious if this survey was only done to members that have drawn a tag in recent years, or would it just be the general public?

Wyatt Bubak: So, we randomly selected either 6-10,000 people who have applied for big game hunts in the last five years.

Blake Stevens: Just general public wasn't necessarily involved in this?

Wyatt Bubak: Right, and that was more so geared towards because the regulations on trail cameras are geared more towards the take of big game animals, not necessarily the recreational use of a trail camera.

Brayden Richmond: Thank you. Go ahead Tammy.

Tammy Pearson: I was just going to ask; I know before your presentations before on what the diagrams are on the public input. Is that something that you can post now, or do we need that at all?

Kevin Bunnell: So, I don't have that for this agenda item, I'll have that for the next one and I'll give you the number of comments we received and how those broke down.

Brayden Richmond: Now, Wyatt you have all the charts and graphs from your survey results, you have those available. So, Tammy if you wanted to see those or have a specific question Wyatt could help you out with those.

Nick Jorgensen: Brayden, I've got a question. I'm just wondering, how could you possibly enforce this?

Wyatt Bubak: As far as how it's proposed in the big game rule?

Nick Jorgensen: Yeah.

Kevin Bunnell: Let's save that. This is just the informational, we're not proposing anything yet. That's the next agenda item so let's hold that question until we get to the action item.

Nick Jorgensen: Alright, thank you.

00:24:54 6) Big Game R657-5 Rule Amendments -Covy Jones, Big Game Coordinator

(Action)

Brayden Richmond: Alright, let's get into the action item. I went from the RAC to the public, back to the RAC. Let's get to the action item and then we have additional questions. So, if we have Wyatt kind of summarize it. Sorry, Covy (not Wyatt).

Covy Jones: At least the room's spacious, so there's that.

Brayden Richmond: Covy, if you want to give us a brief summary. Just as a reminder. Then we'll open it up to questions from the RAC.

Covy Jones: I think that's a great idea Mr. Chair, thank you. Some of the things we did, was first we talked about why we're here recommending the big game rule changes. There are a couple of reasons why we change rules in the first place, and I think it's good to remind everybody. One of them is to comply with Board direction. In this rule change specifically, you'll see a recommended change to ask that all hunters have a bison permit, that they take a shot placement course. That came from a discussion with the Board about concern over wounded loss. We saw a lot of wounded loss in the Book Cliffs two years ago, we brought that up to the Board, then they came back and said, we'll let's implement a shot placement course. Another reason why we may have a rule change, is to comply or align with current state law, or a mandate or a request. So, one of the things we'll talk about in just a second is a proposed season on trans pending trail cameras. That's to comply with house bill 125. Which was some talk of legislation last year. They came back and the legislature came back and said we're not going to do this, but we're going to give you the authority to do it and we're going to ask that you take something through the public process. So, when we talk about trail cameras, this is complying with the request that is now in statute. Finally, there are some things on our public surveys we know have clean up and there are several of those things. Just to get into this, some of the things we're recommending. The first one is just antlerless elk control permits; we define those and say those permits are not valid on CWMUs. Antlerless elk control permit is a permit you can obtain in certain areas across the state. Where if you have a buck/bull permit then you can buy one of these permits and hunt a cow elk at the same time. We defined and prohibited the use of night vision devices for hunting big game. We used the definition in statute for trail cameras, and then are recommending to restrict the use of transmitting trail cameras during all big game seasons. After some of the survey data, we clarified that muzzleloader... In Utah hunting with a muzzleloader means a weapon that both the powder and the bullet are loaded from the muzzle. There are some new muzzleloaders, where you load the bullet in the barrel then the powder charge is actually in a cartridge that you load on the other side, and our hunters did not like or support that. We just clarified the National Wildlife Refuges is closed to hunting unless opened by the managing authority. And then we're asking for some help in the draw process. You remember last time we came around, one of the requests for several years has been to have permit numbers available, at least proposed permit numbers available during the draw; and Lindy's presentation was on how we do that and said we'd have to bring forward a few more things to help streamline the draw process. Right now, you can put in for buck/doe pronghorn, you can put in for bull/antlerless moose, or ram/ewe bighorn, but only if you don't draw the male

of that species. So, we're asking to remove that restriction to help streamline the draw process, so you could essentially put in for to hunt both male and female pronghorn, moose, and sheep in the same year. Now that's highly unlikely, especially for moose and sheep, but that will help streamline the draw process. We talked about this in the beginning, but we're asking that all hunters that have a bison permit have to read a shot placement article on bison. Then clarified that HAMS permits much like with any weapon hunts where you could hunt with a bow, these are not archery permits so they are not valid on extended archery units. Finally, there is a youth hunt that has some overlap with the general season archery hunt, and we're asking that you remove the requirement for hunter orange for those archers during that overlap. We just don't feel like there is the quantity of hunters on the landscape to require that. We have other exceptions to very limited hunts; once in a lifetime, CWMUs, and we felt like this fell more in that realm. That's it, those are the major changes we're recommending.

Brayden Richmond: That's it? You sure you don't have any more? Thank you Covy, we appreciate that. We'll do questions from the RAC then questions from the public. Then we'll move to comments from the public, you'll need to do a comment card. Then we'll go to comments from the RAC. I think what we should do on this agenda item, there are a lot of items. I think we want to have questions and comments on the entire agenda, but when it comes to motions, let's pull out individual subjects and once we go through all motions, we want to address we'll pass the remainder as presented. But, for questions and comments let hit everything. One additional comment, I know that kind of over showing everything is the discussion on trail cameras. That's where we got most of our feedback. But there are some other big changes occurring in there. I would hope we don't get lost on one subject. With that said, Kevin do you want to summarize the public input?

00:32:16 Feedback from the public

Kevin Bunnell: We only had 20 people comment directly on this for the southern region specific, I was surprised because I thought it would be more. Of those 20, 45% strongly agreed; most of the comments were geared towards cameras, then the proposal there with trail cams. So, the largest of any single percentage was 45% that strongly agreed. Additional 15% somewhat agreed. We didn't have any one in the middle on this, you either agreed or disagreed on it. On the disagreed side we had 40%, 25% strongly disagreed and 15% somewhat disagreed. Essentially a 60/40 split.

00:33:10 Questions from RAC Members

Nick Jorgensen: I'll ask my question again. I agree with the trail camera proposal, I just still curious how you're going to possible enforce those.

Wyatt Bubak: So, with it written as is, it's not a whole lot different than how our baiting law is currently written, in that it's unlawful to take big game over bait. The obligation for us is to prove the intent of the hunter hunting over that bait or the individual placing that bait, it would be the same thing with the cameras in that we would have to prove the intent of that camera. So there certainly are challenges associated with it. Some of the reason for that is how it's written and defined in code. But none the less,

we're experiencing something similar with bait. But there certainly are challenges that come with it.

Brayden Richmond: Go ahead.

Chuck Chamberlain: So, in the proposal there are several exemptions there, and in your previous RAC meetings they talked about the use of trail cameras for research, that you mentioned that wouldn't be covered because we're only looking at potential take. Would that be the same for law enforcement as well, as we use trail cameras for both of those things on the forest and would be concerned about the use during the hunt.

Covy Jones: Absolutely, as you read how we've defined this it does tie it back to the take of big game. So, you know the Division's authority comes back to wildlife management, and so when we write a rule to regulate, we write it to regulate as respect the authority that we have, which is over hunting methods or take. So, a law enforcement officer, a private landowner using these on his private land for help with trespass, none of that would constitute take unless they were also using it to hunt with.

Chuck Chamberlain: So, you would see that we needed an exemption for research or law enforcement. I feel like it's already in there.

Covy Jones: I feel like it already qualifies, yeah.

Verland King: If I have a camera out there but I don't have a tag, am I legal during the hunt?

Covy Jones: Yes, so let me rephrase this, the way that is written is take, aiding a take, or attempt to aid in the take. So, if you have a camera out there and you're not sharing those photos or giving the information to somebody that has a tag, then absolutely.

Verland King: How will you enforce that?

Covy Jones: Look, I don't want to step too much on Wyatt's toes or steal his thunder, because he loves this. What I will tell you is that like with any law... How many of you came here on the freeway? And how many drove a little bit over? I know how Tammy drives. In all reality Verland, there are going to be some folks that get away with this, like there are with any law in the books. And we're going to catch some of the egregious offenders. It can be hard, and we catch them every year. It's amazing sometimes it's another offense that leads to looking into something a little deeper, and then all of a sudden, we have a bunch of trail camera photos that we know came off a transmitting camera, we know the time, and we know that animals been taken because we've seized it. So, it's hard and I know they're going to make some cases. Now Wyatt, you probably ought to make sure I didn't say anything incorrect there (Wyatt: he's on point) Thank you.

Gene Boardman: Okay as far as law enforcement goes, can you tell of transmitting trail camera from any other kind of trail camera?

Wyatt Bubak: Yeah, most will have some sort of antenna that's attached to them, or some sort of wiring system that they're running a transmitter up a tree to get service or something like that. So typically, you can tell the difference between the two.

Austin Atkinson: To follow up with that Wyatt, on what Gene said. The way I read it is a trail camera that is capable of transmitting would be illegal, even if it's not in service. Is that right?

Wyatt Bubak: Correct. We didn't want the loophole to say, well I didn't have it set up to transmit; and leave that obligation up just to prove. So, any kind of camera that is capable of transmitting would be prohibited during that time frame.

Brayden Richmond: Go ahead Tammy.

Tammy Pearson: I'm assuming we're just talking public land though, am I right?

Covy Jones: Sure, yeah. No. No we're not, because these are public wildlife, and because of the survey data we came back and we're making this recommendation for hunting big game. So, if you're hunting wildlife on private land or you're hunting wildlife on private land, the regulation is the same.

Tammy Pearson: So, my question is also in the materials, the exemptions were active livestock management and those kinds of things, or trespass, right? On the transmitting cameras.

Covy Jones: Yes Tammy, and that's a really good point. We wanted to make sure that a private landowner still felt like they can still monitor their program, monitor their agriculture operation, and do the things that they need to do. So, we listed those specifically.

Tammy Pearson: Okay.

Austin Atkinson: Now Covy, to follow up on that exemption that means if a deer walked by her trespass transmitting trail cameras, she was still legal as that agricultural producer to harvest that animal. Correct?

Covy Jones: I'm going to let Wyatt answer that question.

Wyatt Bubak: Our intention on this would not be to address incidental occasions. However, if we do see that abused, or find that was the facade that was used to justify the use of the camera we would address that differently. But however, we wouldn't want to punish someone whose intention was not that.

Tammy Pearson: Ok. I do not have a transmitting camera. I did have a regular camera, it was just a security camera, but it was in one of our fields that Jason as approved us on agriculture. And we had some strange vehicles. Come to find out they came in and shot a buck in the middle of our hay field and we didn't know a thing about it until a week or two later when we saw it on the trail camera. Everything is posted, they shouldn't have been there, blah blah blah. (better get yourself a transmitter) Yep.

Brayden Richmond: Go ahead Austin.

Austin Atkinson: I have some more questions. Two parts, and they're connected. Why is it July 31st and not August 1st? I don't understand pulling that camera July 30th as opposed to the... there's probably a reason there and I don't understand it. The second part of that is spring bear. Does that still allow a transmitting camera for the harvest of spring bear if you have a bait permit?

Covy Jones: Okay so the first one, the reason why is simple. And that is just that you can have a permit in hand for big game animal on August 1st. So that's just the distinction there. So, we cut it off the day before you can have a permit in hand and went all the way through the last day that you could be hunting a big game animal. Now I understand the majority of hunts happen August 15th August 20th through the end of October. But there are still some limited-entry buck hunts, and bison hunts and things that occur later a little but later. There is the possibility of hunts occurring up to August 1st.

On the second question, in the survey that we did you'll notice that we're recommending to put these same dates in the cougar and bear rule. And the reason for that wasn't to preclude cougar and bear, the reason for that was because you could have a spot and stalk cougar permit or a bear permit and be using it for big game. And so, we added it to those two rules, only overlapping that same time period for big game. In the survey the sentiment wasn't overwhelming, or there wasn't support to regulate this for a cougar or bear, and so we're following that line and if you had a spring bear tag you absolutely would be able to still use the transmitting camera.

Brayden Richmond: Covy, I had a question along that line. Some of the feedback I've received, I think all of us have, is a concern from houndsmen. Particularly cougar in the winter. So, the question would be I don't know what percentage, but an overwhelming percentage of big game hunts for antlered animals, not antlerless, but antlered animals are done by December 1st. Had we looked at doing December 1st as the cut off so particularly those guys chasing cats can use cameras?

Covy Jones: Yeah, and Brayden we did, we toyed with the notion. Because you're right, the majority of hunts are over by then. We're talking there are a few limited entry deer hunts, and a few bison hunts, and then our antlerless hunts. And honestly a transmitting camera could be helpful on an antlerless hunt just to know if the animals are there or aren't there; but it's not like they're picking the cow with the biggest ears. We just felt like we would be consistent across the board. Whether that's right or wrong, that's the recommendation. Just consistent across all big game hunts, that's why we went with that.

Brayden Richmond: So, I may have a statement on this, but let me ask a question. Is there a concern with having and transmitting cameras on antlerless hunts? Because the goal of the antlerless hunts is to harvest animals, that's why we have them. So, would there be a concern with aiding harvesting on antlerless hunts?

Covy Jones: Okay, so the answer is probably less of a concern, right? Because the goal is to harvest. There's still a strong sentiment from a lot of sportsmen in the survey; at a fair chase sentiment, about what it means to go out and have fair chase and the feeling of a transmitting camera whether it has antlers or not, does that dive into that fair chase?

Austin Atkinson: I'll ask a hard one. Why did the Division not decide to restrict regular internal storage trail cameras as part of this recommendation? Was that directly from the survey? Why was that not included?

Covy Jones: The simple answer is yes. We had the majority of our support, 51% as compared to 33% that opposed on a transmitting camera. Excuse me, I'm sorry. Let me read this slide really quickly and then I'll answer. There are so many percentages and numbers. At the end of the day we had support, a lot of support, to regulate transmitting cameras and less support to regulate non-transmitting cameras. There is one slide that can kind of confuse this at the end of the survey. We did ask if the public was supportive of a Nevada style ban, which is both, under a season. And on that slide, there was support. But if you look at the individual questions of do you support regulating internal storage the answer was no, do you support regulating transmitting the answer was yes. A little bit of confusion about the question on Nevada's rule but overall, we felt like we teased this out and this is what we had the most support for.

Austin Atkinson: Another question, probably for Wyatt. Have internal storage trail cameras or transmitting have they helped you in a prosecution from other Sportsman, from other individuals trail cameras; is there any validity to you guys having trail cameras on the landscape to help you with your investigations?

Wyatt Bubak: Correct me if I'm a little bit off-topic and not answering your question, but some of the ones I can think of off the top of my head are when blinds or other cameras are stolen, we have trail camera photos of the individual stealing those items. It has helped us in that type of case. As far as trail cameras being on bait and dogs running through bait, we have photos of that as well, so there are instances where public use or our use of trail cameras has aided in identifying individuals or prove the crime did occur. Did that answer your question adequately?

Austin Atkinson: Yeah, I think so. I was more thinking of specific animals, like hey I have a picture of a trophy animal you know after the season was over and then it shows up dead. Things like that.

Wyatt Bubak: I can't think of any specific examples, but it would not surprise me if we have someone claiming they shot a deer on the extended, but we have a photo of it off the extended for example. It would be likely.

Brayden Richmond: Go ahead Gene.

Gene Boardman: As I understand it, you don't want transmitting trail cameras during that big game season, but it would be all right for the spring bear hunt?

Covy Jones: That's how it's currently written, Gene.

Gene Boardman: If the reason for not having transmitting trail cameras is an ethical one, it should apply clear across the board.

Brayden Richmond: Any other questions from the RAC? You said one more on your last one, Austin. Go ahead.

Austin Atkinson: I got another one. Question about the sale or purchase of trail camera images. How does that work with guide services and finders' fees, which are way popular in Utah? And for those who don't know what that is, it's where an outfitter will pay an individual who finds an animal or scouts an animal. Might not always be a live photo, maybe a trail camera that he ran in the spring or summer. How does that work? Does it spam all expanses of time if it's something you saw last year, this year? Do we have concerns about that?

Covy Jones: So, first of all, if that data was collected by a trail camera and the way it's written is photos, location, time, any media, it would be illegal to buy or sell the media. Now obviously if you're a guide and you're running trail cameras and your being paid for your guiding service, that's a different thing. But it would impact finder's fees, if the data was collected by a trail camera, and that's what was shared. So, one of the things we were asked to do and one of the sentiments was that the public wanted us to regulate the number of trail cameras on the landscape, and that is that is something that when we look at it is close to impossible to do. When we realized regulating the number because I may have a tag and I'm allowed five, but then I put five out for my wife, and five out for my son, and five up for my daughter. And all legal, right? It was just something that was impossible to regulate. So, the other question we asked in the survey was how does the public feel about buying and selling of these images for take. Again, this isn't wildlife photography this ties back to take. And there was a strong sentiment to not allow that. So, we hypothesize that if the incentive isn't there to buy or sell those images, it may reduce the incentive to go and put out 50-60 cameras to try and capture those images and sell that for big finder's fee. So that was some of the rationale behind that. The other part of this is there are, and I found one the other day, websites where you can go on and buy a picture of an animal and that will get you the picture of the animal, the time it was taken, in the location of where that is. And if you have a tag on that unit, pay 60 bucks or whatever it is and then you're off to hunt the animal with all that information. And there is a pretty strong sentiment that you should do your own work, and that's where the whole not transmitting cameras came back to us, you got to put it up, you got to walk in, you got to check it. And you can't buy those images. It would affect that.

Riley Roberts: Covy was there any discussion about identification on these trail cameras? For example, on our traps there is a specific identification number on each trap that is in the ground. Was there any discussion about something like that to make that happen so that you could identify who that individual was who put it out there; and if so, what was the sentiment on that?

Covy Jones: You want me to take this one, Wyatt? Yeah, we did talk about it, and it was just one more registration program that we be running where we had you come in and register everything to go out to the field. And there could be some benefit to it, and it's also like how much is enough? And what would you add to that, Wyatt?

Wyatt Bubak: The only thing I'd add to that is the reminder that this is tied to takes. Only a camera that's on the mountain that's attempting to take wildlife, or aid in the attempt to take wildlife would be something we'd enforce. So, a camera for photography reasons we would not regulate that camera and therefore wouldn't have a reason to place a registration number on it. All trapping devices are regulated by the state, so we have that ability to require that on trapping devices. But the way the rules written, with the authority we have as far as cameras go, there could be any number of cameras not registered but still legal on the mountain side. So that the effectiveness of that probably wouldn't be effective as far as regulating how many or who's using cameras.

Brayden Richmond: Go ahead.

Austin Atkinson: Covy, the rule the way you proposed the changes, do we have an expectation of what this will do to success rates, to harvest, to the future, or am I looking too far forward on this?

Covy Jones: Yeah, no. No idea. I mean I would like to give you an answer. I assumed that it could impact probably not the number of animals, it may impact individual animals of extreme quality in some areas. It probably won't have any impact on success rates.

Riley Roberts: Covy I'm going to have you back up just a moment. I think that it is important for both the RAC and the public to understand the process of how this first came about. A lot of the comments that we have received from the RAC is, the Division is doing this, the Division is doing this, and obviously we see that a lot when it comes to something that people are very passionate about. Can you give us, I know you touched on it at the beginning, but give us a little bit more background from the legislative side that's coming to you guys, so that the public knows that is not Covy coming and saying, hey we want to take your trail cameras away type of feeling.

Covy Jones: Thanks Riley, I actually appreciate that. One of the things that I'd say is that there are a couple of things. First of all, I'm the face of a lot of

recommendations, which gets me a lot of love on social media, and I read all the comments and appreciate them. But whenever we do this, you know this rule was written by a team, so a team of people along with our attorney general's office representatives. And we're not always perfect, we may miss things, we may get it wrong, but there's a lot of people that work on this, even though I'm the face. The other part about where this came from, there was a strong sentiment last year during the legislature that this is one of the things that the legislature wanted to address. They wanted to address baiting in big game, and they wanted to address trail cameras, and they walked it all the way down and we're going to address both. A lot of the public comments at that time were let us address this, please take this through our public process and let us address this. So, the public was asking the legislature to send it through the way that we make wildlife rule. You know, to their credit they backed up and said okay. If you want this to come through your public process, and you're willing to address it and you're willing to have some rules about how we use trail cameras will let you do it. And so, when they passed House Bill 125 last year, in there was the direction for the Division to take this through our public process. And I think what they were trying to do was listen to the public and do what they asked, and we're just trying to do what that requires us to and give the public opportunity to comment on this. And you know I'm not into finger-pointing so this isn't them versus us or anything like that, but this is our chance to comment on this to get it the best we can in the way that we want to see it.

Kevin Bunnell: Fortunately, we have Riley Peck here tonight, who's our legislative liaison. Riley do you want to add anything to that on how this evolved during the legislative session last year?

Riley Peck: Actually, I think Covy did a pretty good job on describing that. I think that his point in that as we were talking through this bill and you saw this process play out at the legislative level it became very apparent that there are a lot of passionate feelings, and there were a lot of desire to have a say and not just an all-out ban on this. I think the legislative body did a very good job in listening to the public, and still had a desire in seeing something regulated along the lines of trail cameras. So, in their effort to allow both of those scenarios to take place as part of that bill as Covy mentioned, it did send this to the Wildlife Board and asked the Division to make a recommendation before this next 2022 session that is coming up. This is part of that directive; we do have to report back to the legislative body on what the RACs and the Board came up with. As Covy said it was heavily desired that they go through and they backed it up, as there were a lot more voices coming and saying let the public have a say in the camera portion of it all.

Kevin Bunnell: Thank you Riley.

Brayden Richmond: Go ahead Austin.

Austin Atkinson: One more, Covy. While this Muzzleloader rule is open as well, would this be the time, we've had a lot of comments about restricting variable power scopes again on muzzleloaders. Would this be the time to make that change?

Covy Jones: Yes, if there's a desire to do that the rule is open right now. And so that would be an appropriate thing to address if there's a desire to do that. But you've got to promise that's your last question, Austin. Oh, I'm just kidding.

Brayden Richmond: If we're moving on from trail cameras, I've got a question on the antlerless or the female permits for once in a lifetime and antelope. I'm really glad this is being addressed, I had a situation with my daughter last year with an antelope. She had a buck tag and couldn't put into the doe tag and so we ran into that. It seemed odd at the time. But my question is on the once in a lifetime, did the Division look at making once-in-a-lifetime female under the same rule that they are once in a lifetime? So, you can only apply for one once in a lifetime permit. And the reason for that, and maybe I'll get into my comment more, but those are so limited that the demand for those seems like if we could spread them out as much as possible, maybe there's some benefit.

Covy Jones: No, that's a really good point. And first I should apologize to Austin, because he always has a lot of great questions, and puts me on the spot quite a bit. I actually do appreciate it. But to answer your question, as you know cow bison and nanny mountain goat are both once-in-a-lifetime permits. And then when we did cow moose and bighorn, we wrote it differently. The rationale is simple, and that is just that there's not very much sexual dimorphism between a nanny goat and a billy goat or a cow bison and a bull bison. But there's a lot of sexual dimorphism between a bull or a cow moose, and the same thing goes for an ewe or a ram big horn. So that's why we went with what we went with. We felt like there's enough difference there between the female and male of those species that it wasn't the same experience. Right or wrong you're right they are highly desired, but that's why we wrote it like we did.

Brayden Richmond: Okay, thank you. Go ahead Gene.

Gene Boardman: Yeah, on that topic. Doe antelope are a preference point. Aren't ewe and moose bonus points?

Covy Jones: They are. So, they're managed more like limited entry with the five-year waiting period after you draw, and on a bonus point system, not a preference point system.

Brayden Richmond: You can't stop saying one more.

Austin Atkinson: This one is for Wyatt though. I have another one. Why wouldn't it be easier for law enforcement for the Division to enforce a total trail camera ban during a season than just transmitting only?

Wyatt Bubak: As far as how the rule is written now, like let's say we included internal storage on how the rule is written now, probably would not be easier. And the reason I say that is because 8% of the population is using transmitting trail cameras. So, if

we just limit it to transmitting trail cameras being banned and we'd be investigating potentially 8% of the trail cameras on the landscape. That leaves 92% of the population using internal storage trail cameras, in which again if those are on the landscape, they're not necessarily illegal and we'd be tasked with identifying the use of those cameras. If we banned all trail cameras, we have to define the use of essentially every trail camera on the mountain

Brayden Richmond: Go ahead Gene.

Gene Boardman: Is that 92% of the hunting population, or 92% of the total population?

Wyatt Bubak: 92% of the population that uses trail cameras. So, there is only about 40% of the population that actually uses trail cameras, so 92% of that 40% would be using internal storage trail cameras.

Covy Jones: And the 40% is of hunters, not general population.

Wyatt Bubak: Correct, we just surveyed hunters, additional people using trail cameras that we didn't survey wouldn't fall into those numbers. Thanks, Covy.

Brayden Richmond: Chuck.

Chuck Chamberlain: Do we know how many people would... If we get a Nevada style regulation, how many people who are just using trail cameras for wildlife viewing would be affected by that? Because I'm assuming that'd mean you'd have to prove whether they were hunting or not. Again, we have any idea of what proportion of the public?

Wyatt Bubak: So, Nevada bans all trail cameras. It doesn't tie it to take. So, they're slightly different in that the use of trail cameras is banned completely; whether you're researching, photography, whatever. So that would be a little bit different than our recommendation, so be kind of hard to make that comparison.

Chuck Chamberlain: So, if I wanted to put a trail camera out and I'm not using it for hunting, I can do that?

Wyatt Bubak: As the rules written, right now in Utah you could.

Brayden Richmond: Are we ready to move on to questions from the public? And just a reminder to state your name and then ask your question, and we'll do comment after the questions.

01:04:36 Questions from the Public

Troy Justin: Troy Justin with Sports and Fishing Wildlife. Covy is the current rule that is being recommended, would it allow livestock producers to use cameras... say a sheep producer to locate a lion or a bear?

Covy Jones: In a depredation situation? Currently that would probably be included the way that it's written. But we're not opposed to an amendment to allow that in that situation.

Troy Justin: You'd allow it then, is what you're saying if we come up with an amendment to the rule.

Covy Jones: Yeah, if the RAC wanted to make an amendment to that to allow the use of a transmitting camera in a depredation situation for a producer, we wouldn't be opposed to that.

Brayden Richmond: There's a lot of public here for one question. Any other questions from the public? Let's go to comment cards then.

01:05:48 Comments from the Public

Tim Prince: I just represent myself, and I guess the average Joe Hunter. I run cameras and until this year I didn't know there was a problem, until the HP 295. I think it was a pretty good compromise to bring it to the RAC situation where public comment could be made. I think proposals viewed online regarding the surveys and everything that goes along with that are very well. And I think the results were very representative of a lot of the hunters' sentiment. I would ask that as far as the trail cameras go, that the proposal be accepted as is, I think it's well written and well defined. I think no amendments are necessary, and I think it's a good compromise when it comes to transmitting versus regular trail cameras.

Brayden Richmond: Thank you Tim. While Paul is coming up, let me just remind. It's a three-minute comment for public and five minutes for organization. Then also if you don't have a comment card please fill one out and come on up. There are not as many comment cards here as there are people in the room, so I want to make sure you have your chance to speak if you'd like.

Paul Niemeyer: I'm Paul Niemeyer, I represent the local chapter, the spear line chapter of SFW. What I'd like to talk about is probably trail cams. When you get people together now, sportsmen or even people that aren't hunters the thing that is a real concern is the low deer numbers. That's where it all starts and then it winds up everybody blaming why they are. But the real problem is probably about technologies on these animals. Whether it be with cameras or equipment, these animals just can't adapt to what we put on them. And trail cameras are probably the worst in my opinion. I had a friend who drew a Paunsaugunt tag two years ago and I took him down there. I was absolutely shocked amount of trail cams and not just on the water holes. You'd see tracks going into a patch of trees somewhere and you'd go in to see what's going on and there's a pile of apples with a camera on it. I think it's just gone beyond even something that's reasonable. And we're getting black eye as sportsman from these trail cams

especially. People are saying, well all you guys do is just take out cameras and take pictures and then you go kill them. So, they're looking at us as not sportsmen anymore, they're looking at us as killers. All these people have said we need to put the hunt back in hunting and most of the sentiment that I'm getting, and I'm out and about probably as much as about anybody, is that they are against trail cameras of any kind. I just had, in fact it was just a few minutes ago a guide called me, and he said do anything to stop the trail cams. And they're talking about all of them, not just you know we talked about, the ones that you can reach on your phone and stuff. But they're all hurtful and they really select against trophy animals especially. And when you can go and you're out scouting on the early season elk hunt. It's still pretty hot then and you got some time in the morning, sometime in the evening to look. You can't cover a lot of ground, but if you got a trail cam in all these drainages you can find a trophy bull or whatever and then you target that drainage until you finally have a really good chance of taking that animal. So, we need to rethink this a little bit, and it's going to be really hard to reel this back in. I mean everybody's got trail cameras, there are so many of them out there. Our recommendation is to outlaw all trail cameras. I know the northern RAC met and what they did is kind of that recommendation also. I think they kind of mirrored Nevada's which I think is the first of August to the end of January, all trail cams are prohibited with the exception of livestock owners that use them for depredation or if they've got a pond their watching water on to see if it's getting dry, things like that legitimate reasons. Anyway, that would be all recommendation to outlaw any trail cams, and then I guess we can put a date on it from you know August 1st to end of January, that would be a decision you guys could make. But there is a real strong sentiment against trail cameras in general. Thank you.

Brayden Richmond: Thank you.

Troy Justin: Troy Justin Representing Sportsman for Fish and Wildlife. We support the Divisions recommendation which is basically limiting the use of transmitting cameras on the dates specified and prohibiting the use of night vision and thermals for the hunting of big game. With the exception that puts a clause on there that allows these producers, sheep, and cow producer, that if they have a problem with a bear or lion that they would be permitted to use those. Speaking to this just a little bit, we've all heard the cliché you're not going to get anything unless you get out of camp. That's not true anymore and let me tell you a story of why. I've got a nephew who's 15-16 years old, he's sitting in class in Springville. 11:30, ping, spike bull on the Manti. Called his mom, can I get out of school? His buddy gets out of school, they drive up and that bull is still there. They dial him up at 540 yards and they torch him. I'm proud as punch, I've got to hand it to kids being able to do that. But as proud as I am of him, there's something wrong with that. The problem with these transmitting cameras is when I'm out there in person, I'm one person, I'm looking at one hillside. I can have multiple transmitting cameras everywhere, and I can be in multiple places, kind of like the Holy Ghost. That's my problem with this and like Paul said, we've got to put the hunt back in hunting. And it targets big animals, bottom line. It is one of the most effective tools out there, they're there 24/7 365 you can have them in trees, dark, whatever and at the end of the day, you can't kill something if you don't know it's there. So, I would ask sportsmen to step back and show a little self-restraint. I'm not calling you ethical or whatever but if we want to maintain any kind of quality in the state of Utah, we've got to show a little self and start cutting back on some of these technologies daily and we got to level back up the playing field. Thank you.

Brayden Richmond: Thank you Troy.

Tanner Carlson: Tanner Carlson representing myself. I would really enjoy not being able to use trail cameras. When I was 13 years old, I remember getting on a horse at 3 in the morning and riding up the mountain and seeing what animals were on that mountain. And it seems like a lot of people nowadays already know what animals are on that mountain. I have friends in Southern Utah that as soon as a trail camera picks up a big deer or big elk, they grid that area, 75-80 trail cameras. The animal doesn't have a fighting chance. We talked about predators in the state, the best is when people are complaining our deer herds are declining and there's no more big animals in the state, trail cameras are the problem. We have long distance guns, we have long distance muzzleloaders, bows with the Garmin sights nowadays, it's getting out of control and we need to start with something, I think trail cameras would be the perfect thing. I appreciate the Division trying to save our critters, trying to keep hunting going for generations to come. I would really like to see Nevada rule, where we can run trail cameras in the spring, but when we're hunting, we need to be out hunting. We need to get out with friends and family and hike around; get out the spotting scope, get out the binoculars. It's discouraging to see what it's come to. I just saw on Instagram the other day, it was actually yesterday in the post has been taken down, but I guess the was going to check his trail camera and there was a dad and two sons who had pulled the memory card and we're going to I guess throw it away or damage it or something, but it just caused a lot of contention. We don't need that in the state we're hunters, we should all be on the same team. Especially when we have so many people that are wanting to get rid of hunting in the state. Trail cameras have just caused issues. Don't get me wrong they're fun getting sweet pictures, but they are just more problematic than anything. Thank you guys. I appreciate it.

Brayden Richmond: Sorry, after Jed Memmott we'll have Blake Stevens.

Jed Memmott: Jed Memmott, representing the Dry Creek allotment for the Oak Creek unit, it's a greater association. I wanted to come and tell you some of the experiences we've had over the past little bit in Oak Creek, which is a pretty active deer unit this point with some pretty good animals we feel. And what I what I've experienced and some of our other ranchers are some in cases of vandalism. And the reason I wanted to pull this back into trail cameras is both of ours in particular had a person who was posting a trail camera, and at the time that they were posting basically committing a felony tampering with government infrastructure by cutting pipelines, cutting the water lines into our life stock troughs and in one case was into a collection box. And so, I think having the trail camera is almost like enticing some of these, and I don't want to lump anybody into anything, not all cattle guys hate hunters and not all hunters or not even all guide services or anything like that is what I would deem is unethical. But there would be one in particular that I would say in my opinion would be unethical, and according to the law enforcement guys that we've talked to that's the way that it that's the way that they see it too. But when you're talking about having you know two quarts of water a minute to water livestock and to water the game in the area, that the importance of having that

infrastructure intact and operable is paramount. Especially in this extreme drought situation that we have. The grazers have a grazing plan that they coordinate at the first of the year, they coordinate that with all the federal agencies that we run with, and then if something happens and in the one case where they cut the line going into the box, and also plugged the box so the water didn't go down the pipeline. So that ends up having to mess with our grazing plan. So, there's those kind of things. And another recommendation that I would want to say is that you know what guys are catching you take pictures of deer on the trail cams, we take pictures of everything else that moves on trail cam, so in that process I was also, I guess is retaliation to for me going to authorities, the individual who did this had taken some pictures of me and one of them taking a leak and put that on social media. And maybe some in the room have seen it, maybe some in the room have seen the one of me throwing rocks at his trail camera or whatever. But there is some abuse and I think that ties specifically to the trail cams being enticing people to do things that they wouldn't ordinarily do to go get that spot where nobody knows that there's water, by cutting a pipe and putting in a little pond are for their own selfish benefit. Then just another thing on the survey too, I think the way that this survey was conducted, and I haven't hunted in years, but you know I think it's a fair survey for the broad range of hunters, but I think as far as the public is concerned. Outside of that I don't get any support of any kind for trail cameras of people that aren't hunters that are none the less impacted by the trail cams that are put up there you know by hunters, and by others; it may not just be hunters, but they're getting put on the internet without their permission or things like that. There are just things that impact the total of a public of those cameras being there. That's what I got.

Brayden Richmond: Thank you Jed. The last card we have is Blake. If anyone else wants to comment, hurry and fill out a card and bring it up.

Blake Stevens: Good evening, my name is Blake Stevens, I guess I represent myself and the cattleman on the Whiskey Creek which is the west side of the Oak Creek unit. We kind of had similar experiences as Jed, people pulling water out of the infrastructure that waters our cattle throughout the valley, and it takes a lot of time and effort on us cattlemen's part to get that back in the line, get the air bled out, everything like that. Then I have also experienced them on the on a personal level, we have a spring that feeds our irrigation system and every year I find trail cameras on our private property, and this year they damned off the spring ditch and made a wallow for the elk and everything and I've been told by a Fish and Game officer, several years back and can't remember the guy's name, is pretty much a good luck you'll never catch him you're on your own. And it's really frustrating to always have to do that thing; so, I'm really in support of Nevada style law. I think it would help law enforcement be able to not be so laden down with the work effort if it's a complete ban on all cameras, pretty cut-and-dry easy to manage, but again that's just me. I feel like the public, I used to be an avid hunter but got kind of disgusted with all that, it seems like you're shooting fish out of a barrel now, it's not much hunting. I just had a boy turn 13 and kind of get him back involved in it. You can't go up on the mountain without having 20 different cameras pointed in your face. To me it's not it's not spot and stalk, it's not fair chase, it's just the way it is now. But anyway, I thank the Board for my time.

Brayden Richmond: Thank you. Appreciate the comments from the public. We'll turn the time over to comments from the RAC. Before I do that, I just want to make a couple comments on this. My thoughts on this. One, I want to thank those who came tonight, and I appreciate you participating in this public process. This has been an interesting issue, as was mentioned a year ago there was an outcry from the hunters when this legislation was trying to go through, and they said please bring it through the RAC process, please bring it through the RAC process so that's what we're doing; we're bringing it through the process and now I'm thinking thanks a lot. Now we have to deal with this. But my comment would be, as I've stewed over this one, me personally, what I think we should do is different from what I think I should do representing the public. I don't want to be in a position where my personal beliefs and my personal thoughts impact my neighbor who has the right to have his personal beliefs and personal thoughts. I think he's just as entitled as I am. However, we have a public process, and this is the public process that the public shows up and voices their opinion. There are surveys, different that have gone out and although that data is great surveys are hard to really decipher. The process is we have this meeting for people to show up and speak and address their concerns. My views on this, and if I were to vote tonight, have changed due to what I've heard here tonight. But I want to thank those of you that have come, and I fully support the Division at this point and in fact I would be inclined even to look at more restrictions based on the public input that we've had. For me this is how the process is designed to work and I want to thank you guys for taking the time to be here. And with that I'll turn it over to comments from the RAC.

01:24:45 RAC Discussion, Comments and Vote

Riley Roberts: I too would like to thank all of those who... I know there weren't a lot of comments online, but I did read through each one of those and I appreciated those. I also appreciate all of you who came and commented, and for the questions tonight. This is something that's not just this last year, this has been something that is referred to as a social discussion, this is not necessarily something that affects the biology of these animals; but it is something that affects us as individuals. Just as the scopes on the muzzleloaders, and the long range, and the technology is 100% a social problem or a social decision discussion that we have to take. I do appreciate it coming back through the public processes as well. I'm one of those guys that appreciate this process rather than us just being told from the legislation that this is how it's going to be. We actually have a voice, and we could put that input in. In regard to the trail cameras themself representing the sportsmen I have very close friends who are completely on opposite sides of this. Some are completely for and some are completely against it. And then I get that. I have family members who are completely for it, and completely against. I think you do see the polarization in this. Along with Brayden's comment, I would be inclined to vote maybe differently than I would have earlier. One of the issues that has not been discussed yet is ownership of animals. That's always been something that I have that I've had a hard time with. I think that when sportsmen go out and they find these big animals, whether it's through guide service, whether it's an individual, or whether it's just us out having fun, these animals are named, they're nicknamed, and scores are already figured out before

they ever hit the ground. And there is a sense of ownership that comes with them. Whether it's the amount of apples that have been put out, or the amount of pictures that have been taken of this particular animal there is a sense of ownership that comes with that. I struggle with that because this is this a public animal, this is a renewable resource that's out there, and as much as I like seeing these animals and getting pictures myself, we all have that same right as sportsmen, as public to both view or harvest if we have that opportunity for that animal. And it doesn't matter how much time or money has been spent. I'm looking at that animal and that part of it bothers me. Trail cameras, my personal opinion on it, I have again a little bit of heartburn because the average Joe may not be able to afford or have the time to go out and set cameras. There are individuals at set multiple cameras, some of them dozens at a time and that's great and I envy that time and that of the ability to get out and take those. I've seen some of those pictures and I admire them, they're amazing. Brayden talked about this in the last RAC meeting, and it's not about fair, but it is about giving everybody that same opportunity, and I don't know that that does that. I also appreciated the public comments about how the public views that, not just from the sportsmen or the hunters, and that was something that was brought up that was not necessarily shown in the surveys. There is a lot of heartburn out there because people can't go anywhere without a picture taken of them. Some of these pictures are not appropriate for the internet, some of these pictures are made fun of because they're not appropriate on the internet. I myself have been walking down deep dark canyons, and nature calls, and I have to look around because I know how many trail cameras are out there and I don't want to be inappropriate on the internet. And I do think the technology has created where we are now in the hunting world in the state of Utah; and it would also be my recommendation that we go even stricter. I appreciate the stands the Division has taken, but I would recommend that we go even further and even look at a total ban. At least a seasonal total ban, whether that's from the first of August or whenever the RAC so chooses. But I would definitely support that at this point.

Brayden Richmond: Go ahead Chuck.

Chuck Chamberlain: I have a couple of things to mention from the Forest Service, we have some comments that have been mentioned at the other RACs and we wanted to make sure they were spread to all the RACs. Commercial trail cameras on National Forest lands can be subject to a special-use permit. I don't know how many of those we do permit because there are so many of them out there, but if they're commercial use they can be subject to a special use permit. We have cameras that we know have been left in place for 3 or 4 years and haven't moved, they've been on our guzzlers and they're the same cameras, so they can be considered abandoned property and removed subject to the forest service removal rules. Trail cameras can be damaged when we do our vegetation treatments and have been in some of our prescribed fires. We don't know they're there and so we say we don't claim responsibility for that, it's up to you to make sure your cameras are safe. We're not responsible for the loss of those trail cameras. That's one, and two, in listening to what we're talking about here with Nevada style regulation, my only concern is I'm primarily an archery hunter. I moved to a state that rifle hunting was dangerous in because there were so many, I switched completely to archery hunting. That's great for me because I can scout right up to my season, pull my

cameras, but if somebodies season starts in October that's two months that they haven't seen a picture so they're scouting pretty well, it may be worthless for a hunter that had to pull his cameras down in August. That would be my only concern. For me it's great, but those are my comments.

Brayden Richmond: Go ahead Tammy.

Tammy Pearson: I might as well stick my foot in my mouth. I do have to say I appreciate Troy's comments on allowing an amendment for the depreciation of livestock. I have the same problem that you guys do. We have a lot of BLM, a lot of Beaver county is livestock producers, both on private and private lands, and the general things I'm getting from the public and not just online or this, they hate trail cameras across the board. And nobody ever tells me they love trail cameras unless they're sending me a picture of a buck somewhere. But this is one thing that I've struggled with for a long time. I don't own a trail camera other than on our private property, not even where the animals are. It's our ranch house that we worry about the security system. I do not like the transmitting ones at all, especially not during the hunting season, so I would totally support that one. I'm not crazy about trail cameras at all, but I don't have a single water trough anywhere that doesn't have two or three cameras on it. And they got all kinds of mad when we haul water and some of the springs are not producing, Dan knows this, so we haul water and cameras are right in the road where you can't haul water. So, we have a lot of those kinds of issues. I would like to put trail cameras up just to see who is doing the vandalizing and that kind of stuff myself. So, that's kind of where I sit.

Brayden Richmond: Go ahead Gene.

Gene Boardman: I've run into a few places where I've ran into trail cameras. I haven't had the bad experience that some of you have had but I can appreciate that they are bad experiences. Myself, I've got three trail cameras, one that I don't have the technology to operate, and the other two have taken exactly one picture and it has deer in it and it has two does running up the creek bank, and the rest of my pictures are generally foxes and owls. I love that trail camera out there on a fox den or out at an owl burrow. It's really fun and I'll get you some great pictures. I think there's a lot of people that use their cameras that way and we don't want to alienate them, we want it available for everybody, but in truth it's hard for me because I know why most of these trail cameras are out and it's just a tough situation either way. Personally, I think that going with the Divisions recommendation at this time would be a maybe not a good choice but the best choice.

Brayden Richmond: Thanks Gene. You ready?

Austin Atkinson: I do have a comment. I'll preface this a little bit. Every night when I go home, I have a 260-inch deer that overlooks my kids piano there. It was shot 1924 up Logan Canyon by an immigrant that came to Utah with a lever action that he picked up. You know, he didn't know that deer was there, he had no idea. All they knew was it was big enough you needed to get the hair off the mountain so he could get it stuffed and he did, by golly. And so, my great grandpa shot that deer and I still have it.

Every time I look at that deer I think, will those days ever be here again? Sadly, they probably won't be for me. It may make me feel jealous of the guys that can afford a conservation tag, or statewide tag to shoot a deer that caliber, but you know what I still get just as much happiness going out and hunting a 150 buck as he probably did when he shot a 260 buck. I think we have to be careful as individuals in the Sportsman to put our jealousy aside. We're all competitive, this is a weird sport where you cannot all have success, it's not like shooting basketball where eventually you're going to make this shot. Eventually you might not have success, and I work in this industry every day where we try to manage results, but there's that element of the unknown that is always going to overpower your preparation. And that's the joy of hunting, that is to me and that is the guys that have commented to me. So, a couple things I want to talk about is, no matter what the survey says I think as sportsman, agriculture, and the public, we need to come together and say this is what we're going to handicap ourselves with, this is the funnel we're going to play in, and some of you aren't going to be okay with it, but let's play in it and let's try to grow some dang animals. That's what we're trying to do, and if we want more opportunity, we have to either have more animals or less success and I need less success under the current management, as we don't have any more animals currently. So, a lot of my comments are around, let's make less success. I know that's frustrating, and it's frustrating for me to even say those words, but that is what I feel like we need to do. We need to have the ability to only be in one place at a time as Troy mentioned, you can't be everywhere at once with the transmitting camera. And even further I want to question the Division, have we ever looked at electric radios and two-way communication. I've said this for years, it's in the fair chase model for Boone and Crocket, and Pope and Young that you cannot use radios or cell phones to direct someone to game, and yet we ignore. So, if we're going to push trail cameras, we need to push it all the way and make it as fair as we can. Now comments on guide services and guys with thousands of cameras. The guides are always going to push the limits, they're always going to be the best because they're getting paid to do that. They're always going to be better than your average Joe Hunter, if you want to call in that. But somebody is going to get lucky and it maybe you and it may be me. That is what I want to support in the state of Utah is that we're going to grow as many animals as we can, we're going to have opportunities for kids, and you know what? Somebody's going to get lucky, and it might be you and it might be me. Let's give up some stuff, let's give up scope muzzleloaders again, let's give up radios and two-way communication, and let's go hunting again. That's my comment.

Brayden Richmond: Thanks Austin. Any more comments?

Chad Utley: I have a comment.

Brayden Richmond: Go ahead Chad.

Chad Utley: Thank you. I've read all the comments that have come in from the public on this, and I represent the public at large, so I just talked to this with as many people that would talk to me about it who didn't send in comments, just people who don't hunt. I presented it probably as fairly as I could stating the issue. The perception was

people really doing that, that doesn't seem right. And you've had a lot of people here today that have kind of hinted at that, you know. If hunters want to stand the wave that's coming from the non-hunters, they need to do this and they need to hunt ethically and fairly, and this just rings wrong, the trail cameras do. From a personal standpoint when I go into the mountains and I go fishing or hiking, I want to get away from technology. We're subject to technology every day, we're being watched and recorded, and the last place I want to be watched and recorded is in the mountains when I'm trying to get away. And so, I would support a complete ban during the hunting season on all trail cameras.

Brayden Richmond: Thank you Chad. Gene.

Gene Boardman: I want to make sure that I comment on something other than trail cameras during this thing. Let's talk about the tags for antelope, moose, and sheep. I understand that you really want to shepherd any point you get because if you miss a year, it doesn't drop you back a year. It drops you back several years. With the exception of antelope, it will only drop you back a year so that's not a big problem, I don't see a problem. I appreciate the fact that it does take some points to draw a doe antelope anymore because it's a fun hunt, but you see a bit more people getting involved in it, and I really really appreciate that. But I think one moose in a lifetime is enough, there aren't that many moose. On the Sheep oh, there's a hell of a difference between a ewe and a ram, and I don't know quite how to look at that, not that, but still there are not that many sheep, so I think one in a lifetime might be okay there. Once you've drawn that ram, I don't see how that ewe is that important to you anymore, so I'm against that recommendation.

Brayden Richmond: Thanks Gene, I would like to speak to that, I would, I believe echo what you said, Gene. I'm really glad the Division addressed this, but I would like to see this addressed a little bit differently. I don't know why the antelope was ever different from the deer and the elk. I think you should be able to do all of the above. But are once-in-a-lifetime are so limited and so many people want to hunt those. Last month we talked about going to the 60/40 split to help move people through the pool, and on our once in a lifetime that doesn't even hardly help. I mean that it's chasing a dream. A lot of that discussion was new hunters and youth hunters, how do they even get a chance in our current system? I would like to see us go to pick your animal on once-in-a-lifetime. If you want to hunt a ewe, then you don't get to put in for any of the other once in a lifetime and allow those new hunters and those youth a chance to go after that if that's what they choose. I have max points for both the ewe and the cow moose, and I'll forgo them. I don't want to, I want to do everything, but I'll gladly give those up if we could go that direction. So that's my two cents on that rule.

Dan Fletcher: Similar to the Forest Service, the BLM authorizes commercial guys through special recreation permits. They're required to have a permit to operate their guide service, and again with the trail cameras, if they're out on the public landscape for a certain period of time, we can remove those and this selling of data that has been going on is not an approved act on public land. And then just touching base on the depredation that is a really good comment from the public about agriculture and it

seems like if we do an amendment made that agricultural producers as well as livestock producers. Not only on private land, but on public land to be able to monitor for depredation issues. And to the permittees that talked here, we have the same problem in our field office. We have people cutting pipelines and diverting water and trail cameras in those areas, but I think they're going to do that whether there is a complete ban on trail cameras or not. The reason that we these pipelines is a lot of these are funded through the Watershed Restoration Initiative, Grazing Improvement Program is to have good grazing management on the public landscape, that's for long-term sustainability on the public land resource, but for habitat anytime we have someone who does damage to an improvement like that, it can be prosecuted, but it is really having a negative impact on what we're trying to do out here. It's not only for grazing management systems but it's to rotate these permittees through their allotments so that they'll be allowed to have wildlife feed on the landscape after they're done with their operation. People who are doing this are really causing the detriment to what they care about most, which is wildlife, apparently. I think that everybody needs to really take this into consideration when you're damaging livestock pipelines, damaging fences, we see a lot of people that are looking for sheds in the spring in particular and they're damaging fence everywhere, and we have cows going all over the place and the permanency is officially trespass at that point because they're not authorized within that pasture or that allotment. It's just not an ethical way to go about business here. If we're looking as a group to promote wildlife habitat on the landscape, we all need to work together a little better for sure. There are a lot of public and private dollars that go on the ground for habitat improvement projects for water developments to improve that habitat, not only for the grazers, but for wildlife as well. So, I sure would like to see this cleaned up. I don't know whether or not a complete ban of trail cameras is going to do that, I really don't think so. I have a lot of friends that use trail cameras, and they don't always hunt. They're out there to get that picture and enjoy the chase. But like it's been said by other RAC members and the public, it seems like the chase has gone away with all this emerging technology. Trail cameras and night vision and I think we're getting away from what the intent of a lot of hunters is, is to have that chase and enjoy that family time and get out on the public land and enjoy it. Thank you.

Tammy Pearson: Okay, Craig Laub is also Farm Bureau or Ag, and he wasn't able to be here. He sent me a text that said here's my thoughts. I think that night vision devices need some regulation, but the recommended rules are not enforceable. Transmitting trail cameras need to be restricted through at least August-January on public lands, and not used for game hunting on private lands. That will also be hard to enforce. I think we need to decide if the muzzleloader hunt is going to be a primitive weapon hunt or a single shot rifle hunt and make rule accordingly. At present it's a single shot rifle hunt. Either way these proposed rules don't make much, if any, difference.

Brayden Richmond: Any other comments? Go ahead Verland.

Verland King: I agree with Craig, there's a lot of things we're talking about and a lot of them are going to be really hard to enforce. I came thinking we ought to keep the trail cams, but how do you enforce it if you have them for hunting or have them for just

viewing during the hunt. It's kind of like a few years ago we backed off the shed hunting season, and I live with an avid shed hunter. She also is law-abiding, and when she went out to the area she hunts for sheds, big ol' footprint and the sheds were all gone. So, no matter what we do it is going to be hard to enforce, but I am leaning more towards banning them during the hunting season. These ranchers that talked, I think the trail cams play a part in their problem. I think what was said earlier it's also who you're dealing with. They'd cut that pipeline whether they put up a camera on it or not, then they know where the water is and can hunt there. Maybe the trail camera could give away who's doing it. I have a similar problem on my winter range. My problem is with Slot Canyon canyoners. Several times they've chased our cattle up a Slot Canyon to get them stuck, and they get stuck whether that's their intention or not. If we happen to get a text from somebody and we go, I mean it's risky, really hard to get them out, it's dangerous for us. I'll get another situation where the Slot Canyon canyoners park right on top of my well, and bring their little dogs and whatever, and so my cattle can't come into the water trough. So, it's quite a problem and there is no single way to fix it, but I think we need to start. I think, there's too many trail cams. I don't know how you take care of the two-way radios and that, but we sure appreciate it when we're gathering cows and riding the country to know where the other person is. It wouldn't be a deal on hunting, but there is that problem too. So yeah, I think we probably ought to regulate these trail cams, the transmitting ones for sure. I'd probably go at least with the regulations that they're proposing and maybe even stronger. Thanks.

Brayden Richmond: Go ahead Austin. But then I want to make sure that Bart and Nick, I know it's a little big difficult to comment when you're online like this, so I just want to make sure you guys have a chance to comment if you'd like. So, go ahead Austin, and then we'll give it to you guys if you have a comment.

Austin Atkinson: Yeah, I was just going to make one last comment. I think it's important for... I know it's been eye-opening to me through this whole process, that we need to learn to control just what we can control. We've tasked Wyatt and his team, let them figure out enforce it. They love their job and not quite 50 of them that are full investigative officers, but they're going to do their best. And we sit here as a RAC to make our recommendations to the Board. So, I want to just control what we can, the Division has made their recommendation, but the end this is a social issue, so we looked our Wildlife Board. And this is all going to rest on them, on how they decide. We can't control every aspect of hunting, we can't control the outcome of everything, but I really want to see as much of this in this process and out of the legislative process as possible. Where this does relate to hunting and take. So, let's push it the way we want it and give it to the Wildlife Board and trust they'll do it right; and I've seen the Wildlife Board and it's not right we can make changes in future years, we can roll things back and that's the joy of Utah. I was apart the last year and a half with Arizona's trail camera ban, involved in all their public meetings, and our system is much superior to theirs. They did an allaround all-out ban year around for all trail cameras starting this January coming up. And you know what? Everybody shook their heads and said we're going to figure out how to be successful regardless of the rule. But our process has been much better, so let's do

what we can, do what feels right and go forward with trusting the Wildlife Board beyond us.

Brayden Richmond: Bart or Nick, do either of you want to make a comment?

Bart Battista: This is Bart. I generally like the proposal and I think the discussion has been very interesting and I definitely concur. So, thank you.

Brayden Richmond: Thanks Bart.

Nick Jorgensen: And this is Nick. I have talked to several individuals I know statewide that hunt, and they'd all be in support for a total ban during the hunting season for many of those types of trail cams. And I've been influenced by the public as well as my fellow RAC members that that's something that we ought to recommend, that they ban it entirely during the hunting season. Thank you.

Brayden Richmond: Thanks Nick. I would suggest at this time, I think we've all had a chance to speak, I think we could go ahead and make some motions. I would suggest at minimum we'd want to have a standalone motion on trail cameras, but then if there are any additional motions again as we suggested before at the end, we could make a motion to accept the remainder. Is anyone ready to put forth a motion on trail cameras?

Austin Atkinson: I will try it here. So, I move that we modify the recommendation from the Division to prohibit transmitting trail cameras and passive or internal storage trail cameras to take or attempt to take or aide in the attempt to take between July 31st and January 31st; and add an exception that agriculture and livestock producers or their agents will be able to use transmitting trail cameras on public or private land for depredation issues. Does that cover it?

Brayden Richmond: I think that's good, I think Kevin got that word for word, so... And Riley would second it.

Kevin Bunnell: Give me a second.

Brayden Richmond: Come on. We've already got a second, I don't know why you're not caught up. While Kevin is finishing that up, any additional comments?

Tammy Pearson: The agricultural not just depredation but livestock and agricultural right? Did you get both of those in there?

Covy Jones: The rule already takes care of ag, so this would just be to modify to account for depredation.

Kevin Bunnell: So, modify the recommendation to regulate the use of transmitting and non-transmitting cameras, I know that's now how you said it, but I think

it covers it, to allow livestock producers to use cameras to take bears and cougars on public and private land.

Brayden Richmond: Does that capture it?

Austin Atkinson: Yeah. Did you have the dates in there? July 31- January 31st.

Brayden Richmond: From July 31st to January 31st. And just to comment on this, I know we get really worried to get or wording exact, but we're presenting our proposal to the Board, they'll finesse our working. As long as we have the theme of what we're trying to capture, that's what's important.

Kevin Bunnell: Okay, so let me read that one more time. So, the motion is to modify the recommendation to regulate the use of transmitting and non-transmitting trail cameras but allow livestock producers to take depredating bear and cougars on public and private land from July 31-January 1st. I'll move those dates up, so it applies to the cameras not to the depredation.

Brayden Richmond: Okay, Gene did you have a question or comment?

Gene Boardman: I have a question, and what's going to happen to all these hundreds of trail cams out there on August 1st?

Brayden Richmond: Same thing that happened in Nevada.

Gene Boardman: What happened in Nevada?

Brayden Richmond: Some of them came home.

Nick Jorgensen: Hey Kevin, this is Nick, does the way that's wording is that specific enough for the public to realize that it's a ban on them during that time period? Because it wasn't quite clear to me.

Brayden Richmond: And just to be clear Nick, it's written for the take, so I think that's what differentiates this from Nevada is this rule is for the take of hunting, where in Nevada it's an outright ban, so we do have that in the Utah rule.

Nick Jorgensen: Okay.

Kevin Bunnell: Okay, so one more try here Austin. Modify the recommendation to ban the use of transmitting and non-transmitting cameras for the take of big game from July 31-January 31 but allow livestock producers to use cameras to take depredating bears and cougars on private and public land. I think that captures everything that we were wanting to capture in that.

Verland King: Is there a reason you're naming bears and cougars? Coyotes are no season.

Kevin Bunnell: And we don't regulate coyotes, because we don't have any authority over them.

Verland King: Same with Wolves then too huh?

Kevin Bunnell: Well...

Brayden Richmond: There's no wolves in Utah.

Kevin Bunnell: I didn't think about wolves.

Verland King: Tell that to the Northern Utah cattleman.

Kevin Bunnell: Does that capture what we wanted that to say?

Nick Jorgensen: That's much better to me Kevin. Thank you.

Brayden Richmond: I would just emphasize that we're capturing our intent and, in my opinion,, I think it does. The wordsmithing we'll leave up to the experts.

Kevin Bunnell: Okay, we've got a motion and a second.

Brayden Richmond: Okay we've got a motion and a second.

Kevin Bunnell: Let me get you your roll here.

Brayden Richmond: Okay, so (roll call vote)

The following motion was made by Austin Atkinson, seconded by Riley Roberts.

MOTION: I move that we modify the recommendation to ban the use of transmitting and non-transmitting cameras to take big game from July 31st to January 31st but allow livestock producers to use transmitting cameras to take depredating bears and cougars on public and private land.

Motion passes 9 to 1. (Opposed: Gene Boardman)

Brayden Richmond: Gene do you want to make a comment on the no for the record?

Gene Boardman: Uhm, it's just to vote against excessive regulation. I don't think we go with what you just voted on, I don't think it will kill anything, life will just go on, it's just I'm against the excessive regulation.

Brayden Richmond: Thank you Gene. I can sympathize with that explanation. Let's discuss any additional items we'd like to make a motion on. We've tackled the monster. Now I think we can run through the rest. Additional motions on agenda item number 6.

Chuck Chamberlain: I just wondered if Austin wanted to make a motion on muzzleloaders?

Austin Atkinson: I would love too. Rather were you going to make one? I'd hate to steal your thunder.

Riley Roberts: No, go ahead, I can always make an amendment to your motion.

The following motion was made by Austin Atkinson, seconded by Chuck Chamberlain.

MOTION: I move that we accept the recommendation to require muzzleloaders to be loaded (both ball and powder) from the muzzle and ban the use of variable and fixed power scopes on muzzleloaders.

Motion passes unanimously.

Brayden Richmond: Any other additional discussion? This is my additional discussion; it probably should have been in the comment section. This is a good motion. I was surprised how many comments I received wanting this to happen. So, it's definitely, there was a lot of public input on this one.

Austin Atkinson: And I'll make a follow-up to that. I was at the RAC meeting in Cedar I don't know how many years ago now, when we went from fixed up to variable and I remember everybody kind of shrugged their shoulders and a lot has changed in that five to six years with muzzleloaders. Me personally, I shot a deer at 600 yards this year on the muzzleloader hunt. Because I was able to do that legally and ethically and I made the shot. But would I like to see that go away? Maybe increase opportunity and decrease success? Yes, sign me up. That's a part of my reasoning and a lot of the comments that come in that say, hey muzzleloaders have gotten out of hand.

Brayden Richmond: Thank you, any additional discussion?

Riley Roberts: Not necessarily discussion, just comment. I'm glad to see that the definition has changed on that. I would have thought that the word muzzleloader was enough, but I appreciate that clarification.

Brayden Richmond: Alright, you want to read that back?

Kevin Bunnell: Alright, the motion is to accept the recommendation to require muzzleloaders to be loaded both ball and powder from the muzzle, and also ban the use of variable and fixed power scopes on muzzleloaders.

Roll call vote- see above

Austin Atkinson: I'll make one more discussion on that, Brayden. I think we would be surprised how many people applying for bull moose or ram sheep would opt to take a female with their once in a lifetime points if given the option. So, I think in the future we should look at combining that species such as bison or mountain goat, rather than pick one or the other, not even at the same application times. That would be my comment for the future.

Brayden Richmond: So, for me, that would accomplish the same end goal that I had in mind so I would agree with that idea.

Covy Jones: So, can I comment on Brayden, is that ok? Changing this tonight, this is really complicated because of the two-point systems involved and everything else. What do you do when somebody has 10 cow moose points, do you add those 10 points to their once in a lifetime bull moose points? Does that put them ahead? So, what I'm trying to say that if the RAC wants to make a motion that we investigate this, we could run into issues that I don't think we're prepared for.

Brayden Richmond: And I guess my comment to that is fortunately, we can't change it. Again, we'll leave that to the experts, but again what I would recommend is that we look into it and the Division would come back to us with how this would look.

Covy Jones: That's a very fair comment. And that is something we could do.

Brayden Richmond: Go ahead Gene.

Gene Boardman: I'll make a motion to just word it like Brayden said.

Brayden Richmond: Gene I've been accused before of making motions as a Chair and now you're making it very blatant.

Gene Boardman: I'll claim the damn motion.

Brayden Richmond: So, the motion would be to ask the DWR to come back with a proposal for allowing a person to apply for one once in a lifetime permit. So, you couldn't apply for ram and ewe.

Riley Roberts: Could we put that motion into accept the rest as presented...

Brayden Richmond: Included in that?

Riley Roberts: Included in that.

Covy Jones: And what you really want us to look into is the combination of female and male moose and female and male...

Brayden Richmond: Yeah, just like buffalo and goat.

Gene Boardman: I'm good with that.

Brayden Richmond: Do we have a second on that?

Riley Roberts: I would second that. Just for clarification, to accept as presented with the addition of the Division looking into that.

Brayden Richmond: Okay, any other additional discussion on that one?

Austin Atkinson: Yeah, are we going to throw dedicated hunter and general deer in on that while we're at it? I know we've talked about that before combining those.

Brayden Richmond: Don't blow up my motion that Gene made.

Kevin Bunnell: Alright, here's Brayden's motion from Gene. Or Gene's motion through Brayden. To accept as presented with the addition request to ask the DWR to come back with a proposal that would allow an individual to apply for one once in a lifetime species regardless of sex. Was that the intent of that motion?

Brayden Richmond: Yes. Alright.

Tammy Pearson: Can I make a comment? I just want to say, bring on the hate mail. I am proud of this Board for stepping up and making some hard decisions on this, because I think it's needed. I think we need the ethical stuff coming back into our sportsmen. I know that our herds need it with the droughts and everything else coming in. I think technology on top of all of that has been the demise of our wildlife. So, good job guys.

Brayden Richmond: Alright, let's go ahead with the roll call.

The following motion was made by Gene Boardman, seconded by Riley Roberts.

MOTION: I move that we accept the recommendation as presented with the additional request to ask the Division of Wildlife Resources to come back with a proposal that would only allow an individual to apply for one Once-In-A-Lifetime species, regardless of sex.

Motion passes unanimously.

Brayden Richmond: Okay, we've been going two hours and fifteen minutes. That's as long as some of the other RACs did everything. Let's take ten minutes and then reconvene.

02:24:15 7) Furbearer Season Dates and Bobcat Permit Recommendations (Action) -Darren DeBloois, Mammals Coordinator

Brayden Richmond: Alright, we have three agenda items left, these won't take as long as agenda item number six, so let's go ahead and get going. Agenda item number seven; appreciate you being ready Darren. Again, if you could just give us a brief overview of what agenda item number seven is, the furbearer permit recommendations and season dates, then we'll go from there.

Darren DeBloois: Absolutely. So, in a nutshell we're just recommending season dates and preparing for the calendar review for 2022-2023 furbearer season. We're not changing anything from what the current season is, so we're recommending six permits per bob cat per individual then season dates adjusted for the calendar and no permit cap for bobcats. Then all other furbearer species just adjusting for the calendar year, so pretty straight forward.

Brayden Richmond: Thank you Darren. Do we have any public comment on this one from online?

02:25:10 Public Feedback

Kevin Bunnell: Oh yeah. Let's see, there were only four people who commented online, so not a whole lot of information. 25% so one of the four strongly agreed, one of the four neither agreed nor disagreed, and two of the four strongly disagreed.

Brayden Richmond: Do we know why they strongly disagreed?

Kevin Bunnell: Just the trapping in general. Just against the activity of trapping.

Brayden Richmond: Thank you. We'll open up to questions from the RAC? Questions from the public?

02:26:03 Comments from the Public

Kelly Laier: I'm Kelly Lehrer and I'm here representing the Utah Trappers Association and we strongly agree with the recommendations put forth for next year's seasons and bobcat tag numbers. And we encourage you to continue using the bobcat study as a tool to regulate the numbers. Thank you.

Brayden Richmond: Okay. Thank you, Kelly.

Lane Abraham: Thanks for the opportunity to speak. I'm Lane Abraham, I'm a member of the Utah Trappers Association but I am not speaking on behalf. I do a lot of trapping, a lot of snaring, and I know this is a little big off subject, but I'd like you guys to explore the opportunity for trappers or snare man to use processed wild game as bait to go out and set up bait piles to attract coyotes especially and give us the opportunity to have a different source of bait. Right now, all we can use is domestic livestock and there is not enough bait to keep an active bait pile going. I don't see the reason why we're not using processed, like out of the packing house there, and I do ask that you guys maybe explore that. I also support the Divisions and the Trappers Associations recommendation. Thank you.

Brayden Richmond: Thank you, Lane.

02:28:01 Questions from RAC Members

Austin Atkinson: Well, I guess I have a question for Darren. I'm not a trapper, but is the rule currently written for non-game species can be used for bait, is that how the bait rule is written?

Darren DeBloois: There's some exceptions in the rule, but basically you can't use protected wildlife as bait. There are some exceptions, dried bones, and things like that in the rule. Essentially no, you can use domestic, but you have to prove that it belongs to you, either with a brand inspection or proof of purchase, or something like that. And that's the current state of the rule.

Brayden Richmond: Alright, well I'd entertain a motion.

Chuck Chamberlain: I motion that we accept the packet as presented by the DWR.

Brayden Richmond: We have a motion to accept as presented.

Verland King: Second.

Brayden Richmond: And a second my Verland. Go ahead Tammy.

02:29:11 RAC Discussion, Comments and Vote

Tammy Pearson: I like your idea, is there a way to put an amendment into that to look into?

Darren DeBloois: Yeah, we can certainly look into those things. Kevin has got some history, I'm sure there were some reasons why we had some concerns about that. But we're always willing to look at and revisit things.

Tammy Pearson: Or at least follow us up.

Darren DeBloois: I'd be happy to meet with the Trappers Association and talk about some of these issues. We can certainly do that. They just changed leadership so now would be a good time to sit down with them.

Tammy Pearson: That would be helpful.

Brayden Richmond: So, can I just ask, I believe you just said that you will meet with the trapper's association. So, do we want to have that as an amendment to the motion or the fact that Darren will meet with them...

Tammy Pearson: Are you to be trusted?

Darren DeBloois: I'm not very trustworthy, but I will follow through. I'm sure someone will prod me.

Tammy Pearson: I don't know, would you be willing to set that amendment?

Chuck Chamberlain: Yeah, sure. So, we would accept that proposal with the caveat that Darren will meet with the Trappers Association to discuss the use of processed game meat.

Brayden Richmond: And Verland your second still stands? Ok. Additional discussion? Riley apologized but he had to step out. He had another engagement that he had to get to. **(roll call vote)**

The following motion was made by Chuck Chamberlain, seconded by Verland King.

MOTION: I move that we approve the recommendations as present but ask Darren DeBloois to meet with the Trapper's association to discuss the use of processed game meat as bait.

Motion passed unanimously.

02:31:19 8) Cougar Recommendations and Rule R657-10 revisions for 2022-2023
- Darren DeBloois, Mammals Coordinator (Action)

Brayden Richmond: Darren, again, if you could just give us a brief overview?

Darren DeBloois: Quick Summary, as I'm sure you all remember in July, we just did cougar recommendations, but the Board also approved a new recommendation cycle. So, we'll be doing cougars now in December. Our recommendations last year ended July 2022, so what we're doing tonight is recommending season dates for the next year. So, beginning July 1, 2022-June 2023. The notable change that is different than what we've been doing before is we're recommending restricting the use of dogs from July 1-Novemer 1, 2022, and March 31-June 20, 2023. The change is on the South Slope units, no dogs may take through June 30 on the SS Bonanza Diamond Mountain Vernal unit, the SS Yellowstone unit, and the Wasatch Mnts Avintiquin Current Creek, and that's just to avoid having dogs in the field during the bait season and try to avoid some of the law enforcement concerns that we have up there. Other than that everything else is the same, and just adjusting season dates for the calendar year and moving forward with that.

Brayden Richmond: Thank you. Questions from the RAC?

02:32:44 Questions from RAC Members

Austin Atkinson: Darren, I'm still very confused, not being an avid houndsmen to keep up with all these dates and trying to figure out when to bring this up. But I still want the spot and stalk tag to be the same season dates as the season objective. Now the spot and stalk tag doesn't show up on these dates anywhere.

Darren DeBloois: Right, it's not changing, we're not recommending any change. So, spot and stalk season will be the same next year as it currently is for cougars.

Austin Atkinson: Now to extend that spot and stalk and mirror it to the harvest objective, when would be the proper time to do it?

Darren DeBloois: Well, right now, this would be beginning July 1, 2022.

Austin Atkinson: Right. Cause we're finally caught up right?

Darren DeBloois: Right. If you wanted to make a motion along those lines, this would be the time.

Austin Atkinson: Okay, do you have any concerns with that season running the same time as harvest objective?

Darren DeBloois: I think our biggest... it's a little different for bears, but for cougars, probably the biggest challenge is, actually no, I don't have any concerns I think we could do something like that.

Austin Atkinson: Okay.

Brayden Richmond: Austin, remind me, you made that motion before, correct?

Darren DeBloois: I think you did in July.

Austin Atkinson: Well, we talked about it, but I don't know that we demanded that it was a motion or how we set it.

Tammy Pearson: I remember talking about it (inaudible)

Austin Atkinson: Because everything was changing to July 1st anyway. And I would just like everything to get on to that regulatory year so it makes sense to the user that is out in January and can still use that spot and stalk tag. It's not expired and now he has to go buy a different tag for that same thing.

Darren DeBloois: Yeah, we would want everything to be July 1-June 30 going forward.

Brayden Richmond: Yeah, that actually does seem correct. We didn't have a motion, but it seemed like at time there was no opposition to it. We don't have any...

Chuck Chamberlain: I had one additional question, and this is because I'm not familiar with these rules as well as I should be maybe. You mentioned in your presentation several times that we're moving dogs away from the bait, but in your July 1-November, basically the entire seven months of the year you're saying no dogs. But I didn't hear in your presentation why do we not allow dogs? On the La Sal, Book Cliffs...

Darren DeBloois: So, the only change. That didn't change. Yeah, and the reason for that was to avoid some overlap with hunts that they have going on those particular units. But it is related to bear hunting. The new one is on those SS units.

Chuck Chamberlain: Okay.

Darren DeBloois: Again, in our bear recommendation we're trying in those SS units to separate bait and hound hunting in the summer. That's our recommendation, so this is an effort to close the loophole that someone with dogs hunting the bait season would say I'm just hunting cougars. We're trying to get dogs out of the field when there's bait in the field in that season on those units.

Brayden Richmond: Go ahead Gene.

Gene Boardman: The doggone bear and cougar recommendations or rules I should say, are so doggone mixed up and convoluted I don't know how you keep the hell track of them.

Darren DeBloois: I don't, I've got a few things tonight I'm going to bring up. I agree with you Gene, so the current bear plan expires in 2023 and so we are going to be convening a new bear committee and when we come back one of the things, we're going to be presenting is a new plan. So, my objective is to try to simplify. It really is

confusing, we've got a lot of things going on and overlaps and conflicts in the field and so we're not on bear yet, but when we get there, there are a few recommendations to try and address some things. We really do need to do a deep dive with a committee to try and simplify some of this stuff.

Gene Boardman: Okay, so the situation as it is now, say Sam, Joe and Tom go out tougher with the dog. Sam has a cougar permit, Joe has a bear permit, and Tom has the dog. Are they legal to chase?

Darren DeBloois: Yes, so the person who owns the dogs can chase if the person with a legal permit for cougar or bear. So, they could. Once somebody harvest though, they would need to still have... Yeah, Gene, you could harvest a bear and then continue to hunt cougar with your friends' dogs, or even if you're paying a guide to run dogs for you. But once those permits are filled, you're done. Unless you have a pursuit permit, and then you can chase during the pursuit seasons as long as someone has a valid pursuit permit, you can do that.

Gene Boardman: As long as there's not a bait season going on.

Darren DeBloois: As long as the season is open for that activity, yeah.

Kevin Bunnell: I don't think he thought you'd be able to answer that.

Darren DeBloois: I know, I was a little worried. I was hoping that a law enforcement officer would come up behind me and put their hand on my shoulder and say no. But yeah, you could as long as you have a legal permit for the activity and the dogs, as long as they're with you, they have to be with you the whole time, they couldn't go chase up another canyon and call you in. You'd have to be with them the whole time. But you're right it's complicated and sometimes it's hard to think through all those things.

Gene Boardman: Okay, this predator situation on the cougars and the director can open units to practically unrestricted.

Darren DeBloois: Yeah.

Gene Boardman: The recommendation I read somewhere says the biologist can determine, but the legislature says the Director can determine. And this says the biologist can determine. So, who's going to determine?

Darren DeBloois: There's a couple of things, the legislature did pass a statue two sessions ago that directs the Division director that if we've got concerns about mule deer numbers on a particular unit, that he should take immediate action to address predators if the biologist on the ground determines that is a cause of concern on that unit. We wrote a policy to direct our folks. So, we have the legislation, here it the policy of how we implement this on the ground. And we opted in that policy to really give a lot of power to

our district biologist to make those decisions. They're the folks on the ground, they know what's going on with their particular deer herds, and I'm really comfortable with that, we've got a lot of really good people. So, if a district biologist comes to me and the Director and recommends, we need some predator control on this unit, they're going to be supportive, they'll have to explain, it's not going to just be a gut feeling. They will have to show us what's going on with our adult doe mortality for example. Here is what we're seeing in fawn mortality if they have that data. It is data driven but we do rely on them to inform us.

Gene Boardman: Well, it's pretty well been established to get it going. What I'm concerned about is how the hell you ever get it stopped.

Darren DeBloois: Yeah, we've had those discussions and if you're ever going to do any kind of predator management it does have to be sustained for a period of time. We look at it twice a year, Gene. We look at it in July after winter mortality data, then look at it again at this time of year in December when we're out looking at deer and body conditions going into the winter. So, they're always looking at it, having said that you have to let it run its course one year isn't enough, you've got to get after it for a period of time, then one you pull it back out it's going to take a period of time for things to level out. So, it's a longer-term proposition, but we certainly have those discussions.

Gene Boardman: I appreciate your explanation.

Darren DeBloois: Thank you Gene.

Kevin Bunnell: Gene on your first question there on the biologist vs the Director. I think that you could think of it like the biologist is like the RAC, he's making recommendations to the Director. And the Director is like the Wildlife Board. In this scenario. The biologists are making a recommendation to the Director, and the Director is the one who has the authority to make it happen.

Austin Atkinson: One more question for you, Darren. The three-day waiting period when you purchase a permit, is that an antiquated rule, is that something we feel is super viable? Let me give you this example, I'm getting feedback from outfitters that take hunters out on the lion hunt, they kill a lion, they want to go get another harvest objective permit, but now the hunter has to sit for three days before his permit is valid and they can pursue. It doesn't seem logical on an open unit that we want to make that guy sit for three days.

Darren DeBloois: I think, the history on that is to avoid a canned hunt. So, you don't put a cougar up in a tree and then run into town and buy a permit to go shoot it, or a bear for that matter. So, it's really an ethics, certainly not a biological thing. But you're right, now that a person can get a second permit, if they're planning on taking two lions maybe they ought to buy two permits before they go. But we could certainly have a discussion again, it's more social than biological, so that's something the RAC could address if you have concerns.

Austin Atkinson: And I may bring it up later at another meeting, but I guess I would like to see it like other states. In Colorado you can buy two bear permits, but one at a time. Once your first one is checked in, then your second one can be purchased, and I think we should do something like that. Along the line.

Darren DeBloois: And right now, you can buy two cougar permits the same day and go. You can have them both in your pocket. I would just say, under the current rule if you anticipate taking more than one within that three-day period, I'd just buy two.

Brayden Richmond: Any additional questions? Go ahead Verland.

Verland King: So, when we made the motion on trail cams under the big game, did that include this cougar and bear deal?

Darren DeBloois: Yeah, I think what we'll do is the language will be the same in all three rules just so it's consistent. I appreciate the public brining up the depredation angle, that's just something we overlooked when we were looking at this. That's certainly something we'd support.

Verland King: Yeah, well, in the past we talked about getting the numbers down, I don't see why. I didn't know we were covering it all under the big game.

Darren DeBloois: Yeah, I think what we'll do, I anticipate that if the Board changes some of the language there and I know it will come up, we would just make the language change to all three rules would be the practice. And honestly, that is a good way to go. We want producers to kill the lion or bear that's killing their livestock, having a camera that tells you instantly, there it is it's on the kill let's go get it. We support that.

Verland King: Yeah, and what I was getting at is we're trying to get the predators down, and if we could use cameras on the cougars and bear it would help out.

Darren DeBloois: Yeah, certainly. I hear what you're saying, I think guys use cameras quite a bit on bait seasons, so this would only affect fall bait hunters. I guess some guys are using camera for cougar hunting in the winter, but most of the time you can cut a track and it's probably not as big of an issue. We have had a lot of success in the summer with some houndsmen that are capturing cougars for our study in central Utah, using cameras in the summer. But that's a research thing that would be exempt.

Kevin Bunnell: Verland, just to clarify, the motion that we passed was specific to big game with cameras so as this RAC voted, it would not include bear and cougar because it specifically said big game.

Verland King: Yeah, that was my question. Big game has horns.

Kevin Bunnell: Yeah, hoof species.

Darren DeBloois: Correct me if I'm wrong Covy, but I think the big game language has the cougar and bear language in it as well.

Kevin Bunnell: It might but the way, but the way this RAC voted it said specifically big game.

Darren DeBloois: Oh okay, we probably ought to address it then.

Austin Atkinson: But then when we accept the rest as presented, what I understand is the end of Covy's presentation says we'll mirror this language for bear and cougar.

Covy Jones: Yeah, so the way we presented it was because that would be the giant loophole, right? The giant loophole is everybody buys a spot and stalk cougar permit and then they hunt big game with a camera. So that's the rationale behind it, and the exemption for producers is the middle ground we were willing to meet because we didn't want to impact them. Again, the season is not outside the big game season so if you're hunting cougar or bear outside of that July 31-January 31 there is no regulation on cougar or bear outside of those season dates. It's just because we want to stay true with what we committed to with big game.

Kevin Bunnell: I didn't remember the language about mirroring it. So, when you passed the remainder, you passed that mirroring language.

Darren DeBloois: Yeah, I think as long as everybody is clear and we're on the same page, that's the best thing.

Brayden Richmond: Any other additional questions?

02:48:42 RAC Discussion, Comments and Vote

Tammy Pearson: I'm kind of like Gene. It's a lot of layers and complicated. I've bought tags for two years and either there is too much snow or no snow to track them. I'm fine with the way it is, the proposal.

Brayden Richmond: We'd entertain a motion if there are no other comments.

Verland King: I move we accept the recommendations as presented.

Tammy Pearson: Second.

Brayden Richmond: So, a motion to accept as presented by Verland and a second by Tammy. Any additional discussion?

The following motion was made by Verland King, seconded by Tammy.

MOTION: I move that we accept the remainder of the recommendations as presented (Amended).

Motion passes unanimously.

Austin Atkinson: I would like to see an amendment to that motion to modify or ask the Wildlife Board to ask the Director to modify the spot and stalk dates to mirror the harvest objective dates of July1-June30th.

Brayden Richmond: So, we've got an amendment to the motion. Do we have a second on that amendment?

Tammy Pearson: I'll second it.

Brayden Richmond: Alright, so the motion, we have a motion to align the spot and stalk with the harvest objective and accept the rest as presented would be our motion?

Gene Boardman: I'm confused.

Brayden Richmond: Just read the proclamation, Gene. It will clear it up.

Gene Boardman: I'm sure. I thought the spot and stalk was 356 days.

Darren DeBloois: It is not currently. And the spot and stalk for cougar is a Director action which is why I assume the RAC is asking the Director to adjust those dates.

Gene Boardman: And I thought it was statewide.

Darren DeBloois: It is statewide. But it's only, and I'd have to look up the dates, but it's not currently year-round. It's like August 1...

Gene Boardman: Does the spot and stalk cougar come out of a harvest objective number?

Darren DeBloois: No. It's a very low success hunt.

Gene Boardman: Then why are we worrying about spot and stalk?

Darren DeBloois: That's right, that's right.

Kevin Bunnell: Okay, so the amendment we have an amendment and a second and the motion is to align the spot and stalk season with the harvest objectives season. If

we pass that then we go back to the original which is to pass as presented without the amendment added.

Tammy Pearson: So, clarification though. So, the harvest objective is that July 1-June 30 and that is year-round. So, then there would be no confusion on where your tag fits.

-Video sound cuts out-

Verland King: Does that need to say, his amendment said ask the Director or approach the Director to do that. Or is that good enough?

Austin Atkinson: That's what I understood because that is a director action that hunt. I don't know if that's how it stays or if the Wildlife Board controls that hunt now.

Brayden Richmond: The amendment would be to ask the Director through the Wildlife Board to align the spot and stalk season with the harvest objective season.

Kevin Bunnell: The director and the Wildlife Board, depending on which, because the Wildlife Board has some authority here and the Director has some authority, you want to ask both of them.

Brayden Richmond: Alright, I think we're good. (roll call vote on amendment)

The following motion was made by Austin Atkinson, seconded by Tammy Pearson.

AMENDED MOTION: I move that we ask the Director and the Wildlife Board to align the Cougar Spot and Stalk dates with the Harvest Objective season dates.

Motion passed 7 to 2. (Opposed: Gene Boardman, Bart Battista)

Brayden Richmond: First with Gene did you want to clarify the reason for opposing?

Gene Boardman: Like I said from the start of this discussion it is so damn confusing, I can't figure out if I'm voting for or against. So, no vote is safer than a yes.

Brayden Richmond: And Bart did you want to address your vote?

Bart Battista: I didn't hear a compelling reason to change the way it is.

Brayden Richmond: So, the amendment passes 7-2. Let's go back and vote on the original motion now, which is to accept the presentation as presented. That passes unanimously.

9) R657-33 Black Bear Rule Amendments and Recommendations for 2022 -Darren Debloois, Mammals Program Coordinator (Action)

Brayden Richmond: Final Item, black bear amendments. Darren can you walk us through this one quicky again?

Darren DeBloois: Yes, so let me just quickly, everything you saw on the presentation and on the large spreadsheet, the number of permits is correct, but when we looked at the season tables, the hunt tables we noticed a couple of things were missing. Just so the RAC is aware, let me just tell you which ones those are. So, the tables will be amended to include two permits on the Monroe, which is in the presentation. One is in the spring and one is in the summer for the bait season. The Fillmore Pavant has a spring permit and that was not in the spring table that you all got. Then finally there is a multiseason permit, one each, on the Paunsaugunt and the Mt Dutton units. Again, these permits are all included on the tables that we presented, but the tables were missing those hunts. Then, moving on, we're not recommending a lot of changes to bear recommendations. We did adjust permits according to the plan guidelines. So, let me just highlight a couple of things that will be different than what we are currently doing. Again, this is a three-year recommendation for bears. On those SS units I mentioned before for mountain lion, the SS Bonanza, Diamond Mnt, Vernal, SS Yellowstone, Wasatch Mnts, Avintiquin, Current Creek, we're recommending those seasons be changed for hounds April 2-May 27th which is the Friday before Memorial Day. And that the bait season not overlap and begin May 28 and run though the 26. On the Book Cliffs, Bitter Creek South unit, we're recommending that hounds and bait not be in the field at the same time. So, August 6-19 it would be hounds only. August 20- October 6 bait only, and October 7-November 3 again hounds only. There is a restriction on hounds during that middle portion, but you can use bait and to illuminate that overlap. And we have some law enforcement folks here tonight if you want to discuss their concerns. This is primarily law enforcement concern that we're making these recommendations for. Then the other change we're recommending during the fall season, Aug 8-27 and again Nov 3-13 that people choose whether they're going to hunt with dogs, or they're going to hunt with bait. Currently they draw that permit and they can use either method, so you could have a bait station active and hunt with dogs and that makes it difficult for our law enforcement folks to weed out, is this your bait station, but you're hunting with dogs, you know where the bait station obviously because you've got it running. We're proposing making people make a choice on how they want to hunt. Other than that, all the seasons are adjusted to the calendar year from last year, and again the changes I mentioned to the hunt table permits were in the presentation. I won't go through each unit unless someone wants me to address something specifically.

Brayden Richmond: Thanks Darren. I have a question, and I do appreciate that you already brought up that the black bear plan is going to be revisited in 2023. Perhaps I'm willing to wait until then, although I think sometimes you might establish unintended precedence, so I'm going to ask this anyways. We've been going back and forth on this

for years and it's the idea of the overlap of baiting and hounds. I know it's always brought up that it causes some enforcement issues and there is conflict, but last time we got a number to this, the conflict was extremely minimal. The reality is no one is requiring the bait to be out during the hound season. If you don't want dogs on your bait, you can wait till what we'd be moving it too anyways. Do we have numbers of the conflicts that we're changing this rule for?

Darren DeBloois: We do have some formal complaints. But we're really relying on the experience of our enforcement officers in the field. So, I think maybe I'd throw this one back to Wyatt or even some of the regional folks. They can discuss how this impacts them and maybe they can discuss how big of a problem.

Brayden Richmond: And that's great, I'd be happy to have you speak to it, but I'd really like to hear the number of formal complaints.

Wyatt Bubak: I guess I'll just quickly explain, our formal complaints would be documented in a crime report, which we'd only pull if we had reason to believe a crime was committee. When we get formal complaints, we don't have a system set up in the enforcement section to track formal complaints currently. That is something we can look at going into the future. But our complaints would be in the form of a crime report which is only pulled and documented when we believe a crime has been committed.

Brayden Richmond: Okay, I'll address that in the comments in a minute then. Thank you.

03:00:26 Questions from the Public

Brayden Richmond: Go ahead.

Public: We just ask from here?

Brayden Richmond: You can but we won't acknowledge them.

Public: So, the season dates that you read with those units, is that statewide dates, or just those units?

Darren DeBloois: Just those units in the spring and summer.

