

UTAH BLACK BEAR ANNUAL REPORT 2010



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UTAH BLACK BEAR ANNUAL REPORT 2010

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Annual Performance Report for Federal Aid Project W-65-M, segments 58 and 59

State of Utah
Department of Natural Resources
DIVISION OF WILDLIFE RESOURCES

An Equal Opportunity Employer

James F. Karpowitz
Director

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INTRODUCTION

The black bear harvest report presents black bear harvest and hunter effort trends across the state of Utah, based on data collected from bear hunters and compiled by the Utah Division of Wildlife Resources (Division). This report represents the black bear portion of Federal Aid Project W-65-M, segments 58 and 59, grant agreement periods October 1, 2009 through September 30, 2010 and October 1, 2010 through September 30, 2011, respectively. This Federal Aid project covers the 2010 hunting season. This report presents black bear statewide trends since the 1960s, as well as population trend indicators.

For purposes of effective management, the state of Utah is divided into 30 wildlife management units, which are the same for all hunted species. For black bears, some of these units were combined into larger units in order to provide hunters more opportunity, and a few units were open to pursuit only. Hunt units were managed through a limited entry permit system, where a hunter had to apply for and draw from a pool of limited permits. The hunter was allowed to hunt the entire season, or until the permit was filled. Applicants who drew a limited entry permit were required to wait two years before applying for another permit. The season limit was one bear, and females with cubs, or cubs, were not legal to harvest. An unlimited number of pursuit only permits, valid on any open unit statewide, were also available.

A total of 22 management units were open for black bear hunting during the 2010 spring and fall hunting seasons. The spring hunting season opened April 10, 2010 and closed May 30, 2010, except for 6 units that closed June 6, 2010 (Cache/Ogden/Morgan Rich/East Canyon; Central Mountains, Nebo; Central Mountains, Manti-South; Chalk Creek/Kamas/North Slope, Summit; Wasatch Mountains, Currant Creek, Avintaquin; Wasatch Mountains, West). The first half of the fall hunting season opened August 28, 2010 and closed September 30, 2010, and the second half of the fall hunting season opened November 1, 2010 and closed November 30, 2010.

Black bear pursuit was open in all 22 units during 2010, within specified dates. The spring pursuit season opened April 10, 2010 and closed May 30, 2010, except for 6 units that closed June 6, 2010 (Cache/Ogden/Morgan Rich/East Canyon; Central Mountains, Nebo; Central Mountains, Manti-South; Chalk Creek/Kamas/North Slope, Summit; Wasatch Mountains, Currant Creek, Avintaquin; Wasatch Mountains, West). The fall pursuit season opened November 1, 2010 and closed November 30, 2010. The summer pursuit season opened July 10, 2010 and closed August 8, 2010 in all but 3 units. These 3 units, Book Cliffs, La Sal (La Sal Mountains and Dolores Triangle), and San Juan, were closed to general black bear pursuit and only pursuers who applied for and obtained a restricted pursuit permit were allowed to pursue in 1 of those units. Restricted pursuit permits were valid for either an early (July 8 – July 22, 2010) or a late (July 29 – August 12, 2010) season in 1 of the 3 restricted units. These restricted pursuit permits could also be used to pursue bears in any non-restricted unit during the spring, summer, and fall seasons.

METHODS

All successful hunters were required to have their bear checked by a Division office or officer within 48 hours of harvest. At that time, tooth and hair samples were collected, and a permanent tag affixed. Bear harvest information was also collected at that time. Teeth were sectioned and

cementum annuli counted by Matson's Lab in Milltown, Montana, to estimate age of harvested bear. Survival rates were estimated using the Chapman-Robson estimator. Ages for bears harvested during the fall season covered in this annual report are not available at the time of publishing. Therefore, mean ages and survival rates are calculated using ages from bears harvested in the spring and the previous fall. Age data for depredation and other mortality are also not available at the time of publishing, so mean ages are calculated using ages from bears harvested from July of the previous year to June 30 of the current year. Age data and survival, beginning with 2006, were adjusted in the 2007 report to reflect this change in methods.

In past years, a black bear harvest mail questionnaire was sent each fall to all bear permit holders. This questionnaire was used to obtain hunter effort information from those who did not harvest a bear. Beginning with the 2000 bear season, this questionnaire was discontinued. As such, numbers of hunters afield each season and bears per hunter were no longer calculated. For the 2010 spring and summer pursuit seasons, both an Internet survey and a telephone survey were conducted to obtain bear pursuit data. No data was collected for the fall pursuit season in 2010.

Harvest data from depredating bears, or bears involved in human safety incidents, were taken from damage reports received from USDA-APHIS Wildlife Services and from bears taken by Division personnel. Livestock operators could kill damaging bears and were required to have the carcass checked by a Division officer within 48 hours. Harvest information was collected at that time.

RESULTS

In 2010, a total of 372 limited entry black bear permits were issued, which included 22 conservation and convention permits. Hunters harvested 165 bears, 101 of which were taken in the spring and 64 in the fall. 44% of permits were filled, which was the same as it was in 2008 and 2009. The average age of bears harvested in 2010 was 6.5 and estimated adult survival was 82%. The percent of females in the harvest increased from 31% in 2009 to 33% in 2010, which was still below the maximum percentage of females allowed in the harvest in order to maintain a sustainable population. A total of 53 bears were killed as a result of depredation or other mortality.

460 black bear pursuit permits were sold in 2010. 100 of these permits were permits sold through a drawing system and were valid for one restricted summer pursuit unit/season in addition to all other unrestricted units and seasons. 326 pursuers went afield during the spring pursuit season. 185 pursuers pursued in unrestricted units during the summer pursuit season and 63 pursuers pursued in restricted units during the restricted summer pursuit seasons. During the spring pursuit season, pursuers treed 0.41 bears per day, while during the summer pursuit season, pursuers treed 0.35 bears per day.

More detailed information describing the 2010 black bear harvest and black bear harvest trends can be found in the following tables and figures.

Statewide black bear historical harvest statistics, Utah 1967–2000.

Year	Permits sold	Hunters afield	Sport harvest	Permits filled (%)	Bears / hunter	% females	Depredation / other mortality	Total harvest + mortality	Pursuit permits*
1967	—	—	15	—	—	—	12	27	—
1968	—	—	12	—	—	—	9	21	—
1969	43	31	25	58	0.81	—	27	52	—
1970	155	119	9	6	0.08	—	18	27	—
1971	59	48	17	29	0.35	—	16	33	—
1972	96	77	19	20	0.25	—	7	26	—
1973	125	114	25	20	0.22	—	0	25	—
1974	134	117	29	22	0.25	—	9	38	—
1975	161	144	22	14	0.15	41	2	24	161
1976	107	96	10	9	0.10	42	7	17	48
1977	149	127	26	17	0.20	33	6	32	77
1978	222	185	40	18	0.22	33	10	50	114
1979	240	196	26	11	0.13	19	5	31	91
1980	217	177	26	12	0.15	28	6	32	95
1981	263	227	39	15	0.17	30	4	43	95
1982	229	188	38	17	0.20	39	6	44	93
1983	219	176	18	8	0.10	44	9	27	98
1984	217	184	26	12	0.14	31	6	32	33
1985	269	230	29	11	0.13	27	10	39	86
1986	332	302	72	22	0.24	45	6	78	90
1987	326	262	44	13	0.17	35	25	69	156
1988	491	394	69	14	0.18	35	28	97	173
1989	687	556	97	14	0.17	30	10	107	187
1990	142	119	22	15	0.18	18	16	38	355
1991	142	119	35	25	0.29	23	15	50	364
1992	142	124	32	23	0.26	19	25	57	524
1993	162	136	35	22	0.26	51	12	47	570
1994	168	153	42	25	0.27	40	20	62	552
1995	175	156	53	30	0.34	34	34	87	627
1996	181	174	68	38	0.39	43	35	103	630
1997	192	176	50	26	0.28	44	31	81	638
1998	202	181	46	23	0.25	42	42	88	635
1999	220	199	57	26	0.29	30	35	92	264
2000	214	194	75	35	0.39	35	72	147	285

