# UTAH BLACK BEAR ANNUAL REPORT 2011





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# UTAH BLACK BEAR ANNUAL REPORT 2011

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Annual Performance Report for Federal Aid Project W-65-M, segments 59 and 60

State of Utah
Department of Natural Resources
DIVISION OF WILDLIFE RESOURCES

An Equal Opportunity Employer

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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 59 and 60, grant agreement periods October 1, 2010 through September 30, 2011 and October 1, 2011 through September 30, 2012, respectively. This Federal Aid project covers the 2011 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 2011 spring and fall hunting seasons. The spring hunting season opened April 9, 2011 and closed May 30, 2011, except for 10 units that closed June 5, 2011 (Cache/Ogden/Morgan Rich/East Canyon; Central Mountains, Nebo; Central Mountains, Manti-North; Central Mountains, Manti-South; Chalk Creek/Kamas/North Slope, Summit; Plateau, Boulder/Kaiparowits; South Slope, Vernal, Diamond Mountain, Bonanza; South Slope, Yellowstone; Wasatch Mountains, Currant Creek, Avintaquin; Wasatch Mountains, West). The first half of the fall hunting season opened August 27, 2011 and closed September 30, 2011, and the second half of the fall hunting season opened November 1, 2011 and closed November 20, 2011.

Black bear pursuit was open in all 22 units, and dates for the spring and fall pursuit seasons matched those for black bear hunting seasons. The summer pursuit season opened July 9, 2011 and closed August 7, 2011 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 one of those units. Restricted pursuit permits were valid for either an early (July 7 – July 21, 2011) or a late (July 28 – August 11, 2011) season in one 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 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 an independent lab, to estimate age of harvested bear. Survival rates were estimated using the Chapman-Robson estimator.

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. Other mortality includes roadkill, poaching, found dead, etc.

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. Bear pursuit information was obtained using a random telephone survey of a statistically valid sample of bear pursuit permit holders. Data were not collected for the fall pursuit season.

### **Changes from Previous Reports**

Ages for bears harvested during the most recent fall season were not available at the time of publishing. Therefore, mean ages and survival rates for the most recent year covered by this report will not be published until next year. In other words, there will be a one year lag in publication of mean age and survival data in the black bear annual report. Mean age and survival data that were reported in the 2006-2010 annual reports were calculated using a fall-spring year (i.e., overlapping seasons) instead of a calendar year. Beginning with this annual report, we have returned to using the full calendar year for calculation of age data and survival, and mean ages and survival for 2006-2010 have been recalculated using calendar year starting with this report.

This annual report presents the most complete and accurate summary of black bear harvest data available at the time of publication. Occasionally, we will adjust previous years' harvest numbers in a subsequent report as more data were made available after publication. This is typically the case with counts of Wildlife Services (depredation) mortality, and only rarely will counts of hunter harvest need adjustment.

#### **RESULTS**

In 2011, 444 limited entry black bear permits were issued. Hunters harvested 174 bears, 112 of which were taken in the spring and 62 in the fall. 39% of permits were filled, which was slightly lower than the previous few years. The percent of females in the harvest decreased from 33% in 2010 to 24% in 2011. Fifty bears were killed as a result of depredation or other mortality.

Utah issued 504 black bear pursuit permits in 2011. Of these, 122 permits were sold through a drawing system and were valid for one restricted summer pursuit unit/season, in addition to all other unrestricted units and seasons. A total of 308 pursuers went afield during the spring pursuit season, while 172 pursuers pursued in unrestricted units during the summer pursuit season, and 70 pursuers pursued in restricted units during the restricted summer pursuit seasons. During the spring pursuit season, pursuers treed 0.4 bears per day, while during the summer pursuit season, pursuers treed 0.5 bears per day.

More detailed information describing the 2011 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.

							Depredation /	Total	
	Permits	Hunters	Sport	Permits	Bears /	%	other	harvest +	Pursuit
Year	sold	afield	harvest	filled (%)	hunter	females	mortality	mortality	permits*
1967	_	_	15		_	_	12	27	_
1968	_	_	12		_	_	9	21	_
1969	43	31	25	58	0.8	_	27	52	_
1970	155	119	9	6	0.1	_	18	27	_
1971	59	48	17	29	0.4	_	16	33	_
1972	96	77	19	20	0.3	_	7	26	_
1973	125	114	25	20	0.2	_	0	25	_
1974	134	117	29	22	0.3	_	9	38	_
1975	161	144	22	14	0.2	41	2	24	161
1976	107	96	10	9	0.1	42	7	17	48
1977	149	127	26	17	0.2	33	6	32	77
1978	222	185	40	18	0.2	33	10	50	114
1979	240	196	26	11	0.1	19	5	31	91
1980	217	177	26	12	0.2	28	6	32	95
1981	263	227	39	15	0.2	30	4	43	95
1982	229	188	38	17	0.2	39	6	44	93
1983	219	176	18	8	0.1	44	9	27	98
1984	217	184	26	12	0.1	31	6	32	33
1985	269	230	29	11	0.1	27	10	39	86
1986	332	302	72	22	0.2	45	6	78	90
1987	326	262	44	13	0.2	35	25	69	156
1988	491	394	69	14	0.2	35	28	97	173
1989	687	556	97	14	0.2	30	10	107	187
1990	142	119	22	15	0.2	18	16	38	355
1991	142	119	35	25	0.3	23	15	50	364
1992	142	124	32	23	0.3	19	25	57	524
1993	162	136	35	22	0.3	51	12	47	570
1994	168	153	42	25	0.3	40	20	62	552
1995	175	156	53	30	0.3	34	34	87	627
1996	181	174	68	38	0.4	43	35	103	630
1997	192	176	50	26	0.3	44	31	81	638
1998	202	181	46	23	0.3	42	42	88	635
1999	220	199	57	26	0.3	30	35	92	264
2000	214	194	75	35	0.4	35	72	147	285