Public: So, the rest of the units around here are not going to end on the 27th of May?

Darren DeBloois: They'll be the same. Well, they will end on the 27th but there will still be a week overlap with the bait season. So, we're recommending that we stop hunting with hounds before Memorial Day weekend statewide.

Public: Because?

Darren DeBloois: The conflicts with the conflicts with recreational users and the dogs.

Public: Baiters have the whole month of June; bears didn't even come out this year until May 26th.

Darren DeBloois: Yeah, they sometimes stay in there.

Brayden Richmond: Any other questions from the public?

JJ Brewer: JJ Brewer is my name. So just to verify because I know it's confusing. I know there are some seasons change dates, but statewide ending hounding May 27th.

Darren DeBloois: Right, so that would be three days shorter than what we have traditionally done with hounds. And that is to primarily avoid the Memorial Day weekend.

JJ Brewer: K and I don't know if I'm cutting your presentation short or anything, but isn't there also some changes with spot and stalk tags with three units in the state?

Darren DeBloois: Oh yeah, well, what we've done is we're recommending that spot and stalk season, that fall season, go to harvest objective instead of something you'd put in for the draw. So, they'd be unlimited tags with quotas on the units. Is that what you're asking about JJ?

JJ Brewer: Yep, that was my question, I can comment later.

Brayden Richmond: Do you just want to just stay up JJ? You have a comment card. You actually have two, I'm assuming you'll do them in one comment, right?

03:02:26 Comments from the Public

JJ Brewer: Yeah, a couple of them are questions. I guess I can talk to that now. I am a member of the Utah Houndsmen Association, as you know, and I also speak for myself. I guess my concern with the shortening dates is by far the best way to harvest a bear is with hounds, because we can stand under the tree and verify if it is a male or a female, or what specifically that bear is. I believe we have a great group of houndsmen right now, probably the youngest most notable group of houndsmen we've ever had. I hope so, and the way that we can help ranchers and wildlife; I think we've done a good job there and I want to do more of that. I'd hate to see our season shortened in anyway. Specifically, for those reasons. The best way to harvest bears is with hounds. That would be one of my main concerns. My other main concern would be with the harvest objective units, and I don't know if I'm getting ahead, but

specifically the San Juan, La Sal's, and Book Cliffs where they're going to do harvest objective spot and stalk tags. Do we have a number on how many wounded bears were shot at our wounded on those current spot and stalk hunts?

Darren DeBloois: No, no. Not unless someone found the carcass or something.

JJ Brewer: My concern with that, and again I'm going two directions here, but I spend a ton of time on those units, and I see it very often where people come and ask for help because they're very nervous to go look for a bear they shot at, they're sure they didn't hit it. Bears don't leave a lot of blood, they're a different animal. My concern with doing an over-the-counter harvest objective hunt with that is, I know there is a cap on it, but you're going to have a lot of bears shot at. Again, the best way to harvest bears is with hounds. I'd hate to see us loose time in the field, and I believe that citations were zero as far as the report I read with baiting and having issues with hounds running off baits.

Darren DeBloois: Yeah, there aren't a lot of citations, and there aren't a lot of formal complaints, but the feedback we get is our officers will have conversations with people, hey I know there are baits in this drainage, how am I going to stay out of trouble? It puts me in kind of a hard position, I can't intentionally chase off a bait, but I know there are baits here because there are bears here and it kind of creates this gray area. Those are our concerns, and we could certainly address this in the plan, but we tried to just make a couple of tweaks to try and address that for the next couple of years, but it certainly needs more discussion as well.

Brayden Richmond: Thanks, next comment from Jeff.

Jeff Brewer: I'm Jeff Brewer, I'm just representing myself. I would just recommend, I'm like JJ, I would hate to see the season shortened even three days. I spent a lot of time on the La Sal's this year, I had the opportunity to be retired and hunting and I spent a lot of time, I had no conflicts with baiters. What I would suggest is one of two things to Darren. Either change it to Memorial weekend, which is what we all want, and they can start setting baits on Memorial Weekend and start hunting, because they can't have a bear on the bait in one night. We'd hate to lose Memorial Weekend, it's tradition for 40 years we've hunted it. Or let's just bag all of it and do your big study and next year with your new committee and let them come up with new recommendations. That's all I would say. Thanks.

Brayden Richmond: Thank you Jeff. We'll go to comments from the RAC. And I wanted to make a comment to start off here. I appreciate the comments Jeff, I think what you said really aligns with where I'm going. Several years ago, I really pushed because we kept hearing there were conflicts between baits and houndsmen, and when we finally got that we found out there were two complaints. And then we hear that there are complaining going on, but they're not formal and there are no citations. I guess in addition to that several years ago Utah Archery Association and the houndsmen got together so those are the groups representing supposedly in conflict and they said let's

overlap, we can get along. So, the organizations that represent those sportsmen are saying we're fine with this. I would hate... I just don't like the idea of limiting opportunity because of perceived issues. That would be my statement. I would love to see keeping that as open as we can. I've hunted bears with bait, I've hunted bears with hounds, and I didn't have conflict with either of those situations, not once.

03:06:25 RAC Discussion, Comment and Vote

Austin Atkinson: Darren, what would be the problem with pushing the limited entry no dogs bait season hunt back even further? If we allowed them to hunt with dogs later into May or the first part of June, couldn't that whole hunt be slid back?

Darren DeBloois: We don't want dogs in the field in June with fawns hitting the ground. So that's why we've avoided letting hound hunting go later than that. Brayden's right, the current system with that week overlap was something that we sat down with Utah Archery and the houndsmen and came to a compromise. So that's kind of a compromised place. The only thing I'd add is, we just hear these... again it's difficult to quantify, so maybe the plan is the appropriate place to do a deep dive into that, but yeah. I think we definitely wouldn't want hounds running much later into the summer, well any later than June because of our baby big game hitting the ground.

Kevin Bunnell: Yeah, Darren I'd add, at that time bait hunting was limited to archery. It's no longer limited to archery. So, it's not just that user group, it's a much broader user group that is able to hunt over bait now.

Darren DeBloois: Yeah, frankly it's difficult to find a bait hunting representative. There isn't an organization other than the archers, but now it's a bigger group. I think that hunting with hounds certainly is the most selective way to go because you can look. But at bait stations you also get an opportunity to look at animals as they come in and take your time. If they have cubs eventually cubs will come with sows too. Those two methods really are the best if we want to be selective on the bears that are being taken.

Brayden Richmond: I guess my additional comment would be, we're revisiting this plan in 2023 and why stir it up now if we don't have quantifiable reasons to change. It's not quantifiable. We've established that I believe.

Austin Atkinson: My comment Mr. Chair is we have to decide what we're going to do in that plan if we're going to be a bait state or if we're going to be a dog state. I'm familiar with states out west, usually they allow both and they allow them to run in conjunction because enforcement doesn't allow that to distinguish. Like Idaho, you run bait and you run dogs, sweet. Arizona no bait, but you can run dogs. I think we need to take some serious input and draw that line in the sand. Because trying to play both sides of the fence is getting messy and we're crushing the houndsmen down to bring up the bait guys because they don't have dogs and it's making it a mess.

Tammy Pearson: Just, I guess a question though because reading this, the next three-year black bear cycle begins in 2022. So, are you saying July 1st? Or

Darren DeBloois: This will begin with the coming season this spring. It's a little different than cougar, it's not (inaudible)

Tammy Pearson: So, if you're doing a three-year cycle next spring then, when does your Board going to...

Darren DeBloois: We'll put a Board together next year and work on it. We got a little bit out of whack. We should have been on the three-year bear cycle, but we'll be an extra year out. We'll have plenty of time to have a good discussion with the bear committee.

Tammy Pearson: So, the three-year cycle will not start in 2022?

Darren DeBloois: This next cycle will run for three years, so we'll be back in 2024 with new recommendations and a plan revision. And of course, we'll visit you each year and let you know how things are going.

Brayden Richmond: Go ahead Gene.

Gene Boardman: I'm just going to bend a little bit here, because I think that bears and cougars have got blamed or they were set up to be blamed and so we've increased the pressure on them. I didn't like the way it came about, and I'm not sure it was the right thing to do. Mostly because the way it came about wasn't very scientific or anything else. But I want to say that as far as nature goes, foxes feed their young-on-young rabbits and young pot guts that they can catch. They feed on the young of the prey animal. So, do bears and cougars. So, you get an idea that you're going to stop that by increasing the bear tags. But what are you going to do? You can't shoot the sow with cubs, she's the one that has to eat fawns and calves to feed her young. So, you go out and shoot a couple of boars and say we showed them damn bears. We'll have not more trouble there. So, I just wanted to bring that up that maybe we've got to watch just what we're doing and how we're doing it.

Darren DeBloois: Austin, I was just going to add, we may have wounding stats in our harvest data. I just have to look at that raw data. I know we do on big game; we ask did you wound anything? So, it is voluntary info, but we may be able to get it with that.

Brayden Richmond: Any additional comments from the RAC? I'd entertain a motion then. Good discussion.

Austin Atkinson: What does the RAC think about extending the hunt by four days? They already overlap a week, make them lap 10-11 days and give them Memorial Day weekend? I'm not as experienced as I should be in this one.

Brayden Richmond: I don't get to vote but I'm in favor.

Darren DeBloois: That would be essentially status quo if you want to keep it how it is now.

The following motion was made by Verland King, seconded by Tammy Pearson.

MOTION: I move that we accept the recommendation as presented but keep the 2020 and 2021 season dates adjusted for the calendar by year.

Motion passed unanimously.

Brayden Richmond: That is it for agenda items today. We appreciate everyone sticking with us. It was a long meeting but there was a lot to go through. I guess the final thing to discuss is the next meeting which is...

Kevin Bunnell: Not until April.

Brayden Richmond: Not until April so even if we discussed it we'd forget it by then, right? So, we will get word out to everybody and enjoy a little bit of a break. Thank you everybody for coming. I do once want to extend once again we appreciate the feedback on the public meeting. This is the way it's supposed to work. I hope everyone feels like the public was listened to. There were things that changed because you guys were here. We appreciate your time and effort in begin here.

03:18:14 Meeting adjourned at 9:18.

Southeast Region RAC Meeting Hybrid Conference December 8, 2021

The meeting streamed live at https://youtu.be/FH6nAFmZMnQ

RAC AGENDA - December 2021

1.	Welcome, RAC Introductions and RAC Procedure - RAC Chair		
2.	Approval of Agenda and Minutes - RAC Chair	WILD	LIFE RESOUR
3.	Wildlife Board Meeting Update - RAC Chair	INFORM	ATIONAL
4.	Regional Update - DWR Regional Supervisor	INFORM	ATIONAL
5.	Emerging Technologies Survey Results - Wyatt Bubak, Law Enforcement Captain	INFORM	ATIONAL
6.	Big Game R657-5 Rule Amendments - Covy Jones, Big Game Coordinator		ACTION
7.	Furbearer Season Dates and Bobcat Permit Recommendations - Darren DeBloois, Mammals Coordinator		ACTION
8.	Cougar Recommendations and Rule R657-10 revisions for 2022-2 - Darren DeBloois, Mammals Coordinator	2023	ACTION
9.	R657-33 Black Bear Rule Amendments and Recommendations for - Darren DeBloois, Mammals Program Coordinator	or 2022	ACTION

Hybrid Conference December 8, 2021 SUMMARY OF MOTIONS

1. Approval of Agenda & Minutes

The following motion was made by Dana Truman, seconded by Kirk Player and passed unanimously, 12/12.

- MOTION: To approve the agenda and minutes as presented.
- 2. <u>Big Game R657-5 Rule Amendments</u>

The following motion was made by Scoot Flannery and was seconded by Sunshine Brosi, and passed unanimously, 12/12.

 MOTION: To accept the recommendations regarding trail cameras as presented, with the exception of allowing livestock operators to use cameras for depredation and other livestock operation purposes.

The following motion was made by Eric Luke and was seconded by Charles Fisher, and passed unanimously, 12/12.

• MOTION: To accept the recommendations regarding muzzleloaders as presented, with the caveat that the Board and the DWR conduct research on muzzleloader harvest data and get public input regarding further restrictions on muzzleloaders.

The following motion was made by Charles Fisher and was seconded by Sunshine Brosi, and passed 7/5.

• MOTION: To deny the DWR's proposal on hunters orange changes at the end of the archery hunt, overlapping the youth annual elk hunt.

The following motion was made by Dana Truman and was seconded by Kirk Player, and passed unanimously, 12/12/

- MOTION: To accept the remainder of the proposals as presented by the DWR.
- 3. Furbearer season dates and recommendations

The following motion was made by Kirk Player and was seconded by Sunshine Brosi, and passed unanimously, 12/12.

- MOTION: To accept the proposal as presented by the DWR.
- 4. Cougar Recommendations and R657-10 Revisions 2022-2023

The following motion was made by Charles Fisher and was seconded Kirk Player, and passed unanimously, 12/12.

- MOTION: To accept the proposal as presented by the DWR.
- 5. R657-33 Black Bear Amendments and Recommendations 2022

The following motion was made by Eric Luke and was seconded by Scoot Flannery, and passed unanimously, *11/11.

• MOTION: In South Slope Bonanza/Diamond Mountain/Vernal, South Slope Yellowstone, Wasatch Mtn Avintaqiu/Current Creek accept Division's recommendation. All other units retain last year's season dates.

The following motion was made Eric Luke and was seconded by Charles Fisher, and passed unanimously, *11/11.

• MOTION: To accept the remainder of the proposal as presented by the DWR.

^{*}Joe Sacco left the meeting early.

Southeast Region RAC Meeting December 8, 2021 Attendance

RAC Members Attending

Kent Johnson, Chairman Scoot Flannery Todd Thorne Charles Fisher Daren Olsen Dana Truman Eric Luke Kirk Player Lynn Sittered Steve Duke Sunshine Brosi Joe Sacco Brad Richman

18:32:00	RAC chair Kent Johnson called the meeting to order. He called the roll of RAC members to indicate who attended the broadcast.		
18:35:18	 4. Approval of Agenda and Minutes (Action) The following motion was made by Dana Truman, and seconded by Kirk Player and passed unanimously, 12/12. MOTION: To approve the agenda and minutes for the Southeast Region RAC meeting. 		
18:37:00	5. Wildlife Board Meeting (Informational) Scoot Flannery updated the RAC with Wildlife Board decisions.		
18:42:00	6. DWR Update (Informational) Chris Wood updated the RAC on all regional activities.		
18:53:00	Big Game Rule 657-5 (Action) A pre-recorded presentation was provided online on the Division website prior to the meeting: https://wildlife.utah.gov/feedback.html		
19:02:00	RAC Questions		
19:20:00	Public Questions		
19:33:00	Public Comments		
19:42:00	RAC Comments		
20:07:00	The following motion was made by Scoot Flannery and was seconded by Sunshine Brosi, and passed unanimously, 12/12. MOTION: To accept the recommendations regarding trail cameras as presented, with the exception of allowing livestock operators to use cameras for depredation and other livestock operation purposes.		
20:24:00	The following motion was made by Eric Luke and was seconded by Charles Fisher, and passed unanimously, 12/12. MOTION: To accept the recommendations regarding muzzleloaders as presented, with the caveat that the Board and the DWR conduct research on muzzleloader harvest data and get public input regarding further restrictions on muzzleloaders.		
20:29:00	The following motion was made by Charles Fisher and was seconded by Sunshine Brosi, and passed 7/5.		

	MOTION: To deny the DWR's proposal on hunters orange changes at the end of the archery hunt, overlapping the youth annual elk hunt.
20:31:00	The following motion was made by Dana Truman and was seconded by Kirk Player, and passed unanimously, 12/12/
	MOTION: To accept the remainder of the proposals as presented by the DWR.
20:32:00	Furbearer Season Dates and Recommendations
	(Action)
	A pre-recorded presentation was provided online on the Division website prior to the meeting: https://wildlife.utah.gov/feedback.html
20:33:00	RAC Questions
20:33:00	Public Questions
20:33:00	Public Comments
20:34:00	The following motion was made by Kirk Player and was seconded by Sunshine Brosi, and passed unanimously, 12/12.
	MOTION: To accept the proposal as presented by the DWR.
20:36:00	Cougar Recommendations and R657-10 Revisions 2022-2023 (Action)
	A pre-recorded presentation was provided online on the Division website prior to the meeting: https://wildlife.utah.gov/feedback.html
20:36:00	RAC Questions
20:36:00	Public Questions
20:37:00	Public Comments
20:42:00	RAC Comments
20:51:00	The following motion was made by Charles Fisher and was seconded Kirk Player, and passed unanimously, 12/12.
	MOTION: To accept the proposal as presented by the DWR.
20:51:00	R657-33 Black Bear Amendments and Recommendations 2022
	(Action)
	A pre-recorded presentation was provided online on the Division website prior to the meeting: https://wildlife.utah.gov/feedback.html

RAC Questions
Public Questions
Public Questions
RAC Comments
The following motion was made by Eric Luke and was seconded by Scoot Flannery, and passed unanimously, 11/11.
MOTION: In South Slope Bonanza/Diamond Mountain/Vernal, South Slope Yellowstone, Wasatch Mtn Avintaqiu/Current Creek accept Division's recommendation. All other units retain last year's season dates.
The following motion was made Eric Luke and was seconded by Charles Fisher, and passed unanimously, 11/11.
MOTION: To accept the remainder of the proposal as presented by the DWR.

Northeastern Regional Advisory Council Meeting December 9, 2021 6:30 p.m.

Division of Natural Resources building 318 N Vernal Ave. Vernal, UT

Attendance

RAC MEMBERS

Brett Prevedel Joe Arnold (virtual)

Dan Abeyta (virtual) Ritchie Anderson (virtual)

Rebekah Jones Jamie Arrive

Dusty Carpenter Brad Horrocks

Division Personnel

Miles Hanberg Covy Jones

Dax Mangus Amy VandeVoort (virtual)

Clint Sampson Ashley Greene Randall Thacker Darren DeBloois

Randall Scheetz Eric Miller

Tonya Selby Anthony Christianson Justin Shannon Rose Fedelleck (virtual)

Wyatt Bubak

Wildlife Board Members

Randy Dearth

Summary of Motions

2.) Approval of Agenda and Minutes-Brett Prevedel-RAC Chair

MOTION: To Approve Agenda- Brad Horrocks

2. Rebekah Jones

Passed Unanimously

MOTION: To approve Minutes-Brad Horrocks

2-Rebekah Jones

Passed Unanimously

6.) Big Game R657-5 Rule Amendments - Covy Jones, Big Game Coordinator

MOTION: To approve the Divisions recommendations as presented with the exception for the use of cameras on depredation issues- Ritchie Anderson

2. Rebekah Jones

Passed 6-1

7.) Furbearer Season Dates and Bobcat Permit Recommendations - Darren DeBloois, Mammals Coordinator

MOTION: To accept as presented by Division-Dan Abeyta

2. Jamie Arrive

Passed Unanimously

8.) Cougar Recommendations and Rule R657-10 revisions for 2022-2023 - Darren DeBloois, Mammals Coordinator

MOTION: To approve division recommendations -Dan Abeyta

2. Brad Horrocks

Passed Unanimously

9.) R657-33 Black Bear Rule Amendments and Recommendations for 2022 ACTION - Darren DeBloois, Mammals Program Coordinator

MOTION: To accept as presented by the Division -Ritchie Anderson

2. Rebekah Jones

Passed 6-1

Motion to adjourn-Brad Horrocks

2nd Rebekah Jones

Adjourned @ 9:20

00:00:00 1) Welcome

(Informational)

Chairman Brett Prevedel called the meeting to order, welcomed the audience, reviewed the meeting procedures, and had the Board and RAC Members introduce themselves.

00:02:34 2) Approval of Agenda

(Action)

The following motion was made by Brad Horrocks, seconded by Rebekah Jones.

MOTION: I move that we accept the agenda as presented.

Motion passed unanimously.

00:03:12 2) Approval of Minutes

(Action)

The following motion was made by Brad Horrocks, seconded by Rebekah Jones.

MOTION: I move that we accept the minutes from the last meeting.

Motion passed unanimously.

00:04:22 3) Wildlife Board Meeting Update by RAC Chair -Chairman Brett Prevedel (Informational)

Brett Prevedel: If you remember last time, we dealt with elk permits primarily, and also, we looked at the scheduling of all the hunts. The permit numbers will be done in the spring.

We had some discussion on the swan hunt, and I know at the RAC we didn't have a lot of discussion about that, but it closed early for the third or fourth time and it just keeps getting closed early because of the number of trumpeter swans that have been taken. So there is a concern and it's probably a valid concern, that they're being targeted because people want a trumpeter swan. Remember when the quota gets hit it shuts down the tundra swan season a lot of people lose their opportunity to hunt their trumpeter swans. So they had a lot of discussion on how to deal with that, it's not illegal to shoot a trumpeter swan, but it's not recommended either. So what the Wildlife Board did was passed a motion that if you shoot a trumpeter swan and you're an adult you'd have a five-year waiting period before you could put if for swans again. You have to check in a swan that is harvested so they can look at each swan. A three-year waiting period for youth if they shoot a trumpeter swan. And that would be a waiting period to put in for the tundra swan permit. That was what they agreed to there.

The elk permits, the Wildlife Board voted to not go with the DWRs recommendation of a draw and remain as is for one more year just like it was this year online and over the counter. Then the elk committed is scheduled to meet this next year. So that was the decision they made.

A motion to stay with the 50/50 split on the max points for the limited entry. That being the same as it is right now also. The recommendation was to possibly give 60% of the tags to the high bonus point, that did not pass.

There was a little bit of discussion on hunter orange on that little bit of overlap that youth hunt and the bow; and they recommended that bow hunters should not have to wear hunter orange on that overlap, kind of just cleaning up that discrepancy.

They did vote to extend the youth any bull elk hunt for two days, those two days that were not covered there. So it will go right up until the muzzleloader deer, I believe. There was some discussion on CWMUs and a lot of discussion around the state about the public land inside the CWMUs and it's been dealt with different ways around the state because all the situations are a little different. The only motion that came out of that is any additional public tags due to the public land being inside a CWMU would come out of the private allocation of the CWMU rather than just increase the tag numbers.

And I believe that was about it on the rest of the recommendations and all the hunt seasons and hunt structures were approved as presented. Then there was just a private request for a permit to bring a monkey into the state that was denied. So that's my update on the Wildlife Board.

Miles, would you like to talk about the regional update?

00:09:31 4) Regional Update -Miles Hanberg, NE Regional Supervisor

(Informational)

Miles Hanberg: Yeah, I'll do that. While they get the presentation pulled up, I just want to thank the RAC members for coming out on a snowy, slick night. And also, embers of the public. I appreciate everyone coming out and participating in the process and being here to give your input and help decide the direction of wildlife management. I appreciate that.

So, we've got a few things to update everyone on tonight. You can tell where my mind has been here the last few days, is on ice fishing coming up. I'm kind of excited about the cold weather forecast coming up in the next few days. Let's move on to the next slide.

Law enforcement, of course officers are still working late season antlerless hunts. Often times they can be as busy or busier on some of these late season hunts than other times of the year. So still busy doing that, but with the hunting season starting to wind down, that workload will start to wind down as well. Right now the Division is in process of hiring officers. They have an applicant pool, this is a statewide recruitment, they have an applicant pool of about 120 candidates. Last week they started completing a bunch of those interviews and narrowed the pool down to about 20 candidates. There will be some other processes that these candidates will have to go through and in the end, we'll probably hire about four new officers statewide. So we'll have vacant district in the Roosevelt district. Morgan Larsen has been working for us as a seasonal employee, but he's also a native of the basin. He's going to be filling that position, he was hired in our

last recruitment. He just needs to finish up some post and then he'll be going on some statewide training as well. We're excited to have Morgan, he knows the area, knows the agency, so he'll be a good fit for us.

Wildlife section finished the mule deer captures on the SS over the past week. If I misspeak here, we have people here who can correct me. But I think the fawn weights came in at least average overall. After a really dry summer we really were afraid we'd see a lot of light fawns, and the lighter the fawn the less likelihood they have of surviving the winter. So this wet and the fall green up we had, I think, really helped let a lot of our deer pack on some pounds and some fat and I think it will help some of them make it through the winter. That was encouraging, I know there is some variation in that, we did have some light fawns, but overall, it went well.

We also finished capturing 30 mountain goats last week in the Uinta's. These were all outside of the wilderness area. This data will help us better understand the movement of these mountain goats and their migration patterns but also a better idea of what factors we're facing with mountain goats on the Uinta's. The population may be a little stagnant or may be declining the last few years, so this gives us a better idea of the mortality rates and some of those causes.

Outreach section there will be the 17th annual Christmas bird count. It's coming up December 18 at the Ouray National Wildlife Refuge. It's kind a citizens science project, so any folks who are interested in participating in that can get with Anthony Christensen or Tonya Kieffer and get signed up for that. That's an effort that goes on across the country, we just happen to host one here at the Ouray Refuge.

Now that maybe we have some ice in the forecast Anthony and Tonya will be working with our aquatics section on scheduling some ice fishing seminars out on the ice. Those will be good events coming up and once we have a good idea on time frame, we'll have some announcement on the media talking about those events.

Lasty I want to mention that the annual bird bash is scheduled the last week of January, pending ice. So we'll see how that goes.

Habitat I just wanted to give some information on the statewide information on the Watershed Restoration Initiative and this last year 2021 season it was the highest number of acres restored of any year in the state. 147,215 acres. That's pretty impressive amount for just one year and these were kind of the proactive projects that aids season partners are really trying to improve watersheds and habitat. But in addition to that there was 74,910 acres of fire rehabilitation that was completed during the same time period. Those are some big acreages that our watershed restoration initiative continues to grow and do well.

223 miles of stream was completed, stream improvements this year. And total funding with all the sponsors and folks involved is 43 million. So it's really neat to see that kind of effort being placed on the landscape and I believe it's really going to pay off on a lot of things, but primarily on the watersheds but on habitat as well.

At a local level we're just finishing up some of the seeding projects in the past week. Luckily going to get those wrapped up, the snow coming in is a perfect timing on

that. We're excited about that and finished up some pond cleaning projects in the Book Cliffs as well.

Aquatics, our native aquatics crew go around to the fourth-grade classrooms around the Uinta basin every spring and talk about the native fish and give presentations to all those fourth-grade classrooms. They'll be doing that again this year, so I thought I'd mention that now since this RAC won't meet again until April. That's a big effort that they do to try and go out and reach some of our younger people and explain some things about wildlife.

We still have some surveys going on at Cottonwood and Lower Stillwater ponds coming up this month. Those are kind of ongoing efforts our aquatics folks will be working on this month. We also have some additional funding that we'll be trying to work on some additional sediment control work on the canal entering Pelican Lake. So in the picture on the right I thought I'd highlight that sediment catchment basement put in the canal with the cooperation with the canal company and other partners including Division of Water Quality. And just in the last year that pile of sediment is what's been cleaned out of that sediment base. So that's about 210 tons of sand that was stopped in that basin rather than have it go to the lake. That affects water quality and clarity, has impacts on fish, but the other thing is it really just starts to reduce the capacity of your lake over time impacting water users and other things as well.

So that's pretty interesting work, there is a lot of sediment coming down that system and its good work to slow that down and improve water and water quality over time.

Anyhow, I think that's the last of the update. One thing I would like to maybe talk about just briefly, Dan Abeyta has been our Vice Chair for a couple of years, but he has just completed eight years on the RAC, which is two terms, so Dan this will be his last meeting on the RAC. We're really appreciative of Dans time and service on the RAC, he's been a really good RAC member. We really appreciate that, and I wanted to recognize him tonight.

And Natasha Hadden has formally been on the RAC with the BLM, and she'll be taking over for Dan at our next meeting in April. Just a big thanks to Dan. And that's the end of my update.

Brett Prevedel: Thank you, and I'd also like to say thanks Dan. He's done anything he needs to support the RAC and he's an excellent thinker. Thank you. So the process tonight, we'll have the DWR specialist that is over the topic available for questions or comments up at the podium. So the public, if you want to comment you just need to fill out a card and give it to us, so we don't miss you. And we'll work with you but try to keep it around three minutes. It's very important that it remains civil. We have a lot passion in the room with various topics. You're welcome to express your opinion but it's not a personal issue with the DWR staff. So Wyatt if you don't mind, you had the long presentation online which we've all viewed, but what we'd like to do is just get an overview of what you did, you don't need to go into the data and then be available for questions.

(Informational)

Wyatt Bubak: Sounds good, I can do that. So I'm Wyatt Bubak, I'm the Chief over law enforcement with the Division of Wildlife. Over the last few our front desk staff and our biologists have been getting an increasing number of questions about emerging technologies that we're seeing and regarding the take of wildlife throughout the state. So the Division conducted a survey of a handful of these emerging technologies back in March, and the goal of that survey was to combine public input for the creation of new administrative rules because we had some lacking clarity in some of our big game rule that we wanted to clean up. It helps clarify existing administrative rules, helps identify hunters' opinions, preferences, and tolerances, and aides in management decisions. So on this emerging technologies survey that we did in March of this year, it covered a handful of technologies, night vision, trail cameras, definitions of muzzleloaders, some questions about shooting different weapon systems at range. That survived 6,000 of the hunting public. The individuals that we pulled that data from were people who had applied for big game hunts in the last five years. So general season, once in a lifetime, and limited entries. Good return rates, we feel like that data accurately represents the public as a whole. Once that survey was completed the Wildlife Board asked the Division to do a survey specific to trail cameras. That was conducted in October of this year. We put that data and good response rates for that survey as well. Again, we feel like the data collected from that survey represents the hunting public as a whole. So you'll notice if you've watched the presentation, a number of these emerging technologies will be implemented or considered recommended rule changes and the recommendations collected from these surveys.

Brett Prevedel: Thank you. Would you mind the one slide that shows the six issues and shows the dots? Just kind of give us a general sense of what the public strongly supports or opposes of the five or six that were on that table.

So we went through and the slide that Mr. Prevedel is describing is weighted averages. Basically is just tells you how strongly the public supported or opposed a given question. And I'll go through those questions just in the event that you don't have it memorized, which I'll assume most of us don't. The trail cameras impact, the fair chase of an animal hunted, the weighted average of that was 3.25 basically neutral. A neutral response would be a three. Anything between 3-5 would be in support of and anything between 3-1 would be in opposition. The closer to five that number is the more the public supported it. So for this particular question it's 3.25 so the public generally supported that, although not significantly strong extent. Using trail cameras during the hunts. That number was 2.14 which is certainly the most strongly opposed as far as the public did not support the use of transmitting trail cameras during the big game hunts. Using internal trail cameras during the hunt is 3.3 so the public would generally support the use of internal trail cameras during the big game hunt. Regulating the number of trail cameras, 3.37 again the public would generally support that. Then regulating the sale of information from trail cameras, so that would be selling a photo, location data associated

with a trail camera photo, and that was 3.84 and that was the most strongly supported question in the survey as it pertains to trail cameras.

Brett Prevedel: Thank you. And thank you for your work on this. It was very through and very informative when you looked at it.

Wyatt Bubak: I appreciate it, our social scientist did a phenomenal job helping out with this stuff. Big thanks to them as well.

Brett Prevedel: So I will open it up to questions from the RAC.

00:24:41 Questions from the RAC

Rebekah Jones: I was wondering if you had any survey data for non-hunters? Like related to wildlife cameras? It may not be in Utah, but just in general, wildlife cameras on public lands?

Wyatt Bubak: We did not think to include them in the survey, solely because the rules written in a way that only regulates trail cameras as it relates to big game and potentially bears and cougars. The rule isn't written in a way that would prevent someone who was taking wildlife photography or things like that from trail cameras. It's just tied directly to take of big game, so we didn't take that niche of the public because it wouldn't directly affect them. Generally speaking, I don't have that data outside of this survey either.

Brett Prevedel: Any other questions?

Dan Abeyta: Wyatt, I've got a question for you. My question is, currently the non-transmitting trail cameras are legal through hunting season, is that correct?

Wyatt Bubak: Currently all cameras are legal.

Dan Abeyta: Copy that. Then the proposal was to restrict transmitting cameras from July 30-January 30?

Wyatt Bubak: July 31-January 31

-Audio issues, very difficult to hear the RAC and Division members in the Vernal office. –

Brett Prevedel: Wyatt is addressing the survey and the public sentiment. This is informational (inaudible) On the next item Covy will deal with the rule amendment and the dates on the recommendations related to the emerging technology.

Five-minute break due to technical issue.

Brett Prevedel: Welcome back. We've worked on our technical difficulties and we're ready to proceed. We were just having a discussion with Wyatt Bubak on the survey for the emerging technologies. Are there any other questions from the RAC regarding that?

Dusty Carpenter: Mr. Chair I have a question and a comment. Wyatt, my first question is, is there a plan to further consider this issue with public land managers, not just for the take of wildlife, but for the experience of the public users. Like Rebekah was saying regarding general users on the landscape. Is the Division planning on some kind of further partnership or dialog about this issue?

Wyatt Bubak: Maybe if you provide me with an example, I'll have a better grasp of what you're getting at.

Dusty Carpenter: I guess such as the potential impact to solitude experience of being completely under surveillance at multiple locations, specifically around water sources, etc. It's just a booming experience that most people who are recreating on BLM and Forest Service lands.

Wyatt Bubak: We certainly had those questions posed to us and there continues to be a strong concern I don't think we'd have any concerns with meeting and discussing that further. But it wouldn't be part of this proposal, it would be down road if we went that way.

Dusty Carpenter: My comment is I got a couple dozen folks who are really passionate about this really appreciate the work that you all have put into this. It's given me a whole sincere perspective of everything you guys grapple with. I work in a pretty emotional program too so that's fun, but I guess my comment would be that on that same aspect there is an overload on that feeling of surveillance I know this is surveilling a specific resource, but it doesn't have a stop gap measure for people, so we're also surveilling people. And when does property considered abandoned. Especially on public lands. Is it ok to leave tents, coolers, that's considered litter, but there has been an abundance of cameras; I know a tree that has 15-16 cameras on it right now.

Wyatt Bubak: I know that the Forest Service has some regulations speaking to abandoned property. For the most part we'd defer mostly to those land management agencies on those items. There is an initial part of that comment that you had, oh the privacy aspect, arguments go both ways on that as far as when you're in the city or the mountain obviously you'd expect more privacy in the hills. So weighing those is a difficult challenge but we presented this option and it's up for discussion and the RACs can choose which way they go with it.

Dusty Carpenter: Mr. Chair, I had one more question and quick comment. The question is, is there going to be a plan to talk about emerging technologies every year? Because they're changing so fast.

Wyatt Bubak: So we've had internal discussion and the law enforcement section has been asked to kind of look and keep tabs on these emerging technologies and present these to the Wildlife Board if I'm recalling correctly into the future on what I have been told is an annual basis.

Dusty Carpenter: I guess by their comment it would just be, again not just out of appreciation on the Divisions look at this issue, because I know if Covid did anything to public and state resources it just opened the floodgates to technology and people and I think you guys are trying to get a grasp on something that's important to so many users for... cameras are fun we have cameras and we've enjoyed them, but I do also see the flooding of them affecting experience. Thank you.

Wyatt Bubak: My pleasure.

Brett Prevedel: Thank you Dusty, and maybe if I could elaborate on that, these recommendations tonight is relating to taking of game animals with the use of technology. The other issues that were brought up DWR wouldn't have the ability to regulate anything that didn't pertain to the wildlife would it. Wouldn't that be the BLM or the Forest Service, they would make their own ordinances, wouldn't they?

Wyatt Bubak: Yeah, the Forest Service and certainly the BLM have their own regulations and sometimes they don't match up exactly with the state regulations. But the Wildlife Board is tasked with making rules and regulations related to the taking of wildlife with the state regulations. The Wildlife Board it tasked with making rules and regulations with the take, and in case of the cameras the aid in take and another term that's in there, but basically anything that has to do with aiding or taking of wildlife.

Brett Prevedel: I understand the situation, I understand it fully as an individual and you're in the middle of nowhere and there are six trail cams. But we couldn't regulate that in this body if we chose, right?

Wyatt Bubak: What you're asking I believe is could we outright ban the use of trail cameras of any use. The way the statute is currently written we could not. That's why we tied it back to the taking or aiding and assisting of taking.

Joe Arnold: I'm just curious of the rule and actions that will be taken tonight on this. Are we defining what is fair chase? Is that what this has to do with is the definition of fair chase? Also, maybe another part to that question is the transmitting ones, as far as trail cameras, in your opinion how does that aide the hunter compared to a regular camera? And the next part would be how do you... we can have all the laws in place, but how do you enforce the number of trail cameras and whether or not they're transmitting or not transmitting. I think that one will be a challenge.

Wyatt Bubak: Maybe I'll take a step back here. In the next presentation Covy Jones is presenting the rule changes and you can discuss the technicality and the enforcement is probably best suited for that next presentation.

Brett Prevedel: So where were going to go with this Joe is this is the survey portion and then Covy is going stand up and make the recommendations that the DWR has to present to us tonight, and at that time we can discuss the pros and cons of the recommendation.

Jamie Arrive: Brett, I have a question. On your survey you said they're mostly cougar and bear hunters, or they're other kinds of hunters?

Wyatt Bubak: They're hunters that have applied for a big game permit in the last five years. So big game hunters.

Brett Prevedel: Blake, would you rather comment later after you hear the recommendations? Later? Ok. Any comments or additional questions from the RAC at this time for Wyatt? If not, we'll move on and get into Covy's recommendations.

00:44:24 6) Big Game R657-5 Rule Amendments -Covy Jones, Big Game Coordinator

(Action)

Covy Jones: What I've done in previous RACs is go through the recommendation again, just a synopsis, so they know what we're recommending in the big game rule from the survey that we did.

Starting with a little discussion from the RAC about why the Division proposes a change in a rule. Where these come from. So there are a few main reasons why we do this. The first is to comply with direction from the Wildlife Board. An example of this that you'll see in here is we will recommend that every hunter that has a bison permit reads a bison shot placement article. The reason for that is because we went to the Board with a concern about wounding loss on bison specifically about bison on the Book Cliffs. We were concerned about bison who were hit high and then never found. Anyone who know anything about bison know that the vitals sit very low. It's easy to make that mistake and not recover the animal. In this discussion with the Board, our concerns and the Boards concerns, the Board wanted to make sure that all hunters had reviewed that bison shot placement article to help reduce that wounding loss. In order to do that we had to make it mandatory, that takes a rule change. The other reason is to make sure our rule aligns with code. Our legislature meets annually and every year there is the possibility and potential for rule changes. They may clean things up, align things, or pass new laws. An example of this would be HB-295 from last year, where they addressed baiting of big game and in that bill, they also heard there was a lot of sentiment that they were going to address trail cameras as well. The bill sponsor and others heard from the pubic that they wanted that to come through this process. The public really wanted a chance for our RACs and Boards to comment on that. So they gave the Division direction to make a regulation regarding trail cameras but take it through this public process and give us all a chance to comment. Finally, changes may come from the Division internally. There are at times portions of the rule that may be antiquated and used, portions that are unclear or difficult to interpret and we may clean those up and make changes to do that.

With that, let's go into what some of the recommended changes are. The first one is where we have a definition for what an antlerless elk control permit is and these are not valid on CWMU, even if that CWMU resides inside that unit where antlerless control permits are prescribed. Anyone who knows what an antlerless elk permit is, it's a permit that allows you to buy an antlerless cow elk permit if you have an overlapping buck or bull permit in that unit. Right, and it was never our intent to use these on CWMUs. We have a method in place to get the harvest we need to get the harvest we need inside of CWMUs. This is an area where we are having a hard time getting harvest and we don't want to create more pressure inside the field.

We also are making a recommendation on night vision devices to prohibit the use. I'm saying night vision, but I mean thermal devices, infrared, other devices that use heat signatures. Regardless of what time of the day they're used, whether it's night or day, the recommendation is to prohibit the use of these items as it pertains to take, aid in the take, or attempt to aid in the take of big game.

Trail cameras we talked about a little bit, but let's go into the recommendation. The recommendation on trail cameras is that we're recommending that transmitting trail cameras, so trail cameras that are capable of transmitting an image from where they are to a remote location not on site, that those cameras are prohibited from the end of July to the end of January. The rational for the season dates is because that is the time all big game hunt permits fall inside those dates. The other part to this is we're also recommending the prohibition of the sale or purchase of images, time, or date information as it pertains to trail cameras in general; not just transmitting cameras. The rational for this was simple, for one it was highly supported in the survey, as was the trail cameras. But also there are companies popping up around the west, where you can log online and buy an image for a price. Just to answer Joe's question, we're not defining fair chase in the rule, it's that there's a sediment of fair chase across the hunters, and it is that transmitting trail cameras or buying or selling information about a specific animal including the location, time, date, and image, as it pertains to take that is not fair chase.

We're clarifying some stuff on muzzleloaders that muzzleloaders are a weapon type that both the powder and the bullet have to be loaded from the muzzle. There are some new muzzleloaders, the fire stick is one I can think of, where you load the bullet from the barrel, but the powder is actually in a cartridge and loads from behind. Our muzzleloader hunters did not like that concept, they want to maintain that aspect of the traditional muzzleloader.

It's cleaning up the part around National Wildlife Refuges, just stating those refuges are closed unless stated by the managing authority.

There is also some clean up work, do you remember recently when Lindy came around and presented the new draw timeline? And said that this new draw timeline will allow hunters to see proposed permit numbers when they put in. Not final permit numbers but proposed permit numbers when they put in. In order to do that, Lindy said we'd be bringing forward a few other rule changes to streamline the process. One of the things that streamlines the draw process is currently for buck and doe pronghorn, bull and cow moose, and ram and ewe bighorn, if you draw a male of one of these they have to go through and preclude you from drawing for the female. We're recommending to allow you to hunt for and apply for both. It takes one more check on the draw process, help streamline it, and helps us with a commitment we made to the public.

We already talked about the bison shot placement article.

Then we clarify that HAMS permits are not valid for extended archery, much like you can use a bow on an any weapon general season hunt, but an any weapon general season rifle hunt, even though you can use a bow, that permit is not available for extend archery. These are not archery hunts per say.

Then we asked for an exemption on hunter orange for archery hunters who are hunting on that overlap on the general season youth any weapon hunt. The rationale behind that is pretty simple. Safety is paramount for the Division. It is first and foremost on our minds. And when we look at hunter orange it always comes back to a density of hunter's issue. Now there are 500 youth any bull hunters in the field during this opener. But when we look at those densities and the space they occupy, it doesn't reach the density of a traditional general season hunt. That's why we feel comfortable with making this recommendation.

And with that, those are all the rule changes that were recommending. They would go into place before the 2022 hunting season, anything that's approved.

00:53:54 Questions from RAC Members

Brett Prevedel: Thank you Covy. Joe would you like to readdress that question of yours now?

Joe Arnold: Yes. Just on the definition of fair chase we're not trying to redefine that. I know that in some of the public comment periods and some of the things I read through was a bit about fair chase. So I'm just trying to understand fair chase. Maybe I'm trying to split hairs, but even sitting at water holes it becomes a fair chase issue and these transmitting devices as well. Is there fair chase, is there not fair chase? How long should something be able to be in the field? I think it's going to be hard to I guess police in the sense of transmitting vs non transmitting, maybe I'm wrong there. But what real advantage does that give the hunter vs the non-transmitting. My opinion is all or none, but that's just my opinion and may be unpopular. But I'm just trying to understand what we feel like the absolute advantage is with transmitting or the cameras all together and then going into people sit water holes as well. That's probably splitting the hairs of fair chase as well. So I'm just struggling with trying to decide one or the other, honestly Covy.

Covy Jones: Joe, I think we've all wrestled with it. I think that's kind of a comment in the form of a question, but I'll do my best to answer it. I think we've all wrestled with what you're thinking, and fair chase honestly is more of a sentiment. This definition comes from Boone and Crocket, "Boone and Crocket defines fair chase as the ethical sportsmanlike and lawful pursuit of taking any free ranging animal wild animal and a matter that does not give the hunter improper or unfair advantage over the game animals." Now that has a ton of subjectivity in it and probably is different for everybody in the room. What does that mean? Joe, that's why when we did this, we went back to the survey data of asking the public, do you want regulations on trail cameras, yes or no? Do you want regulations on non-transmitting trail devices, yes or no? And do you want regulations on transmitting trail cameras and how do you feel about that? And it was

clear just through our survey data that the public overwhelmingly wanted some regulation and felt most strongly about regulating transmitting trail cameras. The hardest part about this Joe, is I don't know if there is a wrong or a right here. I don't know and that's really hard. What I do know is majority of the public would like to see regulation on transmitting trail cameras. Now when you bring up the difficulty, I think I brought this up at most every RAC, and Wyatt is right here to help me with this, because he does regulate this stuff. We believe that it is enforceable, we don't believe that it will be easy. Kind of like, maybe not everybody sped to the RAC tonight because it's bad weather. But a lot of times we hop in our cars and speed down the road, and we look at the speed limit as an advisory, it says 55 but they really mean 64 because that's when we're going to get caught, right? I'm sure that some of that will happen, I'm positive it will. And when we have a case, and we'll get a phone and we'll get into pictures, and we'll enforce the law. We'll we catch everyone who's breaking this or violating that? No, we won't. Will we have cases? Yes, we will. And eventually you do it enough and no body is great at keeping completely quite and word gets around and we get a case. We do believe we can enforce the recommendation as written; we don't think it will be easy.

Joe Arnold: Maybe on that one more thing. In my opinion, and this is my opinion and I'm not trying to create any animosity with outfitters here. But I believe from my standpoint as a non-outfitter I take 20 years to draw a permit on the Vernon, whatever it takes, and the Vernon would be one where there is a lot of trail cams, I've been out there quite a bit. The outfitters seem to have the upper hand, even though I've waited 20 years. They have a guy who is paying good money and he's earned his money in whatever way. How about outfitters, and I know this may be unpopular, as a guy who represents the public, and I've paid for outfitters in my life. I feel like some of the abuse, and I believe it's done by the sportsmen as well, but the outfitter guide services are the guy who is really benefiting and giving him self an upper hand. Because for my ten cameras on the hill, he has 100 and he has people checking them. How do we address that going forward, Covy?

Covy Jones: That's a fair point.

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Covy Jones: The other thing here is we're looking to prohibit the sale and purchase of the media and other information associated with all trail cameras. So, I know right now it's become more and more popular to pay finders fees, so maybe all of those cameras don't belong to that individual and there are several individuals who are motivated to go out and put out cameras and catch a big animal and get that finders fee. That rule, that incentivizes that and puts the work back on the individual. Now, will they be able to put out more cameras? I mean the guides. I think we always need to be careful from discouraging a group, guides or whoever they may be. What they do is important, they provide a service, there are a lot who appreciate what they do. And they're going to put out more cameras, but we're going to try and make it more fair. Will this make it so they don't put out more cameras than the average hunter who doesn't have the luxury of

spending this much time out on the mountain? Probably not. But I do think it will make it more fair. If you've got to check them, it makes you put in the work.

Ritchie Anderson: Could I make a recommendation that we break all these proposed changes down to one at a time and discuss one at a time and make motions on them one at a time. Would that work ok?

Brett Prevedel: I really would rather not make ten motions, but we could break out the technology from the other ones. I mean the technology, the trail cam, the night vision device, and the possibly the muzzleloader are kind of grouped together.

Ritchie Anderson: Sure, however you think. I think we're going to get a little lost and it's going to be some pretty crazy motions if we try to group them.

Brett Prevedel: I'll do my best; we'll see how the discussion goes. There are certain issues like the antlerless elk control permit which I doubt we'll have much discussion on. It's just housekeeping. And also the applying for the buck and doe of the same species, and the National Wildlife Refuge, and the bison, the hunter orange, and the HAMS hunts. So really Ritchie, we'll be talking about these technology issues. We can sure break that out. I'd be happy to start that right now. Does anyone on the RAC have any opposition to prohibiting the use of night vision devices? Or want to discuss that in anyway? The recommendation is to make it illegal to use night vision device to attempt to locate big game during the hunting season.

Ritchie Anderson: Chairman, I have some questions, if you're ready for questions.

Brett Prevedel: Ok, go ahead.

Ritchie Anderson: Kind of with Joes point or discussion, I have kind of a similar concern, and I don't disparage the guides or the outfitters either, we all need to make a living and have businesses and do that. My concern with limiting the use of transmitting trail cameras is there are those folks that can afford that kind of technology to perhaps assist them in their hunt, but they maybe can't afford these guide services. Sometimes these guide services pay multiple spotters and corner off an area and track a trophy animal basically sometimes 24/7 for their client, and that's what they're paid to do. And I'm not disparaging them, but it seems like if we're going to regulate an opportunity for a group of hunters, it seems like a similar deal to me. I would like to kind of know the RACs opinion of that. I guess, where do we draw the line? I'm not opposed to prohibiting the transmitting cameras, don't get me wrong there, we need to do that. But if we're going to do that, we need to maybe take a look at making it a little equal or fairing things up just a little bit and maybe not having these large groups of spotters and what not paid either. I would like some opinion from the DWR on it and I'd like to see some opinion from the RAC members. The sportsmen I've talked to agree, they've had that concern too. If we're going to limit one, we probably ought to look at limiting the other.

Brett Prevedel: Ok, thank you. I'm going to check through this and look for comments if anyone has any opposition to the recommendation. I'm just going to go through it one at a time. Antlerless elk permits not being valid on a CWMU. Everybody I assume is ok with that? Back to night vision device, is there anybody on the RAC who has a problem with the recommendation to use night vision devices to hunt big game? Or to locate big game?

Joe Arnold: Brett, this is Joe again. Sorry, I've used those devices to locate to look at animals. Big game and predators. What was the public opinion again? I know that the officer had presented that. Just so I can understand it because part of me says it's not really that much of an advantage, and this is back to Ritchie's point, if we're allowing certain things, fair chase, yeah there is night vision which allows you to see animals and certain times of the day you can't see them at all. So I'm kind of having a hard time being on board with this to be honest with you, Brett, because I've used the devices and they haven't' been that beneficial where they take out a great big buck or a great big bull. So I'm having a hard time understanding what the advantage is there. Can I get the statistics there?

Brett Prevedel: Let me clarify, we're talking the survey was to gauge the publics opinion on these issues. So it's a social issue and you and I may have different opinions than the public, but keep in mind what the DWR was asked to do by the Wildlife Board was to survey hunters and get the public opinion. They are hunters, all of them, its not the general public. So, do you have that number?

Covy Jones: Yes, so on the hunters that we surveyed this actually had the strongest opposition for continued use. It was 71% of the surveyed public were opposed to allowing the continued use of night vision devices while hunting big game while only 14% were in support of that with 15% remaining neutral. Joe, I've used these tools as a biologist too. I disagree with you. You can sit and glass a hill side for hours and then throw up a thermal and find several animals that you missed. And the advantage is insane. So, that's my opinion and I'm sharing it with the RAC buts the opinion of someone who's used these devices for things.

Miles Hanberg: Mr. Chair. I'll just point out, let's make sure we don't forget to ask questions from the public. I know you're going down the list and kind of gauging where we need to have discussion, we need take questions from the public and then get into discussion a little more then. Just a reminder to all the RAC members.

Brett Prevedel: Thank you. I'll try not to miss anybody. Raise your hand if I miss you, I have a card from Blake and when we kind of get through the RAC question and comments I expect we'll hear from Blake.

Brett Prevedel: Did that answer your question, Joe?

Joe Arnold: Yes, I wouldn't disagree with Covy that there is an advantage. I think that's what I'm trying to understand that there is an advantage with the trail

cameras as well. I know I'm probably splitting hairs and I'm trying not to be confrontational, but they also do have a limit to range and temp as well. So I just struggle with... they're also super expensive devices and depending on how the question is worded is it an unfair advantage? It can be. Is a trail camera on a water hole? I've seen plenty of holes across mountains across mountains where livestock owners have ran water and people have drilled a hole in the water line in order to put a trail camera up. I have a hard time kind of bouncing back and forth between fair chase and not fair chase and trying to dissect the two of them. And I appreciate Covy, and they are great to pick out animals there is no doubt about it.

Brett Prevedel: Ok, thank you. And we understand where you're' coming from Joe. Everyone has their own opinions, and I have mine, and Covy expressed his. The survey was to get a broad sense of the sentiment of the hunters, and it was directed from the Wildlife Board that the DWR gather more data, and that's why we're here is the data. We can still make motions, Joe, to whatever the RAC will support. But I will say this is the most thorough background we've ever had on an issue since I've been on the RAC to have this type of data and not wonder what the public's thinking, like some of the topics that we hear afterword. We assume things, this one at least we know. So I'm going to move on to the trail camera issue. I know we've asked the questions; we know the recommendation which is to limit the use of transmitting trail cameras and allow internal storage cameras to be used throughout the hunt. Then there is the data, the selling of data, we'll address that also. So Ill open that up to the RAC for comments or questions or whatever, and then we'll go to the public.

Dusty Carpenter: Mr. Chair I have a quick question for Covy. Covy, I know there is a lot of talk about what Nevada does in regard to trail cameras, and I think it was, gosh I don't want to be quoted on this, but maybe Eastman's who published a couple of articles on that in 2018 kind of when their public was in similar situation to where our publics are right now. Have you guys considered something similar to the Nevada seasonal restrictions to make it more black and white for fairness or for enforcement?

Covy Jones: Yeah, the way we've written our is an associated to take. And Nevada's regulation is a little bit different. As a wildlife agency, and I think this is what Wyatt was trying to say before, we're not really the trail camera police. We're not the public land police, we're not the trail camera police, we are the wildlife police, so we tie it back to the managing authority. Nevada's law is a season on trail cameras. Period the end. Now we did ask this question in the survey and surprisingly, there was 49% of the public asked that would support a law like Nevada's, with 39.9% opposed and about 10% who were neutral. So, there is public support among hunters for this type of regulation. No survey is perfect and there are parts that conflict a little bit. When we asked the hunting public, it was the majority, one of the stronger answers, the overwhelming majority wanted a regulation on transmitting trail cameras. When we went to internal storage it went down, then we went to the end of the survey and we asked about Nevada's regulation, again there was support there to have a season on cameras. Period. So we asked about it, it's not our recommendation, but we understand that sentiment as well. And there is some support for it.

Brett Prevedel: That percentage was almost identical to the regulating fixed. I mean that question about Nevada and the question on should we have a season on fixed they were both about 50/50, weren't they?

Covy Jones: It was close, but I think there was more support on the Nevada regulation.

Brett Prevedel: Ok.

Jamie Arrive: Covy, what was the outcome on the other RAC meetings in regard to this?

Covy Jones: Oh, that's a crazy question. Now you're going to ask me to remember the last two weeks. So, central region went with the Divisions recommendation and asked us to clarify that a trail camera would not count as a night vision device. So there was concern in the room that the definition of night vision device may prohibit all trail cameras. We didn't share that concern, we also don't have any heartburn clarifying that, if that's something that the RAC and Board would like us to do.

In the northern region there was a motion again tied to take, but there was a motion to put a season to all trail cameras. Across the board no trail cameras for the purposes of hunting from July 31-January 31. That happened again in the southern region, so again a season on all trail cameras.

The southeast region the sentiment there went back to the Divisions recommendation. Did I get all that right?

Dan Abeyta: I just want to share some of my thoughts here on I think the three topics that we're discussing here. I think the first thing of prohibit the sale of pictures and all the data that goes along with that. I support that for starters. Then in the Forest Service, if that is occurring out on National Forest Service lands, that requires the person doing that to obtain a special use permit, which I don't thing is happening. So for a couple of reasons I feel like the prohibiting the sale of images and the data associated with images and the requirement Forest Service has for a special use permit to do that, I think that is a move in the right direction from a Forest Service perspective. As far as... I think there was comment made earlier about abandonment. In the Forest Service we consider something like a trail cam or a tent or camping gear anything beyond 14 days is abandoned. Currently we don't feel like trail cameras is an issue on NSF lands, at least on the Ashley. I've not seen that as an issue, I've not heard that as an issue. I've been on the Forest a long time, so kind of where we're at there. As far as night vision devices, prohibiting those, I'm in agreement with what Covy was talking about and the proposal the Division is making. As far as the transmitting cameras, I'm in agreement with that as well. I just want to share my thoughts with the RAC with where I stand on those three topics.

Brett Prevedel: Thanks Dan. Maybe I'll elaborate on that a little bit. Maybe personally I'd learn towards a little more restriction on trail cams than the

recommendation, but I wouldn't representing the public and seeing the data I wouldn't go with my personal opinion. I think it's pretty clear what the hunting public wants and so I'm in favor of the recommendation as it's presented, and I commend the DWR for going to the extent they did to provide this. Last month I was highly critical that the public was mad, and we didn't get enough information. This time we have plenty of information to make a decision on it. That's my take on it. Blake would you like to make a public comment?

01:21:09 Comments from the Public

Blake Bess: Representing the sportsmen. Tonight I'd like to put my comment towards these trail cameras. I spent a lot of time in Southern Utah specifically San Juan Elk Ridge unit. I spent more than 45 days last fall on that unit and what I saw down there was 95% of all water is covered with trail cams. I've seen watering holes with upwards of 50 trail cams per watering hole. We've got a serious issue on our hands here and I think it's time the Divisions recognizing the issue with the transmitting cameras and I'd advise the RAC to take further notice and let's put a season on these. I know several outfitters. I've hired outfitters. I know outfitters in southern Utah, specifically San Juan Elk Ridge running over 250 cameras per outfitter. I mean you take other units, that outfitter could be running thousands of cameras. I'd like to share a little experience, by wife had a bear tag and we hired an outfitter down there. We hunted hard and my wife was actually getting a little discouraged and our outfitter got a text come through a bear transmitted. That camera was only 20-30 minutes away and we were there and dumped out on that bear. I'm talking about the animal here. I mean we're kind of cheating on the DNRs animal by not being fair here. I think it's time we put the hunt back into the hunt and do some hunting. I want the biggest buck and bull as anybody out there, but I think the sportsmen are willing to swallow some pride and stand back a little and maybe have some better trophies out there. I encourage the RAC to look at this issue severely. Thank you.

JC Brewer: I'm one of those guys with cameras out there. But I don't use hundreds of them, I don't even use dozens of them. I have six, they're not transmitting cameras, and they stay out in the Book Cliffs year-round. They're not there for the purpose of taking wildlife, they're there for my own enjoyment and education. Now, that being said I support the Divisions attempt to stop the use of trail cameras for the purpose of taking wildlife. That means the guides, that means the service.

Lost video and audio.

JC Brewer: A transmitting trail camera and you think he's using it to take wildlife, is going to deny it and then the Division is going to have to prove it. That's a nightmare and I don't think that you can do that. At that point you're trying to prove his intent and that's going to be a nightmare for the Division. If you're going to stop the use of transmitting trail cameras during the hunting season, stop them all. Regardless of intent. I guarantee you that you can tell, hell you can go out and look at my trail cameras today and tell if I'm trying to take wildlife with them, or just use them for my own entertainment. My own exercise. Hell I've been doing this for about 12 years. I'm in my

80's folks, because I walk a long way to hide those cameras where nobody is going to see them, including my friend behind me here. They're not on every water hole, on every reservoir in the Book Cliffs. They're on very specific locations. Some water holes in the summer you've got to hide them from the cattle. The cattle will destroy your set up. They'll come in and camp on a water hole and all you get is 10,000 pictures of black cattle, so I have to move them, I hide them from the livestock. All I'm suggesting here now, is I support the restrictions on transmitting trail cameras, but I think you need to take the phrase out that makes the Division prove intent to take wildlife. My cameras are not there for the purpose of aiding me in taking anything, and I think you're going to have a hard time proving that. I would suggest that you reword that just a little bit, so the Division doesn't have to prove somebody's intent, because that ends up being a nightmare. Thank you.

Brett Prevedel: Thank you JC. And just to clarify, Wyatt, the DWR does not have the jurisdiction if they're just being used for other purposes, is that right?

Wyatt Bubak: Currently, we do not.

Brett Prevedel: Ok. That's the one issue. I'm not disagreeing with you JC, but they don't have jurisdiction to. They're just over the wildlife issues. Miles, do you want to summarize the public end of it?

01:27:20 Public Feedback

Miles Hanberg: Sure. On the online comment system it was a little quieter this RAC round compared to last time. But we had nine comments come in specific big game rule topic. 44% strongly disagreed with the Divisions recommendation, 22% strongly agreed, 22% somewhat agreed, and 11% somewhat disagreed. Again, not many comments but that was the percentages. Basically this is a summary of that those comments were, and they were kind of across the board. Couple of people commented a ban on all trail cameras during hunting seasons and follow suite with what the northern region did and following along with the Nevada style recommendation. Another comment agreed with the ban on night vision devices. Another person opposed the ban of transmitting cameras especially for bear hunts. The other sentiment was the trail cam law will only hurt kind of the common sportsman out there. Outfitters will still be out in force and the leveling of playing field may not occur. Finally the last one a couple people commented that they supported transmitting trail cam seasons, but not a season on internal storage. Again, that's kind of across the board and differences in opinion. I don't know if that really sways the RAC one way on another that people all definitely have a different viewpoint.

Brett Prevedel: You have one more opportunity if someone wants to get a last word in, but I think we need to move forward. We've pretty much discussed it.

Ritchie Anderson: Brett did we skip the question asking portion? I'm not sure. We went straight to discussion so I'm a little bit lost in where we're at.

Brett Prevedel: We did kind of mesh the questions and comment together, but if you had a question, feel free to ask it.

Ritchie Anderson: I've got a few of them. I talked to a few folks today. Apparently, there was an exemption carved out for the use of cameras in a depredation issue such as maybe a bear killing sheep or cattle, there was going to be an exemption carved out in the rule to allow cameras and transmitting cameras to be used to try and identify and take care of that depredation issue. I went through the changes in the rules and the written language, and I did not see an exemption carved out anywhere. Did I miss that?

Covy Jones: No Ritchie, in the RAC process we don't change the verbiage in the rule. That came up in multiple RACs and what we said was the RACs made a motion asking the Wildlife Board when they formalize it to make sure there is an exemption for the use of transmitting cameras for a producer in the cases of depredation both on his private land or his public allotment. What the Division said was our intent was never to impact a producer on this. Those cameras can actually be very helpful in those types of situation to make sure we get the right animal when it comes back. Were not opposed to that and if the RAC would like to include the exemption for producer in the case of depredation, that is something the Division could support.

Ritchie Anderson: Thank you. That clarifies why I didn't find that there. Another question is on the private lands, the use of these cameras on private lands. We had a good question today from Cattleman's association. I guess how is that going to look? I guess the scenario that was used for a private landowner is using a transmitting camera, its big game season, maybe he has hunters in there. Maybe his neighbor gets mad and calls the Division and says, they've got transmitting cameras and they're hunting big game. That goes kind of with JCs point and the law enforcement nightmare. I think we need to restrict these cameras and stuff, but I can see how it's going to be a law enforcement nightmare for a bit to try and figure out. My question is, how do you perceive the law enforcement component of this looking on private lands?

Wyatt Bubak: So we enforce all of our laws currently on private lands. This would be no different than any other law. The exceptions you're talking about would be for monitoring trespass or their livestock or whatever it may be on private land. Our intent would not be to punish incidental sighting of big game on private land. If they're monitoring for trespass and it's evident, they're monitoring for trespass or monitoring their cattle or practices that aren't tied to hunting on their property and happen to see a deer, that is not necessarily what we're looking for. However, if it becomes apparent that they're goal is to identify big game on their property and then pursue it, that would be where we would take action. But incidental sightings in this situation where it's obvious that that wasn't the intent of the camera, we don't intend to address those.

Ritchie Anderson: How would you approach that with the landowner as far as, maybe there was a complaint or whatever. Would you have the authority to enter that premise and search for those cameras? How would that look?

Wyatt Bubak: It wouldn't be any different than when we investigate any other crime on private property. Typically we try the best we can to work with the private landowner where we go on private land in order to investigate something where we aren't able to contact the landowner. Those are relatively rare, at least we try to keep them to a minimum. However we do have the ability to do that in certain situations.

Ritchie Anderson: Thank you.

Brett Prevedel: Are we ready to move forward with a direction on this as a RAC? I'm not sure.

Joe Arnold: Ritchie and Dan I can see you and maybe hear you, but I'm not sure if I lost them in Vernal.

Dan Abeyta: Same Joe, I can see you and Ritchie fine. But I lost the connection with the Vernal group.

Ritchie Anderson: It's the same for me.

Break for technical issues

Brett Prevedel: We're ready to start back up, are we good to go? (We are good to go, thank you) Thank you. We have a comment from the public, I'm sorry I had his card misplaced so we'll get him in right now.

Tim Ragman: Sportsmen and kind of public at large. It's kind of a comment on Covey's recommendation on no orange. On archery they added five days extra where it overlaps the youth and also during then people don't know there is a disabled hunt that coincides with the youth. On average the last time I talked to your gal in Salt Lake there are 200-300 disabled hunters, but that's for all of your units. So you put it around 500-600 if you include the youth out there. I oppose it personally, because of the situation last year I was out with a disabled guy and a youth guy and several different times, and it's a big thing in hunter safety to know your target and know what's beyond your target. Well if you see an elk there but you can't see the guy in camo behind it, because he's in archery. It's a big safety issue, and I know there is a happy medium because I know the guys in the archery wanted those extra days to hunt elk in the rut, and that's good. It's a safety issue, like I said, we had a young guy who was bugling back and forth, and the guy was wearing all tan and the youth about shot. He was seconds away. He identified one of the other hunters, but there was a heated conversation with the guy, he needed to wear orange and he didn't. He said even if he was required, he wouldn't. They're archery hunting, so maybe there is a happy medium, at least have them wear an orange hat. But you know there is going to be a lot I don't think it's the number you think will be out

there, 500 youth, 200-300 disabled guys, it's the 30 guys who are there on archery who go past the guy with the rifle you can't identify them in this really good camo that is out there now and they're behind the elk. Maybe look at a happy medium, don't require them to have the 200 square inches of orange, maybe just a hat or something. During that time the elk are in the rut you can have that elk almost step on you with the orange on. That is just some feedback on that issue.

Brett Prevedel: Thank you. To clarify the recommendation, the recommendation is the archery hunters will not be required to wear any orange, right? During the five days.

Covy Jones: Yes. And that's really great rationale, we've given our rationale as well. Some happy medium would be nice. It's tricky because hunter orange is in code. And there is a minimum number of square inches in code. Then code give the board the ability to exempt hunts as they see fit, so right now where it is in code it's either all or nothing. But the Board has asked us to look into this and ask what our surrounding states do. We actually got a report back from law enforcement today when we were working on this together and we were going to bring in our outreach folks who work with our hunter ed instructors as well and have a discussion and bring that back to the Board. But major reform to that like reducing the square inches would take a code change. And again, that's a very fair comment, it's just one of those things that is just not an option right now.

Brett Prevedel: Ok we have quite a few other items on our agenda. I think we've had a lot of real good discussion. I don't have a real good feel for what the RAC wants to do. Go ahead Joe.

Joe Arnold: Just one thing real quick to Covy, on surveys. On the survey, just curious if the amount of people, were they also asked if they owned these devices? Transmitting, thermal devices, night vision, trail cameras, if that was also part of the survey?

Covy Jones: That's actually a really good question, Joe. So we did ask that question for cameras. We did not ask that question for night vision. We did not ask who owned them and who didn't for night vision. We did for trail cameras, who owned them, who used them, and what types they use.

Brett Prevedel: I think there was a very high percentage that used them, right?

Wyatt Bubak: On the population we surveyed, only about 40% of them used cameras in the last five years. Of that 40% that used trail cameras, 8% used transmitting and 92% used internal storage. But only 40% of the entire population used them in the last five years.

Brett Prevedel: I stand corrected, thank you. Does that answer your question, Joe?

Joe Arnold: Yes, I'm just trying to understand biased. I'm not sure if I'm a believer in there is no such thing as a non-biased survey. Thank you.

Brett Prevedel: Thank you. Is anyone ready to make a final comment or make a motion in any direction you choose?

Ritchie Anderson: Chairman, I would make a motion to approve the Divisions recommendation as written with the exemption for the use of the cameras on predation issues.

Rebekah Jones: I will second that motion.

Brett Prevedel: Ok we have a motion and a second. I assume we're talking about the whole recommendation including the night vision and the muzzleloader clarification?

Ritchie Anderson: Yes, unless you want to break it out. Right now the motion is for all of it.

Brett Prevedel: Ok, speak now if you want to break any issues out. Ok, we have a motion to approve as presented with an additional clause for depredation.

Covy Jones: Yeah, we'll make sure we have that in there.

The following motion was made by Ritchie Anderson, seconded by Rebekah Jones.

MOTION: To approve the Divisions recommendations as presented with the exception for the use of cameras on depredation issues- Ritchie Anderson

Motion passes 6 to 1. (Opposed: Joe Arnold)

01:54:13 7) Furbearer Season Dates and Bobcat Permit Recommendations (Action) -Darren DeBloois, Mammals Coordinator

Brett Prevedel: Ok, that takes us to our next topic which is the furbearer season dates and bobcat recommendations with Darren DeBloois.

Darren DeBloois: Mr. Chairman, we're just recommending season dates for next season and aren't recommending any changes to the current system on furbearer.

Brett Prevedel: And then most of the discussion will come on the next two items. You've got the cougar and the black bear broken out. So this is the furbearer season dates and bobcat permit recommendations. Does anyone have any questions for Darren?

01:55:19 Questions from RAC Members

Brett Prevedel: You guys got that was your summery right? So we're just continuing.

Darren DeBloois: If anyone wants more clarification, I'd be happy to provide that. Not recommending any changes.

Brett Prevedel: I have a question, on the unlimited bobcat tags, six per person unlimited cap. Was that brand new going into this year?

Darren DeBloois: That's the baseline and given the data we had from last season, we recommended that again this summer and we don' have any new data, so we recommend continuing that. And that's based on the plan guidelines.

Brett Prevedel: Ok, thank you. I don't believe I have any comments from the public or questions. Do we have any online comments?

01:56:16 Public Feedback

Miles Hanberg: There were just two people who responded on this, they didn't leave any comment. Both of those people strongly disagreed with the recommendation.

Brett Prevedel: That could have been a cougar or bear issue also, right?

Miles Hanberg: That would have been specific to furbearers.

Brett Prevedel: Oh, was it. Ok. Any comment from the RAC before we move this forward? Ok, I'd open up for a motion.

01:56:51 RAC Discussion, Comments and Vote

The following motion was made by Dan Abeyta, seconded by Jamie Arrive.

MOTION: To approve the Divisions recommendations as presented.

Motion passed unanimously.

01:58:01 8) Cougar Recommendations and Rule R657-10 revisions for 2022-2023 - Darren DeBloois, Mammals Coordinator (Action)

Darren DeBloois: So similar to the furbearer recommendations, we just completed the cougar cycle this July. One of the things we recommend to the Board is we begin the three-year cycle for the cougar recommendations and then we start brining people with bear timing wise. So we'll be continuing on to do both bear and cougar in December. So what we needed to was set season dates for 2022, so staring July 1 through

next year 2023; June 30, 2023. Let me just hit a couple of highlights, some changes mostly season dates are just being recommended for the calendar year. We are recommending on the SS Bonanza Diamond Mountain Vernal unit the SS Yellowstone, and the Wasatch Mountains Avantiquin Current Creek, no dogs from May 28-June 30 and that is to eliminate dogs during the bait season on those units and that is, so we don't have dogs and baits in the field. As we get to bear, we're making some recommendations there as well to keep dogs and bait seasons separated. So that's why we're doing that there. Other than that, everything else is just an extension of what we've done in the past. And we set all the permits in July so we're not recommending any changes at this time.

Brett Prevedel: So on the Book Cliffs there is not as much an attempt to separate the dogs and the bait, correct?

Darren DeBloois: It's more of a bear issue, but we do currently have some restrictions on hounds in the Book Cliffs. I think it's primarily to eliminate hounds during the archery season. But that's been in place and we're not recommending changing any of that.

Brett Prevedel: Is there an overlap on the lion and bear?

Darren DeBloois: There won't be.

Jamie Arrive: Why is it only these three units?

Darren DeBloois: One of the things we do when we get ready for these recommendation cycles is ask internally if there are any issues we need to address. We talk internally without enforcement officers about issues that they were having, and this pertains more to bear, and we can certainly talk more about it, but one of the things that rose to the top is a really difficult time when you've got hounds and baits in the field enforcing our prohibition of chasing off bait. And these units in particular rose to the top as being a specific concern. I think we need to look at the issue more widely and we certainly will when we do our bear plan review coming up here in the next year or so. But for now, this isn't for bear. But we're recommending some restrictions to prevent overlap on those units. That's where we have some concerns. And when we get to bear, we can have law enforcement speak to that.

Brett Prevedel: Actually, I'd like Eric... Eric Miller is here if I could ask him to come up and explain the difficulties, he's had from a law enforcement standpoint. Let's do it now, so it's the same issue and then we're going to go into bears also. We can look at the specific how you're going to deal with the issue. Yes, if you could do it now, that would be great.

Eric Miller: I'm the investigator in the northeast region. One of the main issues with the overlap has been stated already. We get opportunities for hounds to run off of bait that is actually legal. Historically we've had issues with houndsmen and bait hunters separately. Whether bait hunters have had illegal bait, or hounds had been using bait

illegally. We've had several violations in the northeast region alone. This particular early season we saw an increase in violation and a lot of complaints. I can't go into a lot of details because I have a current investigation open, but there was a certain hunter who his whole hunt was ruined. He spent almost 10 years putting in for a bait hunt. Made it a family event and only to be ruined by multiple rigs of hounds on that bait. Throughout the entire hunt. During the overlap it happened and when confronted, as law enforcement officers we ask these people to call us and not confront in the field for safety reasons. This particular incident they were confronted several different times with different houndsmen and became almost physically aggressive. Emotions run high but at the same time during that one week you have two parties who believe they should be able to hunt a certain location. In law enforcement it's really hard to enforce that. We've talked a lot of enforcement in this RAC and I really apricate that. That particular week it's really hard to enforce. It's really hard to listen to this hunter who was hunting go through that issue. We saw the northeastern region we saw complaints with not only that one week overlap but certain houndsmen were also claiming to hunt lions after that one week overlap, even though we have them evidence of them dropping dogs in the same spot throughout the entire bait season for this hunter. And then once that bait was over, they stopped. One reason, some information we got was there was a particularly big bear in there and there was some push to keep the bait hunter off that big bear, because other reasons in our investigation. It also created a conflict between houndsmen. It's not against the law to get territorial, but we get territorial as outdoorsmen sometimes when it comes to hunting. And one incident I went up with another officer in an unmarked vehicle. We saw eight rigs one running and they circled between two different bait stations between two different hunters, and we observed them for several hours during this incident and they never left more than a mile, mile, and a half from these bait sites. Since it was an investigation, we were able to place some cameras and we have a lot of video and pictures at the bait site, dogs eating the bait, the dogs were coming in during when the bait hunters were there. We had certain houndsmen blocking the road from other houndsmen to get to certain spots. We have evidence of people cutting trees down and blocking different roads because emotions run high, and they can get kind of territorial. So we just saw an increase of complaints and we saw in increase of violation during that one week overlap.

Brett Prevedel: And there was the lion overlap also, separate than that one, or is it over the same week?

Eric Miller: Once the bear harvest objective for the bear stopped it continued to pursue lions, although we think they were pursuing bears. I'd have to look at the season dates, but I think you can pursue lions at the same time because of the harvest objective.

Brett Prevedel: But this lion proposal will solve the lion seasons overlap with the bait, at least on those three units.

Darren DeBloois: Yeah, so at least on those three units we're recommending a restriction of hounds just on the bait season, and that's specifically for lion.

Brett Prevedel: And that's a direct reduction in the season length for the houndsmen?

Darren DeBloois: The season would still be open, but you wouldn't be able to use hounds for lions during that time period. Again just on these three units where we've had this concern.

Brett Prevedel: And we've had quite a few comments come in, and I did ask Daniel Davis who is on the RAC and he asked me to express his comments. He felt like it was a few bad apples that reflected on all the houndsmen. Basically he felt like it was an enforcement issue rather than a hunter issue in the field, to catch the few who were causing the problem. I told him I would relay that. Thank you, Eric. We'll have more questions when we get to the bear topic, but I know it's the same issue.

Darren DeBloois: Right, we're making some recommendations in bear to that will address some of these concerns.

Brett Prevedel: So I'll open it up to question from the RAC.

02:09:11 Questions from RAC Members

Brett Prevedel: How long is that hound season? The restriction is five weeks, right?

Darren DeBloois: On these particular units it would be May 28...

Randall Thacker: It would take out the month of June basically. Not many lions normally get hunted in June unless there is a unique situation, and we have one with no lions harvested during that time of year.

Brett Prevedel: And we don't have a hound restriction during the archery season in those units, do we?

Randall Thacker: Not in the fall.

Brett Prevedel: Any questions from the RAC? Any comments? Ok, specifically regarding cougar recommendations I'd open it up for a motion.

Miles Hanberg: I'll jump in real quick. Electronic comments again.

02:10:33 Public Feedback

Miles Hanberg: Very few commentors. Only two people voted on this probably the same two people; they both strongly disagreed with this as well. No specific comment left on this item.

Brett Prevedel: Do we have a motion?

The following motion was made by Dan Abeyta, seconded by Brad Horrocks.

MOTION: I move that we accept the Divisions recommendations as presented

Motion passes unanimously.

9) R657-33 Black Bear Rule Amendments and Recommendations for 2022 -Darren DeBloois, Mammals Program Coordinator (Action)

Darren DeBloois: So for bear just a quick overview, this is the beginning of our next three-year cycle, so we did make permit recommendations. I wanted to point a few things out, there were some errors in the hunt tables that we send with the packet. The spreadsheet that shows the number of permits is correct, but if you do the math, you'll see that some of the tables don't line up. So really quickly so the RAC understands what we're voting on. We are recommending one permit on the Monroe in the spring and in the summer. One permit in the spring on Fillmore Pavant. And then two multi season permits that weren't in the multi season table; one is on the Pauntsaguant and one on the Dutton. Then there was a typo on the season for the Book Cliffs. Let me just clarify that really quick. Let me go through this... Again all the permit changes recommendations are within the guidelines and they were adjusted within what the plan parameters suggest. We are recommending some season changes which we are which we already started to talk a little about. On those same three units, the SS Bonanza Diamond Mountain Vernal unit the SS Yellowstone, and the Wasatch Mountains Avantiquin Current Creek, we're recommending that the hound's season be from April 2-May 27, which is the Friday before Memorial Day weekend. That would be for hounds. Then beginning May 28, the Saturday of Memorial Day weekend, it would close to hounds and open late season. So there currently is a weeklong overlap between those seasons. We're recommending that we eliminate that overlap. That does shorten the hound season by three days. In the past we've had the Memorial Day weekend, and we're recommending truncating that a little bit. And eliminating the overlap on those units for the reasons we've discussed already. On the Book Cliffs Bitter Creek South, we're recommending hounds only from Aug 6-19, 2022. Then bait only August 20-October 6, bait only. Then October 7-November 3 hounds only. Currently in that early and late part of the season we allowed bait as well. We're recommending that we eliminate bait from the equation during those early and late hunts, so we're separating hounds and bait again on the Bitter Creek South. General fall season we're recommending August 8-September 27 which again eliminate the Memorial Day weekend, this is statewide. We're actually starting that hunt early so instead of having a weeklong baiting season we're just recommending that when the hunt starts, they can start baiting. So they can hunt as they put their baits up. Then the last change we're recommending to seasons is that for the fall season the hunter would have to choose if they want to use hounds or bait for their method when they apply. So currently with that fall permit you can do either or both, legally, and again that has been a concern

for law enforcement that a person could set up a bait station that they know where it is because it's theirs and subsequently use hounds and they wouldn't necessarily need to go to the bait station, but they know where they are. It doesn't eliminate overlap and again we plan to have more in depth discussion when we have the bear plan, but we're trying to make a few tweaks right now to address some of those concerns. Other than that on the rule changes, mainly just housekeeping stuff. We added the trail camera language to both cougar and bear to mirror the big game language, some definitional changes. One thing that I think is worth noting to the public is we will be eliminating our hot line to call in for harvest objective hunts, you'll just need to check our website. There will no longer be a number to call, but our website will have an up-to-date harvest objective updates so people will know if the unit is open or closed. That's pretty much it.

Brett Prevedel: On the spring in the Book Cliffs is there an overlap on the hounds and the bait?

Darren DeBloois: I'm trying to remember. Your spring seasons are the same as the rest of the state, so yes. This does get complicated.

Brett Prevedel: Has there not been a conflict out there like there has been typically on the SS? Has there been less on the Book Cliffs?

Eric Miller: When I surveyed our officers, we didn't get enough feedback on this issue from the Book Cliffs. One reason I think is the officer in that area covers a lot of the area and is fairly new. So no, we haven't had as much feed back for the Book Cliffs as we had for the SS. But it's the same concern that there is a potential to have conflict between hunters.

Darren DeBloois: I think it's fair to say, there is a general concern about having these overlapping hunts. But we've really identified these SS units and the Wasatch unit as being unusually difficult at the moment and that's why we picked those out. We'll be addressing the question with the committee and I think that's a good place for it. So we tried to keep our recommendations limited to some particular concerns, low level, but obviously the RAC can recommend whatever you'd like.

Randall Thacker: To clarify there is not an overlap in the spring in the Book Cliffs. We have the spring hound season, then we have one week overlap. That's the only overlap there in the spring. It's not a complete overlap on the hunt. I just want to make sure that's clear.

Darren DeBloois: So outside of those three units statewide there is a seven day overlap between those two hunts.

02:20:01 Questions from RAC Members

Jamie Arrive: How many permits are given for the hound hunt on 10/3-11/3? For the Book Cliffs, sorry.

Darren DeBloois: Let me pull up my hunt tables. So there are 20 total permits and they're good for all those season breakdowns. 2 nonresident, 18 residents. They permits are valid from August 6 through the end, but there are some restrictions on the methods they can use.

Jamie Arrive: Thank you.

Ritchie Anderson: I have a question. What are the advantage of keeping any overlaps in these hunts? Is it just to try and give people more time in the field? What's the advantage of keeping any overlap?

Darren DeBloois: Yeah, that really is it in a nutshell. The current system is a result of a compromise. Historically there used to be a complete overlap in the spring. There used to not be a spring hunt. When we got that back we overlapped it. We got some of these same concerns and complaints, so we separated the two hunts, and I don't remember how many years we did that. Probably 2-3 the bait hunters came back and said can we put our bait out early? So we allowed a 2 week early baiting period that overlapped hounds, but they weren't allowed to hunt. Then they came back and said since our baits are out can't we... so we came to a compromise and said how about we shorten it to a week, but you can start hunting as soon as you start putting your baits up. That's kind of how we came to our current bait hunting structure and why we have those overlaps. Honestly Ritchie it's the units that have the highest densities of hunters and bears where we hear the most of these complaints, the La Sal, the San Juan. We've done a few things to address that down there and those guys feel pretty comfortable with where they are now. There are some parts of the state where there aren't a lot of bears and it just isn't an issue, but places like the Dutton and the Manti has come up too where we've had some concerns. But these three units just kind of rose to the top during our process this time.

Brett Prevedel: I'm going to ask Rodney Smith to come up from the public and make his comment right now.

02:23:26 Comments from the Public

Rodney Smith: I'm a local houndsmen, sportsmen. I understand there are issues that we've had with this conflict of dogs and bait hunters. I'd like to say that we need to work with a working committee. Let's work on this and try to figure out what we can resolve. I do not support... It may not sound like a big thing, but those three day and that Memorial, that's our big last weekend, that's a big time for us. I think that's about it. Thank you.

02:24:28 RAC Discussion, Comment and Vote

Dusty Carpenter: I have a comment and a question. My question is along the lines of the traditional Memorial Day hunt. Is there a specific reason why the bait hunt wasn't pushed an extra three days to allow that pretty long Utah tradition?

Darren DeBloois: The only reason was due to potential conflict with other user groups that weekend. It's a big weekend. But we've traditionally had that, just so everybody is on the same page. We do avoid the 4th of July and 24th of July for the same reason. So this year we felt that would be align with what we have done with some other big holidays. But again, it would be a change from what we've been doing.

Dusty Carpenter: So there were other issues beside the bait overlap? There were recreationalist issues, high visitation? (Yeah) Ok. Then my comment is I really appreciate all the work that goes int the rubix cube of all these dates it's really incredibly complex, I think their hunting is complex across the state. I don't thing there is one size fits all because of all the units and complexities. I just want to support the law enforcement officers, if they need better management tools if they need better management tools to protect the bear hunting in this state for the bear hunters and the wildlife. I just want to say that comment. Thanks.

02:26:12 Public Feedback

Miles Hanberg: Three people responded and voted on the bear recommendation. Two of those strongly disagreed, 66% and one person was neutral at 33%. They did leave one comment, this person believed that climate change has impacted bears or will impact bears in the future and the Division should back off on bear hunting as climate change may take a toll on bear populations.

Brett Prevedel: Do we see a big difference with these real mild winters we've had. Do the bears stay out longer? Do you get more of a season?

Rodney Smith: I'm friends with Hal Meacham he's been running dogs. He goes off when those bears come off, boars traditionally come out before the sows come out and he's always said to me that they go out based on the amount of daylight. But it really just depends on the bear. I never thought in a million years, I just saw a video last week. This guy is walking through and it's a flat sage brush area. There is a hole right there and I thought this guy is videoing a badger, and it was a black bear. Sage brush, nothing flat. Bears just kind of have their own mindset of when they come out. Sometimes the spring hunts as far as hounds go, some of them are still in their dens. Just depends on the area and the weather. There are a lot of variables. Bears are kind of an interesting character.

Ritchie Anderson: I've got another comment. A rule, a law, a code, whatever, is only good if it's fair, equitable, and enforceable. So I support the Divisions attempt to get away from the overlap, make things more enforceable. It doesn't make a lot of sense to me... the thing is, ethical hunters are going to abide by the rules. They're going to take care of their fellow hunters. They're going to try to make it a pleasant experience for everybody. If we don't make these rules enforceable, unethical hunters are going to continue to do what they do, and there will not be repercussion for them. So if we can't get to a point where they're enforceable, fair, and equitable, there really is no point in

having the rule. The only people that are going to suffer are the ethical hunters. Thank you.

Brett Prevedel: Thank you. And not to put words in your mouth, Eric, but that's what the issue is, right? Ethically of telling where they turned a dog loose on a bait?

Correct with the one week overlap it creates several loopholes with the law enforcement. We have a real hard time trying to, we spend a lot of hours that maybe we don't need to. Did this guy know there was a bait here before his dogs ran there? I know there was one comment I got where an officer spent a lot of time, I believe it was the southern region, and the houndsmen was like, I don't know. And for all we could see this guy was being ethical. But by policy when we get a complaint, we have to investigate it. So sometimes we come off a little edgy to the people that are ethical because first of all someone has complained on them, second of all you have a law enforcement officer in front of you. Even if you did everything right, sometimes you feel like you did something wrong. And we're just trying to close up those loopholes and make thing enforceable because we really don't want to have someone who's being ethical be investigated or be in trouble if they don't have to be. So it helps out the ethical hunters and law enforcement as well.

Brett Prevedel: I guess a comment I have is it appears we took all the days from the houndsmen when we made this adjustment.

Darren DeBloois: We took three days from the houndsmen and seven days from the bait hunters.

Brett Prevedel: Ok, so you did split, it was kind of a fair split.

Darren DeBloois: Well it probably depends if you're a houndsmen or a bait hunter. We felt like the trade off for Memorial Day weekend was probably a fair...

Brett Prevedel: So it was a three-day weekend that the houndsmen lost. (right)

Ritchie Anderson: Chairman, I don't know if Joe got his audio back, but he has his hand up.

Brett Prevedel: Joe, if you can hear us, feel free to speak.

Joe Arnold: Sorry, I stepped away I didn't realize I missed it. Brett, that was my point, it seemed like there were some concessions made to let the bait people put their bait out a little sooner and maybe sacrifice some dates on the houndsmen. It sounds like it's not as one sided as it maybe appears. What is the success rate between the two hunting options?

Darren DeBloois: I'll look that up, generally I'd say hounds tend to be more successful. And bait hunters are successful, certainly more successful than spot and stalk. Joe let me pull those numbers up and I can let you know.

Joe Arnold: I'm not a bear houndsmen, but I'm a houndsmen for upland game. But you know those guys feed their animals all year long to pursue those at a perfect time. So just wanting to make sure it's fair for both sides. If the success is higher on one side than the other it sounds like the bait hunters were allowed to put bait out sooner, than take away days from the houndsmen who were just being fair to the houndsmen. Maybe help us in conservation maybe a little better at controlling the population because they are feeding animal all year long to pursue those.

