

DEER HERD UNIT MANAGEMENT PLAN
Deer Herd Unit # 8
North Slope
October 2016

BOUNDARY DESCRIPTION

Daggett and Summit counties--Boundary begins SR-150 and the Summit-Duchesne county line at Hayden Pass (summit of the Uinta Mountains); north on SR-150 to the Utah-Wyoming state line; east on this state line to the Utah-Colorado state line; south on this state line to the Green River; west along this river to Flaming Gorge Reservoir; west along the south shoreline of this reservoir to Cart Creek; south along this creek to US-191; south on US-191 to the Uintah-Daggett County line (summit of the Uinta Mountains); west along the summit of the Uinta mountains to SR-150 at Hayden Pass.

LAND OWNERSHIP

RANGE AREA AND APPROXIMATE OWNERSHIP – August 2016

Ownership	Yearlong range		Summer Range		Winter Range	
	Area (acres)	%	Area (acres)	%	Area (acres)	%
Forest Service	4780	65	494914	87	76070	42
Bureau of Land Management	0	0	20033	4	43202	24
Utah State Institutional Trust Lands	302	4	7819	1	19276	11
Native American Trust Lands	0	0	0	0	0	0
Private	2249	31	45825	8	37188	21
Department of Defense	0	0	0	0	0	0
Utah State Parks	0	0	0	0	0	0
Utah Department of Transportation	0	0	0	0	9	<1
Utah Forestry, Fire & State Lands	0	0	0	0	2	<1
Utah Division of Wildlife Resources	7	<1	989	<1	4627	2
TOTAL	7338	100	569580	100	180374	100

UNIT MANAGEMENT GOALS

- Manage for a population of healthy animals capable of providing a broad range of recreational opportunities, including hunting and viewing.
- Expand and improve mule deer populations within the carrying capacity of available habitats and in consideration of other land uses.
- Conserve and improve mule deer habitat throughout the unit with emphasis on crucial ranges.

POPULATION MANAGEMENT OBJECTIVES

- < **Long Term Target Winter Herd Size** – The long-term objective is 10,000 wintering deer (modeled number), which is an increase from the previous management plan. The increase is recommended due to a change in population models since the last management plan update. Range trend ratings have remained stable in the “Good” category over the past 5 years with the increasing deer herd size.
- < **Short Term Objective** - No short term objective is needed for this unit.
- < **Herd Composition** - Buck:doe ratios will follow the statewide mule deer management plan, which is currently set at 18 to 20 bucks per 100 does for the North Slope Unit.
- < **Harvest** - Continue general season unit by unit buck deer hunt management, using archery, any weapon, and muzzleloader hunts. There is also an early season limited entry buck hunting opportunity on the Summit Subunit that allows for hunting of deer and elk simultaneously and takes advantage of bucks that may migrate out of the unit before the regular late October rifle season. Buck permits will be adjusted to maintain buck:doe ratio objectives.

POPULATION MANAGEMENT STRATEGIES

Monitoring

Population Size - A model will be used to estimate the wintering population size, by utilizing harvest data, postseason and spring classifications, and radio collar based survival estimates.

- < **Harvest** - The primary means of monitoring harvest will be through the statewide uniform harvest survey. Achieve the target population size by use of antlerless harvest using a variety of harvest methods and seasons. Antlerless hunts will be used to reduce deer densities in areas where habitat damage is occurring due to overpopulation and in areas where depredation is an issue. Buck harvest strategies will be developed through the RAC and Wildlife Board process to achieve management objectives for buck to doe ratios.
- < **Migration** – There currently isn’t much data, other than anecdotal, on migration routes or the percentage of mule deer that leave the unit, and even the state, during the winter. The DWR would like to radio collar does as funding opportunities allow to determine migration routes between summer and winter ranges and to determine percentage of deer that overwinter out of state or on other units to allow for more accurate population modeling. Knowing when the deer migrate can also help to better manage hunts for the North Slope subunits.