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

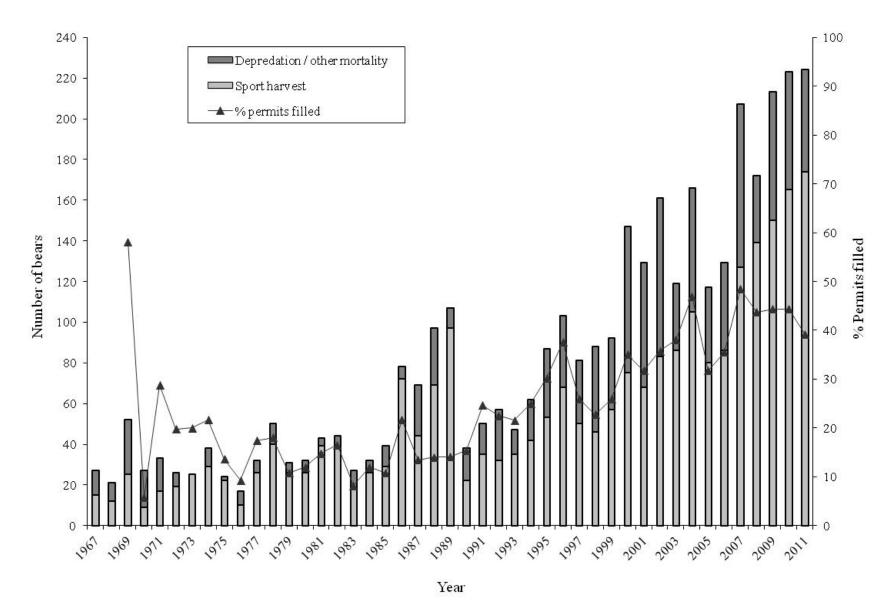
Statewide black bear harvest and mortality statistics, Utah 2001–2011.

						Sport har	vest					Depre	edation / otl	ner mortality	
	Permits	Spring	g harvest	Fall	harvest	Unknown	Total	% permits	%	Mean	Adult				Total harvest +
Year	issued	Male	Female	Male	Female	harvest	harvest	filled	females	age	survival (%)	Male	Female	Unknown	mortality
2001	214	17	3	24	22	2	68	32	37	6.9	79	39	21	1	129
2002	232	30	6	23	21	3	83	36	33	6.8	83	43	27	8	161
2003	226	27	12	32	15	0	86	38	31	7.4	83	22	8	3	119
2004	240	30	7	53	15	0	105	44	21	6.6	82	34	23	4	166
2005	252	14	3	47	16	0	80	32	24	6.6	84	16	17	4	117
2006	242	36	20	22	8	0	86	36	33	6.6	83	20	16	7	129
2007	262	60	19	31	17	0	127	48	28	5.8	81	48	24	8	207
2008	318	64	25	32	16	2	139	44	29	6.3	81	18	8	7	172
2009	338	75	34	29	12	0	150	44	31	6.4	82	39	22	2	213
2010	372	72	29	38	26	0	165	44	33	6.0	80	36	20	2	223
2011	444	89	23	43	19	0	174	39	24	‡	‡	30	20	0	224
Mean	285	47	16	34	17	1	115	40	29	6.5	0.81	31	19	4	169

‡Age data for current year unavailable at time of publication. Data will be included in next year's annual report.

Methodologies for calculating mean ages and survival rates have changed, and data for 2005-2010 have been adjusted to reflect this change. See methods section for more information.

Statewide black bear mortality, Utah 1967–2011.



Statewide black bear spring and fall sport harvest by unit / subunit, Utah 2011.

		Per	mits issued		Spring	g harvest	Fall	harvest		%	
TT to (O.1.)	g :	F 11	Conservation		2.6.1	Б 1	3.5.1		Total	permits	%
Unit / Subunit	Spring	Fall	/ Premium	Total	Male	Female	Male	Female	harvest	filled	females
Book Cliffs, Bitter Creek/South	20	4	4	28	13	1	0	0	14	50	7
Book Cliffs, Little Creek	4	4	1	9	0	0	0	0	0	0	_
Cache/Ogden/Morgan-Rich/East Canyon	2	2	0	4	1	0	0	0	1	25	0
Central Mountains, Manti-North	16	4	3	23	3	3	1	1	8	35	50
Central Mountains, Manti-South	4	7	2	13	3	0	4	1	8	62	13
Central Mountains, Nebo	11	3	3	17	2	4	1	3	10	59	70
Chalk Creek/Kamas/North Slope, Summit	7	4	2	13	0	1	3	1	5	38	40
Fillmore, Pahvant/Beaver	8	5	2	15	1	0	1	1	3	20	33
La Sal, La Sal Mountains/Dolores Triangle	36	7	7	50	13	5	7	2	27	54	26
Monroe	1	1	0	2	0	0	0	0	0	0	
Mt. Dutton	2	1	0	3	0	0	1	0	1	33	0
Nine Mile, Anthro/Range Creek	25	13	6	44	2	0	8	2	12	27	17
North Slope, Daggett/Three Corners	7	1	1	9	1	0	1	0	2	22	0
Panguitch Lake/Zion	7	4	2	13	3	0	2	1	6	46	17
Paunsaugunt	2	1	0	3	2	0	1	0	3	100	0
Plateau, Boulder/Kaiparowits	18	11	4	33	5	0	2	2	9	27	22
Plateau, Fishlake/Thousand Lakes	3	2	1	6	2	0	1	1	4	67	25
San Juan	36	7	7	50	21	4	6	1	32	64	16
South Slope, Vernal/Diamond Mountain/Bonanza	15	5	3	23	5	1	1	0	7	30	14
South Slope, Yellowstone	10	5	3	18	1	0	1	1	3	17	33
Wasatch Mountains, Currant Creek/Avintaquin	17	4	3	24	3	0	0	1	4	17	25
Wasatch Mountains, West	29	8	5	42	8	4	2	1	15	36	33
Statewide total**	280	103	61	444	89	23	43	19	174	39	24

<sup>\*</sup>Percent adult males is calculated as percent of all aged bears that were males 5 years or older.