Brett Prevedel: Is the back of the baiting season run into some other season?

Darren DeBloois: We typically try... no not any other hunting season. You start to get into summer and with bait the only other thing that comes to mind is you're starting to see fawns and calves hit the ground. But with bait that is less of a concern than you would have with hounds.

Member of the public: The restrictions on baiting, what is the legal do you have or anyone in law enforcement know, is it yards, feet you have to be away from a road to set their bait station. It makes me sick to hear that story about these houndsmen that are just being complete jack asses to this bait hunter. You know, share the mountain. Like you said mimicking Daniel Davis, one apple can ruin the whole bushel. I'm just curious and maybe it's under investigation but how close was these incidents? How far do bait hunters need to be away from a road because if it's the minimum bait hunters are, I'm not going to they're going to go as close to the road because I'll tell you right now bait hunting is a lot of work. I will give them that. It is lot of work and effort. I'm just wondering how close it is, because if it's fairly close to a road my dogs will blow up and like you said an honest person, had no idea there was a bait person there.

Darren DeBloois: I'm looking it up, just want to make sure I give you the right information there. There are restrictions from road, water, campgrounds. 100 yards just wanted to make sure. 100 yards from water or designated trail, and half a mile from any dwelling or campground.

Brett Prevedel: While Darren is looking up the success rates, does anyone else have any comments or question from the RAC? I believe the public is all we have.

Jamie Arrive: I have a question. This is Jamie. Are there any issues or complaint you get with the houndsmen during big game seasons? Deer and elk seasons?

Darren DeBloois: Yeah, we hear similar complaints during the archery season. That's one of the reasons why the Book Cliffs seasons are different than most of the rest of the state. That's largely cleared up that concern. I'd say that's primarily the big game complaint we've had.

Brett Prevedel: There was also one on the La Sal a few years ago. We adjusted the season. That's where there were a significant number of conflicts.

Darren DeBloois: Correct.

Joe Arnold: Darren, while you're looking for those do, we have days of field for houndsmen and bait as well with those success ratios.

Darren DeBloois: We do, I'm hoping it will be in the table here. Obviously, success is going to vary depending on the unit. And the season. But for hounds, spring, limited entry, success ranges from 100% on the top end, 61% on Book Cliffs in the spring. 67% on La Sals, those are big density units. 90% on the Parawan, Then as low as 40% on the SS Bonanza Diamond Mnt. That's for the 2020 season. Then for bait, Book Cliffs 67%, La Sals 87%, San Juan 81% in 2020. Actually when you look at the tables if you averaged it, you'd see that bait hunters were more successful statewide, at least in 2020 than houndsmen were.

Randall Thacker: Remember the houndsmen in the spring will be harvest objective, so that's based on the harvest objective strategy and the bait folk are going to be limited entry. So it's going to be different.

Darren DeBloois: There are a lot of moving parts, so I'm trying to summarize this as best I can. But success is high on both of those overall. Then there was a question about days a field. Let me see. I apologize. Days a field so for spring, statewide total in 2020 5,032. For Book Cliffs Bitter Creek South it was 838 days with 66 pursuers. This is pursuit. This is not what we want. Maybe give me an idea for what your after. I want to help but I don't want to spend a ton of time if I can get to something quicker.

Joe Arnold: Just the success ratio vs days a field within those two. It seems like what we're discussing is bait hunting vs hound hunting and whether or not to have an overlap. The bait hunters are only spending 10 days a field and having the same success ratio as the houndsmen, of course there are lots of other factors that accompany that. Just curious on success.

Darren DeBloois: Joe, I'm sorry, I don't think we break it out that way for hunts. Looks like we have days of field for pursuers and typically that's higher. And that's hounds. I'll see what I can dig up and I'd be happy to provide that for you. But I don't think I'll be able to find that right now.

Joe Arnold: Thank you.

Brett Prevedel: If there is sentiment to suggest a slight adjustment to the... I think what I'm hearing is the conflict we want to avoid the overlap, but I would think if Memorial Day is the biggest day of the year for houndsmen the RAC can make that suggestion. I'd like to open it up for motion at this point.

The following motion was made by Ritchie Anderson, seconded by Rebekah Jones.

MOTION: I move that we accept the Divisions recommendations as presented.

Motion passed 6 to 1 (Opposed: Joe Arnold)

Joe Arnold: Sorry, I may have missed something. Is that to illuminate the overlap? I'm trying to help Eric Miller and some of these guys.

Brett Prevedel: Yes, the recommendation was to separate the two seasons.

Joe Arnold: Ok, separate them would be eliminating the opening weekend for the houndsmen?

Brett Prevedel: The closing weekend. It's a three-day adjustment for the houndsmen, seven day on the bait. To get rid of the overlap.

Joe Arnold: I'd have to say no for the houndsmen sake.

Brett Prevedel: I'd like to thank the DWR for all the hard work that went into this meeting and all your travel around the state. I know you love to come here the last day of the route.

The following motion was made by Brad Horrocks, seconded by Rebekah Jones.

MOTION: To adjourn the meeting.

02:46:18 Meeting adjourned at 9:20.



Lieutenant Governor

Department of Natural Resources

BRIAN C. STEED Executive Director

Division of Wildlife Resources

J. SHIRLEY Director

Division Director

MEMORANDUM

TO: Utah Wildlife Board

FROM: Darren DeBloois, Predatory Mammals and Furbearer Program Coordinator

DATE: December 17, 2021

SUBJECT: 2022-23 COUGAR & FURBEARER RECOMMENDATIONS

2022 BLACK BEAR RECOMMENDATIONS POST RAC UPDATED

RECOMMENDATIONS

Following our tour of the state and five RAC meetings, DWR would like to make the following changes and updates to our recommendations for Cougar and Bear.

- 1. Amend cougar and bear rules to exempt livestock producers from trail camera restrictions while taking animals involved in livestock depredation incidents.
- 2. Update the opening dates of cougar harvest objective hunting on units with limited entry seasons to allow DWR to tabulate remaining unfilled permits, as follows:
 - a. Most units, open HO hunting 2/23/23
 - b. Oquirrh-Stansbury, East and Wasatch Mtns, West-Strawberry units, open HO hunting 3/25/23
- 3. Update the attached hunt tables to correct errors in the original information packet. These changes don't change the overall permit number and quotas presented to the RACs, they just correct errors in permit distribution among hunting seasons and resident and nonresident allocations. Corrections are in red.



SPRING BLACK BEAR LIMITED ENTRY SEASON				
Unit	Hunt	Resident Permits	Nonresident Permits	2022 Season Dates
Beaver	BR7000	9	1	April 2 - May 27
Book Cliffs, Bitter Creek/South	BR7001	39	4	April 2 - May 27
Cache/Ogden	BR7017	2	0	April 2 - May 27
Central Mtns, Manti-North	BR7003	17	1	April 2 - May 27
Central Mtns, Manti-South/San Rafael, North	BR7004	8	0	April 2 - May 27
Central Mtns, Nebo	BR7005	8	0	April 2 - May 27
Chalk Creek/East Canyon/Morgan-South Rich	BR7017	5	0	April 2 - May 27
Fillmore, Pahvant	BR7007	1	0	April 2 - May 27
Kamas/North Slope, Summit	BR7018	5	0	April 2 - May 27
La Sal	BR7008	40	3	April 2 - May 27
Monroe	BR7019	1	0	April 2 - May 27
Mt Dutton	BR7009	3	0	April 2 - May 27
Panguitch Lake/Zion	BR7010	9	0	April 2 - May 27
Paunsaugunt	BR7011	4	0	April 2 - May 27
Plateau, Boulder/Kaiparowits	BR7012	27	2	April 2 - May 27
Plateau, Fishlake/Thousand Lakes	BR7013	7	0	April 2 - May 27
San Juan	BR7014	40	3	April 2 - May 27
South Slope, Bonanza/Diamond Mtn/Vernal	BR7015	11	1	April 2 - May 27
Wasatch Mtns, West-Central	BR7016	40	4	April 2 - May 27

SUMMER BLACK BEAR LIMITED ENTRY SEASON (No dogs allowed, No Early Bait)				
Unit	Hunt	Resident Permits	Nonresident Permits	2022 Season Dates
Beaver	BR7100	9	1	May 21 - June 26
Book Cliffs, Bitter Creek/South	BR7101	9	1	May 21 - June 26
Book Cliffs, Little Creek Roadless	BR7102	4	0	May 21 - June 26
Cache/Ogden	BR7121	2	0	May 21 - June 26
Central Mtns, Manti-North	BR7104	12	1	May 21 - June 26
Central Mtns, Manti-South/San Rafael, North	BR7105	16	1	May 21 - June 26
Central Mtns, Nebo	BR7106	9	0	May 21 - June 26
Chalk Creek/East Canyon/Morgan-South Rich	BR7122	6	0	May 21 - June 26
Fillmore, Pahvant	BR7124	1	0	May 21 - June 26
Kamas/North Slope, Summit	BR7123	6	0	May 21 - June 26
La Sal	BR7108	25	2	May 21 - June
Monroe	BR7125	1	0	May 21 - June
Mt Dutton	BR7109	3	0	May 21 - June

WILDLIFE RESOURCES

Nine Mile	BR7110	15	1	May 21 - June 26
North Slope, Three Corners/West Daggett	BR7111	1	0	May 21 - June 26
Panguitch Lake/Zion	BR7112	4	0	May 21 - June 26
Paunsaugunt	BR7113	3	0	May 21 - June 26
Plateau, Boulder/Kaiparowits	BR7114	20	2	May 21 - June 26
Plateau, Fishlake/Thousand Lakes	BR7115	6	0	May 21 - June 26
San Juan	BR7116	25	2	May 21 - June 26
South Slope, Bonanza/Diamond Mtn/Vernal	BR7117	9	0	May 28 - June 26
South Slope, Yellowstone	BR7118	5	0	May 28 - June 26
Wasatch Mtns, Avintaquin/Currant Creek	BR7119	7	0	May 28 - June 26
Wasatch Mtns, West-Central	BR7120	23	1	May 21 - June 26

BLACK BEAR HARVEST OBJECTIVE SEASON SPOT AND STALK (No dogs and no bait allowed)

Unit	Harvest Objectives	2022 Season Dates
Beaver	3	Sept. 28 - Oct. 30
Book Cliffs, Bitter Creek/South	10	Sept. 28 - Oct. 30
Cache/Ogden	3	Sept. 28 - Oct. 30
Central Mtns, Manti-North	12	Sept. 28 - Oct. 30
Central Mtns, Manti-South/San Rafael, North	12	Sept. 28 - Oct. 30
Central Mtns, Nebo	3	Sept. 28 - Oct. 30
Chalk Creek/East Canyon/Morgan-South Rich	5	Sept. 28 - Oct. 30
Kamas/North Slope, Summit	2	Sept. 28 - Oct. 30
La Sal	12	Sept. 28 - Oct. 30
Nine Mile	10	Sept. 28 - Oct. 30
North Slope, Three Corners/West Daggett	1	Sept. 28 - Oct. 30
Panguitch Lake/Zion	3	Sept. 28 - Oct. 30
Plateau, Boulder/Kaiparowits	4	Sept. 28 - Oct. 30
San Juan	12	Sept. 28 - Oct. 30
South Slope, Bonanza/Diamond Mtn/Vernal	3	Sept. 28 - Oct. 30
South Slope, Yellowstone	3	Sept. 28 - Oct. 30
Wasatch Mtns, Avintaquin/Currant Creek	6	Sept. 28 - Oct. 30



MULTI-SEASON BLACK BEAR LIMITED ENTRY SEASON (Public draw)

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Unit	Hunt	Resident Permits	Nonresident Permits	2022 Season Dates
Beaver	BR7318	2	0	All Limited Entry Seasons
Book Cliffs, Bitter Creek/South	BR7300	3	0	All Limited Entry Seasons
Book Cliffs, Little Creek Roadless	BR7301	2	0	All Limited Entry Seasons
Cache/Ogden	BR7320	1	0	All Limited Entry Seasons
Central Mtns, Manti-North	BR7303	10	1	All Limited Entry Seasons
Central Mtns, Manti-South/San Rafael, North	BR7304	12	1	All Limited Entry Seasons
Central Mtns, Nebo	BR7305	3	0	All Limited Entry Seasons
Kamas/North Slope, Summit	BR7321	4	0	All Limited Entry Seasons
La Sal	BR7307	9	1	All Limited Entry Seasons
Mt Dutton	BR7322	1	0	All Limited Entry Seasons
Nine Mile	BR7317	7	0	All Limited Entry Seasons
North Slope, Three Corners/West Daggett	BR7308	1	0	All Limited Entry Seasons
Panguitch Lake/Zion	BR7309	4	0	All Limited Entry Seasons
Paunsaugunt	BR7323	1	0	All Limited Entry Seasons
Plateau, Boulder/Kaiparowits	BR7310	9	1	All Limited Entry Seasons
Plateau, Fishlake/Thousand Lakes	BR7311	2	0	All Limited Entry Seasons
San Juan	BR7312	9	1	All Limited Entry Seasons
South Slope, Bonanza/Diamond Mtn/Vernal	BR7313	7	0	All Limited Entry Seasons
South Slope, Yellowstone	BR7314	2	0	All Limited Entry Seasons
Wasatch Mtns, Avintaquin/Currant Creek	BR7315	5	0	All Limited Entry Seasons
Wasatch Mtns, West-Central	BR7316	13	1	All Limited Entry Seasons



Index of documents

Eskelsen Orchards, LLC Amended Request for Agency Action by the Utah Wildlife Board

Hearing January 4, 2022

- 1. Excerpt from Utah Code Annotated Title 23 Wildlife Resources Code of Utah, Chapter 16 Big Game, Section 4 Compensation for damage to crops, fences, or irrigation equipment -- limitations Appeals, §23-16-4(3)(c) and §23-16-4(6)(a) (d).++
- 2. Eskelsen Orchards, LLC Request for Agency Action by the Utah Wildlife Board, dated August 3, 2021 (without exhibits) ("Eskelsen Orchards RAA").
- 3. Division of Wildlife Resources Assessment Todd Eskelsen Depredation Compensation, dated August 13, 2021 (without exhibits) ("<u>DWR Response to Eskelsen Orchards RAA</u>").
- 4. Eskelsen Orchards Reply to Division of Wildlife Resources Assessment Todd Eskelsen Depredation Compensation, dated August 18, 2021 ("Eskelsen Orchards Reply to DWR Response").
- 5. Hearing Examiner's Recommendation in the matter of Request for Agency Action of Eskelsen Orchards, LLC, dated August 20, 2021 ("Hearing Examiner's Recommendation").
- 6. Eskelsen Orchards, LLC Amended Request for Agency Action by the Utah Wildlife Board, dated November 15, 2021 (without exhibits) ("Eskelsen Orchards ARAA").
- 7. Division of Wildlife Resources Assessment Todd Eskelsen Depredation Compensation, dated December 14, 2021 (without exhibits) ("<u>DWR Response to Eskelsen Orchards ARAA</u>").
 - 8. Eskelsen Orchards Valuation Model pdfs for apricots, nectarines and pluots.

2020 Utah Code Title 23 - Wildlife Resources Code of Utah Chapter 16 - Big Game

Section 4 - Compensation for damage to crops, fences, or irrigation equipment -- limitations – Appeals.

- (3)(c) In determining how to assess and compensate for damages to cultivated crops, the division's determination shall be based on the:
 - (i) full replacement value in the local market of the cultivated crops that actually have been or will be damaged or consumed by big game animals; and
 - (ii) cost of delivery of a replacement crop to the location of the damaged crop or other location that is not farther from the source of the replacement crop.
- (6)(a) The Wildlife Board shall make rules specifying procedures for the appeal of division actions under this section.
 - (b) Upon the petition of an aggrieved party to a final division action, the Wildlife Board may review the action on the record and issue an order modifying or rescinding the division action.
 - (c) A qualified hearing examiner may be appointed for purposes of taking evidence and making recommendations for a board order. The board shall consider the recommendations of the examiner in making decisions.
 - (d) Board review of final agency action and judicial review of final board action shall be governed by Title 63G, Chapter 4, Administrative Procedures Act.

Request for Agency Action by the Utah Wildlife Board

To: Charles Lyon, Hearing Examiner

calyons@agutah.gov

CC: Greg Hansen, Assistant Attorney General, Utah Division of Wildlife Resources

greghansen@agutah.gov

Chad Wilson, Utah Department of Wildlife Resources Coordinator

chwilson@utah.gov

From: Todd R. Eskelsen, Member Eskelsen Orchards, LLC teskelsen@eskelaw.com

Date: August 3, 2021

DWR File Number for Claim: Unknown

Statement of Legal Authority and Jurisdiction

Eskelsen Orchards, LLC, a Utah limited liability company with apricot, nectarine and pluot orchards in Perry, UT ("Eskelsen Orchards"), hereby submits this Request for Agency Action pursuant to Utah Code Ann. §63G-4-201 and Utah Admin. Code R657-2-6 (the "RAA") and requests the Utah Wildlife Board (the "Board") to take action in resolution of the claim by Eskelsen Orchards pursuant to Utah Code Ann. §23-16-4.

Statement of Relief Sought or Action Sought from Agency

Eskelsen Orchards hereby requests (i) "full replacement value in the local market of the cultivated crops that actually have been or will be damaged or consumed by big game animals; and the cost of delivery of a replacement crop to the location of the damaged crop" for the period of July 1, 2020 to June 30, 2021, as provided under Utah Code Ann. §23-16-4(c), in the amount set out below; and (ii) the additional actions set out below.

Statement of Facts and Reasons Forming the Basis for Relief and Agency Action

- 1. On October 1, 2020, Eskelsen Orchards was part of a group of orchard owners who met with Gage Metzen, Utah Division of Wildlife Resources ("DWR") Landowner Specialist, and James Hansen, DWR Wildlife Specialist, at Nielsen's Fruit Stand in Perry, UT to discuss deer depredation in the orchard owners' properties along the US Highway 89 Fruitway between Willard and Perry, UT. At the meeting, Messrs. Metzen and Hansen presented various options for a coordinated deer depredation control plan pursuant to Utah Code Ann. §23-16.1, et seq. that would involve all of the orchards. Following the meeting, the orchard owners agreed to participate in a depredation remediation plan which included a depredation remediation archery hunt on their orchards from October 22 December 31, 2020.
- 2. On October 5, 2020, Eskelsen Orchards provided certain clarifications to the depredation remediation plan and archery hunt, which clarifications were accepted in large part by the DWR, and on October 6, 2020, Eskelsen Orchards executed the necessary documentation to be part of the depredation remediation plan as revised, including the archery hunt (<u>Attachment 1</u>).

- 3. On November 4, 2020, Eskelsen Orchards filed a 72-hour notice under Utah Code §23-16-3 and Utah Regulations §657-44-3, requesting the DWR to take immediate action to stop the big game animals damage to the fruit trees planted on Eskelsen Orchards property (Attachment 2). The notice was necessary because of continued significant damage to the orchards through nocturnal feeding and antler rubbing on the trees by big game, which continued despite the special depredation remediation archery hunt commissioned by the DWR on the property.
- 4. Also included in Eskelsen Orchard's 72-hour notice was follow up on Eskelsen Orchards' prior request for fencing materials from DWR to construct a big game fence around the orchards; DWR was unable to provide the fencing material. Eskelsen Orchards had previously negotiated a Big Game Fence Installation, Removal and Indemnity Agreement with The Weber-Box Elder Conservation District to install a portion of the fence on the land adjacent to the Pineview Canal immediately above the Eskelsen Orchards' property, which agreement was subsequently executed by the parties (Attachment 3). Eskelsen Orchards also requested that DWR immediately begin to harvest big game animals from the orchards at night, which was the only time that the deer were present at the property.
- 5. On November 7, 2020, DWR delivered a letter with instructions for the manner in which Eskelsen Orchards could implement its intent to kill. On November 9, 2020, Eskelsen Orchards rescinded its 72-hour notice and requested that DWR begin nighttime lethal removal of deer, which was forwarded by James Hansen to his superiors at DWR which, as I remember, was either denied by DWI or, if not denied, did not result in any deer being lethally removed from the property. Instead or additionally, DWR provided 15 landowner tags to Eskelsen Orchards for the daytime taking of deer. Despite active and regular attempts by local Perry individuals to whom the landowner tags were issued, there were no deer taken from Eskelsen Orchards' property and only one deer taken from any of the participating orchards in the remediation plan during the entire depredation remediation archery hunt.
- 6. Throughout the period from October 2020 to March 2021, DWR personnel conducted regular (twice per week on average) nighttime deer counts and hazing. Although DWR personnel did not observe many deer on the Eskelsen Orchards property during the initial visits, beginning in December 2020 deer were more regularly observed there, especially when the counts were conducted using a thermal scope and there were regular sightings of multiple and often numerous deer most nights in all of the participating orchards.
- 7. On May 24, 2021, after Eskelsen Orchards had indicated an intention to make claim for compensation for deer depredation, Eskelsen Orchards met at the Eskelsen Orchards property with Steve Pettingill and Jordan Riley (two of the orchard owners group discussed above in Item 1), DWR representatives Randal McBride and Samuel Robertson and Professor Bradley Geary of Brigham Young University, whom the DWR and orchard owners agreed would act as the third party appraiser pursuant to Utah Code Ann. §23-16-4(d) in any claim by Eskelsen Orchards.
- 8. On June 6, 2021, Eskelsen Orchards filed a notice with Randall McBride, Private Lands Biologist NRO of the Utah Division of Wildlife Resources, with copies to Mr. Robertson and Prof. Geary (<u>Attachment 4</u>), which included:
 - (i) a one page summary of the claim for the "full replacement value in the local market of the cultivated crops that actually have been . . . damaged or consumed by big game animals; and the cost of delivery of a replacement crop to the location of the damaged crop" during the period

of July 1, 2020 to June 30, 2021, as required by Utah Code Ann. §23-16-4(c) to its orchards in Perry, UT in the total amount of \$22,219.55;

- (ii) a chart, based on the three physical surveys of the entire orchards conducted during July, October and November 2020, summarizing the damage done by deer to the orchards;
- (iii) an Excel valuation model which sets out the valuation methodology and information underlying the claim; and
- (iv) copies of invoices from the two nurseries from whom the trees had been purchased.

The valuation model was developed by Andrew Eskelsen, the undersigned's son and a Chartered Financial Analyst (CFA) who regularly performs financial valuation analysis in connection with his employment as a financial analyst and advisor with a private wealth investment advisory firm. The model was developed using published articles on tree valuation by the University of California at Davis and Utah State University, interviews with Jordan Riley, an experienced fruit grower in the Perry, UT area and manager of Eskelsen Orchards, data available from the USDA and other public sources, and recognized valuation methodologies. The Excel spreadsheet, assumptions and calculations of the model were provided with the claim and were provided to Prof. Geary, who was also provided additional information in response to direct questions about the Excel spreadsheet during his consideration of the issues.

- 9. On June 15, 2021, Randall McBride provided an e-mail to Eskelsen Orchards setting out the DWR's response to Eskelsen Orchards' claim and offering a total of \$4,187.61 for the damage to Eskelsen Orchards (Attachment 5). Mr. McBride's e-mail also stated that "[a]s the third-party ruling is made available, we will be in contact with you to review that assessment."
- 10. On the evening of June 29, 2021, Prof. Geary provided an e-mail to Eskelsen Orchards valuing Eskelsen Orchards' claim (Attachment 6). Prof. Geary valued the claim at a total of \$8,603.77 and "used [Eskelsen Orchards'] [E]xcel spread sheet to estimate these reimbursement figures," but changed four items (1) stump removal [reduced from \$25.50 to \$5.70 to reflect removal of a one-year old tree rather than a six year old stump]; (2) reduced Total Production Costs lowered from \$12.40 to \$1.91 by removing the irrigation system completely from the Year 1 orchard setup formula]; (3) reducing the production lost from 20 years to 6 years; and (4) adjusted yields of the fruit based on averages from the National Agricultural Statistics Service (NASS).
- 11. In the early afternoon of June 30, 2021, Eskelsen Orchards, specifically the undersigned and Andrew Eskelsen (valuation expert) had a teleconference with Prof. Geary regarding his e-mail. During that call, Eskelsen Orchards accepted comments (1) and (4) of Prof. Geary's analysis but explained to him why his comment (4) was a misunderstanding of the Excel valuation model which already included appropriate recognition and valuation of the reduced production caused by the destruction and subsequent replanting of the destroyed tree. Comment (3) was discussed, but Eskelsen Orchards withheld a decision on that comment. During the conversation, Andrew Eskelsen walked Prof. Geary through the Excel model, explained the underlying assumptions and calculations and answered Prof. Geary's questions about the model. At the conclusion of the teleconference, Prof. Geary complemented Eskelsen Orchards on the Excel valuation model and indicated that he accepted the clarification and correction of his comment [3]. He then indicated he was going to speak with DWR to pass along his findings. Eskelsen

Orchards has not heard anything further from Prof. Geary or from DWR regarding any subsequent communications between them.

- 12. Immediately following the teleconference with Prof. Geary, Eskelsen Orchards had a teleconference with Chad Wilson, DWR Coordinator, about Prof. Geary's e-mail and Eskelsen Orchards explained its comments on the analysis in Prof. Geary's e-mail and the subsequent discussion and agreement by Prof. Geary with Eskelsen Orchards' analysis. Because of a deadline of June 30, 2021 at 4:30 p.m. MDT (which was then less than 45 minutes away), Mr. Wilson indicated that the only choice open to Eskelsen Orchards was to either accept the valuation provided in Prof. Geary's e-mail or appeal the finding in a process that Mr. Wilson was not able to explain at that time. Faced with that choice, on June 30, 2021 at 4:16 p.m. MDT, Eskelsen Orchards made an offer in settlement in the amount of a total amount of \$10,731.41, or in the alternative gave notice of it appeal of Prof. Geary's findings, to which Mr. Wilson replied the next day that he would be back in touch with further information about the appeal (Attachment 7).
- 13. Other than Mr. McBride's June 15, 2021 e-mail (discussed in Item 9 above), Eskelsen Orchards has not received any information from DWR explaining DWR's valuation or methodology, reacting to Prof. Geary's valuation process or commenting on Eskelsen Orchards' detailed valuation spreadsheet and analysis.
- 14. On July 27, 2021, Eskelsen Orchards received an e-mail from Charles A. Lyons, Assistant Attorney General/O'Hara Fellow, Utah Attorney General's Office Division of Natural Resources, which indicated he had been appointed as the Hearing Examiner for the matter (presumably pursuant to Utah Code Ann. §23-16-4(6)(c)) "for purposes of taking evidence and making recommendations for a board order" (Attachment 8). In his e-mail, Mr. Lyons requested a response by August 6, 2021 (only 10 days after his e-mail), a period that is a very short time for Eskelsen Orchards to prepare this RAA and provide all necessary support for its arguments and request for relief in this matter.

Relief Requested

- A. To the extent that DWR has an analysis for its valuation, Eskelsen Orchards moves the Board to direct DWR to produce a copy of the document explaining DWR's valuation methodology and analysis, including all correspondence related thereto, and provide Eskelsen Orchards with a reasonable time to review such documents and provide comments before the Board makes a final determination with respect to Eskelsen Orchards' claim in this proceeding. In the absence of such documents and sufficient time for Eskelsen Orchards to review and comment on it, Eskelsen Orchards moves that that DWR's valuation not be given any weight in this proceeding by the Board.
- B. In light of Eskelsen Orchards' submissions with detailed valuation methodology and analysis, including an Excel spreadsheet based on explicitly stated assumptions and published analytical studies by respected U.S. agricultural universities, which valuation methodology and analysis has been reviewed and accepted by Prof. Geary, including the corrections to Prof. Geary' analysis of the Excel spreadsheet that were discussed with Prof. Geary on June 30, 2021, Eskelsen Orchards moves that the Board accept Eskelsen Orchards' valuation methodology and analysis as an appropriate valuation methodology.
- C. In preparing this Request for Agency Action, Eskelsen Orchards has reviewed its valuation analysis and is attaching to this Request for Agency Action a revised Excel valuation spreadsheet (Attachment 9)

which accepts Prof. Geary's comments [1], {2} and [4]; and rejects comment [3] as improper for the reasons set out above (and accepted by Prof. Geary]. The revised valuation claimed by Eskelsen Orchards is therefore \$ 10,089.93, as more fully set out in <u>Attachment 10</u>. Eskelsen Orchards moves that the Board accept the attached Excel valuation spreadsheet as Eskelsen Orchards' final request for compensation in this matter.

- D. Eskelsen Orchards moves that it be given not less than ten (10) days from receipt of any filing by DWR in response to this RAA in this matter to review DWR's filing in order to provide a reply filing addressing the issues raised by DWR in its filing.
- E. In light of the compressed timetable which has been imposed in this matter through the delivery of Prof. Geary's analysis less than 24 hours before the required appeal, the required appeal by Eskelsen Orchards within 20 hours thereafter without the benefit of adequate time to review, comment and explain the issues with Prof. Geary's analysis and prepare a written reply, and the short time provided for the preparation of this RAA, Eskelsen Orchards further moves that, in the event that the Board does not find wholly in favor of Eskelsen Orchards on its final claim hereunder, Eskelsen Orchards moves that the Board grant Eskelsen Orchards leave, as necessary to provide any and all additional testimony, motions, affidavits, briefs, or memorandum, which may be required to support this RAA and prove its case to the Board for the relief requested and to address any other shortcomings which may be argued by DWR or found by the Hearing Examiner in the materials provided by Eskelsen Orchards.
- F. If the Board is unable to grant the motion requested in Item E above as necessary, in the alternative, Eskelsen Orchards moves that the Board provide Eskelsen Orchards with the formal adjudicative proceeding provided in Utah Code Ann. §63G-4-201(3)(d)(iii) to address the issues in this matter and obtain resolution thereof.

In Witness Whereof, this Request for Agency Action is respectively submitted this 3rd day of June, 2021.

Todd R. Eskelsen, Member

ESKELSEN ORCHARDS, LLC



State of Utah

DEPARTMENT OF NATURAL RESOURCES

BRIAN C. STEED

Executive Director

Division of Wildlife Resources

J. RORY REYNOLDS
Interim Division Director

August 13, 2021

DIVISION OF WILDLIFE RESOURCES ASSESSMENT TODD ESKELSEN DEPREDATION COMPENSATION

Mr. Todd Eskelsen ("Mr. Eskelsen") seeks reimbursement for alleged big game damage to Apricot, Pluot, and Nectarine trees pursuant to U.C.A. §§ 23-16-3 and 4. This summary provides the basis for the Utah Division of Wildlife Resources' ("Division") assessment of damages for review by an independent hearing officer. The hearing officer should accept the Division's calculation of damages for the following reasons: (1) The Division's assessed value is based on the best estimate of actually-incurred damages for the current year, as required by statute and rule; (2) the model Mr. Eskelsen proposes to predict future values is speculative and unreliable; and (3) the proposed predictive model uses variables that are not allowed by statute and exceeds the 1-year damage calculation time period established in rule.

1. The Division's estimate of big game damage is based on documented damages that were actually incurred and is therefore the most accurate.

In response to Mr. Eskelsen's complaints of big game damage to his recently planted orchard, the Division timely responded to assess and mitigate damage caused by big game. Mr. Eskelsen and the Division agreed to delay calculating total damages until spring, with the understanding that big game damage had to be properly documented. When Mr. Eskelsen renewed his 72 hour notice and the Division responded to assess damage, the Division was unable to inventory the alleged damage to orchard trees because Mr. Eskelsen had already removed and replaced the seedlings, referred to as "whips" in the orchard business. Instead, Mr. Eskelsen produced a map of his orchard, indicating trees that had been "killed by animal", as well as other causes – such as being damaged by equipment, drought, planting complications, or poor irrigation. Without a physical evaluation of the damaged orchard trees, DWR, the hearing officer, and ultimately the Wildlife Board, are left with the assertions of Mr. Eskelsen and his unverifiable spreadsheet as to the number of trees damaged and the actual cause of the damage. This scenario makes it near impossible to validate damage claims from landowners and is one reason why Utah Code requires a landowner immediately notify DWR of damage incurred by big game. U.C.A. §23-16-3(1).

Nevertheless, the Division attempted to assess damage caused by big game. The Division may compensate landowners or lessees for damage to cultivated crops caused by big game animals based on the full replacement value in the local market for crops actually damaged or will be

² See Eskelsen Attachment "Eskelsen Orchards FY 2020-21 Deer Depredation Tree Survey"



¹ A "Whip" is a very young tree – essentially a seedling.

damaged. U.C.A. §23-16-4(1) & (3). "For the purposes of compensation, all depredation incidents end on June 30 annually, but may be reinstated July 1." R657-44-5(b).³ This is referred to as the "damage incident period." R657-44-2(2)(d).

The Division's assessment of damages is as follows:

	# of Trees	Cost per tree	Storage	Shipping	Planting	Removal	Replant	Total
Apricot	141 x	(\$8.40 +	\$1.50 +	\$1.50 +	\$1.35 +	\$1.35 +	\$1.35)	\$2,178.45
Pluot	88 x	(\$10.61 +	\$1.50 +	\$1.50 +	\$1.35 +	\$1.35 +	\$1.35)	\$1,554.08
Nectarine	31 x	(\$7.63 +	\$1.50 +	\$1.50 +	\$1.35 +	\$1.35 +	\$1.35)	\$455.08
								\$4,187.61

The Division valued the damages at \$4,187.61 for the FY20 damage incident period based off of the receipt provided by Mr. Eskelsen for the purchase, storage, and shipping of replacement trees.⁴ This is a generous offer, considering that the Division over-credited Mr. Eskelsen for shipping and cold storage costs above those costs actually incurred by approximately \$320.⁵

Based on the information available, this is the most accurate estimate and should be the value recommended to the Wildlife Board by the hearing officer.

2. Mr. Eskelsen's use of predictive model to estimate damages is speculative and relies on unverifiable data parameters.

Mr. Eskelsen proposes using a predictive model that estimates lost future yields from perennial orchard trees that have yet to produce any fruit. This model incorporates a series of variables to estimate a future condition and is based on a series of assumptions. Some variables are static, such as tree cost, but some are estimates or guesses. If a variable is changed, the outcome of the model (assessed value of fruit trees) also changes. Therefore, the outcome of the model is only as good as the data that is input into it. Based on how variables are changed in the model, the assessed values range wildly, from Mr. Eskelsen's initial proposal of \$22,219.55,6 down to Dr. Brad Geary's initial third party valuation of \$8,603.77, which was later reduced to \$7,336.02.7

³ Compensation for damages is limited to a fiscal year because anticipating and calculating future damages are too speculative. Therefore, the Division limits compensation to what was actually lost between July 1 and June 30 of a given year.

⁴ See Todd Eskelsen Tree Replacement Calculations DWR.pdf.

⁵ See 2020 Burchall & Wilson Nurseries Invoice Charges.pdf

⁶ See Tree Loss copy 2020 v3 eskelsen (1).xlsx

⁷ See Brad Geary Email Explanation.pdf.

The wide-ranging outcomes of the model shows how unreliable it is without more concrete data inputs.

For example, the Division reviewed Mr. Eskelsen's evaluation and determined that he overvalued shipping, stump removal, and planting costs. Dr. Brad Geary concurred, and also believed that Mr. Eskelsen overvalued estimated future yields, especially given that no actual yield information or sales information from this particular orchard or grower was available, and no information neighbors or similar orchards was provided. A final point of contention was the use of a 20-year cumulative value of reduced fruit production. Values assigned to many of these variables are guesses or are drawn from noncomparable sources, such as estimated yields from different kinds of fruit. Yields could be affected by any number of factors – disease, late frost, irrigation complications, wind or hail damage, market value fluctuations, and others. There is no way to standardize what future yield will be, especially when no historic yield information is available for this orchard. The model attempts to account for this variability by utilizing a lower the yield value of every third year, but this yet again another best guess. Conclusions from a model are only as good as the data entered into it.

3. The use of a predictive model is inconsistent with statute and administrative rule.

The Division is directed in statute to calculate a damage payment by considering, among other things, the extent of the damage experienced. U.C.A. §23-16-4(3). Specifically, the Division determination shall be based on "full replacement value in the local market of the cultivated crops that actually have been or will be damaged or consumed by big game animals; and cost of delivery of a replacement crop to the location of the damaged crop or other location that is not farther from the source of the replacement crop." U.C.A. §23-16-4(3)(c). That is precisely what the Division did, as outlined in Subsection 1 above. The predictive model goes beyond this directive and attempts to add lost future yields as an additional element of compensation. Lost future yield is not an element identified in the statute.

Second, the Division's Big Game Depredation rule defines the time period for each round of big game damage compensation as a one-year time period, running July 1 to June 30 annually (i.e. the damage incident period). See R657-44-2(2)(d). Simply put, the Division compensates for big game damage on an annual basis. R657-44-5(2). Using a model that incorporates estimated costs and revenues well into the future – whether 20 years out based on Mr. Eskelsen's proposal or 6 years out based on Dr. Brad Geary's assessment – considers materials outside of the damage incident period and is inconsistent with that rule.

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Conclusion

The Division's offer of \$4,187.61 is the most accurate estimate of damages incurred given the complicated set of factors involved – and is generous at that. Mr. Eskelsen's proposal to utilize a predictive model is fraught with speculation and variability. Requiring the Division to compensate for future lost yield in this speculative manner may stretch the Division's already limited depredation budget. See U.C.A. §23-16-4(4). If statewide claims exceed the Division's legislatively approved budget, other livestock and agricultural producers may see their verifiable claims pro-rated. Lastly, the predictive model utilizes data inputs for lost future yields, which goes beyond what is allowed for in statute, and exceeds the 1 year compensation time period established in administrative rule.

For these reasons, we urge the hearing officer and Wildlife Board to adopt the Division's assessment of big game damage.

Greg Hansen

August 13, 2021

Counsel, Division of Wildlife Resources

Attachment I

Eskelsen Orchards Reply to Division of Wildlife Resources Assessment Todd Eskelsen Depredation Compensation

To: Charles Lyon, Hearing Examiner

calyons@agutah.gov

CC: Greg Hansen, Assistant Attorney General, Utah Division of Wildlife Resources

greghansen@agutah.gov

Chad Wilson, Utah Department of Wildlife Resources Coordinator

chwilson@utah.gov

From: Todd R. Eskelsen, Member, Eskelsen Orchards, LLC

teskelsen@eskelaw.com

Date: August 18, 2021

DWR File Number for Claim: Unknown

Eskelsen Orchards, LLC, a Utah limited liability company with apricot, nectarine and pluot orchards in Perry, UT ("Eskelsen Orchards"), hereby submits this reply to the Division of Wildlife Management Resources Assessment Todd Eskelsen Depredation Compensation (the "DWR Response"), a filing made on August 13, 2021, by the Utah Division of Wildlife Resources (the "DWR").

This matter involves the claim made by Eskelsen Orchards for big game depredation damage¹ done to the orchards owned by Eskelsen Orchards in Perry, UT during the fiscal year beginning on July 1, 2020 and ending on June 30, 2021 (the "Eskelsen Claim"). Such claim was detailed by Eskelsen Orchards in its filing on June 6, 2021 (the "Initial Claim Filing"), as supplemented by Eskelsen Orchards' Request for Agency Action filed on July 27, 2021 (the "RAA"). The DWR Response states that it "provides the basis for the DWR's assessment of damages for review by an independent hearing officer" ² and argues that the Hearing Examiner should accept the DWR's calculation of damages for three reasons that are more fully outlined below. After a short discussion of the overarching valuation concept for the matter, this reply

¹ The damage done to the orchards owned by Eskelsen Orchards was caused primarily by deer, although big game animals include deer, elk, pronghorn, moose, bison, bighorn sheep and Rocky Mountain goat. Utah Admin. Code R657-5-1.

² This portion of the DWR Response (which is the only filing by DWR in the Eskelsen Claim process in which the Hearing Examiner has been involved) appears to be similar to the June 15, 2021 e-mail to Eskelsen Orchards from Randall McBride, Private Lands Biologist NRO of the Utah Division of Wildlife Resources, which was included as https://dx.doi.org/10.108/journal.org/ This portion of the DWR Response (which is the only filing by DWR in the Eskelsen Claim process in which the Hearing Examiner has been involved) appears to be similar to the June 15, 2021 e-mail to Eskelsen Orchards from Randall McBride, Private Lands Biologist NRO of the Utah Division of Wildlife Resources, which was included as https://dx.doi.org///dx.doi.org///dx.doi.org///dx.doi.org/ This portion of the Utah Division of Wildlife Resources, which was included as https://dx.doi.org///dx.doi.org///dx.doi.org/ This portion of the Utah Division of Wildlife Resources, which was included as https://dx.doi.org///dx.doi.org/ This portion of the Utah Division of Wildlife Resources, which was included as https://dx.doi.org/ This portion of the Utah Division of Wildlife Resources, which was included as https://dx.doi.org/ This portion of the Utah Division of Wildlife Resources, which was included as https://dx.doi.org/ This portion of the Utah Division of Wildlife Resources, which was included as https://dx.doi.org/ This portion of the Utah Division of Wildlife Resources, which was included as https://dx.doi.org/ This portion of the Utah Division of the

will address the points made by the DWR Response under the three rubrics utilized by the DWR in the DWR Response and uses numbered paragraphs for ease of later reference.

Valuation of Crops

- 1. As an initial matter, the relevant statutory and regulatory provisions for the big game depredation involved in the Eskelsen Claim are set forth in Utah Code Ann. §23-16-1.1, et seq. and the regulations issued thereunder at Utah Admin. Code R657-44 (the "Big Game Depredation Process"). The Big Game Depredation Process details how the DWR and landowners shall address big game depredation of crops. In connection with the Eskelsen Claim, Eskelsen Orchards has cooperated with DWR and complied with the Big Game Depredation Process, including by making request for DWR action pursuant to a 72-hour notice and agreeing to implement a depredation remediation plan required under Utah Code Ann. §23-16-3 and Utah Admin. Code R5657-44-3. As a further part of that process, DWR has agreed to provide compensation to Eskelsen Orchards for damage to its orchards as required by Utah Code Ann. §23-16-4 and Utah Admin. Code R657-44-5.
- 2. The matter at hand now is to determine the amount of such compensation. The standard for calculation of damages is the one cited by both parties in their filings, namely that stated in Utah Code Ann. §23-16-4(c), which provides in full:

In determining how to assess and compensate for damages to cultivated crops, the [DWR's] determination shall be based on the:

- (i) full replacement value in the local market of the cultivated crops that actually have been or will be damaged or consumed by big game animals; and
- (ii) cost of delivery of a replacement crop to the location of the damaged crop or other location that is not farther from the source of the replacement crop.

Neither the statute nor the regulations issued under it set out the methodology for determining the "full replacement value in the local market" of the damaged crops, plus relevant costs. However, applicable rules of statutory construction do require that any such methodology presented by either party be reasonable. The collection of data and valuation methodology used by Eskelsen Orchards in the Eskelsen Claim and the RAA are part of a coherent, reasonable methodology to assess the value of the lost stone fruit crops, as opposed to the means of production, that the big game depredation took from Eskelsen Orchards and for which DWR is required to provide compensation. In contrast, the valuation proposed by DWR is unexplained and arbitrary, based on a flawed calculation methodology that proposes to provide compensation solely for simply acquiring and delivering another newly grafted tree, but without any accounting for (or acknowledging) the lost time and inputs invested and required for actual revenue production and ultimate realized value of a crop of stone fruit.

3. The relevant focus in this proceeding is on the damage to "cultivated crops," which for stone fruit orchards such as Eskelsen Orchards are the peaches, apricots, nectarines, pluots and other fruit produced from trees planted by the orchard owner. Eskelsen Orchards and other orchard owners are not in the business of growing trees; they are in the business of producing stone fruit. Thus, the relevant "cultivated crops" for purposes of Utah Code Ann. §23-16-4(c) are the stone fruit that would have been produced by

the tree if the tree was undamaged. The trees are the means by which the crop is produced and for stone fruits, it can take up to seven years after planting to mature into full commercial production. The loss of a tree directly results in the loss of all future crop that would be produced by such tree, whether the tree has been planted for one year or 20 years and whether the tree has actually borne fruit in the year of damage. The value of the crop lost from the loss of that tree is not the cost of a replacement whip, but the value of future production over the useful life of such tree, netted against the value of similar production from a replacement tree, discounted back to present value.³ The damage for which Utah Code Ann. §23-16-4 authorizes DWR to compensate an orchard owner thus is not just the loss of a single year's crop (to the extent a tree was mature enough to produce fruit) but must also account for the restarting of the timeline for eventual full commercial production. This distinction between the trees and the fruit crop is at the heart of the DWR's misapplication of the statutory and regulatory language. A detailed discussion of the proper methodology for valuing such loss is set out below in Paragraphs 10-12.

4. As noted in the DWR Response, the Big Game Depredation Process provides compensation for depredation incurred during the "damage incident period" of July 1 to June 30 of a given year (DWR Response top of p. 2). Thus, any claim for crops damaged must be made by the deadline established pursuant to the procedures set out in the Big Game Depredation Process for such "damage incident period;" failure to timely file a claim bars an orchard grower from ever receiving compensation from DWR for such damage. Thus, the core issue in the Eskelsen Claim is how to properly value the stone fruit crops that have been lost to big game depredation during 2020-2021. Such a calculation can, and should, be made using generally accepted principles and valuation techniques used in commercial business operations and investment decisions for the reasons explained below in Paragraphs 10-12.

DWR Response Rubric 1: "The Division's estimate of big game damage is based on documented damages that were actually incurred and is therefore the most accurate."

- 5. On pages 1-2 of the DWR Response, the DWR states that the "[DWR's] valuation of big game damage is based on documented damages that were actually incurred and is therefore most accurate." Notwithstanding this statement, the DWR Response then adopts in whole the evidence in the Eskelsen Claim specifying the damages to trees without variation, but then applies an unexplained valuation methodology from undocumented cost sources to undervalue compensation due to Eskelsen Orchards for such damage. The entire argument and claim of accuracy are unsupported and should be rejected.
- 6. The DWR Response states that the DWR could not "inventory alleged damage to orchard trees because Mr. Eskelsen had already removed and replaced the seedlings . . ." and instead ". . . produced a map of his orchard, indicating trees that had been 'killed by animal', as well as other causes . . ." Thus, the DWR counsel argues that "[w]ithout a physical evaluation of the damaged orchard trees, DWR, the [Hearing Examiner], and ultimately the Wildlife Board, are left with the assertions of Mr. Eskelsen and his unverifiable spreadsheet as to the number of trees damaged and the actual cause of the damage." What DWR counsel does not state is that Eskelsen Orchards had been in contact with DWR representatives throughout the Eskelsen Claim process. Eskelsen Orchards disclosed to such representatives the process that Eskelsen Orchards intended to pursue in making and evidencing its claim, including the fact that Eskelsen Orchards intended to replace damaged trees in order to efficiently continue its orchard

-3-

³ Any reasonable valuation methodology must also account for the inherent risks of agricultural production such as frost, hail, drought, pests and other natural occurrences.

operations. And as explained below, despite DWR counsel's claims, DWR representatives had the ability to, and in fact did, physically assess the damaged orchard trees.

- 7. As noted above, the data collection and valuation methodology used by Eskelsen Orchards (discussed below and in Paragraphs 10-12) are part of a coherent, reasonable methodology to determine the "full replacement value in the local market" of the "cultivated crops" lost to big game damage. Eskelsen Orchards conducted three physical surveys of its orchards during 2020-2021 and retained the damaged trees in a pile next to the equipment shed on its property. During the on-site orchards visit by DWR representatives on May 24, 2021 (detailed in Initial Claim Filing §7), Eskelsen Orchards showed the DWR representatives both the surveys done and the actual damaged trees and conducted the group to multiple sites shown in the surveys as spot checks of the locations where damage had occurred (both places where still standing trees evidenced big game wildlife damage and locations where killed trees had been replaced). The DWR representatives had the ability on this visit to review the damage and inspect the entire orchard, not just those areas or trees selected by Eskelsen Orchards. A summary of the surveys was also included as an attachment to the Initial Claim Filing (Initial Claim Filing §8 Attachment 4). All of these actions provide the necessary evidence of the damage claimed by Eskelsen Orchards during the Eskelsen Claim and that evidence was accepted by Randall McBride in the DWR Claims Acknowledgement (referenced in footnote 2 above). In fact, the DWR Response itself at the top of page 2 of the DWR Response accepts the number of trees claimed by Eskelsen Orchards without comment. The assertion now by DWR's counsel that the number of trees set out in the Eskelsen Claim should be questioned is a red herring and such argument should not be considered by the Board.
- 8. Although the DWR Response claims that the DWR's assessment of damage valuation set out at the top of pg. 2 should be accepted because it is more accurate, nowhere does the DWR explain its valuation methodology or the source of the cost numbers used by DWR in its valuation. The DWR Response appears to be valuing the individual trees that were damaged at the purchase price of the whips as set out in the invoices Eskelsen Orchards provided as part of the Initial Claim Filing, plus certain costs for storage, shipping, planting, stump removal and replanting (although the source of such additional costs is never stated or explained). However, as noted above, the "cultivated crops" that must be valued under the Big Game Depredation Process are not the trees, but the crops produced by the trees. Without further information on the source of the numbers cited by DWR or how such values were applied in its valuation methodology and without a discussion by DWR of how such valuation methodology applies for purposes of valuing the actual crops to be considered, Eskelsen Orchards, the Hearing Officer and the Board have no way of evaluating the DWR's valuation or determining its reasonableness. The mere assertion by the DWR of the accuracy of its valuation estimate is not enough to actually evidence and support such valuation and DWR's asserted valuation should be rejected as unsubstantiated.
- 9. The DWR valuation argument is also illogical for purposes of the Big Game Depredation Process in that such valuation methodology would fail to meet the requirements of Utah Code Ann. §23-16-4(c), as such a process never reimburses the grower for the damage resulting from the deferral of eventual full commercial production. Rather, DWR's proposal would only provide orchard growers with a minimum value to purchase another whip; it would never compensate for the loss of the stone fruit crop that such whips would produce once mature. Stone fruit trees are most susceptible to damage by big game animals during the early years (when animals eat tender branches and break off whips by rubbing antler velvet off). DWR's proposed methodology for valuing stone fruit orchard big game damage is like valuing the loss of an alfalfa field consumed by deer at the cost of the alfalfa seed, plus some minimal value for the

labor in replanting the field rather than valuing the crop at the price of the hay bale that would ultimately be produced and sold. Such a methodology perpetually undervalues the actual crop loss caused by big game depredation to stone fruit orchards. Surely, such a result is not what the Utah legislature intended when passing Utah Code Ann. §23-16-1.1, et seq.

DWR Response Rubric 2: "Mr. Eskelsen's use of [a] predictive model to estimate damages is speculative and relies on unverifiable data parameters."

- 10. DWR's assertion is factually incorrect and misunderstands the valuation process. Estimation of a product's market value and the cost required to produce said product is a standard and essential element of all commercial ventures. Without such a valuation process that quantifies the costs and expected rewards of a business venture to demonstrate at least the hope of a profit, reasonable individuals would be loath to enter into the venture. This is especially true for capital intensive ventures such as stone fruit production in which the substantial upfront costs and delayed realization of production only generate profit after a decade or more of operations. In contrast to DWR's assertion, the Eskelsen Orchards valuation methodology is not speculative but based on sound valuation methodology directly applicable to stone fruit production in the Intermountain area using directly applicable data inputs.
- 11. As set out in RAA §8, the valuation methodology used by Eskelsen Orchards as reflected in the Excel valuation spreadsheet was developed by Andrew Eskelsen, a Chartered Financial Analyst⁴, in accordance with generally accepted business valuation concepts and procedures, using inputs sourced directly from public information published by Utah State University and the University of California at Davis, well-respected sources of fruit orchard industry information. Inputs to the valuation model were taken from documented costs incurred during orchard setup, interviews with an actual producer, and from data available from the U.S. Department of Agriculture and other public sources. Further, information that is not specific to the Eskelsen Orchards operations (because such operations are only recently established) was sourced from reputable publications, including a directly-applicable 2015 study of the costs and returns of a Northern Utah conventional peach orchard, conducted by Utah State University.⁵ As such, the information used to develop the methodology is the best available and is of the type customarily used in business valuations of new ventures in lieu of actual results which have not yet occurred.
- 12. DWR is correct in stating the obvious on DWR Response pg. 2 that the "model incorporates certain variables to estimate future conditions and is based on a series of assumptions;" that "[s]ome variables are static, such as tree cost, but some are estimates or guesses"; and that "[i]f a variable is changed, the outcome of the model . . . also changes." On DWR Response pg. 3, DWR states more obvious points, but then draws incorrect conclusions from such data:

Values assigned to many of these variables are guesses or are drawn from noncomparable sources, such as estimated yields from different kinds of fruit. Yields could be affected by any number of factors – disease, late frost, irrigation complications, wind or hail damage, market value fluctuations, and others. There is no way to standardize what future yield will be, especially when no historic yield information is available for this orchard. The

⁴ Background on the requirements for Charted Financial Analyst status and the expertise demonstrated by such a designation can be found at https://www.investopedia.com/terms/c/cfa.asp.

⁵ <u>See</u>, <u>https://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=2619&context=extension_curall.</u>

model attempts to account for this variability by utilizing a lower the yield value of every third year, but this yet again another best guess. Conclusions from a model are only as good as the data entered into it.

The nature of all valuations, including any model DWR would use, are that the variables are estimates and may be drawn from other comparable products, that any number of factors can affect predicted yields, and that conclusions are only as good as the data entered. The role of a valuation model is to provide tools to allow a reasonable prediction of future value and the recognition that certain inputs are best guesses (because no one can foresee future occurrences precisely does not invalidate the process. As it relates to the "attempts to account for [yield] variability" Eskelsen Orchards' "three-year methodology" was taken directly from the previously referenced Utah State University study. As such, it is a reasonable methodology, taken from a Utah-affiliated governmental agricultural resource to account for the inherent volatility of annual yields. Further, the variations in the ultimate valuations produced, see RAA Relief Requested §B, is evidence of Eskelsen Orchards' good faith transparency in providing the underlying working model throughout the Eskelsen Claim process to both DWR and DWR's appointed valuation expert to test and challenge. Eskelsen Orchards modified its valuation as issues were discovered, including based on discussions with DWR representatives and Prof. Geary, so as to calculate the best estimate of the actual big game depredation damages more accurately. Eskelsen Orchards' current claim for \$10,089.93 is the best estimate of the big game depredation losses suffered by Eskelsen Orchards.⁶

DWR Response Rubric 3: The use of a predictive model is inconsistent with statute and administrative rule.

13. DWR's challenge to the use of Eskelsen Orchards' valuation methodology to determine the "full replacement value in the local market" of "cultivated crops" lost to big game damage should be rejected. While DWR's counsel cites the relevant statute, he then misapplies the relevant law and regulation to conclude that the proper valuation is the cost of a replacement tree and not the replacement of the crops actually produced. In fact, in order to accurately estimate the actual damages caused by the big game depredation during 2020-2021 at the Eskelsen Orchards, it is necessary to attempt to estimate future revenue from the damaged tree, recognizing all of the variables that could affect such revenue -- such as the factors outlined by DWR in the quoted language above -- and discount such revenue back to present value. Contrary to DWR's claim, such a methodology does not go beyond the statutory requirement and does not wrongly "[attempt] to add lost future yields as an additional element of compensation." Rather, such valuation is actually the best way to estimate the full extent of such loss. The Big Game Depredation Process requires compensation of the "fair replacement value" of the loss to "cultivated crops," not the mere reimbursement of various inputs. The valuation methodology used by Eskelsen Orchards is a reasonable way to develop that fair replacement value.

14. Finally, the DWR Response on pg. 4 concludes by arguing that:

[r]equiring the [DWR] to compensate for future lost yield in [Eskelsen Orchards'] speculative manner may stretch the [DWR's] already limited depredation budget. . . . If

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⁶ At the bottom of DWR Response pg. 2, the DWR references a valuation of \$7,336.02, citing in footnote 7 "See Brad Geary Email Explanation.pdf." Eskelsen Orchards does not recall ever having seen such a valuation or any e-mail from Professor Geary which explains such an amount. Because that e-mail is not in the record, it cannot be considered by the Board.

statewide claims exceed the [DWR's] legislatively approved budget, other livestock and agricultural producers may see their verifiable claims pro-rated.

While DWR counsel is in a better position that Eskelsen Orchard to speak to the fiscal position of DWR's depredation budget, such an argument provides no support for any argument that Eskelsen Orchards' claim is improper or incorrect.⁷ Rather, this argument at best expresses an opinion that the amounts appropriated by the Utah Legislature might be too small to adequately compensate agricultural producers for the losses suffered in supporting the big game now present in Utah. But this opinion is irrelevant to the decision that the Hearing Officer and the Board must make under Big Game Depredation Process. DWR's responsibility is to implement the law as written and to advise the Legislature on the amounts necessary to implement the laws as written. While Eskelsen Orchards recognizes that a major focus of DWR efforts is on managing big game in Utah, the costs of such management should be fairly supported by all of the citizens in the State and should not be unfairly concentrated on the State's agricultural producers. The State's producers already provide substantial support to big game production by protecting open spaces and habitat vital to the natural order and associated ecosystem. Rather than working at odds with agricultural producers, DWR should be collaborating with such producers to collectively preserve and protect agricultural production so as to allow and encourage wild animals, including big game, to flourish. As one of the last remaining commercial orchards along the historic US Highway 89 Fruit Highway and a buffer between the aggressive housing development in the City of Perry and the Brigham Face Wildlife Management Area immediately above, Eskelsen Orchards is a land use that should be encouraged and supported as required by the Big Game Depredation Process.

For all of the foregoing reasons, as well as those reasons set forth in the RAA, which is incorporated herein by reference, the Eskelsen Claim should be granted in full.

In Witness Whereof, this Eskelsen Orchards Reply to Division of Wildlife Resources Assessment Todd Eskelsen Depredation Compensation is respectively submitted this 18th day of August, 2021.

Todd R. Eskelsen, Member ESKELSEN ORCHARDS, LLC 2065 S. Eskelsen Lane

Judd K.

Perry, UT 84302

⁷ In addition, DWR's counsel provides no evidence to support his speculative assertion.

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES UTAH WILDLIFE BOARD

In the matter of the Request for Agency Action of **Eskelsen Orchards, LLC** requesting the Utah Wildlife Board review and resolve issues with the appraisal for compensation of Big Game Depredation in accordance with Utah Administrative Code R657-44-10 & R657-2.

Hearing Examiner's
Recommendation

Case	No.	
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I. OVERVIEW

This Hearing Examiner's Recommendation ("Recommendation") announces the Hearing Examiner's recommendation to the Utah Wildlife Board ("Board") for resolving Eskelsen Orchards, LLC's ("Petitioner") appeal of the Utah Division of Wildlife Resources' ("Division") compensation assessment for damages to Petitioner's apricot, nectarine and pluot orchards caused by big game animals in Perry, Utah. This recommendation is the result of the Hearing Examiner's review of evidence submitted to the Hearing Examiner by the Petitioner and the Division pursuant to Utah Code Ann. § 23-16-4 (6) and Utah Admin. Code R657-44-10.

After considering the facts and law as set forth below, the Hearing Examiner recommends the Board enter an Order adopting Petitioner's valuation methodology for calculating damages to Petitioner's stone fruit tree orchard, which considers damages to future stone fruit crop yields affected by damage to existing trees caused by big game on Petitioner's property, and award Petitioner's requested relief of \$10,089.93 for damages caused by big game depredation.

II. JURISDICTION AND COURSE OF PROCEEDINGS

The Division designated an Assistant Attorney General as an independent Hearing Examiner pursuant to Utah Code Ann. § 23-16-4 (6)(c). The Hearing Examiner has the authority to accept evidence in this matter and the jurisdiction to issue this Recommendation under Utah Code Ann. § 23-16-4 (6)(c) and Utah Admin. Code R657-44-10.

The Petitioner filed a Request for Agency Action ("RAA") and related evidence on August 3, 2021 pursuant to Utah Code Ann. § 63G-4-201 and Utah Admin. Code R657-2-6. The Division filed a Response to Petitioner's RAA on August 13, 2021 and Petitioner filed a Motion to Strike the Division's Response on August 18, 2021, arguing the Division's response was untimely for being submitted passed an agreed to filing deadline of August 6, 2021. Along with Petitioner's Motion to Strike, Petitioner filed a Reply to the Division's Response in the event Petitioner's Motion to Strike was not granted.

On August 20, 2021, the Division filed a Memorandum Opposing Petitioner's Motion to Strike and because the Hearing Examiner agrees with the arguments contained in the Division's Memorandum, the Hearing Examiner considers the Division's Response to Petitioner's RAA and the Petitioner's Alternative Reply to the Division's Response part of the record forming the basis for this Recommendation.

III. FINDINGS OF FACT

1. In October 2020, Petitioner and a group of orchard owners met with Division representatives to develop a big game depredation remediation plan due to crop damage caused by deer in the area near Perry, Utah. The agreed to depredation plan included a depredation remediation archery hunt at the orchards from October 22, 2020 – December 31, 2020.

- On November 4, 2020, Petitioner requested the Division take immediate action to stop big game animals from damaging Petitioner's orchard, which continued to occur despite the depredation remediation archery hunt.
- On May 24, 2021, due to ongoing crop damage caused by big game, Petitioner indicated to
 the Division that Petitioner intended to make a claim for compensation for damage caused by
 big game.
- 4. On June 6, 2021, Petitioner provided the Division a summary of Petitioner's claim for damages to Petitioner's crops in the amount of \$22,219.55, which included a chart summarizing the damage caused by big game, a valuation model showing the methodology and underlying information for the claim, and copies of invoices from nurseries where the apricot, nectarine and pluot trees were purchased.
- 5. On June 15, 2021, the Division provided Petitioner with its own damage estimation totaling \$4,187.61. The Division's estimate included the following cost breakdown:

Tree variety	No. of Trees	Value per	Shipping Cost	Planting and	Total Cost
	Damaged	Tree		Removal Costs	
Apricot	141	\$8.40	\$3.00	\$4.05	\$2,178.45
Pluot	88	\$10.61	\$3.00	\$4.05	\$1,554.08
Nectarine	31	\$7.63	\$3.00	\$4.05	\$455.08
				Total	\$4,187.61

Table 1.

6. On June 29, 2021, Professor Bradley Greary, who the parties agreed to appoint as the third-party appraiser pursuant to Utah Code Ann. § 23-16-4 (3)(d), provided the Division and the Petitioner with his damage estimate totaling \$8,603.77. Professor Greary's estimate included the following cost breakdown:

Tree Variety	No. of Trees Lost	Value per tree	Total Value
Apricot	141	\$17.99	\$2,536.59
Pluot	88	\$61.78	\$5,436.64
Nectarine	31	\$20.34	\$630.54
		Total =	\$8,603.77

Table 2.

In Professor Greary's explanation of how he reached his estimated amount, he explained four changes made to Petitioner's methodology. First, Professor Greary lowered the estimated cost for stump removal from \$25.50 per tree, to \$5.70 per tree because Petitioner's estimate was based on the cost to remove an eight-year-old tree, while the trees at issue were only one year old. Second, Professor Greary lowered a total production cost variable from \$12.40 per tree to \$1.91 per tree because this variable included removing the associated irrigation system, which was undamaged and still intact. Third, Professor Greary reduced production losses from twenty years to six years based on when fruit trees reach peak production and, fourth, Professor Greary adjusted estimated yields based on averages from the National Agricultural Statistics Service ("NASS"), making alterations to pluot yields because the NASS does not provide them.

7. On June 30, 2021, Petitioner accepted Professor Greary's first, second and fourth proposed changes, but rejected the third suggested change because it allegedly distorted the calculations of the valuation model used. Based on Petitioner's accepted changes, Petitioner offered the following updated cost estimate breakdown:

Tree Variety	No. of Trees Lost	Value per tree	Total Value
Apricot	141	\$31.09	\$4,383.69
Pluot	88	\$62.88	\$5,533.44
Nectarine	31	\$26.26	\$814.17
		Total =	\$10,731.41

Table 3.

In Petitioner's email to the Division and Professor Greary explaining the reasoning for the updated estimation, Petitioner stated the differences between the original claim and Professor Greary's revised determination were differences in mathematical calculations that could have been sorted out in a phone call. However, because Petitioner received Professor Greary's revised estimation on June 29, 2021 and the deadline for resolving the matter was June 30, 2021, Petitioner did not have sufficient time to settle the differences and informed the Division of its intent to appeal to obtain a forum to pursue the claim further.

- 8. On July 9, 2021, the Division contacted the Hearing Examiner requesting he oversee Petitioner's appeal pursuant to Utah Code Ann. § 23-16-4 (6) and Utah Admin. Code R657-44-10. The Division indicated the next Board Meeting was scheduled for August 26, 2021, noting that this may be the first appeal of a big game depredation compensation estimate the Division and Board have dealt with and, therefore, there may be some procedural issues to work through because of this.
- 9. The Hearing Examiner accepted and on July 12, 2021, the Hearing Examiner notified the Division that Petitioner would need to file an RAA in accordance with Utah Code Ann. § 63G-4-201 (3) and Utah Admin. Code R657-2-6.
- 10. On July 16, 2021, the Division contacted Petitioner with the procedural requirements to initiate the appeal process and provided Petitioner with the Hearing Officer's contact information for assistance with the process.
- 11. On July 26, 2021, Petitioner contacted the Hearing Examiner requesting information regarding the procedural process and additional information required for the appeal.
- 12. On July 27, 2021, the Hearing Examiner replied to Petitioner, with the Division copied on the email, to explain the appeal process and stating that the procedural rules contained in Utah

Admin. Code R657-2 would guide the process. Because the next Board meeting was scheduled for August 26, 2021, the Hearing Examiner requested the RAA and accompanying exhibits be emailed to the Hearing Examiner and the Division, and that the Division's response be submitted the same way. The Hearing Examiner requested to have all this material by August 6, 2021.

- 13. On August 3, 2021, Petitioner filed its RAA and accompanying exhibits. Petitioner makes multiple requests for relief in relation to this matter. First, Petitioner requests the Board order the Division to produce documents explaining how the Division calculated its damage cost estimate and, in the absence of any such documents, that the Division's cost estimate not be given any weight. Second, Petitioner requests the Board accept the methodology and analysis for Petitioner's damage cost estimate. Third, Petitioner requests the Board accept its revised damage cost estimate totaling \$10,089.93. Fourth, Petitioner requests it be given no less than ten days to respond to any Division filings in this matter. Fifth, in light of imposed time constraints regarding Petitioner's claim, Petitioner requests the Board grant it leave to prove its case and address any shortcomings in its filings. Finally, if the Board would not grant the fifth request, Petitioner requests a formal adjudicative proceeding pursuant to Utah Code Ann. § 63G-4-201 (3)(d)(iii).
- 14. On August 13, 2021, the Division filed its Response making three arguments. First, the Division's assessed value is based on the best estimate of actually incurred damages for the current year, as required by statute and rule. Second, the model Petitioner proposes to predict future values is speculative and unreliable. Third, The proposed predictive model uses variables that are not allowed by statute and exceeds the 1-year year damage calculation time

period established by rule. The Division's Response contained the following cost-estimate breakdown:

Tree	# of	Cost	Storage	Shipping	Planting	Removal	Replant	Total
Variety	trees	per tree						
Apricot	141	\$8.40	\$1.50	\$1.50	\$1.35	\$1.35	\$1.35	\$2,178.45
Pluot	88	\$10.61	\$1.50	\$1.50	\$1.35	\$1.35	\$1.35	\$1,554.08
Nectarine	31	\$7.63	\$1.50	\$1.50	\$1.35	\$1.35	\$1.35	\$455.08
								\$4,187.61

Table 4.

- 15. Petitioner replied to the Division's Response with an email asserting that the Division's Response should not be considered in the Hearing Examiner's Recommendation because it was filed a week after the August 6, 2021 deadline.
- 16. The Hearing Examiner responded to Petitioner's email suggesting that the Petitioner file a Motion to Strike the Division's Response to keep within the spirit of the Division's rules for adjudicative proceedings. Similarly, the Hearing Examiner suggested the Division file a Memorandum in Support of why the Division's Response should be considered part of the record and part of the Hearing Examiner's recommendation.
- 17. The Division responded via email suggesting issues with service of the RAA and offered to discuss the matter via telephone conference or in response to Petitioner's Motion to Strike if filed. Additionally, the Division suggested an alternative option of delaying the Board hearing on this matter for another month in order to accommodate more adequate review.
- 18. The Hearing Examiner responded by letting the parties decide if a teleconference was desired and stated he was prepared to make the recommendation based on the filings submitted regardless.

- 19. Petitioner replied with being open to a teleconference and expressing no desire to delay the matter for another month, signaling Petitioner's intent to file a Motion to Strike the Division's Response.
- 20. Neither party requested a teleconference and Petitioner filed its Motion to Strike the Division's Response, along with an Alternative Reply to the Division's Response should the Motion be denied, late in the evening of August 18, 2021. Petitioner makes three requests in its Motion to Strike the Division's Response. First, the Division's response to Petitioner's RAA should not be accepted into the record because it was filed late, and the Division did not request an extension to file beyond the agreed to filing deadline. Second, because Petitioner's valuation model is the only evidence of record it should be adopted, and the Board should grant Petitioner's requested damage cost estimation of \$10,089.93. Third, if the Board accepts the Division's Response to the RAA, that Petitioner's Reply to the Division's Response be accepted into the record.
- 21. Petitioner's Reply to the Division's Response, filed in case the Motion to Strike was not granted, contains arguments supporting why the damages valuation estimate should assess the value of the lost stone fruit crops that would have been produced and not just the trees that produce them, and arguments for why the Division's unexplained valuation methodology should be rejected.
- 22. The Division filed a Memorandum Opposing Petitioner's Motion to Strike on August 20, 2021. In the Division's Memorandum, the Division first argues compliance with filing a response to Petitioner's RAA, three days after the RAA was filed, was impractical due to the complexity of the issues raised in the RAA, and because the purpose of the adjudicative process, to resolve the differences in estimated crop values, would be undermined if the

Division's arguments were not considered. Second, there is good cause to extend the Division's response time due to imposed time constraints that are contrary to the Division's right to 30 days to respond to an RAA under Utah Admin. Code R657-2-8 (9)(b).

IV. ANALYSIS AND CONCLUSIONS OF LAW

- 1. If big game animals are damaging cultivated crops, livestock forage, fences, or irrigation equipment on private land, the landowner or lessee shall immediately, upon discovery of the damage, request that the Division take action to alleviate the depredation problem, and allow the Division reasonable access to the property to verify and alleviate the depredation problem. Utah Code Ann. § 23-16-3 (1); Utah Admin. Code R657-44-3.
- 2. If it appears that depredation by big game animals may continue, the Division shall: (i) remove the big game animals causing depredation; or (ii) implement a depredation mitigation plan which has been approved, in writing, by the landowner or lessee. Utah Code Ann. § 23-16-3 (2)(a); Utah Admin. Code R657-44-3.
- 3. Petitioner requested the Division take action to alleviate the depredation problem caused by big game animals to Petitioner's property and a depredation mitigation plan was implemented in accordance with Utah Code Ann. § 23-16-3 (1) & (2)(a) in October 2020.
- 4. If a landowner or lessee who approved a depredation mitigation plan under Utah Code Ann. § 23-16-3 (2)(a)(ii) subsequently determines that the plan is not acceptable, the landowner or lessee may revoke approval of the plan and request that the Division take action pursuant to Utah Code Ann. § 23-16-3 (2)(a)(i). Utah Code Ann. § 23-16-3 (4)(a); Utah Admin. Code R657-44-3 (11).
- 5. Petitioner requested the Division take action to stop big game animals from damaging Petitioner's orchard, which continued to occur despite the depredation mitigation plan, on

November 4, 2020 in accordance with Utah Code Ann. § 23-16-3 (4)(a) and Utah Admin. Code R657-44-3 (11).

- 6. Additionally, the Division may provide compensation to claimants for damage caused by big game to cultivated crops to eligible claimants who notify the Division of the damage within 72 hours after the damage is discovered and allow Division personnel reasonable access to the property to verify and alleviate the depredation problem. Utah Code Ann. § 23-16-4 (1) & (2); Utah Admin. Code R657-44-5 (1).
- 7. Petitioner notified the Division of the damage to the orchard and allowed the Division access to the property in accordance with Utah Code Ann. § 23-16-4 (1) & (2). The main issue of contention between Petitioner and the Division is how this compensation assessment is calculated. Because Petitioner and the Division could not agree on what this amount should be, the parties designated Professor Greary to appraise the damage in accordance with Utah Code Ann. § 23-16-4.
- 8. Utah Code Ann. § 23-16-4 states, "If the claimant and the Division are unable to agree on a fair and equitable damage payment, they shall designate a third party, consisting of one or more persons familiar with the crops, fences, or irrigation equipment and the type of game animals doing the damage, to appraise the damage."
- 9. Because Petitioner received Professor Greary's third party appraisal on June 29, 2021 and the imposed deadline to decide whether to accept the third-party appraisal in the amount of \$8,603.77 or appeal was June 30, 2021, Petitioner chose to appeal. However, The expiration of the damage incident period does not preclude the landowner or lessee from making future claims. Utah Admin. Code R657-44-3 (12). Therefore, requiring Petitioner to decide to

- accept the appraisal or appeal by June 30, 2021 was arbitrary and improper. Regardless, Petitioner filed its appeal as directed by the Division.
- 10. Upon the petition of an aggrieved party to a final Division action relative to big game depredation and this rule, a qualified Hearing Examiner shall take evidence and make recommendations to the Wildlife Board, who shall resolve the grievance in accordance with Rule R657-2. Utah Admin. Code R657-44-10.
- 11. Petitioner filed its RAA on August 3, 2021. The big game depredation cost estimate offered by Professor Greary and the Division's requirement that Professor Greary's amount be accepted or appealed constitutes an appealable final agency action. Therefore, this appeal is appropriate under Utah Admin. Code R57-44-10.
- 12. The Division appointed a qualified Hearing Examiner to take evidence and make recommendations to the Board in accordance with Utah Admin. Code R657-44-10.
- 13. Utah Admin. Code R657-2-1, *et seq.* sets forth the standards and procedures governing all adjudicative proceedings before the Board and specifically governs appeals of Division actions taken pursuant to Utah Code Ann. § 23-16-4. Utah Admin. Code R657-2-1 (1)(h).
- 14. Utah Code Ann. § 23-16-4 sets forth guidelines for compensation for damage to crops caused by big game and the appeals of final agency actions related to compensation for damage to crops caused by big game. Therefore, the adjudicative process articulated in Utah Admin. Code R657-2-1, *et seq.* governs this appeal.
- 15. A "Presiding Officer," as used in Utah Admin. Code R657-2-1, *et seq.*, means the director, chairman of the Wildlife Board, or an individual or body of individuals designated by the director, the chairman of the Wildlife Board, or by statute or Division rule to conduct an adjudicative proceeding. Utah Admin. Code R657-2-2 (f).

- 16. Therefore, because Utah Code Ann. § 23-16-4 (6)(c) and Utah Admin. Code R657-44-10 designates a Hearing Examiner to take evidence and make recommendations to the Board regarding final agency actions made by the Division in relation to compensation for damage to crops caused by big game, and because Utah Admin. Code R657-2-1, *et seq.* sets forth the standards and procedures governing this appeal, the Hearing Examiner is the Presiding Officer as that term is used in Utah Admin. Code R657-2-1, *et seq.* for purposes of this appeal up until the Hearing Examiner makes a recommendation to the Board who is the final decision making body to resolve the grievance in accordance with Utah Admin. Code R657-2.
- 17. Petitioner's August 3, 2021 RAA commenced an informal adjudication. Utah Admin. Code R657-2-5 & -7.
- 18. The Petitioner has the burden of proof by a preponderance of the evidence in this matter. Utah Admin. Code R657-2-17. The preponderance of the evidence standard "requires the proponent of a contested fact to demonstrate that its existence [or nonexistence] is more likely than not." *Kilgore Companies v. Utah County Bd. of Adjustment*, 2019 UT App 20, ¶17, 438 P.3d 1025, 1029. Stated in simpler terms, the Petitioner must show that its cost estimate is more likely than not the correct one.
- 19. Any time before a final order is issued in any adjudicative proceeding, the Presiding Officer may convert an informal adjudicative proceeding to a formal adjudicative proceeding, or any party to an adjudicative proceeding may request a formal hearing by motion. Utah Admin. Code R 657-2-7 (2) & (3).
- 20. The Hearing Examiner did not convert this informal adjudication to a formal adjudication, but the Board Chairman could convert this informal adjudication to a formal adjudication

after the Hearing Examiner issues his recommendation and before the Board issues a final order. Petitioner included in its RAA a motion for a formal hearing should the Board not find in its favor and not grant the Petitioner leave to provide additional testimony, motions, affidavits, briefs, or memoranda in support of the RAA to prove Petitioner's case. Petitioner's RAA at 5, ¶E & ¶F. Regardless of whether or not that request is proper, the Board Chairman has the discretion to convert this matter to a formal adjudication after the Hearing Examiner issues this recommendation.

- 21. The Hearing Examiner notified the Petitioner and the Division July 27, 2021 that Utah Admin. Code R657-2 would provide procedural guidance for this appeal. Because Utah Admin. Code R657-2-8 (7) requires all pleadings be submitted to the Presiding Officer at least 20 days prior to the date upon which the matter that is the subject of the pleadings will be decided, and because the Board Hearing on this matter was scheduled for August 26, 2021, the Hearing Examiner requested all materials be submitted to the Hearing Examiner by August 6, 2021.
- 22. Along with requesting pleadings by August 6, 2021, the Hearing Examiner notified the Division and Petitioner that emailing the pleadings and supporting memoranda attached in pdf. format to the Hearing Examiner with each of the parties copied would be sufficient to simplify and expedite this appeal process. This was a deviation from the rules of service done in accordance with Utah Admin. Code R657-2-3.
- 23. Petitioner's RAA was filed prior to this deadline on August 3, 2021. However, the Division's response was filed on August 13, 2021, one week passed the deadline and is, therefore, untimely. Because of this, Petitioner filed its Motion to Strike the Division's Response from the record and requested that the Hearing Examiner not consider it for his Recommendation

- and requested that the Petitioner's valuation model be adopted as the only evidence of record and requested relief in the amount of \$10,089.93. Petitioner's Motion to Strike at 4.
- 24. The Hearing Examiner agrees that the Division's Response was untimely, but also agrees with the Division's reasoning in the August 20, 2021 Memorandum Opposing Petitioner's Motion to Strike for why the Division's Response to Petitioner's RAA should be allowed. Therefore, the Hearing Examiner considers the Division's Response as part of the record in making this Recommendation to the Board.
- 25. Petitioner's RAA, and subsequent Reply to the Division's Response, requests Petitioner's valuation methodology be adopted, and that Petitioner be compensated \$10,089.93 worth in damages based on those calculations. Petitioner argues the proposed methodology is appropriate because it assesses the value of the lost stone fruit crops that would have been produced, but for the damage caused to the trees by big game.
- 26. The Division's argument is the proper assessed value should be based on the best estimate of actually incurred damages for the current year, future values are speculative and unreliable, and Petitioner's proposed predictive model uses variables that are not allowed by statute and exceeds the 1-year year damage calculation time period established by rule.
- 27. Pertaining to compensation to claimants for damage caused by big game, Utah Code Ann. § 23-16-4 (3)(b) states:

In determining damage payment, the Division and Claimant shall consider:

- (i) the extent of damage experienced; and
- (ii) any revenue the landowner derives from:
 - (A) participation in a cooperative wildlife management unit;
 - (B) use of landowner association permits;
 - (C) use of mitigation permits; and
 - (D) charging for hunter access.

- 28. Since Petitioner seemingly does not receive any revenue from the sources identified in Utah Code Ann. § 23-16-4 (3)(b)(ii), the damage payment should be based on the extent of Petitioner's damage experienced.
- 29. Further, in determining how to assess and compensate for damages to cultivated crops, Utah Code Ann. § 23-16-4 (3)(c) provides:

The Division's determination shall be based on the:

- (i) full replacement value in the local market of the cultivated crops that actually have been or *will be damaged* or consumed by big game animals; and
- (ii) cost of delivery of a replacement crop to the location of the damaged crop or other location that is not farther from the source of the replacement crop. (emphasis added)
- 30. Therefore, because Utah Code Ann. § 23-16-4 (3)(c)(i) requires the Division consider the value of cultivated crops that *will be damaged* by big game animals, the Division must consider the value of future crops that would have been produced had the trees producing those future crops not been damaged by big game. In this instance, the cultivated crops that *will be damaged* are Petitioner's stone fruit crops that have yet to be produced, but the damage to the trees that produce them has already been caused big game.
- 31. The evidence of record regarding the appropriate damage cost estimation and justification thereof is the Petitioner's valuation methodology based on damages to future crops totaling \$10,089.93, and the Division's valuation methodology that does not consider damages to future crops totaling \$4,187.61. Absent from the record is an argument for why the third-party appraisal damage estimate totaling \$8,603.77, which

Hearing Examiner's Recommendation, Case No. ____-

was the amount Petitioner was required to accept or appeal before the June 30, 2021

deadline.

32. Because there is no evidence supporting why the third-party appraisal is the

appropriate methodology and amount, the Hearing Examiner can only consider the

methodologies and amounts offered by the Petitioner and the Division. Therefore,

because Petitioner's valuation methodology considers the value of cultivated crops

that will be damaged by big game animals as required by Utah Code Ann. § 23-16-4

(3)(c)(i), the Hearing Examiner finds Petitioner's proposed valuation methodology is

more likely than not the more appropriate methodology and, therefore, Petitioner has

met its burden of proof for purposes of this appeal.

CONCLUSION AND RECOMMENDATION

The Hearing Officer finds the Petitioner has met its burden of proving by a

preponderance that Petitioner's proposed valuation methodology is more appropriate than the

Division's for calculating damages to trees cultivated for stone fruit crop production. This is

because Petitioner's methodology considers the value of cultivated crops that will be damaged by

big game animals as required by Utah Code Ann. § 23-16-4 (3)(c)(i) and the Division's

methodology does not. Therefore, the Hearing Examiner recommends the Board enter an Order

adopting Petitioner's valuation methodology and award Petitioner \$10,089.93 for damages

caused by big game depredation.

DATED August 20, 2021

/s/ Charles A. Lyons

Charles A. Lyons Assistant Attorney General

Utah Attorney General's Office

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CERTIFICATE OF SERVICE

I certify that I caused to be served the above HEARING EXAMINER'S RECOMMENDATION to the following parties on the 20th day of August 2021.

By Email:

Mike Begley Assistant Attorney General Attorney for the Utah Wildlife Board mbegley@agutah.gov

Greg Hansen
Assistant Attorney General
Attorney for the Division of Wildlife Resources
greghansen@agutah.gov

Kyle Maynard Assistant Attorney General Attorney for the Division of Wildlife Resources kylemaynard@agutah.gov

Chad Wilson
Coordinator for Utah Division of Wildlife resources
chwilson@utah.gov

Todd Eskelsen

Member & Attorney for Eskelsen Orchard's, LLC

teskelsen@eskelaw.com

/s/ Charles A. L	yons

PETITIONER'S REQUEST FOR AGENCY ACTION

Request for Agency Action by the Utah Wildlife Board

To: Charles Lyon, Hearing Examiner

calyons@agutah.gov

CC: Greg Hansen, Assistant Attorney General, Utah Division of Wildlife Resources

greghansen@agutah.gov

Chad Wilson, Utah Department of Wildlife Resources Coordinator

chwilson@utah.gov

From: Todd R. Eskelsen, Member Eskelsen Orchards, LLC teskelsen@eskelaw.com

Date: August 3, 2021

DWR File Number for Claim: Unknown

Statement of Legal Authority and Jurisdiction

Eskelsen Orchards, LLC, a Utah limited liability company with apricot, nectarine and pluot orchards in Perry, UT ("Eskelsen Orchards"), hereby submits this Request for Agency Action pursuant to Utah Code Ann. §63G-4-201 and Utah Admin. Code R657-2-6 (the "RAA") and requests the Utah Wildlife Board (the "Board") to take action in resolution of the claim by Eskelsen Orchards pursuant to Utah Code Ann. §23-16-4.

Statement of Relief Sought or Action Sought from Agency

Eskelsen Orchards hereby requests (i) "full replacement value in the local market of the cultivated crops that actually have been or will be damaged or consumed by big game animals; and the cost of delivery of a replacement crop to the location of the damaged crop" for the period of July 1, 2020 to June 30, 2021, as provided under Utah Code Ann. §23-16-4(c), in the amount set out below; and (ii) the additional actions set out below.

Statement of Facts and Reasons Forming the Basis for Relief and Agency Action

- 1. On October 1, 2020, Eskelsen Orchards was part of a group of orchard owners who met with Gage Metzen, Utah Division of Wildlife Resources ("DWR") Landowner Specialist, and James Hansen, DWR Wildlife Specialist, at Nielsen's Fruit Stand in Perry, UT to discuss deer depredation in the orchard owners' properties along the US Highway 89 Fruitway between Willard and Perry, UT. At the meeting, Messrs. Metzen and Hansen presented various options for a coordinated deer depredation control plan pursuant to Utah Code Ann. §23-16.1, et seq. that would involve all of the orchards. Following the meeting, the orchard owners agreed to participate in a depredation remediation plan which included a depredation remediation archery hunt on their orchards from October 22 December 31, 2020.
- 2. On October 5, 2020, Eskelsen Orchards provided certain clarifications to the depredation remediation plan and archery hunt, which clarifications were accepted in large part by the DWR, and on October 6, 2020, Eskelsen Orchards executed the necessary documentation to be part of the depredation remediation plan as revised, including the archery hunt (<u>Attachment 1</u>).

- 3. On November 4, 2020, Eskelsen Orchards filed a 72-hour notice under Utah Code §23-16-3 and Utah Regulations §657-44-3, requesting the DWR to take immediate action to stop the big game animals damage to the fruit trees planted on Eskelsen Orchards property (Attachment 2). The notice was necessary because of continued significant damage to the orchards through nocturnal feeding and antler rubbing on the trees by big game, which continued despite the special depredation remediation archery hunt commissioned by the DWR on the property.
- 4. Also included in Eskelsen Orchard's 72-hour notice was follow up on Eskelsen Orchards' prior request for fencing materials from DWR to construct a big game fence around the orchards; DWR was unable to provide the fencing material. Eskelsen Orchards had previously negotiated a Big Game Fence Installation, Removal and Indemnity Agreement with The Weber-Box Elder Conservation District to install a portion of the fence on the land adjacent to the Pineview Canal immediately above the Eskelsen Orchards' property, which agreement was subsequently executed by the parties (Attachment 3). Eskelsen Orchards also requested that DWR immediately begin to harvest big game animals from the orchards at night, which was the only time that the deer were present at the property.
- 5. On November 7, 2020, DWR delivered a letter with instructions for the manner in which Eskelsen Orchards could implement its intent to kill. On November 9, 2020, Eskelsen Orchards rescinded its 72-hour notice and requested that DWR begin nighttime lethal removal of deer, which was forwarded by James Hansen to his superiors at DWR which, as I remember, was either denied by DWI or, if not denied, did not result in any deer being lethally removed from the property. Instead or additionally, DWR provided 15 landowner tags to Eskelsen Orchards for the daytime taking of deer. Despite active and regular attempts by local Perry individuals to whom the landowner tags were issued, there were no deer taken from Eskelsen Orchards' property and only one deer taken from any of the participating orchards in the remediation plan during the entire depredation remediation archery hunt.
- 6. Throughout the period from October 2020 to March 2021, DWR personnel conducted regular (twice per week on average) nighttime deer counts and hazing. Although DWR personnel did not observe many deer on the Eskelsen Orchards property during the initial visits, beginning in December 2020 deer were more regularly observed there, especially when the counts were conducted using a thermal scope and there were regular sightings of multiple and often numerous deer most nights in all of the participating orchards.
- 7. On May 24, 2021, after Eskelsen Orchards had indicated an intention to make claim for compensation for deer depredation, Eskelsen Orchards met at the Eskelsen Orchards property with Steve Pettingill and Jordan Riley (two of the orchard owners group discussed above in Item 1), DWR representatives Randal McBride and Samuel Robertson and Professor Bradley Geary of Brigham Young University, whom the DWR and orchard owners agreed would act as the third party appraiser pursuant to Utah Code Ann. §23-16-4(d) in any claim by Eskelsen Orchards.
- 8. On June 6, 2021, Eskelsen Orchards filed a notice with Randall McBride, Private Lands Biologist NRO of the Utah Division of Wildlife Resources, with copies to Mr. Robertson and Prof. Geary (<u>Attachment 4</u>), which included:
 - (i) a one page summary of the claim for the "full replacement value in the local market of the cultivated crops that actually have been . . . damaged or consumed by big game animals; and the cost of delivery of a replacement crop to the location of the damaged crop" during the period

of July 1, 2020 to June 30, 2021, as required by Utah Code Ann. §23-16-4(c) to its orchards in Perry, UT in the total amount of \$22,219.55;

- (ii) a chart, based on the three physical surveys of the entire orchards conducted during July, October and November 2020, summarizing the damage done by deer to the orchards;
- (iii) an Excel valuation model which sets out the valuation methodology and information underlying the claim; and
- (iv) copies of invoices from the two nurseries from whom the trees had been purchased.