Strategies to address Limiting Factors:

- < **Crop Depredation** – Take all steps necessary to minimize depredation as prescribed by state law and DWR policy.
- < **Deer Distribution** – Targeted antlerless hunts, mitigation permits/vouchers, and agency removal and/or trap and cull operations may be used to address unnaturally high concentrations of deer in the city of Manilla. DWR will continue to work with Manilla city leadership to address this issue.
- < **Habitat** – Winter range forage conditions, public land range availability and landowner acceptance will determine herd size. Excessive habitat utilization will be addressed with antlerless hunting.
- < **Predation** – DWR will follow the strategies outlined in the predator management policy.
- <

- < Highway Mortality – Highway mortality is a significant factor in reduced population growth in deer. DWR will work with UDOT, Summit and Daggett counties, Universities, local conservation groups, and landowners to minimize highway mortality by identifying locations of high deer-vehicle collisions and erecting sufficient wildlife crossing structures in those locations. DWR will evaluate the effectiveness of the crossing structures over time and implement new technologies to improve future wildlife crossing structures.
- < Disease – The impact of disease on deer herds is difficult to assess. Monitoring will continue for diseases that have been found in the state including bluetongue, epizootic hemorrhagic disease (EHD), pneumonia, enterotoxemia, and chronic wasting disease (CWD). CWD has been documented on the North Slope Unit. Since 2002 when CWD monitoring was initiated, 7 samples from deer have tested positive for CWD out of 4790 samples tested from across the North Slope and South Slope units. No elk samples have tested positive on the North Slope unit since sampling began in 2002.
- < Illegal Harvest - Support law enforcement efforts to educate the public concerning poaching and reduce illegal taking of deer.

HABITAT MANAGEMENT OBJECTIVES

- < Protect, maintain and/or enhance forage production through direct range improvements throughout the unit to achieve herd population management objectives. Minimize and mitigate impacts from energy development activities. Minimize deer vehicle collisions along highways on the unit.
- < Work with private landowner and federal, state and local government agencies to maintain and protect critical and existing winter range from future losses and degradation through grazing management and OHV and Travel Plan modifications.
- < Work with federal, private, and state partners to improve crucial deer habitats through the Watershed Restoration Initiative (WRI) process. Also work with federal and state partners in fire rehabilitation on crucial deer habitat through the WRI process.
- < Maintain and protect critical winter range from future losses. Preserve, protect and/or acquire critical winter range when the opportunity arises.
- < Provide improved habitat security and escapement opportunities for deer.