\*\* Total conservation/premium permits include 1 statewide conservation permit and 1 statewide sportsman permit.

Adult black bear survival estimated with Chapman-Robson estimator, Utah 1996-2011.

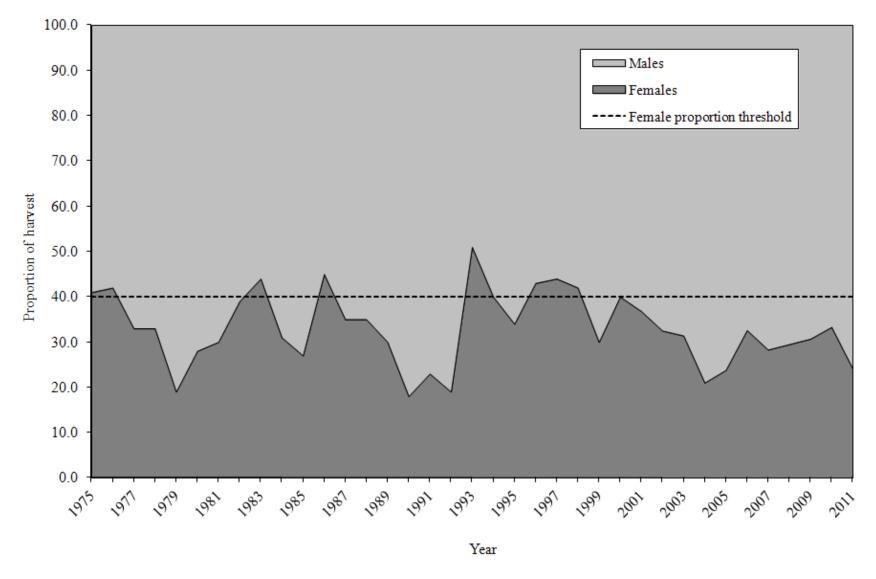
Year	n	Adult survival (%)	95% confidence interval
1996	83	79.4	75.4–83.4
1997	60	78.0	73.0-83.0
1998	54	77.7	72.4–83.0
1999	_	82.0	77.7–86.2
2000	83	80.9	77.2–84.6
2001	98	81.5	78.2-84.8
2002	130	81.2	78.3–84.1
2003	68	83.6	80.0-87.2
2004	115	82.4	79.5–85.4
2005	58	83.6	79.7–87.5
2006	81	82.5	79.0–86.0
2007	107	80.6	77.3–83.9
2008	132	81.4	78.5–84.2
2009	142	81.8	79.1–84.5
2010	160	80.1	77.3–82.8
2011	1	Age data not available at ti	me of publication

<sup>\*</sup> Methodology for calculating survival rates has changed, and data for 2006-2010 have been adjusted to reflect this change. See methods section for more information.

## Percent of black bear harvest by method of take, Utah 2001–2011.

		Met	hod of take	(%)		% harvest	% harvest taken with the use		
Year	Bait	Dogs	Calls	Stalk	Unknown	taken by archery	of a guide		
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		
2011	16	68	0	10	6	25	29		

Sex ratio of black bear sport harvest, Utah 1975–2011.



Historic statewide black bear pursuit statistics, Utah 2002–2011.

				Spring			General season summer / fall					
Year	Permits sold	n	Pursuers	Bears / pursuit-day	Bears / pursuer	n	Pursuers	Bears / pursuit-day	Bears / pursuer			
2002	359	88	318	0.5	7.5	_	_	_	_			
2003	378	91	291	0.5	8.7	65	228	0.52	6.2			
2004	373	73	309	0.4	5.0	54	212	0.45	5.9			
2005	414	103	256	0.4	5.0	220	436	0.33	2.7			
2006	353	78	328	0.3	3.7	_	_	_	_			
2007	363	120	329	0.5	6.5	57	157	0.62	4.3			
2008	391	96	313	0.6	7.8	73	238	0.93	5.4			
2009	424	90	359	0.4	5.1	72	287	0.52	4.9			
2010	460	172	326	0.4	4.9	79	164	0.35	2.6			
2011	504	102	308	0.4	5.3	57	172	0.48	3.0			
Mean	402	101	314	0.4	5.9	85	237	0.49	4.3			

Spring 2002 includes summer/fall 2001 and spring 2002.

Black bear pursuit statistics, restricted summer pursuit, 2010-2011.

Year	Permits sold	n	Pursuers	Bears / pursuit-day	Bears / pursuer
2010	100	70	63	0.8	4.9
2011	122	57	70	1.2	8.2
Mean	111	64	67	1.0	6.5

Spring 2003 includes summer/fall 2002 and spring 2003.

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

Beginning in 2010, general season summer/fall pursuit does not include pursuit activity from restricted summer pursuit units.

Statewide spring black bear pursuit statistics by unit / subunit, Utah 2011.