The valuation model was developed by Andrew Eskelsen, the undersigned's son and a Chartered Financial Analyst (CFA) who regularly performs financial valuation analysis in connection with his employment as a financial analyst and advisor with a private wealth investment advisory firm. The model was developed using published articles on tree valuation by the University of California at Davis and Utah State University, interviews with Jordan Riley, an experienced fruit grower in the Perry, UT area and manager of Eskelsen Orchards, data available from the USDA and other public sources, and recognized valuation methodologies. The Excel spreadsheet, assumptions and calculations of the model were provided with the claim and were provided to Prof. Geary, who was also provided additional information in response to direct questions about the Excel spreadsheet during his consideration of the issues.

- 9. On June 15, 2021, Randall McBride provided an e-mail to Eskelsen Orchards setting out the DWR's response to Eskelsen Orchards' claim and offering a total of \$4,187.61 for the damage to Eskelsen Orchards (Attachment 5). Mr. McBride's e-mail also stated that "[a]s the third-party ruling is made available, we will be in contact with you to review that assessment."
- 10. On the evening of June 29, 2021, Prof. Geary provided an e-mail to Eskelsen Orchards valuing Eskelsen Orchards' claim (Attachment 6). Prof. Geary valued the claim at a total of \$8,603.77 and "used [Eskelsen Orchards'] [E]xcel spread sheet to estimate these reimbursement figures," but changed four items (1) stump removal [reduced from \$25.50 to \$5.70 to reflect removal of a one-year old tree rather than a six year old stump]; (2) reduced Total Production Costs lowered from \$12.40 to \$1.91 by removing the irrigation system completely from the Year 1 orchard setup formula]; (3) reducing the production lost from 20 years to 6 years; and (4) adjusted yields of the fruit based on averages from the National Agricultural Statistics Service (NASS).
- 11. In the early afternoon of June 30, 2021, Eskelsen Orchards, specifically the undersigned and Andrew Eskelsen (valuation expert) had a teleconference with Prof. Geary regarding his e-mail. During that call, Eskelsen Orchards accepted comments (1) and (4) of Prof. Geary's analysis but explained to him why his comment (4) was a misunderstanding of the Excel valuation model which already included appropriate recognition and valuation of the reduced production caused by the destruction and subsequent replanting of the destroyed tree. Comment (3) was discussed, but Eskelsen Orchards withheld a decision on that comment. During the conversation, Andrew Eskelsen walked Prof. Geary through the Excel model, explained the underlying assumptions and calculations and answered Prof. Geary's questions about the model. At the conclusion of the teleconference, Prof. Geary complemented Eskelsen Orchards on the Excel valuation model and indicated that he accepted the clarification and correction of his comment [3]. He then indicated he was going to speak with DWR to pass along his findings. Eskelsen

Orchards has not heard anything further from Prof. Geary or from DWR regarding any subsequent communications between them.

- 12. Immediately following the teleconference with Prof. Geary, Eskelsen Orchards had a teleconference with Chad Wilson, DWR Coordinator, about Prof. Geary's e-mail and Eskelsen Orchards explained its comments on the analysis in Prof. Geary's e-mail and the subsequent discussion and agreement by Prof. Geary with Eskelsen Orchards' analysis. Because of a deadline of June 30, 2021 at 4:30 p.m. MDT (which was then less than 45 minutes away), Mr. Wilson indicated that the only choice open to Eskelsen Orchards was to either accept the valuation provided in Prof. Geary's e-mail or appeal the finding in a process that Mr. Wilson was not able to explain at that time. Faced with that choice, on June 30, 2021 at 4:16 p.m. MDT, Eskelsen Orchards made an offer in settlement in the amount of a total amount of \$10,731.41, or in the alternative gave notice of it appeal of Prof. Geary's findings, to which Mr. Wilson replied the next day that he would be back in touch with further information about the appeal (Attachment 7).
- 13. Other than Mr. McBride's June 15, 2021 e-mail (discussed in Item 9 above), Eskelsen Orchards has not received any information from DWR explaining DWR's valuation or methodology, reacting to Prof. Geary's valuation process or commenting on Eskelsen Orchards' detailed valuation spreadsheet and analysis.
- 14. On July 27, 2021, Eskelsen Orchards received an e-mail from Charles A. Lyons, Assistant Attorney General/O'Hara Fellow, Utah Attorney General's Office Division of Natural Resources, which indicated he had been appointed as the Hearing Examiner for the matter (presumably pursuant to Utah Code Ann. §23-16-4(6)(c)) "for purposes of taking evidence and making recommendations for a board order" (Attachment 8). In his e-mail, Mr. Lyons requested a response by August 6, 2021 (only 10 days after his e-mail), a period that is a very short time for Eskelsen Orchards to prepare this RAA and provide all necessary support for its arguments and request for relief in this matter.

Relief Requested

- A. To the extent that DWR has an analysis for its valuation, Eskelsen Orchards moves the Board to direct DWR to produce a copy of the document explaining DWR's valuation methodology and analysis, including all correspondence related thereto, and provide Eskelsen Orchards with a reasonable time to review such documents and provide comments before the Board makes a final determination with respect to Eskelsen Orchards' claim in this proceeding. In the absence of such documents and sufficient time for Eskelsen Orchards to review and comment on it, Eskelsen Orchards moves that that DWR's valuation not be given any weight in this proceeding by the Board.
- B. In light of Eskelsen Orchards' submissions with detailed valuation methodology and analysis, including an Excel spreadsheet based on explicitly stated assumptions and published analytical studies by respected U.S. agricultural universities, which valuation methodology and analysis has been reviewed and accepted by Prof. Geary, including the corrections to Prof. Geary' analysis of the Excel spreadsheet that were discussed with Prof. Geary on June 30, 2021, Eskelsen Orchards moves that the Board accept Eskelsen Orchards' valuation methodology and analysis as an appropriate valuation methodology.
- C. In preparing this Request for Agency Action, Eskelsen Orchards has reviewed its valuation analysis and is attaching to this Request for Agency Action a revised Excel valuation spreadsheet (Attachment 9)

which accepts Prof. Geary's comments [1], {2} and [4]; and rejects comment [3] as improper for the reasons set out above (and accepted by Prof. Geary]. The revised valuation claimed by Eskelsen Orchards is therefore \$ 10,089.93, as more fully set out in <u>Attachment 10</u>. Eskelsen Orchards moves that the Board accept the attached Excel valuation spreadsheet as Eskelsen Orchards' final request for compensation in this matter.

- D. Eskelsen Orchards moves that it be given not less than ten (10) days from receipt of any filing by DWR in response to this RAA in this matter to review DWR's filing in order to provide a reply filing addressing the issues raised by DWR in its filing.
- E. In light of the compressed timetable which has been imposed in this matter through the delivery of Prof. Geary's analysis less than 24 hours before the required appeal, the required appeal by Eskelsen Orchards within 20 hours thereafter without the benefit of adequate time to review, comment and explain the issues with Prof. Geary's analysis and prepare a written reply, and the short time provided for the preparation of this RAA, Eskelsen Orchards further moves that, in the event that the Board does not find wholly in favor of Eskelsen Orchards on its final claim hereunder, Eskelsen Orchards moves that the Board grant Eskelsen Orchards leave, as necessary to provide any and all additional testimony, motions, affidavits, briefs, or memorandum, which may be required to support this RAA and prove its case to the Board for the relief requested and to address any other shortcomings which may be argued by DWR or found by the Hearing Examiner in the materials provided by Eskelsen Orchards.
- F. If the Board is unable to grant the motion requested in Item E above as necessary, in the alternative, Eskelsen Orchards moves that the Board provide Eskelsen Orchards with the formal adjudicative proceeding provided in Utah Code Ann. §63G-4-201(3)(d)(iii) to address the issues in this matter and obtain resolution thereof.

In Witness Whereof, this Request for Agency Action is respectively submitted this 3rd day of June, 2021.

Todd R. Eskelsen, Member

ESKELSEN ORCHARDS, LLC

From:

James Hansen

To:

Todd Eskelsen

Cc:

Gage Metzen; Randall McBride; jordandri@gmail.com; sgeopettingill@gmail.com; shimsrus@gmail.com

Subject:

Re: Depredation Paperwork

Date:

Tuesday, October 6, 2020 7:55:20 PM

PerryOrchardDepDeerHunterLetter DWR FY21 20201006.pdf Attachments: PerryOrchardDepredationHuntMap 202010061701.pdf

Hi Everyone,

I met with Todd today and he signed the paperwork to be included in the landowner association. Attached is the revised hunter letter and hunt map. Please let myself or Gage know if there are any edits that you'd like to have made to either of the documents, or if you have any questions or concerns overall.

Thank you and I will be talking with you all some more as the hunt approaches.

Have a good one,

Jim

Jim Hansen Wildlife Specialist Utah Division of Wildlife Resources Northern Region 515 E 5300 S South Ogden, UT 84405 801-413-8019 jimhansen@utah.gov

On Tue, Oct 6, 2020 at 1:53 PM Todd Eskelsen < teskelsen@eskelaw.com > wrote:

Jim:

Changing 3 to 5 is acceptable; sorry I misunderstood.

I am around so let me know when you would like to meet. I can meet you somewhere in the Brigham City/Perry area or you can come to my orchards (2065 S. Eskelsen Lane, Perry, UT - the street name was just changed, so the address may show up in a navigation app as 2065 S. 100 W., Perry, UT).

Todd

Todd R. Eskelsen

ESKELSEN ORCHARDS, LLC

(240) 460-1115

From: James Hansen <jimhansen@utah.gov>
Sent: Tuesday, October 6, 2020 3:06 PM

To: Todd Eskelsen < teskelsen@eskelaw.com >; jordandri@gmail.com;

sgeopettingill@gmail.com; shimsrus@gmail.com

Cc: Gage Metzen < gmetzen@utah.gov >; Randall McBride < rmcbride@utah.gov >

Subject: Re: Depredation Paperwork

Hi Todd,

Thank you for sending along that summary. Here's my corrected email address (<u>iimhansen@utah.gov</u>) and I've included Kelly in the email as well.

The only clarification that I'd like to make is in section two (2.) where it states that DWR will limit to three (3) hunters at a time. In the meeting we had discussed using five (5) hunters at a time in order to spread them throughout the properties to effectively kill deer across all different landowners/lessee's properties. If that clarification works for you all, then I think that summary looks good.

Todd, I'll give you a call later today to schedule a meeting with you to sign the landowner association paperwork and then Gage and/or I will send along the final hunter letter and map.

As always, feel free to contact me if you have any questions or concerns and I'd be happy to help with whatever I can.

Thanks,

Jim

Jim Hansen

Wildlife Specialist

Utah Division of Wildlife Resources

Northern Region

515 E 5300 S

South Ogden, UT 84405

801-413-8019

jimhansen@utah.gov

On Tue, Oct 6, 2020 at 8:50 AM Gage Metzen <gmetzen@utah.gov> wrote:

----- Forwarded message -----

From: Todd Eskelsen < teskelsen@eskelaw.com>

Date: Mon, Oct 5, 2020 at 3:26 PM Subject: RE: Depredation Paperwork

To: Gage Metzen <gmetzen@utah.gov>, jhansen@utah.gov <jhansen@utah.gov>

Cc: Jordan Riley < jordandri@gmail.com >, Steven Pettingill < sgeopettingill@gmail.com >

Jim and Gage:

I have reviewed Big Game Depredation Mitigation Plan No. 59155, dated August 11, 2020 for the Riley, Pettingill, and Thorne Orchards, Perry UT (the "Plan") and am willing to sign onto it for the property I own at 2065 S. Eskelsen Lane, Perry, UT (the "Eskelsen Property") with the following explanations/clarifications (which are not changes, but making explicit the things discussed and agreed upon in our meeting on Thursday,

- 1. During the indicated period, DWR will undertake depredation mitigation efforts outlined in the Plan, including regular hazing of the depredatory deer; promptly, upon reasonable request from the landowner, making available at landowner's premises fencing and other exclusion materials; issuing at least 20 depredation mitigation permits to the landowners; and conducting the depredation remediation hunt described in the paragraphs below.
- 2. The depredation hunt on the indicated acres (the "Hunt") shall be conducted during the period October 20 December 31, 2020. DWR shall limit the issued number of outstanding depredation remediation hunt permits for the Property to three (3) at any one time, but, upon a withdrawal of a permitted hunter from the Hunt (either through successful harvest of a deer, removal of a hunter from the Hunt for violation of rules and regulations, a determination by a hunter not to continue to hunt, or a failure by a permit holder to actively conduct such hunting efforts), DWR shall promptly issue another permit to maintain the outstanding number of permits at three (3).
- 3. Permits shall be issued individually only to archers who failed to obtain a regular WMA tag and who respond to DWR's invitation. All permits shall be non-transferable and shall allow only the hunter and one accompanying person shall be granted access to the Property, Only archery shall be allowed in the Hunt, i.e., no firearms shall be allowed to hunters participating in the Hunt. Hunters shall park only in the designated areas shown on the Property map. Hunters and participants shall only have access to the Property on foot and may not access the Property using any motorized equipment.
- 4. Hunters must have their depredation remediation hunt permit on their person (either in paper or electronically) at all times while on the Property. Hunters and accompanying persons shall comply at all times with all applicable DWR rules and regulations and with all reasonable restrictions imposed by the landowner and shall take all reasonable steps to avoid damage to the Property and remove any and all trash, garbage or personal items on the Property. Failure by the hunter and any accompanying person to comply with any and all such rules and regulations shall result in a forfeiture of the permit. Property owner have consented to hunters being on the property in accordance with the rules of the Hunt, but may revoke such consent at any time. Property owners and their authorized agents shall also have the right to order any participant to promptly leave the Property for infraction of applicable rules and regulations or when participant is acting in an unsafe manner. Hunters and any accompanying persons shall be responsible for any and all damage to the Property resulting from their actions.
- 5. DWR shall provide Property owners with reasonable advance notice of the names, individual contact information and vehicle make, description and license plate number for all hunters obtaining a depredation remediation permit for the Hunt prior to such hunters accessing such Property owner's property. DWR shall also keep Property owners reasonably updated on an ongoing basis on the results of the Hunt.
- 6. In early January promptly following the completion of the Hunt, DWR shall provide Property owner with a written overall summary of the success of the Hunt, including the number of hunters granted permits; the number of deer taken during

- the Hunt; a summary of all injuries, interactions between hunters, property owners or others, if any, of which DWR is aware during or following the Hunt; any feedback received by DWR from hunters or others with respect to the Hunt; and an overall summary of the DWR's evaluation of the Hunt and plans for future depredation remediation actions.
- 7. Property owners' participation in the Hunt shall not limit Property owners' rights to (i) obtain compensation for damages caused by big game depredation, (ii) submit additional written notice to DWR of big game depredation or (iii) take other necessary actions as allowed to kill big game animals damaging cultivated crops on the Property, provided that in all such efforts Property owner shall comply with Utah law by providing DWR with required notices and acting in good faith to establish effective depredation remediation plans, which may include Property owners designating an employee to undertake depredation remediation efforts as required.
- 8. DWR and Property owners shall participate in good faith to facilitate the success of the Hunt and shall reasonably provide each other with such information as may be advisable in facilitating the success of the Hunt.

Please let me know if you have any questions or comments.

Todd

Todd R. Eskelsen

ESKELSEN ORCHARDS, LLC

(240) 460-1115

From: Gage Metzen <<u>gmetzen@utah.gov</u>>
Sent: Thursday, October 1, 2020 5:37 PM
To: Todd Eskelsen <<u>teskelsen@eskelaw.com</u>>

Subject: Depredation Paperwork

Here is the link to approve the depredation plan regarding your private property. <u>Click Here</u> You can use this link to navigate back to this page at a later time if needed. In Step 1, please review the plan and sign in all provided signature boxes. If using a mouse, move the cursor inside the box and push and hold the left mouse button. If using a touchscreen,

please use finger or stylus to sign. Please click save after signing. Once signed, you may proceed to Step 2 where you can select your shooters and the amount of permits you want them to have. You must use AT LEAST a birth date in conjunction with either a name or customer ID. Then select Find Shooter. Once the shooter information is correct and the amount of permits selected, please save the permit. This will display the shooter information in a section slightly below and allow the entry of another shooter. This can be done for as many permits allotted to you. Once all shooters are entered and saved, please scroll to the bottom and submit the shooters. If you have problems navigating this form, please contact your assigned Biologist/Specialist for help. Have a Nice Day!

Gage Metzen

Landowner Specialist

801-707-0159

gmetzen@utah.gov

From: Todd Eskelsen
To: James Hansen
Cc: Jordan Riley
Bcc: Jared Gallegos

Subject: Eskelsen Orchards Deer Depredation

Date: Wednesday, November 4, 2020 1:04:00 PM

Jim:

This e-mail is our 72 hour notice under Utah Code §23-16-3 and Utah Regulations §657-44-3 to the Utah Division of Wildlife Resources to take immediate action to stop the big game animals damage to the fruit trees planted on our property.

This notice is necessary because we continue to suffer significant damage to our orchards through nocturnal feeding and antler rubbing on the trees by big game. As we have discussed, this damage continues despite the special depredation remediation archery hunt commissioned by the DWR on the property (which I understand has not resulted in a single deer having been harvested). We have also been ready to begin construction of a big game fence around our property and have requested fencing from DWR, but DWR has only been able to deliver 3 rolls (a total of 990 feet) and no fence posts, which is far less than the 3700 ft. and 370 posts that we have requested. We are rapidly getting to the point that fence construction will be impossible because of cold weather and frozen ground. Because of the current and on-going depredation, the additional big game presence that will occur at our property in late winter when animals move down out of the WMA above, the failure of the current depredation remediation archery hunt and DWR's inability to timely deliver the necessary fencing materials to me, we will undoubtedly incur significant additional loss to our orchards unless active depredation remediation is promptly undertaken by DWR and by me.

We are also requesting that DWR immediately begin to harvest big game animals from our property at night, which is the only time that the deer are present at the property. In the event that the depredation is not remediated, we intend to actively pursue night time remediation to remove animals, as well.

If you need access to our orchards to inspect the damage or have further questions about this depredation and our notice, please call me. Please get back to me within 72 hours as required under the statute and regulations with the appropriate action that will be taken by the DWR for the extent of the damage we have experienced and expect in the future.

Thank you.

Todd

Todd R. Eskelsen ESKELSEN ORCHARDS, LLC teskelsen@eskelaw.com 240-460-1115 (m)

Big Game Fence Installation, Removal and Indemnity Agreement

This Big Game Fence Installation, Removal and Indemnity Agreement (the "Agreement"), dated this __ day of November 2020, by and between Eskelsen Orchards, LLC, a Utah LLC ("Orchards") and Ogden River Water Users' Association, a non-profit organization, (the "Canal Company").

Orchards is the owner of approximately 17 acres of fruit tree orchards (the "<u>Property</u>"), located in Perry Utah immediately west and downslope of the Ogden-Brigham Canal and related adjoining property owned by the Canal Company adjacent to such canal (collectively, the "<u>Canal</u>"). Orchards is a current user of water from the Canal to irrigate such orchards on the Property and in April 2020 planted approximately 3,000 new apricot, nectarine, plum and pluot tree saplings on the Property.

From time to time, deer, elk and other big game animals (the "Big Game") which live in the general area of the Property, especially in the Brigham Face Wildlife Management Area immediately east and above the Canal, come onto Orchards' property and eat, rub their antlers and otherwise damage fruit trees. In order to deter such Big Game damage, especially on young tree saplings during the first six years after planting, Orchards intends to install fencing around its property, including along the eastern edge of such Property bordering the Canal to deter such Big Game. Because of the slope down from the Canal to the Property, such fencing would be more effective if, rather than being placed on the eastern most portion of the Property, be located instead on the higher slope immediately above the Property on property owned by the Canal Company.

Canal Company personnel have met with Orchards personnel at the Property and reviewed Orchards' proposed fence installation plan and the parties have determined that it should be possible for Orchards to install such fencing in such location without interference with Canal Company's operations, so long as the agreement of the parties is explicitly set out and agreed to.

Therefore, the parties to this Agreement agree as follows:

- 1. <u>Installation of Fence</u>. Canal Company consents to Orchards installing, at Orchards sole cost and expense, the Fence (as defined below) on property owned by Canal Company along the westerly portion of Canal Company's property bordering on the Property. For purposes of this Agreement, the "Fence" shall mean a fence consisting of 6' or 8' angle steel fence posts spaced at approximately 10' intervals with 6' or 8' plastic construction fencing strung between such posts and attached by zip ties. Orchards shall consult with Canal Company in locating the Fence and shall install the Fence on Canal Company's property as close to Orchards' property line as reasonable (consistent with reasonable Big Game exclusion) but always in a manner that is at least 10' from the western edge of the cement water-bearing portion of the Canal and does not interfere with the construction, operations or maintenance of the Canal. In the event of interference with the workings of the Canal and upon request from the Canal Company, Orchards shall, at Orchards sole cost and expense, promptly relocate the interfering portions of the Fence so as to remedy such interference.
- 2. <u>Maintenance of Fence</u>. Orchards shall maintain the Fence in a manner so as to provide reasonable Big Game exclusion, contribute to efficient operation of the Property and the Canal and not become unsightly. Such maintenance shall be done from the westerly side of the fence from the Property as much as reasonably possible, but the Canal Company consents

to Orchards accessing Canal Company's property as reasonably necessary to maintain and repair the Fence.

- 3. Removal of Fence. Orchards agrees to remove the Fence at such time as protection from Big Game depredation of its orchards is no longer reasonably required and in any event on or before July 1, 2026.
- 4. <u>No Claim of Right or Title by Orchards</u>. Orchards' installation of the Fence shall not convey to Orchards or otherwise give Orchards any right, title or interest in the property of Canal Company other than the consent by Canal Company to allow Orchards to install, maintain and remove the Fence as specifically granted under this Agreement
- 5. Indemnification. Orchards agrees to the fullest extent allowed by law, to protect, defend and save harmless Canal Company against any and all direct or indirect loss or liability that results to Canal Company from Orchards' construction, maintenance and removal of the Fence, including any and all costs and expense (including without limitation reasonable legal fees) incurred by Canal Company in defending against such loss or liability or enforcing such indemnification, if any, excluding any loss caused by Canal Company's or its personnel's gross negligence or willful misconduct. The indemnity hereunder shall be unlimited as to duration and shall be binding upon Orchards and its successors and assigns and inure to the benefit of Canal Company, its successors, assigns and personal agents and representatives.

ESKELSEN ORCHARDS, LLC

Ogden River Water Users' Association

By: Todd R. Eskelsen

Its: Member

By: Benjamin D. Quick Its: General Manager

From: Todd Eskelsen
To: Randall McBride

Cc: Jordan Riley; Bradley Geary; Samuel Robertson; Andrew Eskelsen

Subject: Eskelsen Orchards 2020-21 Deer Depredation Claim

Date: Sunday, June 6, 2021 10:18:00 PM

Attachments: Eskelsen Orchards 2020-21 Deer Depredation Claim.docx

Eskelsen Orchards FY 2020-21 Deer Depredation Tree Survey.pdf

Tree Loss 2020 v3.xlsx

2020 Burchall & Wilson Nurseries Invoice Charges.pdf

Randall:

Attached to this e-mail please find the following:

- 1. A one page summary of my claim for deer depredation during FY 2020-21 on my orchards in Perry, UT;
- 2. A chart, based on the three surveys of my entire orchards that I conducted during July, October and November 2020, summarizing the damage done by deer to my orchards. The key to the color coding is at the end of the document;
- 3. An Excel valuation model which sets out the valuation methodology and information underlying the claim. This analysis was derived from the following two studies:

Utah State University Extension - https://digitalcommons.usu.edu/cgi/viewcontent.cgi? article=2619&context=extension_curall

UC Davis Tree Loss Calculator - Peaches - https://coststudyfiles.ucdavis.edu/uploads/cs_public/0c/37/0c37c7df-4de3-4913-94f8-b809fd28a2b2/treelosspeach2009.xlsx

In developing the model was developed, we used the data from the USU Extension study as the basis for the per acre & per tree assumptions driving the UC Davis Tree Loss Calculator and utilized the actual tree planting information for our orchards; and

4. Copies of invoices from Dave Wilson Nursery and The Burchell Nursery Inc., the two nurseries from whom I purchased the trees.

Please review these materials and get back to me with any questions or comments that you have.

Thank you.

Todd

Todd R. Eskelsen ESKELSEN ORCHARDS, LLC (240) 460-1115 (m)

From: Randall McBride
To: Todd Eskelsen

Cc: Samuel Robertson; Bradley Geary
Subject: Deer Damage Estimation

Date: Tuesday, June 15, 2021 3:36:45 PM

Mr. Eskelson,

The following is the estimation of deer damage to your orchard. First off, for next and future years, if you are seeking payment for damaged trees you will need to leave all damaged trees standing in order for us to accurately assess and estimate the damage. If the damaged trees are not standing when we meet to assess the damage, then the Division will not assist financially with those. Second, our Rule is clear that we can only pay for losses that occur between July 1 and June 30 of that year. With that in mind, please find the damage estimation below. We know you want to seek a third-party ruling and that is currently being worked on by Brad Geary from BYU.

Apricots 141 damaged at \$8.40 each plus \$3.00 shipping and cold storage plus \$4.05 for planting, removal, and replanting. Total for apricots lost=\$2,178.45

Pluots 88 damaged at \$10.61 each plus \$3.00 shipping and cold storage plus \$4.05 for planting, removal, and replanting. Total Pluots lost=\$1,554.08

Nectarines 31 damaged at \$7.63 each plus \$3.00 shipping and cold storage plus \$4.05 for planting, removal, and replanting total of Nectarines lost=\$455.08

Grand total=\$4,187.61

As the third-party ruling is made available, we will be in contact with you to review that assessment.

Thank you,

Randall McBride Private Lands Biologist NRO Utah Division of Wildlife 801-452-5029 rmcbride@utah.gov

From: Bradley Geary

To: Todd Eskelsen; Chad Wilson; Randall McBride; Samuel Robertson

Subject: Orchard deer damage estimate

Date: Tuesday, June 29, 2021 7:36:22 PM

Attachments: Tree Loss copy 2020 v3 eskelsen bg edit.xlsx

Hi Todd, Chad, Randall, and Sam,

Here is my estimate for Eskelsen:

Apricot \$17.99 / tree X 141 trees = \$2,536.59 Pluot \$61.78 / tree X 88 trees = \$5,436.64 Nectarine \$20.34 / tree X 31 trees = \$630.54

Total \$ 8,603.77

I used Todd Eskelsen's excel spread sheet to estimate these reimbursement figures, but I changed four items. I highlighted the cells I changed in green in the attached excel document.

First – Stump removal, the UC Davis excel spread sheet was based on an 8 year old tree, a stump on a tree that age would require mechanical assistance to remove from the ground and from the orchard. A one year old tree does not require machinery so I lowered that cost from UC Davis' \$25.50 to \$5.70 because it is a one year old twig that can be pulled from the ground by hand and left on the ground. No hauling or destroying of the stump is necessary. The \$5.70 matches the cost the Division has already offered for removal, replant, shipping, and cold storage.

Second – Total Production Costs were lowered from \$12.40 to \$1.91, I removed the irrigation system from the Year 1 orchard setup formula leaving the clearing, discing, soil finishing, and soil testing, which comes to \$1.91. The irrigation is still intact and functioning and has nothing to do with a deer damaged tree.

Third – I reduced the production lost from 20 years to 6 years because a fruit tree hits full production by its 6^{th} year and it does not increase afterwards, so the replanted tree at 6 years matches the yield of surrounding trees that are a year older.

Fourth – I adjusted yields of the fruit based on averages from the National Agricultural Statistics Service (NASS). I used the highest yield estimates based on California yields. I only adjusted yields out to the sixth year. Pluot yields were not available through NASS or extension articles, so I used yields from plums since a Pluot is a plum hybrid. I added 1,000 lbs per acre to compensate for a Pluot possibly producing higher yields than a plum.

Brad Geary

From: Chad Wilson
To: Todd Eskelsen

Cc: Bradley Geary; Randall McBride; Samuel Robertson; Andrew Eskelsen

Subject: Re: Orchard deer damage estimate Date: Thursday, July 1, 2021 11:00:15 AM

Todd.

Thank you for the notice. We will stay in touch with you on the procedures for the next appeal. I will probably reach out to you next week with more information on the process.

On Wed, Jun 30, 2021 at 4:16 PM Todd Eskelsen < teskelsen@eskelaw.com > wrote:

Prof. Geary, Chad, Randall and Sam:

Thank you, Prof. Geary, for your e-mail and explanation which was very helpful. We have reviewed the comments and examined our model to determine the exact effect of each of the adjustments you have made on the valuation. While the points raised in items First (stump removal), Second (irrigation system) and Fourth (NASS yield estimates) are well-considered and could be reasonable adjustments to our claim, our review indicates that the changes made to implement Item Third (reduction of production lost from 20 to 6 years) misunderstands the model and distorts the value of the trees, in particular the apricots.

The model we developed reflects the <u>difference</u> in the overall production of trees -- a tree that is planted in YR1 and continues in production for 20 years vs. a tree that is damaged in YR1, replanted in YR3 and then continuing in production. Thus, the changes made by simply changing the net present value calculation to remove production years YRs 7-20 actually reduces the value of the tree in a manner that distorts the calculation. I am attaching to this e-mail a model that accepts the changes made with respect to Items First, Second and Fourth and implements the changes required in Item Third without distorting the model. The net impact of those changes actually corrects the valuation of each of the tree types, resulting in a major change in the value of an apricot tree and smaller adjustments in nectarines and pluots trees. As adjusted to implement Prof. Geary's comments in his e-mail and the correction noted in the prior sentences, our claim becomes:

Apricot $$31.09 / \text{tree} \times 141 \text{ trees} = $4,383.69$

Pluot $62.88 / \text{tree} \times 88 \text{ trees} = 5,533.44$

Nectarine $$26.26 / \text{tree} \times 31 \text{ trees} = 814.17

Total (some minor rounding in the model) \$10,731.41

We think that the differences between our claim above and Prof. Geary's revised determination of value could have been worked out through a single telephone call as the difference is a matter of mathematical calculations and not a difference in opinion or judgment. Since we only received Prof. Geary's model last night at 7:36 p.m., there has not been sufficient time for such a call, which lands us in the position of having to either take a lesser number or appeal the valuation. If the Division can give us flexibility to talk with Prof. Geary in the next day or so to come to an agreement of how the adjustments that he has made actually work their way through the model, Eskelsen Orchards would be willing to accept in settlement of our claim the amount generated through the agreed upon revised model (which we believe to the \$10,731.41). If it is not possible to allow that leeway because of the deadline of June 30, then we hereby appeal the determination of our claim to the next level of appeal so as to obtain the forum to pursue our claim further.

Notwithstanding the statements made in this e-mail as an offer in settlement, we specifically reserve the right to raise any and all arguments as to our original claim and Prof. Geary's subsequent decision in an appeal to the next level of review.

Please let us know what the Division determines and whether we need to make any other filings or notices to implement either settlement of our claim on the terms outlined above or our further appeal of our claim.

Thank you.

Todd

Todd R. Eskelsen

ESKELSEN ORCHARDS, LLC

(240) 460-1115 (m)

From: Bradley Geary < brad geary@byu.edu>

Sent: Tuesday, June 29, 2021 7:36 PM

To: Todd Eskelsen < teskelsen@eskelaw.com >; Chad Wilson < chwilson@utah.gov >; Randall

McBride < rmcbride@utah.gov >; Samuel Robertson < sdrobertson@utah.gov >

Subject: Orchard deer damage estimate

Hi Todd, Chad, Randall, and Sam,

Here is my estimate for Eskelsen:

Apricot $$17.99 / \text{tree} \times 141 \text{ trees} = $2,536.59$

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Total \$ 8,603.77

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Brad Geary

Chad Wilson Private Lands Public Wildlife Coordinator (801)391-1234 chwilson@utah.gov

From: <u>Charles Lyons</u>
To: <u>Todd Eskelsen</u>

 Cc:
 Greg Hansen; Chad Wilson

 Subject:
 Re: Orchard damage assessment

 Date:
 Tuesday, July 27, 2021 1:10:18 PM

Hello Mr. Eskelsen,

Yes - I have been appointed as the Hearing Examiner for this matter.

The Division of Wildlife Resources (DWR) notified me of your intent to appeal a third-party valuation of depredation caused by big game animals contained in an email sent from you to DWR on June 30, 2021. DWR considered this email an appeal for further review. However, I believe this appeal requires a Request for Agency Action (RAA) in accordance with Utah Admin. Code R657-2-6 and Utah Code Ann. Sec. 63G-4-201.

I believe this will help develop a cleaner record and help facilitate a smoother process. Utah Admin. Code R657-44-10(1) simply states, "Upon the petition of an aggrieved party to a final division action relative to big game depredation and this rule, a qualified hearing examiner shall take evidence and make recommendations to the Wildlife Board, who shall resolve the grievance in accordance with Rule R657-2." Because the Wildlife Board will need to resolve this pursuant to Utah Admin. Code R657-2, I will follow those procedural rules for guidance in this matter.

Therefore, Utah Admin. Code R657-2-5 provides for how the RAA shall be filed, which also points to Utah Code Ann. Sec. 63G-4-201(3) for what the RAA must contain and to Utah Admin. Code R657-2-6 for what should accompany the RAA. To expedite and simplify this process, I believe emailing this required RAA and accompanying memoranda/exhibits in support as an attachment in pdf. format to me, Mr. Hansen and Mr. Wilson will suffice. Once this RAA is received, DWR should file a Response with similar memoranda/exhibits in support of its position.

My assumption is that both parties' exhibits will consist of their calculations for property valuations and the filings will consist of arguments for why each parties' calculations are correct/incorrect. Regardless, please share with me whatever you believe to be relevant in support of your position that will help me better understand where you are coming from. Once I receive these filings, I will draft my recommendation to the Wildlife Board who will resolve this matter pursuant to Utah Admin. Code R657-2 as it sees fit.

The next Wildlife Board meeting is August 26, 2021, and I would like to have everything by August 6, 2021 to draft my recommendation for the Board. If either party would like to discuss any of this, I would suggest a conference call be scheduled. However, I hope the process I've identified and articulated is understandable enough that we can move forward from here.

Please, email me and all who are copied if there are any immediate questions.

Thank you,

Charles A. Lyons Assistant Attorney General | O'Hara Fellow Utah Attorney General's Office - Division of Natural Resources calyons@agutah.gov | 801 839 4530

From: Todd Eskelsen <teskelsen@eskelaw.com>

Sent: Monday, July 26, 2021 3:49 PMTo: Charles Lyons <calyons@agutah.gov>Cc: Greg Hansen <greghansen@agutah.gov>Subject: FW: Orchard damage assessment

Mr. Lyons:

I am reaching out to you because of the e-mail below from Greg Hansen of the Utah Division of Wildlife Resources. As stated in Mr. Hansen's e-mail, Eskelsen Orchards is appealing the assessment of orchard damage caused by big game and I understand that you have been appointed as the qualified hearing examiner pursuant to Utah Code Ann. Section 23-16-4(6)(c) and Utah Admin. Code R657-44-10. Please provide me with the requisite procedural steps and additional information that I need to provide for the appeal review by you (in addition to the materials I have already submitted as part of my original claim for damage and the other information I provided to BYU Professor Brad Geary, the third-party expert who was appointed to appraise the damage). Please also let me know how I can obtain and respond to the report and any additional correspondence that Prof. Geary provided to the DWR with respect to our claim so that I have the entire case file available in pursuing my appeal.

If you need to speak with me, please call me at the number below.

Thank you.

Todd

Todd R. Eskelsen ESKELSEN ORCHARDS, LLC (240) 460-1115 (m)

From: Greg Hansen <greghansen@agutah.gov>

Sent: Friday, July 16, 2021 5:08 PM

To: Todd Eskelsen <teskelsen@eskelaw.com>

Cc: Chad Wilson <chwilson@utah.gov>

Subject: Orchard damage assessment

Good afternoon,

My name is Greg Hansen, and I am an Assistant Attorney General representing the Utah Division of Wildlife Resources. Chad Wilson (DWR Coordinator) has notified me that Eskelsen Orchards has expressed an interest in appealing a third party assessment of orchard damage caused by big game. Consistent with UCA 23-16-4 and Utah Administrative Rule R657-44-10, DWR has identified an independent qualified hearing officer to hear your claim should you pursue an appeal.

His name is Charles Lyons, and his email is <u>calyons@agutah.gov</u>. Mr. Lyons' role will be to evaluate materials from your appeal and formulate a recommendation for consideration by the Utah Wildlife Board.

There are some basic elements to include in your appeal (jurisdictional basis, relief sought, facts and reasons supporting your position, etc.). Mr. Lyons can help answer questions relating to the process and filing requirements.

Thank you, Greg

Attachment 9

See separate Hearing Examiner submission containing depredation claim valuation spreadsheets

Attachment 10

Eskelsen Orchards, LLC

2065 S. Eskelsen Lane Perry, UT 84302 (240) 460-1115

2020-21 Big Game Depredation Claim May 24, 2021

(As revised August 3, 2021)

Tree Variety	Age of Tree	Value/Tree	Number of Killed Trees	Total
Apricot	1 yr. (planted April 2020)	\$31.09	141	\$ 4,383.69
Pluots	1 yr. (planted April 2020)	\$57.15	88	\$ 5,029.20
Nectarines	1 yr. (planted April 2020)	\$21.84	31	\$ 67.04
			250	\$ 10,089.93

Attachment 11

Eskelsen Orchards, LLC

2065 S. Eskelsen Lane Perry, UT 84302 (240) 460-1115

2020-21 Big Game Depredation Claim May 24, 2021

Tree Variety	Age of Tree	Value/Tree	Number of Killed Trees	Total
Apricot	1 yr. (planted April 2020)	\$65.99	141	\$ 9,304.59
Pluots	1 yr. (planted April 2020)	\$124.30	88	\$10,938.40
Nectarines	1 yr. (planted April 2020)	\$63.76	31	\$ 1,976.56
			250	\$ 22,219.55

Attachment 12

Eskelsen Orchards Tree Count Upper North Orchard FINAL FY 2020 - 2021

Upper Orchard

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
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			В	Ν	Е						В				Ν					
			В	В	D	R				D		В								
5			<u> </u>	В	Е			D			В				Е					
		Е		D	Е				S						Е		R		Ν	
		D			D		N	В			E	Е		E	E	R	R	N	В	
		D			D							N			E/R	D	R	N/R	N	N/R
	N	D		N	N							N	R		В	N/R				
10		В											E			R		N		
		D		N	N															
		В		N	N		N						R		В	N			N	R
		R		N/B	N			N					R	R	В				N/R	
		E/R		В	В			В					В		N	N			N/R	N
15											R/B	R	В		Χ	N		R	N	
				N				E	N	В		В			N/R					
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------ Apricots ------

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1		N		Ν	N	R	N/B	D	Ν	N	N	N	D	Е	E	Χ	Х	Χ	N/R	R
		N	N	Ν		N			Ν					N				R	N	
		N		Ν		N				Ζ				D		Ν	Ν	Ν	N	
					Ν			В					R	R			R			
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		R	R		R							N								
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10							R	N						N					R	
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		R		Ν									R		N					
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25		N	N	R					N			Χ	R							
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35					Ε		N		R											
			N		N		N/R		R											
				N			R													
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40							N													
								E												

------ Apricots ------

	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
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									Χ	Χ	N	Е	Е	D	D	N	D	N		N
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									Χ	В		N	N	Ε	N	N	N	N		N
5			R						Χ		Ε	Ε	N	Ε	N		Ε	N	N	N
			R			N			В	В	Χ	Х	N	N	R	Ε	D	N	N	R
					N	Χ			В	В	N		N	Ε	N	N	D	N		N
					R	Х			D	В			R	R	N	Е	D	N	D	D
					R	Х		Х	Х		Х	Е	N	R	N	N	D	N		N
10				В	R	R	N		Х	Χ	R	N	Х	Χ	R	D	Е	Ν		N
		Χ				N	R			D	R	N	R	N	R	N	D	Ν	N	Е
		D			R	Χ		D	Х	Χ	N	D	R	N	N		D	N	N	Е
					R	Ε	Х	Х	D	Χ	Е	Е	R	N	N		D	N		N
			R	R			D	Х	R		Е	R	Е	Е			D	N		N
15					Х	Χ		Х	D		R	R	R	N			D	N		N
					Х	Χ		Х	R		R	E	R	N	N	N	D	N		N
			Χ				Х				Е	D	N	N	N		D	N		R
			D	Χ	Х	Χ		Χ			R	R	Ν	Ν			Х	Ν	R	N
			Χ	Χ				Χ			N	D	N	Ν	R	N	D	Ν	R	N
20				Χ		Χ	N	Χ	D		Ε	N	Ν	Ζ	Ζ		D	R	N	N
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25		D	Χ	Χ	Ε	Χ	N	N	Χ		N	Е	Ε	Ν	Ε	R	Χ	Ν	N	N
		N	Χ	Χ	Χ	N		D	Χ		Χ	Ε	Ε	R	Ε	N	Χ	N	N	N
		N		Χ		Ε		D	Χ		Ε	Ε	Ε	N	R	N	D	N	R	N
				Χ			Χ	D	Χ		Χ	Е	Ε	Ε	Ε	N	D	N	N	N
					Χ	D	D	Χ	Χ		N	E	Ε	Ε	Ε	Ε	D	N	R	R
30			D		Χ	D	D	D	N		N	E	R	R	Ε	N	D	N	N	N
			D	R		D	Х	Х	D		E	E	E	R	E	N	D	E	N	D D
		D	D			D	Х	Χ	Х		D	Е	N	R	R	N	Е	N	N	Е
					Е	Х	Х	Х	Х		N	Е	Ε	Ε	N	N	D	N		Ε
				Χ		Χ	D	D	Х		Е	Е	Е	N	Ε	N	D	N	N	Ε
35				Χ	Ε	Χ	Х				Е	Е	Е	Ε	R	N	D	N	N	N
				Χ	N	Х					Е	Е	Е	N	Χ	N	D	Е	N	N
				Χ		Χ			Х		Е	Е	Е	N	D			Е	N	Е
												E						Е		Е
																		Е	N	Е
40																		Ε	Х	Ε
																		Ν	Х	
																		Ε		

------ Plums ------ Pluots ------

	61	62	63	64	65	66	67	68	69	70	71
1	E	02	05	07	03	00	07	00	03	70	7 1
_	N										
	N										
	N	N	N								
5	N	IN	N	E				N		E	
3	R		N	E		N	N/R	N	N	N	
	N	N	N	N		N	N N	IN	N	N	
								N.I			
	N	X	N N/D	E		N	N	N	N	N	
10	N	E	N/R	N		N	N	N	N	N	
10	N	N	N/B	N		N	N	N	N	N	
	N	N	N	N		N	N	N	N	N	
	N		N	N		N	N		N	N	
	N		N	N		N	N		N	N	
	N			Е		N	N	N	N	N	
15	N	N	N	N		N	N		N	E	
	N			D		Е	N	N	N	N	
	N		N	N/B		N	N	N	N	N	
	N	N/R	N	E		Ε	N	N	N	N	
	N		N	N		N	N	Ν	N	N	
20	N		N	N		Ε	N	N	N	N	
	N		N	N		Ε	N	N	N	N	
	N	N	N	E		N	N		N	E	
	E	N	Ν	Ν		D	N	Ν	N	E	
	N	N	Ν	Ν		Ε	Ν	Ν	N	N	
25	N	N	Ν	Ν		Ε	Ν	Ν	N	E	
	N	N	Ν	Ν		Ε	N/B	Ε	N	E	
	Ε		Ν	E		N	Ν	Ε	N	Ε	
	N	N	N	E		N	N	Ν	N	N	
	N		N	N		N	N	N	N/R	Ε	
30	N	N	N	E		Ε	N	N	N/R	N/R	
	N	N	N	E		R	N		N	E	
	N	N	N	D		Е	N	N	N/R	Е	
	N			E		R	N	Е	N	Е	
	N	N	N	E		В	E	E/R	N	N	
35	N	N	N	R		R	R	R	E	E	
	N	N		N		Ε	N	R	N	E	
	Х	N	N	N		Е	Е	R	N	R	
			N	N		Е	N	R	N	Е	
				E		Е	R	N	N	D	
40						Е	Е				
				Dluote							

------ Pluots ------

Eskelsen Tree Listing -Deer Depredation Chart 2020-21 Lower North Orchard

	1	2	3	4	5	6	7	8	9	10
	Х									
	Х									D
5								Z		
					В					
	D									
									N	
	D									
10										
								R		
14		D								
20										
20										
		D								
26	Х	R X								
20	X	<u>^</u>								
28	^	^	В							
20			ט							

----- Nectarines

Eskelsen Tree Listing -Deer Depredation Chart 2020-21 - Lower South Orchard

	1	2	3	4	5	6	7	8	9	10
		D		Х		В	Х	Х	Х	Χ
	Х				D		Х	Х	Х	Χ
	N	D			N	В	В	Х	Х	Χ
		D	D	Ν			D	Х	Х	Х
5		В	D	R		D	D	D	Χ	Χ
				R		D		D	Χ	Χ
		D		D					Χ	Χ
	D	D		В		D	R		Х	Χ
				R		В				
10						D		R		D
	R	В				В	D			D
	R									
					D	N				
					R					D
15				В						
			В							
							В			R
				D			D			D
20										В
					D					
					D					
		D				В				
							D			
25							D			
							D		D	
					Χ		Х	Χ	D	
28	Χ		D		X	Χ	Χ	Χ	Χ	

----- Nectarines -----

<u>KEY</u>

B = broken (tree has been broken off by animal activity to the point that death or significant compromise likely)

D = Dead (tree has been killed or is so damaged that likely to die or be significantly compromised)

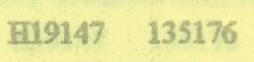
N = Nibbled (significant animal nibbling on branches; likely to recover)

R = rubbed (significant animal antler rubbing to the point that death or significant compromise likely)

X = missing (tree missing from expected location; likely no tree planted or tree lost through problem planting or irrigating)

Green = space empty; Red = killed by animal; Yellow = killed by equipment, drought, other

Attachment 13



13 Out-of-State

DELIVERY DATE

A CALIFORNIA CORPORATION

HICKMAN OFFICE

PO BOX 429

HICKMAN, CALIFORNIA 95323

PHONE (209) 874-1821

WHOLESALE

PO BOX 429

HICKMAN, CALIFORNIA 95323

PHONE (209) 874-1821

DAYS OF DATE OF INVOICE. PAST DUE ACCOUNTS ARE SUBJECT TO A LATE CHARGE OF TERMS: THIS INVOICE IS TO BE PAID IN FULL WITHIN

18 %) ON THE UNPAID PAST DUE BALANCE. IF SUIT IS FILED TO COLLECT THIS 1.5 % PER MONTH (ANNUAL PERCENTAGE RATE OF

DEBT OR ANY PART THEREOF, THE PURCHASER AGREES TO RAY ADDITIONAL SUMS ADJUDGED REASONABLE BY THE COURT FOR ATTORNEY'S FEES.

SOLD

TO:

Eskelsen Orchards, LLC *PR* Jordan Riley

FARMER PROVEN

SINCE 1938

4011 Glenridge Street Kensington MD 20895 CUST. ACCT. NO.

ESKORC

INVOICE DATE P.O. NO.

BRANCH

10

DEL. REC. NO.

SHIPPED

TO

	Ebony Rose not available.	ITEM #	COLUBCE	CIZE	PRICE		AMOUNT
QUANTITY	PRODUCT	ITEM #	SOURCE	SIZE	PRICE		AMOUNT
1	Cold Storage	10293	W51	No. 1	215.00 N		215.00
15	Amigo II Pluot 'R' LS. Plum on Citation		W51	1/2"	8.40		126.00
	Variety Royalty 3.00 + Rtsk Royalty	= 3.00					45.00
20	Amigo II Pluot 'R' LS. Plum on Citation	10042	W51	3/8"	8.25		165.00
	Variety Royalty 3.00 + Rtsk Royalty	= 3.00					60.00
8	Candy Heart Pluerry 'R' LS. Plum on Lovell	14862	W51	1/2"	8.40		67.20
	Variety Royalty 3.00						24.00
20	Candy Heart Pluerry 'R' LS. Plum on Lovell	14862	W51	5/8"	8.55		171.00
	Variety Royalty 3.00						60.00
7	Candy Heart Pluerry 'R' I.S. Plum on Lovell	14862	W51	3/8"	8.25		57.75
	Variety Royalty 3.00						21.00
6	Crimson Rose Pluot 'R' LS. Plum on Citation	Control of the second	W51	3/8"	8.25		49.50
	Variety Royalty 3.00 + Rtsk Royalty	= 3.00		200			18.00
29	Crimson Rose Pluot R' LS. Plum on Citation	14316	- 11	3/16"	8.00		232.00
	Variety Royalty 3.00 + Risk Royalty	= 3.00		1 100	0.10		87.00
35			W51	1/2"	8.40		294.00
100	Variety Royalty 3.00 + Rtsk Royalty	= 3.00	W51	5/8"	0.00		105.00 179.55
21	Dapple Fire Pluot 'R' LS. Plum on Citation	7628		210	8.55		63.00
	Variety Royalty 3.00 + Rtsk Royalty	= 3.00 7628	W51	1/2"	8.40		117.60
14	Dapple Fire Pluot 'R' LS. Plum on Citation	1020	A4 77	116	0.40		117.00
						AMOUNT	
						SALES TAX	
						LESS DEP. PAID	
						TOTAL	
	Discounts will be reduced by 3% for pa	auments vi	a credit	card			

Discounts will be reduced by 3% for payments via credit card

ORDER NUMBER-INVOICE NUMBER
H19147 135176

DELIVERY DATE

13 Out-of-State

A CALIFORNIA CORPORATION

HICKMAN OFFICE

PO BOX 429

HICKMAN, CALIFORNIA 95323 PHONE (209) 874-1821

THIS INVOICE IS TO BE PAID IN FULL WITHIN

WHOLESALE

PO BOX 429

HICKMAN, CALIFORNIA 95323

PHONE (209) 874-1821

DAYS OF DATE OF INVOICE. PAST DUE ACCOUNTS ARE SUBJECT TO A LATE CHARGE OF

1.5 % PER MONTH (ANNUAL PERCENTAGE RATE OF 18 %) ON THE UNPAID PAST DUE BALANCE. IF SUIT IS FILED TO COLLECT THIS DEBT OR ANY PART THEREOF, THE PURCHASER AGREES TO PAY ADDITIONAL SUMS ADJUDGED REASONABLE BY THE COURT FOR ATTORNEY'S FEES.

30

SOLD

TERMS:

TO:

Eskelsen Orchards, LLC *PR*
Jordan Riley
4011 Glenridge Street
Kensington MD 20895

CUST. ACCT. NO.

ESKORC

INVOICE DATE

3/17/2020

P.O. NO.

BRANCH 10

DEL. REC. NO.

SHIPPED

TO

Y	Ebony Rose not available.	10)					
QUANTITY	PRODUCT	ITEM #	SOURCE	SIZE	PRICE		AMOUNT
	Variety Royalty 3.00 + Rtsk Royalty	= 3.00					42.00
35	Festival Red Pluot 'R' I.S. Plum on Citation	14082	W51	5/8"	8.55		299.25
186	Variety Royalty 3.00 + Rtsk Royalty	= 3.00					105.00
35	Festival Red Pluot 'R' LS. Plum on Citation	14082	W51	5/8"	8.55		299.25
	Variety Royalty 3.00 + Rtsk Royalty	= 3.00					105.00
35	Flavor Blast Plumcherry L.S. Plum on Citation	14036	W51	1/2"	8.40		294.00
	Variety Royalty 3.00 + Rtsk Royalty	= 3.00					105.00
35	Flavor Fusion Pluot 'R' LS. Plum on Citation	13051	W51	5/8"	8.55		299.25
	Variety Royalty 3.00 + Rtsk Royalty	= 3.00					105.00
35	Flavor Gem Pluot 'R' LS. Plum on Citation	5928	W51	5/8"	8.55		299.25
	Variety Royalty + Rtsk Royalty	ma					
35	Flavor Grenade Pluot 'R' LS. Plum on Citation	6940	W51	5/8"	8.55		299.25
	Variety Royalty 3.00 + Rtsk Royalty	= 3.00					105.00
35	Flavor King Pluot 'R' LS. Plum on Citation	2433	W51	1/2"	8.40		294.00
*	Variety Royalty + Rtsk Royalty	Pages 1					
35	Flavor Queen Pluot 'R' LS. Plum on Citation	2449	W51	1/2"	8.40	and and	294.00
	Variety Royalty + Rtsk Royalty	Tinne Stant					
35	Flavor Supreme Pluot 'R' LS. Plum on Citation	2464	W51	1/2"	8.40		294.00
	Variety Royalty + Rtsk Royalty	=					
35	Honey Punch Pluot 'R' I.S. Plum on Citation	10831	W51	5/8"	8.55		299.25
						AMOUNT	
						SALES	
						TAX	
						LESS DEP. PAID	
						TOTAL	
			415			IOIAL	
	Discounts will be reduced by 3% for pa	yments via	credit	card			

ORDER NUMBER-INVOICE NUMBER H19147 135176

DELIVERY DATE

Out-of-State

A CALIFORNIA CORPORATION

HICKMAN OFFICE

PO BOX 429

HICKMAN, CALIFORNIA 95323 PHONE (209) 874-1821

WHOLESALE

PO BOX 429

HICKMAN, CALIFORNIA 95323

PHONE (209) 874-1821

THIS INVOICE IS TO BE PAID IN FULL WITHIN DAYS OF DATE OF INVOICE. PAST DUE ACCOUNTS ARE SUBJECT TO A LATE CHARGE OF

1.5 % PER MONTH (ANNUAL PERCENTAGE RATE OF %) ON THE UNPAID PAST DUE BALANCE. IF SUIT IS FILED TO COLLECT THIS

DEBT OR ANY PART THEREOF, THE PURCHASER AGREES TO PAY ADDITIONAL SUMS ADJUDGED REASONABLE BY THE COURT FOR ATTORNEY'S FEES.

SOLD

TERMS:

TO:

Eskelsen Orchards, LLC *PR* Jordan Riley 4011 Glenridge Street

Kensington MD 20895

Rhany Rose not available

CUST. ACCT. NO. INVOICE DATE

ESKORC

P.O. NO.

BRANCH

10

DEL. REC. NO.

SHIPPED

TO

	Ebony Rose not available.		11/	DENERGY PAR			
QUANTITY	PRODUCT	ITEM #	SOURCE	SIZE	PRICE		AMOUNT
	Variety Royalty 3.00 + Rtsk Royalty	= 3.00				4	105.00
35	Ruby Kat Pluot 'R' LS. Plum on Citation	10860	W51	3/4"	8.70		304.50
	Variety Royalty 3.00 + Rtsk Royalty	= 3.00					105.00
35	Sweet Pixie 2 Plumcherry I.S. Plum on Citation	14032	W51	5/8"	8.55		299.25
	Variety Royalty 3.00 + Rtsk Royalty	= 3.00		17.2			105.00
35	Sweet Treat Pluerry 'R' LS. Plum on Citation	14796	W51	5/8"	8.55		299.25
	Variety Royalty 3.00 + Rtsk Royalty	= 3.00					105.00
665	Freight Charge	7612	W10	No. 1	0.22 N		146.30
35	Emerald Beaut Plum on Citation	2298	W51	1/2"	8.40		294.00
	Variety Royalty + Rtsk Royalty	==					
		mary recording	est per to a	Constitution Street	a - nabel and		Company of the second
							7 450 40
	CA FRUIT TREE, NUT TREE AND GRAPE				00.00	AMOUNT	7,459.40 70.98
	ASSESSMENT (1% BY LAW) BASED O	NPUKCE	LASES	OF \$7,0	- 00.80	SALES	
						TAX LESS	0.00
	IF YOUR ACCOUNT IS NOT PAID	WITHIN T	CERM	S.		DEP. PAID	0.00
	**DISCOUNT AMOUNT OF \$0.0	00 WILL	BE CI	HARGED		TOTAL	7 520 20
							1000.00

Discounts will be reduced by 3% for payments via credit card



THE

STATEMENT

BURCHELL

12000 Highway 120 NURSERY Oakdale, CA 95361 phn: (209)845-8733

Eskelsen Orchards LLC 4011 Glenridge Street Kensington, MD 20895

ACCOUNTS 9281	03/25/2020	7898.52
If you wish to charge your pa VISA MASTER Cardholder Name	lyment, please complete the inf	ormation below:
Security code Signature	Expires [
Payable to: The Burch	ell Nursery Inc	AMOUNT PAID

Address change:

To insure proper credit, please return top portion with payment. (cut on line below)

	DATE	CD	P DR=debit memo	CR=credit memo BF=bal forward P=payment	DA=discount allow FC=fir	nance charge
1	02/17/2020 03/18/2020 03/24/2020	I P	20106900 3287 20106902	19,598.52 5,000.00-	7,898.52 .00 .00	7,898.52 7,898.52 7,898.52 7,898.52

pd 1/1064 4/14/20 47,898.52

deposits

0-30day

31-60day 7,898.52

61-90day

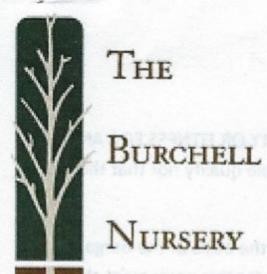
over90 .00

total 7,898.52

Billing: (209)845-8733

The Burchell Nursery, Inc 12000 Hwy 120

Oakdale, CA 95361



THE

INVOICE #: 1069

Oakdale Office - 12000 Hwy.120 Oakdale, CA 95361-8887

(209) 845-TREE (8733) Nursery

INC.

Fresno Office - 6705 S. Clovis Ave Fowler, CA 93625-9616 (559) 834-1661

Customer #: 9281

Eskelsen Orchards LLC SOLD TO: 4011 Glenridge Street

Kensington MD 20895

FILE COPY

1 of 2

CHARGE INV DATE: 02/17/20

CALIFORNIA NURSERY STOCK CERTIFICATE FOR INTERSTATE AND INTRASTATE SHIPMENTS No. B4863.001

This plant material or nursery or premises from which this shipment was made has been inspected and found free from especially injurious plant pests and disease symptoms.

THIS SHIPMENT NEED NOT BE HELD FOR INSPECTION IN CALIFORNIA

Issued by: Stanislaus County Agricultural Commisioner California Department of Food and Agriculture 1220 N. Street, Sacramento, CA 95814 66-119 (2-120)

SHIP Eskelsen Orchards LLC

2065 S 100 W TO:

> 2065 S. Eskelsen Lane Perry UT 84302

TERMS: NET CASH. INTEREST of 1% per month (ANNUAL PERCENTAGE RATE of 12%) will be charged on past due accounts.

QTY			DESCRIPTION	SIZE	PRICE	AMOUNT	
244	253	30	GOLDEN SWEET APRICOT ON LOV	Replant	3/8"	7.550	1,842.20
31	253	30	GOLDEN SWEET APRICOT ON LOV	Replant	3/4"	7.950	246.45
110	253	30	GOLDEN SWEET APRICOT ON LOV	Replant	1/2"	7.700	847.00
115	253	30	GOLDEN SWEET APRICOT ON LOV	Replant	5/8"	7.850	902.75
191	257	30	PATTERSON APRICOT ON LOV	Replant	3/4"	7.950	1,518.45
94	257	30	PATTERSON APRICOT ON LOV	Replant	5/8"	7.850	737.90
15	257	30	PATTERSON APRICOT ON LOV	Replant	3/8"	7.550	113.25
64	257	45	PATTERSON APRICOT ON NEM	Replant	5/8"	7.750	496.00
1	257	45	PATTERSON APRICOT ON NEM	Replant	3/4"	7.850	7.85
135	257	45	PATTERSON APRICOT ON NEM	Replant	1/2"	7.600	1,026.00
4	262	45	ROBADA APRICOT ON NEM	Replant	1/2"	7.700	30.80
64	262	45	ROBADA APRICOT ON NEM	Replant	3/8"	7.550	483.20
12	262	45	ROBADA APRICOT ON NEM	Replant	5/16"	7.250	87.00
53	262	30	ROBADA APRICOT ON LOV	Replant	5/8"	7.850	416.05
67	262	30	ROBADA APRICOT ON LOV	Replant	3/4"	7.950	532.65
53	251	45	BLENHEIM APRICOT ON NEM	Replant	1/2"	7.700	408.10
165	251	45	BLENHEIM APRICOT ON NEM	Replant	3/8"	7.550	1,245.75
51	251	45	BLENHEIM APRICOT ON NEM	Replant	5/16"	7.250	369.75
15	251	45	BLENHEIM APRICOT ON NEM	Replant	1/4"	7.000	105.00
112	1129	30	BN7 (C7.053) NECTARINE ON LOV	Replant	1/2"	7.600	851.20
188	1129	30	BN7 (C7.053) NECTARINE ON LOV	Replant	3/8"	7.450	1,400.60
158	1127	30	BN15 (E4.050) NECTARINE ON LOV	Replant	5/8"	7.750	1,224.50
142	1127	30	BN15 (E4.050) NECTARINE ON LOV	Replant	1/2"	7.600	1,079.20
45	441	30	SUPREME RED #1 NECTARINE ON LOV	Replant	1/2"	7.600	342.00
205	441	30	SUPREME RED #1 NECTARINE ON LOV	Replant	5/8"	7.750	1,588.75
2,334		5	SHIPPING CHARGE	OUR REPLACEMEN		.300	700.20

Please Note!

HEEL IN TREES PROMPTLY IN WELL DRAINED LOCATION. DIG TRENCH AND COVER ROOTS WITH FINE MOIST SOIL - WATER THOROUGHLY - PACK FIRMLY

IMPORTANT DISCLAIMER OF WARRANTIES IS ON THE REVERSE SIDE AND IS AN INTEGRAL PART OF THIS AGREEMENT.

Discount on June Buds Grown to Order

slsm: SHIP/GERRY

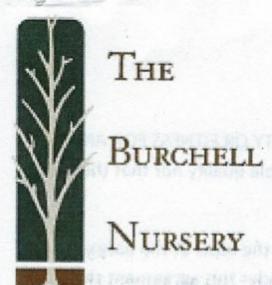
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INVOICE #: 1069

Oakdale Office - 12000 Hwy 120 Oakdale, CA 95361-8887 (209) 845-TREE (8733)

Nursery

Fresno Office - 6705 S. Clovis Ave. Fowler, CA 93625-9616 (559) 834-1661

Customer #: 9281

Eskelsen Orchards LLC SOLD TO: 4011 Glenridge Street

Kensington MD 20895

FILE COPY

2 of 2

CHARGE INV DATE: 02/17/20

CALIFORNIA NURSERY STOCK CERTIFICATE FOR INTERSTATE AND INTRASTATE SHIPMENTS No. B4863.001

This plant material or nursery or premises from which this shipment was made has been inspected and found free from especially injurious plant pests and disease symptoms.

THIS SHIPMENT NEED NOT BE HELD FOR INSPECTION IN CALIFORNIA

Issued by: Stanislaus County Agricultural Commisioner California Department of Food and Agriculture 1220 N. Street, Sacramento, CA 95814 66-119 (2-120)

Eskelsen Orchards LLC SHIP

2065 S 100 W

2065 S. Eskelsen Lane Perry UT 84302

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DIVISION'S RESPONSE TO PETITIONER'S REQUEST FOR AGENCY ACTION



State of Utah

DEPARTMENT OF NATURAL RESOURCES

BRIAN C. STEED Executive Director

Division of Wildlife Resources

J. RORY REYNOLDS Interim Division Director

August 13, 2021

DIVISION OF WILDLIFE RESOURCES ASSESSMENT TODD ESKELSEN DEPREDATION COMPENSATION

Mr. Todd Eskelsen ("Mr. Eskelsen") seeks reimbursement for alleged big game damage to Apricot, Pluot, and Nectarine trees pursuant to U.C.A. §§ 23-16-3 and 4. This summary provides the basis for the Utah Division of Wildlife Resources' ("Division") assessment of damages for review by an independent hearing officer. The hearing officer should accept the Division's calculation of damages for the following reasons: (1) The Division's assessed value is based on the best estimate of actually-incurred damages for the current year, as required by statute and rule; (2) the model Mr. Eskelsen proposes to predict future values is speculative and unreliable; and (3) the proposed predictive model uses variables that are not allowed by statute and exceeds the 1-year damage calculation time period established in rule.

1. The Division's estimate of big game damage is based on documented damages that were actually incurred and is therefore the most accurate.

In response to Mr. Eskelsen's complaints of big game damage to his recently planted orchard, the Division timely responded to assess and mitigate damage caused by big game. Mr. Eskelsen and the Division agreed to delay calculating total damages until spring, with the understanding that big game damage had to be properly documented. When Mr. Eskelsen renewed his 72 hour notice and the Division responded to assess damage, the Division was unable to inventory the alleged damage to orchard trees because Mr. Eskelsen had already removed and replaced the seedlings, referred to as "whips" in the orchard business. ¹ Instead, Mr. Eskelsen produced a map of his orchard, indicating trees that had been "killed by animal", as well as other causes – such as being damaged by equipment, drought, planting complications, or poor irrigation.² Without a physical evaluation of the damaged orchard trees, DWR, the hearing officer, and ultimately the Wildlife Board, are left with the assertions of Mr. Eskelsen and his unverifiable spreadsheet as to the number of trees damaged and the actual cause of the damage. This scenario makes it near impossible to validate damage claims from landowners and is one reason why Utah Code requires a landowner immediately notify DWR of damage incurred by big game. U.C.A. §23-16-3(1).

Nevertheless, the Division attempted to assess damage caused by big game. The Division may compensate landowners or lessees for damage to cultivated crops caused by big game animals based on the full replacement value in the local market for crops actually damaged or will be

² See Eskelsen Attachment "Eskelsen Orchards FY 2020-21 Deer Depredation Tree Survey



¹ A "Whip" is a very young tree – essentially a seedling.

damaged. U.C.A. §23-16-4(1) & (3). "For the purposes of compensation, all depredation incidents end on June 30 annually, but may be reinstated July 1." R657-44-5(b).³ This is referred to as the "damage incident period." R657-44-2(2)(d).

The Division's assessment of damages is as follows:

	# of Trees	Cost per tree	Storage	Shipping	Planting	Removal	Replant	Total
Apricot	141 x	(\$8.40 +	\$1.50 +	\$1.50 +	\$1.35 +	\$1.35 +	\$1.35)	\$2,178.45
Pluot	88 x	(\$10.61 +	\$1.50 +	\$1.50 +	\$1.35 +	\$1.35 +	\$1.35)	\$1,554.08
Nectarine	31 x	(\$7.63 +	\$1.50 +	\$1.50 +	\$1.35 +	\$1.35 +	\$1.35)	\$455.08
								\$4,187.61

The Division valued the damages at \$4,187.61 for the FY20 damage incident period based off of the receipt provided by Mr. Eskelsen for the purchase, storage, and shipping of replacement trees.⁴ This is a generous offer, considering that the Division over-credited Mr. Eskelsen for shipping and cold storage costs above those costs actually incurred by approximately \$320.⁵

Based on the information available, this is the most accurate estimate and should be the value recommended to the Wildlife Board by the hearing officer.

2. Mr. Eskelsen's use of predictive model to estimate damages is speculative and relies on unverifiable data parameters.

Mr. Eskelsen proposes using a predictive model that estimates lost future yields from perennial orchard trees that have yet to produce any fruit. This model incorporates a series of variables to estimate a future condition and is based on a series of assumptions. Some variables are static, such as tree cost, but some are estimates or guesses. If a variable is changed, the outcome of the model (assessed value of fruit trees) also changes. Therefore, the outcome of the model is only as good as the data that is input into it. Based on how variables are changed in the model, the assessed values range wildly, from Mr. Eskelsen's initial proposal of \$22,219.55,6 down to Dr. Brad Geary's initial third party valuation of \$8,603.77, which was later reduced to \$7,336.02.7

³ Compensation for damages is limited to a fiscal year because anticipating and calculating future damages are too speculative. Therefore, the Division limits compensation to what was actually lost between July 1 and June 30 of a given year.

⁴ See Todd Eskelsen Tree Replacement Calculations DWR.pdf.

⁵ See 2020 Burchall & Wilson Nurseries Invoice Charges.pdf

⁶ See Tree Loss copy 2020 v3 eskelsen (1).xlsx

⁷ See Brad Geary Email Explanation.pdf.

The wide-ranging outcomes of the model shows how unreliable it is without more concrete data inputs.

For example, the Division reviewed Mr. Eskelsen's evaluation and determined that he overvalued shipping, stump removal, and planting costs. Dr. Brad Geary concurred, and also believed that Mr. Eskelsen overvalued estimated future yields, especially given that no actual yield information or sales information from this particular orchard or grower was available, and no information neighbors or similar orchards was provided. A final point of contention was the use of a 20-year cumulative value of reduced fruit production. Values assigned to many of these variables are guesses or are drawn from noncomparable sources, such as estimated yields from different kinds of fruit. Yields could be affected by any number of factors – disease, late frost, irrigation complications, wind or hail damage, market value fluctuations, and others. There is no way to standardize what future yield will be, especially when no historic yield information is available for this orchard. The model attempts to account for this variability by utilizing a lower the yield value of every third year, but this yet again another best guess. Conclusions from a model are only as good as the data entered into it.

3. The use of a predictive model is inconsistent with statute and administrative rule.

The Division is directed in statute to calculate a damage payment by considering, among other things, the extent of the damage experienced. U.C.A. §23-16-4(3). Specifically, the Division determination shall be based on "full replacement value in the local market of the cultivated crops that actually have been or will be damaged or consumed by big game animals; and cost of delivery of a replacement crop to the location of the damaged crop or other location that is not farther from the source of the replacement crop." U.C.A. §23-16-4(3)(c). That is precisely what the Division did, as outlined in Subsection 1 above. The predictive model goes beyond this directive and attempts to add lost future yields as an additional element of compensation. Lost future yield is not an element identified in the statute.

Second, the Division's Big Game Depredation rule defines the time period for each round of big game damage compensation as a one-year time period, running July 1 to June 30 annually (i.e. the damage incident period). See R657-44-2(2)(d). Simply put, the Division compensates for big game damage on an annual basis. R657-44-5(2). Using a model that incorporates estimated costs and revenues well into the future – whether 20 years out based on Mr. Eskelsen's proposal or 6 years out based on Dr. Brad Geary's assessment – considers materials outside of the damage incident period and is inconsistent with that rule.

Page 4 August 13, 2021

Conclusion

The Division's offer of \$4,187.61 is the most accurate estimate of damages incurred given the complicated set of factors involved – and is generous at that. Mr. Eskelsen's proposal to utilize a predictive model is fraught with speculation and variability. Requiring the Division to compensate for future lost yield in this speculative manner may stretch the Division's already limited depredation budget. See U.C.A. §23-16-4(4). If statewide claims exceed the Division's legislatively approved budget, other livestock and agricultural producers may see their verifiable claims pro-rated. Lastly, the predictive model utilizes data inputs for lost future yields, which goes beyond what is allowed for in statute, and exceeds the 1 year compensation time period established in administrative rule.

For these reasons, we urge the hearing officer and Wildlife Board to adopt the Division's assessment of big game damage.

Greg Hansen

August 13, 2021

Counsel, Division of Wildlife Resources

PETITIONER'S MOTION TO STRIKE THE DIVISION'S RESPONSE

Eskelsen Orchards' Motion to Strike the Division of Wildlife Management Resources' Late Filing

To: Charles Lyon, Hearing Examiner

calyons@agutah.gov

CC: Greg Hansen, Assistant Attorney General, Utah Division of Wildlife Resources

greghansen@agutah.gov

Chad Wilson, Utah Department of Wildlife Resources Coordinator

chwilson@utah.gov

From: Todd R. Eskelsen, Member, Eskelsen Orchards, LLC

teskelsen@eskelaw.com

Date: August 18, 2021

DWR File Number for Claim: Unknown

Statement of Legal Authority and Jurisdiction

Eskelsen Orchards, LLC, a Utah limited liability company with apricot, nectarine and pluot orchards in Perry, UT ("Eskelsen Orchards"), hereby submits this motion to strike the Division of Wildlife Management Resources' Late Filing pursuant to Utah Admin. Code R657-2-8.

Statement of Relief Sought or Action Sought from Agency

Eskelsen Orchards hereby requests the Utah Wildlife Board (the "Board") to strike the filing entitled "Division of Wildlife Resources Assessment Todd Eskelsen Depredation Compensation" that was sent by the Utah Division of Wildlife Resources (the "DWR") to Charles Lyon, Hearing Examiner (the "Hearing Examiner"), with a copy to the undersigned (and others) on Friday, August 13, 2021 at 12:55 pm (the "DWR Filing") because such filing was filed one week past the deadline established by the Hearing Examiner for such filing.

If this Motion to Strike is granted and the DWR's Filing is stricken, the only evidence in the record as to the valuation of the loss suffered by Eskelsen Orchards during 2020-2021 due to big game depredation would be the valuation model developed by Eskelsen Orchards and submitted in its Request for Agency Action (the "RAA"). Accordingly, the Wildlife Board should grant Eskelsen Orchards \$10,089.93, the full amount of its requested full replacement value for big game depredation of stone fruit crops.

Statement of Facts

1. As more fully outlined in its Request for Agency Action filed in this matter, Eskelsen Orchards has filed and pursued a compensation claim for big game depredation for damage done to the orchards owned by Eskelsen Orchards in Perry, UT (the "Eskelsen Claim"). Eskelsen Orchards has cooperated with the DWR before and throughout the proceedings related to the Eskelsen Claim, participating in on-going correspondence with the DWR about the big game depredation; submitting a 72-hour notice letter as required by statute and DWR regulations; accepting and participating in a depredation remediation

archery hunt; requesting fencing materials; allowing DWR personnel regular access to Eskelsen Orchards' property for deer counting and hazing; and meeting with DWR representatives on multiple occasions. Eskelsen Orchards also hosted DWR representatives and Professor Bradley Geary of Brigham Young University, the outside valuation consultant agreed to between the parties, at the Eskelsen Orchards to inspect the damages caused by the depredation, including viewing damaged trees retained by Eskelsen Orchards and spot checking the tree survey prepared by Eskelsen Orchards that identified the locations of trees damaged by big game.

- 2. On June 6, 2021, Eskelsen Orchards filed its written claim with DWR (with a copy to Prof. Geary) and provided detailed information about the damage done by big game, including a summary of the claim, an Excel valuation model supporting its valuation of such damage and copies of tree purchase invoices. Eskelsen Orchards subsequently answered Prof. Geary's questions about the claim and the Excel valuation model. On June 15, 2021, Eskelsen Orchards received an e-mail from DWR which purported to be DWR's response to Eskelsen Orchards' claim. DWR's email simply offered a total of \$4,187.61 for the damage to Eskelsen Orchards but provided no further explanation or discussion of how it was "responding" to the claim. DWR's June 15 email also stated DWR "will be in contact with you to review [Professor Geary's] assessment" once it was made available. This single e-mail was, until the DWR Filing, the only substantive response provided by DWR to Eskelsen Orchards on the Eskelsen Claim.
- 3. On June 29, 2021, Eskelsen Orchards finally received Prof. Geary's determination of value of the Eskelsen Claim. Within twenty-four hours of receipt of that e-mail, Eskelsen Orchards had contacted Prof. Geary to discuss certain inaccuracies in Prof. Geary's valuation, and, because of the short deadline imposed by DWR, submitted a written document explaining such problems and requesting time to discuss and resolve the valuation or, in the alternative, appealing the valuation. No further discussion was ever offered by DWR. Rather, weeks later DWR informed Eskelsen Orchards that the Eskelsen Claim would be evaluated by the Wildlife Board and notified Eskelsen Orchards that the Hearing Examiner had been appointed, setting up the current process.
- 4. On July 27, 2021, the Hearing Examiner sent an e-mail to Eskelsen Orchards (copied to the DWR) (the "Hearing Procedures E-mail"), that required Eskelsen Orchards to submit a formal Request for Agency Action, with accompanying memoranda/exhibits in support. The Hearing Procedures E-mail went on to state that "[o]nce this RAA is received, DWR should file a Response with similar memoranda/exhibits in support of its submission." Eskelsen Orchards submitted its RAA on Tuesday, August 3, 2021 at 7:43 pm MDT. The RAA was a total of five pages with 10 attachments. While the RAA itself was a new document, all of the information in the RAA and attachments referred to facts and materials previously provided by Eskelsen Orchards to the DWR in connection with the Eskelsen Claim.
- 5. As a further pertinent to this Motion, the Hearing Examiner stated in the Hearing Procedures E-mail that:

[m]y assumption is that both parties' exhibits will consist of their calculations for property valuations and the filings will consist of arguments for why each parties' calculations are correct/incorrect. Regardless, please share with me whatever you believe to be relevant in support of your position that will help me better understand where you are coming from. Once I receive these filings, I will draft my recommendation to the Wildlife Board who will resolve this matter pursuant to Utah Admin. Code R657-2 as it sees fit.

The next Wildlife Board meeting is August 26, 2021, and I would like to have everything by [Friday] August 6, 2021 to draft my recommendation for the Board. If either party would like to discuss any of this, I would suggest a conference call be scheduled. However, I hope the process I've identified and articulated is understandable enough that we can move forward from here.

Hearing Procedures E-mail, ¶¶ 4-5 (emphasis added). Eskelsen Orchards did not request, was not contacted about, and did not participate in, any conference call with respect to any discussion about the procedures outlined. Eskelsen Orchards therefore assumes that neither DWR nor the Hearing Examiner held any such discussions regarding extensions to the Hearing Officer's expectations that all filings would be received by August 6, 2021.

6. The DWR Filing was received by Eskelsen Orchards on Friday, August 13, 2021, a week after the deadline established in the Hearing Procedures E-mail, during which week there had been no communication from the DWR. Eskelsen Orchards did not immediately review the DWR Filing, but instead sent an e-mail to the Hearing Examiner within 90 minutes of receipt of the e-mail to which the DWR Filing was attached, objecting to the late filing of materials by DWR. The Hearing Examiner subsequently replied, asking for a formal motion from Eskelsen Orchards and indicating that he intended to submit his recommendations to the Board by "the end of next week" (which Eskelsen Orchards assumes means Friday, August 20, 2021). Eskelsen Orchards intends this Motion to Strike to be the formal motion requested by the Hearing Examiner.

Reasons Forming the Basis for Relief

- Eskelsen Orchards asserts that the DWR Filing is late and should not be accepted by the Hearing Examiner. The Hearing Procedures E-mail was clear and unequivocal all filings with respect to the Eskelsen Claim (for purposes of the Board hearing on August 26, 2021) should be made by August 6, 2021. Eskelsen Orchards recognized that time was short before the Board hearing and felt that, even though the arguments and materials in the RAA were not new, it would be unfair for DWR to have to respond to the formal RAA without first seeing it. Eskelsen Orchards therefore made extra efforts to find time in a busy schedule, including working over the weekend and at night, to submit the RAA late on the evening of August 3, 2021. By submitting the RAA in advance of the deadline, Eskelsen Orchards intended to, and did, give the DWR at least a couple of days to review the five-page RAA and still have sufficient time to respond while meeting the deadline. DWR did not contact Eskelsen Orchards to request any extension of the August 6, 2021 deadline or to inquire whether Eskelsen Orchards would agree to any modification of the timetable set in the Hearing Procedures E-mail. To the best knowledge of Eskelsen Orchards, DWR never raised any issues about the August 6, 2021 deadline with the Hearing Examiner either.
- 8. Eskelsen Orchards has cooperated with DWR at all points of the Eskelsen Claim proceedings, has attempted to be transparent and complete in all of its interactions with DWR, and has gone out of its way to avoid any kind of "gotcha" procedural arguments. Eskelsen Orchards does not feel that DWR has been equally transparent or cooperative. Further, Eskelsen Orchards believes that this matter could have been resolved amicably well before this time had DWR attempted to engage Eskelsen Orchards in a good faith process to address the damage to the orchards, as it is required to do by statute. This lack of engagement has resulted in a waste of time and resources on the part of all parties involved without ever adequately addressing the real issue at hand the proper way of protecting orchards from big game depredation consistent with the law and regulations established by the State of Utah. Rejecting DWR's late filing would

hold DWR accountable to the deadlines and procedures established for such matter and assist in future similar proceedings.

Relief Requested

- A. Eskelsen Orchards moves that the DWR Filing must be rejected and not accepted into the record for the Board Hearing on the grounds that it was filed late without any request by DWR for an extension of the deadline.
- B. Because the DWR Filing must be rejected, the only evidence in the record as to the valuation of the loss suffered by Eskelsen Orchards during 2020-2021 due to big game depredation would be the valuation model developed by Eskelsen Orchards and submitted in its RAA. This valuation model should be adopted, and the Wildlife Board should grant Eskelsen Orchards \$10,089.93, the full amount of its requested full replacement value for big game depredation of stone fruit crops.
- C. If the Board determines to accept the DWR Filing, Eskelsen Orchards moves that the Board also allow Eskelsen Orchards to file its Reply to Division of Wildlife Resources Assessment Todd Eskelsen Depredation Compensation, attached hereto as <u>Attachment 1</u>, which is a point-by-point response to the issues raised in the DWR Filing.

In Witness Whereof, this Motion to Strike the Division of Wildlife Management Resources' Late Filing is respectively submitted this 18th day of August, 2021.

Todd R. Eskelsen, Member ESKELSEN ORCHARDS, LLC

Judy R. S.

2065 Eskelsen Lane

Perry, UT 84302

PETITIONER'S ALTERNATIVE REPLY TO THE DIVISION'S RESPONSE

Attachment I

Eskelsen Orchards Reply to Division of Wildlife Resources Assessment Todd Eskelsen Depredation Compensation

To: Charles Lyon, Hearing Examiner

calyons@agutah.gov

CC: Greg Hansen, Assistant Attorney General, Utah Division of Wildlife Resources

greghansen@agutah.gov

Chad Wilson, Utah Department of Wildlife Resources Coordinator

chwilson@utah.gov

From: Todd R. Eskelsen, Member, Eskelsen Orchards, LLC

teskelsen@eskelaw.com

Date: August 18, 2021

DWR File Number for Claim: Unknown

Eskelsen Orchards, LLC, a Utah limited liability company with apricot, nectarine and pluot orchards in Perry, UT ("Eskelsen Orchards"), hereby submits this reply to the Division of Wildlife Management Resources Assessment Todd Eskelsen Depredation Compensation (the "DWR Response"), a filing made on August 13, 2021, by the Utah Division of Wildlife Resources (the "DWR").

This matter involves the claim made by Eskelsen Orchards for big game depredation damage¹ done to the orchards owned by Eskelsen Orchards in Perry, UT during the fiscal year beginning on July 1, 2020 and ending on June 30, 2021 (the "Eskelsen Claim"). Such claim was detailed by Eskelsen Orchards in its filing on June 6, 2021 (the "Initial Claim Filing"), as supplemented by Eskelsen Orchards' Request for Agency Action filed on July 27, 2021 (the "RAA"). The DWR Response states that it "provides the basis for the DWR's assessment of damages for review by an independent hearing officer" ² and argues that the Hearing Examiner should accept the DWR's calculation of damages for three reasons that are more fully outlined below. After a short discussion of the overarching valuation concept for the matter, this reply

¹ The damage done to the orchards owned by Eskelsen Orchards was caused primarily by deer, although big game animals include deer, elk, pronghorn, moose, bison, bighorn sheep and Rocky Mountain goat. Utah Admin. Code R657-5-1.

² This portion of the DWR Response (which is the only filing by DWR in the Eskelsen Claim process in which the Hearing Examiner has been involved) appears to be similar to the June 15, 2021 e-mail to Eskelsen Orchards from Randall McBride, Private Lands Biologist NRO of the Utah Division of Wildlife Resources, which was included as https://dx.doi.org/10.108/journal.org/ This portion of the DWR Response (which is the only filing by DWR in the Eskelsen Claim process in which the Hearing Examiner has been involved) appears to be similar to the June 15, 2021 e-mail to Eskelsen Orchards from Randall McBride, Private Lands Biologist NRO of the Utah Division of Wildlife Resources, which was included as https://dx.doi.org///dx.doi.org///dx.doi.org///dx.doi.org/ This portion of the Utah Division of Wildlife Resources, which was included as https://dx.doi.org///dx.doi.org///dx.doi.org/ This portion of the Utah Division of Wildlife Resources, which was included as https://dx.doi.org///dx.doi.org/ This portion of the Utah Division of Wildlife Resources, which was included as https://dx.doi.org/ This portion of the Utah Division of Wildlife Resources, which was included as https://dx.doi.org/ This portion of the Utah Division of Wildlife Resources, which was included as https://dx.doi.org/ This portion of the Utah Division of Wildlife Resources, which was included as https://dx.doi.org/ This portion of the Utah Division of Wildlife Resources, which was included as https://dx.doi.org/ This portion of the Utah Division of the

will address the points made by the DWR Response under the three rubrics utilized by the DWR in the DWR Response and uses numbered paragraphs for ease of later reference.

Valuation of Crops

- 1. As an initial matter, the relevant statutory and regulatory provisions for the big game depredation involved in the Eskelsen Claim are set forth in Utah Code Ann. §23-16-1.1, et seq. and the regulations issued thereunder at Utah Admin. Code R657-44 (the "Big Game Depredation Process"). The Big Game Depredation Process details how the DWR and landowners shall address big game depredation of crops. In connection with the Eskelsen Claim, Eskelsen Orchards has cooperated with DWR and complied with the Big Game Depredation Process, including by making request for DWR action pursuant to a 72-hour notice and agreeing to implement a depredation remediation plan required under Utah Code Ann. §23-16-3 and Utah Admin. Code R5657-44-3. As a further part of that process, DWR has agreed to provide compensation to Eskelsen Orchards for damage to its orchards as required by Utah Code Ann. §23-16-4 and Utah Admin. Code R657-44-5.
- 2. The matter at hand now is to determine the amount of such compensation. The standard for calculation of damages is the one cited by both parties in their filings, namely that stated in Utah Code Ann. §23-16-4(c), which provides in full:

In determining how to assess and compensate for damages to cultivated crops, the [DWR's] determination shall be based on the:

- (i) full replacement value in the local market of the cultivated crops that actually have been or will be damaged or consumed by big game animals; and
- (ii) cost of delivery of a replacement crop to the location of the damaged crop or other location that is not farther from the source of the replacement crop.

Neither the statute nor the regulations issued under it set out the methodology for determining the "full replacement value in the local market" of the damaged crops, plus relevant costs. However, applicable rules of statutory construction do require that any such methodology presented by either party be reasonable. The collection of data and valuation methodology used by Eskelsen Orchards in the Eskelsen Claim and the RAA are part of a coherent, reasonable methodology to assess the value of the lost stone fruit crops, as opposed to the means of production, that the big game depredation took from Eskelsen Orchards and for which DWR is required to provide compensation. In contrast, the valuation proposed by DWR is unexplained and arbitrary, based on a flawed calculation methodology that proposes to provide compensation solely for simply acquiring and delivering another newly grafted tree, but without any accounting for (or acknowledging) the lost time and inputs invested and required for actual revenue production and ultimate realized value of a crop of stone fruit.