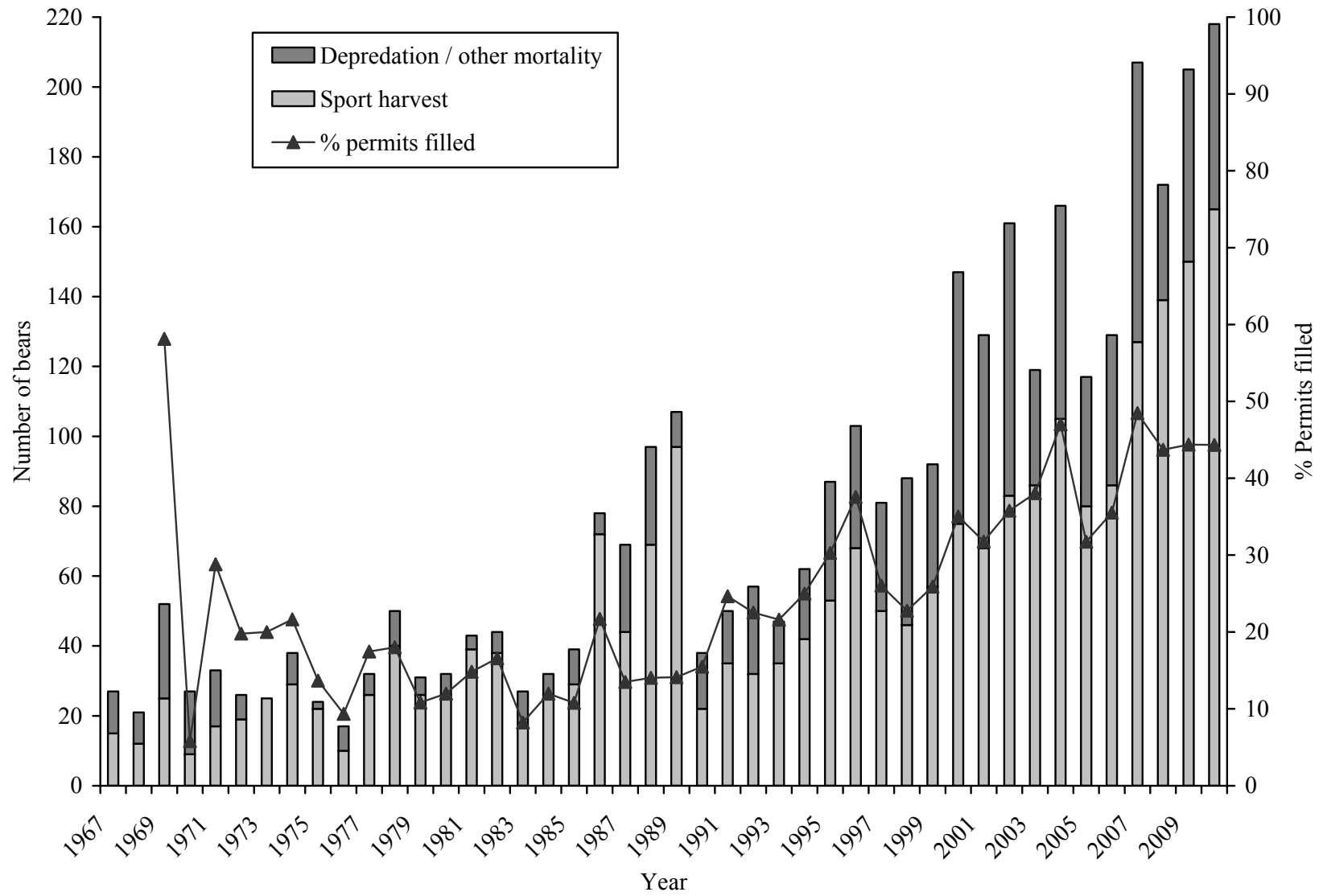
* Beginning in 1999, a bear-only pursuit permit was issued. Prior to 1999, cougar/bear pursuit permits were issued.

Statewide black bear harvest statistics, Utah 2001–2010.

Year	Sport harvest											Depredation / other mortality			Total harvest + mortality
	Permits issued	Spring harvest		Fall harvest		Unknown harvest	Total harvest	% permits filled	% females	Mean age	Adult survival	Male	Female	Unknown	
Male	Female	Male	Female												
2001	214	17	3	24	22	2	68	32	37	6.9	0.79	39	21	1	129
2002	232	30	6	23	21	3	83	36	33	6.8	0.83	43	27	8	161
2003	226	27	12	32	15	0	86	38	31	7.4	0.83	22	8	3	119
2004	240	30	7	53	15	0	105	44	21	6.6	0.82	34	23	4	166
2005	252	14	3	47	16	0	80	32	24	6.6	0.84	16	17	4	117
2006	242	36	20	22	8	0	86	36	33	6.8	0.86	20	16	7	129
2007	262	60	19	31	17	0	127	48	28	5.7	0.80	48	24	8	207
2008	318	64	25	32	16	2	139	44	29	5.9	0.81	18	8	7	172
2009	338	75	34	29	12	0	150	44	31	6.1	0.81	34	20	1	205
2010	372	72	29	38	26	0	165	44	33	6.5	0.82	33	18	2	218
Mean*	270	43	16	33	17	1	109	40	30	6.5	0.82	31	18	5	162

*Since the implementation of the spring bear hunt in 2001.

Statewide black bear mortality, Utah 1967–2010.



Statewide black bear spring and fall sport harvest by unit / subunit, Utah 2010.

Unit / Subunit	Permits issued				Spring harvest		Fall harvest		Total harvest	% permits filled	% females	Mean age of harvest*
	Spring	Fall	Conservation	Total	Male	Female	Male	Female				
Book Cliffs, Bitter Creek/South	17	5	1	23	9	2	1	1	13	57	23	8.2
Book Cliffs, Little Creek	4	1	0	5	2	0	1	0	3	60	0	12.0
Cache/Ogden/Morgan-Rich/East Canyon	2	2	0	4	1	0	0	0	1	25	0	6.0
Central Mountains, Manti-North	14	4	1	19	2	2	1	0	5	26	40	6.5
Central Mountains, Manti-South	5	6	1	12	4	0	3	3	10	83	30	6.6
Central Mountains, Nebo	9	3	1	13	4	2	0	0	6	46	33	7.5
Chalk Creek/Kamas/North Slope, Summit	7	5	1	13	1	1	3	2	7	54	43	8.0
Fillmore, Pahvant/Beaver	7	6	1	14	2	0	1	1	4	29	25	8.0
La Sal, La Sal Mountains/Dolores Triangle	28	10	2	40	11	4	2	4	21	53	38	7.5
Monroe	1	1	0	2	0	0	0	0	0	0	—	—
Mt. Dutton	1	1	0	2	0	0	1	0	1	50	0	—
Nine Mile, Anthro/Range Creek	22	15	2	39	5	0	3	4	12	31	33	5.5
North Slope, Daggett/Three Corners	7	2	0	9	1	0	0	1	2	22	50	10.0
Panguitch Lake/Zion	5	4	1	10	2	0	3	1	6	60	17	6.7
Paunsaugunt	2	1	0	3	0	0	1	0	1	33	0	—
Plateau, Boulder/Kaiparowits	15	10	0	25	3	4	4	0	11	44	36	6.6
Plateau, Fishlake/Thousand Lakes	2	3	0	5	0	0	1	0	1	20	0	—
San Juan	24	10	2	36	11	5	4	4	24	67	38	6.9
South Slope, Vernal/Diamond Mountain/Bonanza	14	7	1	22	2	2	4	3	11	50	45	4.6
South Slope, Yellowstone	10	7	0	17	1	1	1	0	3	18	33	6.0
Wasatch Mountains, Currant Creek/Avintaquin	17	6	1	24	3	1	2	0	6	25	17	4.7
Wasatch Mountains, West	23	10	1	34	8	5	2	2	17	50	41	4.1
Statewide total	236	119	17	372	72	29	38	26	165	44	33	6.5

* Mean age of harvest is based on bears harvested fall 2009 and spring 2010.

** Total conservation permits includes 1 statewide conservation permit.

Adult black bear survival estimated with Chapman-Robson estimator, Utah 1996–2010.

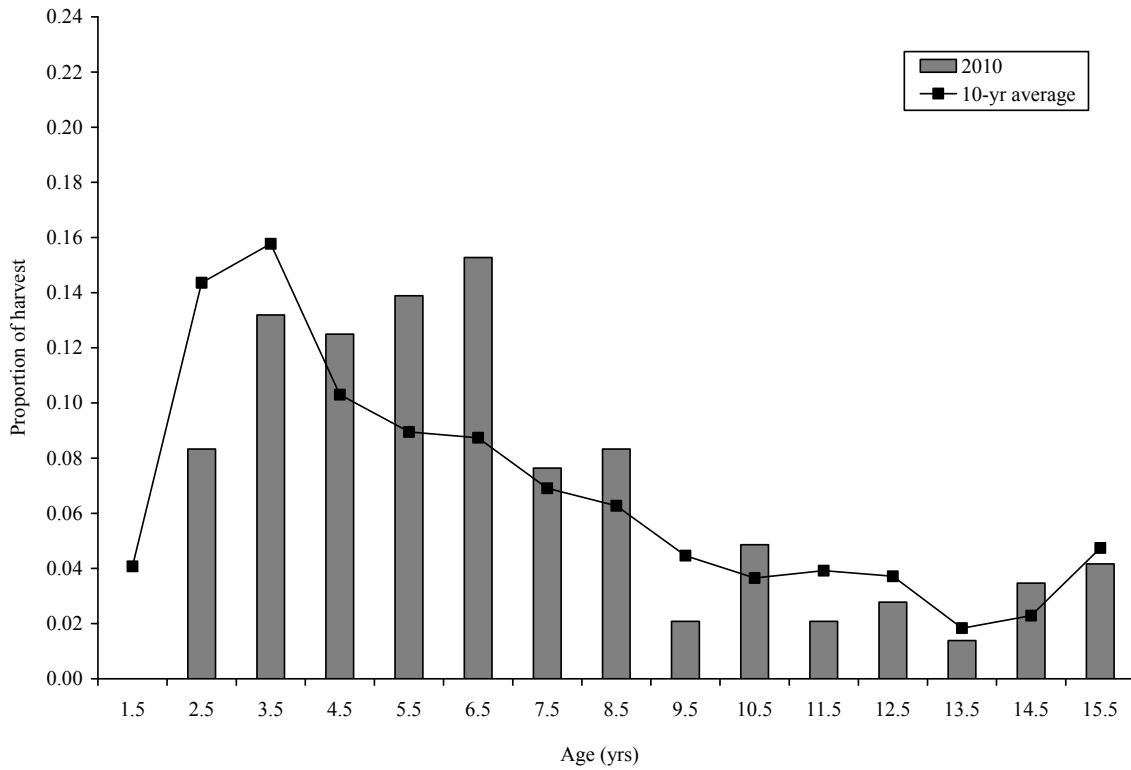
Year	n	Adult survival (%)	95% confidence interval
1996	83	79.4	75.4–83.4
1997	60	78.0	73.0–83.0
1998	54	77.7	72.4–83.0
1999	—	82.0	77.7–86.2
2000	83	80.9	77.2–84.6
2001	98	81.5	78.2–84.8
2002	130	81.2	78.3–84.1
2003	68	83.6	80.0–87.2
2004	115	82.4	79.5–85.4
2005	58	83.6	79.7–87.5
2006	62	85.0	81.5–88.5
2007	109	80.2	76.8–83.5
2008	99	81.0	77.7–84.4
2009	142	81.0	78.2–83.9
2010	144	81.9	79.2–84.6

* Survival rates since 2001 are estimated using ages from bears harvested in the spring and the previous fall.