		Pursuers	Pursuit-		Numbe	er of bea	ars treed		Bears treed /	Bears treed /
Unit / Subunit	n	afield	days afield	Males	Females	Cubs	Unknown	Total	pursuit-day	pursuer
Book Cliffs, Bitter Creek/South	18	54	857	172	157	57	6	392	0.5	7.3
Book Cliffs, Little Creek	1	3	30	3	12	0	0	15	0.5	5.0
Cache/Ogden/Morgan Rich/East Canyon	2	6	45	3	0	0	0	3	0.1	0.5
Central Mountains, Manti-North	7	21	160	0	6	0	0	6	0.0	0.3
Central Mountains, Manti-South	9	27	226	30	24	12	0	66	0.3	2.4
Central Mountains, Nebo	4	12	72	0	3	9	0	12	0.2	1.0
Chalk Creek/Kamas/North Slope, Summit	2	6	66	6	0	9	3	18	0.3	3.0
Fillmore, Pahvant/Beaver	3	9	91	6	15	12	0	33	0.4	3.7
La Sal, La Sal Mountains/Dolores Triangle	25	75	733	148	113	54	33	348	0.5	4.6
Monroe	0	_	_	_	_	_	_		_	_
Mt. Dutton	2	6	69	15	9	0	0	24	0.3	4.0
Nine Mile, Anthro/Range Creek	2	6	24	0	0	0	0	0	0.0	0.0
North Slope, Daggett/Three Corners	1	3	45	3	3	0	0	6	0.1	2.0
Panguitch Lake/Zion	2	6	27	3	3	6	0	12	0.4	2.0
Paunsaugunt	1	3	30	6	9	3	0	18	0.6	6.0
Plateau, Boulder/Kaiparowits	5	15	88	15	12	0	0	27	0.3	1.8
Plateau, Fishlake/Thousand Lakes	2	6	42	6	6	0	0	12	0.3	2.0
San Juan	15	45	459	106	94	45	27	272	0.6	6.0
South Slope, Vernal/Diamond Mountain/Bonanza	11	33	395	60	51	24	15	150	0.4	4.5
South Slope, Yellowstone	2	6	178	48	69	0	0	117	0.7	19.5
Wasatch Mountains, Currant Creek/Avintaquin	5	15	72	3	9	0	0	12	0.2	0.8
Wasatch Mountains, West	8	24	217	36	30	21	0	87	0.4	3.6
Unknown	1	3	9	0	0	0	0	0	0.0	0.0
Statewide total*	102	308	3935	669	625	252	84	1630	0.4	5.3

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

167 permit holders surveyed; 504 permits sold; Projection factor = 3.02

39% of permit holders did not pursue spring season

Statewide general season summer black bear pursuit statistics by unit / subunit, Utah 2011.

		Pursuers	Pursuit-		Numbe	er of bea	rs treed		Bears treed /	Bears treed /
Unit / Subunit	n	afield	days afield	Males	Females	Cubs	Unknown	Total	pursuit-day	pursuer
Cache/Ogden/Morgan-Rich/East Canyon	2	6	15	0	0	0	0	0	0.0	0.0
Central Mountains, Manti-North	3	9	18	0	0	0	3	3	0.2	0.3
Central Mountains, Manti-South	7	21	148	33	27	9	0	69	0.5	3.3
Central Mountains, Nebo	4	12	30	0	3	0	0	3	0.1	0.3
Chalk Creek/Kamas/North Slope, Summit	2	6	30	3	0	3	3	9	0.3	1.5
Fillmore, Pahvant/Beaver	7	21	106	21	27	18	3	69	0.7	3.3
Monroe	1	3	39	9	6	6	0	21	0.5	7.0
Mt. Dutton	0	_	_	_	_	_		—	_	_
Nine Mile, Anthro/Range Creek	2	6	18	0	0	0	0	0	0.0	0.0
North Slope, Daggett/Three Corners	2	6	24	0	0	0	0	0	0.0	0.0
Panguitch Lake/Zion	1	3	6	0	0	0	0	0	0.0	0.0
Paunsaugunt	0	_	_	_	_	_		—	_	_
Plateau, Boulder/Kaiparowits	3	9	30	3	3	0	0	6	0.2	0.7
Plateau, Fishlake/Thousand Lakes	1	3	27	0	3	0	0	3	0.1	1.0
South Slope, Vernal/Diamond Mountain/Bonanza	13	39	374	97	142	0	15	254	0.7	6.5
South Slope, Yellowstone	3	9	30	0	0	0	0	0	0.0	0.0
Wasatch Mountains, Currant Creek/Avintaquin	2	6	51	6	9	9	0	24	0.5	4.0
Wasatch Mountains, West	9	27	97	15	21	6	6	48	0.5	1.8
Unknown	2	6	27	0	0	0	0	0	0.0	0.0
Statewide total*	57	172	1070	187	241	51	30	509	0.5	3.0

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

<sup>167</sup> permit holders surveyed; 504 permits sold; Projection factor = 3.02

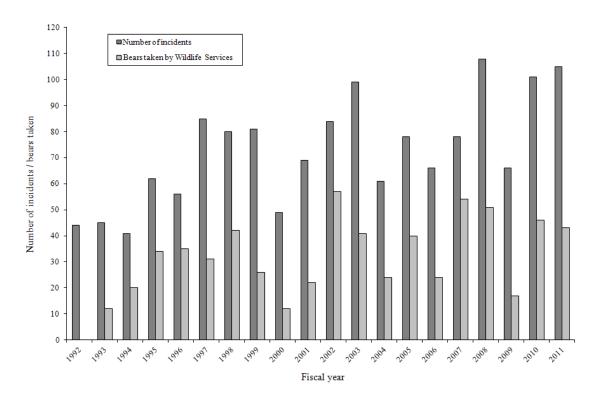
<sup>66%</sup> of permit holders did not pursue summer season; 49% of permit holders indicated that they intend to pursue fall season