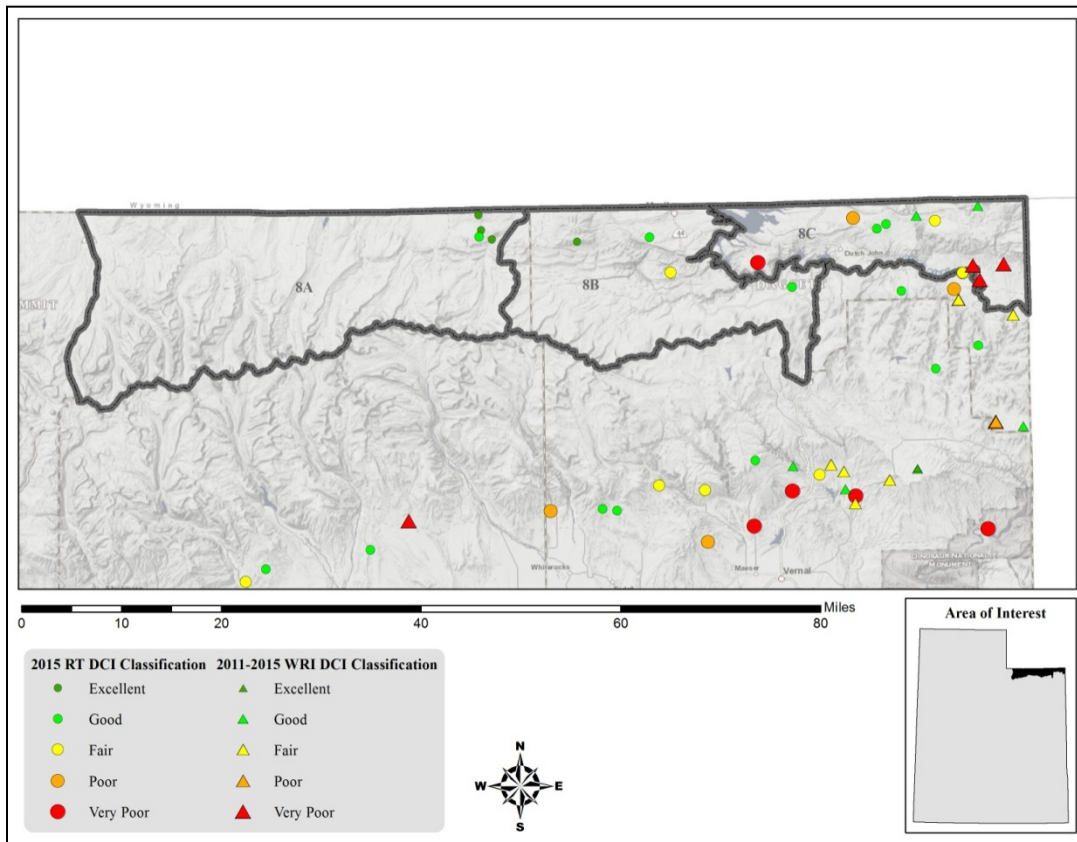
HABITAT MANAGEMENT STRATEGIES

- < Continue to improve, protect, and restore sagebrush steppe habitats critical to deer. Cooperate with federal land management agencies and private landowners in carrying out habitat improvements such as pinion-juniper removal, reseeding, controlled burns, grazing management, water developments, etc. on public and private lands. Habitat improvement projects will occur on both winter ranges as well as summer range.
- < Continue to monitor permanent range trend studies located throughout the herd unit.
- < Conduct cooperative seasonal range rides and surveys to evaluate forage condition and utilization. Determining opportunities for habitat improvements will be an integral part of these surveys. This will also be pivotal in determining if antlerless harvest is necessary.
- < Work toward long term habitat protection and preservation through the use of agreements with federal agencies and local governments and the use of conservation easements on private lands.

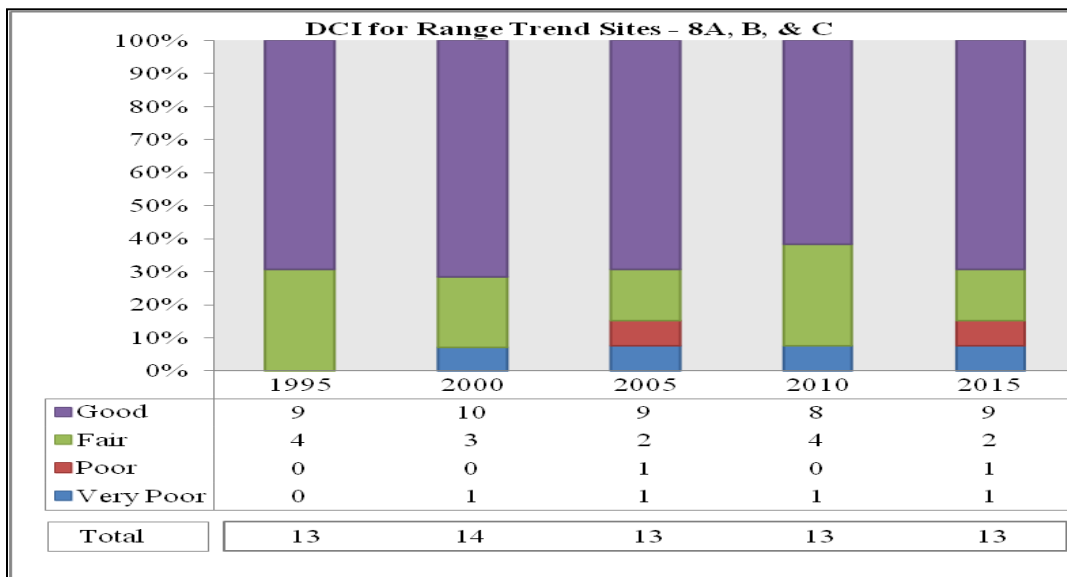
- < Work with land management agencies, conservation organizations, private landowners, and local leaders through the regional WRI working groups to identify and prioritize mule deer habitats that are in need of enhancement or restoration.
- < Utilize antlerless deer harvest to improve or protect forage conditions if and when vegetative declines are attributed to deer over utilization.
- < Initiate broad scale vegetative treatment projects to improve mule deer habitat with emphasis on drought or fire damaged sagebrush winter ranges, ranges that are being taken over by invasive annual grass species, and ranges being diminished by encroachment of conifers into sagebrush or aspen habitats.
- < Support, cooperate with, and provide input to land management planning efforts dealing with actions affecting habitat security, quality and quantity.
- < Manage vehicle access on DWR lands to limit human disturbance during times of high stress, such as winter and fawning.
- < Manage riparian areas in critical fawning habitat to furnish water, cover, and succulent forage from mid to late summer.
- < Properly manage elk populations to minimize competition with mule deer on crucial ranges.
- < Reduce expansion of pinion-juniper and other woodlands into sagebrush habitats and improve habitats dominated by pinion-juniper woodlands by completing habitat restoration projects like lop and scatter, bullhog, and chaining.
- < Manage conifer encroachment on important summer ranges by utilizing prescribed fire. Seek opportunities to increase browse in burned areas of critical winter range.
- < Protect deer winter ranges from wildfire by reseeding burned areas, creating fuel breaks and vegetated green strips and reseed areas dominated by cheat grass with desirable perennial vegetation.
- < Work with state and federal land management agencies to properly manage livestock to enhance crucial mule deer ranges
- < Minimize impacts and mitigate for losses of crucial habitat due to human impacts and energy development. Oil and gas specific habitat biologists will lead this effort.
- < Work with county, state, and federal agencies to limit the negative effects of roads by reclaiming unused roads, properly planning new roads, and installing fencing and highway passage structures where roads disrupt normal mule deer migration patterns.