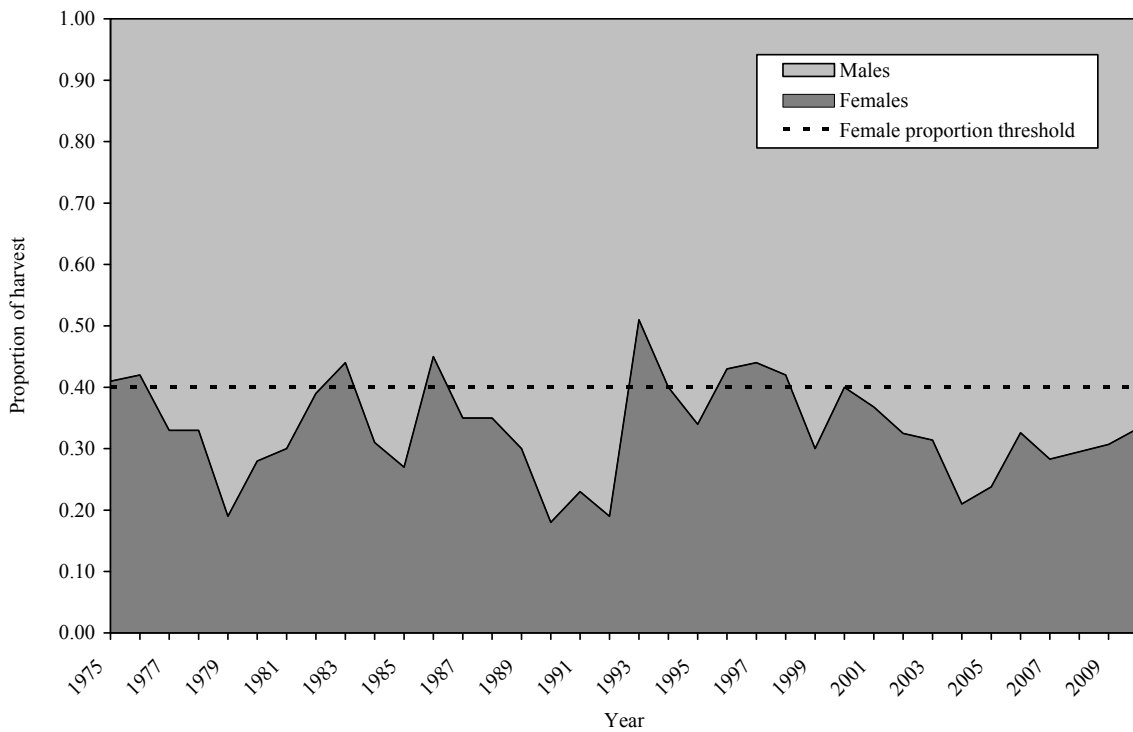
Percent of black bear harvest by method of take, Utah 2001–2010.

Year	Method of take (%)					% harvest taken by archery	% harvest taken with the use of a guide
	Bait	Dogs	Calls	Stalk	Unknown		
2001	6	65	1	4	24	12	41
2002	8	71	0	1	19	18	33
2003	12	70	0	0	19	26	22
2004	17	65	2	8	9	31	37
2005	8	84	1	3	5	26	29
2006	6	77	0	10	7	21	41
2007	12	75	0	7	6	26	32
2008	14	71	1	12	2	31	33
2009	19	66	0	12	3	33	31
2010	18	67	0	8	7	33	32

Proportion of black bears harvested by age class, Utah 2010.



Sex ratio of black bear sport harvest, Utah 1975–2010.



Historic statewide black bear pursuit statistics, Utah 2002–2010.

Year	Permits sold	Spring				General season summer / fall			
		n	Pursuers	Bears / pursuit-day	Bears / pursuer	n	Pursuers	Bears / pursuit-day	Bears / pursuer
2002	359	88	318	0.46	7.5	—	—	—	—
2003	378	91	291	0.49	8.7	65	228	0.52	6.2
2004	373	73	309	0.43	5.0	54	212	0.45	5.9
2005	414	103	256	0.41	5.0	220	436	0.33	2.7
2006	353	78	328	0.29	3.7	—	—	—	—
2007	363	120	329	0.54	6.5	57	157	0.62	4.3
2008	391	96	313	0.62	7.8	73	238	0.93	5.4
2009	424	90	359	0.39	5.1	72	287	0.52	4.9
2010	460	172	326	0.41	4.9	79	164	0.35	2.6
Mean	391	101	314	0.45	6.0	89	246	0.49	4.4

Spring 2002 includes summer/fall 2001 and spring 2002.

Spring 2003 includes summer/fall 2002 and spring 2003.

Beginning with 2007, summer/fall only includes summer season.

In 2010, general season summer/fall pursuit does not include pursuit activity of any pursuers who obtained a restricted summer season pursuit permit.

Black bear pursuit statistics during restricted summer pursuit seasons, 2010.

Year	Permits sold	n	Pursuers	Bears / pursuit-day	Bears / pursuer
2010	100	70	63	0.75	4.9

Statewide spring black bear pursuit statistics by unit / subunit, Utah 2010.

Unit / Subunit	n	Pursuers afield	Pursuit- days afield	Number of bears treed					Bears treed / pursuit-day	Bears treed / pursuer
				Males	Females	Cubs	Unknown	Total		
Book Cliffs, Bitter Creek/South	40	76	914	174	178	51	45	448	0.49	5.9
Book Cliffs, Little Creek	3	6	70	6	13	2	2	23	0.33	3.8
Cache/Ogden/Morgan Rich/East Canyon	5	9	34	4	0	0	0	4	0.12	0.4
Central Mountains, Manti-North	6	11	49	2	9	4	0	15	0.31	1.4
Central Mountains, Manti-South	17	32	212	15	19	6	0	40	0.19	1.3
Central Mountains, Nebo	9	17	115	4	13	0	2	19	0.17	1.1
Chalk Creek/Kamas/North Slope, Summit	2	4	47	6	8	0	2	16	0.34	4.0
Fillmore, Pahvant/Beaver	15	28	197	27	15	0	2	44	0.22	1.6
La Sal, La Sal Mountains/Dolores Triangle	34	64	572	110	134	78	38	360	0.63	5.6
Monroe	0	—	—	—	—	—	—	—	—	—
Mt. Dutton	0	—	—	—	—	—	—	—	—	—
Nine Mile, Anthro/Range Creek	7	13	72	15	8	0	0	23	0.32	1.8
North Slope, Daggett/Three Corners	0	—	—	—	—	—	—	—	—	—
Panguitch Lake/Zion	1	2	19	2	2	0	0	4	0.21	2.0
Paunsaugunt	0	—	—	—	—	—	—	—	—	—
Plateau, Boulder/Kaiparowits	12	23	123	17	21	9	9	56	0.46	2.4
Plateau, Fishlake/Thousand Lakes	3	6	32	0	2	0	0	2	0.06	0.3
San Juan	36	68	655	153	140	36	33	362	0.55	5.3
South Slope, Vernal/Diamond Mountain/Bonanza	24	45	428	49	53	2	11	115	0.27	2.6
South Slope, Yellowstone	1	2	4	0	0	0	0	0	0.00	0.0
Wasatch Mountains, Currant Creek/Avintaquin	12	23	123	4	13	4	9	30	0.24	1.3
Wasatch Mountains, West	14	27	197	6	9	0	0	15	0.08	0.6
Unknown	1	2	2	2	2	0	2	6	3.00	3.0
Statewide total*	172	326	3865	596	639	192	155	1582	0.41	4.9

*Totals for sample size and pursuers afield are not the sum of the columns because pursuers could pursue on multiple units.

243 permit holders surveyed; 460 permits sold; Projection factor = 1.89

29% of permit holders did not pursue spring season

Statewide general season summer black bear pursuit statistics by unit / subunit, Utah 2010.