# Summer black bear pursuit statistics in restricted units, by unit and season, Utah 2011.

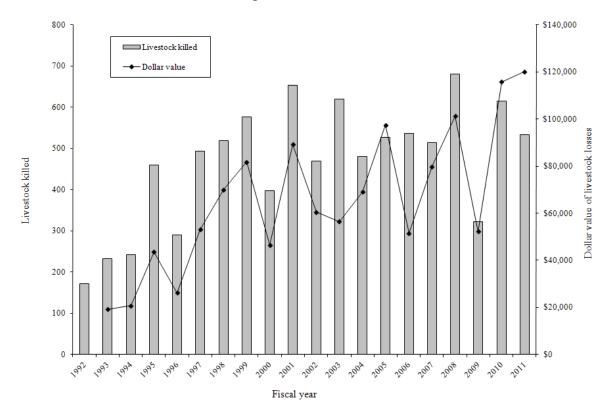
						Numbe	er of bea			Bears	
			Pursuers	Pursuit-						Bears treed /	treed /
Unit and season	Permits	n	afield	days afield	Males	Females	Cubs	Unknown	Total	pursuit-day	pursuer
Book Cliffs (early)	28	12	9	96	51	44	9	0	86	0.9	9.6
La Sal, La Sal Mountains, Dolores Triangle (early)	13	5	10	36	16	13	0	0	94	2.6	9.4
San Juan (early)	20	8	13	93	20	25	13	8	133	1.4	10.2
Book Cliffs (late)	28	18	19	107	23	30	11	3	128	1.2	6.7
La Sal, La Sal Mountains, Dolores Triangle (late)	13	4	7	36	0	3	7	0	36	1.0	5.1
San Juan (late)	20	10	12	98	8	10	2	2	94	1.0	7.8

<sup>57</sup> permit holders surveyed; 122 permits sold

Livestock depredation incidents and black bears killed by Wildlife Services, Utah 1992–2011.



Livestock losses due to black bear depredation, Utah 1992–2011.



# **APPENDIX**

HISTORIC BLACK BEAR HARVEST BY HUNT UNIT

Black bear mortality for unit 2/3/4/5 – Cache/Ogden/Morgan-Rich/East Canyon, Utah 1990–2011.

					Spor	t harvest			Depredation / other mortality			Total		
	Permits	Sı	oring		Fall	-		% permits	%	Mean				harvest +
Year	issued	Male	Female	Male	Female	Unknown	Total	filled	females	age	Male	Female	Unknown	mortality
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	1	1	0	3
2011	4	1	0	0 0	0	1	1	25	0	‡	1	0	0	2
Mean	2	0	0	0 0	0	0	0	8	0	4.5	0	0	0	1

<sup>\*</sup> Unit 2 was pursuit only in 2003.

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

‡Age data unavailable at time of publication. Data will be included in next year's annual report.

Black bear mortality for unit 6/7/8a – Chalk Creek/Kamas/North Slope, Summit, Utah 1990–2011.

					Sport	harvest					Depre	dation / otl	ner mortality	. Total
Year	Permits issued	S <sub>I</sub> Male	oring Female	Male	Fall Female	Unknown	Total	% permits filled	% female	Mean age	Male	Female	Unknown	harvest + mortality
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	5.0	3	0	0	5
2007	8	2	0	1	0	0	3	38	0	2.3	8	3	0	14
2008	11	1	0	0	0	0	1	9	0	3.0	3	1	0	5
2009	11	1	2	0	0	0	3	27	67	6.7	3	1	0	7
2010	13	1	1	3	2	0	7	54	43	6.5	5	2	0	14
2011	13	0	1	3	1	0	5	38	40	‡	1	2	0	8
Mean	5	1	1	1	0	0	1	28	33	4.0	3	1	0	5

<sup>‡</sup>Age data unavailable at time of publication. Data will be included in next year's annual report.

Black bear mortality for unit 8bc - North Slope, Daggett/Three Corners, Utah 1998–2011.

					Sport	harvest					Depre	edation / ot	her mortality	Total
	Permits	SI	oring	I	Fall	_		% permits	%	Mean				harvest +
Year	issued	Male	Female	Male	Female	Unknown	Total	filled	female	age	Male	Female	Unknown	mortality
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	4.0	0	0	0	1
2007	5	0	0	1	1	0	2	40	50	2.0	0	0	0	2
2008	7	1	0	0	1	0	2	29	50	5.0	0	0	0	2
2009	7	3	0	0	0	0	3	43	0	3.7	0	0	0	3
2010	9	1	0	0	1	0	2	22	50	10.5	0	0	0	2
2011	9	1	0	1	0	0	2	22	0	‡	0	1	0	3
Mean	5	1	0	0	0	0	1	22	25	4.9	0	0	0	2

<sup>‡</sup>Age data unavailable at time of publication. Data will be included in next year's annual report.

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

					Sport	harvest					Depr	edation / ot	her mortality	Total
	Permits	Sp	oring	I	Fall			% permits	%	Mean	_			harvest +
Year	issued	Male	Female	Male	Female	Unknown	Total	filled	female	age	Male	Female	Unknown	mortality
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  $9a-South\ Slope,\ Yellowstone,\ Utah\ 2002–2011.$ 

					Spor	t harvest					Depre	dation / otl	her mortality	Total
	Permits	SI	oring	I	Fall	_		% permits	%	Mean				harvest +
Year	issued	Male	Female	Male	Female	Unknown	Total	filled	female	age	Male	Female	Unknown	mortality
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	3.0	1	1	0	7
2007	14	1	0	1	2	0	4	29	50	2.0	3	1	1	9
2008	18	0	3	2	1	0	6	33	67	9.0	0	1	0	7
2009	18	1	0	0	0	0	1	6	0	2.0	0	0	0	1
2010	17	1	1	1	0	0	3	18	33	5.7	3	1	0	7
2011	18	1	0	1	1	0	3	17	33	‡	1	0	0	4
Mean	13	1	1	1	1	0	4	27	46	6.2	1	1	0	5

<sup>‡</sup>Age data unavailable at time of publication. Data will be included in next year's annual report.

Black bear mortality for unit 9bcd – South Slope, Vernal/Diamond Mountain/Bonanza, Utah 2002–2011.