3. The relevant focus in this proceeding is on the damage to "cultivated crops," which for stone fruit orchards such as Eskelsen Orchards are the peaches, apricots, nectarines, pluots and other fruit produced from trees planted by the orchard owner. Eskelsen Orchards and other orchard owners are not in the business of growing trees; they are in the business of producing stone fruit. Thus, the relevant "cultivated crops" for purposes of Utah Code Ann. §23-16-4(c) are the stone fruit that would have been produced by

the tree if the tree was undamaged. The trees are the means by which the crop is produced and for stone fruits, it can take up to seven years after planting to mature into full commercial production. The loss of a tree directly results in the loss of all future crop that would be produced by such tree, whether the tree has been planted for one year or 20 years and whether the tree has actually borne fruit in the year of damage. The value of the crop lost from the loss of that tree is not the cost of a replacement whip, but the value of future production over the useful life of such tree, netted against the value of similar production from a replacement tree, discounted back to present value.³ The damage for which Utah Code Ann. §23-16-4 authorizes DWR to compensate an orchard owner thus is not just the loss of a single year's crop (to the extent a tree was mature enough to produce fruit) but must also account for the restarting of the timeline for eventual full commercial production. This distinction between the trees and the fruit crop is at the heart of the DWR's misapplication of the statutory and regulatory language. A detailed discussion of the proper methodology for valuing such loss is set out below in Paragraphs 10-12.

4. As noted in the DWR Response, the Big Game Depredation Process provides compensation for depredation incurred during the "damage incident period" of July 1 to June 30 of a given year (DWR Response top of p. 2). Thus, any claim for crops damaged must be made by the deadline established pursuant to the procedures set out in the Big Game Depredation Process for such "damage incident period;" failure to timely file a claim bars an orchard grower from ever receiving compensation from DWR for such damage. Thus, the core issue in the Eskelsen Claim is how to properly value the stone fruit crops that have been lost to big game depredation during 2020-2021. Such a calculation can, and should, be made using generally accepted principles and valuation techniques used in commercial business operations and investment decisions for the reasons explained below in Paragraphs 10-12.

DWR Response Rubric 1: "The Division's estimate of big game damage is based on documented damages that were actually incurred and is therefore the most accurate."

- 5. On pages 1-2 of the DWR Response, the DWR states that the "[DWR's] valuation of big game damage is based on documented damages that were actually incurred and is therefore most accurate." Notwithstanding this statement, the DWR Response then adopts in whole the evidence in the Eskelsen Claim specifying the damages to trees without variation, but then applies an unexplained valuation methodology from undocumented cost sources to undervalue compensation due to Eskelsen Orchards for such damage. The entire argument and claim of accuracy are unsupported and should be rejected.
- 6. The DWR Response states that the DWR could not "inventory alleged damage to orchard trees because Mr. Eskelsen had already removed and replaced the seedlings . . ." and instead ". . . produced a map of his orchard, indicating trees that had been 'killed by animal', as well as other causes . . ." Thus, the DWR counsel argues that "[w]ithout a physical evaluation of the damaged orchard trees, DWR, the [Hearing Examiner], and ultimately the Wildlife Board, are left with the assertions of Mr. Eskelsen and his unverifiable spreadsheet as to the number of trees damaged and the actual cause of the damage." What DWR counsel does not state is that Eskelsen Orchards had been in contact with DWR representatives throughout the Eskelsen Claim process. Eskelsen Orchards disclosed to such representatives the process that Eskelsen Orchards intended to pursue in making and evidencing its claim, including the fact that Eskelsen Orchards intended to replace damaged trees in order to efficiently continue its orchard

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³ Any reasonable valuation methodology must also account for the inherent risks of agricultural production such as frost, hail, drought, pests and other natural occurrences.

operations. And as explained below, despite DWR counsel's claims, DWR representatives had the ability to, and in fact did, physically assess the damaged orchard trees.

- 7. As noted above, the data collection and valuation methodology used by Eskelsen Orchards (discussed below and in Paragraphs 10-12) are part of a coherent, reasonable methodology to determine the "full replacement value in the local market" of the "cultivated crops" lost to big game damage. Eskelsen Orchards conducted three physical surveys of its orchards during 2020-2021 and retained the damaged trees in a pile next to the equipment shed on its property. During the on-site orchards visit by DWR representatives on May 24, 2021 (detailed in Initial Claim Filing §7), Eskelsen Orchards showed the DWR representatives both the surveys done and the actual damaged trees and conducted the group to multiple sites shown in the surveys as spot checks of the locations where damage had occurred (both places where still standing trees evidenced big game wildlife damage and locations where killed trees had been replaced). The DWR representatives had the ability on this visit to review the damage and inspect the entire orchard, not just those areas or trees selected by Eskelsen Orchards. A summary of the surveys was also included as an attachment to the Initial Claim Filing (Initial Claim Filing §8 Attachment 4). All of these actions provide the necessary evidence of the damage claimed by Eskelsen Orchards during the Eskelsen Claim and that evidence was accepted by Randall McBride in the DWR Claims Acknowledgement (referenced in footnote 2 above). In fact, the DWR Response itself at the top of page 2 of the DWR Response accepts the number of trees claimed by Eskelsen Orchards without comment. The assertion now by DWR's counsel that the number of trees set out in the Eskelsen Claim should be questioned is a red herring and such argument should not be considered by the Board.
- 8. Although the DWR Response claims that the DWR's assessment of damage valuation set out at the top of pg. 2 should be accepted because it is more accurate, nowhere does the DWR explain its valuation methodology or the source of the cost numbers used by DWR in its valuation. The DWR Response appears to be valuing the individual trees that were damaged at the purchase price of the whips as set out in the invoices Eskelsen Orchards provided as part of the Initial Claim Filing, plus certain costs for storage, shipping, planting, stump removal and replanting (although the source of such additional costs is never stated or explained). However, as noted above, the "cultivated crops" that must be valued under the Big Game Depredation Process are not the trees, but the crops produced by the trees. Without further information on the source of the numbers cited by DWR or how such values were applied in its valuation methodology and without a discussion by DWR of how such valuation methodology applies for purposes of valuing the actual crops to be considered, Eskelsen Orchards, the Hearing Officer and the Board have no way of evaluating the DWR's valuation or determining its reasonableness. The mere assertion by the DWR of the accuracy of its valuation estimate is not enough to actually evidence and support such valuation and DWR's asserted valuation should be rejected as unsubstantiated.
- 9. The DWR valuation argument is also illogical for purposes of the Big Game Depredation Process in that such valuation methodology would fail to meet the requirements of Utah Code Ann. §23-16-4(c), as such a process never reimburses the grower for the damage resulting from the deferral of eventual full commercial production. Rather, DWR's proposal would only provide orchard growers with a minimum value to purchase another whip; it would never compensate for the loss of the stone fruit crop that such whips would produce once mature. Stone fruit trees are most susceptible to damage by big game animals during the early years (when animals eat tender branches and break off whips by rubbing antler velvet off). DWR's proposed methodology for valuing stone fruit orchard big game damage is like valuing the loss of an alfalfa field consumed by deer at the cost of the alfalfa seed, plus some minimal value for the

labor in replanting the field rather than valuing the crop at the price of the hay bale that would ultimately be produced and sold. Such a methodology perpetually undervalues the actual crop loss caused by big game depredation to stone fruit orchards. Surely, such a result is not what the Utah legislature intended when passing Utah Code Ann. §23-16-1.1, et seq.

DWR Response Rubric 2: "Mr. Eskelsen's use of [a] predictive model to estimate damages is speculative and relies on unverifiable data parameters."

- 10. DWR's assertion is factually incorrect and misunderstands the valuation process. Estimation of a product's market value and the cost required to produce said product is a standard and essential element of all commercial ventures. Without such a valuation process that quantifies the costs and expected rewards of a business venture to demonstrate at least the hope of a profit, reasonable individuals would be loath to enter into the venture. This is especially true for capital intensive ventures such as stone fruit production in which the substantial upfront costs and delayed realization of production only generate profit after a decade or more of operations. In contrast to DWR's assertion, the Eskelsen Orchards valuation methodology is not speculative but based on sound valuation methodology directly applicable to stone fruit production in the Intermountain area using directly applicable data inputs.
- 11. As set out in RAA §8, the valuation methodology used by Eskelsen Orchards as reflected in the Excel valuation spreadsheet was developed by Andrew Eskelsen, a Chartered Financial Analyst⁴, in accordance with generally accepted business valuation concepts and procedures, using inputs sourced directly from public information published by Utah State University and the University of California at Davis, well-respected sources of fruit orchard industry information. Inputs to the valuation model were taken from documented costs incurred during orchard setup, interviews with an actual producer, and from data available from the U.S. Department of Agriculture and other public sources. Further, information that is not specific to the Eskelsen Orchards operations (because such operations are only recently established) was sourced from reputable publications, including a directly-applicable 2015 study of the costs and returns of a Northern Utah conventional peach orchard, conducted by Utah State University.⁵ As such, the information used to develop the methodology is the best available and is of the type customarily used in business valuations of new ventures in lieu of actual results which have not yet occurred.
- 12. DWR is correct in stating the obvious on DWR Response pg. 2 that the "model incorporates certain variables to estimate future conditions and is based on a series of assumptions;" that "[s]ome variables are static, such as tree cost, but some are estimates or guesses"; and that "[i]f a variable is changed, the outcome of the model . . . also changes." On DWR Response pg. 3, DWR states more obvious points, but then draws incorrect conclusions from such data:

Values assigned to many of these variables are guesses or are drawn from noncomparable sources, such as estimated yields from different kinds of fruit. Yields could be affected by any number of factors – disease, late frost, irrigation complications, wind or hail damage, market value fluctuations, and others. There is no way to standardize what future yield will be, especially when no historic yield information is available for this orchard. The

⁴ Background on the requirements for Charted Financial Analyst status and the expertise demonstrated by such a designation can be found at https://www.investopedia.com/terms/c/cfa.asp.

⁵ See, https://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=2619&context=extension_curall.

model attempts to account for this variability by utilizing a lower the yield value of every third year, but this yet again another best guess. Conclusions from a model are only as good as the data entered into it.

The nature of all valuations, including any model DWR would use, are that the variables are estimates and may be drawn from other comparable products, that any number of factors can affect predicted yields, and that conclusions are only as good as the data entered. The role of a valuation model is to provide tools to allow a reasonable prediction of future value and the recognition that certain inputs are best guesses (because no one can foresee future occurrences precisely does not invalidate the process. As it relates to the "attempts to account for [yield] variability" Eskelsen Orchards' "three-year methodology" was taken directly from the previously referenced Utah State University study. As such, it is a reasonable methodology, taken from a Utah-affiliated governmental agricultural resource to account for the inherent volatility of annual yields. Further, the variations in the ultimate valuations produced, see RAA Relief Requested §B, is evidence of Eskelsen Orchards' good faith transparency in providing the underlying working model throughout the Eskelsen Claim process to both DWR and DWR's appointed valuation expert to test and challenge. Eskelsen Orchards modified its valuation as issues were discovered, including based on discussions with DWR representatives and Prof. Geary, so as to calculate the best estimate of the actual big game depredation damages more accurately. Eskelsen Orchards' current claim for \$10,089.93 is the best estimate of the big game depredation losses suffered by Eskelsen Orchards.⁶

DWR Response Rubric 3: The use of a predictive model is inconsistent with statute and administrative rule.

13. DWR's challenge to the use of Eskelsen Orchards' valuation methodology to determine the "full replacement value in the local market" of "cultivated crops" lost to big game damage should be rejected. While DWR's counsel cites the relevant statute, he then misapplies the relevant law and regulation to conclude that the proper valuation is the cost of a replacement tree and not the replacement of the crops actually produced. In fact, in order to accurately estimate the actual damages caused by the big game depredation during 2020-2021 at the Eskelsen Orchards, it is necessary to attempt to estimate future revenue from the damaged tree, recognizing all of the variables that could affect such revenue -- such as the factors outlined by DWR in the quoted language above -- and discount such revenue back to present value. Contrary to DWR's claim, such a methodology does not go beyond the statutory requirement and does not wrongly "[attempt] to add lost future yields as an additional element of compensation." Rather, such valuation is actually the best way to estimate the full extent of such loss. The Big Game Depredation Process requires compensation of the "fair replacement value" of the loss to "cultivated crops," not the mere reimbursement of various inputs. The valuation methodology used by Eskelsen Orchards is a reasonable way to develop that fair replacement value.

14. Finally, the DWR Response on pg. 4 concludes by arguing that:

[r]equiring the [DWR] to compensate for future lost yield in [Eskelsen Orchards'] speculative manner may stretch the [DWR's] already limited depredation budget. . . . If

⁶ At the bottom of DWR Response pg. 2, the DWR references a valuation of \$7,336.02, citing in footnote 7 "See Brad Geary Email Explanation.pdf." Eskelsen Orchards does not recall ever having seen such a valuation or any e-mail from Professor Geary which explains such an amount. Because that e-mail is not in the record, it cannot be considered by the Board.

statewide claims exceed the [DWR's] legislatively approved budget, other livestock and agricultural producers may see their verifiable claims pro-rated.

While DWR counsel is in a better position that Eskelsen Orchard to speak to the fiscal position of DWR's depredation budget, such an argument provides no support for any argument that Eskelsen Orchards' claim is improper or incorrect.⁷ Rather, this argument at best expresses an opinion that the amounts appropriated by the Utah Legislature might be too small to adequately compensate agricultural producers for the losses suffered in supporting the big game now present in Utah. But this opinion is irrelevant to the decision that the Hearing Officer and the Board must make under Big Game Depredation Process. DWR's responsibility is to implement the law as written and to advise the Legislature on the amounts necessary to implement the laws as written. While Eskelsen Orchards recognizes that a major focus of DWR efforts is on managing big game in Utah, the costs of such management should be fairly supported by all of the citizens in the State and should not be unfairly concentrated on the State's agricultural producers. The State's producers already provide substantial support to big game production by protecting open spaces and habitat vital to the natural order and associated ecosystem. Rather than working at odds with agricultural producers, DWR should be collaborating with such producers to collectively preserve and protect agricultural production so as to allow and encourage wild animals, including big game, to flourish. As one of the last remaining commercial orchards along the historic US Highway 89 Fruit Highway and a buffer between the aggressive housing development in the City of Perry and the Brigham Face Wildlife Management Area immediately above, Eskelsen Orchards is a land use that should be encouraged and supported as required by the Big Game Depredation Process.

For all of the foregoing reasons, as well as those reasons set forth in the RAA, which is incorporated herein by reference, the Eskelsen Claim should be granted in full.

In Witness Whereof, this Eskelsen Orchards Reply to Division of Wildlife Resources Assessment Todd Eskelsen Depredation Compensation is respectively submitted this 18th day of August, 2021.

Todd R. Eskelsen, Member ESKELSEN ORCHARDS, LLC 2065 S. Eskelsen Lane

Judd K.

Perry, UT 84302

⁷ In addition, DWR's counsel provides no evidence to support his speculative assertion.

DIVISION MEMORANDUM OPPOSING PETITIONER'S MOTION TO STRIKE



State of Utah DEPARTMENT OF NATURAL RESOURCES

BRIAN C. STEED
Executive Director

Division of Wildlife Resources

J. RORY REYNOLDS
Interim Division Director

August 20, 2021

DIVISION OF WILDLIFE RESOURCES' MEMORANDUM OPPOSING ESKELSEN MOTION TO STRIKE

For the reasons identified below, the Utah Division of Wildlife Resources ("DWR" or "Respondent") opposes the Motion to Strike filed with the Utah Wildlife Board by Eskelsen Orchards ("Petitioner") on August 18, 2021.

Factual Background and Introduction

In anticipation of an adjudicative proceeding to determine the assessed damage to cultivated crops by big game on Petitioner's orchard, DWR appointed a hearing examiner to take evidence and make recommendations to the Wildlife Board. The hearing examiner contacted Petitioner regarding the items he expected to review as part of a Request for Agency Action ("RAA") that was to be filed with the Wildlife Board. In a July 27, 2021 correspondence, addressed directly to Petitioner and with DWR only as a "cc," the hearing examiner requested to have materials submitted to him on or before August 6, 2021. Petitioner filed his RAA on August 3, 2021. DWR filed their memorandum in response to the RAA on August 13, 2021, prompting Petitioner's current motion to strike the DWR memorandum. While admittedly after the hearing examiner's requested filing date, the factual circumstances warrant the Wildlife Board and their presiding officer accept and consider this filing, and the law allows it.

Argument

1. Utah Administrative Rule allows for deviations from rule when strict compliance is impractical, or if a deviation promotes the statutory purposes for which the action is brought. Both reasons apply here and justify accepting DWR's memorandum.

Utah Administrative Rule R657-2-3 indicates that the adjudicative proceedings rule should be liberally construed in order to facilitate a just and speedy determination of issues in this matter. It identifies two scenarios when a presiding officer may decide to deviate from rule in order to accomplish this objective: (1) if compliance is impractical; or (2) if a deviation promotes the statutory purposes for which the action was brought. It is both impractical to require DWR to respond to an RAA three days after it is filed, and it would undermine the integrity of the hearing currently scheduled for August 26. Therefore, the Wildlife Board and it's presiding officer should grant leave to DWR to file their memorandum beyond the August 6 timeline requested by the hearing examiner and consider it as part of their proceeding.



The RAA filed by Petitioner was far more complex than a standard valuation of estimated crop damages, as indicated by the number of attachments included in the RAA and its reliance upon a novel predictive model that included a host of variables and assumptions. Responding to this RAA in only three days would have been impractical, if not impossible, for DWR. DWR does not regularly employ economists or financial analysts that can readily provide an interpretation of Petitioner's model or its reliability, and it took substantial research and effort for DWR and their representatives to become sufficiently educated on the model and its associated issues. In fact, until DWR's counsel and Program Coordinator were able to meet with the third-party assessor, Dr. Brad Geary, they were largely unable to interpret and understand Petitioner's model. This all occurred after the RAA filing and after the hearing examiner's proposed filing date.

Second, the purpose of this adjudicative proceeding hearing is to resolve a difference in estimated values on crop damage between DWR and Petitioner. A critical component of that process is allowing the Wildlife Board and its presiding officer the option to consider DWR's explanation of their approach and their concerns regarding Petitioner's approach. In fact, Petitioner specifically asked for DWR's explanation in how they calculated damages in their RAA. DWR provided that, yet Petitioner now requests that explanation be removed from the record and not be considered. If Petitioner's motion is granted and DWR's memorandum is struck from the record, DWR will be forced to present all materials solely during the hearing before the Wildlife Board. This would unnecessarily complicate the proceeding and potentially undermine the integrity of the Wildlife Board hearing. It certainly does not facilitate a just and speedy determination of issues in this matter as noted in Utah Administrative Rule R657-2-3.

To the extent Petitioner claims prejudice due to timing of DWR's filing, DWR has offered numerous concessions to limit or mitigate those concerns. One of those alternatives was to approach the Wildlife Board for a continuance as allowed under R657-2-14. Given the length of time over which this dispute has arisen, the complexity of the issues at hand, the amount of

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¹ As noted in Subsection 2 of this memorandum, an adjudicative proceeding does not commence until an RAA is filed. The compressed time schedule for DWR's response unfairly negated what would have otherwise been a 30-day window to respond to a Request for Agency Action. DWR was only a "cc" on the July 27 email establishing the hearing examiner's preferred filing timeline. That email was framed as a request. ("I would like to have everything by August 6, 2021 to draft my recommendation for the Board.") Named counsel for DWR was out of state and largely without phone or email capability when the RAA was filed. Notice of this was delivered to Petitioner and the hearing examiner by automatic email reply the day of Petitioner's RAA filing. And again, until the RAA was filed, the proceeding had yet to commence; and without an RAA, there is no proceeding to respond to.

material before the hearing examiner and Wildlife Board for consideration, and the compressed filing timeframe, a continuance could allow adequate time for the hearing examiner and Wildlife Board to evaluate the evidence presented from both sides. Petitioner has indicated that they would oppose such a request. That said, DWR is not requesting a continuance and is prepared to argue this matter at the August 26 Wildlife Board meeting if the Wildlife Board is prepared to hear it. To that end, DWR is finalizing and filing their response to Petitioner's Motion to Strike less than two days after Petitioner submitted their filing. If any party has suffered prejudice based on timing issues it is DWR.

2. Utah Administrative Rule allows the presiding officer to extend response times for good cause. Good cause applies in this circumstance.

The compressed time schedule proposed by the hearing examiner has created two issues. First, the hearing examiner proposed a scheduling date for the hearing before the Wildlife Board within 30 days of receiving the RAA, contrary to the DWR's right to 30 days to respond to an RAA under R657-2-8(9)(b). Second, the expedited schedule, coupled with Petitioner's filing date of the RAA, provided DWR only three days to review and respond in order to satisfy the 20-day filing timeline in R657-2-8(7). Nevertheless, DWR made substantial efforts to respond to the RAA promptly in a manner allowing Petitioner to file a responsive pleading before the hearing examiner finalized their assessment. DWR finalized and submitted their memorandum on August 13. This provided the hearing examiner ample time to review the DWR's materials and would provide the Wildlife Board over two weeks-time to evaluate materials prior to the proposed hearing date.

DWR has also offered concessions to ensure no prejudice flows to Petitioner due to the timing of when their filing was submitted. DWR indicated that it would not oppose Petitioner's request to respond to State's memorandum, which provides him the forum to respond to DWR's position prior to the issuance of the hearing examiner's recommendation and the hearing before the Wildlife Board. Such a response also qualifies as a "pleading" (R657-2-8(1)) and is subject to the same 20-day filing window he has raised with DWR's memorandum. Petitioner filed such a response as an attachment to his current Motion to Strike. DWR reiterates that it does not oppose Petitioner responding to its Memorandum, and views that as a compromise that should alleviate any claim of prejudice from Petitioner.

² Similarly, DWR received Petitioner's Motion to Strike on Wednesday, August 18 at 10:20 PM – forcing DWR to draft and file a response in less than two days. There are very few legal proceedings where such a response timeframe is placed upon a Party. This proceeding is not one of them.

Lastly, good cause exists to allow the pleadings from the Parties and proceed to a hearing based on complications caused solely by the Petitioner. Petitioner alleges that DWR's calculation of damages and their third-party assessment were so close to DWR's end of the fiscal year that it forced Petitioner into the position of appealing to the Wildlife Board. Petitioner needs to accept some responsibility for these timing issues. They are sophisticated, and obviously well-equipped to navigate the depredation rule and DWR's system. Their decision to wait until the end of DWR's fiscal year and damage incident period should not be attributed solely to DWR.

Summary

Admittedly DWR filed their memorandum after the deadline requested by the hearing examiner. However, the hearing examiner is not the presiding officer in this proceeding, and the hearing examiner's scheduling recommendations placed DWR in a prejudicial situation. In hindsight, counsel for DWR should have anticipated this complication and addressed it more directly. But DWR should not be prejudiced for this error, especially given comparatively small inconvenience suffered by Petitioner, the concessions offered by DWR to mitigate alleged prejudice by Petitioner, and the administrative rules that allow for modifying response timelines and allowing deviation from rule provisions in qualifying circumstances. The Wildlife Board and its presiding officer should dismiss Petitioner's Motion to Strike, consider DWR's memorandum along with the other properly filed materials in this proceeding, and conduct a fair and impartial hearing that gives both Parties equal opportunity to present their positions.

Greg Hansen

Counsel, Division of Wildlife Resources

August 20, 2021

Amended Request for Agency Action by the Utah Wildlife Board

To: Charles Lyon, Hearing Examiner

calyons@agutah.gov

CC: Kyle Maynard, Assistant Attorney General, Utah Division of Wildlife Resources

kylemaynard@agutah.gov

Chad Wilson, Utah Department of Wildlife Resources Coordinator

chwilson@utah.gov

From: Todd R. Eskelsen, Member Eskelsen Orchards, LLC

teskelsen@eskelaw.com

Date: November 15, 2021

DWR File Number for Claim: Unknown

Statement of Legal Authority and Jurisdiction

Eskelsen Orchards, LLC, a Utah limited liability company with apricot, nectarine and pluot orchards in Perry, UT ("Eskelsen Orchards"), hereby submits this Amended Request for Agency Action by the Utah Wildlife Board pursuant to Utah Code Ann. §63G-4-201 and Utah Admin. Code R657-2-6 (the "ARAA") and requests the Utah Wildlife Board (the "Board") to take action in resolution of the claim by Eskelsen Orchards pursuant to Utah Code Ann. §23-16-4. This ARAA is a follow up to the original Request for Agency Action by the Utah Wildlife Board filed by Eskelsen Orchards on August 3, 2021 (the "RAA")

Statement of Relief Sought or Action Sought from Agency

Eskelsen Orchards originally filed the RAA at the beginning of this proceeding to request "full replacement value in the local market of the cultivated crops that actually have been or will be damaged or consumed by big game animals; and the cost of delivery of a replacement crop to the location of the damaged crop" for the period of July 1, 2020 to June 30, 2021, as provided under Utah Code Ann. §23-16-4(c). This ARAA renews such request for relief.

Statement of Facts and Reasons Forming the Basis for Relief and Agency Action

- 1. Eskelsen Orchards hereby incorporates the RAA by reference and restates and includes all of the facts and reasons set out in the RAA for purposes of this ARAA.
- 2. This proceeding began by Eskelsen Orchards filing a notice on June 6, 2021 with Randall McBride, Private Lands Biologist NRO of the Utah Division of Wildlife Resources (the "DWR"), which included (i) a one-page summary of Eskelsen Orchards' claim for big game depredation; (ii) a chart summarizing the damage done by big game to the orchards; (iii) an Excel valuation model which set out the valuation methodology and information underlying the claim (the "Original Valuation Model"); and (iv) copies of invoices from the two nurseries from whom the trees had been purchased. The initial amount of the claim was \$22,219.55.

- 3. The Original Valuation Model was developed by Andrew Eskelsen, the undersigned's son and a Chartered Financial Analyst (CFA), who developed the model using published articles on tree valuation by the University of California at Davis and Utah State University, interviews with Jordan Riley, an experienced fruit grower in the Perry, UT area and manager of Eskelsen Orchards, data available from the USDA and other public sources, and recognized valuation methodologies.
- 4. The Excel spreadsheet, assumptions and calculations of the Prior Valuation Model were attached to the RAA and were also provided to Prof. Bradley Geary of Brigham Young University, whom the DWR and Eskelsen Orchards had agreed would act as the third-party appraiser for the claim pursuant to Utah Code Ann. §23-16-4(d). Eskelsen Orchards had subsequent discussions with Prof. Geary about the Prior Valuation Model.
- 5. On June 15, 2021, DWR responded to Eskelsen Orchards' claim and offered a total of \$4,187.61 for the damage done to Eskelsen Orchards' trees. The matter was then referred to Prof. Geary for his opinion as to valuation. After reviewing Eskelsen Orchards' claim, on June 29, 2021, Prof. Geary responded with a valuation of Eskelsen Orchards' claim at \$8,603.77, using the Original Valuation Model, with some proposed corrections.
- 6. Eskelsen Orchards rejected both the DWR's valuation and Prof. Geary's valuation with an explanation of the areas of disagreement and ultimately filed the RAA in accordance with filing directions established by Charles A. Lyons, Assistant Attorney General/O'Hara Fellow, Utah Attorney General's Office Division of Natural Resources, who had been appointed as the Hearing Examiner for the matter pursuant to Utah Code Ann. §23-16-4(6)(c)). When filed, the RAA requested a total claim of \$10,089.93, a reduced amount that reflected certain changes agreed to by Eskelsen Orchards in the Original Valuation Model as a result of its communications with Prof. Geary.
- 7. Pursuant to a briefing schedule established by Mr. Lyons in order to have the matter considered at the Board's August 26, 2021 Public Hearing, the DWR filed its Assessment to the RAA on August 13, 2021 (the "Assessment") and Eskelsen Orchards filed a Reply to DWR's Assessment on August 18, 2021 (the "Reply").¹
- 8. On August 20, 2021, the Hearing Examiner filed his Recommendation which stated:

The Hearing Officer finds [Eskelsen Orchards] has met its burden of proving by a preponderance that [Eskelsen Orchards'] proposed valuation methodology [the Original Valuation Model] is more appropriate than the [DWR's] for calculating damages to trees cultivated for stone fruit crop production. This is because [Eskelsen Orchards'] methodology considers the value of cultivated crops that *will be damaged* by big game animals as required by Utah Code Ann. §23-16-4)3)(c)(i) and the [DWR's] methodology does not. Therefore, the Hearing Examiner recommends the Board enter an Order

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¹ Eskelsen Orchards filed a Motion to Strike the DWR's Assessment because it was filed one week after the date set out in the briefing schedule established by Mr. Lyons. The Motion to Strike also included the Reply as an attachment in the event that the Hearing Examiner accepted the DWR's Assessment. DWR filed a Memorandum Opposing Eskelsen Orchards' Motion to Strike on August 20, 2021. In his August 20, 2021, the Hearing Examiner accepted the DWR's Assessment and Eskelsen Orchards' Reply as part of the record.

adopting [Eskelsen Orchards'] valuation methodology and award [Eskelsen Orchards] \$10,089.93 (emphasis in original).²

- 9. In preparation for the scheduled presentation by Eskelsen Orchards at the August 2021 Board Public Hearing, on August 23, 2021, Eskelsen Orchards and DWR participated in a pre-hearing coordination teleconference with Michael Begley, an Assistant Attorney General in the Utah Attorney General's Office, Natural Resources Division, who was appointed to represent the Board in this matter. At the request of Mr. Begley, Greg Hansen, representing DWR, and the undersigned subsequently conferred by teleconference and agreed to a Stipulated Motion for Continuance on August 24, 2021, moving the Eskelsen Orchard's' presentation to the Board's September 30, 2021 Public Hearing.
- 10. Subsequently, Eskelsen Orchards and DWR met in person with Prof. Geary on September 9, 2021, to review the Original Valuation Model and discuss settlement. During the discussion, DWR indicated that in evaluating the Original Valuation Model or any other valuation methodology, DWR was concerned that the model and the inputs used in the model be publicly accessible, objectively verifiable and ordinarily replicable; DWR and Prof. Geary also pointed out certain limitations and problems in the Original Valuation Model and its calculations. Eskelsen Orchards took on the assignment to review the Original Valuation Model, address the problems noted with the model, attempt to simplify the valuation model, and obtain publicly available information to support the inputs used in the valuation model.
- 11. Following the September 9, 2021 in-person meeting, Mr. Begley conducted another pre-hearing coordination teleconference on September 22, 2021, at which it was agreed that, in order to allow for Eskelsen Orchards and DWR sufficient time to follow up on matters discussed in the September 9, 2021 meeting, the matter would be removed from the Board's September 30, 2021 Public Hearing and rescheduled for the Board's December 2, 2021 Public Hearing.
- 12. Eskelsen Orchards has continued to review and revise the Original Valuation Model and obtain relevant inputs for the valuation process. Eskelsen Orchards and DWR participated in an additional prehearing coordination teleconference with Mr. Begley on November 9, 2021, at which Eskelsen Orchards summarized its efforts to revise the Original Valuation Model. As a result of that discussion, Eskelsen Orchards and DWR agreed that Eskelsen Orchards would file this ARAA, together with a revised valuation model which is derived from the Original Valuation Model but is simpler (the "Revised Valuation Model").
- 13. Therefore, Eskelsen Orchards now files this ARAA, along with the attached (i) chart summarizing the value of the damage done by big game to the orchards owned by Eskelsen Orchards using the Revised Valuation Model, plus the cost of delivery of a replacement crop to the location of the damaged crop; and (ii) Excel valuation model setting out the valuation methodology and input information used in making the valuation. The amount of the claim under this ARAA is \$13,884.72.

-3-

² The Hearing Examiner noted in the Recommendation that there was no evidence in the record supporting why Prof. Geary's appraisal should be considered the appropriate methodology and amount, so "the Hearing Examiner [could] only consider the methodologies and amounts offered by [Eskelsen Orchards] and [DWR]."

Relief Requested

- A. In light of Eskelsen Orchards' submissions with detailed valuation methodology and analysis, including an Excel spreadsheet based on explicitly stated assumptions and published analytical studies by respected U.S. agricultural universities, Eskelsen Orchards moves that the Board accept Eskelsen Orchards' valuation methodology and analysis as an appropriate valuation methodology.
- B. Eskelsen Orchards moves that the Board accept the attached Excel valuation spreadsheet as Eskelsen Orchards' final request for compensation in this matter and award Eskelsen Orchards damages of \$13,884.72.
- C. Eskelsen Orchards moves that it be given not less than ten (10) days from receipt of any filing by DWR in response to this ARAA in this matter to review DWR's filing in order to provide a reply filing addressing the issues raised by DWR in its filing.
- D. Eskelsen Orchards moves that, in the event that the Board does not find wholly in favor of Eskelsen Orchards on its final claim hereunder, the Board grant Eskelsen Orchards leave, as necessary to provide any and all additional testimony, motions, affidavits, briefs, or memorandum, which may be required to support this ARAA and prove its case to the Board for the relief requested and to address any other shortcomings which may be argued by DWR or found by the Hearing Examiner in the materials provided by Eskelsen Orchards.
- E. If the Board is unable to grant the motion requested in Item D above as necessary, in the alternative, Eskelsen Orchards moves that the Board provide Eskelsen Orchards with the formal adjudicative proceeding provided in Utah Code Ann. §63G-4-201(3)(d)(iii) to address the issues in this matter and obtain resolution thereof.

In Witness Whereof, this Amended Request for Agency Action is respectively submitted this 15th day of November, 2021.

Todd R. Eskelsen, Member ESKELSEN ORCHARDS, LLC

Eskelsen Orchards, LLC

2065 S. Eskelsen Lane Perry, UT 84302 (240) 460-1115

2020-21 Big Game Depredation Claim May 24, 2021

as amended November 15, 2021

Tree Variety	Age of Tree	Value/Tree	Number of Killed Trees	Total
	1 yr.			
Apricot	(planted April 2020) 1 yr.	\$36.19	141	\$ 5,102.79
Pluots	(planted April 2020) 1 yr.	\$72.56	88	\$ 6,385.28
Nectarines	(planted April 2020)	\$52.15	31	\$ 1,616.65
Shipping and cold storage	·	\$ 3.00	260	\$ 780.00
				\$ 13,884.72



State of Utah

DEPARTMENT OF NATURAL RESOURCES

BRIAN C. STEED Executive Director

Division of Wildlife Resources

J. SHIRLEY
Division Director

December 14, 2021

DIVISION OF WILDLIFE RESOURCES ASSESSMENT TODD ESKELSEN DEPREDATION COMPENSATION

Mr. Todd Eskelsen ("Mr. Eskelsen") seeks reimbursement for alleged big game damage to Apricot, Pluot, and Nectarine trees pursuant to U.C.A. §§ 23-16-3 and 4. This summary provides the basis for the Utah Division of Wildlife Resources' ("Division") assessment of damages for review by an independent hearing officer. We assert the hearing officer should accept the Division's calculation of damages for the following reasons: (1) The Division's assessed value is based on the best estimate of actually-incurred damages for the current year, as required by statute and rule; (2) the model which Mr. Eskelsen has provided and which he has used to provide his own assessment of damage is speculative and unreliable; and (3) the proposed predictive model uses variables that are not allowed by statute and exceeds the 1-year damage calculation time period established in rule.

Incorporation

The Division hereby incorporates by reference all exhibits included in Mr. Eskelsen's original Request for Agency Action ("RAA") and the Division's response and exhibits to that RAA. Mr. Eskelsen has amended his RAA and the Division responds accordingly below.

Argument

1. The Division's estimate of big game damage is based on documented damages that were actually incurred and is therefore the most accurate.

In response to Mr. Eskelsen's complaints of big game damage to his recently planted orchard, the Division responded in a timely manner to assess and mitigate damage caused by big game. Mr. Eskelsen and the Division agreed to delay calculating total damages until spring, with the understanding that big game damage had to be properly documented. When Mr. Eskelsen renewed his 72 hour notice and the Division responded to assess damage, the Division was unable to inventory the alleged damage to orchard trees because Mr. Eskelsen had already removed and replaced the seedlings, referred to as "whips" in the orchard business. Instead, Mr. Eskelsen produced a map of his orchard, indicating trees that had been "killed by animal," in addition to other causes, such as being damaged by equipment, drought, planting complications, or poor irrigation. Without a physical evaluation of the damaged orchard trees, DWR, the hearing officer, and ultimately the Wildlife Board, are left only with the assertions of Mr. Eskelsen and his unverifiable spreadsheet as to the number of trees damaged and the actual cause of the damage. This scenario makes it nearly impossible to validate damage claims from landowners and is one reason why Utah Code requires a landowner to immediately notify DWR



¹ A "Whip" is a very young tree – essentially a seedling.

² See Eskelsen Attachment "Eskelsen Orchards FY 2020-21 Deer Depredation Tree Survey"

of damage incurred by big game. U.C.A. §23-16-3(1). Nevertheless, the Division attempted to assess damage caused by big game.

The Division may compensate landowners or lessees for damage to cultivated crops caused by big game animals based on the full replacement value in the local market for crops actually damaged or will be damaged. U.C.A. §23-16-4(1) & (3). "For the purposes of compensation, all depredation incidents end on June 30 annually, but may be reinstated July 1." R657-44-5(b).³ This is referred to as the "damage incident period." R657-44-2(2)(d).

The Division's assessment of damages is as follows:

	# of Trees	Cost per tree	Storage	Shipping	Planting	Removal	Replant	Total
Apricot	141 x	(\$8.40 +	\$1.50 +	\$1.50 +	\$1.35 +	\$1.35 +	\$1.35)	\$2,178.45
Pluot	88 x	(\$10.61 +	\$1.50 +	\$1.50 +	\$1.35 +	\$1.35 +	\$1.35)	\$1,554.08
Nectarine	31 x	(\$7.63 +	\$1.50 +	\$1.50 +	\$1.35 +	\$1.35 +	\$1.35)	\$455.08
								\$4,187.61

The Division valued the damages at \$4,187.61 for the FY20 damage incident period based off of the receipt provided by Mr. Eskelsen for the purchase, storage, and shipping of replacement trees that Mr. Eskelsen actually incurred.⁴ This is a generous offer considering that the Division overcredited Mr. Eskelsen for shipping and cold storage costs above those costs actually incurred by approximately \$320.⁵

Based on the information available, this is the most accurate estimate and should be the value recommended to the Wildlife Board by the hearing officer.

2. <u>Mr. Eskelsen's use of predictive model to estimate damages is speculative and relies on unverifiable data parameters.</u>

Mr. Eskelsen proposes using a predictive model that estimates lost future yields from perennial orchard trees that have yet to produce any fruit. This model incorporates a series of variables to estimate a future condition and is based on a series of assumptions. Some variables are static, such as tree cost, some are variable, and some are estimates or guesses. If a variable is changed, the outcome of the model (assessed value of fruit trees) also changes. Therefore, the outcome of the model is only as good as the data that is used.

³ Compensation for damages is limited to a fiscal year because anticipating and calculating future damages are too speculative. Therefore, the Division limits compensation to what was actually lost between July 1 and June 30 of a given year.

⁴ See Todd Eskelsen Tree Replacement Calculations DWR.pdf.

⁵ See 2020 Burchall & Wilson Nurseries Invoice Charges.pdf

Based on how variables are changed in the model, the assessed values range wildly eventually arriving at Mr. Eskelsen's amended proposal of \$13,884.72. In an effort to resolve the gap between the Division and Mr. Eskelsen's assessments, the parties sought an independent third-party valuation. Upon initial review of the model at issue in this Amended RAA, Professor Geary, the independent evaluator, felt that the model was too complicated and that the values utilized were difficult to understand and incongruent with national statistics. Using US Dept. of Agriculture census data from 2018-2019 (most recent years available) to calculate prices per bushel, the value per tree can be dropped from Mr. Eskelsen's valuation to \$5,566.88. The wideranging outcomes of the model show how unreliable it is without more concrete data inputs.

The lack of concrete, verifiable inputs has been one of the primary contentions over this model. Because of its scarcity, the availability of local data presents a challenge for Mr. Eskelsen and would be a substantial hurdle for other growers to find and use in the model. Major data points that cause concern for the Division are:

- Weighted Avg. Price these numbers seem to be based on neighboring orchards but lack context on whether these sales are applied uniformly to all qualities for fruit. More importantly, these numbers are contradicted by the national avg. price for these fruits by at least a factor of two.⁷
- NASS Annual Yields Tons/Acre Unable to find local data on orchard yields, Mr. Eskelsen used data from the USDA. However, the USDA also lacks data for Utah or neighboring arid states. As a result, these yield numbers are largely based on Washington and California numbers, which are not comparable to Utah. Using Apricots as an example, in 2015 UT does have information contributing to these numbers with a yield of .06 tons per acre. That same year California and Washington had yields per acre of 3.7 and 7.15 respectively. These yield numbers do not reflect yields in Utah and would heavily increase the value per tree.⁸
- Furthermore, to complicate this spreadsheet, Mr. Eskelsen's yield numbers between his two models struggle with how to approach the variable nature of yields and factoring in (1) the natural three-year cycle of yields in stone fruit trees and (2) the loss of yields by any number of natural causes unrelated to big game in any given year. In this amended RAA, Mr. Eskelsen uses a five-year yield average. As stated above, these numbers likely do not come close to reflecting yields in Utah. To add to that, utilizing a number based on national yield average per acre cannot be distilled down to an individual tree that at any given cycle in its life can fail to produce stone fruit. Here, this average is used as the peak production of the tree.
- **All Utilities and production costs** the costs for production drive the amount of money lost by a tree being a year behind the rest. These values are either unsubstantiated or are based on a "standard" value found on the internet. For example, the costs in the model for marketing are not

⁶ See Amended Request for Agency Action by Utah Wildlife Board. See Also Revised Tree Valuation Model 11.15.21 v3.xlsx. See also Attachments 4,9, and 10 of Eskelsen's initial RAA.

⁷ See Crop Values 2020 Summary (Feb. 2021) with notes converting to tons to bushels.

⁸ See NASS yield data for 2020 to 2010. See also 2017 Census Info on Fruit.pdf – noting the acreage difference between the lower 48 states. The importance of this document is California and Washington have significantly more acres of Apricot, Nectarine, and Pluot orchards than Utah which would skew the statistical data that drives the NASS yield data.

- supported by any information and have changed by approximately \$1,200 between Mr. Eskelsen's initial request and this amended request. Additionally, Mr. Eskelsen has hired an individual to tend to his orchard, however, in this model he utilizes minimum wage regulations from the federal government. It therefore does not reflect his actual expense.
- Finally, this model predicts out the expenses and anticipated income for the 20 years. The result is a claim that the loss of a whip reverberates across 5 years of lost income. The problem is that all of the above variables feed this lost income unreliable data creates more unreliable data. This methodology also ignores the year-to-year variability in growth and climate (disease, late frost, irrigation complications, wind or hail damage, market value fluctuations, etc.). While using an avg. anticipated yield makes sense on its face, this approach ignores that for an individual tree, that yield could be zero.

What cannot be understated is that this model applies to a very specific scenario where saplings and whips are destroyed by big game. This model does not apply to damage done to trees that actually yield a crop. With that in mind, this model is not replicable for any other orchard growers in the state due to its dependency on accurate and substantiated data. The same growers Mr. Eskelsen has discovered were unwilling or unable to share their records are the same growers that will be unable or unwilling to provide information necessary for this model.

In considering how best to fairly make growers whole in a manner that in replicable, the Division still feels that its evaluation in part 1 above is the clearest route to do so until trees begin bearing fruit and growers start having information regarding the loss of their fruit production.

3. *The use of a predictive model is inconsistent with statute and administrative rule.*

The Division is directed in statute to calculate a damage payment by considering, among other things, the extent of the damage experienced. U.C.A. §23-16-4(3). Specifically, the Division determination shall be based on "full replacement value in the local market of the cultivated crops that actually have been or will be damaged or consumed by big game animals; and cost of delivery of a replacement crop to the location of the damaged crop or other location that is not farther from the source of the replacement crop." U.C.A. §23-16-4(3)(c). That is precisely what the Division did, as outlined in Subsection 1 above. For all producers, the Division has treated this "will be damaged" clause of the statute as an acknowledgement that in the ongoing relationship between the Division and Growers, there will be damage that might occur year-round. Mr. Eskelsen's predictive model goes beyond this directive and attempts to add lost future yields as an additional element of compensation for a tree that is three years from production. Lost future yield is not an element identified in the statute.

Second, the Division's Big Game Depredation rule defines the time period for each round of big game damage compensation as a one-year time period, running July 1 to June 30 annually (i.e., the damage incident period). See R657-44-2(2)(d). Simply put, the Division compensates for big game damage on an annual basis. R657-44-5(2). Using a model that incorporates estimated costs and revenues well into the future considers materials outside of the damage incident period and not only is inconsistent with that rule but also impractical to replicate for other growers.

Conclusion

The Division's offer of \$4,187.61 is the most accurate estimate of damages incurred given the complicated set of factors involved – and is generous at that. Mr. Eskelsen's proposal to utilize a predictive model is fraught with speculation. Requiring the Division to compensate for future lost yield in this speculative manner may stretch the Division's already limited depredation budget. See U.C.A. §23-16-4(4). If statewide claims exceed the Division's legislatively approved budget, other livestock and agricultural producers may see their verifiable claims prorated. This model would set a precedent that would make it more difficult for other growers to get compensation. Lastly, the predictive model utilizes data inputs for lost future yields, which goes beyond what is allowed for in statute, and exceeds the 1-year compensation time period established in administrative rule.

For these reasons, we urge the hearing officer and Wildlife Board to adopt the Division's assessment of big game damage.

Request for Relief

Upon review by the Wildlife Board, the Division respectfully requests the Board find the following:

- 1. By Statute and by rule, damage caused by big game on cultivated crops are limited to damages caused within a calendar year, thus preventing the Division from considering speculative anticipated income in future years in its damage calculations.
- 2. The damage calculation of \$4,187.61 is the best calculation of damages that incurred by Eskelsen Orchards LLC, in light of paragraph 1 above and the verifiable information used to reach that value.

Apricot

Fruit:

Lost Tree Value

\$36.19

Claimant Weighted Avg. Yield at Pounds Tree Cost **Provided Yield** Price Maturity Per Bushel NASS Annual Yields - Tons/Acre Replace default costs and values where appropriate: Per Acre 2016 5-Year Average Age of tree replaced: 1 years old Quantity Total Cost Cost per Tree 2020 2019 2018 2017 \$5.70 \$8.40 Stump removal cost: Apricot 2,334 \$19,598.52 \$8.40 \$59.32 9,468 48 3.77 5.00 3.73 4.57 6.60 4.73 6.77 New tree cost: 700 \$7,430.38 \$10.61 \$76.28 14,656 53 7.60 7.16 7.86 7.25 7.33 Pluot 805 \$6,142.15 \$7.63 Planting cost/tree: \$1.35 \$48,77 17,200 48 9.00 8.65 8.60 8.34 8.41 8.60 Nectarine Crop value per Bushel: \$59.32 Discount rate: 6.12% 10 ft Spacing - R x T: Total Acreage: 14 Trees per Acre: 272 Hourly Labor Cost: \$14.82 Cost Inputs (Per Acre) Annual Irrigation: Total Water Cost \$850.00 \$60.71 Total Cost per Acre Annual Electricity: \$50.00 Irrigation Pump \$45.00 Cooler \$95.00 Total Elecricity Cost Per Acre **Annual Fertilization & Chemical Costs** Fertilizer \$319.00 Insect & Disease Prevention \$151.00 Weed Killer \$6.25 \$476.25 Total **Annual Equipment Cost** Fuel & Lube N/A N/A Repairs Total **Annual Marketing** \$0.70 Cost per Box Packaging \$276.15 Transportation \$72.00 \$348.15 Total COST SECTION: Apricot YEAR 10 11 12 13 14 15 16 17 18 19 20 EXPECTED YIELD AND INCOME FOR REPLANTED TREE 197 197 197 197 Bushels of fruit/acre 41 115 164 197 197 197 197 197 197 197 197 197 197 197 Bushels of fruit/tree 0.15 0.42 0.60 0.72 0.72 0.72 0.72 0.72 0.72 REPLACEMENT COSTS FOR NEW TREE Stump removal \$5.70 New tree \$8.40 Planting \$1.35 \$4.75 **Total Production Costs** \$1.86 \$4.67 \$10.95 \$13.90 \$17.12 \$17.12 \$17.12 \$17.12 \$17.12 \$17.12 \$17.12 \$17.12 \$17.12 \$17.12 \$17.12 \$17.12 \$17.12 \$17.12 \$17.12 \$17.12 Income credit -\$42.98 NET COST OF THE NEW TREE \$7.56 \$4.67 \$14.50 \$2.00 -\$25.86 -\$25.86 -\$25.86 -\$25.86 YIELD LOST FROM OLD TREE Bushels of fruit/acre 41 115 164 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 197 Bushels of fruit/tree 0.42 0.60 0.72 0.72 0.72 0.72 0.72 NET INCOME LOST FROM OLD TREE \$42.98 \$42.98 \$42.98 \$42.98 \$42.98 Income lost \$8.95 \$25.07 \$35.82 \$42.98 \$42.98 \$42.98 \$42.98 \$42.98 \$42.98 \$42.98 \$42.98 \$42.98 \$42.98 \$42.98 -\$4.67 -\$4.75 -\$10.95 -\$13.90 -\$17.12 -\$17.12 -\$17.12 -\$17.12 -\$17.12 -\$17.12 -\$17.12 -\$17.12 -\$17.12 -\$17.12 -\$17.12 -\$17.12 -\$17.12 -\$17.12 -\$17.12 -\$17.12 -\$17.12 Decrease in production cost NET INCOME LOST FROM OLD TREE -\$4.67 \$25.86 \$25.86 \$25.86 \$11.17 \$18.70 \$25.86 \$25.86 \$25.86 \$25.86 \$25.86 \$25.86 \$25.86 \$25.86 \$25.86 \$25.86 \$25.86 \$25.86 \$12.50 ANNUAL LOSS (Net cost plus net income lost) \$2.89 \$13.17 \$7.53 \$7.16 VALUE OF TREE LOST @ AGE \$36.19

Fruit:

Nectarine

Lost Tree Value

\$52.15

Claimant Weighted Avg. Yield at Pounds Tree Cost **Provided Yield** Price Maturity Per Bushel NASS Annual Yields - Tons/Acre Replace default costs and values where appropriate: Per Acre 2016 5-Year Average Age of tree replaced: 1 years old Quantity Total Cost 2020 2019 2018 2017 \$5.70 \$7.63 Stump removal cost: Apricot 2,334 \$19,598.52 \$8.40 \$59.32 9,468 48 3.77 5.00 3.73 4.57 6.60 4.73 6.77 New tree cost: 700 \$7,430.38 \$10.61 \$76.28 14,656 53 7.60 7.16 7.86 7.25 7.33 Pluot \$7.63 Planting cost/tree: \$1.35 805 \$6.142.15 \$48,77 17,200 48 9.00 8.65 8.60 8.34 8.41 8.60 Nectarine Crop value per Bushel: \$48.77 Discount rate: 6.12% 10 ft Spacing - R x T: 14 Total Acreage: Trees per Acre: 272 Hourly Labor Cost: \$14.82 Cost Inputs (Per Acre) Annual Irrigation: Total Water Cost \$850.00 \$60.71 Total Cost per Acre Annual Electricity: \$50.00 Irrigation Pump \$45.00 Cooler \$95.00 Total Elecricity Cost Per Acre **Annual Fertilization & Chemical Costs** Fertilizer \$319.00 Insect & Disease Prevention \$151.00 Weed Killer \$6.25 \$476.25 Total **Annual Equipment Cost** Fuel & Lube N/A Repairs N/A Total **Annual Marketing** \$0.70 Cost per Box Packaging \$501.67 Transportation \$72.00 \$573.67 Total COST SECTION: Nectarine YFAR 10 11 12 13 14 15 16 17 18 19 20 EXPECTED YIELD AND INCOME FOR REPLANTED TREE 358 358 358 Bushels of fruit/acre 75 209 299 358 358 358 358 358 358 358 358 358 358 358 358 Bushels of fruit/tree 0.27 0.77 1.32 1.32 1.32 1.32 1.32 1.32 1.32 1.32 1.32 1.32 REPLACEMENT COSTS FOR NEW TREE Stump removal \$5.70 New tree \$7.63 Planting \$1.35 \$17.95 **Total Production Costs** \$1.86 \$4.67 \$4.75 \$11.78 \$14.73 \$17.95 \$17.95 \$17.95 \$17.95 \$17.95 \$17.95 \$17.95 \$17.95 \$17.95 \$17.95 \$17.95 \$17.95 \$17.95 \$17.95 \$17.95 Income credit -\$64.19 -\$64.19 NET COST OF THE NEW TREE \$7.56 \$4.67 \$13.73 -\$35.54 -\$46.24 -\$46.24 -\$46.24 -\$46.24 -\$46.24 -\$46.24 -\$46.24 -\$46.24 -\$46.24 -\$46.24 -\$46.24 -\$46.24 YIELD LOST FROM OLD TREE Bushels of fruit/acre 75 209 299 358 358 358 358 358 358 358 358 358 358 358 358 358 358 358 358 Bushels of fruit/tree 1.32 1.32 1.32 1.32 1.32 NET INCOME LOST FROM OLD TREE \$13.37 \$37.44 \$64.19 \$64.19 \$64.19 \$64.19 \$64.19 Income lost \$53.49 \$64.19 \$64.19 \$64.19 \$64.19 \$64.19 \$64.19 \$64.19 \$64.19 \$64.19 \$64.19 \$64.19 -\$4.67 -\$4.75 -\$11.78 -\$14.73 -\$17.95 -\$17.95 -\$17.95 -\$17.95 -\$17.95 -\$17.95 -\$17.95 -\$17.95 -\$17.95 -\$17.95 -\$17.95 -\$17.95 -\$17.95 -\$17.95 -\$17.95 -\$17.95 -\$17.95 Decrease in production cost NET INCOME LOST FROM OLD TREE -\$4.67 \$35.54 \$46.24 \$46.24 \$1.59 \$22.71 \$46.24 \$46.24 \$46.24 \$46.24 \$46.24 \$46.24 \$46.24 \$46.24 \$46.24 \$46.24 \$46.24 \$46.24 \$46.24 \$46.24 \$15.32 \$12.83 ANNUAL LOSS (Net cost plus net income lost) \$2.89 \$21.12 \$10.70 VALUE OF TREE LOST @ AGE \$52.15

Lost Tree Value

Pluot

Fruit:

\$72.56

Claimant Weighted Avg. Yield at Pounds Tree Cost **Provided Yield** Price Maturity Per Bushel NASS Annual Yields - Tons/Acre Replace default costs and values where appropriate: Per Acre 2016 5-Year Average Age of tree replaced: 1 years old Quantity Total Cost 2020 2019 2018 2017 Stump removal cost: \$5.70 Apricot 2,334 \$19,598.52 \$8.40 \$59.32 9,468 48 3.77 5.00 3.73 4.57 6.60 4.73 \$10.61 6.77 New tree cost: 700 \$7,430.38 \$10.61 \$76.28 14,656 53 7.60 7.16 7.86 7.25 7.33 Pluot \$7.63 Planting cost/tree: \$1.35 805 \$6.142.15 \$48,77 17,200 48 9.00 8.65 8.60 8.34 8.41 8.60 Nectarine Crop value per Bushel: \$76.28 Discount rate: 6.12% Spacing - R x T: 16 ft Total Acreage: 14 Trees per Acre: 272 Hourly Labor Cost: \$14.82 Cost Inputs (Per Acre) Annual Irrigation: Total Water Cost \$850.00 \$60.71 Total Cost per Acre Annual Electricity: \$50.00 Irrigation Pump \$45.00 Cooler \$95.00 Total Elecricity Cost Per Acre **Annual Fertilization & Chemical Costs** Fertilizer \$319.00 Insect & Disease Prevention \$151.00 Weed Killer \$6.25 \$476.25 Total **Annual Equipment Cost** Fuel & Lube N/A N/A Repairs Total **Annual Marketing** \$0.70 Cost per Box Packaging \$427.47 \$72.00 Transportation \$499.47 Total COST SECTION: Pluot 10 11 12 13 14 15 16 17 18 19 20 EXPECTED YIELD AND INCOME FOR REPLANTED TREE 305 Bushels of fruit/acre 64 178 254 305 305 305 305 305 305 305 305 305 305 305 305 305 305 Bushels of fruit/tree 0.23 0.65 0.93 1.12 1.12 1.12 1.12 REPLACEMENT COSTS FOR NEW TREE Stump removal \$5.70 New tree \$10.61 Planting \$1.35 **Total Production Costs** \$1.86 \$4.67 \$4.75 \$11.51 \$14.46 \$17.67 \$17.67 \$17.67 \$17.67 \$17.67 \$17.67 \$17.67 \$17.67 \$17.67 \$17.67 \$17.67 \$17.67 \$17.67 \$17.67 \$17.67 \$17.67 Income credit -\$85.55 NET COST OF THE NEW TREE \$7.56 \$4.67 \$16.71 -\$67.88 -\$67.88 -\$67.88 -\$67.88 -\$67.88 -\$67.88 -\$67.88 -\$67.88 YIELD LOST FROM OLD TREE Bushels of fruit/acre 64 178 254 305 305 305 305 305 305 305 305 305 305 305 305 305 305 305 305 Bushels of fruit/tree 0.65 0.93 1.12 1.12 NET INCOME LOST FROM OLD TREE \$17.82 \$85.55 \$85.55 \$85.55 \$85.55 \$85.55 \$85.55 Income lost \$49.90 \$71.29 \$85.55 \$85.55 \$85.55 \$85.55 \$85.55 \$85.55 \$85.55 \$85.55 \$85.55 \$85.55 -\$4.67 -\$4.75 -\$11.51 -\$14.46 -\$17.67 -\$17.67 -\$17.67 -\$17.67 -\$17.67 -\$17.67 -\$17.67 -\$17.67 -\$17.67 -\$17.67 -\$17.67 -\$17.67 -\$17.67 -\$17.67 -\$17.67 -\$17.67 -\$17.67 Decrease in production cost NET INCOME LOST FROM OLD TREE -\$4.67 \$67.88 \$67.88 \$67.88 \$67.88 \$67.88 \$6.32 \$35.45 \$53.62 \$67.88 \$67.88 \$67.88 \$67.88 \$67.88 \$67.88 \$67.88 \$67.88 \$67.88 \$67.88 \$67.88 \$23.03 ANNUAL LOSS (Net cost plus net income lost) \$2.89 \$29.13 \$18.17 \$14.26 VALUE OF TREE LOST @ AGE \$72.56



State of Utah

DEPARTMENT OF NATURAL RESOURCES

BRIAN C. STEED Executive Director

Division of Wildlife Resources

J. SHIRLEY
Division Director

December 14, 2021

DIVISION OF WILDLIFE RESOURCES ASSESSMENT TODD ESKELSEN DEPREDATION COMPENSATION

Mr. Todd Eskelsen ("Mr. Eskelsen") seeks reimbursement for alleged big game damage to Apricot, Pluot, and Nectarine trees pursuant to U.C.A. §§ 23-16-3 and 4. This summary provides the basis for the Utah Division of Wildlife Resources' ("Division") assessment of damages for review by an independent hearing officer. We assert the hearing officer should accept the Division's calculation of damages for the following reasons: (1) The Division's assessed value is based on the best estimate of actually-incurred damages for the current year, as required by statute and rule; (2) the model which Mr. Eskelsen has provided and which he has used to provide his own assessment of damage is speculative and unreliable; and (3) the proposed predictive model uses variables that are not allowed by statute and exceeds the 1-year damage calculation time period established in rule.

Incorporation

The Division hereby incorporates by reference all exhibits included in Mr. Eskelsen's original Request for Agency Action ("RAA") and the Division's response and exhibits to that RAA. Mr. Eskelsen has amended his RAA and the Division responds accordingly below.

Argument

1. The Division's estimate of big game damage is based on documented damages that were actually incurred and is therefore the most accurate.

In response to Mr. Eskelsen's complaints of big game damage to his recently planted orchard, the Division responded in a timely manner to assess and mitigate damage caused by big game. Mr. Eskelsen and the Division agreed to delay calculating total damages until spring, with the understanding that big game damage had to be properly documented. When Mr. Eskelsen renewed his 72 hour notice and the Division responded to assess damage, the Division was unable to inventory the alleged damage to orchard trees because Mr. Eskelsen had already removed and replaced the seedlings, referred to as "whips" in the orchard business. Instead, Mr. Eskelsen produced a map of his orchard, indicating trees that had been "killed by animal," in addition to other causes, such as being damaged by equipment, drought, planting complications, or poor irrigation. Without a physical evaluation of the damaged orchard trees, DWR, the hearing officer, and ultimately the Wildlife Board, are left only with the assertions of Mr. Eskelsen and his unverifiable spreadsheet as to the number of trees damaged and the actual cause of the damage. This scenario makes it nearly impossible to validate damage claims from landowners and is one reason why Utah Code requires a landowner to immediately notify DWR



¹ A "Whip" is a very young tree – essentially a seedling.

² See Eskelsen Attachment "Eskelsen Orchards FY 2020-21 Deer Depredation Tree Survey"

of damage incurred by big game. U.C.A. §23-16-3(1). Nevertheless, the Division attempted to assess damage caused by big game.

The Division may compensate landowners or lessees for damage to cultivated crops caused by big game animals based on the full replacement value in the local market for crops actually damaged or will be damaged. U.C.A. §23-16-4(1) & (3). "For the purposes of compensation, all depredation incidents end on June 30 annually, but may be reinstated July 1." R657-44-5(b).³ This is referred to as the "damage incident period." R657-44-2(2)(d).

The Division's assessment of damages is as follows:

	# of Trees	Cost per tree	Storage	Shipping	Planting	Removal	Replant	Total
Apricot	141 x	(\$8.40 +	\$1.50 +	\$1.50 +	\$1.35 +	\$1.35 +	\$1.35)	\$2,178.45
Pluot	88 x	(\$10.61 +	\$1.50 +	\$1.50 +	\$1.35 +	\$1.35 +	\$1.35)	\$1,554.08
Nectarine	31 x	(\$7.63 +	\$1.50 +	\$1.50 +	\$1.35 +	\$1.35 +	\$1.35)	\$455.08
								\$4,187.61

The Division valued the damages at \$4,187.61 for the FY20 damage incident period based off of the receipt provided by Mr. Eskelsen for the purchase, storage, and shipping of replacement trees that Mr. Eskelsen actually incurred.⁴ This is a generous offer considering that the Division overcredited Mr. Eskelsen for shipping and cold storage costs above those costs actually incurred by approximately \$320.⁵

Based on the information available, this is the most accurate estimate and should be the value recommended to the Wildlife Board by the hearing officer.

2. <u>Mr. Eskelsen's use of predictive model to estimate damages is speculative and relies on unverifiable data parameters.</u>

Mr. Eskelsen proposes using a predictive model that estimates lost future yields from perennial orchard trees that have yet to produce any fruit. This model incorporates a series of variables to estimate a future condition and is based on a series of assumptions. Some variables are static, such as tree cost, some are variable, and some are estimates or guesses. If a variable is changed, the outcome of the model (assessed value of fruit trees) also changes. Therefore, the outcome of the model is only as good as the data that is used.

³ Compensation for damages is limited to a fiscal year because anticipating and calculating future damages are too speculative. Therefore, the Division limits compensation to what was actually lost between July 1 and June 30 of a given year.

⁴ See Todd Eskelsen Tree Replacement Calculations DWR.pdf.

⁵ See 2020 Burchall & Wilson Nurseries Invoice Charges.pdf

Based on how variables are changed in the model, the assessed values range wildly eventually arriving at Mr. Eskelsen's amended proposal of \$13,884.72. In an effort to resolve the gap between the Division and Mr. Eskelsen's assessments, the parties sought an independent third-party valuation. Upon initial review of the model at issue in this Amended RAA, Professor Geary, the independent evaluator, felt that the model was too complicated and that the values utilized were difficult to understand and incongruent with national statistics. Using US Dept. of Agriculture census data from 2018-2019 (most recent years available) to calculate prices per bushel, the value per tree can be dropped from Mr. Eskelsen's valuation to \$5,566.88. The wideranging outcomes of the model show how unreliable it is without more concrete data inputs.

The lack of concrete, verifiable inputs has been one of the primary contentions over this model. Because of its scarcity, the availability of local data presents a challenge for Mr. Eskelsen and would be a substantial hurdle for other growers to find and use in the model. Major data points that cause concern for the Division are:

- Weighted Avg. Price these numbers seem to be based on neighboring orchards but lack context on whether these sales are applied uniformly to all qualities for fruit. More importantly, these numbers are contradicted by the national avg. price for these fruits by at least a factor of two.⁷
- NASS Annual Yields Tons/Acre Unable to find local data on orchard yields, Mr. Eskelsen used data from the USDA. However, the USDA also lacks data for Utah or neighboring arid states. As a result, these yield numbers are largely based on Washington and California numbers, which are not comparable to Utah. Using Apricots as an example, in 2015 UT does have information contributing to these numbers with a yield of .06 tons per acre. That same year California and Washington had yields per acre of 3.7 and 7.15 respectively. These yield numbers do not reflect yields in Utah and would heavily increase the value per tree.⁸
- Furthermore, to complicate this spreadsheet, Mr. Eskelsen's yield numbers between his two models struggle with how to approach the variable nature of yields and factoring in (1) the natural three-year cycle of yields in stone fruit trees and (2) the loss of yields by any number of natural causes unrelated to big game in any given year. In this amended RAA, Mr. Eskelsen uses a five-year yield average. As stated above, these numbers likely do not come close to reflecting yields in Utah. To add to that, utilizing a number based on national yield average per acre cannot be distilled down to an individual tree that at any given cycle in its life can fail to produce stone fruit. Here, this average is used as the peak production of the tree.
- **All Utilities and production costs** the costs for production drive the amount of money lost by a tree being a year behind the rest. These values are either unsubstantiated or are based on a "standard" value found on the internet. For example, the costs in the model for marketing are not

⁶ See Amended Request for Agency Action by Utah Wildlife Board. See Also Revised Tree Valuation Model 11.15.21 v3.xlsx. See also Attachments 4,9, and 10 of Eskelsen's initial RAA.

⁷ See Crop Values 2020 Summary (Feb. 2021) with notes converting to tons to bushels.

⁸ See NASS yield data for 2020 to 2010. See also 2017 Census Info on Fruit.pdf – noting the acreage difference between the lower 48 states. The importance of this document is California and Washington have significantly more acres of Apricot, Nectarine, and Pluot orchards than Utah which would skew the statistical data that drives the NASS yield data.

- supported by any information and have changed by approximately \$1,200 between Mr. Eskelsen's initial request and this amended request. Additionally, Mr. Eskelsen has hired an individual to tend to his orchard, however, in this model he utilizes minimum wage regulations from the federal government. It therefore does not reflect his actual expense.
- Finally, this model predicts out the expenses and anticipated income for the 20 years. The result is a claim that the loss of a whip reverberates across 5 years of lost income. The problem is that all of the above variables feed this lost income unreliable data creates more unreliable data. This methodology also ignores the year-to-year variability in growth and climate (disease, late frost, irrigation complications, wind or hail damage, market value fluctuations, etc.). While using an avg. anticipated yield makes sense on its face, this approach ignores that for an individual tree, that yield could be zero.

What cannot be understated is that this model applies to a very specific scenario where saplings and whips are destroyed by big game. This model does not apply to damage done to trees that actually yield a crop. With that in mind, this model is not replicable for any other orchard growers in the state due to its dependency on accurate and substantiated data. The same growers Mr. Eskelsen has discovered were unwilling or unable to share their records are the same growers that will be unable or unwilling to provide information necessary for this model.

In considering how best to fairly make growers whole in a manner that in replicable, the Division still feels that its evaluation in part 1 above is the clearest route to do so until trees begin bearing fruit and growers start having information regarding the loss of their fruit production.

3. *The use of a predictive model is inconsistent with statute and administrative rule.*

The Division is directed in statute to calculate a damage payment by considering, among other things, the extent of the damage experienced. U.C.A. §23-16-4(3). Specifically, the Division determination shall be based on "full replacement value in the local market of the cultivated crops that actually have been or will be damaged or consumed by big game animals; and cost of delivery of a replacement crop to the location of the damaged crop or other location that is not farther from the source of the replacement crop." U.C.A. §23-16-4(3)(c). That is precisely what the Division did, as outlined in Subsection 1 above. For all producers, the Division has treated this "will be damaged" clause of the statute as an acknowledgement that in the ongoing relationship between the Division and Growers, there will be damage that might occur year-round. Mr. Eskelsen's predictive model goes beyond this directive and attempts to add lost future yields as an additional element of compensation for a tree that is three years from production. Lost future yield is not an element identified in the statute.

Second, the Division's Big Game Depredation rule defines the time period for each round of big game damage compensation as a one-year time period, running July 1 to June 30 annually (i.e., the damage incident period). See R657-44-2(2)(d). Simply put, the Division compensates for big game damage on an annual basis. R657-44-5(2). Using a model that incorporates estimated costs and revenues well into the future considers materials outside of the damage incident period and not only is inconsistent with that rule but also impractical to replicate for other growers.

Conclusion

The Division's offer of \$4,187.61 is the most accurate estimate of damages incurred given the complicated set of factors involved – and is generous at that. Mr. Eskelsen's proposal to utilize a predictive model is fraught with speculation. Requiring the Division to compensate for future lost yield in this speculative manner may stretch the Division's already limited depredation budget. See U.C.A. §23-16-4(4). If statewide claims exceed the Division's legislatively approved budget, other livestock and agricultural producers may see their verifiable claims prorated. This model would set a precedent that would make it more difficult for other growers to get compensation. Lastly, the predictive model utilizes data inputs for lost future yields, which goes beyond what is allowed for in statute, and exceeds the 1-year compensation time period established in administrative rule.

For these reasons, we urge the hearing officer and Wildlife Board to adopt the Division's assessment of big game damage.

Request for Relief

Upon review by the Wildlife Board, the Division respectfully requests the Board find the following:

- 1. By Statute and by rule, damage caused by big game on cultivated crops are limited to damages caused within a calendar year, thus preventing the Division from considering speculative anticipated income in future years in its damage calculations.
- 2. The damage calculation of \$4,187.61 is the best calculation of damages that incurred by Eskelsen Orchards LLC, in light of paragraph 1 above and the verifiable information used to reach that value.

Eskelsen Orchards Tree Count Upper North Orchard FINAL FY 2020 - 2021

Upper Orchard

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1		R	Е	В	Ν			N		N		Ν								Е
		Е		N	N				Е		В		Х							
			В	Ν	Е						В				Ν					
			В	В	D	R				D		В								
5			<u> </u>	В	Е			D			В				Е					
		Е		D	Е				S						Е		R		Ν	
		D			D		Ν	В			E	Е		E	E	R	R	N	В	
		D			D							N			E/R	D	R	N/R	N	N/R
	N	D		N	N							N	R		В	N/R				
10		В											E			R		N		
		D		N	N															
		В		N	N		N						R		В	N			N	R
		R		N/B	N			N					R	R	В				N/R	
		E/R		В	В			В					В		N	N			N/R	N
15											R/B	R	В		Χ	N		R	N	
				N				E	N	В		В			N/R					
				N	В							В								
				E					Х	В					N					
			Е	D					В	В		Ε		В		R				
20			E	N														R		
			Ε	E																
			E	N												N	N	N		
				N			N	N			N				Ν	N	N	N		
			Е					N								N				
25				N/R					N		N				N		N			R
			Е	В					N		N									
			Ε	N	R										N		N			
			R		N	_										_		E	N	
						В		_							N	R	N			
30					N			В	D		N								N	
					N						N					N			N	
						RE									N	N		N		
							R			_		N			N.	N	N	N		
25						R				R					N	R	N			
35				N:		R									N	N	N			
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40								N												
40																		N.I.	R	
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------ Apricots ------

	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
1		N		Ν	N	R	N/B	D	Ν	N	N	N	D	Е	E	Χ	Х	Χ	N/R	R
		N	N	Ν		N			Ν					N				R	N	
		N		Ν		N				Ζ				D		Ν	Ν	Ν	N	
					Ν			В					R	R			R			
5								В							Ν					
	N					N	D					N			N	N		N	D	
		R	R		R							N								
	R			R/N			N					N	N	N		N				
							N	N						N	N	D	D	N		
10							R	N						N					R	
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	R	R					N/R		Ν									N		
		R		Ν									R		N					
15				Ν		N	N							Ε	N					
		R	N	R				N							В	R				
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		N		R/B	R	Е								Е						
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			R/B	N					N				R							
			N	N	N	N		N	N											
		N			R	N		R												
				N		N	N	В		N		N								
30						Ε	E	Е	R	В	D									
		N			R		N			R	R									
				R	R			D	R											
			R/N					N/R	N	N										
			N		N	N	N	N		R	R									
35					Ε		N		R											
			N		N		N/R		R											
				N			R													
		N			N		N				R									
40							N													
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------ Apricots ------

	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
1		N	Χ					Х			Е					Ε	Е	N	N	
									Χ	Χ	N	Е	Е	D	D	N	D	N		N
						N				Ν	Е	N	N	N	Ε	Ε	Ε	N		Ν
									Χ	В		N	N	Ε	N	N	N	N		N
5			R						Χ		Ε	Ε	N	Ε	N		Ε	N	N	N
			R			N			В	В	Χ	Х	N	N	R	Ε	D	N	N	R
					N	Х			В	В	N		N	Ε	N	N	D	N		N
					R	Х			D	В			R	R	N	Е	D	N	D	D
					R	Х		Х	Х		Х	Е	N	R	N	N	D	N		N
10				В	R	R	N		Х	Χ	R	N	Х	Χ	R	D	Е	Ν		N
		Χ				N	R			D	R	N	R	N	R	N	D	Ν	N	Е
		D			R	Χ		D	Х	Χ	N	D	R	N	N		D	N	N	Е
					R	Ε	Х	Х	D	Χ	Е	Е	R	N	N		D	N		N
			R	R			D	Х	R		Е	R	Е	Е			D	N		N
15					Х	Χ		Х	D		R	R	R	N			D	N		N
					Х	Χ		Х	R		R	E	R	N	N	N	D	N		N
			Χ				Χ				Е	D	N	N	N		D	N		R
			D	Χ	Х	Χ		Χ			R	R	Ν	Ν			Х	Ν	R	N
			Χ	Χ				Χ			N	D	N	Ν	R	N	D	Ν	R	N
20				Χ		Χ	N	Χ	D		Ε	N	Ν	Ζ	Ζ		D	R	N	N
			Χ	Χ			N				Е	Ε		Ν	Ν	Ν	Ε	R	N	N
		Χ		Χ		Χ		Χ	D		Е	N	N	Ε	Ε	N	Χ	Ν	N	N
		Χ		Χ		Χ	Χ	Χ			N	N	Ν	Ζ	Z	N	Χ	Z	Е	Ε
		Χ	Χ	Χ		Χ	D	Χ				N	Е	Е	Χ	N	Χ	Z	N	Ε
25		D	Χ	Χ	Ε	Χ	N	N	Χ		N	Е	Ε	Ν	Ε	R	Χ	Ν	N	N
		N	Χ	Χ	Χ	N		D	Χ		Χ	Ε	Ε	R	Ε	N	Χ	N	N	N
		N		Χ		Ε		D	Χ		Ε	Ε	Ε	N	R	N	D	N	R	N
				Χ			Χ	D	Χ		Χ	Е	Ε	Ε	Ε	N	D	N	N	N
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30			D		Χ	D	D	D	N		N	E	R	R	E	N	D	N	N	N
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		D	D			D	Х	Χ	Х		D	Е	N	R	R	N	Е	N	N	Е
					Е	Х	Х	Х	Х		N	Е	Е	Ε	N	N	D	N		Ε
				Χ		Χ	D	D	Х		Е	Е	Е	N	Ε	N	D	N	N	Ε
35				Χ	Ε	Χ	Х				Е	Е	Е	Ε	R	N	D	N	N	N
				Χ	N	Х					Е	Е	Е	N	Х	N	D	Е	N	N
				Χ		Χ			Х		Е	Е	Е	N	D			Е	N	Е
												E						Е		Е
																		Е	N	Е
40																		Ε	Х	Ε
																		Ν	Х	
																		Ε		

------ Plums ------ Pluots ------

	61	62	63	64	65	66	67	68	69	70	71
1	E	02	05	07	03	00	07	00	03	70	7 1
_	N										
	N										
	N	N	N								
5	N	IN	N	E				N		E	
3	R		N	E		N	N/R	N	N	N	
	N	N	N	N		N	N N	IN	N	N	
								N.I			
	N	X	N N/D	E		N	N	N	N	N	
10	N	E	N/R	N		N	N	N	N	N	
10	N	N	N/B	N		N	N	N	N	N	
	N	N	N	N		N	N	N	N	N	
	N		N	N		N	N		N	N	
	N		N	N		N	N		N	N	
	N			Е		N	N	N	N	N	
15	N	N	N	N		N	N		N	E	
	N			D		Е	N	N	N	N	
	N		N	N/B		N	N	N	N	N	
	N	N/R	N	E		Ε	N	N	N	N	
	N		N	N		N	N	Ν	N	N	
20	N		N	N		Ε	N	N	N	N	
	N		N	N		Ε	N	N	N	N	
	N	N	N	E		N	N		N	E	
	E	N	Ν	Ν		D	N	Ν	N	E	
	N	N	Ν	Ν		Ε	Ν	Ν	N	N	
25	N	N	Ν	Ν		Ε	Ν	Ν	N	E	
	N	N	Ν	Ν		Ε	N/B	Ε	N	E	
	Ε		Ν	E		N	Ν	Ε	N	Ε	
	N	N	N	E		N	N	Ν	N	N	
	N		N	N		N	N	N	N/R	Ε	
30	N	N	N	E		Ε	N	N	N/R	N/R	
	N	N	N	E		R	N		N	E	
	N	N	N	D		Е	N	N	N/R	Е	
	N			E		R	N	Е	N	Е	
	N	N	N	E		В	E	E/R	N	N	
35	N	N	N	R		R	R	R	E	E	
	N	N		N		Ε	N	R	N	E	
	Х	N	N	N		Е	Е	R	N	R	
			N	N		Е	N	R	N	Е	
				E		Е	R	N	N	D	
40						Е	Е				
				Dluote							

------ Pluots ------

Eskelsen Tree Listing -Deer Depredation Chart 2020-21 Lower North Orchard

	1	2	3	4	5	6	7	8	9	10
	Х									
	Х									D
5								Z		
					В					
	D									
									N	
	D									
10										
								R		
14		D								
20										
20										
		D								
26	Х	R X								
20	X	<u>^</u>								
28	^	^	В							
20			ט							

----- Nectarines

Eskelsen Tree Listing -Deer Depredation Chart 2020-21 - Lower South Orchard

	1	2	3	4	5	6	7	8	9	10
		D		Х		В	Х	Х	Х	Χ
	Х				D		Χ	Х	Х	Χ
	N	D			N	В	В	Х	Х	Χ
		D	D	Ν			D	Х	Х	Х
5		В	D	R		D	D	D	Χ	Χ
				R		D		D	Χ	Χ
		D		D					Χ	Χ
	D	D		В		D	R		Х	Χ
				R		В				
10						D		R		D
	R	В				В	D			D
	R									
					D	N				
					R					D
15				В						
			В							
							В			R
				D			D			D
20										В
					D					
					D					
		D				В				
							D			
25							D			
							D		D	
					Χ		Х	Χ	D	
28	Χ		D		X	Χ	Χ	Χ	Χ	

----- Nectarines -----

<u>KEY</u>

B = broken (tree has been broken off by animal activity to the point that death or significant compromise likely)

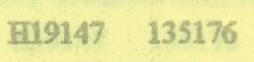
D = Dead (tree has been killed or is so damaged that likely to die or be significantly compromised)

N = Nibbled (significant animal nibbling on branches; likely to recover)

R = rubbed (significant animal antler rubbing to the point that death or significant compromise likely)

X = missing (tree missing from expected location; likely no tree planted or tree lost through problem planting or irrigating)

Green = space empty; Red = killed by animal; Yellow = killed by equipment, drought, other



13 Out-of-State

DELIVERY DATE

A CALIFORNIA CORPORATION

HICKMAN OFFICE

PO BOX 429

HICKMAN, CALIFORNIA 95323

PHONE (209) 874-1821

WHOLESALE

PO BOX 429

HICKMAN, CALIFORNIA 95323

PHONE (209) 874-1821

DAYS OF DATE OF INVOICE. PAST DUE ACCOUNTS ARE SUBJECT TO A LATE CHARGE OF TERMS: THIS INVOICE IS TO BE PAID IN FULL WITHIN

18 %) ON THE UNPAID PAST DUE BALANCE. IF SUIT IS FILED TO COLLECT THIS 1.5 % PER MONTH (ANNUAL PERCENTAGE RATE OF

DEBT OR ANY PART THEREOF, THE PURCHASER AGREES TO RAY ADDITIONAL SUMS ADJUDGED REASONABLE BY THE COURT FOR ATTORNEY'S FEES.

SOLD

TO:

Eskelsen Orchards, LLC *PR* Jordan Riley

FARMER PROVEN

SINCE 1938

4011 Glenridge Street Kensington MD 20895 CUST. ACCT. NO.

ESKORC

INVOICE DATE P.O. NO.

BRANCH

10

DEL. REC. NO.

SHIPPED

TO

	Ebony Rose not available.	ITEM #	COLUBCE	CIZE	PRICE		AMOUNT
QUANTITY	PRODUCT	ITEM #	SOURCE	SIZE	PRICE		AMOUNT
1	Cold Storage	10293	W51	No. 1	215.00 N		215.00
15	Amigo II Pluot 'R' LS. Plum on Citation		W51	1/2"	8.40		126.00
	Variety Royalty 3.00 + Rtsk Royalty	= 3.00					45.00
20	Amigo II Pluot 'R' LS. Plum on Citation	10042	W51	3/8"	8.25		165.00
	Variety Royalty 3.00 + Rtsk Royalty	= 3.00					60.00
8	Candy Heart Pluerry 'R' LS. Plum on Lovell	14862	W51	1/2"	8.40		67.20
	Variety Royalty 3.00						24.00
20	Candy Heart Pluerry 'R' LS. Plum on Lovell	14862	W51	5/8"	8.55		171.00
	Variety Royalty 3.00						60.00
7	Candy Heart Pluerry 'R' I.S. Plum on Lovell	14862	W51	3/8"	8.25		57.75
	Variety Royalty 3.00						21.00
6	Crimson Rose Pluot 'R' LS. Plum on Citation	Control of the second	W51	3/8"	8.25		49.50
	Variety Royalty 3.00 + Rtsk Royalty	= 3.00		200			18.00
29	Crimson Rose Pluot R' LS. Plum on Citation	14316	- 11	3/16"	8.00		232.00
	Variety Royalty 3.00 + Risk Royalty	= 3.00		1 100	0.10		87.00
35			W51	1/2"	8.40		294.00
100	Variety Royalty 3.00 + Rtsk Royalty	= 3.00	W51	5/8"	0.00		105.00 179.55
21	Dapple Fire Pluot 'R' LS. Plum on Citation	7628		210	8.55		63.00
	Variety Royalty 3.00 + Rtsk Royalty	= 3.00 7628	W51	1/2"	8.40		117.60
14	Dapple Fire Pluot 'R' LS. Plum on Citation	1020	A4 77	116	0.40		117.00
						AMOUNT	
						SALES TAX	
						LESS DEP. PAID	
						TOTAL	
	Discounts will be reduced by 3% for pa	auments vi	a credit	card			

Discounts will be reduced by 3% for payments via credit card

ORDER NUMBER-INVOICE NUMBER
H19147 135176

DELIVERY DATE

13 Out-of-State

A CALIFORNIA CORPORATION

HICKMAN OFFICE

PO BOX 429

HICKMAN, CALIFORNIA 95323 PHONE (209) 874-1821

THIS INVOICE IS TO BE PAID IN FULL WITHIN

WHOLESALE

PO BOX 429

HICKMAN, CALIFORNIA 95323

PHONE (209) 874-1821

DAYS OF DATE OF INVOICE. PAST DUE ACCOUNTS ARE SUBJECT TO A LATE CHARGE OF

1.5 % PER MONTH (ANNUAL PERCENTAGE RATE OF 18 %) ON THE UNPAID PAST DUE BALANCE. IF SUIT IS FILED TO COLLECT THIS DEBT OR ANY PART THEREOF, THE PURCHASER AGREES TO PAY ADDITIONAL SUMS ADJUDGED REASONABLE BY THE COURT FOR ATTORNEY'S FEES.

30

SOLD

TERMS:

TO:

Eskelsen Orchards, LLC *PR*
Jordan Riley
4011 Glenridge Street
Kensington MD 20895

CUST. ACCT. NO.

ESKORC

INVOICE DATE

3/17/2020

P.O. NO.

BRANCH 10

DEL. REC. NO.

SHIPPED

TO

Y	Ebony Rose not available.	10)					
QUANTITY	PRODUCT	ITEM #	SOURCE	SIZE	PRICE		AMOUNT
	Variety Royalty 3.00 + Rtsk Royalty	= 3.00					42.00
35	Festival Red Pluot 'R' I.S. Plum on Citation	14082	W51	5/8"	8.55		299.25
186	Variety Royalty 3.00 + Rtsk Royalty	= 3.00					105.00
35	Festival Red Pluot 'R' LS. Plum on Citation	14082	W51	5/8"	8.55		299.25
	Variety Royalty 3.00 + Rtsk Royalty	= 3.00					105.00
35	Flavor Blast Plumcherry L.S. Plum on Citation	14036	W51	1/2"	8.40		294.00
	Variety Royalty 3.00 + Rtsk Royalty	= 3.00					105.00
35	Flavor Fusion Pluot 'R' LS. Plum on Citation	13051	W51	5/8"	8.55		299.25
	Variety Royalty 3.00 + Rtsk Royalty	= 3.00					105.00
35	Flavor Gem Pluot 'R' LS. Plum on Citation	5928	W51	5/8"	8.55		299.25
	Variety Royalty + Rtsk Royalty	ma					
35	Flavor Grenade Pluot 'R' LS. Plum on Citation	6940	W51	5/8"	8.55		299.25
	Variety Royalty 3.00 + Rtsk Royalty	= 3.00					105.00
35	Flavor King Pluot 'R' LS. Plum on Citation	2433	W51	1/2"	8.40		294.00
*	Variety Royalty + Rtsk Royalty	Pages 1					
35	Flavor Queen Pluot 'R' LS. Plum on Citation	2449	W51	1/2"	8.40	and and	294.00
	Variety Royalty + Rtsk Royalty	Tinne Stant					
35	Flavor Supreme Pluot 'R' LS. Plum on Citation	2464	W51	1/2"	8.40		294.00
	Variety Royalty + Rtsk Royalty	=					
35	Honey Punch Pluot 'R' I.S. Plum on Citation	10831	W51	5/8"	8.55		299.25
						AMOUNT	
						SALES	
						TAX	
						LESS DEP. PAID	
						TOTAL	
			415			IOIAL	
	Discounts will be reduced by 3% for pa	yments via	credit	card			

ORDER NUMBER-INVOICE NUMBER H19147 135176

DELIVERY DATE

Out-of-State

A CALIFORNIA CORPORATION

HICKMAN OFFICE

PO BOX 429

HICKMAN, CALIFORNIA 95323 PHONE (209) 874-1821

WHOLESALE

PO BOX 429

HICKMAN, CALIFORNIA 95323

PHONE (209) 874-1821

THIS INVOICE IS TO BE PAID IN FULL WITHIN DAYS OF DATE OF INVOICE. PAST DUE ACCOUNTS ARE SUBJECT TO A LATE CHARGE OF

1.5 % PER MONTH (ANNUAL PERCENTAGE RATE OF %) ON THE UNPAID PAST DUE BALANCE. IF SUIT IS FILED TO COLLECT THIS

DEBT OR ANY PART THEREOF, THE PURCHASER AGREES TO PAY ADDITIONAL SUMS ADJUDGED REASONABLE BY THE COURT FOR ATTORNEY'S FEES.

SOLD

TERMS:

TO:

Eskelsen Orchards, LLC *PR* Jordan Riley 4011 Glenridge Street

Kensington MD 20895

Rhany Rose not available

CUST. ACCT. NO. INVOICE DATE

ESKORC

P.O. NO.

BRANCH

10

DEL. REC. NO.