Unit / Subunit	n	Pursuers afield	Pursuit- days afield	Number of bears treed					Bears treed / pursuit-day	Bears treed / pursuer
				Males	Females	Cubs	Unknown	Total		
Book Cliffs*	2	4	58	12	6	4	0	22	0.38	5.5
Cache/Ogden/Morgan-Rich/East Canyon	1	2	8	0	0	0	0	0	0.00	0.0
Central Mountains, Manti-North	3	6	23	0	0	0	0	0	0.00	0.0
Central Mountains, Manti-South	18	37	254	29	40	35	4	108	0.43	2.9
Central Mountains, Nebo	7	15	81	6	6	0	0	12	0.15	0.8
Chalk Creek/Kamas/North Slope, Summit	3	6	31	2	4	4	0	10	0.32	1.7
Fillmore, Pahvant/Beaver	10	21	119	12	25	4	0	41	0.34	2.0
La Sal*	0	—	—	—	—	—	—	—	—	—
Monroe	0	—	—	—	—	—	—	—	—	—
Mt. Dutton	0	—	—	—	—	—	—	—	—	—
Nine Mile, Anthro/Range Creek	4	8	60	23	19	2	0	44	0.73	5.5
North Slope, Daggett/Three Corners	1	2	10	0	0	0	0	0	0.00	0.0
Panguitch Lake/Zion	3	6	44	0	0	0	0	0	0.00	0.0
Paunsaugunt	0	—	—	—	—	—	—	—	—	—
Plateau, Boulder/Kaiparowits	8	17	148	27	40	4	2	73	0.49	4.3
Plateau, Fishlake/Thousand Lakes	0	—	—	—	—	—	—	—	—	—
San Juan*	1	2	4	2	0	0	0	2	0.50	1.0
South Slope, Vernal/Diamond Mountain/Bonanza	15	31	218	42	42	10	6	100	0.46	3.2
South Slope, Yellowstone	3	6	27	2	2	0	0	4	0.15	0.7
Wasatch Mountains, Currant Creek/Avintaquin	5	10	29	2	0	0	2	4	0.14	0.4
Wasatch Mountains, West	8	17	106	2	2	0	2	6	0.06	0.4
Unknown	0	—	—	—	—	—	—	—	—	—
Statewide total**	79	164	1220	161	186	63	16	426	0.35	2.6

*Although these units were closed to general pursuit permit holders, some people still reported pursuing here.

**Totals for sample size and pursuers afield are not the sum of the columns because pursuers could pursue on multiple units.

173 permit holders surveyed; 360 permits sold; Projection factor = 2.08

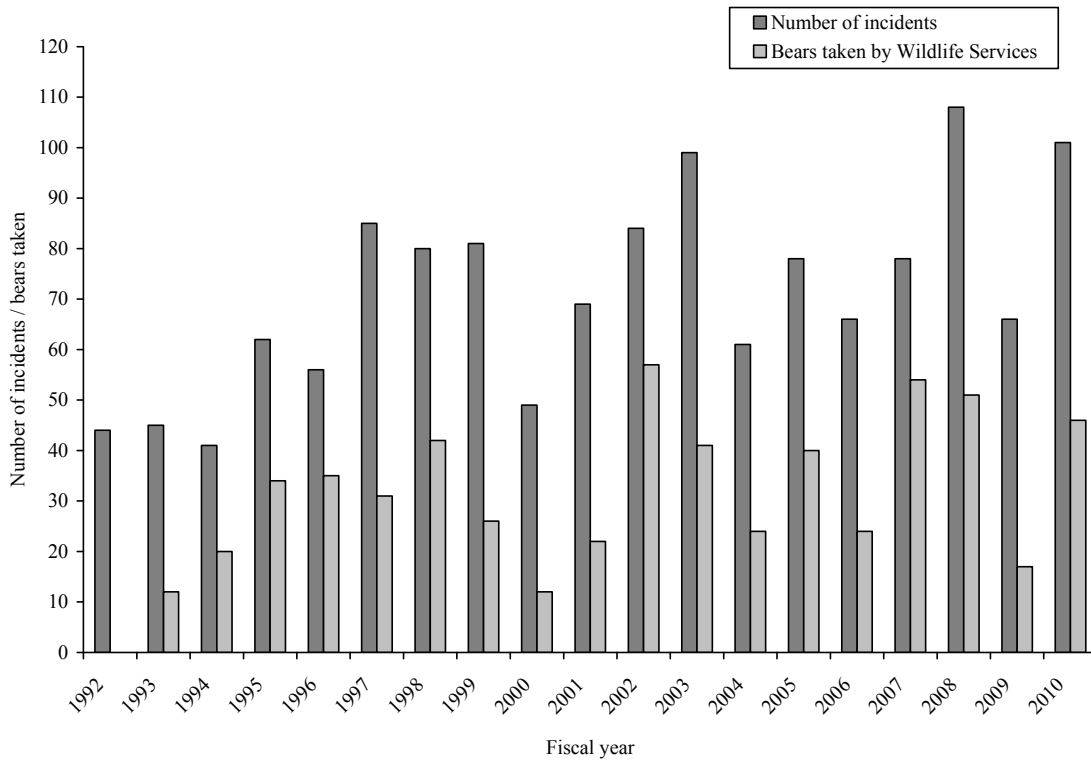
54% of permit holders did not pursue summer season; 42% of permit holders indicated that they intend to pursue fall season

Summer black bear pursuit statistics in restricted units, by unit and season, Utah 2010.

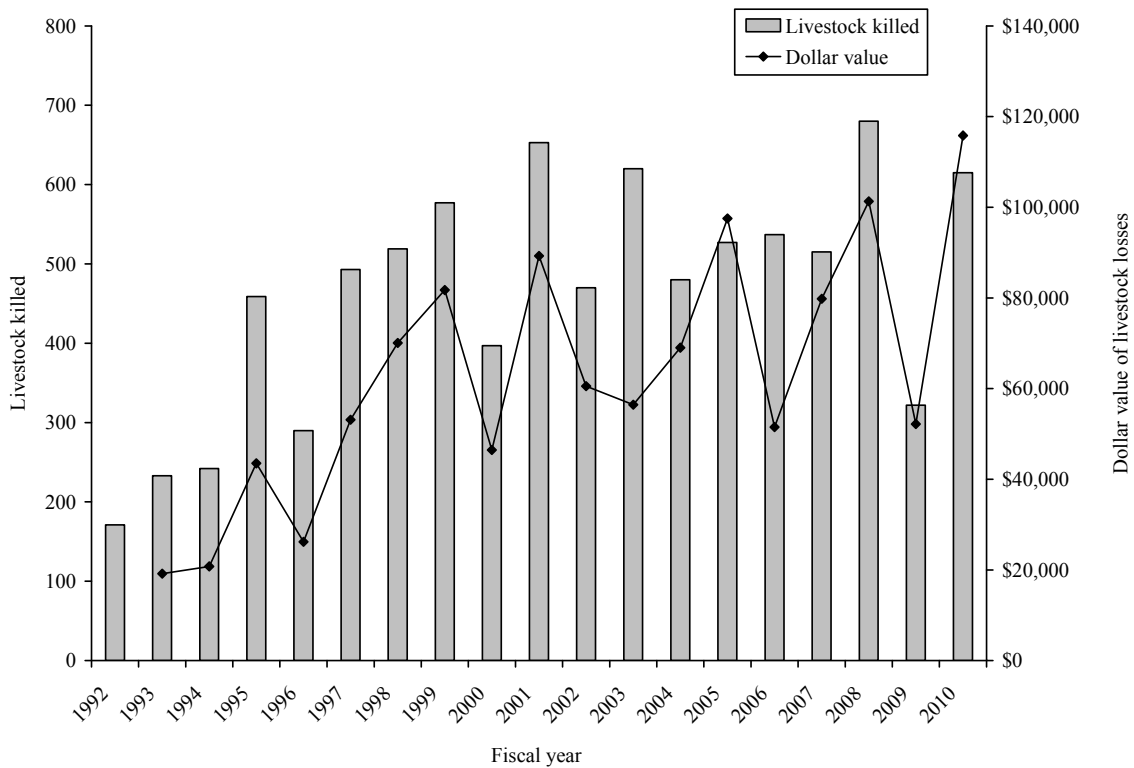
Unit and season	Permits	n	Pursuers afield	Pursuit- days afield	Number of bears treed					Bears treed / pursuit-day	Bears treed / pursuer
					Males	Females	Cubs	Unknown	Total		
Book Cliffs (early)	17	12	6	47	14	13	0	0	27	0.57	4.5
La Sal, La Sal Mountains, Dolores Triangle (early)	20	14	17	113	23	46	19	19	107	0.95	6.3
San Juan (early)	13	10	12	78	27	14	1	10	52	0.67	4.3
Book Cliffs (late)	17	9	9	36	13	6	0	0	19	0.53	2.1
La Sal, La Sal Mountains, Dolores Triangle (late)	20	16	11	94	25	33	11	5	74	0.79	6.7
San Juan (late)	13	9	7	40	9	12	3	3	27	0.68	3.9

70 permit holders surveyed; 100 permits sold; Projection factor = 1.43
 51% of permit holders indicated that they intend to pursue fall season

Livestock depredation incidents and black bears killed by Wildlife Services, Utah 1992–2010.



Livestock losses due to black bear depredation, Utah 1992–2010.



APPENDIX

HISTORIC BLACK BEAR HARVEST BY HUNT UNIT

Black bear mortality for unit 2/3/4/5 – Cache/Ogden/Morgan-Rich/East Canyon, Utah 1990–2010.