					Sport	harvest					Depr	edation / ot	her mortality	_ Total
	Permits	Sı	oring	I	Fall	_		% permits	%	Mean				harvest +
Year	issued	Male	Female	Male	Female	Unknown	Total	filled	female	age	Male	Female	Unknown	mortality
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	7.8	0	0	0	6
2007	12	3	0	3	2	0	8	67	25	7.8	1	2	0	11
2008	16	6	1	3	0	0	10	63	10	3.7	1	0	0	11
2009	18	2	1	5	1	0	9	50	22	5.3	0	0	0	9
2010	22	2	2	4	3	0	11	50	45	4.3	0	2	0	13
2011	23	5	1	1	0	0	7	30	14	‡	4	3	0	14
Mean	14	4	1	3	1	0	7	50	28	5.6	1	1	0	9

<sup>‡</sup>Age data unavailable at time of publication. Data will be included in next year's annual report.

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

					Sport	harvest					Depr	edation / ot	her mortality	Total
Year	Permits issued	S <sub>I</sub> Male	oring Female	Male	Fall Female	Unknown	Total	% permits filled	% female	Mean age	Male	Female	Unknown	harvest +
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	7.0	0	0	0	5
2007	15	7	1	1	0	0	9	60	11	10.3	0	0	0	9
2008	19	9	1	3	1	0	14	74	14	7.4	0	0	0	14
2009	23	10	0	0	0	0	10	43	0	8.8	0	0	0	10
Mean	21	8	1	5	3	0	9	42	29	7.6	1	0	0	11

Black bear mortality for unit 10ab – Book Cliffs, Bitter Creek/South, Utah 2010-2011.

					Sport	harvest					Depr	edation / ot	her mortality	Total
	Permits	Sp	oring	F	Fall			% permits	%	Mean				harvest +
Year	issued	Male	Female	Male	Female	Unknown	Total	filled	female	age	Male	Female	Unknown	mortality
2010	23	9	2	1	1	0	13	57	23	8.0	2	2	0	17
2011	28	13	1	0	0	0	14	50	7	‡	0	0	0	14
Mean	26	11	2	1	1	0	14	53	15	8.0	1	1	0	16

<sup>‡</sup>Age data unavailable at time of publication. Data will be included in next year's annual report.

Black bear mortality for unit 10c – Book Cliffs, Little Creek, Utah 2010-2011.

					Sport	harvest					Depr	edation / ot	her mortality	- Total
	Permits	Sp	oring	I	Fall	_		% permits	%	Mean				harvest +
Year	issued	Male	Female	Male	Female	Unknown	Total	filled	female	age	Male	Female	Unknown	mortality
2010	7	2	0	1	0	0	3	43	0	9.7	0	0	0	3
2011	9	0	0	0	0	0	0	0	_	‡	0	0	0	0
Mean	8	1	0	1	0	0	2	19	0	9.7	0	0	0	2

<sup>‡</sup>Age data unavailable at time of publication. Data will be included in next year's annual report.

 $Black\ bear\ mortality\ for\ unit\ 11ab-Nine\ Mile,\ Anthro/Range\ Creek,\ Utah\ 1990-2011.$ 

					Sport	harvest					Depr	edation / ot	her mortality	_ Total
Year	Permits issued	S <sub>I</sub> Male	oring Female	Male	Fall Female	Unknown	Total	% permits filled	% female	Mean age	Male	Female	Unknown	harvest + mortality
1990	44	Maie	Telliale	14	0	0	14	32	0	age	6	0	0	20
1990	22	_	_		2	0	5	23	40		1	1	0	20 7
1991		_	_	3		-					1	1		,
	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	9.0	0	0	1	7
2007	26	4	4	1	2	0	11	42	55	6.1	2	3	0	16
2008	29	5	2	1	1	1	10	34	30	7.6	1	0	0	11
2009	34	9	3	2	3	0	17	50	35	6.9	1	3	0	21
2010	40	5	0	3	4	0	12	30	33	5.0	0	0	0	12
2010	40 44	2	0	8	2		12	27	33 17			0		12
			1			0				‡ 7.4	0	1	0	
Mean	25	5	1	4	3	0	8	31	32	7.4	2	1	0	11

<sup>‡</sup>Age data unavailable at time of publication. Data will be included in next year's annual report.

Black bear mortality for unit 13ab – La Sal, La Sal Mountains/Dolores Triangle, Utah 1990–2011.

					Sport	harvest					Depr	edation / ot	her mortality	_ Total
	Permits		oring		Fall	-		% permits	%	Mean				harvest +
Year	issued	Male	Female	Male	Female	Unknown	Total	filled	female	age	Male	Female	Unknown	mortality
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	8.3	0	0	0	12
2007	30	14	4	3	4	0	25	83	32	4.6	0	0	0	25
2008	32	9	5	5	3	0	22	69	36	6.0	2	1	0	25
2009	36	12	5	3	2	0	22	61	32	5.5	0	0	0	22
2010	40	11	4	2	4	0	21	53	38	7.4	2	0	0	23
2011	50	13	5	7	2	0	27	54	26	‡	0	1	0	28
Mean	24	11	4	4	3	0	13	55	32	7.1	1	0	0	15

<sup>‡</sup>Age data unavailable at time of publication. Data will be included in next year's annual report.

Black bear mortality for unit 14-San Juan, Utah 1990–2011.

					Sport	harvest					Depr	edation / ot	her mortality	_ Total
	Permits	Sp	oring	I	Fall	_		% permits	%	Mean				harvest +
Year	issued	Male	Female	Male	Female	Unknown	Total	filled	female	age	Male	Female	Unknown	mortality
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	9.3	2	1	0	20
2007	34	9	2	8	1	0	20	59	15	7.7	0	0	0	20
2008	34	12	2	6	3	0	23	68	22	6.1	1	0	0	24
2009	35	5	7	3	3	0	18	51	56	8.2	1	0	0	19
2010	40	11	5	4	4	0	24	60	38	6.2	0	1	0	25
2011	50	21	4	6	1	0	32	64	16	‡	3	2	0	37
Mean	26	11	4	6	3	0	13	51	29	7.8	1	1	0	15

<sup>‡</sup>Age data unavailable at time of publication. Data will be included in next year's annual report.