PERMANENT RANGE TREND SUMMARIES

Distribution of Range Trend study sites in the North Slope Unit:



Trend of deer winter range condition on Unit 8 as indicated by DWR permanent Big Game Range Trend studies:



Condition of deer winter range on Unit 8 as indicated by DWR range trend surveys:

8bc (West Daggett & Three Corners)

Year	Mean DCI Score for Unit	Classification	Unit-specific DCI Score Range: Low	Unit-specific DCI Score Range: Mid	Unit-specific DCI Score Range: High
1995	74	Good	65	76	76
2000	70	Good	57	74	81
2005	64	Good	54	60	85
2010	68	Good	52	63	87
2015	66	Good	21	75	90

8a (Summit)

Year	Mean DCI Score for Unit	Classification	Unit-specific DCI Score Range: Low	Unit-specific DCI Score Range: Mid	Unit-specific DCI Score Range: High
1995	90	Good	-	-	90
2000	93	Excellent	-	-	93
2005	88	Good	-	-	88
2010	93	Excellent	-	-	93
2015	94	Excellent	-	-	94

APPENDIX

Unit 8bc, North Slope, Daggett and Three Corners subunits

Overall range trend within these subunits is good. Some areas within this subunit suffered a sagebrush die-off, primarily due to the extensive seven-year drought. This is reflected in the DCI rating for these sites.

There are ten permanent winter range trend study sites on this portion of the unit. In 2010, two sites had a higher Desired Components Index figure showing an improvement in habitat quality. Study sites in the low ecological potential had a slight decrease in their DCI rating, while the mid potential was up slightly. The overall DCI rating is "Good" at 66 for 2015, which is down from 68 found in the year 2010.

The Utah Division of Wildlife Resources Big Game Range Inventory crew read a total of 10 range trend study sites during 2015. Three sites had improving browse trend, 4 were stable and 3 had declining trends due to drought conditions and/or increases in annual grasses. Overall, the majority of the sites are in good condition. The key browse species are principally Wyoming big sagebrush, mountain big sagebrush and mountain browse species such as true mountain mahogany. Areas where sagebrush is the key species have remained stable, but recruitment of young plants has generally remained low. The perennial forb understories associated with mountain big sagebrush and Wyoming big sagebrush have stayed low, but have shown stable to upward trends for perennial grasses. Annual grasses, namely cheatgrass, have increased across sites, placing sites at increased risk for fire.

Two additional range trend sites located in Brown's Park, south of the Green River, are technically in the South Slope Diamond Mountain subunit, but can be used to show range trend on the Three Corners Subunit. They both show fair DCI ratings, and both have low potential ecological potential.

Essential vegetation types monitored include Mountain big sagebrush, Wyoming big sagebrush and mountain brush (which includes bitterbrush, mountain mahogany, curleaf mahogany and service berry).

Unit 8a, North Slope, Summit Subunit

The steep slopes on the study sites have high erosion potential. However, the understory, especially the bunch grasses, is dense and vigorous and provides adequate soil stabilization. Browse trends on the unit for the key browse species, mountain mahogany, are stable to slightly up. The sites in this area all show a stable to slightly increasing trend. The slight upward trend in the last 5 years is probably a result of increased precipitation. The overall DCI rating is excellent.