Year	Sport harvest							Depredation / other mortality			Total harvest + mortality			
	Permits issued	Spring		Fall		Unknown	Total	% permits filled	% females	Mean age		Male	Female	Unknown
		Male	Female	Male	Female									
1990	1			0	0	0	0	0	—	—	0	0	0	0
1991	1			0	0	0	0	0	—	—	0	0	0	0
1992	1			0	0	0	0	0	—	—	0	0	0	0
1993	1			0	0	0	0	0	—	—	0	0	0	0
1994	1			0	0	0	0	0	—	—	0	0	0	0
1995	1			0	0	0	0	0	—	—	0	0	0	0
1996	1			0	0	0	0	0	—	—	0	0	0	0
1997	1			0	0	0	0	0	—	—	1	0	0	1
1998	1			0	0	0	0	0	—	—	0	0	1	1
1999	1			0	0	0	0	0	—	—	1	0	0	1
2000	1			1	0	0	1	100	0	3.0	0	0	0	1
2001	1			0	0	0	0	0	—	—	0	0	0	0
2002	1			0	0	0	0	0	—	—	0	0	0	0
2003	1			0	0	0	0	0	—	—	0	0	0	0
2004	1			0	0	0	0	0	—	—	0	0	0	0
2005	1			0	0	0	0	0	—	—	0	0	0	0
2006	2	0	0	0	0	0	0	0	—	—	0	0	1	1
2007	2	0	0	0	0	0	0	0	—	—	3	1	0	4
2008	4	0	0	0	0	0	0	0	—	—	1	0	0	1
2009	4	0	0	0	0	0	0	0	—	—	0	1	0	1
2010	4	1	0	0	0	0	1	25	0	6.0	0	0	0	1
Mean	2	0	0	0	0	0	0	6	0	4.5	0	0	0	1

* Unit 2 was pursuit only in 2003.

** Unit 5 was added to units 2, 3, and 4 in 2004.

Black bear mortality for unit 6/7/8a – Chalk Creek/Kamas/North Slope, Summit, Utah 1990–2010.

Year	Sport harvest										Depredation / other mortality			Total harvest + mortality
	Permits issued	Spring		Fall		Unknown	Total	% permits filled	% female	Mean age	Male	Female	Unknown	
		Male	Female	Male	Female									
1990	3			0	0	0	0	0	—	—	0	0	0	0
1991	3			0	0	0	0	0	—	—	1	0	0	1
1992	3			1	0	0	1	33	0	—	0	0	0	1
1993	3			0	0	0	0	0	—	—	3	0	0	3
1994	3			0	0	0	0	0	—	—	0	1	0	1
1995	3			0	0	0	0	0	—	—	4	0	0	4
1996	2			0	0	0	0	0	—	—	0	0	0	0
1997	2			1	0	0	1	50	0	—	3	0	0	4
1998	2			0	1	0	1	50	100	—	4	1	0	6
1999	2			0	0	0	0	0	—	—	3	1	0	4
2000	2			0	1	0	1	50	100	—	3	0	0	4
2001	2			0	0	0	0	0	—	—	6	7	0	13
2002	2			0	0	0	0	0	—	—	6	1	0	7
2003	2			1	0	0	1	50	0	—	2	1	0	4
2004	5			1	0	0	1	20	0	2.0	1	3	0	5
2005	5			2	1	0	3	60	33	2.5	2	1	2	8
2006	8	1	0	1	0	0	2	25	0	4.3	3	0	0	5
2007	8	2	0	1	0	0	3	38	0	2.0	8	3	0	14
2008	11	1	0	0	0	0	1	9	0	2.0	3	1	0	5
2009	11	1	2	0	0	0	3	27	67	6.7	0	1	0	4
2010	13	1	1	3	2	0	7	54	43	8.0	5	2	0	14
Mean	5	1	1	1	0	0	1	26	32	4.1	3	1	0	5

Black bear mortality for unit 8bc – North Slope, Daggett/Three Corners, Utah 1998–2010.

Year	Sport harvest										Depredation / other mortality			Total harvest + mortality
	Permits issued	Spring		Fall		Unknown	Total	% permits filled	% female	Mean age	Male	Female	Unknown	
Male	Female	Male	Female	Male	Female						Male	Female	Unknown	
1998	4			0	0	0	0	0	—	—	0	0	0	0
1999	4			1	0	0	1	25	0	1.0	0	0	0	1
2000	4			0	0	0	0	0	—	—	2	0	0	2
2001	4			0	0	0	0	0	—	—	1	0	0	1
2002	4			0	0	0	0	0	—	—	2	2	0	4
2003	4			1	0	0	1	25	0	7.0	0	0	0	1
2004	4			0	0	0	0	0	—	—	1	0	0	1
2005	4			1	1	0	2	50	50	6.0	0	0	0	2
2006	5	0	0	1	0	0	1	20	0	7.0	0	0	0	1
2007	5	0	0	1	1	0	2	40	50	4.0	0	0	0	2
2008	7	1	0	0	1	0	2	29	50	3.0	0	0	0	2
2009	7	3	0	0	0	0	3	43	0	4.0	0	0	0	3
2010	9	1	0	0	1	0	2	22	50	10.0	0	0	0	2
Mean	5	1	0	0	0	0	1	22	29	5.0	0	0	0	2

Black bear mortality for unit 9 – South Slope (all subunits), Utah 1990–2001.

Year	Sport harvest										Depredation / other mortality			Total harvest + mortality
	Permits issued	Spring		Fall		Unknown	Total	% permits filled	% female	Mean age	Male	Female	Unknown	
Male	Female	Male	Female	Male	Female						Male	Female	Unknown	
1990	16			2	1	0	3	19	33	—	1	2	0	6
1991	16			4	0	0	4	25	0	—	1	1	0	6
1992	16			2	1	0	3	19	33	—	4	2	0	9
1993	16			4	1	0	5	31	20	—	1	0	0	6
1994	16			3	1	0	4	25	25	—	1	0	0	5
1995	16			3	2	0	5	31	40	—	6	1	0	12
1996	17			3	0	0	3	18	0	—	4	2	0	9
1997	18			1	1	0	2	11	50	—	3	0	0	5
1998	14			1	2	0	3	21	67	—	3	2	3	11
1999	14			5	1	0	6	43	17	—	2	1	0	9
2000	14			4	1	0	5	36	20	—	3	0	0	8
2001	14			2	2	0	4	29	50	2.6	6	5	1	16
Mean	16	—	—	3	1	0	4	25	28	2.6	3	1	0	9

Black bear mortality for unit 9a – South Slope, Yellowstone, Utah 2002–2010.

Year	Sport harvest							Depredation / other mortality			Total harvest + mortality			
	Permits issued	Spring		Fall		Unknown	Total	% permits filled	% female	Mean age		Male	Female	Unknown
2002	6			1	1	1	3	50	33	6.7	0	0	0	3
2003	7			0	2	0	2	29	100	11.0	0	0	0	2
2004	6			1	2	0	3	50	67	12.3	1	2	0	6
2005	12			4	1	0	5	42	20	4.0	0	1	0	6
2006	12	1	0	2	2	0	5	42	40	4.2	1	1	0	7
2007	14	1	0	1	2	0	4	29	50	2.3	3	1	1	9
2008	18	0	3	2	1	0	6	33	67	5.6	0	1	0	7
2009	18	1	0	0	0	0	1	6	0	8.0	0	0	0	1
2010	17	1	1	1	0	0	3	18	33	6.0	3	1	0	7
Mean	12	1	1	1	1	0	4	29	47	7.5	1	1	0	5

Black bear mortality for unit 9bcd – South Slope, Vernal/Diamond Mountain/Bonanza, Utah 2002–2010.

Year	Sport harvest										Depredation / other mortality			Total harvest + mortality
	Permits issued	Spring		Fall			% permits filled	% female	Mean age	Male	Female	Unknown		
		Male	Female	Male	Female	Unknown	Total							
2002	10			0	2	1	3	30	67	2.7	2	1	0	6
2003	9			2	2	0	4	44	50	7.3	0	1	1	6
2004	10			5	2	0	7	70	29	4.6	0	1	0	8
2005	12			6	1	0	7	58	14	7.3	0	0	0	7
2006	10	3	1	1	1	0	6	60	33	8.3	0	0	0	6
2007	12	3	0	3	2	0	8	67	25	6.8	1	2	0	11
2008	16	6	1	3	0	0	10	63	10	5.1	1	0	0	11
2009	18	2	1	5	1	0	9	50	22	4.7	0	0	0	9
2010	22	2	2	4	3	0	11	50	45	4.6	0	2	0	13
Mean	13	3	1	3	2	0	7	55	29	5.5	0	1	0	9

Black bear mortality for unit 10 – Book Cliffs, Utah 1990–2009.

Year	Sport harvest									Depredation / other mortality			Total harvest + mortality	
	Permits issued	Spring		Fall		Unknown	Total	% permits filled	% female	Mean age	Male	Female		Unknown
Male	Female	Male	Female	Male	Female						Male	Female	Unknown	
1990	18			1	2	0	3	17	67	—	3	0	0	6
1991	18			5	2	0	7	39	29	—	0	0	0	7
1992	18			5	1	0	6	33	17	—	2	0	0	8
1993	18			3	4	0	7	39	57	—	0	0	0	7
1994	18			4	4	0	8	44	50	—	1	0	0	9
1995	18			11	1	0	12	67	8	—	2	0	0	14
1996	18			8	2	0	10	56	20	—	1	0	0	11
1997	18			5	3	0	8	44	38	—	0	0	0	8
1998	30			3	4	0	7	23	57	—	0	0	0	7
1999	30			9	1	0	10	33	10	—	1	1	0	12
2000	29			7	7	0	14	48	50	—	9	3	0	26
2001	15			5	3	0	8	53	38	6.8	1	0	0	9
2002	25			7	5	0	12	48	42	7.3	1	0	1	14
2003	25			4	5	0	9	36	56	8.0	2	0	1	12
2004	25			10	3	0	13	52	23	5.9	2	2	0	17
2005	30			5	3	0	8	27	38	7.3	0	0	0	8
2006	15	4	0	1	0	0	5	33	0	7.5	0	0	0	5
2007	15	7	1	1	0	0	9	60	11	9.8	0	0	0	9
2008	19	9	1	3	1	0	14	74	14	6.2	0	0	0	14
2009	23	10	0	0	0	0	10	43	0	8.9	0	0	0	10
Mean	21	8	1	5	3	0	9	42	29	7.4	1	0	0	11

Black bear mortality for unit 10ab – Book Cliffs, Bitter Creek/South, Utah 2010.