Black bear mortality for unit 16a – Central Mountains, Nebo, Utah 1990–2011.

					Sport	harvest					Depr	edation / ot	her mortality	_ Total
	Permits	Sı	oring	I	Fall			% permits	%	Mean				harvest +
Year	issued	Male	Female	Male	Female	Unknown	Total	filled	female	age	Male	Female	Unknown	mortality
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	6.0	0	0	0	2
2007	8	2	1	2	1	0	6	75	33	4.0	1	2	0	9
2008	12	2	1	3	0	0	6	50	17	3.5	1	2	0	9
2009	12	3	0	0	0	0	3	25	0	7.3	3	2	1	9
2010	14	4	2	0	0	0	6	43	33	7.5	2	1	0	9
2011	17	2	4	1	3	0	10	59	70	‡	3	1	0	14
Mean	8	2	1	1	0	0	3	34	32	4.5	1	0	0	4

<sup>‡</sup>Age data unavailable at time of publication. Data will be included in next year's annual report.

Black bear mortality for unit 16b – Central Mountains, North Manti, Utah 1990–2011.

					Sport	harvest					Depr	edation / ot	her mortality	_ Total
	Permits		oring	-	Fall			% permits	%	Mean				harvest +
Year	issued	Male	Female	Male	Female	Unknown	Total	filled	female	age	Male	Female	Unknown	mortality
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	2.4	1	0	0	6
2007	15	7	0	2	0	0	9	60	0	4.0	4	2	0	15
2008	17	4	1	1	1	0	7	41	29	4.0	0	0	0	7
2009	17	3	2	2	0	0	7	41	29	5.0	4	6	0	17
2010	19	2	2	1	0	0	5	26	40	5.8	9	5	0	19
2011	23	3	3	1	1	0	8	35	50	‡	6	0	0	14
Mean	19	3	2	2	1	0	4	22	38	4.6	3	2	0	9

<sup>‡</sup>Age data unavailable at time of publication. Data will be included in next year's annual report.

Black bear mortality for unit 16c – Central Mountains, South Manti, Utah 1990–2011.

					Sport	harvest					Depr	edation / ot	ther mortality	Total
	Permits	Sp	oring	I	Fall			% permits	%	Mean				harvest +
Year	issued	Male	Female	Male	Female	Unknown	Total	filled	female	age	Male	Female	Unknown	mortality
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	4.3	1	1	2	11
2008	12	1	1	0	1	0	3	25	67	5.3	1	0	0	4
2009	12	2	5	2	0	0	9	75	56	6.8	4	2	0	15
2010	13	4	0	3	3	0	10	77	30	4.1	1	3	2	16
2011	13	3	0	4	1	0	8	62	13	‡	1	1	0	10
Mean	16	3	2	2	1	0	4	25	31	4.6	2	1	0	7

<sup>‡</sup>Age data unavailable at time of publication. Data will be included in next year's annual report.

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

					Sport	harvest					Depr	edation / ot	her mortality	_ Total
	Permits	Sı	oring	I	Fall			% permits	%	Mean				harvest +
Year	issued	Male	Female	Male	Female	Unknown	Total	filled	female	age	Male	Female	Unknown	mortality
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 2001–2011.

					Sport	harvest					Depr	edation / ot	her mortality	_ Total
	Permits	-	oring		Fall	-		% permits	%	Mean				harvest +
Year	issued	Male	Female	Male	Female	Unknown	Total	filled	female	age	Male	Female	Unknown	mortality
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	3.9	4	4	1	16
2007	22	1	2	2	1	0	6	27	50	8.2	10	6	5	27
2008	27	3	5	1	1	0	10	37	60	7.4	3	2	3	18
2009	28	6	4	1	0	0	11	39	36	4.3	12	4	0	27
2010	34	8	5	2	2	0	17	50	41	4.1	7	0	0	24
2011	42	8	4	2	1	0	15	36	33	‡	6	6	0	27
Mean	25	4	3	2	1	0	8	34	37	6.5	6	4	1	19

<sup>‡</sup>Age data unavailable at time of publication. Data will be included in next year's annual report.

Black bear mortality for unit 17bc – Wasatch Mountains, Currant Creek/Avintaquin, Utah 2001–2011.

					Sport	harvest					Depr	edation / ot	her mortality	_ Total
	Permits	Sr	oring	J	Fall			% permits	%	Mean				harvest +
Year	issued	Male	Female	Male	Female	Unknown	Total	filled	female	age	Male	Female	Unknown	mortality
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	3.7	6	5	3	17
2007	16	0	1	0	2	0	3	19	100	2.3	8	2	0	13
2008	20	3	0	1	1	0	5	25	20	7.8	1	0	2	8
2009	24	4	4	2	1	0	11	46	45	4.9	4	2	0	17
2010	24	3	1	2	0	0	6	25	17	4.3	2	1	0	9
2011	24	3	0	0	1	0	4	17	25	‡	3	1	0	8
Mean	18	2	1	1	1	0	4	23	31	3.8	3	2	1	10

<sup>‡</sup>Age data unavailable at time of publication. Data will be included in next year's annual report.

Black bear mortality for unit 21/22 – Fillmore, Pahvant/Beaver, Utah 1990–2011.

					Sport	harvest					Depr	edation / ot	her mortality	_ Total
	Permits	Sp	oring	I	Fall			% permits	%	Mean				harvest +
Year	issued	Male	Female	Male	Female	Unknown	Total	filled	female	age	Male	Female	Unknown	mortality
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	4.0	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	7.7	1	1	0	5
2009	10	3	1	3	0	0	7	70	14	9.4	1	0	0	8
2010	15	2	0	1	1	0	4	27	25	5.0	0	0	0	4
2011	15	1	0	1	1	0	3	20	33	‡	1	1	0	5
Mean	3	2	0	0	0	0	1	33	23	7.3	0	0	0	1

<sup>\*</sup> Unit 21 was added to 22 to become 21/22 in 2008.