SHIPPED

TO

QUANTITY PRODUCT ITEM # SOURCE SIZE PRICE AMO													
QUANTITY	PRODUCT	ITEM #	SOURCE	SIZE	PRICE		AMOUNT						
	Variety Royalty 3.00 + Rtsk Royalty	= 3.00				4	105.00						
35	Ruby Kat Pluot 'R' LS. Plum on Citation	10860	W51	3/4"	8.70		304.50						
	Variety Royalty 3.00 + Rtsk Royalty	= 3.00					105.00						
35	Sweet Pixie 2 Plumcherry I.S. Plum on Citation	14032	W51	5/8"	8.55		299.25						
	Variety Royalty 3.00 + Rtsk Royalty	= 3.00		17.2			105.00						
35	Sweet Treat Pluerry 'R' LS. Plum on Citation	14796	W51	5/8"	8.55		299.25						
	Variety Royalty 3.00 + Rtsk Royalty	= 3.00					105.00						
665	Freight Charge	7612	W10	No. 1	0.22 N		146.30						
35	Emerald Beaut Plum on Citation	2298	W51	1/2"	8.40		294.00						
	Variety Royalty + Rtsk Royalty	==											
		mary recording	est per to de	Constitution Street	a - nabel and		Company of the second						
							7 450 40						
	CA FRUIT TREE, NUT TREE AND GRAPE				00.00	AMOUNT	7,459.40 70.98						
	ASSESSMENT (1% BY LAW) BASED O	NPUKCE	LASES	OF \$7,0	- 00.80	SALES							
						TAX LESS	0.00						
	IF YOUR ACCOUNT IS NOT PAID	WITHIN T	CERM	S.		DEP. PAID	0.00						
	**DISCOUNT AMOUNT OF \$0.0	00 WILL	BE CI	HARGED		TOTAL	7 520 20						
							1000.00						

Discounts will be reduced by 3% for payments via credit card



THE

STATEMENT

BURCHELL

12000 Highway 120 NURSERY Oakdale, CA 95361 phn: (209)845-8733

Eskelsen Orchards LLC 4011 Glenridge Street Kensington, MD 20895

ACCOUNTS 9281	03/25/2020	AMOUNT DUE 7898.52	
If you wish to charge your pa VISA MASTER Cardholder Name	lyment, please complete the inf	ormation below:	
Security code Signature	Expires [
Payable to: The Burch	ell Nursery Inc	AMOUNT PAID	

Address change:

To insure proper credit, please return top portion with payment. (cut on line below)

	DATE	CD	P DR=debit memo	CR=credit memo BF=bal forward P=payment	DA=discount allow FC=finance charge	
1	02/17/2020 03/18/2020 03/24/2020	I P	20106900 3287 20106902	19,598.52 5,000.00-	7,898.52 .00 .00	7,898.52 7,898.52 7,898.52 7,898.52

pd 1/1064 4/14/20 47,898.52

deposits

0-30day

31-60day 7,898.52

61-90day

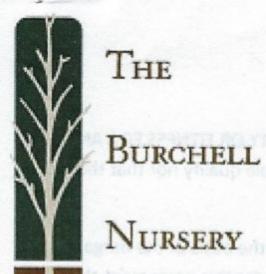
over90 .00

total 7,898.52

Billing: (209)845-8733

The Burchell Nursery, Inc 12000 Hwy 120

Oakdale, CA 95361



THE

INVOICE #: 1069

Oakdale Office - 12000 Hwy.120 Oakdale, CA 95361-8887

(209) 845-TREE (8733) Nursery

INC.

Fresno Office - 6705 S. Clovis Ave Fowler, CA 93625-9616 (559) 834-1661

Customer #: 9281

Eskelsen Orchards LLC SOLD 4011 Glenridge Street TO:

Kensington MD 20895

FILE COPY 1 of 2 CHARGE INV DATE: 02/17/20

CALIFORNIA NURSERY STOCK CERTIFICATE FOR INTERSTATE AND INTRASTATE SHIPMENTS No. B4863.001

This plant material or nursery or premises from which this shipment was made has been inspected and found free from especially injurious plant pests and disease symptoms.

THIS SHIPMENT NEED NOT BE HELD FOR INSPECTION IN CALIFORNIA

Issued by: Stanislaus County Agricultural Commisioner California Department of Food and Agriculture 1220 N. Street, Sacramento, CA 95814 66-119 (2-120)

Eskelsen Orchards LLC SHIP

2065 S 100 W TO:

2065 S. Eskelsen Lane

Perry UT 84302

TERMS: NET CASH. INTEREST of 1% per month (ANNUAL PERCENTAGE RATE of 12%) will be charged on past due accounts.

YTY			DESCRIPTION		SIZE	PRICE	AMOUNT
244	253	30	GOLDEN SWEET APRICOT ON LOV	Replant	3/8"	7.550	1,842.20
31	253	30	GOLDEN SWEET APRICOT ON LOV	Replant	3/4"	7.950	246.45
110	253	30	GOLDEN SWEET APRICOT ON LOV	Replant	1/2"	7.700	847.00
115	253	30	GOLDEN SWEET APRICOT ON LOV	Replant	5/8"	7.850	902.75
191	257	30	PATTERSON APRICOT ON LOV	Replant	3/4"	7.950	1,518.45
94	257	30	PATTERSON APRICOT ON LOV	Replant	5/8"	7.850	737.90
15	257	30	PATTERSON APRICOT ON LOV	Replant	3/8"	7.550	113.25
64	257	45	PATTERSON APRICOT ON NEM	Replant	5/8"	7.750	496.00
1	257	45	PATTERSON APRICOT ON NEM	Replant	3/4"	7.850	7.85
135	257	45	PATTERSON APRICOT ON NEM	Replant	1/2"	7.600	1,026.00
4	262	45	ROBADA APRICOT ON NEM	Replant	1/2"	7.700	30.80
64	262	45	ROBADA APRICOT ON NEM	Replant	3/8"	7.550	483.20
12	262	45	ROBADA APRICOT ON NEM	Replant	5/16"	7.250	87.00
53	262	30	ROBADA APRICOT ON LOV	Replant	5/8"	7.850	416.05
67	262	30	ROBADA APRICOT ON LOV	Replant	3/4"	7.950	532.65
53	251	45	BLENHEIM APRICOT ON NEM	Replant	1/2"	7.700	408.10
165	251	45	BLENHEIM APRICOT ON NEM	Replant	3/8"	7.550	1,245.75
51	251	45	BLENHEIM APRICOT ON NEM	Replant	5/16"	7.250	369.75
15	251	45	BLENHEIM APRICOT ON NEM	Replant	1/4"	7.000	105.00
112	1129	30	BN7 (C7.053) NECTARINE ON LOV	Replant	1/2"	7.600	851.20
188	1129	30	BN7 (C7.053) NECTARINE ON LOV	Replant	3/8"	7.450	1,400.60
158	1127	30	BN15 (E4.050) NECTARINE ON LOV	Replant	5/8"	7.750	1,224.50
142	1127	30	BN15 (E4.050) NECTARINE ON LOV	Replant	1/2"	7.600	1,079.20
45	441	30	SUPREME RED #1 NECTARINE ON LOV	Replant	1/2"	7.600	342.00
205	441	30	SUPREME RED #1 NECTARINE ON LOV	Replant	5/8"	7.750	1,588.75
2,334		5	SHIPPING CHARGE	OUR REPLACEMEN		.300	700.20

Please Note!

HEEL IN TREES PROMPTLY IN WELL DRAINED LOCATION. DIG TRENCH AND COVER ROOTS WITH FINE MOIST SOIL - WATER THOROUGHLY - PACK FIRMLY

IMPORTANT DISCLAIMER OF WARRANTIES IS ON THE REVERSE SIDE AND IS AN INTEGRAL PART OF THIS AGREEMENT.

Discount on June Buds Grown to Order

slsm: SHIP/GERRY

(CONTINUED)

Invoiced By

Delivered By

Received By

Amount:	to said foot stool year
Discount:	June 1th in the year de
Royalty:	du igaç ani tu -u andç du soino Inemio nodi:
Tax:	at promise to smooth the
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of Dalogs is Any	ins replacement po
Less Deposit	one percent (LS) for
Net Due	purchased by another



THE

INVOICE #: 1069

FILE COPY

2 of 2 CHARGE INV DATE: 02/17/20

BURCHELL

Oakdale Office - 12000 Hwy 120 Oakdale, CA 95361-8887 (209) 845-TREE (8733) Nursery

CALIFORNIA NURSERY STOCK CERTIFICATE FOR INTERSTATE AND INTRASTATE SHIPMENTS No. B4863.001

Fresno Office - 6705 S. Clovis Ave.

Fowler, CA 93625-9616 (559) 834-1661

This plant material or nursery or premises from which this shipment was made has been inspected and found free from especially injurious plant pests and disease symptoms. THIS SHIPMENT NEED NOT BE HELD FOR INSPECTION

IN CALIFORNIA Issued by: Stanislaus County Agricultural Commissioner California Department of Food and Agriculture 1220 N. Street, Sacramento, CA 95814 66-119 (2-120)

Customer #: 9281

Kensington MD 20895

Eskelsen Orchards LLC SOLD TO: 4011 Glenridge Street

Eskelsen Orchards LLC SHIP 2065 S 100 W TO:

2065 S. Eskelsen Lane

Perry UT 84302

QTY	DESCRIPTION		IZE	PRICE	AMOUNT
2,334	BULK COLD STORAGE CHARGE	UE originates a complete and exclusive sta	edocume edocume	.300	700.20
HEALTH'	Y START PROGRAM (TM) 2,334 trees	does to the state of the state	ent ni p	.05	116.70
, friend Ca	sometions about the appete payonal thoses provided in this decrarabit; that i	ragas existe or heringalitative scheme edit a sistem	STRUMENT NO	no on today	series time Environment of the
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SAME TANK		dat, edirect or consequential damages, nor	egy took	tong avidasi	Seller is not liable for pres
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	CALIFORNIA FRUIT TREE, NUT TREE AI	ND GRAPEVINE			
	IMPROVEMENT ASSESSMENT. (1% B)				179.02
Brown Carlo		without together adjust the late of	Mary and the	i branta plaja Skratka sova	
	Please Note!		1	Amount:	19,598.52
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COVE	R ROOTS WITH FINE MOIST SOIL - WATER THO	ROUGHLY - PACK FIRMLY	2021 THE ST	Discount:	.00
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sed for ock	Discount on June Buds Grown to Order	slsm: SHIP/GERRY	liss repland	ess Depos	6,700.00
Invoiced	Ry Delivered Dy	Deschool Des	the Burn	Not Division	12,898.52
invoiced	By Delivered By	Received By	1	Net Due:	5,000.00



Randall McBride <rmcbride@utah.gov>

Deer Damage Estimation

Randall McBride <rmcbride@utah.gov>

Tue, Jun 15, 2021 at 1:36 PM

To: Todd Eskelsen <teskelsen@eskelaw.com>

Cc: Samuel Robertson <sdrobertson@utah.gov>, Bradley Geary
brad_geary@byu.edu> Bcc: Chad Wilson <chwilson@utah.gov>, Jim Christensen <jameschristensen@utah.gov>

Mr. Eskelson,

The following is the estimation of deer damage to your orchard. First off, for next and future years, if you are seeking payment for damaged trees you will need to leave all damaged trees standing in order for us to accurately assess and estimate the damage. If the damaged trees are not standing when we meet to assess the damage, then the Division will not assist financially with those. Second, our Rule is clear that we can only pay for losses that occur between July 1 and June 30 of that year. With that in mind, please find the damage estimation below. We know you want to seek a third-party ruling and that is currently being worked on by Brad Geary from BYU.

Apricots 141 damaged at \$8.40 each plus \$3.00 shipping and cold storage plus \$4.05 for planting, removal, and replanting. Total for apricots lost=\$2,178.45

Pluots 88 damaged at \$10.61 each plus \$3.00 shipping and cold storage plus \$4.05 for planting, removal, and replanting. Total Pluots lost=\$1,554.08

Nectarines 31 damaged at \$7.63 each plus \$3.00 shipping and cold storage plus \$4.05 for planting, removal, and replanting total of Nectarines lost=\$455.08

Grand total=\$4,187.61

As the third-party ruling is made available, we will be in contact with you to review that assessment.

Thank you,

Randall McBride
Private Lands Biologist NRO
Utah Division of Wildlife
801-452-5029
rmcbride@utah.gov

1 of 1 6/30/2021, 5:47 PM

From: Todd Eskelsen
To: Randall McBride

Cc: <u>Jordan Riley; Bradley Geary; Samuel Robertson; Andrew Eskelsen</u>

Subject: Eskelsen Orchards 2020-21 Deer Depredation Claim

Date: Sunday, June 6, 2021 10:18:00 PM

Attachments: Eskelsen Orchards 2020-21 Deer Depredation Claim.docx

Eskelsen Orchards FY 2020-21 Deer Depredation Tree Survey.pdf

Tree Loss 2020 v3.xlsx

2020 Burchall & Wilson Nurseries Invoice Charges.pdf

Randall:

Attached to this e-mail please find the following:

- 1. A one page summary of my claim for deer depredation during FY 2020-21 on my orchards in Perry, UT;
- 2. A chart, based on the three surveys of my entire orchards that I conducted during July, October and November 2020, summarizing the damage done by deer to my orchards. The key to the color coding is at the end of the document;
- 3. An Excel valuation model which sets out the valuation methodology and information underlying the claim. This analysis was derived from the following two studies:

Utah State University Extension - https://digitalcommons.usu.edu/cgi/viewcontent.cgi? article=2619&context=extension_curall

UC Davis Tree Loss Calculator - Peaches - https://coststudyfiles.ucdavis.edu/uploads/cs_public/0c/37/0c37c7df-4de3-4913-94f8-b809fd28a2b2/treelosspeach2009.xlsx

In developing the model was developed, we used the data from the USU Extension study as the basis for the per acre & per tree assumptions driving the UC Davis Tree Loss Calculator and utilized the actual tree planting information for our orchards; and

4. Copies of invoices from Dave Wilson Nursery and The Burchell Nursery Inc., the two nurseries from whom I purchased the trees.

Please review these materials and get back to me with any questions or comments that you have.

Thank you.

Todd

Todd R. Eskelsen ESKELSEN ORCHARDS, LLC (240) 460-1115 (m)



United States Department of Agriculture

National Agricultural Statistics Service

Crop Values 2020 Summary

February 2021



ISSN: 1949-0372



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States Included in the United States Marketing Year Average Price Estimates

[The States specified for each crop, which are in the monthly price estimates program, generally account for 90 percent or more of total United States marketings]

State	Corn for grain	Grain sorghum	Oats	Barley	Wheat	Rice	Soybeans	Peanuts	Flaxseed
Alabama					Х			Х	
Arkansas					X	Х	Х	X	
California				Х	X	X	^	^	
Colorado	Х			X	X				
Florida								Х	
Georgia								X	
Idaho				X	X				
Illinois	X		Х		X		Х		
Indiana	Х				X		X		
lowa	Х		х				Х		
Kansas	X	X			X		X		
Kentucky	X						X		
Louisiana						X	X		
Michigan	Х		X		X		X		
Minnesota	Х		Х	X	X		X		
Mississippi						X	X	Х	
Missouri	Х				X	X	Х		
Montana			Х	X	X				
Nebraska	Х	X	Х		Χ		Х		
Nevada									
New Mexico								Х	
New York			Х						
North Carolina	X				X		Х	Х	
North Dakota	Х		Х	X	X		X		X
Ohio	X				X		Х		
Oklahoma		X			X			X	
Oregon			Х		X				
Pennsylvania	X		Х						
South Carolina								Х	
South Dakota	Х		х		Х		Х		
Tennessee	X		~		, ,		X		
Texas	X	Х	X		Х	X	·	X	
Utah	^	^	^		^	^		^	
Virginia								X	
Washington				X	X				
Wisconsin	Х		X	,	,		Х		
Wyoming	,		~	Х			^		

--continued

States Included in the United States Marketing Year Average Price Estimates (continued)

[The States specified for each crop, which are in the monthly price estimates program, generally account for 90 percent or more of total United States marketings]

State	Sunflower	Canola	Upland cotton	Hay	Dry beans	Chickpeas	Dry edible peas	Lentils
Alabama Arizona Arkansas California Colorado Florida			X X X	×	X	×		
Georgia			X	X X	Х	х	х	X
lowaKansasKentuckyLouisiana	Х		X	X X X				
Michigan Minnesota Mississippi Missouri	Х	X	Х	X X	×	V	V	V
Montana Nebraska Nevada New Mexico		Х		X X X	×	X	X X	Х
New York North Carolina North Dakota Ohio Oklahoma Oregon Pennsylvania South Carolina	x	x x	х	X X X X X	X	X	X	Х
South Dakota Tennessee Texas Utah	X		X X	X X X			Х	
Virginia Washington Wisconsin Wyoming				X X X		х	Х	Х

Field and Miscellaneous Crops Price - United States: 2018-2020

[Blank data cells indicate estimation period has not yet begun]

Cron	Price per unit 1					
Сгор	2018	2019	2020 ²			
	(dollars)	(dollars)	(dollars)			
Grains and hay						
Barleybushels	4.62	4.69	4.70			
Corn for grainbushels	3.61	3.56	4.30			
Hay, alltons	166.00	163.00	159.00			
Alfalfatons	180.00	179.00	172.00			
All othertons	139.00	135.00	133.00			
Oatsbushels	2.66	2.82	2.70			
Proso milletbushels	5.22	5.54	9.89			
Rice	12.60	13.60	13.40			
Ryebushels	6.27	6.01	5.20			
•						
Sorghum for graincwt	5.82	5.96	8.60			
Wheat, allbushels	5.16	4.58	5.00			
Winterbushels	5.08	4.53	4.90			
Durumbushels	5.33	4.90	6.25			
Other springbushels	5.31	4.66	5.05			
Oilseeds						
Canolacwt	15.80	14.80	17.30			
Cottonseedtons	155.00	161.00	192.00			
Flaxseedbushels	9.89	9.15	10.30			
Mustard seedcwt	28.60	26.60	27.10			
Peanuts ³ pounds	0.215	0.205	0.207			
Rapeseedcwt	18.50	20.20	22.60			
Safflowercwt	20.30	19.90	21.30			
Soybeans for beansbushels	8.48	8.57	11.15			
Sunflowercwt	17.40	19.50	19.70			
Cotton, tobacco, and sugar crops						
Cotton, all ³ pounds	0.723	0.614	0.652			
Upland ³ pounds	0.703	0.596	0.632			
American Pima ³ pounds	1.150	1.060	1.090			
Sugarbeets ⁴ tons	35.60	38.30				
Sugarcane ⁴ tons	33.40	38.30				
Tobacco	2.051	2.009	2.103			
Dry beans, peas, and lentils						
Austrian winter peas 5cwt	16.40	(NA)	(NA)			
Chickpeas ⁶ cwt	21.20	16.50	19.50			
Dry edible beans ⁶	25.40	31.80	29.90			
Dry edible peas 5cwt	10.50	9.64	9.03			
Lentils	17.70	15.70	17.40			
Wrinkled seed peas ⁵ cwt	35.10	(NA)	(NA)			
Potatoes and miscellaneous						
Hops pounds	5.46	5.68	5.97			
Maple syrup ⁷ gallons	33.80	31.00	3.57			
Mushrooms pounds	1.34	1.34	1.41			
Peppermint oil	19.80	19.30	18.90			
Potatoes	8.90	9.94	9.44			
Spearmint oil	16.80	16.90	16.90			
Sweet potatoes	23.20	21.60	23.80			
Taro (Hawaii) ⁸ pounds	0.660	(NA)	(NA)			

(NA) Not available

United States average prices per unit computed by weighting State prices by estimated sales for all crops, except corn, canola, sorghum, oats, barley, wheat, rice, soybeans, flaxseed, sunflower, Upland cotton, dry edible beans, chickpeas, Austrian winter peas, dry edible peas, and lentils which are computed by weighting United States monthly prices by estimated monthly marketings.

² Preliminary

³ Based on marketings and monthly prices received from August 1, 2020 - December 31, 2020.

⁴ The preliminary 2020 price will be published in Agricultural Prices released July 2021. Sugarcane price is for sugar only.

⁵ Beginning in 2019, Austrian winter peas and wrinkled seed peas are included in dry edible peas.

⁶ Beginning in 2019, chickpeas are excluded from dry edible beans.

⁷ The 2020 price will be published in *Crop Production* released June 2021.

⁸ Estimates discontinued in 2019.

Field and Miscellaneous Crops Value of Production - United States: 2018-2020

[Blank data cells indicate estimation period has not yet begun]

Cron	Value of production					
Crop	2018	2019	2020 ¹			
	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)			
Grains and hay						
Barley	697,598	788,711	753,314			
Corn for grain	52,102,404	48,940,622	61,039,005			
Hay, all	17,288,215	18,039,795	17,328,527			
Alfalfa	8,583,806	9,098,728	8,415,852			
All other	8,704,409	8,941,067	8,912,675			
Oats	167,640	164,373	186.241			
Proso millet	60,566	92,032	91,120			
Rice	2,898,996	2,631,955	3,069,000			
Rye	52,870	63,827	59,816			
Sorghum for grain	1.180.847	1,125,759	1,719,805			
Wheat, all	9,661,916	8,919,117	9,324,496			
and the second s	* *	6,048,221				
Winter	5,985,308 412,749	267,055	5,903,687			
Durum	,		421,164			
Other spring	3,263,859	2,603,841	2,999,645			
Oilseeds						
Canola	568,622	501,761	602,504			
Cottonseed	878,254	968,027	903,431			
Flaxseed	43,533	49,734	56,487			
Mustard seed	20,974	16,912	22,161			
Peanuts ²	1,175,989	1,131,374	1,275,009			
Rapeseed	1,526	4,536	4,497			
Safflower	47,976	38,335	31,470			
Soybeans for beans	37,557,828	30,525,961	46,068,982			
Sunflower	370,446	386,346	587,848			
	,	,	•			
Cotton, tobacco, and sugar crops						
Cotton, all ²	6,375,167	5,865,099	4,677,566			
Upland ²	5,931,451	5,517,536	4,390,027			
American Pima ²	443,716	347,563	287,539			
Sugarbeets ³	1,183,562	1,098,421				
Sugarcane ³	1,154,907	1,223,686				
Tobacco	1,093,418	940,162	819,102			
Dry beans, peas, and lentils						
Austrian winter peas ⁴	2,433	(NA)	(NA)			
Chickpeas ⁵	281,451	116,289	83,210			
Dry edible beans ⁵	951,047	676,966	1,005,619			
Dry edible peas ⁴	163,963	210,446	196,705			
Lentils	131,739	83,574	129,220			
Wrinkled seed peas ⁴	13,654	(NA)	(NA)			
Potatoos and miscollaneous						
Potatoes and miscellaneous Hops	583,444	636,580	619,424			
Maple syrup ⁶	141,825	129,479	,			
Mushrooms	1,233,582	1,114,710	1,153,296			
Peppermint oil	106,489	105,439	94,360			
Potatoes	4,006,340	4,217,271	3,911,077			
Spearmint oil	43,178	40,531	36,048			
Sweet potatoes 7	634,228	661,863	726,177			
Taro (Hawaii) ⁸	1,970	(NA)	(NA)			
Total field and miscellaneous crops ⁹	142 507 146	120 947 920	159 642 000			
(NA) Net evellelle	142,597,146	130,847,830	158,643,909			

(NA) Not available.

Preliminary.

² Based on marketings and monthly prices received from August 1, 2020 - December 31, 2020.

³ The preliminary 2020 value of production will be published in *Agricultural Prices* released July 2021.

⁴ Beginning in 2019, Austrian winter peas and wrinkled seed peas are included in dry edible peas.

Beginning in 2019, chickpeas are excluded from dry edible beans.
 The 2020 value of production will be published in *Crop Production* released June 2021.

⁷ Beginning in 2019, sweet potatoes are estimated as part of the vegetable program.

⁸ Estimates discontinued in 2019.

⁹ The 2020 total value of production includes an estimated value of production for sugarbeets, sugarcane, and maple syrup which is computed using 2019 prices. Beginning in 2019, sweet potato values are not included in the field and miscellaneous crop total.

Fruit and Nut Crops Price - United States: 2018-2020

[Blank data cells indicate estimation period has not yet begun]

Crop	Price per unit ¹					
Crop	2018	2019	2020			
	(dollars)	(dollars)	(dollars)			
Citrus ²						
Grapefruitboxes	16.71	13.69	16.03			
Lemonsboxes	32.24	29.92	24.43			
Orangesboxes	19.82	14.43	14.06			
Tangerines and mandarinsboxes	28.86	25.50	35.28			
Noncitrus			#4.040/0000lb — #0.04/lb			
Apples, commercialpounds	0.299	0.258	\$1,210/2000lb = \$0.61/lb			
Apricotstons	1,210.00	1,000.00	\$0.61 x 48lbs/bushel			
Avocadostons	2,180.00	2,960.00	\$29.04/bushel			
Blueberries, Cultivatedpounds	1.430	1.350	#4000/0000H # F/II			
Blueberries, Wild (Maine)pounds	0.473	0.480	\$1000/2000lbs = \$.5/lbs			
Cherries, sweettons	1,860.00	1,890.00	\$0.5 x 48 lbs/bushel			
Cherries, tartpounds	0.196	0.151	\$24 /bushel			
Coffee (Hawaii) ³ pounds	1.90	2.02	(29.04+24)/2 = \$26.52 avg 2.11			
Cranberriesbourids	27.80	28.70	2.11			
Datestons	3,800.00	3,650.00				
Grapes tons	872.00	842.00				
Kiwifruit (California) tons	1.470.00	1.680.00				
	874.00	980.00				
Nectarines tons Olives (California) tons	766.00	791.00				
,						
Papayas (Hawaii)pounds	0.554	0.467				
Peachestons	801.00	788.00				
Pearstons	536.00	435.00				
Plums (California) tons	935.00	1,180.00				
Prunes (California)tons	616.00	503.00				
Raspberries, allpounds	1.69	1.91				
Strawberries	92.60	112.00				
Nuts						
Almonds, shelled (California) 4pounds	2.500	2.430				
Hazelnuts, in-shell (Oregon)tons	1,800.00	1,920.00				
Macadamia, in-shell (Hawaii)pounds	1.190	1.200				
Pecans, in-shell ³ pounds	1.750	1.840	1.320			
Pistachios, in-shell (California)pounds	2.650	2.620				
Walnuts, in-shell (California)tons	1,350.00	1,970.00				

¹ United States average prices per unit computed by weighting State prices by estimated sales.
² Equivalent packinghouse-door returns for all citrus sales. Prices and values in column headed 2018 are 2017-2018 crop; 2019 are 2018-2019 crop; 2020 are 2019-2020 crop.

³ Preliminary for 2020.

⁴ Price is based on the edible portion of the crop only.

Fruit and Nut Crops Value of Utilized Production - United States: 2018-2020

[Blank data cells indicate estimation period has not yet begun]

Cron		Value of utilized production	
Crop	2018	2019	2020
	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
Citrus ¹			
Grapefruit	207,970	202,712	199,621
Lemons	715,761	730,843	671,929
Oranges	1,830,445	1,765,347	1,714,690
Tangerines and mandarins	575,976	700,977	812,199
Noncitrus			
Apples, commercial	2,954,219	2,746,225	
Apricots	47,469	51,392	
Avocados	400,354	398,537	
Blueberries, Cultivated	797,295	908,677	
Blueberries, Wild (Maine)	23,815	26,028	
Cherries, sweet	637,700	659,781	
Cherries, tart	56,635	35,747	
Coffee (Hawaii) ²	50,160	54,298	55,894
Cranberries	245,762	224,843	·
Dates	152,175	223,778	
Grapes	6,621,258	5,719,758	
Kiwifruit (California)	55,566	85,999	
Nectarines	104,626	129,300	
Olives (California)	40,523	130,218	
Papayas (Hawaii)	5,702	4,943	
Peaches	511,226	518,876	
Pears	428,940	315,145	
Plums (California)	99,537	115,889	
Dried prunes (California)	168,080	136,187	
Raspberries, all	367,001	432,314	
Strawberries	2,416,285	2,528,520	
Nuts			
Almonds, shelled (California) 3	5,602,500	6,094,440	
Hazelnuts, in-shell (Oregon)	91,800	84,480	
Macadamia, in-shell (Hawaii)	42,007	48,840	
Pecans, in-shell ²	421,531	470,999	398,759
Pistachios, in-shell (California)	2,615,550	1,938,800	- 70,100
Walnuts, in-shell (California)	916,650	1,286,410	
Total fruit and nut crop	29,204,518	28,770,303	

¹ Equivalent packinghouse-door returns for all citrus sales. Prices and values in column headed 2018 are 2017-2018 crop; 2019 are 2018-2019 crop; 2020 are 2019-2020 crop.

² Preliminary for 2020.

³ Value is based on the edible portion of the crop only.

Vegetable Crops Price and Value of Utilized Production – United States: 2018-2020

Cron		Price per cwt		Value of utilized production			
Сгор	2018	2019	2020	2018	2019	2020	
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)	
Artichokes	63.00	78.00	79.00	63,032	74,568	62,608	
Asparagus	113.00	135.00	129.00	87,584	98,062	85,284	
Beans, lima ¹	31.90	(NA)	(NA)	21,622	(NA)	(NA)	
Beans, snap	20.60	18.50	18.60	351,909	297,614	271,727	
Broccoli	42.80	51.30	55.50	738,527	850,742	874,959	
Cabbage	21.20	23.10	18.10	408,091	510,740	427,982	
Cantaloupes	22.70	21.00	26.10	331,542	237,751	295,730	
Carrots	16.00	23.00	23.00	732,946	767,161	716,150	
Cauliflower	45.80	45.70	39.10	434,491	459,988	346,391	
Celery	25.00	30.20	22.30	436,818	474,711	358,579	
Corn, sweet	11.80	10.40	11.80	864,064	652,057	742,906	
Cucumbers	20.90	18.80	18.40	322,999	277,788	229,725	
Garlic	78.90	78.20	76.30	412,587	299,393	263,993	
Honeydews	19.60	21.30	20.90	75,342	55,401	49,240	
Lettuce, head	30.10	34.00	30.80	1,219,857	1,427,335	1,252,303	
Lettuce, leaf	51.80	52.20	51.20	555,982	650,424	799,877	
Lettuce, romaine	31.00	32.40	31.30	901,186	880,826	948,324	
Onions	12.50	14.60	11.90	886,941	1,001,986	877,816	
Pea, green	12.80	13.50	12.90	64,901	67,798	70,906	
Peppers, bell	41.50	46.70	41.10	533,307	539,519	479,308	
Peppers, chile	35.60	37.50	42.20	94,767	109,393	100,518	
Pumpkins	12.90	13.60	14.30	195,445	180,190	193,932	
Spinach	51.30	64.80	60.70	415,671	613,749	439,162	
Squash	26.60	31.90	32.10	192,922	221,727	217,886	
Sweet Potatoes ²	23.20	21.60	23.80	634,228	661,863	726,177	
Tomatoes	6.76	6.73	6.95	1,863,915	1,600,307	1,660,030	
Watermelons	16.90	15.20	16.80	663,435	545,306	574,831	
Total ³	(X)	(X)	(X)	12,869,883	13,556,399	13,066,344	

⁽NA) Not available.

⁽X) Not applicable.

Estimates discontinued in 2019.

Sweet potatoes added to the vegetable program in 2019. Price and value in 2018 represent total production.
 Sweet potatoes were added to the vegetable program in 2019, therefore crops do not add to the total for 2018.

Crop Values Summary - States and United States: 2018

State	Field and miscellaneous crops	Fruits and nuts	Vegetables	Total value of principal crops ¹
	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
Alabama	1,000,550	2,366	15,379	1,018,295
Alaska	15,991	(NA)	(NA)	15,991
Arizona	745,729	152,436	(D)	898,165
Arkansas	3,764,450	(NA)	(NA)	3,764,450
California	2,824,716	21,923,678	7,327,501	32,075,895
Colorado	2,088,024	28,140	(D)	2,116,164
Connecticut	20,328	(NA)	(NA)	20,328
Delaware	180,592	(NA)	(D)	180,592
	1,001,845	1,152,439	1,121,318	3,275,602
Florida				
Georgia Hawaii	1,823,595 1,970	224,526 99,460	452,589 (NA)	2,500,710 101,430
daho	3,256,042	(NA)	60,831	3,316,873
Illinois	14,446,374	(NA)	39,577	14,485,951
Indiana	6,959,510	(NA)	97,104	7,056,614
owa	14,030,385	(NA)	(NA)	14,030,385
Kansas	6,784,263	(NA)	(NA)	6,784,263
Kentucky	2,856,643	(NA)	(NA)	2,856,643
Louisiana	2,093,782	5,954	(NA)	2,099,736
Maine	223,629	23,815	(NA)	247,444
Maryland	589,830	(NA)	(IVA) (D)	589,830
Massachusetts	25,478	60,916	(NA)	86,394
Michigan	2,953,099	405,908	273,314	3,632,321
Minnesota	9,413,778	(NA)	116,288	9,530,066
Mississippi	2,306,318	(NA)	(NA)	2,306,318
Missouri	5,270,938	(NA)	`(D)	5,270,938
Montana	2,376,056	(NA)	(NA)	2,376,056
Nebraska	10,218,349	(NA)	(NA)	10,218,349
Nevada	207,393	(NA)	(NA)	207,393
New Hampshire	17,247	(NA)	(NA)	17,247
•	117,036	` /	138,376	373,787
New Jersey New Mexico	267,415	118,375 169,290	133,357	570,062
New York	1,085,798	270,958	209,911	1,566,667
North Carolina	2,378,348	78,679	145,025	2,602,052
North Dakota	7,203,804	(NA)	(NA)	7,203,804
Ohio	5,288,643	(NA)	103,562	5,392,205
Oklahoma	1,475,102	14,884	(NA)	1,489,986
Oregon	1,256,267	566.299	(D)	1,822,566
Pennsylvania	1,367,459	128,307	59,224	1,554,990
Rhode Island	1,684	(NA)	(NA)	1,684
South Carolina	643.047	71,546	68,470	783,063
South Dakota	5,848,547	(NA)	(NA)	5,848,547
Tennessee	2,082,737	(NA)	66,984	2,149,721
Texas	5,431,329	156,682	298,047	5,886,058
Jtah	419,186	9,102	(NA)	428,288
/ermont	104,732	(NA)	(NA)	104,732
/irginia	988,206	37,256	43,653	1,069,115
Washington	2,876,706	3,346,715	351,475	6,574,896
West Virginia	150,108	(NA)	(NA)	150,108
Visconsin	3,622,914	156,787	(D)	3,779,70
Wyoming	527,864	(NA)	(NA)	527,864
United States ²	142,597,146	29,204,518	12,869,883	184,671,547

⁽D) Withheld to avoid disclosing data for individual operations.

(NA) Not available.

1 Crops included for each producing State are those shown.

¹ Crops included for each producing State are those shown in the United States summary tables on pages 8-12. ² United States totals may not add due to disclosure.

Crop Values Summary - States and United States: 2019

State	Field and miscellaneous crops	Fruits and nuts	Vegetables	Total value of principal crops ¹
	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
Alabama	878,192	(NA)	(NA)	878,192
Alaska	11,138	(NA)	(NA)	11,138
Arizona	730,172	197,188	1,628,351	2,555,711
Arkansas	3,504,863	(NA)	(NA)	3,504,863
California	2,624,508	21,437,185	7,744,144	31,805,837
Colorado	2,336,674	30,647	18,531	2,385,852
Connecticut	14,325	(NA)	(NA)	14,325
Delaware	211,203	(NA)	(NA)	211,203
Florida	1,135,326	1,536,612	1,222,850	3,894,788
Georgia	1,891,308	308,074	515,530	2,714,912
Hawaii	(NA)	109,868	(NA)	109,868
Idaho	3,277,862	(NA)	65,815	3,343,677
Illinois	11,629,426	(NA)	41,932	11,671,358
Indiana	5,883,098	(NA)	52,276	5,935,374
lowa	13,696,553	(NA)	(NA)	13,696,553
Kansas	7,303,443	(NA)	(NA)	7,303,443
Kentucky	2,668,947	(NA)	(NA)	2,668,947
Louisiana	1,881,578	(NA)	(NA)	1,881,578
Maine	238,404	26,028	(NA)	264,432
Maryland	638,892	(NA)	(NA)	638,892
Massachusetts	18,931	58,991	(NA)	77,922
Michigan	2,468,524	361,709	217,138	3,047,371
Minnesota	8,053,723	(NA)	76,579	8,130,302
Mississippi	1,937,082	(NA)	75,021	2,012,103
Missouri	5,171,666	(NA)	(NA)	5,171,666
Montana	2,402,544	(NA)	(NA)	2,402,544
Nebraska	9,710,430	(NA)	(NA)	9,710,430
Nevada	272,027	(NA)	(NA)	272,027
New Hampshire	20,283	(NA)	(NA)	20,283
New Jersey	113,708	125,456	80,629	319,793
New Mexico	264,604	165,064	152,628	582,296
New York	893,989	276,937	226,905	1,397,831
North Carolina	2,083,457	60,811	499,681	2,643,949
North Dakota	5,860,880	(NA)	(NA)	5,860,880
Ohio	4,021,495	(NA)	9,911	4,031,406
Oklahoma	1,701,063	26,966	(NA)	1,728,029
Oregon	1,367,620	456,326	194,586	2,018,532
Pennsylvania	1,612,213	130,667	25,389	1,768,269
Rhode Island	1,199	(NA)	(NA)	1,199
South Carolina	572,612	85,898	16,130	674,640
South Dakota	4,281,839	(NA)	(NA)	4,281,839
Tennessee	2,115,575	(NA)	(NA)	2,115,575
Texas	5,447,095	163,350	184,896	5,795,341
Utah	513,385	6,661	(NA)	520,046
Vermont	107,594	(NA)	(NA)	107,594
Virginia	912,164	34,566	16,427	963,157
Washington	2,955,925	3,033,860	362,740	6,352,525
West Virginia	127,655	(NA)	(NA)	127,655
Wisconsin	3,120,543	137,439	128,310	3,386,292
Wyoming	535,896	(NA)	(NA)	535,896
United States ²	130,847,830	28,770,303	13,556,399	173,174,532

⁽NA) Not available.

¹ Crops included for each producing State are those shown in the United States summary tables on pages 8-12.

² United States totals may not add due to disclosure.

Crop Values Summary – States and United States: 2020

[Blank data cells indicate estimation period has not yet begun]

Alabama	State	Field and miscellaneous crops ¹	Fruits and nuts	Vegetables	Total value of principal crops ²
Alaska 9,857 (NA) Artzona 652,834 1,154,644 Artansas 4,124,734 (NA) California 2,237,407 7,676,076 Colorado 1,877,938 28,024 Connecticut 15,160 (NA) Delaware 216,024 (NA) Florida 1,129,091 1,168,155 Georgia 2,037,780 583,351 Hawaii (NA) (NA) Idaho (NA) (NA) Illinois 16,704,83 39,445 Illinois 16,704,83 39,445 Illinois 16,		(1,000 dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
Alaska	Alabama	955.417		(NA)	
Afizona 652,834 1,154,644 Afkansas 4,124,734 (NA) California 2,237,407 7,676,076 Colorado 1,877,938 28,024 Connecticut 15,160 (NA) Delaware 216,024 (NA) Plorida 1,129,091 1,168,155 Georgia 2,037,780 583,351 Congress 2,037,780 583,351 Consideration 1,129,091 1,168,155 Georgia 2,037,780 583,351 Consideration 1,129,091 1,168,155 Georgia 2,037,780 583,351 Consideration 1,168,155 Georgia 2,037,780 583,351 Consideration 1,168,155 Georgia 2,037,780 583,351 Consideration 1,168,155 Georgia 2,037,780 Georgia 2,037,781 Georgia 2,03		•			
Arkansas					
California 2,237,407 7,676,076 Colorado 1,877,938 28,024 Connecticut 15,160 (NA) Delaware 216,024 (NA) Florida 1,129,091 583,351 Georgia 2,037,780 583,351 Hawaii (NA) (NA) Idaho 13,746,676 68,331 Illinois 16,701,458 39,446 Indiana 8,452,316 63,295 Iowa 8,557,601 (NA) Kansas 8,557,601 (NA) Kentucky 3,333,220 (NA) Kentucky 3,333,220 (NA) Maryland 601,745 (NA) Maryland 601,745 (NA) Maryland 601,745 (NA) Michigan 3,18,848 196,907 Michigan 3,18,848 196,907 Mississiph 2,282,244 12,640 Mississiph 2,286,410 (NA) Michigan 3,86,88					
Colorado		The state of the s		` ,	
Donneticut					
Delaware					
Clorida					
Caparigia Capa					
Hawaii					
Idaho	Georgia	2,037,780		563,351	
Illinois	Hawaii				
Incliana	ldaho	3,374,676		68,331	
Down	Illinois	16,701,458		39,446	
Kansas Kentucky 3,433,220 Louisiana 1,77,837 (NA) Maine 194,262 (NA) Maryland 601,745 (NA) Maryland Maryland Maryland Maryland Missachusetts 18,230 (NA) Mississipp 3,619,848 196,907 Minnesota Mississipp 2,292,244 (NA) Mississipp 2,292,244 (NA) Mississipp 17,037,721 (NA) Montana 2,486,410 (NA) Nebraska 11,885,848 (NA) Nebraska 11,885,848 (NA) New Jersey 139,878 88,100 New Mexico 231,021 New Hore 139,878 88,100 New Mississipp North Dakota 6,828,031 Ohio 6,126,489 Orlahoma 0,1710,738 (NA) Oregon (NA) Nebraska 1,7420 (NA) Nebraska 1,710,738 (NA) Nepraska 1,710,738 (NA) Nenyland 1	Indiana	8,452,316		63,295	
Kentucky 3.433,220 (NA) Louisiana 2,177,837 (NA) Maine 194,262 (NA) Maryland 601,745 (NA) Miser 601,745 (NA) Miser (NA) (NA) Michigan 3,619,848 196,907 Minnesota 11,689,599 89,658 Minsissispipi 2,292,244 121,540 Mississippi 2,292,244 (NA) Mississippi 2,486,410 (NA) Morbraska 11,885,648 (NA) Nebraska 11,885,648 (NA) Nevada 209,885 (NA) New Hampshire 20,031 (NA) New Jersey 139,878 88,100 New Mexico 231,021 139,123 New York 900,502 222,273 North Carolina 6,126,489 (NA) North Dakota 6,828,031 (NA) Origon (NA) 202,153 Pennsylvania 1,76	lowa	15,798,129		(NA)	
Louisiania 2,177,837 (NA) Maine 194,262 (NA) Maryland 601,745 (NA) Massachusetts 18,230 (NA) Michigan 3,619,848 196,907 Minnesota 11,689,599 89,658 Mississippi 2,292,244 121,540 Missouri 7,037,721 (NA) Montana 2,486,410 (NA) Nevada 11,885,848 (NA) Nevada 20,985 (NA) New Hampshire 20,031 (NA) New Jork 20,031 (NA) New York 900,502 222,273 North Carolina 2,107,045 469,399 North Dakota 6,828,031 (NA) Oric 6,828,031 (NA) Oric 6,126,489 9,995 Oklahoma 1,710,738 (NA) Oregon (NA) 202,153 Pennsylvania 1,769,486 30,653 Rhode Island 1,420 <td>Kansas</td> <td>8,557,601</td> <td></td> <td>(NA)</td> <td></td>	Kansas	8,557,601		(NA)	
Maine 194.262 (NA) Maryland 601,745 (NA) Massachusetts 18,230 (NA) Michigan 3,619,848 196,907 Minnesota 11,689,599 89,658 Mississippi 2,292,244 121,540 Missouri 7,037,721 (NA) Montana 2,486,410 (NA) Nebraska 11,885,848 (NA) Nevada 209,885 (NA) New Hampshire 20,031 (NA) New Jersey 139,878 88,100 New Mexico 231,021 139,123 New York 900,502 222,273 North Carolina 2,107,045 469,399 North Dakota 6,828,031 (NA) Ohio 6,126,489 9,995 Oklahoma 1,710,738 (NA) Oregon (NA) 202,153 Pennsylvania 1,769,486 30,653 Rhode Island 1,420 (NA) South Carolina 637,416 31,118 South Dakota 6,505,699	Kentucky	3,433,220		(NA)	
Maine 194,262 (NA) Maryland 601,745 (NA) Massachusetts 18,230 (NA) Michigan 3,619,848 196,907 Minnesota 11,689,599 89,658 Missispipi 2,292,244 121,540 Missouri 7,037,721 (NA) Montana 2,486,410 (NA) Nebraska 11,885,848 (NA) Nevada 209,885 (NA) New Hampshire 20,031 (NA) New Hersey 139,878 88,100 New Hexico 231,021 139,123 New York 900,502 222,273 North Carolina 2,107,045 469,399 North Dakota 6,828,031 (NA) Ohio 6,126,489 9,995 Oklahoma 1,710,738 (NA) Oregon (NA) 202,153 Pennsylvania 1,769,486 30,653 Rhode Island 1,420 (NA) South Dakota 6,505,699 (NA) Tennessee 2,410,089 (N	Louisiana	2,177,837		(NA)	
Maryland 601,745 (NA) Massachusetts 18,230 (NA) Michigan 3,619,848 196,907 Minnesota 11,689,599 89,658 Mississippi 2,292,244 121,540 Missouri 7,037,721 (NA) Montana 2,486,410 (NA) Nebraska 11,885,848 (NA) Nevada 209,885 (NA) New Hampshire 20,031 (NA) New Jersey 139,878 88,100 New Jersey 139,878 88,100 New Mexico 231,021 139,123 New York 900,502 222,273 North Dakota 6,828,031 (NA) North Dakota 6,828,031 (NA) Ohio 6,126,489 9,995 Oklahoma 1,710,738 (NA) Oregon (NA) 202,153 Pennsylvania 1,769,486 30,653 Rhode Island 1,420 (NA) South Carolina 637,416 31,118 South Dakota 6,505,699	Maine			` ,	
Michigan 3,619,848 196,907 Minnesota 11,689,599 89,658 Mississippi 2,292,244 121,540 Missouri 7,037,721 (NA) Montana 2,466,410 (NA) Nebraska 11,885,848 (NA) Nevada 209,885 (NA) New Hampshire 20,031 (NA) New Jersey 139,878 88,100 New Mexico 231,021 139,123 New York 900,502 222,273 North Carolina 2,107,045 469,399 North Dakota 6,828,031 (NA) Oriegon (NA) 9,995 Oklahoma 1,710,738 (NA) Oregon (NA) 202,153 Pennsylvania 1,769,486 30,653 Rhode Island 1,420 (NA) South Carolina 6,505,699 (NA) Tennessee 2,410,089 (NA) Tennessee 2,410,089 (NA) Tennessee 2,599,900 299,824 West Virginia 145,630 <td>Maryland</td> <td></td> <td></td> <td>` '</td> <td></td>	Maryland			` '	
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New York 900,502 222,273 North Carolina 2,107,045 469,399 North Dakota 6,828,031 (NA) Ohio 6,126,489 9,995 Oklahoma 1,710,738 (NA) Oregon (NA) 202,153 Pennsylvania 1,769,486 30,653 Rhode Island 1,420 (NA) South Carolina 637,416 31,118 South Dakota 6,505,699 (NA) Tennessee 2,410,089 (NA) Texas 5,183,403 215,990 Utah 499,716 (NA) Vermont 105,580 (NA) Virginia 990,354 17,595 Washington 2,959,900 299,824 West Virginia 145,630 (NA) Wisconsin 4,135,576 150,694	New Jersey	139,878		88,100	
North Carolina 2,107,045 469,399 North Dakota 6,828,031 (NA) Ohio 6,126,489 9,995 Oklahoma 1,710,738 (NA) Oregon (NA) 202,153 Pennsylvania 1,769,486 30,653 Rhode Island 1,420 (NA) South Carolina 637,416 31,118 South Dakota 6,505,699 (NA) Tennessee 2,410,089 (NA) Texas 5,183,403 215,990 Utah 499,716 (NA) Vermont 105,580 (NA) Virginia 990,354 17,595 Washington 2,959,900 299,824 West Virginia 145,630 (NA) Wisconsin 4,135,576 150,694	New Mexico	231,021		139,123	
North Dakota 6,828,031 (NA) Ohio 6,126,489 9,995 Oklahoma 1,710,738 (NA) Oregon (NA) 202,153 Pennsylvania 1,769,486 30,653 Rhode Island 1,420 (NA) South Carolina 637,416 31,118 South Dakota 6,505,699 (NA) Tennessee 2,410,089 (NA) Texas 5,183,403 215,990 Utah 499,716 (NA) Vermont 105,580 (NA) Virginia 990,354 17,595 Washington 2,959,900 299,824 West Virginia 145,630 (NA) Wisconsin 4,135,576 150,694	New York				
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Oklahoma 1,710,738 (NA) Oregon (NA) 202,153 Pennsylvania 1,769,486 30,653 Rhode Island 1,420 (NA) South Carolina 637,416 31,118 South Dakota 6,505,699 (NA) Tennessee 2,410,089 (NA) Texas 5,183,403 215,990 Utah 499,716 (NA) Vermont 105,580 (NA) Virginia 990,354 17,595 Washington 2,959,900 299,824 West Virginia 145,630 (NA) Wisconsin 4,135,576 150,694	North Dakota	6,828,031		(NA)	
Oregon (NA) 202,153 Pennsylvania 1,769,486 30,653 Rhode Island 1,420 (NA) South Carolina 637,416 31,118 South Dakota 6,505,699 (NA) Tennessee 2,410,089 (NA) Texas 5,183,403 215,990 Utah 499,716 (NA) Vermont 105,580 (NA) Virginia 990,354 17,595 Washington 2,959,900 299,824 West Virginia 145,630 (NA) Wisconsin 4,135,576 150,694	Ohio	6,126,489		9,995	
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Pennsylvania 1,769,486 30,653 Rhode Island 1,420 (NA) South Carolina 637,416 31,118 South Dakota 6,505,699 (NA) Tennessee 2,410,089 (NA) Texas 5,183,403 215,990 Utah 499,716 (NA) Vermont 105,580 (NA) Virginia 990,354 17,595 Washington 2,959,900 299,824 West Virginia 145,630 (NA) Wisconsin 4,135,576 150,694	Oregon	(NA)		202,153	
Rhode Island 1,420 (NA) South Carolina 637,416 31,118 South Dakota 6,505,699 (NA) Tennessee 2,410,089 (NA) Texas 5,183,403 215,990 Utah 499,716 (NA) Vermont 105,580 (NA) Virginia 990,354 17,595 Washington 2,959,900 299,824 West Virginia 145,630 (NA) Wisconsin 4,135,576 150,694	Pennsylvania	* *			
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Nisconsin 4,135,576 150,694	//asilington				
	vvest Virginia				
wyoming 555,899 (NA)					
	Wyoming	555,899		(NA)	
United States ³	Jnited States 3	158,643,909		13,066,344	

⁽NA) Not available.

¹ Preliminary.

² Crops included for each producing State are those shown in the United States summary tables on pages 8-12.

³ United States totals may not add due to disclosure.

Corn for Grain Price per Bushel and Value of Production - States and United States: 2018-2020

State		Price per bushel			Value of production	
State	2018	2019	2020 ¹	2018	2019	2020 ¹
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
Alabama	4.11	3.99	4.15	157,084	178,892	209,824
Arizona	4.96	5.40	5.00	21,824	46,154	29,290
Arkansas	3.80	3.86	3.95	443,631	496,493	439,714
California	4.40	4.60	4.50	49,478	46,368	50,490
Colorado	3.70	3.68	4.70	572,390	588,432	577,912
Delaware	4.11	4.30	4.30	98,928	124,614	121,088
Florida	4.47	4.39	4.65	43,511	38,167	39,144
Georgia	4.35	4.53	4.30	218,196	253,680	301,860
Idaho	4.42	4.47	4.70	117,683	137,453	121,589
Illinois	3.62	3.55	4.35	8,210,160	6,554,010	9,270,720
Indiana	3.78	3.84	4.45	3,657,830	3,127,987	4,368,788
lowa	3.59	3.50	4.30	8,971,410	9,043,650	9,873,660
Kansas	3.58	3.56	4.30	2,299,864	2,850,350	3,295,864
Kentucky	3.84	3.92	4.45	819,840	960,596	1,129,944
Louisiana	3.86	3.86	3.70	300,501	347,111	324,805
Maryland	4.11	4.30	4.30	228,023	318,458	286,595
Michigan	3.72	3.73	4.45	1,075,712	882,779	1,363,747
Minnesota	3.47	3.26	4.20	4,711,288	4,088,855	6,056,064
Mississippi	3.80	3.86	3.70	323,380	416,417	326,340
Missouri	3.68	3.67	4.30	1,715,616	1,700,862	2,411,784
Montana	3.79	3.70	3.80	21,906	21,090	25,266
Nebraska	3.58	3.52	4.25	6,392,448	6,284,678	7,607,883
New Jersey	3.90	4.30	4.35	32,994	45,322	54,288
New Mexico	4.30	4.40	3.90	28,144	28,512	28,139
New York	4.16	4.20	4.80	406,786	361,662	384,336
North Carolina	4.39	4.41	4.50	411,738	455,244	483,075
North Dakota	3.32	3.07	4.25	1,488,323	1,258,792	1,051,535
Ohio	3.74	3.91	4.50	2,307,954	1,647,987	2,539,350
Oklahoma	3.86	4.00	4.10	139,655	180,840	177,120
Oregon	4.13	4.34	4.95	32,214	50,400	77,542
Pennsylvania	4.22	4.13	5.05	525,812	669,803	696,900
South Carolina	4.50	4.64	4.35	177,165	172,144	218,196
South Dakota	3.38	3.32	4.05	2,628,288	1,850,170	2,952,450
Tennessee	3.76	3.78	4.40	423,226	608,845	617,100
Texas	4.13	4.20	4.40	780,570	1,200,990	1,019,392
Utah	4.31	4.30	4.95	17,257	15,987	22,864
Virginia	4.06	4.10	4.10	192,647	224,352	210,084
Washington	4.11	4.13	4.45	76,857	88,093	81,168
West Virginia	4.08	4.10	4.10	20,465	25,707	22,435
Wisconsin	3.52	3.43	4.15	1,919,245	1,520,245	2,144,637
Wyoming	3.69	3.45	3.95	42,361	28,431	26,023
United States	3.61	3.56	4.30	52,102,404	48,940,622	61,039,005

¹ Preliminary.

Sorghum for Grain Price per Cwt and Value of Production - States and United States: 2018-2020

State		Price per cwt		Value of production		
State	2018	2019	2020 ¹	2018	2019	2020 ¹
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
Arkansas ²	(D)	(NA)	(NA)	(D)	(NA)	(NA)
Colorado	4.93	4.95	7.50	47,555	35,232	21,420
Georgia ²	7.40	(NA)	(NA)	3,294	(NA)	(NA)
Illinois ²	6.14	(NA)	(NA)	6,107	(NA)	(NA)
Kansas	5.59	5.70	8.60	730,009	651,168	1,146,208
Louisiana 2	6.10	(NA)	(NA)	1,722	(NA)	(NA)
Mississippi ²	(D)	(NA)	(NA)	(D)	(NA)	(NA)
Missouri 2	6.40	(NA)	(NA)	7,526	(NA)	(NA)
Nebraska	5.45	5.58	8.05	48,771	37,779	61,534
New Mexico ²	6.98	(NA)	(NA)	6,981	(NA)	(NA)
North Carolina ²	6.60	(NA)	(NA)	1,774	(NA)	(NA)
Oklahoma	5.95	6.0Ó	8.80	39,984	44 <u>,</u> 554	51,00Ś
South Dakota	5.86	5.95	7.55	52,506	46,648	48,030
Texas	6.64	6.49	7.40	230,913	310,378	391,608
Other States ³	6.36	(X)	(X)	3,705	-	-
United States	5.82	5.96	8.60	1,180,847	1,125,759	1,719,805

<sup>Represents zero.
(D) Withheld to avoid disclosing data for individual operations.
(NA) Not available.</sup>

⁽X) Not available.

(X) Not applicable.

¹ Preliminary.

² Estimates discontinued in 2019.

³ Includes data withheld above.

Oat Price per Bushel and Value of Production - States and United States: 2018-2020

State		Price per bushel			Value of production	
State	2018	2019	2020 ¹	2018	2019	2020 ¹
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
Alabama ²	4.50	(NA)	(NA)	4,253	(NA)	(NA)
Arkansas	2.75	2.80	3.00	1,444	588	960
California	(D)	(D)	3.00	(D)	(D)	900
Colorado ²	3.66	(NA)	(NA)	1,281	(NA)	(NA)
Georgia	4.15	4.10	4.35	4,420	3,383	4,698
Idaho	2.80	3.27	2.45	2,352	3,610	3,499
Illinois	3.12	4.10	3.70	6,474	2,665	3,219
lowa	2.93	3.53	3.15	6,091	14,127	17,936
Kansas	3.32	3.40	2.95	2,928	3,917	2,454
Maine	2.80	2.95	2.85	3,564	4,260	3,950
Michigan	3.31	3.63	3.00	10,427	5,173	4,950
Minnesota	2.49	2.63	2.50	15,426	16,306	26,400
Missouri	3.00	3.90	3.60	2,160	1,100	1,548
Montana	2.71	3.14	2.85	2,680	4,490	4,874
Nebraska	2.85	3.09	2.80	4,326	3,504	5,116
New York	2.92	3.61	3.45	6,780	8,447	5,851
North Carolina	3.10	3.10	3.00	2,251	1,541	2,412
North Dakota	2.41	2.47	2.45	20,750	24,428	20,066
Ohio	3.76	3.75	3.60	7,332	4,313	3,240
Oklahoma	2.75	2.10	3.50	1,320	2,625	1,733
Oregon	(D)	(D)	3.40	(D)	(D)	2,380
Pennsylvania	4.02	4.18	3.95	6,472	11,077	10,863
South Carolina 2	3.95	(NA)	(NA)	1,714	(NA)	(NA)
South Dakota	2.67	2.81	2.55	20,799	17,282	27,489
Texas	4.82	4.26	4.10	12,050	8,520	11,070
Washington ²	2.18	(NA)	(NA)	401	(NA)	(NA)
Wisconsin	2.77	3.13	2.50	15,207	20,282	20,633
Wyoming ²	3.60	(NA)	(NA)	1,847	(NA)	(NA)
Other states ³	3.16	2.75	(X)	2,891	2,735	-
United States	2.66	2.82	2.70	167,640	164,373	186,241

⁻ Represents zero.

⁽D) Withheld to avoid disclosing data for individual operations.

⁽NA) Not available.

⁽X) Not available.

(X) Not applicable.

¹ Preliminary.

² Estimates discontinued in 2019.

³ Includes data withheld above.

Barley Price per Bushel and Value of Production – States and United States: 2018-2020

Stata		Price per bushel		Value of production			
State	2018	2019	2020 ¹	2018	2019	2020 ¹	
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)	
Alaska	5.20	5.20	5.10	894	988	1,097	
Arizona	3.84	4.15	4.45	4,224	7,844	4,343	
California	4.84	4.61	4.45	8,683	14,300	6,484	
Colorado	4.55	4.87	4.85	34,967	34,947	31,646	
Delaware	2.60	3.35	3.10	2,839	3,752	3,906	
Idaho	5.03	5.02	4.90	269,256	276,702	269,500	
Kansas	3.20	2.45	2.85	595	323	872	
Maine	2.90	3.20	3.45	3,387	3,674	2,608	
Maryland	2.60	3.35	3.30	4,368	4,841	5,059	
Michigan	2.45	3.00	3.95	527	1,056	1,770	
Minnesota	4.22	4.38	4.35	21,488	16,140	10,223	
Montana	4.62	4.43	4.40	155,232	198,641	200,970	
New York	2.90	3.85	3.75	1,346	801	1,125	
North Carolina	2.70	3.25	2.95	1,728	1,287	1,817	
North Dakota	4.24	4.16	4.40	120,798	133,286	127,512	
Oregon	3.28	3.80	3.45	4,520	10,374	6,210	
Pennsylvania	2.90	3.90	3.55	6,029	6,825	8,094	
South Dakota	3.65	3.55	4.30	2,610	1,374	2,649	
Utah	3.69	3.70	3.95	5,077	3,785	3,358	
Virginia	2.60	3.00	2.80	1,638	1,365	1,235	
Washington	4.40	5.08	4.90	21,520	29,870	31,311	
Wisconsin	4.00	5.25	3.45	1.800	1,932	2,063	
Wyoming	4.72	4.90	4.95	24,072	34,604	29,462	
United States	4.62	4.69	4.70	697,598	788,711	753,314	

¹ Preliminary.

All Wheat Price per Bushel and Value of Production - States and United States: 2018-2020

Ctata		Price per bushel			Value of production	
State	2018	2019	2020 ¹	2018	2019	2020 ¹
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
Alabama	4.95	5.05	5.20	39,204	30,906	26,208
Arizona	7.01	6.61	7.65	55,038	24,060	32,566
Arkansas	4.88	5.12	5.55	25,498	13,312	22,894
California	6.39	5.95	6.30	76,413	43,464	48,123
Colorado	4.61	4.01	4.65	324,789	392,980	190,836
Delaware	4.90	4.95	5.55	15,656	17,820	22,283
Florida ²	4.40	(NA)	(NA)	1,584	(NA)	(NA)
Georgia	4.80	4.9Ó	5.20	18,144	13,720	24,310
Idaho	5.15	5.03	5.15	539,010	497,252	582,419
Illinois	4.77	5.06	5.40	176,299	186,461	190,944
Indiana	4.90	4.95	5.30	90.454	79.794	92.750
lowa ²	4.75	(NA)	(NA)	1,653	(NA)	(NA)
Kansas	4.93	4.08	4.50	1,367,582	1,421,472	1,265,625
Kentucky	5.19	5.33	5.45	102,762	133,676	116,739
Louisiana ²	5.10	(NA)	(NA)	3,315	(NA)	(NA)
Maryland	4.90	4.95	5.55	61,740	61,256	60,773
Michigan	5.08	5.21	5.35	181,458	181,256	180.563
Minnesota	5.25	4.57	5.00	487,796	364,686	360,400
Mississippi	4.88	5.14	5.15	7,174	5,073	4,944
Missouri	4.84	5.17	5.45	148,491	127,027	125,023
Montana	5.24	4.69	5.25	1,041,736	1,023,209	1,200,863
Nebraska	4.71	3.88	4.60	233,098	214,525	156,538
Nevada ²	5.18	(NA)	(NA)	4.749	(NA)	(NA)
New Jersey	4.90	4.95	5.50	4,557	4,574	6,633
New Mexico	4.75	4.38	4.65	7,481	14,454	14,973
New York	5.31	5.50	5.25	34,807	22,869	41,580
North Carolina	4.80	5.30	4.75	101,232	66,780	99,750
North Dakota	5.09	4.47	5.15	1,848,508	1,429,651	1,599,919
Ohio	5.08	5.22	5.35	171,450	112,543	186,127
Oklahoma	5.10	4.31	4.60	357,000	474,100	478,400
Oregon	5.80	5.73	6.35	298.465	284.437	294.640
Pennsylvania	5.30	5.60	5.55	49,953	57,232	74,870
South Carolina	4.70	5.00	5.55 4.75	49,953 16,497	57,232 11,124	23,014
South Dakota	5.24	4.53	4.75	378,573	295,269	23,014 347,426
	5.24	5.45		97,071	78,507	73,957
Tennessee	5.24	4.44	5.45 5.10	,		313,650
Texas				289,520 30.998	317,016 31.007	
Utah Virginia	6.00 4.70	4.95 5.05	5.75 5.30	43,710	31,007 32,876	29,866 41,340
0	5.51	5.53	5.30 5.70	844,592	,	942,365
Washington West Virginia ²	4.90	5.53 (NA)		676	792,509	942,365 (NA)
	4.55	(NA) 4.54	(NA) 4.70	64,610	(NA)	(NA) 40,538
Wisconsin	4.55 4.75	3.94	4.70 4.55	18,573	43,584 18,636	40,538 10,647
United States	5.16	4.58	5.00	9,661,916	8,919,117	9,324,496
				7 7	//	7- 7-0-

⁽NA) Not available.

¹ Preliminary.

² Estimates discontinued in 2019.

Winter Wheat Price per Bushel and Value of Production - States and United States: 2018-2020

State		Price per bushel	<u> </u>		Value of production	
State	2018	2019	2020 ¹	2018	2019	2020 ¹
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
Alabama	4.95	5.05	5.20	39,204	30,906	26,208
Arizona ²	4.97	(NA)	(NA)	795	(NA)	(NA)
Arkansas	4.88	5.12	5.55	25,498	13,312	22,894
California	6.32	5.78	6.15	53,530	28,900	36,900
Colorado	4.61	4.01	4.65	323,622	392,980	190,836
Delaware	4.90	4.95	5.55	15,656	17,820	22,283
Florida ²	4.40	(NA)	(NA)	1,584	(NA)	(NA)
Georgia	4.80	4.90	5.20	18,144	13,720	24,310
Idaho	5.07	5.00	5.15	310,284	295,800	343,299
Illinois	4.77	5.06	5.40	176,299	186,461	190,944
Indiana	4.90	4.95	5.30	90.454	79.794	92.750
lowa ²	4.75	(NA)	(NA)	1,653	(NA)	(NA)
Kansas	4.93	4.08	4.50	1,367,582	1,421,472	1,265,625
Kentucky	5.19	5.33	5.45	102,762	133,676	116,739
Louisiana ²	5.10	(NA)	(NA)	3,315	(NA)	(NA)
Maryland	4.90	4.95	5.55	61,740	61,256	60,773
Michigan	5.08	5.21	5.35	181,458	181,256	180,563
Minnesota ²	4.96	(NA)	(NA)	1,488	(NA)	(NA)
Mississippi	4.88	5.14	5.15	7,174	5,073	4,944
Missouri	4.84	5.17	5.45	148,491	127,027	125,023
Montana	5.13	4.55	5.10	402,705	432,250	387,549
Nebraska	4.71	3.88	4.60	233,098	214,525	156,538
Nevada ²	5.26	(NA)	(NA)	3,156	(NA)	(NA)
New Jersey	4.90	4.95	5.50	4,557	4,574	6,633
New Mexico	4.75	4.38	4.65	7,481	14,454	14,973
New York	5.31	5.50	5.25	34,807	22,869	41,580
North Carolina	4.80	5.30	4.75	101,232	66,780	99,750
North Dakota	5.05	3.87	4.75	15,201	14,358	7,034
Ohio	5.08	5.22	5.35	171,450	112,543	186,127
Oklahoma	5.10	4.31	4.60	357,000	474,100	478,400
Oregon	5.76	5.73	6.35	268,214	284,437	294.640
Pennsylvania	5.30	5.60	5.55	49,953	57,232	74,870
South Carolina	4.70	5.15	4.75	16,497	11,124	23,014
South Dakota	5.13	4.39	4.80	162,518	175,776	167,040
Tennessee	5.24	5.45	5.45	97,071	78,507	73,957
Texas	5.17	4.44	5.10	289,520	317,016	313,650
Utah	5.70	4.95	5.75	27,862	31,017	29.866
Virginia	4.70	5.05	5.30	43,710	32,876	41,340
Washington	5.46	5.48	5.65	684,684	652,120	751,450
West Virginia ²	4.90	5.46 (NA)	5.65 (NA)	676	652,120 (NA)	751,450 (NA)
Wisconsin	4.90 4.55	(NA) 4.54	(NA) 4.70	64,610	(NA) 43,584	40,538
Wyoming	4.75	3.94	4.70	18,573	43,564 18,636	10,647
United States	5.08	4.53	4.90	5,985,308	6,048,221	5,903,687

⁽NA) Not available.

¹ Preliminary.

² Estimates discontinued in 2019.

Other Spring Wheat Price per Bushel and Value of Production - States and United States: 2018-2020

Ctoto		Price per bushel			Value of production	
State	2018	2019	2020 ¹	2018	2019	2020 ¹
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
Colorado ²	3.84	(NA)	(NA)	1,167	(NA)	(NA)
Idaho	5.27	5.08	5.20	222,789	198,933	234,234
Minnesota	5.25	4.57	5.00	486,308	364,686	360,400
Montana	5.37	4.81	5.25	514,876	485,858	654,360
Nevada ²	5.31	(NA)	(NA)	1,593	(NA)	(NA)
North Dakota	5.12	4.44	5.00	1,628,211	1,294,482	1,379,350
Oregon ²	6.02	(NA)	(NA)	30,251	(NA)	(NA)
South Dakota	5.32	4.71	5.05	215,620	119,493	180,386
Utah ²	6.70	(NA)	(NA)	3,136	(NA)	(NA)
Washington	5.75	5.80	5.85	159,908	140,389	190,915
United States	5.31	4.66	5.05	3,263,859	2,603,841	2,999,645

Durum Wheat Price per Bushel and Value of Production - States and United States: 2018-2020

State		Price per bushel			Value of production		
	2018	2019	2020 ¹	2018	2019	2020 ¹	
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)	
Arizona	7.01	6.61	7.65	54,243	24,060	32,566	
California	6.51	6.49	6.45	22,883	14,564	11,223	
Idaho	6.35	5.79	6.10	5,937	2,519	4,886	
Montana	5.34	4.84	5.95	124,155	105,101	158,954	
North Dakota	4.83	4.66	6.05	205,096	120,811	213,535	
South Dakota ²	5.18	(NA)	(NA)	435	(NA)	(NA)	
United States	5.33	4.90	6.25	412,749	267,055	421,164	

(NA) Not available.

1 Preliminary.

⁽NA) Not available.

¹ Preliminary.

² Estimates discontinued in 2019.

² Estimates discontinued in 2019.

Rice Price per Cwt and Value of Production - States and United States: 2018-2020

State —		Price per cwt		Value of production			
	2018	2019	2020 ¹	2018	2019	2020 ¹	
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)	
Arkansas	10.70 21.30 11.20 10.80 10.70 12.50	11.90 21.80 11.80 11.90 12.10 12.80	12.00 18.90 12.30 12.40 11.60 13.40	1,144,333 924,953 348,253 110,344 182,863 188,250	1,002,658 923,492 311,614 98,794 154,239 141,158	1,297,284 846,909 397,364 151,788 180,055 195,600	
United States	12.60	13.60	13.40	2,898,996	2,631,955	3,069,000	

¹ Preliminary.

Rye Price per Bushel and Value of Production - States and United States: 2018-2020

Ctoto		Price per bushel		Value of production			
State	2018	2019	2020 ¹	2018	2019	2020 ¹	
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)	
Georgia ²	7.05 5.75 (D) 7.55 5.90 5.75	(D) 4.60 4.56 8.25 5.90 7.00	(D) 4.05 3.95 7.55 6.00 5.25	2,750 (D) (D) 8,305 (D) (D)	(D) 3,229 11,696 12,251 2,148 4,760	(D) 2,309 8,690 5,496 11,232 4,200	
Other States ³	6.02	6.16	5.20	41,815	29,743	27,889	
United States	6.27	6.01	5.20	52,870	63,827	59,816	

⁽D) Withheld to avoid disclosing data for individual operations.

Proso Millet Price per Bushel and Value of Production – States and United States: 2018-2020

State -		Price per bushel		Value of production		
	2018	2019	2020 ¹	2018	2019	2020 ¹
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
Colorado Nebraska South Dakota	5.42 5.07 4.47	5.67 5.25 5.16	10.70 8.87 9.57	40,975 13,141 6,450	67,133 17,252 7,647	48,097 26,610 16,413
United States	5.22	5.54	9.89	60,566	92,032	91,120

¹ Preliminary.

Preliminary.

² Beginning in 2019, estimates included in Other States.
³ In 2018, Other States include Illinois, Kansas, Maine, Maryland, Michigan, Minnesota, Nebraska, New Jersey, New York, North Carolina, North Dakota, Pennsylvania, South Carolina, South Dakota, Texas, Virginia, and Wisconsin. Beginning in 2019, Other States include Georgia, Illinois, Kansas, Michigan, Nebraska, New York, North Carolina, South Dakota, and Texas.

Soybeans for Beans Price per Bushel and Value of Production – States and United States: 2018-2020

State		Price per bushel			Value of production	
State	2018	2019	2020 ¹	2018	2019	2020 ¹
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
Alabama	8.50	9.10	10.80	113,900	85,176	121,770
Arkansas	8.81	8.87	11.10	1,428,145	1,134,384	1,542,900
Delaware	8.25	8.35	8.75	57,519	60,045	63,455
Florida ²	8.10	(NA)	(NA)	3,596	(NA)	(NA)
Georgia	7.90	8.95	10.40	40,567	22,321	40,508
Illinois	8.74	8.84	11.60	5,827,395	4,706,770	7,015,100
Indiana	8.73	8.92	11.40	2,991,771	2,438,371	3,755,616
lowa	8.46	8.48	11.10	4,657,061	4,253,568	5,482,956
Kansas	7.93	8.28	10.90	1,599,243	1,542,854	2,074,815
Kentucky	8.79	8.98	11.50	865,200	698,105	1,163,800
Louisiana	8.95	8.70	10.30	548,501	359,136	556,818
Maryland	8.12	8.35	8.40	198,640	174,515	183,582
Michigan	8.53	8.81	11.50	935,954	613,705	1,183,695
Minnesota	8.40	8.29	11.10	3,148,740	2,469,425	3,986,787
Mississippi	8.85	8.80	10.70	1,046,601	717,200	1,190,268
Missouri	8.56	8.75	11.50	2,201,718	2,016,525	3,340,750
Nebraska	8.20	8.27	10.80	2,658,604	2,341,568	3,176,496
New Jersey	7.98	8.45	10.00	33,731	28,764	42,780
New York	8.20	8.50	10.10	138,580	91,800	160,711
North Carolina	8.66	8.71	11.60	448,675	463,372	673,844
North Dakota	7.98	7.93	10.70	1,910,412	1,348,893	2,043,165
Ohio	8.69	9.04	11.60	2,442,933	1,891,439	3,050,568
Oklahoma	7.89	8.45	10.10	132,552	107,822	163,620
Pennsylvania	8.42	8.50	10.00	236,055	254,065	289,800
South Carolina	9.10	9.20	10.80	87,087	75,348	113,400
South Dakota	7.97	8.22	10.60	2,001,267	1,201,764	2,372,916
Tennessee	8.75	8.96	11.40	664,869	576,934	923,400
Texas	7.59	7.70	8.95	32,280	15,739	33,473
Virginia	8.30	8.80	10.50	205,674	167,552	246,960
West Virginia 2	8.50	(NA)	(NA)	12,164	(NA)	(NA)
Wisconsin	8.49	8.42	10.70	888,394	668,801	1,075,029
United States	8.48	8.57	11.15	37,557,828	30,525,961	46,068,982

⁽NA) Not available.

¹ Preliminary.

² Estimates discontinued in 2019.

Peanut Price per Pound and Value of Production - States and United States: 2018-2020

Ctata		Price per pound		Value of production			
State	2018	2019	2020 ¹	2018	2019	2020 ¹	
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)	
Alabama	0.208	0.194	0.203	118,882	101,384	129,311	
Arkansas	0.190	0.198	0.194	21,413	33,977	35,386	
Florida	0.207	0.201	0.203	116,924	118,389	113,883	
Georgia	0.205	0.195	0.200	589,467	536,679	656,000	
Mississippi	0.202	0.189	0.200	18,907	14,364	19,360	
New Mexico	0.292	0.274	0.328	4,577	4,134	4,723	
North Carolina	0.230	0.221	0.218	87,230	99,185	92,432	
Oklahoma	0.234	0.235	0.215	10,776	13,160	12,642	
South Carolina	0.213	0.206	0.209	57,936	48,534	58,269	
Texas	0.275	0.281	0.263	127,600	137,128	128,870	
Virginia	0.221	0.219	0.218	22,277	24,440	24,133	
United States	0.215	0.205	0.207	1,175,989	1,131,374	1,275,009	

¹ Based on marketings and monthly prices received from August 1, 2020 - December 31, 2020.

Flaxseed Price per Bushel and Value of Production - States and United States: 2018-2020

State	Price per bushel			Value of production		
	2018	2019	2020 ¹	2018	2019	2020 ¹
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
Montana North Dakota South Dakota ²	8.89 9.89 9.73	7.85 9.15 (NA)	8.90 10.30 (NA)	5,592 37,503 438	10,480 39,254 (NA)	14,525 41,962 (NA)
United States	9.89	9.15	10.30	43,533	49,734	56,487

26

⁽NA) Not available.

¹ Preliminary.

² Estimates discontinued in 2019.

Sunflower Price per Cwt and Value of Production by Type – States and United States: 2018-2020

Varietal types		Price per cwt		,	Value of production	
and State	2018	2019	2020 ¹	2018	2019	2020 ¹
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
Oil						
California	(D)	27.10	24.60	(D)	18,591	13,592
Colorado	(D)	18.30	18.80	(D)	8,052	4,993
Kansas	(D)	(D)	(D)	(D)	(D)	(D)
Minnesota Nebraska	(D) 15.50	(D) 18.00	(D) 18.10	(D) 5,282	(D) 6,084	(D) 7,412
North Dakota	17.10	19.00	18.80	113,715	125,400	222,667
South Dakota	(D)	(D)	(D)	(D)	(D)	(D)
Texas	18.00	18.00	20.00	3,830	6,084	8,220
Other States ²	17.00	17.20	18.60	198,040	178,676	235,673
United States	16.70	19.10	18.70	320,867	342,887	492,557
Non-oil						
California	(D)	24.20	24.60	(D)	503	354
Colorado	(D)	20.80	25.10	(D)	3,203	4,907
Kansas	(D)	(D)	(D)	(D)	(D)	(D)
Minnesota	(D)	(D)	(D)	(D)	(D)	(D)
Nebraska	25.60	21.00	25.00	3,405	2,321	3,308
North Dakota	23.40	23.80	26.70	17,410	21,206	41,078
South Dakota	(D) 24.00	(D) 20.00	(D) 26.00	(D) 1,512	(D) 1,170	(D) 10,109
Texas	24.00	20.00	26.00	1,512	1,170	10,109
Other States ²	21.70	27.10	25.70	27,252	15,056	35,535
United States	22.80	22.60	26.30	49,579	43,459	95,291
All						
California	25.00	27.00	24.60	19,101	19,094	13,946
Colorado	17.30	18.90	21.50	10,692	11,255	9,900
Kansas	17.60	18.50	21.80	13,235	10,733	21,513
Minnesota	18.40	19.80	21.80	21,272	20,417	29,468
Nebraska	18.30	18.70	19.80	8,687	8,405	10,720
North DakotaSouth Dakota	18.10 16.50	19.70 19.50	20.20 18.20	131,125 160,992	146,606 162,582	263,745 220,227
Texas	19.40	18.30	22.90	5,342	7,254	18,329
16/03	19.40	10.30	22.90	5,342	7,254	10,329
United States	17.40	19.50	19.70	370,446	386,346	587,848

⁽D) Withheld to avoid disclosing data for individual operations.

¹ Preliminary.

² Includes data withheld above.

Canola Price per Cwt and Value of Production - States and United States: 2018-2020

State		Price per cwt		Value of production		
State	2018	2019	2020 ¹	2018	2019	2020 ¹
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
Idaho ²	15.70	(NA)	(NA)	13,847	(NA)	(NA)
Kansas	14.00	1Ì.7Ó	12.2Ó	4,704	2,423	`65Ś
Minnesota	17.10	15.20	17.80	15,852	16,734	13,414
Montana	14.10	14.20	16.10	18,319	28,414	38,862
North Dakota	15.80	14.80	17.40	489,294	428,904	508,150
Oklahoma	10.80	10.40	11.30	5,037	3,079	1,383
Oregon ²	17.00	(NA)	(NA)	1,301	(NA)	(NA)
Washington	16.90	15.60	20.00	20,268	22,207	40,040
United States	15.80	14.80	17.30	568,622	501,761	602,504

(NA) Not available.

Safflower Price per Cwt and Value of Production – States and United States: 2018-2020

State		Price per cwt		Value of production		
State	2018	2019	2020 ¹	2018	2019	2020 ¹
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
CaliforniaIdaho Montana		21.50 18.40 17.40	25.10 19.00 19.20	29,988 2,928 7,841	23,688 4,929 6,285	12,210 4,431 7,857
North Dakota ² South Dakota Utah	16.80 19.40	(NA) 17.80 17.10	(NA) 21.00 19.00	1,737 3,713 1,769	(NA) 1,153 2,280	(NA) 3,544 3,428
United States	20.30	19.90	21.30	47,976	38,335	31,470

(NA) Not available.

Other Oilseeds Price per Cwt and Value of Production - United States: 2018-2020

Crop	Price per cwt			Value of production		
Стор	2018	2019	2020 ¹	2018	2019	2020 ¹
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
Rapeseed ² Mustard seed ³	18.50 28.60	20.20 26.60	22.60 27.10	1,526 20,974	4,536 16,912	4,497 22,161

¹ Preliminary.

¹ Preliminary.

² Estimates discontinued in 2019.

¹ Preliminary.

² Estimates discontinued in 2019.

² For 2018, rapeseed program States include Idaho, Montana, North Carolina, North Dakota, Oregon, and Washington. For 2019 and 2020, rapeseed program States include Delaware, Idaho, Kentucky, North Carolina, Pennsylvania, South Carolina, Tennessee, and Virginia

³ For 2018, mustard seed program States include Idaho, Montana, North Dakota, Oregon, and Washington. For 2019 and 2020, mustard seed program States include Idaho, Montana, and North Dakota.

Cottonseed Price per Ton and Value of Production - States and United States: 2018-2020

¹ Based on monthly prices received from August 1, 2020 - December 31, 2020.

Cotton Price per Pound and Value of Production by Type – States and United States: 2018-2020

Type and State	Price per pound			Value of production ¹		
	2018	2019	2020 ²	2018	2019	2020 ²
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
Upland						
Alabama	0.730	0.603	0.624	311,155	297,544	220,147
Arizona	0.680	0.571	0.720	142,637	104,150	112,320
Arkansas	0.708	0.612	0.663	385,039	442,403	413,712
California	(D)	(D)	(D)	(D)	(D)	(D)
Florida	0.709	0.589	0.633	35,053	57,958	37,980
Georgia	0.741	0.613	0.682	695,354	806,218	713,645
Kansas	0.600	0.603	0.538	98,208	81,043	82,637
Louisiana	0.755	0.641	0.636	152,208	179,070	106,848
Mississippi	0.751	0.604	0.619	527,022	469,960	356,544
Missouri	0.712	0.598	0.635	314,761	262,642	219,456
New Mexico	(D)	(D)	(D)	(D)	(D)	(D)
North Carolina	0.748	0.605	0.661	252,046	302,016	171,331 [°]
Oklahoma	0.653	0.621	0.632	213,766	196,435	194,150
South Carolina	0.747	0.594	0.654	150,595	141,705	94,176
Tennessee	0.696	0.589	0.657	257,242	271,411	192,370
Texas	0.679	0.581	0.609	2,232,552	1,762,522	1,373,904
Virginia	0.718	0.606	0.627	62,380	70,684	48,154
Other States ³	0.702	0.596	0.560	101,433	71,775	52,653
United States	0.703	0.596	0.632	5,931,451	5,517,536	4,390,027
American Pima						
Arizona	(D)	(D)	(D)	(D)	(D)	(D)
California	(D)	(D)	(D)	(D)	(D)	(D)
New Mexico	(D)	(D)	(D)	(D)	(D)	(D)
Texas	(D)	(D)	(D)	(D)	(D)	(D)
Other States ³	1.150	1.060	1.090	443,716	347,563	287,539
United States	1.150	1.060	1.090	443,716	347,563	287,539
All						
United States	0.723	0.614	0.652	6,375,167	5,865,099	4,677,566

⁽D) Withheld to avoid disclosing data for individual operations.

¹ Value based on 480-pound net weight bale.

² Based on marketings and monthly prices received from August 1, 2020 - December 31, 2020.

³ Includes data withheld above.

All Hay Price per Ton and Value of Production - States and United States: 2018-2020

State	Price per ton ¹			Value of production			
	2018	2019	2020 ²	2018	2019	2020 ²	
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)	
Alabama	95.00	87.00	94.00	226,100	152,250	218,550	
Alaska	355.00	350.00	365.00	10,295	10,150	8,760	
Arizona	209.00	204.00	180.00	488,622	513,420	444,300	
Arkansas	108.00	108.00	108.00	234,816	298,920	289,956	
California	191.00	192.00	180.00	1,083,312	1,091,622	823,690	
Colorado	220.00	231.00	209.00	794,138	931,959	695,164	
Connecticut	172.00	177.00	183.00	18,960	14,325	15,160	
Delaware	168.00	160.00	156.00	5,650	4,972	5,292	
Florida	153.00	151.00	147.00	132,804	118,233	123,480	
Georgia	82.00	84.00	96.00	142,680	129,360	164,160	
Georgia	62.00	64.00	96.00	142,000	129,360	104,100	
daho	154.00	157.00	155.00	773,241	798,867	813,420	
Ilinois	153.00	161.00	155.00	194,260	179,520	221,47	
ndiana	154.00	178.00	177.00	211,026	230,100	230,580	
owa	131.00	124.00	112.00	394,170	385,208	423,57	
Kansas	153.00	127.00	127.00	635,950	724,710	647,848	
Kentucky	159.00	149.00	156.00	770,610	611,312	785,640	
Louisiana	102.00	103.00	101.00	85,272	100,425	96,960	
Maine	133.00	134.00	140.00	28,121	31,688	25,545	
Maryland	172.00	157.00	152.00	91,092	79,822	65,736	
Massachusetts	182.00	165.00	172.00	21,662	18,931	18,230	
Michigan	147.00	160.00	166.00	271.980	313.375	337,300	
Minnesota	133.00	142.00	111.00	410,294	424,580	421,290	
Mississippi	97.00	95.00	99.00	120,183	133,285	160,87	
Missouri	121.00	120.00	114.00	631,392	866,514	705,58	
Montana	145.00	143.00	128.00	800,860	893,595	754,496	
Nebraska	107.00	103.00	100.00	706,705	608,815	604,206	
		175.00	182.00	202,644	· ·	·	
Nevada	174.00			·	272,027	209,885	
New Hampshire	114.00	164.00	170.00	8,103	13,579	13,055	
New Jersey	186.00	187.00	190.00	41,032	35,048	36,177	
New Mexico	231.00	223.00	214.00	211,832	212,044	175,568	
New York	150.00	163.00	159.00	423,976	382,006	281,010	
North Carolina	123.00	113.00	118.00	271,897	211,624	188,310	
North Dakota	87.00	83.00	81.00	357,969	319,968	281,366	
Ohio	145.00	165.00	171.00	354,888	365,213	347,204	
Oklahoma	103.00	106.00	109.00	539,127	637,165	590,220	
Oregon	195.00	197.00	194.00	590,414	657,580	569,496	
Pennsylvania	182.00	184.00	185.00	502,203	569,036	640,401	
Rhode Island	140.00	171.00	178.00	1,684	1,199	1,420	
South Carolina	139.00	142.00	132.00	93,825	80,514	98,208	
South Dakota	104.00	102.00	99.00	588,941	697,950	514,555	
Tennessee	120.00	112.00	117.00	510,353	457,095	483,574	
Texas	143.00	130.00	147.00	1,078,326	1,118,592	1,334,172	
Utah	171.00	181.00	184.00	364,085	460,326	440,200	
Vermont	138.00	167.00	138.00	50,412	49,634	43,420	
Virginia	139.00	126.00	131.00	347,540	323,185	354,37	
Washington	186.00	193.00	195.00	519,277	468,306	509,220	
				·			
West Virginia	127.00	114.00	119.00	116,446	101,948	123,195	
Nisconsin	153.00	185.00	156.00	441,450	513,504	542,40	
Wyoming	167.00	176.00	168.00	387,596	426,294	449,816	
United States	166.00	163.00	159.00	17,288,215	18,039,795	17,328,527	

¹ Baled hay. ² Preliminary.