Year	Sport harvest								Depredation / other mortality			Total harvest + mortality		
	Permits issued	Spring		Fall		Unknown	Total	% permits filled	% female	Mean age	Male		Female	Unknown
2010	23	9	2	1	1						0	13	57	23
Mean	23	9	2	1	1	0	13	57	23	8.2	2	2	0	17

Black bear mortality for unit 10c – Book Cliffs, Little Creek, Utah 2010.

Year	Sport harvest								Depredation / other mortality			Total harvest + mortality		
	Permits issued	Spring		Fall		Unknown	Total	% permits filled	% female	Mean age	Male		Female	Unknown
2010	5	2	0	1	0						0	3	60	0
Mean	5	2	0	1	0	0	3	60	0	12.0	0	0	0	3

Black bear mortality for unit 11ab – Nine Mile, Anthro/Range Creek, Utah 1990–2010.

Year	Sport harvest										Depredation / other mortality			Total harvest + mortality
	Permits issued	Spring		Fall		Unknown	Total	% permits filled	% female	Mean age	Male	Female	Unknown	
Male	Female	Male	Female	Male	Female						Male	Female	Unknown	
1990	44			14	0	0	14	32	0	—	6	0	0	20
1991	22			3	2	0	5	23	40	—	1	1	0	7
1992	22			6	0	0	6	27	0	—	4	1	0	11
1993	27			0	4	0	4	15	100	—	0	0	0	4
1994	27			3	7	0	10	37	70	—	4	2	0	16
1995	24			3	4	0	7	29	57	—	3	3	0	13
1996	24			6	6	0	12	50	50	—	5	2	0	19
1997	20			2	2	0	4	20	50	—	1	0	0	5
1998	20			4	1	0	5	25	20	—	0	0	0	5
1999	20			2	1	0	3	15	33	—	0	0	0	3
2000	20			4	4	0	8	40	50	—	9	0	0	17
2001	15	3	0			0	3	20	0	8.3	1	0	0	4
2002	20	7	0			0	7	35	0	5.0	2	3	0	12
2003	20	7	2			0	9	45	22	12.0	0	0	0	9
2004	20	7	2			0	9	45	22	7.6	6	4	0	19
2005	20	2	0			0	2	10	0	6.5	0	0	0	2
2006	22	4	1	1	0	0	6	27	17	10.3	0	0	1	7
2007	26	4	4	1	2	0	11	42	55	5.4	2	3	0	16
2008	29	5	2	1	1	1	10	34	30	6.5	1	0	0	11
2009	34	9	3	2	3	0	17	50	35	7.9	1	2	0	20
2010	39	5	0	3	4	0	12	31	33	5.5	0	0	0	12
Mean	25	5	1	3	3	0	8	32	34	7.1	2	1	0	11

Black bear mortality for unit 13ab – La Sal, La Sal Mountains/Dolores Triangle, Utah 1990–2010.

Year	Sport harvest										Depredation / other mortality			Total harvest + mortality
	Permits issued	Spring		Fall		Unknown	Total	% permits filled	% female	Mean age	Male	Female	Unknown	
Male	Female	Male	Female											
1990	10			1	0	0	1	10	0	—	2	0	0	3
1991	10			6	1	0	7	70	14	—	1	0	0	8
1992	10			1	1	0	2	20	50	—	1	0	0	3
1993	12			4	1	0	5	42	20	—	0	0	0	5
1994	12			8	0	0	8	67	0	—	0	0	0	8
1995	12			3	3	0	6	50	50	—	0	0	0	6
1996	16			6	5	0	11	69	45	—	2	0	0	13
1997	20			6	8	0	14	70	57	—	6	0	0	20
1998	20			6	5	0	11	55	45	—	0	0	1	12
1999	20			5	4	0	9	45	44	—	0	0	0	9
2000	19			4	6	0	10	53	60	—	2	0	0	12
2001	30	13	3			0	16	53	19	8.1	2	0	0	18
2002	30	17	4			0	21	70	19	6.9	3	0	0	24
2003	30	13	5			0	18	60	28	9.0	1	0	0	19
2004	30	12	3			0	15	50	20	7.9	0	1	0	16
2005	30	8	2			0	10	33	20	7.0	0	3	0	13
2006	30	4	6	2	0	0	12	40	50	9.1	0	0	0	12
2007	30	14	4	3	4	0	25	83	32	4.5	0	0	0	25
2008	32	9	5	5	3	0	22	69	36	6.4	2	1	0	25
2009	36	12	5	3	2	0	22	61	32	5.3	0	0	0	22
2010	40	11	4	2	4	0	21	53	38	7.5	2	0	0	23
Mean	23	11	4	4	3	0	13	56	33	6.8	1	0	0	14

Black bear mortality for unit 14 – San Juan, Utah 1990–2010.

Year	Sport harvest										Depredation / other mortality			Total harvest + mortality
	Permits issued	Spring		Fall		Unknown	Total	% permits filled	% female	Mean age	Male	Female	Unknown	
Male	Female	Male	Female	Male	Female						Male	Female	Unknown	
1990	16			4	1	0	5	31	20	—	0	0	0	5
1991	16			3	0	0	3	19	0	—	0	0	0	3
1992	16			3	0	0	3	19	0	—	1	0	0	4
1993	16			0	4	0	4	25	100	—	0	0	0	4
1994	16			4	0	0	4	25	0	—	0	0	0	4
1995	16			5	4	0	9	56	44	—	0	1	0	10
1996	20			9	6	0	15	75	40	—	2	1	0	18
1997	20			4	3	0	7	35	43	—	2	0	0	9
1998	20			6	3	1	10	50	30	—	0	0	0	10
1999	20			4	1	0	5	25	20	—	0	0	0	5
2000	19			9	2	0	11	58	18	—	2	0	0	13
2001	30			12	7	1	20	67	35	7.3	4	3	0	27
2002	30			10	5	0	15	50	33	8.1	3	0	0	18
2003	30			10	3	0	13	43	23	7.4	0	0	0	13
2004	30			18	1	0	19	63	5	8.4	0	0	0	19
2005	30			8	6	0	14	47	43	9.1	1	2	0	17
2006	29	8	6	2	1	0	17	59	41	9.2	2	1	0	20
2007	34	9	2	8	1	0	20	59	15	9.1	0	0	0	20
2008	34	12	2	6	3	0	23	68	22	7.1	1	0	0	24
2009	35	5	7	3	3	0	18	51	56	6.4	1	0	0	19
2010	36	11	5	4	4	0	24	67	38	6.9	0	1	0	25
Mean	24	9	4	6	3	0	12	50	31	7.4	1	0	0	14

Black bear mortality for unit 16a – Central Mountains, Nebo, Utah 1990–2010.

Year	Sport harvest										Depredation / other mortality			Total harvest + mortality
	Permits issued	Spring		Fall		Unknown	Total	% permits filled	% female	Mean age	Male	Female	Unknown	
Male	Female	Male	Female	Male	Female						Male	Female	Unknown	
1990	3			0	0	0	0	0	—	—	2	0	0	2
1991	3			0	0	0	0	0	—	—	0	0	0	0
1992	3			0	0	0	0	0	—	—	0	0	0	0
1993	6			0	0	0	0	0	—	—	0	0	0	0
1994	6			0	0	0	0	0	—	—	1	0	0	1
1995	6			0	0	0	0	0	—	—	3	0	0	3
1996	6			0	0	0	0	0	—	—	0	0	0	0
1997	6			0	0	0	0	0	—	—	1	0	0	1
1998	6			1	0	0	1	17	0	—	0	0	0	1
1999	6			1	1	0	2	33	50	—	0	0	0	2
2000	6			2	1	0	3	50	33	—	1	0	0	4
2001	6			0	1	1	2	33	50	2.5	0	0	0	2
2002	6			2	1	0	3	50	33	6.0	1	0	1	5
2003	8			4	0	0	4	50	0	3.0	1	0	0	5
2004	8			2	1	0	3	38	33	3.5	1	0	0	4
2005	8			5	0	0	5	63	0	1.8	0	1	0	6
2006	9	1	0	0	1	0	2	22	50	2.9	0	0	0	2
2007	8	2	1	2	1	0	6	75	33	5.0	1	2	0	9
2008	12	2	1	3	0	0	6	50	17	3.2	1	2	0	9
2009	12	3	0	0	0	0	3	25	0	5.5	2	2	1	8
2010	13	4	2	0	0	0	6	46	33	7.5	2	0	0	8
Mean	7	2	1	1	0	0	2	31	24	4.5	1	0	0	3

Black bear mortality for unit 16b – Central Mountains, North Manti, Utah 1990–2010.