<sup>‡</sup>Age data unavailable at time of publication. Data will be included in next year's annual report.

Black bear mortality for unit 23 - Monroe, Utah 1990–2011.

					Sport	harvest					Depr	edation / ot	her mortality	_ Total
	Permits	Sp	oring	I	Fall			% permits	%	Mean				harvest +
Year	issued	Male	Female	Male	Female	Unknown	Total	filled	female	age	Male	Female	Unknown	mortality
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
2011	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

<sup>\*</sup>Unit was pursuit only during 2006. ‡Age data unavailable at time of publication. Data will be included in next year's annual report.

Black bear mortality for unit 24-Mt. Dutton, Utah 2008-2011.

					Sport	harvest					Depr	edation / ot	her mortality	_ Total
	Permits	Sı	oring	I	Fall	_		% permits	%	Mean				harvest +
Year	issued	Male	Female	Male	Female	Unknown	Total	filled	female	age	Male	Female	Unknown	mortality
2008	2	1	0	0	0	0	1	50	0	7.0	1	0	0	2
2009	2	0	0	0	0	0	0	0	_	_	1	0	0	1
2010	2	0	0	1	0	0	1	50	0	9.0	1	0	0	2
2011	3	0	0	1	0	0	1	33	0	‡	0	0	0	1
Mean	2	0	0	1	0	0	1	33	0	8.0	1	0	0	2

<sup>‡</sup>Age data unavailable at time of publication. Data will be included in next year's annual report.

Black bear mortality for unit 25ab – Plateau, Fishlake/Thousand Lakes, Utah 1990–2011.

					Sport	harvest					Depr	edation / ot	her mortality	_ Total
Year	Permits issued	S <sub>I</sub> Male	oring Female	Male	Fall Female	Unknown	Total	% permits filled	% female	Mean age	Male	Female	Unknown	harvest + mortality
1990	3	Iviaic	1 Ciliaic	0	0	0	0	0	Terriare	age	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 75	67	_	0	0	0	3
1997	4	_	_	3	0	0	3	75 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	_	_	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	3.0	0	0	0	1
2009	6	2	0	0	0	0	2	33	0	5.5	0	0	0	2
2010	6	0	0	1	0	0	1	17	0	4.0	1	0	0	2
2011	6	2	0	1	1	0	4	67	25	‡	0	0	0	4
Mean	5		0	1	0	0	1	31	23	5.5	0	0	0	2

<sup>‡</sup>Age data unavailable at time of publication. Data will be included in next year's annual report.

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

					Sport	harvest					Depr	edation / ot	her mortality	- Total
	Permits	Sı	oring	I	Fall	_		% permits	%	Mean				harvest +
Year	issued	Male	Female	Male	Female	Unknown	Total	filled	female	age	Male	Female	Unknown	mortality
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.

					Sport	harvest					Depr	edation / ot	her mortality	_ Total
	Permits	Sp	oring	I	Fall			% permits	%	Mean				harvest +
Year	issued	Male	Female	Male	Female	Unknown	Total	filled	female	age	Male	Female	Unknown	mortality
2000	1	_	_	1	0	0	1	100	0	4.0	0	0	0	1
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 2004–2011.

					Sport	harvest					Depr	edation / ot	her mortality	_ Total
	Permits	Sp	oring	I	Fall	-		% permits	%	Mean				harvest +
Year	issued	Male	Female	Male	Female	Unknown	Total	filled	female	age	Male	Female	Unknown	mortality
2004	17	_	_	6	2	0	8	47	25	8.3	2	0	2	12
2005	17	—	_	2	2	0	4	24	50	4.8	1	1	1	7
2006	16	0	1	5	0	0	6	38	17	7.0	0	4	1	11
2007	22	7	1	3	0	0	11	50	9	7.1	6	0	0	17
2008	25	2	2	4	2	0	10	40	40	7.4	0	0	0	10
2009	25	6	0	5	2	0	13	52	15	5.8	4	0	0	17
2010	29	3	4	4	0	0	11	38	36	6.4	0	0	0	11
2011	33	5	0	2	2	0	9	27	22	‡	0	1	0	10
Mean	23	4	1	4	1	0	9	39	25	6.7	2	1	1	12

<sup>‡</sup>Age data unavailable at time of publication. Data will be included in next year's annual report.

Black bear mortality for unit 27 - Paunsaugunt, Utah 2003–2011.

	Sport harvest											Depredation / other mortality			
	Permits	Sı	oring	I	Fall	_		% permits	%	Mean				- Total harvest +	
Year	issued	Male	Female	Male	Female	Unknown	Total	filled	female	age	Male	Female	Unknown	mortality	
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	_	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	5.0	0	1	0	2	
2011	3	2	0	1	0	0	3	100	0	‡	0	0	0	3	
Mean	2	1	0	0	0	0	1	39	14	5.3	0	0	0	1	

<sup>‡</sup>Age data unavailable at time of publication. Data will be included in next year's annual report.

Black bear mortality for units 28/29 – Panguitch Lake/Zion, Utah 1990–2011.

				Depredation / other mortality			_ Total							
Year	Permits	Spring		Fall				% permits	%	Mean				harvest +
	issued	Male	Female	Male	Female	Unknown T	Total	filled	female	age	Male	Female	Unknown	mortality
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	3.5	0	0	0	2
2008	11	2	0	2	0	1	5	40	45	5.8	0	0	2	7
2009	11	2	0	1	0	0	3	27	0	5.5	0	0	1	4
2010	11	2	0	3	1	0	6	55	17	6.7	0	0	0	6
2011	13	3	0	2	1	0	6	46	17	‡	0	0	0	6
Mean	8	2	0	1	0	0	2	19	24	7.5	1	0	0	3

<sup>‡</sup>Age data unavailable at time of publication. Data will be included in next year's annual report.