Alfalfa Hay Price per Ton and Value of Production - States and United States: 2018-2020

State	Price per ton 1			Value of production			
	2018	2019	2020 ²	2018	2019	2020 ²	
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)	
Arizona	209.00	205.00	180.00	451,022	476,420	397,800	
Arkansas	192.00	192.00	192.00	1,536	1,920	1,920	
California	204.00	204.00	189.00	872,712	840,072	646,380	
Colorado	219.00	231.00	208.00	543,558	623,931	495,040	
Connecticut	210.00	197.00	200.00	3,780	2,561	2,200	
Delaware	194.00	198.00	198.00	2,328	1,782	1,980	
Idaho	152.00	158.00	156.00	670,320	702,152	709,020	
Illinois	168.00	176.00	172.00	138,600	123,200	147,576	
Indiana	180.00	215.00	210.00	129,600	141,900	133,980	
lowa	135.00	130.00	121.00	309,690	309,400	351,505	
Kansas	170.00	140.00	141.00	362,950	352,800	281,718	
Kentucky	218.00	208.00	210.00	98,100	96,512	106,680	
Maine	177.00	178.00	175.00	4,071	3,738	3,675	
Maryland	194.00	198.00	198.00	34,920	23,562	20,196	
Massachusetts	222.00	187.00	200.00	4,218	2,992	1,400	
Michigan	156.00	184.00	179.00	220,896	253,000	275,660	
Minnesota	147.00	155.00	130.00	301,644	350,765	346,320	
Missouri	159.00	152.00	155.00	103,032	106,704	92,070	
Montana	148.00	143.00	128.00	576,460	645,645	535,040	
Nebraska	115.00	109.00	108.00	420,325	393,490	352,944	
Nevada	174.00	175.00	182.00	151,380	193,025	140,140	
New Hampshire	167.00	197.00	200.00	1,503	1,182	2,000	
New Jersey	214.00	224.00	240.00	6,634	7,840	10,320	
New Mexico	241.00	231.00	222.00	181,232	181,104	152,958	
New York	170.00	197.00	197.00	122,400	125,686	112,290	
North Carolina	221.00	212.00	213.00	5,083	2,968	2,982	
North Dakota	91.00	88.00	83.50	227,409	193,248	183,366	
Ohio	183.00	209.00	198.00	198,555	200,013	172,260	
Oklahoma	187.00	171.00	165.00	116,127	105,165	112,860	
Oregon	198.00	200.00	206.00	340,956	376,000	341,136	
Pennsylvania	197.00	226.00	241.00	171,390	196,620	285,585	
Rhode Island	162.00	197.00	200.00	324	394	400	
South Dakota	107.00	108.00	107.00	402,641	482,220	346.680	
Tennessee	223.00	215.00	216.00	14,718	10,320	15,984	
Texas	204.00	187.00	188.00	159,936	107,712	101,332	
Utah	172.00	182.00	185.00	318,200	399,126	386,650	
Vermont	172.00	197.00	200.00	6,192	9,062	5,800	
Virginia	214.00	207.00	207.00	25,680	27,945	26,082	
Washington	184.00	197.00	190.00	289,800	299,046	342,760	
West Virginia	203.00	192.00	192.00	7,714	8,448	5,376	
Wisconsin	162.00	197.00	166.00	312,174	416,064	446,208	
Wyoming	172.00	181.00	169.00	273,996	302,994	319,579	
United States	180.00	179.00	172.00	8,583,806	9,098,728	8,415,852	

¹ Baled hay. ² Preliminary.

All Other Hay Price per Ton and Value of Production - States and United States: 2018-2020

State		Price per ton 1			Value of production	
State	2018	2019	2020 ²	2018	2019	2020 ²
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
Alabama ³	95.00	87.00	94.00	226,100	152,250	218,550
Alaska ³	355.00	350.00	365.00	10,295	10,150	8,760
Arizona	200.00	200.00	186.00	37,600	37,000	46,500
Arkansas	108.00	108.00	108.00	233,280	297,000	288,036
California	150.00	150.00	149.00	210,600	251,550	177,310
	220.00	228.00	218.00	250,580	308,028	200,124
Colorado				· ·	· ·	,
Connecticut	165.00	173.00	180.00	15,180	11,764	12,960
Delaware	151.00	145.00	138.00	3,322	3,190	3,312
Florida ³	153.00	151.00	147.00	132,804	118,233	123,480
Georgia ³	82.00	84.00	96.00	142,680	129,360	164,160
ldaho	169.00	145.00	144.00	102,921	96,715	104,400
Illinois	115.00	128.00	119.00	55,660	56,320	73,899
Indiana	123.00	140.00	150.00	81,426	88,200	96,600
owa	120.00	103.00	91.00	84,480	75,808	72,072
Kansas	104.00	98.00	94.00	273,000	371,910	366,130
Kentucky	145.00	130.00	138.00	672,510	514,800	678,960
Louisiana ³	102.00	103.00	101.00	85,272	100,425	96,960
	130.00	130.00	135.00	24,050	27,950	21,870
Maine				,		
Maryland	151.00	145.00	138.00	56,172	56,260	45,540
Massachusetts	178.00	161.00	170.00	17,444	15,939	16,830
Michigan	129.00	125.00	134.00	51,084	60,375	61,640
Minnesota	106.00	105.00	85.00	108,650	73,815	74,970
Mississippi ³	97.00	95.00	99.00	120,183	133,285	160,87
Missouri	111.00	114.00	105.00	528,360	759,810	613,51
Montana	132.00	145.00	127.00	224,400	247,950	219,450
Nebraska	86.00	87.00	81.00	286,380	215,325	251,262
Nevada	178.00	171.00	185.00	51,264	79,002	69,745
New Hampshire	110.00	161.00	165.00	6,600	12,397	11,055
New Jersey	182.00	179.00	169.00	34,398	27,208	25,857
New Mexico	170.00	182.00	170.00	30,600	30,940	22,610
Naw Yark	440.00	400.00	440.00	204 570	250 220	400.70
New York	149.00	160.00	148.00	301,576	256,320	168,720
North Carolina	122.00	112.00	117.00	266,814	208,656	185,328
North Dakota	68.00	66.00	70.00	130,560	126,720	98,000
Ohio	123.00	140.00	142.00	156,333	165,200	174,944
Oklahoma	94.00	100.00	102.00	423,000	532,000	477,360
Oregon	187.00	190.00	173.00	249,458	281,580	228,360
Pennsylvania	177.00	176.00	168.00	330,813	372,416	354,816
Rhode Island	136.00	161.00	170.00	1,360	805	1,020
South Carolina 3	139.00	142.00	132.00	93,825	80,514	98,208
South Dakota	92.00	85.00	79.00	186,300	215,730	167,875
Tennessee	119.00	111.00	115.00	495,635	446,775	467,590
Texas	121.00	117.00	136.00		· ·	1,232,840
				918,390	1,010,880	, ,
Utah	133.00	144.00	119.00	45,885	61,200	53,550
Vermont	134.00	161.00	132.00	44,220	40,572	37,620
Virginia	133.00	122.00	127.00	321,860	295,240	328,29
Washington	193.00	182.00	205.00	229,477	169,260	166,460
West Virginia	123.00	110.00	117.00	108,732	93,500	117,81
Wisconsin	126.00	145.00	121.00	129,276	97,440	96,195
Wyoming	142.00	150.00	163.00	113,600	123,300	130,237
United States	139.00	135.00	133.00	8,704,409	8,941,067	8,912,675
Baled hay.	100.00	100.00	100.00	5,7 5 1, 100	3,011,007	3,512,070

Baled hay.
 Preliminary.
 Alfalfa and alfalfa mixtures included in all other hay.

All Forage Value of Production – States and United States: 2018-2020

State		Value of production ¹	
State	2018	2019	2020 ²
	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
Alabama	226,100	152,250	218,550
Alaska	10,295	10,150	8,760
Arizona	488,622	513,420	444,300
Arkansas	234,816	298,920	289,956
California ³	1,302,192	1,291,632	1,007,260
Colorado	794,138	931,959	695,164
Connecticut	18,960	14,325	15,16
	, i		
Delaware	5,650	4,972	5,29
Florida	132,804	118,233	123,480
Georgia	142,680	129,360	164,160
ldaho ³	850,808	937,015	930,930
Illinois ³	210,761	203,360	247,00
ndiana	211,026	230,100	230,58
owa ³	432,390	434,881	457,03
Kansas ³	679,364	765,366	680,65
Kentucky	770,610	611,312	785,64
Louisiana	85,272	100,425	96,96
Maine	28,121	31,688	25,54
Maryland	91,092	79,822	65,730
Massachusetts	21,662	18,931	18,230
Michigan ³	413,871	511,652	532,61
Minnesota ³	507,815	541,975	552,29
Mississippi	120,183	133,285	160,87
Missouri ³	674,151	903,032	729,52
	•		
Montana	800,860	893,595	754,49 631.37
Nebraska ³	716,640	626,088	621,37
Nevada	202,644	272,027	209,88
New Hampshire	8,103	13,579	13,05
New Jersey New Mexico	41,032	35,048 212,044	36,17 175,56
New Mexico	211,832	212,044	175,50
New York ³	833,603	728,880	628,67
North Carolina	271,897	211,624	188,31
North Dakota	357,969	319,968	281,36
Ohio ³	424,791	444,277	406,05
Oklahoma	539,127	637,165	590,22
Oregon	590,414	657,580	569,49
Pennsylvania ³	753,465	833,690	881,53
Rhode Island	1,684	1,199	1,420
South Carolina	93,825	80,514	98,20
South Dakota ³	621,895	733,711	533,842
Tennessee	510,353	457,095	483,574
Texas ³	1,144,593	1,208,815	1,459,60
Utah	364,085	460,326	440,20
Vermont ³	156,036	157,407	126,76
Virginia	347,540	323,185	354,37
Vashington ³	637,642	514,593	591,21
West Virginia	116,446	101,948	123,19
Wisconsin ³	· · · · · · · · · · · · · · · · · · ·	•	
Wyoming	1,004,958 387,596	1,151,447 426,294	1,148,66 449,81
, ,	·	,	•
United States ³	19,592,413	20,470,164	19,652,802

Includes dry hay and haylage/greenchop where applicable in value of production.
 Preliminary.
 Dry hay prices used to calculate haylage/greenchop portion of total value of production.

Alfalfa and All Other Hay Forage and Value of Production - States and United States: 2018-2020

Andria dria An Otrici II		Alfalfa 1			All Other 1	
State	2018	2019	2020 ²	2018	2019	2020 ²
	(1,000 dollars)					
Alabama	(X)	(X)	(X)	226,100	152,250	218,550
Alaska	(X)	(X)	(X)	10,295	10,150	8,760
Arizona	451,022	476,420	397,800	37,600	37,000	46,500
Arkansas	1,536	1,920	1,920	233,280	297,000	288,036
California ³	922,692	878,832	690,039	379,500	412,800	317,221
Colorado	543,558	623,931	495,040	250,580	308,028	200,124
Connecticut	3,780	2,561	2,200	15,180	11,764	12,960
Delaware	2,328	1,782	1,980	3,322	3,190	3,312
Florida	(X)	(X)	(X)	132,804	118,233	123,480
Georgia	(X)	(X)	(X)	142,680	129,360	164,160
Idaho ³	727,776	814,490	785,928	123,032	122,525	145,008
Illinois ³	151,536	142,560	167,872	59,225	60,800	79,135
Indiana	129,600	141,900	133,980	81,426	88,200	96,600
lowa ³	339,390	349,700	373,043	93,000	85,181	83,993
Kansas ³	372,980	365,820	287,358	306,384	399,546	393,296
Kentucky	98,100	96,512	106,680	672,510	514,800	678,960
Louisiana	(X)	(X)	(X)	85,272	100,425	96,960
Maine	4,071	3,738	3,675	24,050	27,950	21,870
Maryland	34,920	23,562	20,196	56,172	56,260	45,540
Massachusetts	4,218	2,992	1,400	17,444	15,939	16,830
Michigan ³	357,240	442,152	459,314	56,631	69,500	73,298
Minnesota ³	390,579	461,125	468,910	117,236	80,850	83,385
Mississippi	(X)	(X)	(X)	120,183	133,285	160,875
Missouri ³	123,702	118,712	98,890	550,449	784,320	630,630
Montana	576,460	645,645	535,040	224,400	247,950	219,456
Nebraska ³	425,960	404,499	365,256	290,680	221,589	256,122
Nevada	151,380	193,025	140,140	51,264	79,002	69,745
New Hampshire	1,503	1,182	2,000	6,600	12,397	11,055
New Jersey	6,634	7,840	10,320	34,398	27,208	25,857
New Mexico	181,232	181,104	152,958	30,600	30,940	22,610
New York ³	436,220	362,480	364,647	397,383	366,400	264,032
North Carolina	5,083	2,968	2,982	266,814	208,656	185,328
North Dakota	227,409	193,248	183,366	130,560	126,720	98,000
Ohio ³	261,324	266,057	220,176	163,467	178,220	185,878
Oklahoma	116,127	105,165	112,860	423,000	532,000	477,360
Oregon	340,956	376,000	341,136	249,458	281,580	228,360
Pennsylvania ³	334,506	375,386	448,260	418,959	458,304	433,272
Rhode Island	324	394	400	1,360	805	1,020
South Carolina South Dakota ³	(X) 426,395	(X) 505,656	(X) 360,911	93,825 195,500	80,514 228,055	98,208 172,931
	14 740	10.220	15.004	40E 62E	116 775	
Tennessee Texas ³	14,718 163,404	10,320	15,984	495,635	446,775	467,590
Utah	163,404	114,631	104,904	981,189	1,094,184	1,354,696
Vermont ³	318,200 33,024	399,126 34,081	386,650 37,400	45,885 123,012	61,200 123,326	53,550 89,364
Virginia	25,680	27,945	26,082	321,860	295,240	328,295
Washington ³	308,384	318,943	376,580	329,258	195,650	214,635
West Virginia	7,714	8,448	5,376	108,732	93,500	117,819
Wisconsin ³	848,718	992,092	1,004,798	156,240	159,355	143,869
Wyoming	273,996	302,994	319,579	113,600	123,300	130,237
United States ³	10,144,379	10,777,938	10,014,030	9,448,034	9,692,226	9,638,772
(V) Not applicable	.,,	- , ,	- / , - 90	-,,	-,,	-,,

⁽X) Not applicable.

¹ Includes dry hay and haylage/greenchop where applicable in value of production.

³ Dry hay prices used to calculate haylage/greenchop portion of total value of production.

Dry Edible Bean Price per Cwt and Value of Production - States and United States: 2018-2020

[Excludes beans grown for garden seed. Beginning in 2019, chickpeas are excluded]

Ctata		Price per cwt			Value of production	
State	2018	2019	2020 ¹	2018	2019	2020 ¹
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
California	69.20	59.60	65.10	82,348	43,448	45,245
Colorado	31.20	36.40	29.30	20,186	22,204	31,322
Idaho	23.50	29.70	32.00	73,485	31,690	50,944
Michigan	27.60	31.70	30.70	127,926	116,117	185,213
Minnesota	26.70	35.00	34.60	112,140	140,595	191,165
Montana ²	19.30	(NA)	(NA)	100,630	(NA)	(NA)
Nebraska	(D)	31.70	30.10	(D)	59,564	108,571
North Dakota	22.90	29.60	26.40	247,457	228,305	337,762
Texas ²	(D)	(NA)	(NA)	(D)	(NA)	(NA)
Washington	22.70	35.80	34.80	87,554	24,630	38,976
Wyoming	25.90	26.70	31.10	15,670	10,413	16,421
Other States ³	24.10	(X)	(X)	83,651	-	-
United States	25.40	31.80	29.90	951,047	676,966	1,005,619

⁻ Represents zero.

⁽D) Withheld to avoid disclosing data for individual operations. (NA) Not available.

⁽X) Not applicable.

1 Preliminary.
2 Estimates discontinued in 2019.
3 Includes data withheld above.

Chickpea Price per Cwt and Value of Production - States and United States: 2018-2020

[Chickpea value of production is included in dry bean value of production in 2018. Small chickpeas will pass through a 20/64 inch round hole screen and large chickpeas are larger than 20/64 inches]

C:		Price per cwt			Value of production	
Size	2018	2019	2020 ¹	2018	2019	2020 ¹
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
Small California Idaho Montana North Dakota Washington	(NA) (NA) (NA) (NA) (NA)	(D) 12.90 18.30 (D) 16.20	(D) 16.80 19.70 (D) 16.50	(NA) (NA) (NA) (NA) (NA)	(D) 3,302 11,529 (D) 6,739	(D) 2,066 6,028 (D) 4,620
Other States ²	(NA)	13.20	18.20	(NA)	1,178	1,931
United States	21.50	15.00	18.40	71,677	22,748	14,645
Large California Idaho Montana North Dakota Washington	(NA) (NA) (NA) (NA) (NA)	(D) 18.30 15.90 (D) 17.90	(D) 19.20 19.50 (D) 20.60	(NA) (NA) (NA) (NA) (NA)	(D) 18,044 28,922 (D) 25,400	(D) 15,302 25,662 (D) 20,476
Other States ²	(NA)	33.00	20.30	(NA)	21,175	7,125
United States	20.90	17.80	20.30	209,774	93,541	68,565
All California	(NA) (NA) (NA) (NA) (NA) (NA)	(D) 15.00 17.50 (D) 17.50	(D) 18.50 19.70 (D) 19.80	(NA) (NA) (NA) (NA) (NA) (NA)	(D) 21,346 40,451 (D) 32,139 22,353	(D) 17,368 31,690 (D) 25,096
United States	21.20	16.50	19.50	281,451	116,289	83,210

⁽D) Withheld to avoid disclosing data for individual operations.

⁽NA) Not available.

1 Preliminary.

² Includes data withheld above.

Dry Edible Pea Price per Cwt and Value of Production - States and United States: 2018-2020

[Beginning in 2019, wrinkled seed peas and Austrian winter peas included]

State -		Price per cwt			Value of production	
State	2018	2019	2020 ¹	2018	2019	2020 ¹
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
Idaho	11.70	(D)	13.60	2,048	(D)	11,560
Montana	9.56	8.89	8.31	48,010	90,234	81,712
Nebraska	10.40	10.70	(D)	9,381	6,891	(D)
North Dakota	10.50	9.49	9.03	84,315	86,862	70,434
Oregon ²	11.50	(NA)	(NA)	1,449	(NA)	(NA)
South Dakota	9.95	(D)	(D)	3,970	(D)	(D)
Washington	11.60	12.30	11.00	14,790	17,466	25,740
Other States ³	(X)	10.70	7.98	-	8,993	7,259
United States	10.50	9.64	9.03	163,963	210,446	196,705

⁻ Represents zero.

Wrinkled Seed Pea Price per Cwt and Value of Production - States and United States: 2018-2020

[Beginning in 2019, wrinkled seed peas are included in dry edible peas]

State —		Price per cwt			Value of production	2019 2020 (1,000 dollars) (1,000 dollars) (NA) (NA)		
	2018	2019	2020	2018	2019	2020		
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)		
Idaho Washington	(D) (D)	(NA) (NA)	(NA) (NA)	(D) (D)	(NA) (NA)	(NA) (NA)		
Other States 1	35.10	(NA)	(NA)	13,654	(NA)	(NA)		
United States	35.10	(NA)	(NA)	13,654	(NA)	(NA)		

⁽D) Withheld to avoid disclosing data for individual operations.

⁽D) Withheld to avoid disclosing data for individual operations.

⁽NA) Not available.

⁽X) Not applicable.

1 Preliminary.

2 Estimates discontinued in 2019.

3 Includes data withheld above.

⁽NA) Not available.

¹ Includes data withheld above.

Austrian Winter Pea Price per Cwt and Value of Production - States and United States: 2018-2020

[Beginning in 2019, Austrian winter peas are included in dry edible peas]

State -		Price per cwt			Value of production			
	2018	2019	2020	2018	2019	2020		
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)		
Idaho Montana Oregon	11.50 (D) (D)	(NA) (NA) (NA)	(NA) (NA) (NA)	115 (D) (D)	(NA) (NA) (NA)	(NA) (NA) (NA)		
Other States ¹	20.30	(NA)	(NA)	2,318	(NA)	(NA)		
United States	16.40	(NA)	(NA)	2,433	(NA)	(NA)		

⁽D) Withheld to avoid disclosing data for individual operations.

Lentil Price per Cwt and Value of Production - States and United States: 2018-2020

State		Price per cwt			Value of production	
State	2018	2019	2020 ¹	2018	2019	2020 ¹
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
Idaho	24.60 14.10 14.80 23.80	18.40 15.50 13.90 18.00	21.20 17.00 16.80 20.30	10,873 68,526 35,490 16,850	6,679 51,987 12,830 12,078	7,717 90,576 19,051 11,876
United States	17.70	15.70	17.40	131,739	83,574	129,220

¹ Preliminary.

⁽NA) Not available.

1 Includes data withheld above.

All Potatoes Price per Cwt and Value of Production - States and United States: 2018-2020

State -		Price per cwt		\	/alue of production	1
State	2018	2019	2020 ²	2018	2019	2020 ²
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
Alaska ³	34.30	(NA)	(NA)	4,802	(NA)	(NA)
California	14.30	16.50	20.70	221,508	277,893	259,992
Colorado	9.98	12.20	11.20	216,786	239,925	259,101
Florida	16.30	21.30	22.30	89,846	148,205	121,535
Idaho	7.25	7.98	7.49	1,027,688	1,044,582	1,009,465
Illinois ³	9.01	(NA)	(NA)	25,679	(NA)	(NA)
Kansas ³	9.44	(NA)	(NA)	13,395	(NA)	(NA)
Maine	11.10	11.00	11.30	166,889	184,118	145,521
Maryland ³	11.70	(NA)	(NA)	5,967	(NA)	(NA)
Michigan	10.50	9.84	11.30	191,520	200,441	201,818
Minnesota	9.64	10.90	11.20	180,316	194,511	197,546
Missouri ³	11.40	(NA)	(NA)	18,981	(NA)	(NA)
Montana ³	12.90	(NA)	(NA)	50,117	(NA)	(NA)
Nebraska	10.90	1Ì.4Ó	11.2Ó	100,978	109,383	104,227
New Jersey ³	8.91	(NA)	(NA)	4,722	(NA)	(NA)
New York ³	12.20	(NA)	(NA)	47,409	(NA)	(NA)
North Carolina 3	12.30	(NA)	(NA)	28,511	(NA)	(NA)
North Dakota	9.53	1Ì.5Ó	1Ò.8Ó	226,099	223,445	247,460
Oregon	7.47	9.24	8.03	201,690	233,874	216,810
Texas	12.60	12.40	15.90	93,719	88,090	69,547
Virginia ³	16.00	(NA)	(NA)	16,544	(NA)	(NA)
Washington	7.82	8.9Ó	7.92	788,256	934,144	780,59Ś
Wisconsin	10.50	11.80	10.70	284,918	338,660	297,460
United States ⁴	8.90	9.94	9.44	4,006,340	4,217,271	3,911,077

⁽NA) Not available.

The value of production is the sum of the value of production of the seasonal groups.

² Preliminary.

³ Estimates discontinued in 2019.

⁴ The 2018 and 2019 prices per cwt are derived from value of sales. The 2020 price is derived from value of production.

Sweet Potato Price per Cwt and Value of Production - States and United States: 2018-2020

[Beginning in 2019, estimates were published in the Vegetable Summary]

State		Price per cwt		Value of utilized production		
State	2018 ¹	2019	2020	2018 ¹	2019	2020
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
Arkansas ² California Florida ² Louisiana ² Mississippi	23.20 23.60 47.90 20.00 18.00	(NA) 23.30 (NA) (NA) 17.60	(NA) 28.90 (NA) (NA) 20.60	24,499 183,372 38,895 44,000 81,900	(NA) 189,236 (NA) (NA) 75,021	(NA) 229,268 (NA) (NA) 121,540
North Carolina	23.80	21.70	22.40	261,562	397,606	375,369
United States	23.20	21.60	23.80	634,228	661,863	726,177

Tobacco Price per Pound and Value of Production - States and United States: 2018-2020

State		Price per pound			Value of production	
State	2018	2019	2020 ¹	2018	2019	2020 ¹
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
Georgia	1.980	1.930	2.030	47,025	36,477	39,130
Kentucky	2.219	2.150	2.211	298,231	265,258	237,097
North Carolina	1.910	1.870	1.970	481,256	438,980	362,778
Pennsylvania	2.034	2.555	2.337	35,397	36,532	31,411
South Carolina	1.980	1.830	1.910	43,837	28,859	16,044
Tennessee	2.491	2.477	2.605	98,659	75,526	76,536
Virginia	2.021	1.925	2.036	89,013	58,530	56,106
United States	2.051	2.009	2.103	1,093,418	940,162	819,102

¹ Preliminary.

⁽NA) Not available.

1 Price and value for 2018 are based upon total production instead of utilized production.

² Estimates discontinued in 2019.

Tobacco Price per Pound and Value by Class and Type – States and United States: 2018-2020

•		Price per pound		Value of production		
Class, type, and State	2018	2019	2020 ¹	2018	2019	2020 ¹
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
Class 1, Flue-cured (11-14)	, ,	, ,	,	,	,	
Georgia	1.980	1.930	2.030	47,025	36,477	39,130
North Carolina	1.910	1.870	1.970	479,028	437,580	361,692
South Carolina	1.980	1.830	1.910	43,837	28,859	16,044
Virginia	2.020	1.920	2.030	84,840	54,720	53,592
United States	1.933	1.876	1.979	654,730	557,636	470,458
Class 2, Fire-cured (21-23)						
Kentucky	2.700	2.730	2.710	95,040	75,212	56,233
Tennessee	2.770	2.740	2.800	64,209	48,334	46,284
Virginia	2.340	2.250	2.530	1,278	1,296	1,202
United States	2.724	2.728	2.747	160,527	124,842	103,719
Class 3A, Light air-cured						
Type 31, Burley						
Kentucky	1.960	1.880	2.020	156,800	146,452	145,743
North Carolina	1.980	2.000	2.060	2,228	1,400	1,086
Pennsylvania	2.050	2.100	2.090	18,040	13,650	14,630
Tennessee	1.880	1.840	1.990	16,939	11,776	8,637
Virginia	1.930	1.890	1.930	2,895	2,514	1,312
United States	1.960	1.894	2.024	196,902	175,792	171,408
Type 32, Southern Maryland Belt						
Pennsylvania	1.800	1.890	1.860	5,544	4,347	1,711
United States	1.800	1.890	1.860	5,544	4,347	1,711
Total light air-cured (31-32)	1.956	1.894	2.022	202,446	180,139	173,119
Class 3B, Dark air-cured (35-37)						
Kentucky	2.420	2.430	2.450	46,391	43,594	35,121
Tennessee	2.360	2.390	2.540	17,511	15,416	21,615
United States	2.403	2.419	2.484	63,902	59,010	56,736
Class 4, Cigar filler						
Type 41, Pennsylvania Seedleaf						
Pennsylvania	2.140	3.370	2.730	11,813	18,535	15,070
United States	2.140	3.370	2.730	11,813	18,535	15,070
All tobacco						
United States	2.051	2.009	2.103	1,093,418	940,162	819,102

¹ Preliminary.

Sugarbeet Price per Ton and Value of Production - States and United States: 2018 and 2019

[Relates to year of intended harvest in all States except California. The 2020 United States price and value will be published in *Agricultural Prices* released July 2021. State prices and values for 2020 will be published in *Crop Values* released February 2022]

State	Price p	er ton	Value of production			
State	2018	2019	2018	2019		
	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)		
California ¹	47.20	48.60	56,640	53,849		
Colorado	29.20	16.90	24,265	12,607		
Idaho	46.00	50.90	303,692	327,542		
Michigan	35.10	35.00	151,176	145,145		
Minnesota	27.50	35.40	288,365	298,245		
Montana	41.40	29.20	54,607	33,668		
Nebraska	30.00	16.90	42,210	18,066		
North Dakota	35.60	38.00	204,024	167,960		
Oregon	46.00	50.90	16,836	19,189		
Washington	46.00	50.90	4,002	4,632		
Wyoming	39.90	25.80	37,745	17,518		
United States	35.60	38.30	1,183,562	1,098,421		

¹ Relates to year of planting for overwintered beets in California.

Sugarcane for Sugar and Seed Price per Ton and Value of Production by Use – States and United States: 2018 and 2019

[Price per ton of cane for sugar used in evaluating value of production for seed. The 2020 United States price and value will be published in *Agricultural Prices* released July 2021. State prices and values for 2020 will be published in *Crop Values* released February 2022]

Llas and Ctata	Price per t	ton	Value of production			
Use and State	2018	2019	2018	2019		
	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)		
For sugar						
Florida	31.10	36.70	514,861	623,606		
Louisiana	37.20	42.10	558,112	515,430		
Texas	19.80	19.50	27,245	20,514		
United States	33.40	38.30	1,100,218	1,159,550		
For sugar and seed						
Florida	(NA)	(NA)	536,662	647,534		
Louisiana	(NA)	(NA)	590,030	554,078		
Texas	(NA)	(NA)	28,215	22,074		
United States	(NA)	(NA)	1,154,907	1,223,686		

(NA) Not available.

Maple Syrup Price per Gallon and Value of Production - States and United States: 2018 and 2019

[The 2020 price and value will be published in Crop Production released June 2021]

State	Price pe	r gallon	Value of production			
State	2018	2019	2018	2019		
	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)		
Connecticut ¹ Indiana ¹ Maine Massachusetts ¹ Michigan Minnesota ¹ New Hampshire New York Ohio ¹ Pennsylvania	76.00 50.20 40.20 53.00 38.90 61.60 56.10 32.40 45.40 39.00	(NA) (NA) 28.20 (NA) 48.60 (NA) 45.30 32.20 (NA) 35.00	1,368 904 21,668 3,816 6,419 801 9,144 26,114 4,086 5,538	(NA) (NA) 14,664 (NA) 9,477 (NA) 6,704 26,404 (NA) 5,495		
Vermont	28.00 44.60 32.40 33.80	28.00 (NA) 32.50 31.00	54,320 357 7,290 141,825	57,960 (NA) 8,775 129,479		

⁽NA) Not available.

Mint Oil Price per Pound and Value of Production by Crop - States and United States: 2018-2020

Cran and State		Price per pound		Value of production			
Crop and State	2018	2019	2020 ¹	2018	2019	2020 ¹	
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)	
Peppermint							
California ²	(D)	(NA)	(NA)	(D)	(NA)	(NA)	
Idaho	18.90	18.60	17.50	33,737	37,944	34,650	
Indiana	21.50	22.30	(D)	7,525	6,846	(D)	
Oregon	21.10	19.70	19.70	34,077	35,559	34,042	
Washington	19.40	19.30	(D)	25,608	25,090	(D)	
Wisconsin ²	(D)	(NA)	(NA)	(D)	(NA)	(NA)	
Other States ³	18.10	(X)	20.10	5,542	-	25,668	
United States	19.80	19.30	18.90	106,489	105,439	94,360	
Spearmint							
Idaho	(D)	(D)	(D)	(D)	(D)	(D)	
Indiana	(D)	(D)	15.80	(D)	(D)	4,582	
Michigan ²	(D)	(NA)	(NA)	(D)	(NA)	(NA)	
Oregon	17.40	15.90	(D)	5,446	4,579	(D)	
Washington	16.70	17.40	16.70	29,229	29,075	24,227	
Native	16.50	(D)	(D)	20,856	(D)	(D)	
Scotch	17.30	(D)	(D)	8,373	(D)	(D)	
Other States ³	16.70	15.60	18.30	8,503	6,877	7,239	
United States	16.80	16.90	16.90	43,178	40,531	36,048	

⁻ Represents zero.

¹ Estimates discontinued in 2019.

⁽D) Withheld to avoid disclosing data for individual operations.

⁽NA) Not available.

⁽X) Not applicable.

1 Preliminary.

² Estimates discontinued in 2019.

³ Includes data withheld above.

Hops Price per Pound and Value of Production - States and United States: 2018-2020

State		Price per pound		Value of production			
State	2018 2019		2020 ¹	2018	2019	2020 ¹	
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)	
Idaho Oregon Washington	5.30 5.40 5.50	5.25 5.50 5.80	5.80 6.00 6.00	86,087 69,855 427,502	89,266 71,628 475,686	99,703 74,812 444,909	
United States	5.46	5.68	5.97	583,444	636,580	619,424	

¹ Preliminary.

Taro Price per Pound and Value of Production - States and United States: 2018-2020

[Estimates discontinued beginning in 2019]

State		Price per pound		Value of production			
State	2018	2019	2020	2018	2019	2020	
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)	
Hawaii	0.660	(NA)	(NA)	1,970	(NA)	(NA)	
United States	0.660	(NA)	(NA)	1,970	(NA)	(NA)	

⁽NA) Not available.

Statistical Methodology

Crop value calculations: *Crop Values* includes average prices and values of production for major field crops and many specialty crops. All prices in this report are marketing year average (MYA) prices which do not include allowances or adjustments for commodities under government loan at the end of the marketing year, commodities forfeited to the Commodity Credit Corporation, loan deficiency payments, farm program payments, or disaster payments.

Each State MYA price is based on sales in the months comprising its marketing year, while United States MYA prices are based on sales during the standard United States marketing year for each crop. See pages 47 and 48 of this report for a listing of State and United States marketing year definitions for specified field crops.

United States monthly prices for all crops in the monthly price estimating program are computed by weighting monthly State prices by monthly marketings for each State. For the major field crops, the States included in the monthly price estimating program are shown on pages 6 and 7. United States MYA prices for corn, sorghum, oats, barley, wheat, rice, soybeans, peanuts, flaxseed, sunflower, canola, Upland cotton, and hay are computed by weighting United States monthly prices by monthly marketings for the United States marketing year. For all other crops, United States MYA prices are computed by weighting State MYA prices by the estimated production in each State.

State and United States preliminary 2020 MYA prices for corn, sorghum, oats, barley, wheat, rice, soybeans, flaxseed, sunflower, canola, Upland cotton, dry edible beans, chickpeas, dry edible peas, lentils, and peanuts are based on entire month price data through December 2020 and, except for cotton and peanuts, allowances are made for the portion of the 2020 crop to be marketed during the remainder of each crop's 2020 marketing year. State MYA prices for crops not in the monthly price program are based on annual surveys. See the schedule on page 47 for the publication dates of final MYA prices for specified crops.

State value of production is computed by multiplying each State price by its production. Value of production for the United States is the sum of State values for all States listed for the crop. Value of production estimates in this report relate to the crop year. These estimates should not be confused with cash receipts which relate to sales during a calendar year irrespective of the year of production.

Revision policy: Estimates contained in this report may be revised the following year if new information is available that would justify a change. Estimates will also be reviewed after data for the 5-year Census of Agriculture are available. No revisions will be made after that date.

Final 2020 MYA Price Publication Schedule

June 2021	Agricultural Prices:	Barley (All, Feed, and Malting), Oats, and Wheat (All, Winter, Durum, and Other Spring) for United States only.
July 2021	Agricultural Prices:	Canola, Dry Edible Peas, Flaxseed, Lentils, and Rapeseed for United States and all States.
August 2021	Agricultural Prices:	Barley (All, Feed, and Malting), Hay, Oats, Peanuts, Rye, and Wheat (All, Winter, Durum, and Other Spring) for United States and all States
September 2021	Potatoes 2020 Summary:	Potatoes for United States and all States.
September 2021	Agricultural Prices:	Corn for United States only. Chickpeas, Cotton (American Pima and Upland), Cottonseed, Mustard Seed, Safflower, Sorghum, Soybeans, and Sunflower for United States and all States.
November 2021	Agricultural Prices:	Corn, Dry Edible Beans, and Proso Millet for United States and all States.
January 2022	Agricultural Prices:	Rice for United States and all States.
February 2022	Crop Values:	Hops, Peppermint Oil, Spearmint Oil, Sugarbeets, Sugarcane, and Tobacco for United States and all States.
June 2022	Crop Production:	Maple Syrup for United States and all States.

2020 Crop Marketing Year Definitions for Specified Field Crops

Barley: June 1 to May 31 for United States; June 1 to May 31 for Arizona, California, Delaware, Maryland, Pennsylvania, and Virginia; August 1 to July 31 for Alaska; July 1 to June 30 for all other States.

Canola: July 1 to June 30 for United States and all States.

Chickpeas: September 1 to August 31 for United States and all monthly price States.

Corn for Grain: September 1 to August 31 for United States; July 1 to June 30 for Texas; August 1 to July 31 for Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, and Tennessee; September 1 to August 31 for Arizona, California, Delaware, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Missouri, Nebraska, New Mexico, Ohio, Pennsylvania, South Dakota, Virginia, and West Virginia; October 1 to September 30 for all other States.

Cotton: August 1 to July 31 for United States and all States.

Cottonseed: August 1 to February 28 for United States and all States.

Dry Edible Beans: September 1 to August 31 for United States and all States.

Dry Edible Peas: July 1 to June 30 for United States and all States.

Flaxseed: July 1 to June 30 for United States and all States.

Hay: May 1 to April 30 for United States; April 1 to March 31 for Arizona and California; May 1 to April 30 for Alabama, Arkansas, Colorado, Florida, Georgia, Kansas, Kentucky, Louisiana, Mississippi, Missouri, Nevada, New Mexico, North Carolina, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Utah, and Virginia; June 1 to May 31 for all other States.

Lentils: July 1 to June 30 for United States and all States.

Oats: June 1 to May 31 for United States; May 1 to April 30 for Georgia, and Texas; June 1 to May 31 for Arkansas, North Carolina, and Oklahoma; August 1 to July 31 for Maine and New York; September 1 to August 31 for Alaska; July 1 to June 30 for all other States.

Peanuts: August 1 to July 31 for United States and all States.

Rice: August 1 to July 31 for United States; July 1 to June 30 for Louisiana and Texas; August 1 to July 31 for Arkansas and Mississippi; October 1 to September 30 for California; September 1 to August 31 for Missouri.

Sorghum for Grain: September 1 to August 31 for United States; June 1 to May 31 for Texas; August 1 to July 31 for Oklahoma; September 1 to August 31 for all other States.

Soybeans: September 1 to August 31 for United States; July 1 to June 30 for Texas; August 1 to July 31 for Louisiana and Mississippi; September 1 to August 31 for all other States.

Sunflower: September 1 to August 31 for United States; July 1 to June 30 for Texas; September 1 to August 31 for all other States.

Wheat: June 1 to May 31 for United States; May 1 to April 30 for Alabama, Georgia, Louisiana, Mississippi, and Texas; June 1 to May 31 for Arizona, Arkansas, California, Delaware, Illinois, Indiana, Kansas, Kentucky, Maryland, Missouri, New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee, and Virginia; July 1 to June 30 for all other States.

USDA, National Agricultural Statistics Service Information Contacts

Listed below are the commodity statisticians in the Crops Branch of the National Agricultural Statistics Service to contact for additional information. E-mail inquiries may be sent to nass@usda.gov

Lance Honig, Chief, Crops Branch	(202) 720-2127
Chris Hawthorn, Head, Field Crops Section	(202) 720-2127
Irwin Anolik – Crop Weather	
Joshua Bates – Oats, Soybeans	
David Colwell – Current Agricultural Industrial Reports	
Becky Sommer – Cotton, Cotton Ginnings, Sorghum	
James Johanson – Barley, County Estimates, Hay	
Greg Lemmons – Corn, Flaxseed, Proso Millet	
Jean Porter – Rye, Wheat	
John Stephens – Peanuts, Rice	
Travis Thorson – Sunflower, Other Oilseeds	
Tital in Tital in the state of	(202) 720 730)
Fleming Gibson, Head, Fruits, Vegetables and Special Crops Section	(202) 720-2127
Heidi Lanouette – Blueberries, Cranberries, Cucumbers, Pistachios, Potatoes, Pumpkins,	, ,
Raspberries, Squash, Strawberries, Sugarbeets, Sugarcane, Sweet Potatoes	(202) 720-4285
Robert Little – Apricots, Dry Beans, Lettuce, Macadamia, Maple Syrup,	,
Nectarines, Pears, Snap Beans, Spinach, Tomatoes	(202) 720-3250
Anastasiya Osborne – Almonds, Apples, Asparagus, Carrots, Coffee, Onions	
Plums, Prunes, Sweet Corn, Tobacco	(202) 720-4288
Krishna Rizal – Artichokes, Cauliflower, Celery, Grapefruit, Garlic, Hazelnuts,	(===) . == . ===
Kiwifruit, Lemons, Mandarins and tangerines, Mint, Mushrooms, Olives, Oranges	(202) 720-5412
Fleming Gibson – Avocados, Bell Peppers, Broccoli, Cabbage, Chickpeas,	
Chile Peppers, Dates, Floriculture, Grapes, Hops, Pecans	(202) 720-2127
Antonio Torres – Cantaloupes, Dry Edible Peas, Green Peas, Honeydews, Lentils,	(-v-) v - x - /
Papayas, Peaches, Sweet Cherries, Tart Cherries, Walnuts, Watermelons	(202) 720-2157
Lapayas, Latinos, Sweet Cheffes, Late Cheffes, Wallato, Walletine in the	(202) 720 2137

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For more information on NASS surveys and reports, call the NASS Agricultural Statistics Hotline at (800) 727-9540, 7:30 a.m. to 4:00 p.m. ET, or e-mail: nass@usda.gov.

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Table 31. Fruits and Nuts: 2017 and 2012

[For meaning of abbreviations and symbols, see intro	Tota	ıl	Bearing a	ige acres	Nonbearing age acres		
Geographic area	Farms	Acres	Farms	Acres	Farms	Acres	
NONCITRUS, ALL (SEE TEXT)							
United States Total							
United States	74,907	2,160,940	63,061	1,938,770	31,734	222,170	
2012	69,233	2,209,192	59,303	1,965,099	29,849	244,093	
States, 2017							
Alabama	799	3,241	548	2,398	468	844	
Alaska Arizona	44 494	22 8,226	33 389	16 5,937	17 219	7 2,289	
Arkansas	484	(D)	274	1,542	316	(D)	
California	22,977 932	1,300,428 6,114	21,599 720	1,199,832 5,047	6,520 499	100,596 1,066	
Connecticut Delaware	423 33	3,106 569	324 24	2,673 543	207 18	433 27	
Florida	3,281	19,611	2,780	15,862	1,370	3,749	
Georgia	977	20,468	741	12,618	499	7,850	
Hawaii	3,462 552	19,781 5,634	3,115 411	15,269 4,996	1,263 281	4,512 638	
ldaholllinois	878	4,781	684	3,659	434	1,122	
Indianalowa	733 763	2,866 2,054	530 580	2,221 1,541	379 388	644 514	
Kansas	377	1,229	308	892	176	337	
Kentucky Louisiana	1,047 323	2,339 802	619 240	1,542 589	667 153	797 213	
Maine Maryland	565 431	2,873 4,183	460 376	2,515 3,792	260 233	358 391	
		,					
MassachusettsMichigan	604 2,376	4,681 97,090	512 1,925	4,214 81,463	243 1,370	467 15,627	
Minnesota	1,028 494	4,589 (D)	814 318	3,687 738	556 288	903 (D)	
Missouri	995	(D)	746	3,774	547	(D)	
Montana Nebraska	484 293	1,228 868	401 246	1,041 682	222 125	188 186	
Nevada	96	324	83	270	36	55	
New Hampshire New Jersey	306 730	1,701 8,678	237 597	1,535 7,621	141 329	166 1,057	
New Mexico	1,321	3,076	997	2,354	721	721	
New York	2,588	89,243	2,206	79,884	1,209	9,359	
North Carolina North Dakota	1,521 74	(D) 111	1,166 58	8,693 67	713 39	(D) 44	
OhioOklahoma	1,700 561	8,235 1,979	1,245 338	6,755 1,074	898 388	1,480 905	
Oregon	3,409	63,896	3,051	57,878	1,288	6,019	
PennsylvaniaRhode Island	2,343 91	43,082 362	1,956 78	37,769 331	1,124 38	5,314 31	
South Carolina	684	19,089	493	15,029	372	4,060	
South Dakota	143	469	98	295	75	174	
Tennessee Texas	1,171 2,704	3,414 11,898	750 1,886	2,313 7,937	698 1,489	1,101 3,961	
Utah Vermont	633 454	8,419 2,779	544 343	6,197 2,420	267 251	2,222 359	
Virginia	1,452	17,704	1,156	14,848	779	2,855	
WashingtonWest Virginia	4,677 880	327,178 6,276	4,248 594	295,238 4,862	1,857 535	31,940 1,413	
Wisconsin	1,452 68	7,852 99	1,165 55	6,236 81	747 22	1,616 18	
	00	33	33	01	22	10	
APPLES							
United States Total							
United States	26,408	381,718	19,433	329,932	13,306	51,786	
2012	25,129	384,237	18,815	336,947	12,298	47,290	
States, 2017							
Alabama	326	329	146	209	213	121	
AlaskaArizona	39 146	18 533	29 109	13 490	14 64	5 43	
ArkansasCalifornia	241 1,801	283 13,637	94 1,408	166 12,200	177 754	117 1,437	
Colorado	465	1,523	321	1,208	237	315	
Connecticut Delaware	280 15	2,036 (D)	214 9	1,839 (D)	132 6	197 1	
FloridaGeorgia	179 320	1 <u>26</u> 842	95 193	`51 558	99 185	74 284	
HawaiiIdaho	33 371	11 2,256	23 258	9 1,942	16 191	3 313	
IllinoisIndiana	521	2,182	362 304	1,759	273 191	423 301	
lowa	402 428	1,749 943	273	1,449 639	259	304	
Kansas Kentucky	211 672	291 1,106	147 352	234 784	94 451	57 322	
Louisiana	47	(D)	28	(D)	25	17	
Maine Maryland	449 205	2,668 1,793	372 174	2,392 1,692	193 98	275 102	
Massachusetts	443	3,739	378	3,464	171	275	
Michigan	1,551	38,563	1,239	32,941	816	5,623	
Minnesota	706 167	3,600 97	545 65	2,931 31	394 121	669 67	
Missouri	519 259	1,381 304	337 194	1,123 241	314 118	258 63	
Montana Nebraska	127	304	97	230	40	63 79	
						continued	

Table 31. Fruits and Nuts: 2017 and 2012 (continued)

[For meaning of abbreviations and symbols, see int	roductory text.]	tal	Bearing a	ane acres	Nonbearing age acres		
Geographic area	Farms	Acres	Farms	Acres	Farms	Acres	
APPLES - Con.							
States, 2017 - Con.							
Nevada	54	115	47	102	20	13	
New Hampshire	228	1,458	161	1,330	101	127	
New Jersey New Mexico	489 832	2,232 1,153	384 631	1,914 868	201 394	319 285	
New York	1,421	50,450	1,156	43,789	774	6,661	
North Carolina	691	6,022	446	5,214	369	807	
North Dakota	43	43	35	28	21	15	
OhioOklahoma	1,137 214	4,849 288	798 70	4,010 64	587 183	839 224	
Oregon	1,457	5,791	1,240	4,934	484	857	
Pennsylvania	1,579	22,513	1,274	19,297	761	3,216	
Rhode Island	57	219	.47	194	23	25 177	
South Carolina	258 80	379 252	136 51	202 162	164 41	177	
Tennessee	665	1,377	369	886	409	492	
Texas	518	404	252	233	336	171	
Utah	380	1,211	304	1,017	131	194	
Vermont Virginia	343 687	2,483 10,879	242 448	2,191 9,055	191 421	292 1,824	
Washington	2,522	179,899	2,267	158,291	1,043	21,608	
•				·			
West Virginia	712 1,076	4,409 4,673	441 839	3,516 3,771	430 559	893 903	
Wisconsin	42	4,673 50	29	3,771	17	11	
APRICOTS							
United States Total							
United States2017	2,969	13,885	1,923	12,179	1,391	1,705	
2012	2,305	12,863	1,654	11,286	933	1,705	
States, 2017							
Alabama	8	2	-	-	8	2	
Arizona	65	28	39	21	33	7	
Arkansas	9 820	2 11,834	643	(D) 10,532	7 309	(D) 1,302	
California	152	92	88	67	81	25	
Connecticut	6	(D)	3	(D)	3	(D)	
Delaware	1	(D)	1	(D)	-	-	
Florida	5 10	(D)	4	(D)	2 10	(D)	
Georgia Hawaii	6	3	3	3	3	(Z)	
Idaho	75 37	49 5	55	44	24	5	
IllinoisIndiana	8	(D)	24	(D)	15 5	2	
lowa	31	(-/6	15	4	16	2	
Kansas	31	5	16	4	15	2	
Kentucky	20	7	10	2	11	5	
Louisiana	1 5	(D) (D)	<u>'</u>	(D)	5	(D) (D)	
Maryland	13	7	11	6	3	1	
Massachusetts	13	(D)	9	2	4	(D)	
Michigan	65	70	39	49	33	21	
Minnesota	22	11	10	5	19	7	
Mississippi	10	1	-	-	10	1	
Missouri	35 26	6	12 14	2	24 12	4 (D)	
Montana	24	5 5	16	(D) 3	11	(b)	
Nevada	17	20	17	18	6	1	
New Hampshire	15	3	7	1	8	2	
New Mexico	23 339	28 103	15 214	21 69	9 170	7 34	
	339		214		170	34	
New York	92	143	57	107	54	36	
North Carolina	20 12	3 1	2 7	(D) 1	18 5	(D) 1	
Ohio	49	15	12	7	37	8	
Oklahoma	41	22	22	11	30	11	
Oregon	79	44	60	39	23	5	
Pennsylvania	99 19	69 48	60	47 (D)	49 17	22 (D)	
South Dakota	11	3	-	(D)	11	3	
Tennessee	44	10	11	2	37	7	
Texas	133	48	60	24	82	24	
Utah	146	(D)	105	113	63	51 (D)	
Vermont	3 23	(D) (D)	14	7	3 11	(D)	
Washington		988	202	947	69	(D) (D) 41	
West Virginia	249 22	5	12	4	10	2	
Wisconsin	30 5	9 (D)	22	6 (D)	13	2 (D)	
	5	(D)	3	(D)	_	(0)	
AVOCADOS							
United States Total			_		_		
United States	7,106 7,495	64,455 73,534	6,459 6,919	58,104 64,407	2,178 2,402	6,352 9,128	
2012	.,.50	. 0,004	5,510	5.,.57	2,.02	5,.25	

Table 31. Fruits and Nuts: 2017 and 2012 (continued) [For meaning of abbreviations and symbols, see introductory text.]

For meaning of abbreviations and symbols, see int Geographic area	To	tal	Bearing a	age acres	Nonbearing	g age acres
	Farms	Acres	Farms	Acres	Farms	Acres
AVOCADOS - Con.						
States, 2017						
Arizona	3	(Z) 57,192	4.507		3	(Z) 5,730
CaliforniaFlorida	4,826 1,129	6,327	4,537 1,000	51,462 5,900	1,401 337	5,730 426
Georgia	1	(D)	· -	-	1	(D)
Hawaii Louisiana	1,124 4	922 (D)	909 4	729 1	421	193 (D)
Mississippi	6	(D)	-	-	6	(D) (D)
Texas	13	14	9	12	8	2
BANANAS						
United States Total						
United States2017	1,467	2,139	1,185	1,885	474	253
2012	1,169	2,133	970	1,788	438	656
States, 2017						
·						
CaliforniaFlorida	25 312	(D) 952	15 243	17 869	12 102	(D) 83
Hawaii	1,114	1,159	919	996	347	162
Mississippi South Carolina	1 6	(D)	-	-	1 6	(D)
Texas	9	(D)	8	3	6	(D)
CHERIMOYAS (SEE TEXT)						
· ,						
United States Total						
United States2017 2012	275 (NA)	750 (NA)	199 (NA)	623 (NA)	110 (NA)	127 (NA)
	(147)	(1471)	(1471)	(1471)	(1471)	(1471)
States, 2017						
California	166	688	122	581	74	106
Florida Hawaii	75 33	(D) 11	52 24	(D) 7	25 11	17 4
New Jersey	1	(D)	1	(D)	-	-
CHERRIES, SWEET						
United States Total						
		405.070	F 000			10.110
United States	7,771 7,663	105,978 105,244	5,696 5,677	93,866 91,935	3,388 3,409	12,112 13,309
States, 2017						
•	22		2	(D)	20	(D)
AlabamaAlaska	22 3	6 (D)	1	(D) (D)	20	(D) (D)
Arizona	31	7	11	3	20	5
Arkansas California	32 1,254	20 36,853	13 985	3 32,483	21 514	17 4,369
Colorado	183	259	136	211	72	48 5
Connecticut Delaware	29 4	13 (D)	8 1	8 (D)	23	(D)
Florida	11	3	5	1	6	3
Georgia	28	42	8	2	20	40
HawaiiIdaho	8 173	2 572	3 107	(Z) 540	6 86	2 32
Illinois	100	27	49	13	60	32 14
Indiana	73	31	47	18	39	14 13
lowa Kansas	58 42	12 9	36 21	7 5	25 23	5 4
Kentucky	93	19	21	5	74	15
Maine Maryland	32 48	4 88	14 39	(D) 78	20 21	(D) 10
Massachusetts	40	23	19	19	23	4
Michigan	495	7,807	375	6,701	265	1,106
Minnesota	24	15	9	3	19	12
Mississippi Missouri	15 128	5 36	7 58	2 17	8 76	3 19
Montana	237	717	208	642	83	76 2
Nebraska Nevada	37 15	6 8	25 11	4 7	15 4	1
New Hampshire	32	7	20	5	13	2
New Jersey New Mexico	69 248	503 82	46 139	482 49	28 131	21 33
New York	290	676	217	623	118	54
North Carolina	59	16	24	9	36	54 7
North DakotaOhio	4 187	1 89	4 75	1 55	120	33
Oklahoma	29	7	12	2	19	5
Oregon Pennsylvania	821 380	14,884 382	697 284	13,273 302	277 163	1,611 80
Rhode Island	1	(D)	1	(D)	-	-
South Carolina	14 12	7	2 4	(D) (D)	12	(D) (D)
		(D)		. ,	8	` ,
Tennessee Texas	110 33	20 25	26 13	6	88 22	14 19
Utah	170	421	133	346	65	76
Vermont	2 139	(D) 112	2 63	(D) 55	1 90	(D) 57
Washington	1,773	42,010	1,606	37,784	549	4,226
		· · · · · · · · · · · · · · · · · · ·		<u> </u>	1	continued

Table 31. Fruits and Nuts: 2017 and 2012 (continued) [For meaning of abbreviations and symbols, see introductory text.]

Geographic area	ductory text.] Total		Bearing a	age acres	Nonbearing	gage acres
0 1	Farms	Acres	Farms	Acres	Farms	Acres
CHERRIES, SWEET - Con.						
States , 2017 - Con.						
West Virginia	115 67	64 73	58 50	34 57	70 29	30 16
Wyoming	1	(D)	1	(D)	1	(D)
CHERRIES, TART						
United States Total						
United States2017	3,581	46,449	2,302	35,944	1,821	10,505
2012	3,052	49,785	1,983	38,965	1,610	10,820
States, 2017						
Alabama	18	7	9	5	11	2
Alaska	10 11	3 2	7	2	4 11	1
Arkansas	17	10	8	1	12	2 9
California	86 88	44 111	41 54	23 101	46 48	21 10
Connecticut	18	5	5	1	14	3
DelawareFlorida	1 12	(D)	1 6	(D) 1	6	1
Georgia	6	1	2	(D)	4	(D)
Hawaii	17	2	11	1	6	_1
IdahoIllinois	68 87	12 23	38 42	(D) 15	33 49	(D) 8
Indiana	82	14	54	9	33	5
Iowa Kansas	105 41	23 (D)	61 22	15 5	53 20	9 (D)
Kentucky	77	15	42	7	38	` 8
Maine	34 33	10 58	19 28	4 52	15 10	5 6
Massachusetts	19	6	12	5	8	1
Michigan	546	33,381	464	26,084	322	7,296
Minnesota	103	40 (7)	65	26	49	14 (7)
Missouri	89	(Z) 19	47	7	46	(Z) 12
Montana Nebraska	74 44	98 11	49 25	90 8	27 19	8 3
Nevada	7	5 4	7	5	- 10	-
New Hampshire New Jersey	16 51	42	5 33	3 34	12 20	8
New Mexico	205	49	95	23	127	26
New York	196	1,927	145	1,564	90	363
North Carolina North Dakota	49 28	13 (D)	18 17	4 (D)	35 11	9 4
Ohio	177	63	92	28	100	35
Oklahoma Oregon	4 145	(D) 691	115	645	43	(D) 45
PennsylvaniaSouth Carolina	255 9	604	185 3	503	124 9	101 1
South Dakota	31	10	12	(Z) 4	20	7
Tennessee	99	32	38	16	68	15
Texas	10	4 722	7	2 2007	6	2
Utah Vermont	67 35	4,732 11	49 18	3,267 7	42 18	1,465 4
Virginia	67 219	24 2,293	47	19 1,765	25 71	4
Washington	71	41	161 36	21	42	527 21
Wisconsin	140 11	1,982	99 8	1,552	64	430
COFFEE			-	-		(-/
United States Total						
United States2017 2012	1,489 1,577	9,308 9,872	1,378 1,488	8,441 8,622	383 496	868 1,250
States, 2017	.,	-,2	.,.00	-,	.00	.,200
,	2	(5)	•	(6)		(P)
California	8 2	(D) (D)	6 2	(D) (D)	4	(D)
Hawaii Texas	1,477 2	9,30ó (D)	1,370	8,435	377 2	865 (D)
	4	(D)	-	-	2	(D)
DATES						
United States Total						
United States2017 2012	303 213	16,336 10,981	276 192	12,701 9,275	132 112	3,635 1,706
States, 2017	2.0	.0,001	102	0,210	112	1,730
·	2-			0.45-	-	. = :=
Arizona	67 220	4,900 11,423	52 213	3,152 9,543	32 95	1,748 1,880
New Mexico New York	9	9 (D) (D)	4	2 (D) (D)	5	7
		(ப)	1	(D)	-	-

Table 31. Fruits and Nuts: 2017 and 2012 (continued)

2012 27,878 1,139,146 23,420 1,043,042 10,092 9 States, 2017 Alabama 362 589 273 509 154 Alaska 3 (D) 2 (D) 1 Arizona 230 1,538 185 1,339 83 Arkansas 179 956 108 794 94	Nonbearing age acres	
United States		
United States		
States, 2017 988 7,094 616 6,251 483		
States, 2017	937	
Abbarn	834	
Arizona		
Arkanisas	15	
Delaware	2 6	
Florida	726 (D)	
Illinois	20	
Kentucky 28	9	
Maryland.	2 15	
Missispip	(D)	
New Jersey	22	
New Mexico	5 (D)	
North Carolina	(D)	
Oklahoma 9 2 5 1 6 Coregon 68 71 124 60 52 Pennsylvania 7 (D) 5 1 0 3 Rhode Island 98 23 17 58 46 South Carolina 98 31 39 17 58 46 South Carolina 90 31 39 17 58 46 58 8 26 46 44 9 30 31 39 17 58 8 26 44 49 30 31 30 44 49 30 30 448 44 9 30 436 444 49 30 448 448 9 30 448 448 9 30 448 448 9 30 448 448 9 20 88 26 448 444 12 22 13 348 348 24	17	
Oregon. 168 71 124 60 52 Pennsylvania 7 (D) 5 1 3 Rhode Island 1 (D) 0 (D) 46 South Carolina 98 22 90 13 99 17 58 Texas 279 121 172 79 136 138 136 130 130 136<	(D) 1	
Rhode States St	11	
South Carolina 98 23 60 13 46 Tennessee 90 31 39 17 58 Texas 279 121 172 79 136 Virginia 66 15 44 9 30 Washington 73 12 58 8 26 West Virginia 22 4 12 2 2 13 Wisconsin 2 (D) - - 2 CRAPES	(D)	
Tennessee	10	
Virginia 66	14 41	
West Virginia 22	6	
Wisconsin	4 2	
United States Total United States	(D)	
United States 2017 28,387 1,136,155 24,461 1,055,484 9,290 8 2012 27,878 1,139,146 23,420 1,043,042 10,092 9 States, 2017 Alabama 362 589 273 509 154 Alaska 3 (D) 2 (D) 1 Arizona 230 1,538 185 1,339 83 Arkansas 179 956 108 794 94 California 179 956 108 794 94 California 18,12 935,272 11,265 871,264 2,626 6 Colorado 277 1,049 208 881 125 Connecticut 199 526 78 356 52 Delaware 15 55 9 48 9 9 Florida 574 1,595 457 1,157 225 Georgia 574 1,595 457 1,157 225 Georgia 574 1,266 91 1,166 188 Hawaii 11 33 9 31 5 Georgia 574 1,266 91 1,166 188 Hawaii 186 196 Hawaii 178 270 663 118 Indiana 252 587 181 410 123 Indiana 379 935 275 806 118 Indiana 252 587 181 410 123 Indiana 379 935 275 806 130 Indiana 379 935 275 806 201 Indiana 379		
States, 2017 2012 27,878 1,139,146 23,420 1,043,042 10,092 9 States, 2017 Alabama 362 589 273 509 154 4 4 Alabama 300 1,538 185 1,339 83 3 Alabama 230 1,538 185 1,339 83 3 Alabama 1,009 2 (D) 1 1 4		
States, 2017 Alabama	80,671	
Alabama 362 589 273 509 154 Alaska 3 (D) 2 (D) 1 Arizona 230 1,538 185 1,339 83 Arkansas 179 956 108 794 94 California 11,812 935,272 11,265 871,264 2,626 6 Colorado 277 1,049 208 881 125 6 Connecticut 109 526 78 356 52 5 9 48 9 9 15 15 5 9 48 9 9 15 15 5 9 48 9 9 15 15 5 9 48 9 9 15 15 15 15 15 15 15 14 15 15 14 15 15 14 15 15 14 15 15 15 14 15 <	96,103	
Alaska. 3 (D) 2 (D) 1 Arizona 230 1,538 185 1,339 83 Arkansas. 179 956 108 794 94 Califorila 11,812 935,272 11,265 871,264 2,626 6 Colorado 277 1,049 208 881 125 6 Connecticut 109 526 78 356 52 2 5 128 125 52 9 48 9 15 55 9 48 9 9 15 55 9 48 9 9 15 15 55 9 48 9 9 48 9 9 15 15 15 15 15 15 15 15 15 15 14 15 15 15 14 15 15 14 15 15 15 14 15 15 15 1		
Arizona 230 1,538 185 1,339 83 Arkansas. 179 956 108 794 94 California 11,812 935,272 11,265 871,264 2,626 6 Colorado 277 1,049 208 881 125 Connecticut 109 526 78 356 52 Delaware 15 55 9 48 9 Florida 574 1,595 457 1,157 225 Georgia 531 2,086 418 1,861 196 Hawaii 11 33 9 31 5 Idaho 128 1,216 91 1,106 58 Illinois 314 778 270 663 118 Indiana 252 587 181 410 123 lowa 337 935 275 806 130 Kansas 148 43	79	
California 11,812 935,272 11,265 871,264 2,626 6 Colorado 277 1,049 208 881 125 Connecticut 109 526 78 356 52 Delaware 15 55 9 48 9 Florida 574 1,595 457 1,157 225 Georgia 531 2,086 418 1,861 196 Hawaii 11 33 9 31 5 Idaho 128 1,216 91 1,106 58 Illinois 314 778 270 663 118 Indiana 252 587 181 410 123 Iowa 337 935 275 806 130 Kansas 148 433 118 352 55 Kentucky 361 565 216 336 201 Louisiana 103 81 </th <td>(D) 199</td>	(D) 199	
Colorado 277 1,049 208 881 125 Connecticut 109 526 78 356 52 Delaware 15 55 9 48 9 Florida 574 1,595 457 1,157 225 Georgia 531 2,086 418 1,861 196 Hawaii 11 33 9 31 5 Idaho 128 1,216 91 1,106 58 Illinois 314 778 270 663 118 Indiana 252 587 181 410 123 Iowa 337 935 275 806 130 Kansas 148 433 118 352 55 Kentucky 361 565 216 336 201 Louisiana 131 195 100 142 57 Maine 103 81 58 49 <td>162 34,008</td>	162 34,008	
Delaware 15 55 9 48 9 Florida 574 1,595 457 1,157 225 Georgia 531 2,086 418 1,861 196 Hawaii 11 33 9 31 5 Idaho 128 1,216 91 1,106 58 Illinois 314 778 270 663 118 Indiana 252 587 181 410 123 Iowa 337 935 275 806 130 Kansas 148 433 118 352 55 Kentucky 361 565 216 336 201 Louisiana 131 195 100 142 57 Maine 103 81 58 49 48	169	
Georgia 531 2,086 418 1,861 196 Hawaii	170 7	
Hawaii 11 33 9 31 5 Idaho 128 1,216 91 1,106 58 Illinois 314 778 270 663 118 Indiana 252 587 181 410 123 Iowa 337 935 275 806 130 Kansas 148 433 118 352 55 Kentucky 361 565 216 336 201 Louisiana 131 195 100 142 57 Maine 103 81 58 49 48	438 224	
Idaho 128 1,216 91 1,106 58 Illinois 314 778 270 663 118 Indiana 252 587 181 410 123 Iowa 337 935 275 806 130 Kansas 148 433 118 352 55 Kentucky 361 565 216 336 201 Louisiana 131 195 100 142 57 Maine 103 81 58 49 48	2	
Indiana 252 587 181 410 123 Iowa 337 935 275 806 130 Kansas 148 433 118 352 55 Kentucky 361 565 216 336 201 Louisiana 131 195 100 142 57 Maine 103 81 58 49 48	111	
Kansas 148 433 118 352 55 Kentucky 361 565 216 336 201 Louisiana 131 195 100 142 57 Maine 103 81 58 49 48	115 177	
Kentucky	128 81	
Maine	229	
Maryland 187 170 169 1027 06	53 32	
	134	
Massachusetts	33 830	
Minnesota	160	
Mississippi 153 447 115 375 57 Missouri 398 1,854 311 1,589 182	72 265	
Montana	14 87	
Nevada	29	
New Hampshire 58 112 51 100 18 New Jersey 212 1,124 175 894 88	12 231	
New Mexico	151	
New York 1,175 33,142 1,033 31,464 377 North Carolina 797 2,974 642 2,521 280	1,678 454	
North Dakota	15	
Ohio	238 244	
Oregon	2,169 965	
Rhode Island	4	
South Carolina	76	
South Dakota	53 212	
Texas	1,205	
Utah 130 77 105 58 39 Vermont 97 223 87 177 54	46	
Virginia	593 4,037	
West Virginia 190 216 122 143 83	73	

Table 31. Fruits and Nuts: 2017 and 2012 (continued)

For meaning of abbreviations and symbols, see int Geographic area	Total	5 5		Nonbearing age acres		
- '	Farms	Acres	Farms	Acres	Farms	Acres
GRAPES - Con.						
States, 2017 - Con.						
Wisconsin	428 18	917 (D)	337 16	732 (D)	178 4	186 (D)
GUAVAS		, ,		` '		. ,
United States Total						
United States2017	557	1,040	436	941	160	99
2012	399	1,733	331	1,276	129	457
States, 2017						
Alabama	1	(D)	1	(D)	-	-
CaliforniaFlorida	177 224	244 678	149 166	213 625	48 68	30 53
Hawaii Louisiana	149 2	117 (D)	116	102	39 2	15 (D)
New Jersey Texas	1 3	(D) 1	1 3	(D) (D)	3	(D)
KIWIFRUIT				()		,
United States Total						
United States2017	426	4,354	304	3,707	168	647
2012	345	4,395	258	3,750	131	645
States, 2017						
Alabama	16	5	2	(D)	14	(D)
CaliforniaConnecticut	174	4,173 (D)	159 1	3,580 (D)	42	593
Florida Georgia	9 6	2	3 -	(Z)	6 6	2
lowa Kentucky	2 13	(D) (D)	- 5	(D)	2 9	(D) (D)
Maryland	4	(D)	4 1	(D)	4	` -
Mississippi Missouri	5 7	1	4	(D) (Z)	3	(D) (Z)
New Hampshire	2	(<u>D</u>)	2		2	(D)
New York	7 9	(D) 3	2	(D) (D)	5 8	1 (D)
Ohio Oregon	1 57	(D) 113	- 50	85	1 12	(D) (D) 28
Pennsylvania	8 16	21	6 11	(D) 2	4 7	(D) 2
South Carolina Tennessee	21	4	6	1	16	3
Vermont	5 13	3 (D)	5 9	2 3	3 7	(Z) (D)
Washington	45	14	33	10	14	4
West Virginia	4	1 (D)	1 1	(D) (D)	3	(D)
MANGOES		` '		` '		
United States Total						
United States2017	1,445	3,328	1,194	2,598	478	730
2012	933	3,006	800	2,596	306	410
States, 2017						
California	50	287	30	(D)	23	(D)
Florida Hawaii	921 469	2,672 366	801 358	2,053 296	290 163	618 70
Texas	5	4	5	(D)	2	(D)
NECTARINES						
United States Total						
United States2017 2012	1,796 1,275	20,461 22,368	1,300 961	18,204 19,652	730 509	2,258 2,715
States, 2017	1,270	22,000	301	10,002	000	2,710
Alabama	27	17 (D)	12	10	15	7
Alaska	19	(D) 8	1 13	(D) 7	6	1
ArkansasCalifornia	12 <mark>643</mark>	5 17,618	3 <mark>512</mark>	(D) (15,912)	10 250	(D) (1,707)
ColoradoConnecticut	40 29	34 23	30 26	28 21	14 5	7 2
Delaware Florida	4 47	(D) 19	2 2 25	(D) 3	2 28	(D) 16
Georgia	20	90	10	(D)	12	(D)
Idaho	30	60	19	(D)	11	(D)
IllinoisIndiana	20 6 5	17 5	14 4	10 (D)	10 2 3	(D) (D)
lowa Kansas	8	(D) 2	2 3	(D) (D)	3 5	(D) (D)
Kentucky Maine	29 13	6 6	13 8	(D) 2 (D)	16 5	4 (D)
Maryland	13	13	11	12	6	2
Massachusetts	22	16	20	(D)	4	continued

Table 31. Fruits and Nuts: 2017 and 2012 (continued)

Second Part	[For meaning of abbreviations and symbols, see int	To	tal	Bearing age acres		Nonbearing	Nonbearing age acres	
Sues, 297 - Cut.	Geographic area	Farms	Acres	Farms	Acres	Farms	Acres	
Medical	NECTARINES - Con.							
Managery 256 4	States, 2017 - Con.							
Massoci							4	
No. Algorithm	Missouri	13	3	7	2	7		
No. Algorithm			(D) 4				(D) (D)	
New Yest	New Jersey	50		44	350	13	14	
Note Controls		53		52		9	18	
Calebram	North Carolina	30		12			4	
Chargest 44								
Penday House 12 310 62 255 39 30 30 30 30 30 30 30				38			6	
Trees. 36 36 36 6 6 00 25 00 00 25 00 00 00 00 00 00 00 00 00 00 00 00 00	Pennsylvania					39	29 (D)	
Trees. 36 36 36 6 6 00 25 00 00 25 00 00 00 00 00 00 00 00 00 00 00 00 00	South Carolina	22	16	10	14	12	2	
Vignish					·		5 (D)	
West Veryinia	Utah	49	79	45	(D)	(13)	(D)	
Culved States Total						37	(D) 211	
Culved States Total	West Virginia	19	34	17	(D)	3	(D)	
United States Total United States — 2017	Wisconsin				(D)		(Z)	
United States 2017 2,655 50,921 2,066 40,915 701 12,438	OLIVES							
United States 2017 2,655 50,921 2,066 40,915 701 12,438	United States Total							
States, 2017 2,092 51,150 1,761 38,712 701 12,438 12,438 12,438 13,436		2.455	50 921	2.066	<i>1</i> 0 915	722	10.006	
Abbum		2,092				701		
Affacts 13	States, 2017							
Affacts	Alahama	2	(D)	2	(D)	2	(D)	
Florida	Arizona	13	873	8	(D)	10		
Caprops		92	(D)	29	(D)		(D)	
Louisians	Georgia		(D)			25	(D)	
New Jersey	Louisiana	2		-	-		(D)	
Degnn				1	(D)	1 -	(D) -	
Toxas		23		12		15	27	
PAPAYAS United States Total United States Total United States Total United States 2017 750 1.589 583 1.247 228 341 575 585 585 1.517 145 755 585 5	Tennessee						(D)	
United States Total United States		161	1,608	69	590	121	1,018	
United States	PAPAYAS							
States, 2017 California	United States Total							
States, 2017 California			1,589		1,247		341	
California	2012	401	2,272	339	1,517	145	/55	
Florida	States, 2017							
Hawaii						4	(D)	
PASSION FRUIT United States Total United States								
United States Total United States 2017 364 209 259 133 137 76 2012 153 125 131 104 32 22 States, 2017 Alabama 2 2 (D) - 2 2 (D) 33 (D) 76 California 82 61 57 (D) 33 (D) 76 India 92 100 1 1 (D) 1	Texas	4	7	4	(D)	3	(D)	
United States	PASSION FRUIT							
States, 2017 Stat	United States Total							
States, 2017 Stat	United States	364	209	259	133	137	76	
Alabama	2012	153	125	131	104	32	22	
Florida	States, 2017							
Florida	Alabama		(D)	-	-		(D)	
Hawaii	California				(D)	33	(D)	
Tennessee 1 1 (D) 1 (D) - Texas (D) 1 (D)	Hawaii	203	68	156	55	63	14	
Texas			(D) (D)		(D) (D)	-	-	
United States Total United States 2017 13,093 112,861 9,201 94,836 6,337 18,025 2012 13,916 128,480 9,637 108,224 6,895 20,256 States, 2017 Alabama 2018 1818 165 1,348 180 470 1 (D) 1		2	(D)	1	(D)	1	(D)	
United States 2017 13,093 112,861 9,201 94,836 6,337 18,025 20,256 States, 2017 Alabama 293 1,818 165 1,348 180 470 Alaska 1 (D) 1 (D) 1 (D) 1 (D) 4720na (D) 4720n	PEACHES, ALL							
States, 2017 Stat	United States Total							
States, 2017 Stat	United States	13.093	112.861	9.201	94.836	6.337	18.025	
Alabama 293 1,818 165 1,348 180 470 Alaska 1 (D) 64 (D) 68 145 144 64	2012		128,480		108,224			
Alaska 1 (D) 1 (D) 1 (D) Arizona 130 172 75 (D) 64 (D) Arkansas 212 669 102 525 145 144 California 1,688 44,987 1,369 39,326 680 5,661 Colorado 362 2,785 282 2,352 187 433 Connecticut 167 365 134 323 63 42 Delaware 11 269 9 (D) 4 (D) Florida 337 1,025 219 904 159 121	States, 2017							
Alaska 1 (D) 1 (D) 1 (D) Arizona 130 172 75 (D) 64 (D) Arkansas 212 669 102 525 145 144 California 1,688 44,987 1,369 39,326 680 5,661 Colorado 362 2,785 282 2,352 187 433 Connecticut 167 365 134 323 63 42 Delaware 11 269 9 (D) 4 (D) Florida 337 1,025 219 904 159 121	Alabama	293	1.818	165	1.348	180	470	
Arkansas. 212 669 102 525 145 144 California 1,688 44,987 1,369 39,326 680 5,661 Colorado 362 2,785 282 2,352 187 433 Connecticut 167 365 134 323 63 42 Delaware 11 269 9 (D) 4 (D) Florida 337 1,025 219 904 159 121	Alaska	1	(D)	1	(D)	1	(D)	
California 1,688 44,987 1,369 39,326 680 5,661 Colorado 362 2,785 282 2,352 187 433 Connecticut 167 365 134 323 63 42 Delaware 11 269 9 (D) 4 (D) Florida 337 1,025 219 904 159 121	Arkansas	212	669	102	525	145	1144	
Connecticut 167 365 134 323 63 42 Delaware 11 269 9 (D) 4 (D) Plorida 337 1,025 219 904 159 121	California	1,688	44,987	1,369	39,326		5,661	
Florida	Connecticut	167	365	134	323	63	42	
Georgia						·	(D) 121	
		289	11,877				2,005	

Table 31. Fruits and Nuts: 2017 and 2012 (continued)

[For meaning of abbreviations and symbols, see in	To	tal	Bearing a	age acres	Nonbearing age acres	
Geographic area	Farms	Acres	Farms	Acres	Farms	Acres
PEACHES, ALL - Con.						
States, 2017 - Con.						
Hawaii	17	4	14	3	5	1
Idaho	87	914 1.472	59 219	848	43	66
IllinoisIndiana	278 195	357	113	1,014 256	118 113	457 102
lowa	117	40	68	25	60	15
Kansas Kentucky	157 364	169 370	110 208	134 292	75 197	36 78
Louisiana	54	164	33	141	27	23
Maine	118	44	78	33	44	11
Maryland	134	831	125	772	57	59
Massachusetts	216	461	189	392	75	70
Michigan	477 19	2,863	352 2	2,367 (D)	220 17	497
MinnesotaMississippi	173	250	70	154	127	(D) 96
Missouri	349	1,305	200	934	192	372
MontanaNebraska	28 60	14 31	15 41	8 27	15 21	6 4
Nevada	14	16	10	9	4	6
New Hampshire	114	83	90	73	39	10
New Jersey	281	3,362	229	3,193	102	170
New Mexico	422	153	253	. 83	212	70
New York North Carolina	431 323	1,391 930	339 196	1,158 758	174 175	233 172
Ohio	547	1,167	365	954	275	213
Oklahoma	266	766	145	585	179	181
Oregon Pennsylvania	342 849	651 4,249	309 697	568 3,722	105 378	83 527
Rhode Island	12	(D)	11	(D)	1	(D)
South Carolina	248	17,566	155	13,917	162	3,648
South Dakota	13	8	1	(D)	12	(D)
Tennessee	406	638	202	464	263	175
TexasUtah	1,092 310	3,317 1,582	720 269	2,496 1,229	566 126	821 354
Vermont	40	13	32	10	20	3
Virginia	337	1,032	236	835	174	197
Washington	336 277	1,542 1,088	274 178	1,411 883	126 136	131 205
Wisconsin	97	34	59	20	56	14
Wyoming	3	(D)	2	(D)	3	(D)
PEACHES, CLINGSTONE						
United States Total						
Officed States Total						
United States2017 2012	5,027 (NA)	33,027 (NA)	3,396 (NA)	27,778 (NA)	2,379 (NA)	5,249 (NA)
	(10.1)	(,	(,	(,	(,	(,
States, 2017						
Alabama	161	787	86	649	91	138
Arizona	37 94	27 133	23 35	(D) 74	14 63	(D) 59
Arkansas	768	20,983	632	17,898	310	3,086
Colorado	106	82	71	67	45	14
Connecticut	68 5	33 (D)	50 5	26 (D)	23 2	7 (D)
Florida	217	802	138	720	102	(D) 82
Georgia	135	259	77	213	76	46
Idaho	30	(D)	20	(D)	11	3
Illinois	98	161				
Indiana		101	73	128	38	33
lowa Kansas	71	65	39	18	43	47
Kentucky	71 49 56	0=	73 39 27 41	4.0	43 25	47 6 13
Louisiana	56 146	65 14 46 101	39 27 41 75	18 7 33 73	43 25 26 86	47 6 13 28
	56 146 32	65 14 46 101 57	39 27 41 75 23	18 7 33 73 51	43 25 26 86 14	47 6 13 28 6
Maine Maryland	56 146	65 14 46 101	39 27 41 75	18 7 33 73	43 25 26 86	47 6 13 28 6 5
Maryland Massachusetts	56 146 32 55 48 89	65 14 46 101 57 12 70 181	39 27 41 75 23 46 45 70	18 7 33 73 51 7 65 145	43 25 26 86 14 9 14 34	47 6 13 28 6 5 5 36
Maryland	56 146 32 55 48	65 14 46 101 57 12 70	39 27 41 75 23 46 45	18 7 33 73 51 7 65	43 25 26 86 14 9	47 6 13 28 6 5
Maryland Massachusetts Michigan Minnesota	56 146 32 55 48 89 158	65 14 46 101 57 12 70 181 897	39 27 41 75 23 46 45 70 114	18 7 33 73 51 7 65 145 737	43 25 26 86 14 9 14 34 57	47 6 13 28 6 5 5 36 160
Maryland	56 146 32 55 48 89 158 6	65 14 46 101 57 12 70 181 897	39 27 41 75 23 46 45 70 114 2	18 7 33 73 51 7 65 145 737 (D)	43 25 26 86 14 9 14 34 57 4	47 6 13 28 6 5 5 36 160 (D)
Maryland Massachusetts Michigan Minnesota Mississippi Missouri Montana	56 146 32 55 48 89 158 6 60 135	65 14 46 101 57 12 70 181 897 1 29 102	39 27 41 75 23 46 45 70 114 2 29 68 2	18 7 33 73 51 7 65 145 737 (D) 16 66 (D)	43 25 26 86 14 9 14 34 57 4 40 83 3	47 6 13 28 6 5 5 36 160 (D)
Maryland Massachusetts Michigan Minnesota Mississippi Missouri Montana Nebraska.	56 146 32 55 48 89 158 6 60 135 4	65 14 46 101 57 12 70 181 897 1 1 29 102 1	39 27 41 75 23 46 45 70 114 2 29 68 2	18 7 33 73 51 7 65 145 737 (D) 16 66 (D)	43 25 26 86 14 9 14 34 57 4 40 83 3	47 6 13 28 6 5 5 36 160 (D)
Maryland Massachusetts Michigan Minnesota Mississippi Missouri Montana Nebraska	56 146 32 55 48 89 158 6 60 135 4 23	65 14 46 101 57 12 70 181 897 1 29 102 1 1 4 (D)	39 277 411 75 23 46 45 70 114 2 29 68 2 18	18 7 33 73 51 7 65 145 737 (D) 16 66 (D) 11	43 25 26 86 14 9 14 34 57 4 40 83 3 7	47 6 13 28 6 5 5 36 160 (D) 13 36 (D) 2
Maryland Massachusetts Michigan Minnesota Mississippi Missouri Montana Nebraska Nevada New Hampshire New Jersey	56 146 32 55 48 89 158 6 60 135 4 23 13 52	65 14 46 101 57 12 70 181 897 1 29 102 1 1 4 (D) 12 418	39 27 41 75 23 46 45 70 114 2 29 68 2 18 9 44	18 7 33 73 51 7 65 145 737 (D) 16 66 (D) 11 (D) (D)	43 25 26 86 14 9 14 34 57 4 40 83 3 7 7 4 12 54	47 6 13 28 6 5 5 36 160 (D) 13 36 (D) 2 6 (D) 48
Maryland Massachusetts Michigan Minnesota Mississippi Missouri Montana Nebraska Nevada New Hampshire New Jersey New Mexico	56 146 32 55 48 89 158 6 60 135 4 23 13 52	65 14 46 101 57 12 70 181 897 1 29 102 1 1 14 (D) 12 418	39 27 41 75 23 46 45 70 114 2 29 68 2 18 9 44	18 7 33 73 51 7 65 145 737 (D) 16 66 (D) 11 (D) 370 370	43 25 26 86 86 14 9 14 34 34 40 83 3 7 4 12 54	47 6 13 28 6 5 5 36 160 (D) 13 36 (D) 2 6 (D) 48 30
Maryland Massachusetts Michigan Minnesota Mississippi Missouri Montana Nebraska Nevada New Hampshire New Jersey	56 146 32 55 48 89 158 6 60 135 4 23 13 52 133 200 123	65 14 46 101 57 12 70 181 897 1 29 102 1 1 1 4 (D) 12 418 59 317	39 27 41 75 23 46 45 70 114 2 29 68 2 18 9 44 103 101 97	18 7 33 73 51 7 65 145 737 (D) 16 66 (D) 11 (D) (D) 370 30 268	43 25 26 86 14 9 14 34 57 4 40 83 3 7 4 12 54 112 39	47 6 13 28 6 5 5 36 160 (D) 13 36 (D) 2 6 (D) 48 30 49
Maryland Massachusetts Michigan Minnesota Mississippi Missouri Montana Nebraska Nevada. New Hampshire New Jersey New Mexico New York North Carolina	56 146 32 55 48 89 158 6 6 60 135 4 23 13 52 133 200 123	65 14 46 101 57 12 70 181 897 1 29 102 1 14 (D) 12 418 59 317	39 27 41 75 23 46 45 70 114 2 29 68 2 18 9 44 103 101 97	18 7 33 73 51 7 65 145 737 (D) 16 66 (D) 111 (D) (D) 370 30 268	43 25 26 86 14 9 14 34 57 4 40 83 3 7 4 12 54 112 39	47 6 13 28 6 5 5 36 160 (D) 13 36 (D) 2 6 (D) 48 30 49
Maryland Massachusetts Michigan Minnesota Mississippi Missouri Montana Nebraska Nevada New Hampshire New Jersey New Mexico New York Morth Carolina Ohio Morth Carolina Ohio Morth Carolina Ohio Morth Carolina Massachusett Massachusett Massachusett Massachusett Morth Carolina Ohio Massachusett	56 146 32 55 48 89 158 6 60 135 4 23 13 52 133 200 123	65 14 46 101 57 12 70 181 897 1 29 102 1 1 4 (D) 12 418 59 317	39 27 41 75 23 46 45 70 114 2 29 68 2 18 9 44 103 101 97	18 7 33 73 51 7 65 145 737 (D) 16 66 (D) 11 (D) (D) 370 30 268 86	43 25 26 86 14 9 14 34 57 4 40 83 3 7 7 4 112 39 63 118	47 6 13 28 6 5 5 36 160 (D) 13 36 (D) 2 6 (D) 48 30 49
Maryland Massachusetts Michigan Minnesota Mississippi Missouri Montana Nebraska Nevada New Hampshire New Jersey New Mexico New York North Carolina Ohio Oklahoma Oregon	56 146 32 55 48 89 158 6 60 135 4 23 13 52 133 200 123 108 178 84 108	65 14 46 101 57 12 70 181 897 1 29 102 1 14 (D) 12 418 59 317	39 27 41 75 23 46 45 70 114 2 29 68 2 18 9 44 103 101 97 63 89 49	18 7 33 73 51 7 65 145 737 (D) 16 66 (D) 11 (D) 370 30 268 86 73 24	43 25 26 86 14 9 14 34 57 4 40 83 3 7 4 112 54 112 39 63 118 55	47 6 13 28 6 5 5 36 160 (D) 13 36 (D) 2 6 6 (D) 48 30 49 48 27 7
Maryland Massachusetts Michigan Minnesota Mississippi. Missouri Montana Nebraska Nevada New Hampshire New Jersey New Mexico New York North Carolina Ohio Oklahoma Oregon Pennsylvania	56 146 32 55 48 89 158 6 60 135 4 23 31 352 133 200 123 108 178 84 108	65 14 46 101 57 12 70 181 897 1 29 102 1 1 4 (D) 12 418 59 317	39 27 41 75 23 46 45 70 114 2 29 68 2 18 9 44 103 101 97 63 89 49 100	18 7 33 73 51 7 65 145 737 (D) 16 66 (D) 11 (D) (D) 370 30 268 86 73 24 83 643	43 25 26 86 14 9 14 34 57 4 40 83 3 7 4 12 54 112 39 63 118 55 31	47 6 13 28 6 5 5 36 160 (D) 13 36 (D) 2 6 (D) 48 30 49 30 49
Maryland Massachusetts Michigan Minnesota Mississippi Missouri Montana Nebraska Nevada New Hampshire New Jersey New Mexico New York North Carolina Ohio Oklahoma Oregon Pennsylvania Rhode Island	56 146 32 55 48 89 158 6 6 60 135 4 23 13 52 133 200 123 108 178 84 108 229 6	65 14 46 101 57 12 70 181 897 1 1 29 102 1 14 (D) 12 418 59 317 116 121 51 90 746	39 277 411 75 23 46 45 70 114 2 29 68 2 18 9 44 103 101 97 63 89 49 100 172 5	18 7 33 73 51 7 65 64 145 737 (D) 16 66 (D) 11 (D) 370 30 268 86 73 24 83 643 (D)	43 25 26 86 14 9 14 34 57 4 40 83 3 7 4 112 54 112 39 63 118 55 31	47 6 13 28 6 5 5 5 36 160 (D) 13 36 (D) 2 6 6 (D) 48 30 49 30 48 27 7 103 (D)
Maryland Massachusetts Michigan Minnesota Mississippi. Missouri. Montana Nebraska. Newada New Hampshire. New Jersey New Mexico New York North Carolina Ohio Oklahoma Oregon Pennsylvania Rhode Island South Carolina South Dakota	56 146 32 55 48 89 158 6 60 135 4 23 13 52 133 200 123 108 178 84 108 229 6 69 5	65 14 46 101 57 12 70 181 897 1 29 102 1 1 4 (D) 12 418 59 317 116 121 51 90 746 1 4,414 4,414 6	39 27 41 75 23 46 45 70 114 2 29 68 2 18 9 44 103 101 97 63 89 49 100 172 5 29	18 7 33 73 51 145 737 (D) 16 66 (D) 11 (D) (S) 370 268 86 73 24 83 643 (D) 3,762	43 255 266 866 14 9 14 34 57 4 400 83 3 7 4 112 39 63 118 55 31 101 1 49 55	47 6 13 28 6 5 5 36 160 (D) 13 36 (D) 2 6 (D) 48 30 49 30 49 30 48 27 7 7 103 (D) 652 66
Maryland Massachusetts Michigan Minnesota Mississippi. Missouri Montana Nebraska Nevada New Hampshire New Jersey New Mexico New York North Carolina Ohio Oklahoma Oregon Pennsylvania Rhode Island South Carolina South Dakota Tennessee	56 146 32 55 48 89 158 6 60 135 4 23 13 52 133 200 123 108 178 84 108 229 6 6 69 5	65 14 46 101 57 12 70 181 897 1 29 102 1 14 (D) 12 418 59 317 116 121 51 90 746 1 4,414 6 138	39 277 411 75 23 46 45 70 114 2 29 68 2 18 9 44 103 101 197 63 89 49 100 172 5	18 7 33 73 51 7 65 145 737 (D) 16 66 (D) 11 (D) (D) 370 30 268 86 73 24 83 643 (D) 3,762	43 25 26 86 14 9 14 34 57 4 40 83 3 7 4 112 39 63 118 55 31 101 11 49 5	47 6 13 28 6 5 5 5 36 160 (D) 13 36 (D) 2 6 6 (D) 48 30 49 48 27 7 103 (D) 652 6
Maryland Massachusetts Michigan Minnesota Mississippi. Missouri. Montana Nebraska. Newada New Hampshire. New Jersey New Mexico New York North Carolina Ohio Oklahoma Oregon Pennsylvania Rhode Island South Carolina South Dakota	56 146 32 55 48 89 158 6 60 135 4 23 13 52 133 200 123 108 178 84 108 229 6 69 5	65 14 46 101 57 12 70 181 897 1 1 29 102 1 14 (D) 12 418 59 317 116 121 51 90 746 6 138 814	39 277 411 75 23 46 45 70 114 2 2 29 68 2 18 9 44 103 101 197 63 89 49 100 172 5 2	18 7 33 73 51 145 737 (D) 16 66 (D) 11 (D) (S) 370 268 86 73 24 83 643 (D) 3,762	43 25 26 86 14 9 14 34 57 4 40 83 3 7 4 412 54 112 39 63 118 55 31 101 1 49 5	47 6 13 28 6 5 5 5 36 160 (D) 13 36 (D) 2 6 (D) 48 30 49 30 48 27 7 7 103 (D) 652 6 6
Maryland Massachusetts Michigan Minnesota Mississippi. Missouri Montana Nebraska Nevada New Hampshire New Jersey New Mexico New York North Carolina Ohio Oklahoma Oregon Pennsylvania Rhode Island South Carolina South Dakota Tennessee	56 146 32 55 48 89 158 6 60 135 4 23 13 52 133 200 123 108 178 84 108 229 6 6 69 5	65 14 46 101 57 12 70 181 897 1 29 102 1 14 (D) 12 418 59 317 116 121 51 90 746 1 4,414 6 138	39 277 411 75 23 46 45 70 114 2 29 68 2 18 9 44 103 101 197 63 89 49 100 172 5	18 7 33 73 51 7 65 145 737 (D) 16 66 (D) 11 (D) (D) 370 30 268 86 73 24 83 643 (D) 3,762	43 25 26 86 14 9 14 34 57 4 40 83 3 7 4 112 39 63 118 55 31 101 11 49 5	47 6 13 28 6 5 5 36 160 (D) 13 36 (D) 2 2 6 (D) 48 30 49 48 27 7 103 (D) 652 6