Year	Permits issued	Sport harvest						Depredation / other mortality			Total harvest + mortality			
		Spring		Fall		Unknown	Total	% permits filled	% female	Mean age		Male	Female	Unknown
Male	Female	Male	Female	Male	Female						Male	Female	Unknown	
1990	16			1	0	0	1	6	0	—	3	1	0	5
1991	16			2	0	0	2	13	0	—	2	2	0	6
1992	16			2	0	0	2	13	0	—	4	7	0	13
1993	20			0	2	0	2	10	100	—	1	1	0	4
1994	22			0	0	0	0	0	—	—	1	0	0	1
1995	22			2	0	0	2	9	0	—	1	3	0	6
1996	21			1	2	0	3	14	67	—	6	0	0	9
1997	21			2	2	0	4	19	50	—	5	3	0	12
1998	20			0	1	0	1	5	100	—	4	0	1	6
1999	25			3	3	0	6	24	50	—	2	5	0	13
2000	25			1	3	0	4	16	75	—	3	0	0	7
2001	22			1	5	0	6	27	83	3.5	5	0	0	11
2002	16			1	3	1	5	31	60	10.0	1	1	2	9
2003	16			0	1	0	1	6	100	5.0	2	0	0	3
2004	16			4	1	0	5	31	20	3.0	6	1	0	12
2005	16			7	0	0	7	44	0	3.7	1	1	0	9
2006	16	1	2	2	0	0	5	31	40	3.3	1	0	0	6
2007	15	7	0	2	0	0	9	60	0	3.9	4	2	0	15
2008	17	4	1	1	1	0	7	41	29	3.7	0	0	0	7
2009	17	3	2	2	0	0	7	41	29	4.0	4	6	0	17
2010	19	2	2	1	0	0	5	26	40	6.5	9	5	0	19
Mean	19	3	1	2	1	0	4	21	37	4.5	3	2	0	9

Black bear mortality for unit 16c – Central Mountains, South Manti, Utah 1990–2010.

Year	Sport harvest							Depredation / other mortality			Total harvest + mortality			
	Permits issued	Spring		Fall		Unknown	Total	% permits filled	% female	Mean age		Male	Female	Unknown
1990	17			2	0	0	2	12	0	—	0	0	0	2
1991	17			1	2	0	3	18	67	—	0	0	0	3
1992	17			4	1	0	5	29	20	—	1	1	0	7
1993	18			2	2	0	4	22	50	—	0	0	0	4
1994	20			0	0	0	0	0	—	—	0	0	0	0
1995	20			1	0	0	1	5	0	—	0	1	0	2
1996	20			2	2	0	4	20	50	—	1	0	0	5
1997	20			1	1	0	2	10	50	—	1	1	0	4
1998	16			3	0	0	3	19	0	—	1	3	0	7
1999	20			1	0	0	1	5	0	—	1	1	0	3
2000	20			2	1	0	3	15	33	—	10	2	0	15
2001	18			2	1	0	3	17	33	5.0	7	2	0	12
2002	12			1	0	0	1	8	0	3.0	2	2	0	5
2003	12			3	0	0	3	25	0	7.3	1	1	1	6
2004	12			3	1	0	4	33	25	3.0	5	3	0	12
2005	11			4	0	0	4	36	0	2.8	1	1	0	6
2006	11	3	1	1	1	0	6	55	33	4.0	3	1	0	10
2007	11	2	2	2	1	0	7	64	43	3.7	1	1	2	11
2008	12	1	1	0	1	0	3	25	67	3.5	1	0	0	4
2009	12	2	5	2	0	0	9	75	56	6.3	3	2	0	14
2010	12	4	0	3	3	0	10	83	30	6.6	1	3	2	16
Mean	16	2	2	2	1	0	4	24	33	4.7	2	1	0	7

Black bear mortality for unit 17 – Wasatch Mountains (all subunits), Utah 1990–2000.

Year	Sport harvest										Depredation / other mortality			Total harvest + mortality
	Permits issued	Spring		Fall		Unknown	Total	% permits filled	% female	Mean age	Male	Female	Unknown	
		Male	Female	Male	Female									
1990	26	—	—	7	0	0	7	27	0	—	6	4	0	17
1991	11	—	—	1	0	0	1	9	0	—	2	0	0	3
1992	11	—	—	1	1	0	2	18	50	—	0	0	0	2
1993	14	—	—	1	2	0	3	21	67	—	1	1	0	5
1994	14	—	—	2	1	0	3	21	33	—	0	2	0	5
1995	14	—	—	2	0	0	2	14	0	—	3	2	0	7
1996	14	—	—	2	3	0	5	36	60	—	9	0	0	14
1997	10	—	—	1	1	0	2	20	50	—	2	0	0	4
1998	26	—	—	0	1	0	1	4	100	—	9	1	4	15
1999	35	—	—	5	2	0	7	20	29	—	5	2	6	20
2000	34	—	—	4	2	0	6	18	33	—	17	0	0	23
Mean	19	—	—	2	1	0	4	19	33	—	5	1	1	10

Black bear mortality for unit 17a – Wasatch Mountains, West, Utah 2001–2010.

Year	Sport harvest										Depredation / other mortality			Total harvest + mortality
	Permits issued	Spring		Fall		Unknown	Total	% permits filled	% female	Mean age	Male	Female	Unknown	
Male	Female	Male	Female	Male	Female						Male	Female	Unknown	
2001	20	1	0			0	1	5	0	12.0	3	2	0	6
2002	20	4	2			0	6	30	33	8.2	7	9	2	24
2003	20	5	5			0	10	50	50	—	6	0	0	16
2004	20	5	0			0	5	25	0	5.0	3	4	2	14
2005	19	3	1			0	4	21	25	5.3	6	4	1	15
2006	19	4	0	2	1	0	7	37	14	4.5	4	4	1	16
2007	22	1	2	2	1	0	6	27	50	4.2	10	6	5	27
2008	27	3	5	1	1	0	10	37	60	8.7	3	2	3	18
2009	28	6	4	1	0	0	11	39	36	4.8	12	4	0	27
2010	34	8	5	2	2	0	17	50	41	4.1	5	0	0	22
Mean	23	4	2	2	1	0	8	34	38	5.6	6	4	1	19

Black bear mortality for unit 17bc – Wasatch Mountains, Carrant Creek/Avintaquin, Utah 2001–2010.

Year	Sport harvest										Depredation / other mortality			Total harvest + mortality
	Permits issued	Spring		Fall		Unknown	Total	% permits filled	% female	Mean age	Male	Female	Unknown	
Male	Female	Male	Female											
2001	14	0	0			0	0	0	—	—	0	0	0	0
2002	14	2	0			0	2	14	0	3.0	3	6	2	13
2003	14	2	0			0	2	14	0	—	3	2	0	7
2004	14	6	2			0	8	57	25	2.6	3	1	0	12
2005	14	1	0			0	1	7	0	2.0	1	1	0	3
2006	16	1	0	1	1	0	3	19	33	5.0	6	5	3	17
2007	16	0	1	0	2	0	3	19	100	2.7	8	2	0	13
2008	20	3	0	1	1	0	5	25	20	6.2	1	0	2	8
2009	24	4	4	2	1	0	11	46	45	4.7	4	1	0	16
2010	24	3	1	2	0	0	6	25	17	4.7	2	1	0	9
Mean	17	2	1	1	1	0	4	24	32	4.1	3	2	1	10

Black bear mortality for unit 21/22 – Fillmore, Pahvant/Beaver, Utah 1990–2010.

Year	Sport harvest										Depredation / other mortality			Total harvest + mortality
	Permits issued	Spring		Fall		Unknown	Total	% permits filled	% female	Mean age	Male	Female	Unknown	
Male	Female	Male	Female											
1990	1			0	0	0	0	0	—	—	0	0	0	0
1991	1			0	0	0	0	0	—	—	0	0	0	0
1992	1			0	0	0	0	0	—	—	0	0	0	0
1993	1			0	0	0	0	0	—	—	0	0	0	0
1994	1			0	0	0	0	0	—	—	0	0	0	0
1995	1			1	0	0	1	100	0	—	0	0	0	1
1996	1			0	0	0	0	0	—	—	0	0	0	0
1997	1			0	0	0	0	0	—	—	0	0	0	0
1998	1			0	0	0	0	0	—	—	0	0	0	0
1999	1			0	0	0	0	0	—	—	0	0	0	0
2000	1			0	0	0	0	0	—	—	0	0	0	0
2001	1			1	0	0	1	100	0	5.0	0	0	0	1
2002	1			0	0	0	0	0	—	—	1	2	0	3
2003	1			0	0	0	0	0	—	—	0	0	0	0
2004	1			1	0	0	1	100	0	7.0	0	0	0	1
2005	1			0	1	0	1	100	100	13.0	0	0	0	1
2006	2	1	0	0	0	0	1	50	0	8.5	0	0	0	1
2007	2	0	0	0	0	0	0	0	—	—	1	1	0	2
2008	6	2	1	0	0	0	3	50	33	8.0	1	1	0	5
2009	10	3	1	3	0	0	7	70	14	8.7	1	0	0	8
2010	14	2	0	1	1	0	4	29	25	8.0	0	0	0	4
Mean	2	2	0	0	0	0	1	38	21	8.1	0	0	0	1

* Unit 21 was added to 22 to become 21/22 in 2008.

Black bear mortality for unit 23 - Monroe, Utah 1990–2010.

Year	Sport harvest										Depredation / other mortality			Total harvest + mortality
	Permits issued	Spring		Fall		Unknown	Total	% permits filled	% female	Mean age	Male	Female	Unknown	
Male	Female	Male	Female											
1990	1			0	0	0	0	0	—	—	0	0	0	0
1991	1			0	0	0	0	0	—	—	0	0	0	0
1992	1			0	0	0	0	0	—	—	0	0	0	0
1993	1			0	0	0	0	0	—	—	1	0	0	1
1994	1			0	0	0	0	0	—	—	0	0	0	0
1995	1			0	0	0	0	0	—	—	0	0	0	0
1996	1			0	0	0	0	0	—	—	0	0	0	0
1997	1			0	0	0	0	0	—	—	0	0	0	0
1998	1			0	0	0	0	0	—	—	0	0	0	0
1999	1			0	0	0	0	0	—	—	0	0	0	0
2000	1			0	0	0	0	0	—	—	0	0	0	0
2001	1			0	0	0	0	0	—	—	0	0	0	0
2002	1			0	0	0	0	0	—	—	0	0	0	0
2003	1			0	0	0	0	0	—	—	0	0	0	0
2004	1			0	0	0	0	0	—	—	0	0	0	0
2005	1			0	0	0	0	0	—	—	0	0	0	0
2006	0			—	—	—	—	—	—	—	0	0	0	0
2007	1	0	0	0	0	0	0	0	—	—	0	0	0	0
2008	2	0	0	0	0	0	0	0	—	—	0	0	0	0
2009	2	0	0	0	0	0	0	0	—	—	0	1	0	1
2010	2	0	0	0	0	0	0	0	—	—	0	0	0	0
Mean	1	0	0	0	0	0	0	0	—	—	0	0	0	0

*Unit was pursuit only during 2006.

Black bear mortality for unit 24 – Mt. Dutton, Utah 2008–2010.

Year	Sport harvest								Depredation / other mortality			Total harvest + mortality		
	Permits issued	Spring		Fall		Unknown	Total	% permits filled	% female	Mean age	Male		Female	Unknown
2008	2	1	0	0	0						0	1	50	0
2009	2	0	0	0	0	0	0	0	—	—	1	0	0	1
2010	2	0	0	1	0	0	1	50	0	—	1	0	0	2
Mean	2	0	0	0	0	0	1	33	0	7.0	1	0	0	2

Black bear mortality for unit 25ab – Plateau, Fishlake/Thousand Lakes, Utah 1990–2010.

Year	Sport harvest										Depredation / other mortality			Total harvest + mortality
	Permits issued	Spring		Fall		Unknown	Total	% permits filled	% female	Mean age	Male	Female	Unknown	
Male	Female	Male	Female	Male	Female						Male	Female	Unknown	
1990	3			0	0	0	0	0	—	—	0	0	0	0
1991	3			1	0	0	1	33	0	—	0	0	0	1
1992	3			1	0	0	1	33	0	—	0	0	0	1
1993	3			1	0	0	1	33	0	—	1	0	0	2
1994	3			0	0	0	0	0	—	—	2	1	0	3
1995	4			2	1	0	3	75	33	—	1	1	0	5
1996	4			1	2	0	3	75	67	—	0	0	0	3
1997	4			3	0	0	3	75	0	—	0	0	0	3
1998	4			1	0	0	1	25	0	—	0	0	0	1
1999	4			1	0	0	1	25	0	—	0	0	0	1
2000	4			0	0	0	0	0	—	—	0	0	0	0
2001	4			0	0	0	0	0	—	—	1	1	0	2
2002	4			0	1	0	1	25	100	2.0	0	0	0	1
2003	4			3	0	0	3	75	0	5.3	1	0	0	4
2004	6			0	2	0	2	33	100	11.5	0	0	0	2
2005	6			2	0	0	2	33	0	7.0	1	0	0	3
2006	6	0	0	0	0	0	0	0	—	7.0	0	0	0	0
2007	6	1	0	0	0	0	1	17	0	6.0	0	0	0	1
2008	6	1	0	0	0	0	1	17	0	—	0	0	0	1
2009	6	2	0	0	0	0	2	33	0	5.5	0	0	0	2
2010	5	0	0	1	0	0	1	20	0	—	1	0	0	2
Mean	4	1	0	1	0	0	1	29	22	6.3	0	0	0	2

Black bear mortality for unit 25c – Plateau, Boulder, Utah 1990–2003.

Year	Sport harvest										Depredation / other mortality			Total harvest + mortality
	Permits issued	Spring		Fall		Unknown	Total	% permits filled	% female	Mean age	Male	Female	Unknown	
Male	Female	Male	Female	Male	Female						Male	Female	Unknown	
1990	3	—	—	0	0	0	0	0	—	—	1	0	0	1
1991	3	—	—	0	1	0	1	33	100	—	0	0	0	1
1992	3	—	—	1	0	0	1	33	0	—	0	0	0	1
1993	4	—	—	2	0	0	2	50	0	—	0	2	0	4
1994	5	—	—	0	1	0	1	20	100	—	2	2	0	5
1995	6	—	—	3	2	0	5	83	40	—	1	0	0	6
1996	8	—	—	2	2	0	4	50	50	—	3	0	0	7
1997	8	—	—	2	1	0	3	38	33	—	0	0	0	3
1998	8	—	—	1	1	0	2	25	50	—	2	0	0	4
1999	8	—	—	2	2	0	4	50	50	—	1	0	0	5
2000	8	—	—	3	1	0	4	50	25	—	0	0	0	4
2001	8	—	—	1	2	0	3	38	67	7.6	1	0	1	5
2002	8	—	—	1	2	0	3	38	67	3.0	1	0	0	4
2003	8	—	—	3	0	0	3	38	0	5.0	1	3	0	7
Mean	6	—	—	2	1	0	3	42	41	5.2	1	1	0	4

Black bear mortality for unit 26 - Kaiparowits, Utah 2000–2003.

Year	Sport harvest										Depredation / other mortality			Total harvest + mortality
	Permits issued	Spring		Fall		Unknown	Total	% permits filled	% female	Mean age	Male	Female	Unknown	
2000	1	—	—	1	0						0	1	100	0
2001	1	—	—	0	0	0	0	0	—	—	0	0	0	0
2002	1	—	—	0	0	0	0	0	—	—	3	0	0	3
2003	1	—	—	0	1	0	1	100	100	13.0	0	0	0	1
Mean	1	—	—	0	0	0	1	50	50	8.5	0	0	0	1

Black bear mortality for units 25c/26 – Plateau, Boulder/Kaiparowits, Utah 2004–2010.

Year	Sport harvest										Depredation / other mortality			Total harvest + mortality
	Permits issued	Spring		Fall		Unknown	Total	% permits filled	% female	Mean age	Male	Female	Unknown	
2004	17			6	2						0	8	47	25
2005	17			2	2	0	4	24	50	4.8	1	1	1	7
2006	16	0	1	5	0	0	6	38	17	6.2	0	4	1	11
2007	22	7	1	3	0	0	11	50	9	7.4	6	0	0	17
2008	25	2	2	4	2	0	10	40	40	3.0	0	0	0	10
2009	25	6	0	5	2	0	13	52	15	6.1	4	0	0	17
2010	25	3	4	4	0	0	11	44	36	6.6	0	0	0	11
Mean	21	4	2	4	1	0	9	43	25	6.8	2	1	1	12

Black bear mortality for unit 27 - Paunsaugunt, Utah 2003–2010.

Year	Sport harvest							Depredation / other mortality			Total harvest + mortality			
	Permits issued	Spring		Fall		Unknown	Total	% permits filled	% female	Mean age		Male	Female	Unknown
Male	Female	Male	Female	Male	Female						Male	Female	Unknown	
2003	1			0	0	0	0	0	—	—	0	0	0	0
2004	1			0	0	0	0	0	—	—	0	1	0	1
2005	2			1	0	0	1	50	0	3.0	0	0	0	1
2006	2	0	1	0	0	0	1	50	100	3.0	0	0	0	1
2007	2	0	0	0	0	0	0	0	—	—	0	0	0	0
2008	2	0	0	0	0	0	0	0	—	—	0	0	0	0
2009	2	1	0	0	0	0	1	50	0	8.0	1	0	0	2
2010	3	0	0	1	0	0	1	33	0	—	0	1	0	2
Mean	2	0	0	0	0	0	1	27	25	5.5	0	0	0	1

Black bear mortality for units 28/29 – Panguitch Lake/Zion, Utah 1990–2010.

Year	Sport harvest										Depredation / other mortality			Total harvest + mortality
	Permits issued	Spring		Fall		Unknown	Total	% permits filled	% female	Mean age	Male	Female	Unknown	
Male	Female	Male	Female											
1990	3			0	0	0	0	0	—	—	1	0	0	1
1991	3			1	0	0	1	33	0	—	2	0	0	3
1992	3			0	0	0	0	0	—	—	2	0	0	2
1993	3			0	0	0	0	0	—	—	0	0	0	0
1994	4			1	0	0	1	25	0	—	1	0	0	2
1995	8			1	0	0	1	13	0	—	1	1	0	3
1996	8			0	0	0	0	0	—	—	4	0	0	4
1997	8			0	0	0	0	0	—	—	0	0	0	0
1998	8			0	0	0	0	0	—	—	1	0	0	1
1999	8			0	1	0	1	13	100	5.7	2	0	0	3
2000	6			0	0	0	0	0	—	—	0	0	0	0
2001	6			0	1	0	1	17	100	19.0	0	1	0	2
2002	6			0	1	0	1	17	100	11.0	5	0	0	6
2003	11			1	1	0	2	18	50	5.3	2	0	0	4
2004	12			2	0	0	2	17	0	8.0	3	0	0	5
2005	12			0	0	0	0	0	—	—	2	1	0	3
2006	11	0	1	0	0	0	1	9	100	4.0	0	0	0	1
2007	10	0	1	1	0	0	2	20	50	1.0	0	0	0	2
2008	11	2	0	2	0	1	5	40	45	8.0	0	0	2	7
2009	11	2	0	1	0	0	3	27	0	3.0	0	0	0	3
2010	10	2	0	3	1	0	6	60	17	6.7	0	0	0	6
Mean	8	1	0	1	0	0	1	17	26	6.6	1	0	0	3