Table 31. Fruits and Nuts: 2017 and 2012 (continued)

Section Paris Acres Paris Pa	[For meaning of abbreviations and symbols, see into	roductory text.] To	tal	Bearing a	age acres	Nonbearing	g age acres
Sizes 2017 Con.	Geographic area			,			
Vigin	PEACHES, CLINGSTONE - Con.						
Weak Vigerial 107	States, 2017 - Con.						
Weak Vigerial 107	Virginia	143	186	90	113	82	73
PEACHES, FREETONE	Washington	96	131	83	93	32	38
PADMES TRESTONE							36
United States — 2917							
United States	·						
Subsect Subs							
Sides							
Ablanes 176		(,	(,	(,	(,	(,	(,
Agastas 1 10 1 10 1 10 1 10	,						
Adamenta 156 568 742 446 346 258 246 346 248 348 248 248 348 2	AlaskaAlaska	176 1		112		102	332 (D)
Calfornia	Arizona		145		1`2Ó		25
Colorado							2.576
Deliavarie	Colorado	295	2,703	242	2,285	149	419
Fielded 160 223 104 185 72 39 39 39 39 39 39 39 3							35 (D)
Section Color Co							39
Illinois	Georgia	175	11,617	113	9,658	95	1,960
Inclana					(D)		.63
Kareas							425
Louisiaria				45		40	9
Louisiaria							23
Maryland							18
Messachuells	Maine						
Mechigan 354 1,967 265 1,630 173 337 Minesotia 137 22 1 138 97 82 Mississipi 127 221 47 139 97 82 Mississipi 127 221 47 139 97 82 Mississipi 138	Massachusetts						
Monisola 13 2 7 15 13 2 7 15 13 2 7 15 15 15 15 15 15 15		354	1 967	265	1 630	173	337
Missouri	Minnesota	13	2	-	-	13	2
Montana							82
New Add				13			(D)
New Jersey 778 294 178 52 (D) 30 (D) New Jersey 178 2944 178 53 122 125 34 122 125 125 140 141 1						14	2
New Jerseys						30	(D)
New York	New Jersey	178		154		53	122
North Carolina	New Mexico	2/1	94	1/8	53	125	40
Ohio							
Oklahoma							
Pen'nsylvaria	Oklahoma	203	715	112	561	133	154
Rhode Sland 6	Oregon Pennsylvania						
South Dakots	Rhode Island	6	(D)	6	(D)	-	-
Tennessee	South Carolina		13,152	137			
Utah	Tennessee		501	141			
Utah	Texas	781	2.502	495	1.891	429	612
Viginia	Utah	268	1,534	232	1,189	114	345
Washington 283 1,411 234 1,318 100 93 West Virginia 202 1,014 137 846 91 168 Wisconsin 64 29 50 18 30 11 Wyoming 3 (D) 2 (D) 3 (D) PEARS, ALL United States Total United States Total United States 2017 11,749 56,719 7,573 51,455 5,572 5,284 States, 2017 United States Total							
Wisconsin	Washington	283	1,411	234	1,318	100	93
Wygoning	West Virginia						
United States Total United States 2017 11,749 56,719 7,573 51,435 5,572 5,284 States, 2017 11,749 56,749 6,631 51,455 4,918 5,294 States, 2017 Alabama 279 303 124 230 174 73 Arizona 59 49 40 44 22 5 Arkansas 152 64 58 19 104 45 California 866 11,011 676 10,377 311 634 Colorado 139 188 84 152 72 37 Connecticut 86 95 65 86 22 9 Delaware 6 2 4 (D) 2 (D) Florida 1999 (D) 122 (D) 101 (D) Georgia 212 (D) 107 102 131 (D)			(D)		(D)	3	
United States Total United States 2017 11,749 56,719 7,573 51,435 5,572 5,284 States, 2017 11,749 56,749 6,631 51,455 4,918 5,294 States, 2017 Alabama 279 303 124 230 174 73 Arizona 59 49 40 44 22 5 Arkansas 152 64 58 19 104 45 California 866 11,011 676 10,377 311 634 Colorado 139 188 84 152 72 37 Connecticut 86 95 65 86 22 9 Delaware 6 2 4 (D) 2 (D) Florida 1999 (D) 122 (D) 101 (D) Georgia 212 (D) 107 102 131 (D)	PEARS, ALL						
United States 2017 11,749 56,749 6,631 51,435 5,572 5,284 2012 10,246 56,749 6,631 51,455 4,918 5,294 States, 2017 Alabama 279 303 124 230 174 73 Arizona 559 49 40 44 22 55 Arkansas 51,245 1634 162 1634 1634 1634 1634 1634 1634 1634 1634	·						
States, 2017 Stat		44.740	50.740	7 570	54 405	5.570	5.004
Alabama 279 303 124 230 174 73 Arizona 59 49 40 44 22 5 Arkansas 152 64 58 19 104 45 California 866 11,011 676 10,377 311 634 Colorado 139 188 84 152 72 37 Connecticut 86 95 65 86 22 9 Delaware 6 2 4 (D) 2 (D) Florida 199 (D) 122 (D) 101 (D) Georgia (D) 122 (D) 107 102 131 (D) Idaho 143 186 91 145 71 41 Illinois 192 202 121 159 83 43 Indiana 142 62 91 46 70 15				7,573 6,631			5,284 5,294
Alabama 279 303 124 230 174 73 Arizona 59 49 40 44 22 5 Arkansas 152 64 58 19 104 45 California 866 11,011 676 10,377 311 634 Colorado 139 188 84 152 72 37 Connecticut 86 95 65 86 22 9 Delaware 6 2 4 (D) 2 (D) Florida 199 (D) 122 (D) 101 (D) Georgia (D) 122 (D) 107 102 131 (D) Idaho 143 186 91 145 71 41 Illinois 192 202 121 159 83 43 Indiana 142 62 91 46 70 15	States, 2017						
Arkansas 152 64 58 19 104 45 California 866 11,011 676 10,377 311 634 Colorado 139 188 84 152 72 37 Connecticut 86 95 65 86 22 9 Delaware 6 2 4 (D) 2 (D) Florida 199 (D) 122 (D) 101 (D) Georgia 212 (D) 107 102 131 (D) Idaho 143 186 91 145 71 41 Illinois 192 202 121 159 83 43 Indiana 142 62 91 46 70 15 Iowa 146 67 85 32 80 35 Kansas 128 62 77 42 59 20 Kentucky 313 120 140 56 193 64 Louisiana 75 108 51 86 35 21 Maryland 97 132 62 91 52 24 <t< td=""><td>•</td><td>270</td><td>202</td><td>404</td><td>220</td><td>174</td><td>70</td></t<>	•	270	202	404	220	174	70
Arkansas 152 64 58 19 104 45 California 866 11,011 676 10,377 311 634 Colorado 139 188 84 152 72 37 Connecticut 86 95 65 86 22 9 Delaware 6 2 4 (D) 2 (D) Florida 199 (D) 122 (D) 101 (D) Georgia 212 (D) 107 102 131 (D) Idaho 143 186 91 145 71 41 Illinois 192 202 121 159 83 43 Indiana 142 62 91 46 70 15 Iowa 146 67 85 32 80 35 Kansas 128 62 77 42 59 20 Kentucky 313 120 140 56 193 64 Louisiana 75 108 51 86 35 21 Maryland 97 132 62 91 52 24 <t< td=""><td></td><td>59</td><td>49</td><td>40</td><td>44</td><td>22</td><td>5</td></t<>		59	49	40	44	22	5
Delaware 6 2 4 (D) 2 (D) Florida 199 (D) 122 (D) 101 (D) Georgia 212 (D) 107 102 131 (D) Idaho 143 186 91 145 71 41 Illinois 192 202 121 159 83 43 Indiana 142 62 91 46 70 15 Iowa 146 67 85 32 80 35 Kansas 128 62 77 42 59 20 Kentucky 313 120 140 56 193 64 Louisiana 75 108 51 86 35 21 Maryland 97 132 62 91 52 24 Massachusetts 148 126 104 110 52 41 Michigan							45
Delaware 6 2 4 (D) 2 (D) Florida 199 (D) 122 (D) 101 (D) Georgia 212 (D) 107 102 131 (D) Idaho 143 186 91 145 71 41 Illinois 192 202 121 159 83 43 Indiana 142 62 91 46 70 15 Iowa 146 67 85 32 80 35 Kansas 128 62 77 42 59 20 Kentucky 313 120 140 56 193 64 Louisiana 75 108 51 86 35 21 Maryland 97 132 62 91 52 24 Massachusetts 148 126 104 110 52 41 Michigan							37
Florida							9
Georgia 212 (D) 107 102 131 (D) Idaho 143 186 91 145 71 41 Illinois 192 202 121 159 83 43 Indiana 142 62 91 46 70 15 Iowa 146 67 85 32 80 35 Kansas 128 62 77 42 59 20 Kentucky 313 120 140 56 193 64 Louisiana 75 108 51 86 35 21 Maine 121 44 79 20 52 24 Maryland 97 132 62 91 52 41 Massachusetts 148 126 104 110 52 41 Michigan 417 699 250 584 207 115							(D)
Illinois	Georgia	212	(D)	107	102	131	(D)
Indiana 142 62 91 46 70 15 Iowa 146 67 85 32 80 35 Kansas 128 62 77 42 59 20 Kentucky 313 120 140 56 193 64 Louisiana 75 108 51 86 35 21 Maine 121 44 79 20 52 24 Maryland 97 132 62 91 52 41 Massachusetts 148 126 104 110 52 16 Michigan 417 699 250 584 207 115							
Kentucky 313 120 140 56 193 64 Louisiana 75 108 51 86 35 21 Maine 121 44 79 20 52 24 Maryland 97 132 62 91 52 41 Massachusetts 148 126 104 110 52 16 Michigan 417 699 250 584 207 115							43
Kentucky 313 120 140 56 193 64 Louisiana 75 108 51 86 35 21 Maine 121 44 79 20 52 24 Maryland 97 132 62 91 52 41 Massachusetts 148 126 104 110 52 16 Michigan 417 699 250 584 207 115							15 35
Louisiana 75 108 51 86 35 21 Maine 121 44 79 20 52 24 Maryland 97 132 62 91 52 41 Massachusetts 148 126 104 110 52 16 Michigan 417 699 250 584 207 115	Kansas	128	62	77	42	59	20
Maine 121 44 79 20 52 24 Maryland 97 132 62 91 52 41 Massachusetts 148 126 104 110 52 16 Michigan 417 699 250 584 207 115	KentuckyLouisiana						
Michigan	Maine	121	44	79	20	52	24
Michigan	Massachusetts					52 52	
Minnesota	Michigan	417	699	250	584	207	115
	Minnesota	91	36	47	20	50	16

Table 31. Fruits and Nuts: 2017 and 2012 (continued)

### Parent Acres Pa	Geographic area	Tot		Bearing a			g age acres
Seese, 2017 - Cot. 201	· .	Farms	Acres	Farms	Acres	Farms	Acres
Massengin	PEARS, ALL - Con.						
Microsoft	States, 2017 - Con.						
Mortens						138	46
New Part Part 10							45
Necessary							12
New Humber 10	Nevada		23				4 2
New Mexico	New Hampshire		22				7
New York	New Jersey						(D) 44
North Cardonia	New York						181
Child	North Carolina						50
Cho	North Dakota	16	2	Q.	1	Q	1
Colaborna					137		84
Parting Part	Oklahoma	174	205	73	(D)		(D)
Shoot Indied							
South Execution						213	190
South Databack						121	68
Texas							5
United States					(D) 207		(D) 242
Vermort	16,43	033	443	333	201	301	272
Virginia							10
Naishington	Vermont						9 74
West Vispina							1,094
Misconam 257 102 162 65 119 3 (0) 1 (0) 1 (0) 1 (0) 1 (0) 1 (0) 1 (0) 1 (0) 1 (0) (0) 1 (0) (0							124
### PEARS, BARTLETT United States Total United States 2012 24235 3,655 21,932 2,626 2,30 2,805 2,1032 2,626 2,30 2,805 2,1032 2,626 2,30 2,805 2,1032 2,626 2,30 2,805 2,1032 2,626 2,30 2,805 2,1032 2,626 2,30 2,805 2,1032 2,626 2,30 2,305	Wisconsin						37
United States Total United States 2017 5,927 24,235 States, 2017 States	wyoming	3	(D)	3	(D)	1	(D)
United States 2017	PEARS, BARTLETT						
States, 2017 Stat	United States Total						
Alabama							2,303 (NA)
Arizona		(,	(,	(,	(4	(,	(,
Affanssa	Alabama			36		70	31
California							2
Connecticut							19
Connecticut							27
Georgia		42	30	29	25	14	4
Idaho			(D)	37	(D)		2
Illinoiss							(D) 31
Indiana	Illinois						16
Dova			20	4-	40		40
Kansas							10 17
Kentucky			20				8
Maine	Kentucky	145	47	61	16	93	31
Maryland 36 29 21 19 25 1 Massachusetts 57 19 43 16 17 4 Michigan 242 459 153 413 110 4 (2 Missessipi. 99 34 32 13 69 2 Missestipi. 30 6 19 4 13 14 Montana 130 6 19 4 13 14 Mortana 30 6 19 4 13 14 Nevada 9 5 7 (D) 4 10 New Hampshite 44 9 19 (D) 27 (C New Hampshite 44 9 19 (D) 27 (C New Hampshite 44 9 19 (D) 37 (C New Sersey 88 42 58 (D) 37 (C New S							7
Massachusetts 57 19 43 16 17 Michigan 242 459 153 413 110 4 Minnesota 11 2 7 1 4 (2 Mississippi 99 34 32 13 69 2 Missoun 143 44 84 25 79 1 Mortana 30 8 19 6 13 8 Mortana 30 8 19 1 6 13 14 14 14 14 14 14 14 14 14 14 14 14 14 14 15 14 11 14							13 10
Michigan 242 459 153 413 110 4 4 (increase) 11 2 7 1 4 (increase) 11 2 7 1 4 (increase) 11 2 7 1 4 (increase) 11 4 (increase) 11 2 7 1 4 (increase) 13 69 2 2 2 2 2 3 3 3 4 3 3 4 4 8 4 25 79 1 3 3 3 3 4 3 3 4 4 8 4 25 79 1 3 3 3 3 4 3 3 3 3 3		57	19	43	16	17	2
Mississippi. 99 34 32 13 69 2 Missouri. 143 44 84 25 79 1 Moritana. 30 6 19 4 13 1 Nebraska. 35 8 21 6 144 14 14 14 14 14 14 14 18 18 14 18 18 14 18 18 14 18 18 14 18 18 14 18 19 19 10 19 27 19 10 10 20 10 20 10 20 10 20 10 20 10 20 10 20 10 20 10 20 10 10 10	Michigan	242	459	153	413		47
Missouri.	winnesota	11	2	7	1	4	(Z)
Missouri	Mississippi						21
Nebraska	Missouri						19 2
New Ada		30		19	4		2 2
New Hampshire	Nevada		5			4	(D)
New York	New Hampshire	44	9	19	(D)	27	(<u>D</u>)
New York			42		(D)	37 65	(D)
North Dakota							59
Ohio 243 96 129 54 129 4 Oklahoma 90 76 44 (D) 55 (E) Oregon 608 3,786 525 3,405 165 38 Pennsylvania 303 308 195 249 136 5 Rhode Island 1 (D) 1 (D) - - South Carolina 82 38 48 17 50 2 South Dakota 15 3 9 2 6 - Tennessee 139 110 55 (D) 95 (E Texas 262 156 155 78 156 7 Utah 220 9 13 8 12 Vermont 20 9 13 8 12 Virginia 919 9,020 821 8,437 243 58 West Virginia 91 27 <td></td> <td></td> <td></td> <td></td> <td></td> <td>55</td> <td>14</td>						55	14
Ohio 243 96 129 54 129 4 Oklahoma 90 76 44 (D) 55 (E Oregon 608 3,786 525 3,405 165 38 Pennsylvania 303 308 195 249 136 5 Rhode Island 1 (D) 1 (D) 1 5 South Carolina 82 38 48 17 50 2 South Dakota 15 3 9 2 6 6 Tennessee 139 110 55 (D) 95 (E Texas 262 156 155 78 156 7 Utah 20 9 13 8 12 Vermont 20 9 13 8 12 Virginia 919 9,020 821 8,437 243 58 West Virginia 91 27 47 14 47 1 Wyoming 2 (D) 2 (D) - PEARS, OTHER THAN BARTLETT United States 207 8,287 32,484 5,329 29,503 </td <td>North Dakota</td> <td></td> <td>(Z)</td> <td></td> <td>(Z)</td> <td>-</td> <td>-</td>	North Dakota		(Z)		(Z)	-	-
Pennsylvania 303 308 195 249 136 5 Rhode Island 1 (D) 1 (D) - - South Carolina 82 38 48 17 50 2 South Dakota 15 3 9 2 6 - Tennessee 139 110 55 (D) 95 (C Texas 262 156 155 78 156 7 Utah 124 76 92 69 40 Vermont 20 9 13 8 12 Virginia 111 38 51 20 71 1 Washington 919 9,020 821 8,437 243 58 West Virginia 119 199 61 111 66 8 Wisconsin 91 27 47 14 47 1 Wyoming 2 (D) 2 (D) - PEARS, OTHER THAN BARTLETT United States 207 8,287 32,484 5,329 29,503 3,867 2,98	Ohio		96		54		42
Pennsylvania 303 308 195 249 136 5 Rhode Island 1 (D) 1 (D) - - South Carolina 82 38 48 17 50 2 South Dakota 15 3 9 2 6 - Tennessee 139 110 55 (D) 95 (C Texas 262 156 155 78 156 7 Utah 124 76 92 69 40 Vermont 20 9 13 8 12 Virginia 111 38 51 20 71 1 Washington 919 9,020 821 8,437 243 58 West Virginia 119 199 61 111 66 8 Wisconsin 91 27 47 14 47 1 Wyoming 2 (D) 2 (D) - PEARS, OTHER THAN BARTLETT United States 207 8,287 32,484 5,329 29,503 3,867 2,98	Oklahoma		76			55	(D) 381
Rhode Sland	Pennsylvania						59
South Carolina 82 38 48 17 50 2 South Dakota 15 3 9 2 6 2 Tennessee 139 110 55 (D) 95 (E Texas 262 156 155 78 156 7 Utah 124 76 92 69 40 Vermont 20 9 13 8 12 Virginia 111 38 51 20 71 1 Washington 919 9,020 821 8,437 243 58 Wisconsin 91 27 47 111 66 8 Wisconsin 91 27 47 14 47 1 Wyoming 2 (D) 2 (D) - PEARS, OTHER THAN BARTLETT United States 207 8,287 32,484 5,329 29,503 3,867 2,98	Rhode Island	1	(D)	1	(D)	-	-
Tennessee 139 110 55 (D) 95 (E Texas 262 156 155 78 156 7 Utah 124 76 92 69 40 Vermont 20 9 13 8 12 Virginia 111 38 51 20 71 1 Washington 919 9,020 821 8,437 243 58 Wisconsin 91 199 61 111 66 8 Wisconsin 91 27 47 14 47 1 Wyoming 2 (D) 2 (D) - PEARS, OTHER THAN BARTLETT United States 207 8,287 32,484 5,329 29,503 3,867 2,98	South Carolina		38		17		21
Texas 262 156 155 78 156 7 Utah 124 76 92 69 40 Vermont 20 9 13 8 12 Virginia 111 38 51 20 71 1 1 Washington 919 9,020 821 8,437 243 58 Wisconsin 91 27 47 14 47 1 Wyoming 2 (D) 2 (D) - - PEARS, OTHER THAN BARTLETT United States 207 8,287 32,484 5,329 29,503 3,867 2,98							1 (D)
Vermont 20 9 13 8 12 Virginia 111 38 51 20 71 1 Washington 919 9,020 821 8,437 243 58 West Virginia 199 90,020 821 8,437 243 58 Wisconsin 91 199 61 111 66 8 Wyoming 91 27 47 14 47 1 PEARS, OTHER THAN BARTLETT 1 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>78</td></td<>							78
Vermont 20 9 13 8 12 Virginia 111 38 51 20 71 1 Washington 919 9,020 821 8,437 243 58 West Virginia 199 90,020 821 8,437 243 58 Wisconsin 91 199 61 111 66 8 Wyoming 91 27 47 14 47 1 PEARS, OTHER THAN BARTLETT 1 <td< td=""><td>Utah</td><td>124</td><td>76</td><td>92</td><td>69</td><td>40</td><td>7</td></td<>	Utah	124	76	92	69	40	7
Virginia 111 38 51 20 71 1 Washington 919 9,020 821 8,437 243 58 West Virginia 119 199 61 111 66 8 Wisconsin 91 27 47 14 47 1 Wyoming 2 (D) 2 (D) - PEARS, OTHER THAN BARTLETT United States 2017 8,287 32,484 5,329 29,503 3,867 2,98	Vermont	20	9	13	8	12	1
West Virginia 119 199 61 111 66 8 Wisconsin 91 27 47 14 47 1 Wyoming 2 (D) 2 (D) - PEARS, OTHER THAN BARTLETT United States Total United States 2017 8,287 32,484 5,329 29,503 3,867 2,98	Virginia	111		51		71	18
Wisconsin	Washington		9,020				583 88
Wyoming 2 (D) 2 (D) - PEARS, OTHER THAN BARTLETT United States Total United States 32,484 5,329 29,503 3,867 2,98		91	27	47	14		13
United States Total United States	Wyoming					· · ·	-
United States							
United states		2 22=	20.45	=	20.5	2	2.25
	United States2017 2012	8,287 (NA)	32,484 (NA)	5,329 (NA)	29,503 (NA)	3,867 (NA)	2,981 (NA)

Table 31. Fruits and Nuts: 2017 and 2012 (continued)

Geographic area	Tota		Bearing a		Nonbearing	
	Farms	Acres	Farms	Acres	Farms	Acres
PEARS, OTHER THAN BARTLETT - Con.	1					
States, 2017	i					
Alabama	213	96	99	54	127	42
Arizona	38	21	24	18	14	3
Arkansas	131	44	58	17	83	27
California	550	2,663	432	2,517	182	146
Colorado	93 69	41 66	45 52	31 61	51 18	10 5
Delaware	6	2	4	(D)	2	(D)
Florida	161	(D)	91	42	88	(D)
Georgia	170	136	84	(D)	110	(D)
daho	105	43	66	33	50	10
Ilinois	123	169	83	142	49	28
ndiana	87	39	62	34	34	6
owa	92	39	54	20	54	18
Kansas	88	42	59	30	31	12
Kentucky	195	73	89	39	117	33
ouisiana	61	92	42	79	24	14
Maine	92 78	26 102	60 50	15 72	41 35	11 30
Massachusetts	117	107	81	93	42	14
Michigan	267	239	150	171	142	68
	20.	200				00
Minnesota	84	34	42	18	48	16
Mississippi	148	83	61	58	93	25
Missouri	171	53	78	27	110	26
Montana	74	22	50	12	30	10
lebraska	35	9	33 19	7	11 4	2
Nevada New Hampshire	19 43	19 13	23	(D) (D)	24	(D)
New Jersey	150	443	114	(D)	51	(D) (D)
New Mexico	242	60	129	30	131	30
lew York	320	488	229	365	133	123
North Carolina	183	93	92	57	113	36
North Dakota	13 283	2 125	5 156	1 83	8 143	1 42
Oklahoma	117	129	35	(D)	96	(D)
Oregon	732	12,987	607	12,297	235	690
Pennsylvania	375	639	220	508	205	131
Rhode Island	11	(D)	11	(D)	-	-
South Carolina	135	147	72	100	83	47
South Dakota	19	4	. 3	_1	.17	_3
Tennessee	254	121	107	(D)	170	(D)
Texas	418	293	219	129	242	164
Jtah	69	24	52	21	20	3
Vermont	58	22	32	15	30	8
Virginia	239	280	148	224	145	56
Washington	974	12,107	862	11,596	259	511
West Virginia	187	98	110	62	87	37
Wisconsin	197	75	134	51	84	24
Wyoming	1	(D)	1	(D)	1	(D)
PERSIMMONS						
Jnited States Total						
	•					
	2,368	4,685	1,618	3,798	1,071	887
2012	2,368 1,389	4,685 4,968	1,618 1,064	3,798 3,773	1,071 558	
United States						887 1,195
2012 States, 2017						1,195
2012 States, 2017 Alabama	1,389 53 5	4,968 22 (D)	1,064 27 5	3,773	558 33	1,195 10 -
2012 States, 2017 Alabama Arizona Arkansas	1,389 53 5 27	4,968 22 (D) 16	1,064 27 5 8	3,773 12 (D) 1	33 20	1,195 10 14
2012 States, 2017 Alabama Arizona Arkansas	1,389 53 5 27 855	4,968 22 (D)	1,064 27 5 8 751	3,773 12 (D) 1 3,175	33 20 218	1,195 10 14
2012 States, 2017 Alabama Arizona Arkansas. California Connecticut	1,389 53 5 27 855 6	4,968 22 (D) 16 3,557	1,064 27 5 8	3,773 12 (D) 1	33 20	1,195 10 - 14 382 1
2012 States, 2017 Alabama	1,389 53 5 27 855	4,968 22 (D) 16	1,064 27 5 8 751	3,773 12 (D) 1 3,175	33 20 218	1,195 10 - 14 382 1 (D)
2012 States, 2017 Alabama Arizona Arkansas. Zalifornia Connecticut Delaware	1,389 53 5 27 855 6	4,968 22 (D) 16 3,557 1 (D)	1,064 27 5 8 751 3	3,773 12 (D) 3,175 (Z)	558 33 - 20 218 6 1	1,195 10 - 14 382 1 (D) 79
2012 States, 2017 Alabama Arizona Arkansas Dalifornia Donnecticut Delaware Florida Beorgia Hawaii	1,389 53 5 27 855 6 1 227 92 32	4,968 22 (D) 16 3,557 1 (D) 266 58 48	1,064 27 5 8 751 3 - 151	3,773 12 (D) 1 3,175 (Z) 187	558 33 20 218 6 1 126 43 5	1,195 10 - 14 382 1 (D) 79 21
2012 States, 2017 Valabama Arizona Arkansas Salifornia Connecticut Jelaware Florida Beorgia Jawaii	1,389 53 5 27 855 6 1 227 92	4,968 22 (D) 16 3,557 1 (D) 266 58	1,064 27 5 8 751 3 - 151 62	3,773 12 (D) 1 3,175 (Z) - 187 37	558 33 - 20 218 6 1 126 43	1,195 10 - 14 382 1 (D) 79 21
2012 States, 2017 Alabama Arizona Arkansas California Connecticut Delaware Florida Seorgia Hawaii daho	1,389 53 5 27 855 6 1 227 92 32 2	4,968 22 (D) 16 3,557 1 (D) 266 58 48 (D)	1,064 27 5 8 751 3 - 151 62 29	3,773 12 (D) 1 3,175 (Z) 187 37 46	558 33 - 20 218 6 1 126 43 5 2	1,195 10 - 14 382 1 (D) 79 21 2 (D)
2012 States, 2017 Alabama Arizona Arkansas. Zalifornia Connecticut. Delaware Plorida. Georgia Hawaii. daho.	1,389 53 5 27 855 6 1 227 92 32 2	4,968 22 (D) 16 3,557 1 (D) 266 58 48 (D)	1,064 27 5 8 8 751 3 151 62 29	3,773 12 (D) 1 3,175 (Z) 187 37 46	558 33 20 218 6 1 126 43 5 2	1,195 10 14 382 1 (D) 79 21 2 (D)
2012 States, 2017 Alabama Arizona Arkansas. Zalifornia Connecticut Delaware Iclorida. Seorgia 4awaii daho.	1,389 53 5 27 855 6 1 227 92 32 2 22 63	4,968 22 (D) 16 3,557 1 (D) 266 58 48 (D) 24 37	1,064 27 5 8 751 3 - 151 62 29 - 8 8 39	3,773 12 (D) 1 3,175 (Z) 187 37 46 -	558 33 - 20 218 6 1 126 43 5 2	1,195 10 - 14 382 1 (D) 79 21 2 (D) 20
2012 States, 2017 Alabama Arizona Arkansas. California Connecticut Delaware Florida. Georgia Hawaii daho. Illinois. Illinois. Illinois. Owa	1,389 53 5 27 855 6 1 227 92 32 2	4,968 22 (D) 16 3,557 1 (D) 266 58 48 (D) 24 37	1,064 27 5 8 8 751 3 151 62 29	3,773 12 (D) 1 3,175 (Z) 187 37 46 -	558 33 20 218 6 1 126 43 5 2	1,195 10
2012 States, 2017 Alabama Arizona Arkansas. Zalifornia Connecticut Delaware Iclorida. Georgia Hawaii daho. Illinois ndiana Owa (ansas.	1,389 53 5 27 855 6 1 227 92 32 2 22 63 17 39	4,968 22 (D) 16 3,557 1 (D) 266 58 48 (D) 24 37	1,064 27 5 8 751 3 151 62 29 8 39	3,773 12 (D) 1 3,175 (Z) 187 37 46 - 5 18 (D) (D)	558 33 - 20 218 6 1 126 43 5 2 16 31	1,195 10
States, 2017 Nabama Arizona Arkansas Alaifornia Connecticut Delaware Corida Alawaii daho. Ulinois Adaho.	1,389 53 5 27 855 6 1 227 92 32 2 63 10 17 39 28	4,968 22 (D) 16 3,557 1 (D) 266 58 48 (D) 24 37 3 14 52 17	1,064 27 5 8 751 3 - 151 62 29 - 8 39 2 6 16	3,773 12 (D) 3,175 (Z) 187 37 46 - 5 18 (D) (D)	558 33 20 218 6 1 126 43 5 2 16 31 9 16 300 14	1,195 10 14 382 1 (D) 79 21 2 (D) 20 (D) (D) 38 6
States, 2017 Alabama	1,389 53 5 27 855 6 1 227 92 32 2 63 10 17 39 28 22	4,968 22 (D) 16 3,557 (D) 266 58 48 (D) 24 37 3 14 52 17 13	1,064 27 5 8 751 3 - 151 62 29 - 8 39 2 6 16 16 13	3,773 12 (D) 1 3,175 (Z) - 187 37 46 - 5 18 (D) (D) (D) 14	558 33 - 20 218 6 1 126 43 5 2 16 31 9 16	1,195 10 14 382 1 (D) 79 21 2 (D) 20 (D) (D) 38 6
States, 2017 Nabama Arizona Arkansas California Connecticut Delaware Porida Georgia dawaii daho Illinois Indiana Dowa Cansas Centucky Ouisiana Aaryland Alaysachusetts	1,389 53 5 27 855 6 1 227 92 32 2 63 10 17 39 28 22 2 2	4,968 22 (D) 16 3,557 1 (D) 266 58 48 (D) 24 37 3 14 52 17 13 (D)	1,064 27 5 8 751 3 - 151 62 29 - 8 39 2 6 16 16 16	3,773 12 (D) 1 3,175 (Z) - 187 37 46 - 5 18 (D) (D) (D) 14	558 33 - 20 218 6 1 126 43 5 2 16 31 9 16 30 14 10	1,195 10 14 382 1 (D) 79 21 2 (D) 20 (D) (D) 38 6 10
zo12 states, 2017 labama rizona rkansas alifornia connecticut belaware lorida seorgia lawaii daho linois diana bwa ansas entucky ouisiana daryland dassachusetts lichigan	1,389 53 5 27 855 6 1 227 92 32 2 63 10 17 39 28 22 2 17	4,968 22 (D) 16 3,557 1 (D) 266 58 48 (D) 24 37 3 14 52 17 13 (D) 6	1,064 27 5 8 8751 3 151 62 29 2 8 39 2 6 16 16 13 2 1	3,773 12 (D) 1 3,175 (Z) 187 37 46 - 5 18 (D) (D) 14 10 2 (D) (D)	558 33 20 218 6 1 126 43 5 2 16 31 9 16 30 14 10	1,195 10
2012 States, 2017 Nabama Arizona Arkansas. Salifornia Connecticut Delaware Plorida Beorgia Hawaii Idaho. Ilinois Indiana Dowa Aransas. Kentucky Louisiana Aaryland Alassachusetts Ilichigan	1,389 53 5 27 855 6 1 227 92 32 2 63 10 17 39 28 22 2 2	4,968 22 (D) 16 3,557 1 (D) 266 58 48 (D) 24 37 3 14 52 17 13 (D)	1,064 27 5 8 751 3 - 151 62 29 - 8 39 2 6 16 16 16	3,773 12 (D) 1 3,175 (Z) - 187 37 46 - 5 18 (D) (D) (D) 14	558 33 - 20 218 6 1 126 43 5 2 16 31 9 16 30 14 10	1,195 10 14 382 1 (D) 79 21 2 (D) 20 (D) (D) 38 6 10 - (D)
States, 2017 Alabama Arizona Arkansas. Zalifornia Zonnecticut Delaware Florida Beorgia Hawaii daho. Ullinois Indiana Owa Kansas. Kentucky Jouisiana Jaryland Jassachusetts Michigan Mississippi	1,389 53 5 27 855 6 1 227 92 32 2 63 10 17 39 28 22 21 74	4,968 22 (D) 16 3,557 1 (D) 266 58 48 (D) 24 37 3 14 52 17 13 (D) 6 47	1,064 27 5 8 751 3 151 62 29 8 39 2 6 16 16 13 2 1 25	3,773 12 (D) 1 3,175 (Z) - 187 37 46 - 5 18 (D) (D) 14 10 2 (D) (D) 15	558 33 20 218 6 1 126 43 5 2 16 31 16 30 14 10 - 16 54	1,195 10 14 382 1 (D) 79 21 2 (D) 20 (D) (D) 38 6 10 (D) 32
States, 2017 Alabama	1,389 53 5 27 855 6 1 227 92 32 2 63 10 17 39 28 22 2 17 74	4,968 22 (D) 16 3,557 1 (D) 266 58 48 (D) 24 37 3 14 52 17 13 (D) 6	1,064 27 5 8 8751 3 151 62 29 2 8 39 2 6 16 16 13 2 1	3,773 12 (D) 1 3,175 (Z) 187 37 46 - 5 18 (D) (D) 14 10 2 (D) (D)	558 33 20 218 6 1 126 43 5 2 16 31 9 16 30 14 10	1,195 10
States, 2017 Alabama Arizona Arkansas Zalifornia Zonnecticut Delaware Plorida Georgia Hawaii daho Illinois Illinois owa Kentucky Jouisiana Maryland Massachusetts Iliciligan Mississippi Missouri Missouri Missouri Wissouri Wi	1,389 53 5 27 855 6 1 227 92 32 2 22 63 10 17 39 28 22 2 17 74 60 30 4	4,968 22 (D) 16 3,557 1 (D) 266 58 48 (D) 24 37 3 14 52 17 13 (D) 6 47	1,064 27 5 8 751 3 - 151 62 29 9 2 6 16 16 13 2 1 25 38	3,773 12 (D) 1 3,175 (Z) 187 36 - 188 (D) (D) (D) (D) (D) 14 10 2 (D) (D) 15	558 33 20 218 6 1 126 43 5 2 16 31 9 16 30 14 10 - 16 54 32 14 4	1,195 10 14 382 1 (D) 79 21 2 (D) 20 (D) (D) 38 6 10 (D) 32
States, 2017 Alabama Arizona Arkansas Jalifornia Jonnecticut Delaware Florida Seorgia Jalwaii	1,389 53 5 27 855 6 1 227 92 22 63 10 17 39 28 22 27 74 60 30 4 19	4,968 22 (D) 16 3,557 1 (D) 266 58 48 (D) 24 37 37 14 52 17 13 (D) 6 47	1,064 27 5 8 751 3 151 62 29 - 8 39 2 6 16 16 13 2 1 25	3,773 12 (D) 1 3,175 (Z) 187 37 46 - 5 18 (D) (D) 14 10 2 (D) (D) 15 27 8 - 1	558 33 - 20 218 6 1 126 43 5 2 16 31 9 16 30 14 10 - 16 54 32 14 4 15	1,195 10 144 382 1 (D) 79 21 2 (D) (D) (D) (D) 38 6 10 (D) 32 8 2 (D) (D) 32
States, 2017 Alabama	1,389 53 5 27 855 6 1 227 92 32 2 63 10 17 39 28 22 2 17 74 60 30 4 19 117	4,968 22 (D) 16 3,557 1 (D) 266 58 48 (D) 24 37 3 14 52 17 13 (D) 6 47	1,064 27 5 8 751 3	3,773 12 (D) 1 3,175 (Z) - 187 37 46 - 5 18 (D) (D) 14 10 2 (D) (D) 15 27 8	558 33 20 218 6 1126 43 5 2 16 31 16 30 14 10 - 16 54 32 14 4 56 64	1,195 10 14 382 1 (D) 79 21 2 (D) (D) (D) (D) 38 6 10 (D) 32 8 2 (D) 332
States, 2017 Alabama Arizona Arkansas California Connecticut Delaware Florida Seorgia Hawaii daho Illinois Indiana owa Kansas Kentucky ouisiana daryland Massachusetts Michigan Mississippi Missouri kew Jersey kew Mexico kew York Johio Jo	1,389 53 5 27 855 6 1 227 92 32 2 63 10 17 39 28 22 2 17 74 60 30 4 19 117	4,968 22 (D) 16 3,557 (D) 266 58 48 (D) 24 37 3 14 52 17 13 (D) 6 47 35 10 (D) 41 112	1,064 27 5 8 751 3 - 151 62 29 - 8 39 2 6 16 16 13 2 1 1 25 38 19 - 5 78	3,773 12 (D) 1 3,175 (Z) - 187 37 46 - 5 18 (D) (D) (D) (D) 14 10 2 (D) (D) 15 27 8 - 1 47	558 33 - 20 218 6 1 126 43 5 2 16 31 9 16 30 14 10 - 16 54 32 14 4 15 64 12	1,195 10 14 144 382 1 (D) 79 21 20 (D) (D) (S) 38 66 10 32 (D) 33 65 4
States, 2017 Alabama	1,389 53 5 27 855 6 1 227 92 32 2 63 10 17 39 28 22 2 17 74 60 30 4 19 117 16	4,968 22 (D) 16 3,557 1 (D) 266 58 48 (D) 24 37 3 14 52 17 13 (D) 6 47 35 10 (D) 4 112 6 17	1,064 27 5 8 751 3 151 62 29 - 8 39 2 6 16 16 13 2 1 25 38 39 - 1 5 78 5	3,773 12 (D) 1 3,175 (Z) - 187 37 46 - 5 18 (D) (D) (D) 15 27 8 - 1 47 3 11	558 33	1,195 10 14 382 1 (D) 79 21 20 (D) (D) (S) 8 6 10 20 (D) 32 (D) 33 65 4
States, 2017 Alabama	1,389 53 5 27 855 6 1 227 92 32 2 22 63 10 17 39 28 22 2 17 74 60 30 4 19 117 16 26 71	4,968 22 (D) 16 3,557 1 (D) 266 58 48 (D) 24 37 3 14 52 17 13 (D) 6 47 35 10 (D) 4 112 6 17 22	1,064 27 5 8 751 3 - 151 62 29 - 8 39 2 6 16 16 13 2 1 25 38 19 - 5 78 5 13	3,773 12 (D) 3,175 (Z) 187 37 46 5 18 (D) (D) 14 10 2 (D) 15 27 8 1 47 3 31 11 20	558 33 33 20 218 6 1 126 43 5 2 16 31 19 9 16 30 14 10 - 16 54 32 14 4 15 64 12 15	1,195 10 14 382 1 (D) 79 21 2 (D) 20 (D) 38 6 10 (D) 32 (D) 32 (D) 34 6 6 2
States, 2017 Alabama	1,389 53 5 27 855 6 1 227 92 22 63 10 17 39 28 22 21 77 46 60 30 4 19 117 16 26 71 24	4,968 22 (D) 16 3,557 1 (D) 266 58 48 (D) 24 37 37 13 (D) 6 47 35 10 (D) 4 112 6 17 22 12	1,064 27 5 8 751 3 151 62 29 - 8 839 2 6 16 16 13 2 1 25 38 19 - 78 57 13	3,773 12 (D) 1 3,175 (Z) 187 37 46 - 5 18 (D) (D) (D) 14 10 2 (D) (D) 15 27 8 - 1 47 3 11 20 4	558 33 - 20 218 6 1 126 43 5 2 16 30 14 10 - 16 54 32 14 4 15 64 12 15 21	1,195 10 14 382 1 (D) (D) (E) (D) (D) (E) (E) (E) (E) (E) (E) (E) (E) (E) (E
States, 2017 Alabama	1,389 53 5 27 855 6 1 227 92 32 2 22 63 10 17 39 28 22 2 17 74 60 30 4 19 117 16 26 71	4,968 22 (D) 16 3,557 1 (D) 266 58 48 (D) 24 37 3 14 52 17 13 (D) 6 47 35 10 (D) 4 112 6 17 22	1,064 27 5 8 751 3 - 151 62 29 - 8 39 2 6 16 16 13 2 1 25 38 19 - 5 78 5 13	3,773 12 (D) 3,175 (Z) 187 37 46 5 18 (D) (D) 14 10 2 (D) 15 27 8 1 47 3 31 11 20	558 33 33 20 218 6 1 126 43 5 2 16 31 19 9 16 30 14 10 - 16 54 32 14 4 15 64 12 15	1,195 10 14 382 1 (D) 79 21 2 (D) 20 (D) 38 6 10 (D) 32 (D) 32 (D) 33 65 4 6 2
States, 2017 Alabama	1,389 53 5 27 855 6 1 227 92 22 63 10 17 39 28 22 21 77 46 60 30 4 19 117 16 26 71 24	4,968 22 (D) 16 3,557 1 (D) 266 58 48 (D) 24 37 37 13 (D) 6 47 35 10 (D) 4 112 6 17 22 12	1,064 27 5 8 751 3 151 62 29 - 8 839 2 6 16 16 13 2 1 25 38 19 - 78 57 13	3,773 12 (D) 1 3,175 (Z) 187 37 46 - 5 18 (D) (D) (D) 14 10 2 (D) (D) 15 27 8 - 1 47 3 11 20 4	558 33 - 20 218 6 1 126 43 5 2 16 30 14 10 - 16 54 32 14 4 15 64 12 15 21	1,195 10 14 382 1 (D) (D) (E) (D) (D) (E) (E) (E) (E) (E) (E) (E) (E) (E) (E

Table 31. Fruits and Nuts: 2017 and 2012 (continued)

For meaning of abbreviations and symbols, see intro Geographic area	Total		Bearing a	ige acres	Nonbearing	gage acres
• ,	Farms	Acres	Farms	Acres	Farms	Acres
PERSIMMONS - Con.						
States, 2017 - Con.						
Utah	5 79	(D) 19	42	7	5 46	(D) 12
Washington	23 33	3 21	16 11	2 6	7 26	1 1 15
West VirginiaWisconsin	9	2	1	(D)	9	(D)
PINEAPPLES (SEE TEXT)						
United States Total						
United States2017	295	3,778	188	1,452	132	2,326
2012	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
States, 2017						
Florida	36	(D)	28	(D)	11	(D)
Hawaii Texas	258 1	3,752 (D)	160	(D)	120 1	(D) (D)
PLUMCOTS, PLUOTS, AND OTHER PLUM-APRICOT HYBRIDS (SEE TEXT)		(= /				(-/
United States Total						
United States2017	506	4,767	350	4,266	200	501
2012	223	3,317	184	3,002	72	315
States, 2017	_				_	
AlabamaAlaska	7 1	2 (D)	1 -	(D)	6 1	(D) (D)
ArizonaCalifornia	3 354	(D) 4,583	1 251	(D) 4,094	2 142	(D) 488
Colorado	4	(D) (D)	2	(D)	3	(D) (D)
Georgialdaho	8	(D)	2	(D)	6	(D)
IllinoisIndiana	1 1	(D) (D)	1 1	(D) (D)	-	-
lowa	1	(D)	1	(D)	-	-
Kentucky Mississippi	1 3	(D)	-	-	1 3	(D)
Missouri	2	(D)	2	(D)	-	-
Nebraska Nevada	2	(D) (D)	2 1	(D) (D)	-	-
New Hampshire	3 2	(D) (D)	3 2	(D) (D)	-	-
New York	4 2	2	3	(D)	2 2	(D) (D)
OklahomaOregon	36	(D) (D)	26	6	11	(D) (D)
Utah	4	1	4	(1)	9	
Washington	65	(161)	47	157	20	4
PLUMS AND PRUNES						
United States Total						
United States2017 2012	7,838 5,888	69,590 88,122	5,055 4,016	61,273 77,314	3,702 2,691	8,317 10,808
States, 2017						
Alabama	177	86	84	49	121	37
AlaskaArizona	2 59	(D) 18	2 35	(D) 10	- 26	9
Arkansas	76 1,642	16 64,702	29 1,398	57,525	52 592	12 7,177
California	166	58	96	38	83	20
Connecticut	54 5	38 1	42 3	35 (D)	16 2	3 (D)
Florida	141 144	94 48	87 79	(D) (D) (D)	61 79	(D) (D) (D)
			79	(D)		
Hawaiildaho	3 120	(Z) 364	86	310	3 43	(Z) 53
IllinoisIndiana	78 65	25 16	43 34	11 9	41 38	14 7
lowaKansas	80 88	16 26	25 59	6 (D)	58 35	10
Kentucky	116	38 39	59	15	69	(D) 22 13
Louisiana	58 64	39 16	28 39	26 12	39 28	13
Maryland	41	39	33	(D)	14	(D)
Massachusetts	62 265	36 525	41 164	28 399	25 150	7 126
Minnesota	135	48	80	28	69	19
Mississippi	141 126	50 41	50 54	22 18	99 77	28 23
Montana Nebraska	83 33	16 7	58 18	11 2	29 15	5
Nevada	15	4	12	3	8	1
New Hampshire	32	10	16	(D)	19	(D)
New Jersey New Mexico	102 282	508 63	65 154	(D) (D) 34	47 142	(D) 29

Table 31. Fruits and Nuts: 2017 and 2012 (continued)

[For meaning of abbreviations and symbols, see int	Total Bearing age acres Nonbearing age acres					
Geographic area	Farms	Acres	Farms	Acres	Farms	Acres
PLUMS AND PRUNES - Con.						
States, 2017 - Con.						
New York North Carolina North Dakota Ohio Oklahoma Oregon. Pennsylvania Rhode Island South Carolina South Dakota	254 93 21 159 101 618 250 3 116	407 21 8 55 83 868 142 (D) 86	189 44 19 76 46 494 155 2 41 17	297 11 (D) 37 39 774 99 (D) 70	105 52 2 92 69 172 127 1 83 20	110 10 (D) 18 43 94 43 (D) 16
Tennessee Texas Utah Vermont Virginia Washington West Virginia Wisconsin Wyoming PLUMS	184 498 104 23 122 568 102 119	348 44 41 35 346 72 47 6	52 238 71 13 54 436 53 70	19 232 33 9 14 296 46 (D)	148 322 44 11 79 176 50 67 2	35 116 11 2 21 50 26 (D) (D)
United States Total						
United States	7,087 (NA)	17,346 (NA)	4,344 (NA)	14,708 (NA)	3,465 (NA)	2,637 (NA)
States, 2017						
Alabama Alaska Alaska Arizona Arkansas California Colorado Connecticut Delaware Florida Georgia Idaho Illinois Indiana Ilowa Kansas Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Minnesota Misnesota Misnesota Meriase Meriase Meriase Meriase Meriase Meriase Meriase Minnesota Minnesota Minnesota Misnesota	177 2 59 76 1.096	86 (D) 18 16 13,268 55 38 (D) (D) (D) 349 25 16 (D) 33 39 15 (D) 35 456 (D) (D) 63 37 15 7 4 (D) (D) 63 307 21 8 52 83 413 135 (D) 86	84 235 299 863 94 422 3 85 79 82 43 34 25 58 59 28 36 32 37 162 79 50 54 54 54 12 15 65 154 173 44 19 71 46 424 153 2	49 (D) 4	121 26 522 404 82 16 61 79 40 41 38 58 35 69 39 28 14 25 149 68 99 77 26 26 15 8 19 47 142 100 52 2 90 69 150 126 1 83	37 9 12 1,587 20 3 (D) (D) (D) 14 7 10 (D) 22 13 4 (D) 7 (D) (D) 28 (D) 5 4 1 1 (D) (D) 28 (D) (D) 18 4 4 10 (D) 10 10 10 10 10 10 10 10 10 10
South Dakota Tennessee	36 183 498 102 23 122 511 102 118	12 53 348 42 11 35 206 72 (D)	17 51 238 71 13 54 380 53 69 12	3 (D) 232 32 9 14 158 46 (D) (D)	20 148 322 42 11 79 171 50 67 2	8 (D) 116 10 2 21 48 26 (D) (D)
PRUNES						
United States Total United States	1,005	52,244	886	46,565	330	5,679
2012 States, 2017	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
California Colorado Delaware Florida Georgia	606 11 2 2 1	51,433 4 (D) (D) (D)	569 8 2 2 1	45,844 3 (D) (D) (D)	216 3 - -	5,589 1 - -

Table 31. Fruits and Nuts: 2017 and 2012 (continued)

Geographic area	Total		Bearing ag		Nonbearing age acres		
· .	Farms	Acres	Farms	Acres	Farms	Acres	
PRUNES - Con.							
States, 2017 - Con.							
ldaho	21	15	15	(D)	6	(D)	
Illinois Kansas	3	1 (D)	2	(D)	3	1	
Maine	2 3	`1	3	1	-	-	
Maryland Massachusetts	1 5	(D)	1 5	(D)	-	-	
Michigan	11	69	7	(D)	9	(D)	
Minnesota	1 5	(D) 5	1	(D) (D)	1 5	(D) (D)	
Montana	10	1	7	1	3	1	
New Hampshire	1	(D)	1	(D)	_	_	
New Jersey	1	(D)	1	(D)	-		
New Mexico	3 30	1 100	3 29	(Z) (D)	3 9	(Z) (D)	
North Dakota	3	(Z) 3	3	(Z) 2	-	-	
Ohio Oregon	10 143	454	6 113	434	4 39	1 20	
Pennsylvania	9	8	9	(D)	2	(D)	
Tennessee	4 16	1 2	2 9	(D)	3 7	(D)	
				'			
Washington	100	140 (D)	85 1	138 (D)	17	2	
		(D)	,	(D)			
POMEGRANATES							
United States Total							
United States2017	1,502	31,472	1,043	29,922	610	1,550	
2012	1,056	32,887	739	29,667	492	3,220	
States, 2017							
States, 2017							
Alabama	19 41	10 10	3 24	(D) 6	16 17	(D)	
ArizonaArizona	41	(D)	-	-	4	(D)	
California	907	30,917	753	29,714	244	1,204	
ColoradoFlorida	131	(D) 146	1 56	(D) 48	86	98	
Georgia	29	28 13	19 27	11	14	17	
HawaiiIllinois	46	(D)	-	5	22 3	8 (D)	
Louisiana	3 9	` 1	3	(Z)	6	` 1	
Maryland	1	(D)	1	(D)	-	-	
Mississippi	14	5	5	` á	9	1	
Missouri Nevada	2 10	(D) 22	9	20	2 5	(D) 3	
New Mexico	71	30	33	9	46	20	
New York North Carolina	3 20	(D) (D)	2 7	(D) (D)	1 15	(D) 2	
Ohio	4	(D)	1	(D)	3	(Z)	
Oklahoma Oregon	1	(D) (D)	1	(D)	- 1	(D)	
	•	` '				. ,	
PennsylvaniaSouth Carolina	2 15	(D)	2 7	(D)	1 10	(D)	
Tennessee	2	(D)	1	(D)	1	(D)	
Texas Utah	158	256	80 6	75 2	102	181	
Virginia	2	(D)	2	(D)	2	(D)	
OTHER NONCITRUS FRUIT (SEE TEXT)							
, ,							
United States Total							
United States2017	3,105	9,959	2,427	7,784	1,263	2,175	
2012	3,096	14,428	2,468	11,538	1,332	2,889	
States, 2017							
Alabama	19	13	5	7	14	6	
Arizona	14	23	6	19	10	4	
Arkansas	15	26	14	23	7	3	
CaliforniaColorado	357 21	1,500 13	306 12	(D) (D)	109 15	(D) (D)	
Connecticut	15	3	6	(D)	9	(D) (D) (D)	
Delaware	4 1,095	4,409	3 892	(D) (D)	1 424	(D) (D)	
Georgia	21	35	12	`26	12	9	
Hawaii	832	2,582	702	(D)	326	(D)	
	2	(D)	-		2	(D)	
	20	22	7	(D) (D)	15 4	(D) (D)	
Illinois	17		11	3	8	2	
llinoisowa	17 18	_5					
llinois	18 2	(D)	1	(D)	2	(D)	
llinois ndiana owa (ansas Centucky	18 2 20 74	(D) 29 199		(D) (D) (D)	10 22	(D) (D)	
llinois ndiana owa	18 2 20 74 2	(D) 29 199 (D)	1 16 54	(D) (D)	10 22 2	(D) (D) (D)	
Illinois Indiana Iowa Kansas Kentucky Louisiana Maine Maryland	18 2 20 74	(D) 29 199	1 16	(D)	10 22	(D) (D)	
Idaho Illinois	18 2 20 74 2 21 11	(D) 29 199 (D) 32 65	1 16 54 - 11 5	(D) (D) (D) (D)	10 22 2 12 9	(D) (D) (D) (D) (D)	
Illinois Indiana Iowa Kansas Kentucky Louisiana Maine Maryland Massachusetts Michigan	18 2 20 74 2 21 11	(D) 29 199 (D) 32 65	1 16 54 - 11	(D) (D) (D) (D)	10 22 2 12	(D) (D) (D) (D) (D)	
Illinois Indiana lowa Kansas Kentucky Louisiana Maine Maryland	18 2 20 74 2 21 11	(D) 29 199 (D) 32 65	1 16 54 - 11 5	(D) (D) (D) (D)	10 22 2 12 9	(D) (D) (D) (D) (D)	

Table 31. Fruits and Nuts: 2017 and 2012 (continued)

Geographic area	Total	A	Bearing ag		Nonbearing a	-
OTHER NONCITRUS FRUIT	Farms	Acres	Farms	Acres	Farms	Acres
(SEE TEXT) - Con. States, 2017 - Con.						
	6			(D)		(D)
VontanaVebraska	6	2 (D)	6 6	(D) (D)	1 2	(D) (D)
Nevada	3	(D)	3	(D) (D) (D)	-	(- <i>/</i>
New Hampshire	2	(D)	2	(D)	-	- (D)
lew Jerseylew Mexico	19 37	16 33	14 22	(D) (D)	6 19	(D) (D)
lew York	32	82	27	62	8	20
lorth Carolina	29	26	10	3	21	23
North Dakota	2	(D)	-	- (5)	2	(D)
Ohio	19	14	10	(D)	15	(D)
Oklahoma	5	4	3	(D)	2	(D)
Oregon	45	27	27	(D) 20	19	8
ennsylvania	15	213	10	(D)	9	(D)
hode Islandouth Carolina	14 10	9 3	10	(D) (D)	6	(D) (D)
outh Dakota	1	(D)	1	(D)	<u>:</u>	(D)
ennessee	25	15	16	(D) (D)	10	(D)
exas	76	167	57	127	38	40
ltah	5 7	(D)	5 4	(D) (D)	7	-
ermont	,	(D)	4	(D)	1	2
'irginia	37	37	24	(D)	20	(D) 2
Vashington	20	13	16	11	9	
Vest Virginia	29	23	11	6 2	20	18
Visconsin	17	12 (D)	9	(D)	9	10 (D)
Vyoming	۷	(D)	1	(D)	!	(D)
ITRUS FRUIT, ALL						
nited States Total						
Inited States2017 2012	12,107	824,983	10,835	756,544 811,570	3,917	68,439
itates, 2017	13,055	877,701	11,886	811,570	3,999	66,131
labama	104	190	68	153	44	38
rizona	317	10,031	277	9,360	114	672
rkansas	1	(D)			1	(D)
California	6,581 3,044	312,162 474,540	6,080 2,775	274,954 446,044	1,862	37,209 28,496
lorida Georgia	71	248	2,775	149	1,111 39	28,496
lawaii	1,033	891	832	708	371	183
ouisiana	281	684	223	528	100	156
/ississippi	78	(D)	45	(D)	41	13
lissouri	1	(D)	-	-	1	(D)
lew York	3	(Z)	3	(Z)	-	-
lorth Carolina	2	(Z) (D)	-	` -	2	(D)
South Carolina	11	2	10	1	3	1
exas/est Virginia	579 1	26,188 (D)	473 1	24,616 (D)	228	1,573
RAPEFRUIT		, ,		, ,		
Inited States Total						
United States2017 2012	2,245 2,144	68,390 88,393	1,994 1,922	64,790 83,212	562 526	3,599 5,181
States, 2017	,			,		,
Nabama	11	6	11	(D)	1	(D)
Arizona	109	352	87	344	31	(D) 9
California	959	9,864	870	9,467	195	397
Florida Georgia	496	40,248 (D)	441	38,207	155	2,042
lawaii	6 263	72	210	(D) 56	82	(D) 17
ouisiana	62	32	51	30	11	2
Mississippi	2	(D)	2	(D) (D)	-	-
South Carolina	2	(D)	2		2	(D)
exas	335	17,785	316	16,675	81	1,111
KUMQUATS						
Inited States Total	250	250	225	222	4.44	26
Inited States	358 102	258 136	235 83	222 123	141 30	36 13
States, 2017						
labama	1	(D)	-	-	1	(D)
rizona	5	(D)	2	(D)	3	(Z) 17
CaliforniaFlorida	187 81	181 59	139 49	163 48	61 35	17
Georgia	3	(D)	1	(D)	3	(D)
lawaii	25	4	11	(D) (D) (D)	14	(D)
ouisiana	44	(D)	26	(<u>D</u>)	19	4
Mississippi	6 1	(D) (D)	4	(D)	2	(D) (D)
Vorth Carolina	2	(D)	-	-	2	(D)
exas	3	1	3	1	-	-

Table 31. Fruits and Nuts: 2017 and 2012 (continued) [For meaning of abbreviations and symbols, see introductory text.]

Coornelia	ductory text.] Total Bea			Bearing age acres		Nonbearing age acres	
Geographic area	Farms	Acres	Farms	Acres	Farms	Acres	
LEMONS							
United States Total							
United States2017 2012	3,498 3,007	66,501 62,324	2,847 2,578	59,001 56,391	1,129 783	7,500 5,932	
States, 2017			·	ŕ			
Alabama	21	(D)	11	(D)	11	3	
Arizona California	181 2,254	7,691 58,190	145 1,974	7,117 51,472	61 657	574 6,717	
Florida	217 21	272	124 12	124 5	107 9	148 2	
Hawaii Louisiana	516 87	138 23	402 62	113 17	167 28	25 6	
Mississippi	38	7	11	3	28	5	
New YorkSouth Carolina	3 1	(Z) (D)	3 1	(Z) (D)	-	-	
Texas	158	168	101	148	61	20	
West Virginia	1	(D)	1	(D)	-	-	
LIMES							
United States Total							
United States2017 2012	1,336 583	1,296 820	1,018 497	1,051 760	402 143	245 60	
States, 2017							
Alabama	12	2 8	8	1	5	1 2	
ArizonaCalifornia	38 592	997	20 480	6 816	18 131	180	
FloridaGeorgia	104 7	66 2	74	59 1	37 4	7	
Hawaii Louisiana	508 17	159 5	387 13	114 3	175 6	45 1	
Mississippi Texas	11 47	1 57	3 30	(Z) 50	8 18	1 7	
ORANGES, ALL							
United States Total							
United States2017	7,973	602,830	7,275	567,237	2,294	35,593	
2012 States, 2017	9,437	670,386	8,649	626,982	2,774	43,405	
Alabama	24	15	13	6	13	9	
Arizona California	177 4,145	1,432 170,421	157 3,880	(D) 159,938	57 989	(D) 10,483	
Florida	2,486	422,421	2,334	397,764	845	24,657	
Georgia Hawaii	20 596	16 290	12 468	10 254	10 1 <u>7</u> 0	6 36	
Louisiana Mississippi	157 34	383 5	117 16	312 (D)	54 20	71 (D) (D)	
South Carolina Texas	3 331	1 7,847	2 276	(D) 7,573	3 133	(D) 273	
ORANGES, VALENCIA							
United States Total							
United States2017	3,945 4,674	262,907 290,905	3,724 4,340	249,344 277,180	910 1.120	13,562 13.725	
States, 2017	4,074	250,500	4,040	277,100	1,120	10,720	
Alabama	3	(Z)	-	_	3	(Z)	
Arizona California	96 1,922	516 33,924	89 1,832	(D) 32,842	20 319	(Z) (D) 1,082	
Florida	1,594	226,052	1,534	213,704	466	12,348	
Hawaii	200	94	149	86 (D)	63	9	
Louisiana Mississippi	19 5	8 1	12 3	(D) (D)	7 2	(D) (D)	
ORANGES, OTHER THAN VALENCIA -	102	2,311	101	2,201	30	110	
INCLUDING NAVEL (SEE TEXT)							
United States Total	0.070	200 000	5 c==	047.000	4 700	00.004	
United States2017 2012	6,276 7,452	339,923 379,481	5,677 6,784	317,893 349,802	1,788 2,193	22,031 29,679	
States, 2017							
AlabamaArizona	21 143	15 917	13 123	6 875	10 46	9 42	
California Florida	3,264 1,885	136,497 196,369	3,023 1,757	127,096 184,060	808 606	9,401 12,309	
Georgia	18	16	10	10	10	6	
Hawaii Louisiana	456 149	196 375	367 115	169 (D)	122 47	27 (D)	
MississippiSouth Carolina	29	4	13 2	(D) (D)	18 3	(D) (D)	
Texas	308	5,535	254	5,373	118	continued	

Table 31. Fruits and Nuts: 2017 and 2012 (continued) [For meaning of abbreviations and symbols, see introductory text.]

For meaning of abbreviations and symbols, see interest. Geographic area	To	tal	Bearing a	age acres	Nonbearing	g age acres
	Farms	Acres	Farms	Acres	Farms	Acres
TANGELOS						
United States Total						
United States	816 507	7,806 8,548	714 468	7,222 8,016	188 106	584 532
States, 2017						
AlabamaArizona	8 77	(D) 307	8 65	4 (D)	1 18	(D) (D)
California	317	5,439	301	5,036	64	403
Florida Georgia	192 4	1,975 (D)	173 4	1,811 (D)	38	163
Hawaii Mississippi	209	77	161	(D) (D)	60	(D)
Texas	2 7	(D) 2	2	(D) -	7	2
TANGERINES (SEE TEXT)						
United States Total						
United States	3,053 1,395	77,701 42,289	2,524 1,184	56,883 32,358	1,085 449	20,818 9,932
States, 2017						
Alabama	59	160	45	137	19	24
Arizona Arkansas	66 1	232 (D)	52	(D)	18 1	(D) (D)
California	1,747	66,965	1,504	47,983 8 031	592 203	18,982
FloridaGeorgia	557 39	9,499 189	455 28	8,031 121	21	1,469 68
Hawaii Louisiana	338 127	100 229	246 105	76 158	134 42	24 72
Mississippi	38	28	25	(D)	15	(D)
South Carolina Texas	7 74	(D) 299	7 57	(D) 148	40	- 151
OTHER CITRUS FRUIT (SEE TEXT)						
United States Total						
United States	212 873	202 4,313	146 695	138 3,246	88 355	64 1,067
States, 2017	_	(0)	_	(D)		
Arizona California	7 87	(D) 107	5 52	(D) 77	4 41	1 29
Hawaii	101 2	52	79 2	27 (D)	36	25
Louisiana Texas	15	(D) 31	8	22	7	9
NUTS, ALL						
United States Total						
United States	38,823 36,302	2,679,683 2,112,869	32,002 31,126	2,178,701 1,797,156	16,108 13,962	500,982 315,713
States, 2017						
Alabama	1,077 343	11,570 35,261	864 284	8,873 21,724	482 118	2,697 13,537
Arizona Arkansas	347	15,862	264	14,086	138	1,777
California Colorado	13,676 43	2,023,746 64	12,209 15	1,647,547 (D)	5,538 30	376,198 (D)
Connecticut	37	35	12	5	31	30
FloridaGeorgia	1,161 3,334	8,735 161,543	934 2,771	7,002 133,847	416 1,327	1,733 27,696
Hawaiildaho	862 67	18,200 74	764 32	17,443 29	211 36	758 45
Illinois	207	783	130	453	110	330
Indianalowa	160 200	375 706	115 135	228 396	89 117	147 311
Kansas	186	2,941	125	1,919	110	1,023
Kentucky Louisiana	329 701	1,003 14,096	189 533	496 10,946	207 336	507 3,150
Maine	37 47	68 64	11 25	39 20	26 29	30 44
Maryland Massachusetts	25	24	14	9	14	15
Michigan	302	1,130	156	614	195 49	516
Minnesota Mississippi	65 501	177 6,188	28 349	119 4,382	255	58 1,805
Missouri	519 13	9,952 10	354 6	8,279 1	268 7	1,673 9
Nebraska	68	282	45	125	35	157
New Hampshire	22 10	90 1	22 8	84 (D)	7 2	6 (D)
New Jersey New Mexico	70 2,048	147 51,322	41 1,884	77 44,935	43 506	71 6,387
New York	186	520	119	137	112	383
North Carolina North Dakota	512 7	(D) 13	339 6	1,093 12	250 4	(D)
Ohio	285	749	153	307	176	443
Oklahoma Oregon	2,141 1,633	96,737 69,483	1,890 1,236	84,789 44,156	752 846	11,948 25,327
Pennsylvania	243	427	152	189	127	238
						continued

Table 31. Fruits and Nuts: 2017 and 2012 (continued)

For meaning of abbreviations and symbols, see intre-		ital	Bearing a	age acres	Nonbearing age acres		
	Farms	Acres	Farms	Acres	Farms	Acres	
NUTS, ALL - Con.							
States, 2017 - Con.							
Rhode Island	6	19	3	1	. 3	18	
South Carolina	567 16	3,319 8	452 5	2,672	185 13	647 6	
Tennessee	380	819	175	326	266	493	
Texas Utah	5,342 71	138,750 148	4,483 58	120,063 95	2,060 22	18,687 53	
Vermont	37	25	15	4	33	20	
Virginia Washington	218 363	692 935	130 247	328 550	135 170	364 385	
West Virginia	170	(D)	113	(D)	83	175	
Wisconsin	189	511	107	140	139	372	
ALMONDS							
United States Total							
United States2017 2012	7,954 7,052	1,266,160 936,248	6,830 6,285	1,058,244 818,027	3,412 2,683	207,916 118,221	
States, 2017	,		.,		,	-,	
Alabama	.8	. 5	2	(D)	.8	(D)	
Arizona Arkansas	22 6	163	5 3	(D) (Z)	17 3	(D) (Z)	
California	7,611	1,265,815	6,683	1,058,124	3,191	207,691	
ColoradoFlorida	13 5	2	4 2	1 (D)	9	1 (D)	
Georgia	3 2	_i	-	-	3	1	
HawaiiIllinois	2 7	(D) 2	4	1	2 3	(D)	
lowa	2	(D)	1	(D)	1	(D)	
Kansas	9	(D)	2	(D)	7	1	
Kentucky	8	2	1	(D) (D)	7	(D)	
LouisianaMississippi	3 6	(D)	2	(D)	3 6	1	
Missouri	15	2	2	(D)	13	(D)	
Nebraska Nevada	4 3	(D) (Z) (D)	4 3	(D) (Z)	-	-	
New Jersey	1		-	` 1	1	(D)	
New Mexico	25 21	3 (D)	21 4	2 (D)	7 17	1 3	
		, ,	7	(5)			
Ohio Oklahoma	11 1	2 (D)	1	(D)	11	2	
Oregon	43	(D)	20	(D)	23	5	
Pennsylvania	8	(D)	2	(D)	7	(D)	
South Carolina	8 3	24 (D)	7 3	(D) (D)	2	(D)	
Tennessee	9	2	3	1	6	1	
Texas Utah	38 15	83 15	19 14	68 (D)	30 6	15 (D)	
Virginia	11	8	2	(D)	9	(D) (D)	
Washington	30	6	13	4	17	2	
West Virginia	1	(D)	1	(D)	-	-	
Wisconsin	2	(D)	2	(D)	-	-	
CHESTNUTS United States Total							
United States2017	1,587	4,228	841	2,185	975	2,043	
2012	919	3,784	591	2,406	526	1,378	
States, 2017	£ :			·=:	<u> </u>	·-·	
AlabamaArkansas	34 24	48 20	10 5	(D) (D)	24 22	(D) (D)	
California	88	370	72	326	25	44	
Connecticut	22 115	16 323	9 94	(D) 277	18 44	(D) 45 47 (D) (D)	
Georgia	29	98	13	51	21	47	
IdahoIllinois	6 42	(D) 111	3 25	(D) (D)	3 24	(D)	
Indiana	30	22	17	11	17	11	
lowa	68	333	37	135	50	198	
Kansas	13	40	10	38	4	3	
Kentucky Louisiana	40 7	69 9	17 3	(D) 2	30 4	(D) 7	
Maine	6	20 23	3	(D)	3	(D)	
Maryland	20 10	23 7	6	(D) (D)	14 3	(D) (D) (D)	
MassachusettsMichigan	143	675	70	360	94	316	
Minnesota	8 23	(D) 49	1 3	(D)	8 21	4 47	
MississippiMissouri	59 59	49 143	3 28	(D)	21 44	47 (D)	
				(3)		, ,	
Montana Nebraska	2	(D) (D)	1	(D)	2	(D)	
New Hampshire	6	(D)	6	(D)		-	
New Jersey New Mexico	26 13	65	16 3	32 (D)	15 13	33 (D)	
New York	59	145	33	38	36	107	
North CarolinaNorth Dakota	69 1	45 (D)	30 1	(D) (D)	43 1	(D) (D)	
Ohio	75	332	40	163	47	170	
							

Table 31. Fruits and Nuts: 2017 and 2012 (continued)

For meaning of abbreviations and symbols, see into Geographic area	Tot			age acres		aring age acres	
<u> </u>	Farms	Acres	Farms	Acres	Farms	Acres	
CHESTNUTS - Con.							
States, 2017 - Con.							
Oklahoma	11	(D)			11	(D)	
Oregon	48	202	41	140	14	62	
Pennsylvania	131	157	88	71	58	86	
Rhode Island South Carolina	3 38	58	3 15	1 32	30	26	
South Dakota	1	(D)	-	-	1	(D)	
Tennessee	83	110	25	27	62	84	
Texas	22	84	11	10	17	75	
Utah	2	(D)	-	-	2	(D)	
Vermont	17	11	4	2	17	9	
Virginia	62	299	24	154	48	146	
Washington	51	76	31	54	29	22	
West Virginia	50	153	29	21	30	132	
Wisconsin	29	31	5	(D)	26	(D)	
HAZELNUTS (FILBERTS)							
United States Total							
United States	2,607	70,091	1,601	43,965	1,607	26,126	
2012	1,458	38,082	1,003	30,463	766	7,619	
States, 2017							
Alabama	21	_4	10	3	11	1	
Arizona	2	(D)	-	-	2	(D)	
Arkansas	10	31	-	-	10	31	
California	40 16	124 4	25 5	87 2	17 13	38 2	
Connecticut	13	13	3 -	_	13	13	
Florida	6	3	3	2	6	1	
Georgia	7	2	1	(D)	6	(D)	
ldaho	26	21	10	4	16	17	
Illinois	36	20	12	8	25	13	
Indiana	37	13	20	9	20	5	
lowa	49	27	21	9	34	19	
Kansas	10	9	2	(D)	10	(D)	
Kentucky	31	34	10	1	28	33	
Louisiana	1	(D)		Ī.	.1	(D)	
Maine	20	10	5 7	1	15 5	9	
Maryland	12 8	10 (D)	5	(D)	3	(D) (D)	
Michigan	90	60	31	28	62	32	
Minnesota	47	131	18	99	36	32	
Mississippi	3	1	_	_	3	1	
Missouri	29	17	15	7	22	10	
Montana	9	(D)	5	(D)	4	(D)	
Nebraska	14	19	5	(D)	9	(D)	
New Hampshire	2	(D)), <u>-</u>	2	(D)	
New Jersey	26	32	12	19	18	14	
New Mexico	18	2	6	1	12	1	
New York	74 44	60 106	49 19	21 14	43 29	40 92	
North Dakota	3	(D)	3	(D)	23	(D)	
		, ,		` '		` '	
Ohio	42	43	15	6	30	38	
Oklahoma	9 1,331	(D) 68,378	3 988	43,180	8	(D) 25,198	
Oregon Pennsylvania	60	32	32	43,160	765 39	25,196	
South Carolina	14	7	2	(D)	14	(D)	
South Dakota	7	2	1	(D) (D)	7	(D)	
Tennessee	49	39 3	19	27	35	12	
lexas	11	3	1	(D)	10	(D)	
Utah Vermont	4 20	2 8	3 5	(D)	2 17	(D) 7	
Virginia	31	33	20	6	22	27	
Washington	199	615	135	321	93	294	
West Virginia Wisconsin	36 90	11 157	17 61	6 63	20 68	5 94	
MACADAMIA NUTS							
United States Total							
	1,046	18,403	903	17 507	260	816	
United States	995	18,403	903 920	17,587 16,592	260 241	1,691	
States, 2017							
California	155	124	130	106	37	10	
California	56	109	24	58	36	18 51	
Hawaii	835	18,170	749	17,424	187	747	
PECANS, ALL United States Total							
	10.000	EE0 070	15 600	464 900	7.005	04.200	
United States2017 2012	19,008 19,253	553,276 543,486	15,608 16,284	461,890 466,144	7,285 7,051	91,386 77,341	
States, 2017							
	1,033	44.470	837	8,840	455	2,635	
AlabamaArizona	267	11,476 25,988	234	16,629	79	9,358	

Table 31. Fruits and Nuts: 2017 and 2012 (continued)

For meaning of abbreviations and symbols, see inti	To	tal	Bearing a	age acres	Nonbearing	ing age acres	
Geographic area	Farms	Acres	Farms	Acres	Farms	Acres	
PECANS, ALL - Con.							
States, 2017 - Con.							
Arkansas	310	15,736	244	14,041	113	1,695	
California Colorado	311 3	6,075 (Z)	257	3,527	105 3	2,548	
Florida	968	8,079	794	6,476	330	(Z) 1,603	
Georgia Hawaii	3,306	161,401 (D)	2,757 3	133,786 (D)	1,302 4	27,615 (D)	
Idaho	1	(D)	-	-	1	(D) (D)	
IllinoisIndiana	123 48	518 101	84 28	330 68	57 23	187 33	
lowa	32	(D)	10	(D)	28	15	
Kansas	146	2,752	93	1,800	90	952	
Kentucky	135	566	57	314	100	252	
LouisianaMaryland	691 11	14,066	526 5	10,928	331 6	3,138 3	
Massachusetts	4	(D)	3	(D)	1	(D) 2	
Minnesota	12 2	3 (D)	3	1	9 2	(D)	
Mississippi	484	6,1`09	345	4,368	234	1,741	
Missouri Nebraska	367 20	8,951 78	257 7	7,751 28	180 17	1,200 50	
		70		20	17	30	
New Jersey	3 4	1 (D)	3	1 (D)	2	(D)	
New Mexico	1,947	50,722	1,814	44,434	456	6,288	
New York	17 395	64 1,444	10 272	38 896	8 181	27 548	
Ohio	27	28	3	(D)	25	(D)	
Oklahoma	2,119	96,569	1,878	84,764	726	11,805	
Oregon Pennsylvania	2 28	(D) (D)	14	(D)	2 23	(D) 11	
South Carolina	508	3,181	425	2,580	138	601	
South Dakota	1	(D)	-	-	1	(D)	
Tennessee	226	500 138.429	90	206 119.888	164	294 18,541	
Texas	5,295 31	138,429	4,452 25	38	2,018 7	18,541	
Virginia	108	291	71	120	52	17 <u>1</u>	
West Virginia	12 4	(D) (D)	3	(D) (D)	9	1	
PECANS, IMPROVED		,		,			
•							
United States Total							
United States2017 2012	13,627 11,652	397,598 325,089	11,037 9,629	324,229 278,275	5,275 4,317	73,369 46,814	
States, 2017							
Alabama	583	8,168	419	6,010	312	2,159	
Arizona	267	25,988	234	16,629	79	9,358	
Arkansas	193 311	7,936 6,075	162 257	7,238 3,527	65 105	698 2,548	
Colorado	3	(Z) 8,079	-	· -	3	(Z) 1,603	
Florida	968 3,306	8,079 161,401	794 2,757	6,476 133,786	330 1,302	1,603 27,615	
Hawaii	3,306 7	(D)	2,757	(D)	1,302	(D)	
Idaho	1	(D) 287	43	` -	1	(D) 122	
Illinois	62			165	30	122	
Indianalowa	14 8	55 3	5 1	(D) (D)	9	(D) (D)	
Kansas	62	786	36	(D) 453	43	333	
Kentucky	60 422	116	32 307	55 6 838	37 211	60	
LouisianaMaryland	11	8,801 3	5	6,838 1	211 6	1,963 3	
Massachusetts	4	(D)	3	(D)	1	3 (D) 2	
Minnesota	12 2	3 (D)	3	1 -	9 2	(D)	
Mississippi	233	4,199	173	3,211	104	989	
Missouri	131	2,694	77	1,920	84	773	
Nebraska	20	78	7	28	17	50	
New Jersey	3 4	1 (D)	3	1 (D)	2	(D)	
New Mexico	1,947	50,722	1,814	44,434	456	6,288	
New York	17 393	64 (D)	10 270	38 (D)	8 181	27 548	
Ohio	27	28	3	(D)	25	(D)	
Oklahoma Oregon	752 2	24,709 (D)	569	19,674	334 2	5,035 (D)	
		` '	4.4	(5)		, ,	
Pennsylvania	28 508	(D) 3,169	14 425	(D) 2,568	23 138	11 601	
South Dakota	1	(D)	-	-	1	(D)	
Tennessee	114 2,996	306 82,066	47 2,461	137 69,912	84 1,188	169 12,154	
Utah	31	66	25	38	7	28	
Virginia West Virginia	108 12	291 (D)	71 3	120 (D)	52 9	171 7	
Wisconsin	4	(D)	1	(D)	3	1	
				•		continued	

Table 31. Fruits and Nuts: 2017 and 2012 (continued)

[For meaning of abbreviations and symbols, see intro	Tot	al	Bearing a	age acres	Nonbearing	Nonbearing age acres	
Geographic area	Farms	Acres	Farms	Acres	Farms	Acres	
PECANS, NATIVE AND SEEDLING							
United States Total							
United States	6,869 9,579	155,678 218,397	5,742 8,189	137,661 187,869	2,373 3,207	18,017 30,528	
States, 2017							
Alabama	604	3,307 7,800	525 126	2,831 6,803	178 51	477 997	
Arkansas	162 77	231	54	166	30	65	
Indianalowa	34 24	46 (D)	23 9	(D) (D)	14 20	(D) (D)	
Kansas Kentucky	95 86	1,966 451	61 28	1,348 259	54 69	618 192	
Louisiana	373 293	5,265 1,910	297 196	4,091 1,157	153 158	1,175 753	
Missouri	261	6,257	199	5,831	102	426	
North CarolinaOklahoma	2 1,738	(D) 71,860	2 1,613	(D) 65,090	- 469	- 6,770	
South Carolina	3	12	3	12	-	· -	
Tennessee	123 2,994	194 56,363	49 2,557	69 49,976	88 987	125 6,387	
PISTACHIOS							
United States Total							
United States	1,709 1,496	344,614 232,653	1,319 1,191	247,872 185,712	783 639	96,742 46,941	
States, 2017	.,.30	202,000	.,.31	.55,. 12	555	,.	
Arizona	69	8,905	46	4,972	36	3,933	
California	1,515 13	334,949 87	1,165 13	242,252 81	699 4	92,697 6	
New Mexico	89 16	571 51	75 13	486 (D)	31 9	85 (D)	
Utah	7	50	7	(D)	4	(D) (D)	
WALNUTS, ENGLISH							
United States Total							
United States2017 2012	7,532 6,656	419,706 332,045	6,413 5,707	345,019 272,556	2,875 2,548	74,687 59,489	
States, 2017							
Alabama	15	6	8	1	9	5	
Arkansas	8 14	203 33	2 7	(D) 2	6 8	(D) 31	
California Colorado	5,676 13	416,201 8	5,241 5	343,062 1	2,006 8	73,139 7	
ConnecticutFlorida	16 8	(D) 4	3 8	(D) 3	14 7	6 2	
Georgialdaho	19 47	6 29	13 26	4 8	6 22	2 21	
Illinois	64	120	34	29	43	90	
Indianalowa	51 43	132 108	37 31	71 88	24 14	62 20	
Kansas	31	72	20	14	18	58	
Kentucky	140 7	183 6	82 2	59 (D)	79 5	125 (D)	
Maine Maryland	8 19	1 17	9	12	8 13	1 5	
MassachusettsMichigan	9 83	13 116	3 40	1 53	6 49	12 63	
Minnesota	14	26	7	7	10	19	
Mississippi	8 129	8 503	86	172	8 57	8 331	
Montana Nebraska	4 17	(D) 34	1 8	(D) 1	3 9	1 34	
Nevada New Hampshire	5 2	1	5 2	1 (D)	-	-	
New Jersey	27 8	(D) 21 2	16	8	11	12	
New Mexico	39	50	5 22 10	(D) 33 36	3 24 24	(D) 17	
North Carolina	42	41 (D)	19	36	24	5 (D)	
North Dakota	91	156	57	44	50 54	112	
Oklahoma Oregon	18 305	40 884	12 255	15 828	14 69	25 56	
PennsylvaniaRhode Island	81 3	70 18	49	48	40 3	22 18	
South Carolina	10 7	9 (D)	7	3	6 7	6 (D)	
Tennessee	92 21	116 23	49 15	28 17	50 9	88 6	
Utah	30	13	22	9	11	4	
Vermont Virginia	3 25	3 16	- 14	12	3 15	3 5	
Washington	187 59	207 75	135 38	153 55	57 27	55 21	
West Virginia	33	127	18	20	19	107	
		·		·		continued	

Table 31. Fruits and Nuts: 2017 and 2012 (continued) [For meaning of abbreviations and symbols, see introductory text.]

Geographic area	Total		Bearing age acres		Nonbearing a	age acres
Geographic area	Farms	Acres	Farms	Acres	Farms	Acres
OTHER NUTS (SEE TEXT)						
United States Total						
United States2017 2012	1,030 1,126	3,205 8,289	700 753	1,938 5,257	548 631	1,267 3,032
States, 2017	,	,				•
Alabama	12	33	11	22	9	11
Arizona	3	(D)	3	(D)	-	
Arkansas	11	42	8	(D)	4	(D)
California	32	88	32	64	3	`24
Colorado	5	50	1	(D)	4	(D
Connecticut	1	(D)	<u> </u>	(5)	i	(D
JOHN COLLOUR	51	217	42	(D)	13	(D
Florida						
Georgia	13	36	7	(D)	11	(D
Hawaii	22	18	12	(D)	21	(D
daho	3	(D)	1	(D)	2	(D)
Ilinois	6	14	3	(D)	5	(D)
						37
ndiana	49	107	40	70	29	
owa	67	220	55	(D)	35	(D
Cansas	7	(D)	4	(D)	3	(D
Kentucky	61	149	41	112	35	`37
ouisiana	3	(D)	2	(D)	1	(D)
Maine	5	37	3	(D)	2	(D)
Varyland	11	11	3	(D)	11	11
			-	-		
Massachusetts	1	(D)			_1	(D)
Michigan	62	275	43	173	32	103
Minnesota	15	(D)	6	(D)	12	(D)
Viin Coold Viississippi	14	20	6	12	8	(2)
Missouri	11	337	7	(D)	7	(D)
Montana	2	(D)		-	2	(<u>D</u>)
Nebraska	30	1`51	28	(D)	10	(D)
Nevada	3	1	3	(Z)	3	(Z (D
New Jersey	11	(D)	9	(D)	7	(D
New Mexico	15	`19	11	11	9	` (
New York	50	201	28	8	29	193
North Carolina	33	146	27	125	12	21
						=-
North Dakota	2	(D)	2	(D)	-	
Ohio	103	189	61	(D)	54	(D)
Oklahoma	6	(D)	5	(D)	1	(D
	8	11	4	(D)	5	(D
Oregon						
Pennsylvania	50	142	25	(D)	36	(D)
South Carolina	18	40	12	32	12	
South Dakota	3	(D)	1	(D)	2	(D)
Tennessee	45	`52́	28	`38	20	`15
Texas	18	76	12	39	10	36
Jtah	5	(D)	5	(D)	10	30
	3	(D)	٦	(D)		
/ermont	9	2	8	1	4	•
/irginia	26	45	25	(D)	7	(D
Vashington	15	30	11	18	11	12
		30 47				
West Virginia	48		42	36	13	11 (D
Wisconsin	65	195	26	(D)	52	/D