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Project W-170-R-34

Progress Report



BLACK BEAR

Study I, Job 9

July 1, 2010 to June 30, 2011

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**PROGRESS REPORT
SURVEYS AND INVENTORIES**

STATE:	<u>Idaho</u>	JOB TITLE:	<u>Black Bear Surveys and</u>
PROJECT:	<u>W-170-R-34</u>		<u>Inventories</u>
SUBPROJECT:	<u>1-7</u>	STUDY NAME:	<u>Big Game Population Status,</u>
STUDY:	<u>1</u>		<u>Trends, Use, and Associated</u>
JOB:	<u>9</u>		<u>Habitat Studies</u>
PERIOD COVERED: <u>July 1, 2010 to June 30, 2011</u>			

STATEWIDE

Abstract

Hunters are required to report black bears harvested to Idaho Department of Fish and Game (Department) within 10 days of kill. Hunters killed 2,509 black bears during 2010, a 20% increase from 2009. Hunters killed 1,355 in the spring and 1,154 in the fall. Females comprised 35% of the harvest. Of all the regions, most bears (826, 33%) were killed in the Clearwater Region, in north-central Idaho. The, 7 game management units (GMU) have extra bear tags, allow nonresident hunters to purchase reduced price bear tags (\$31.75 vs. \$186.00), and encourage increased harvest by outfitters. Bear densities are highest in the moist forests of northern Idaho and decrease heading south toward the drier continental and desert climates. The fewest number of bears was harvested in the Southeast Region. Bear baiting is allowed across most of the state, and 40% of bears were harvested using this technique. Still hunting and stalking accounted for 29% of the harvest, incidental harvest accounted for 15%, and hound hunting for 13%. Percentage of adult males in the harvest is monitored to determine trend over time.

There were 30,566 resident and 2,374 nonresident black bear tags sold in 2010. Bear baiting permits are required by anyone hunting over bait; 2,374 baiting permits were sold in 2010. Likewise, hunting with hounds requires a permit and nonresident permits are restricted to 70 statewide with additional nonresident permits available in a few GMUs. In 2010, 2,976 resident and 112 nonresident hound-hunting permits were sold.

Over the last few years, monitoring efforts included a non-invasive mark-recapture project using DNA hair-snags by the Southwest Region and Washington State University (WSU). This year, WSU placed grid cells in GMU 39. Also in recent years, an additional non-invasive mark-recapture project was conducted in the Panhandle Region. Bear numbers and density estimates for these project areas will be determined and the efficacy of this method is being evaluated. Scent station surveys were not operated because we are evaluating non-invasive mark-recapture methods that potentially provide density estimates.

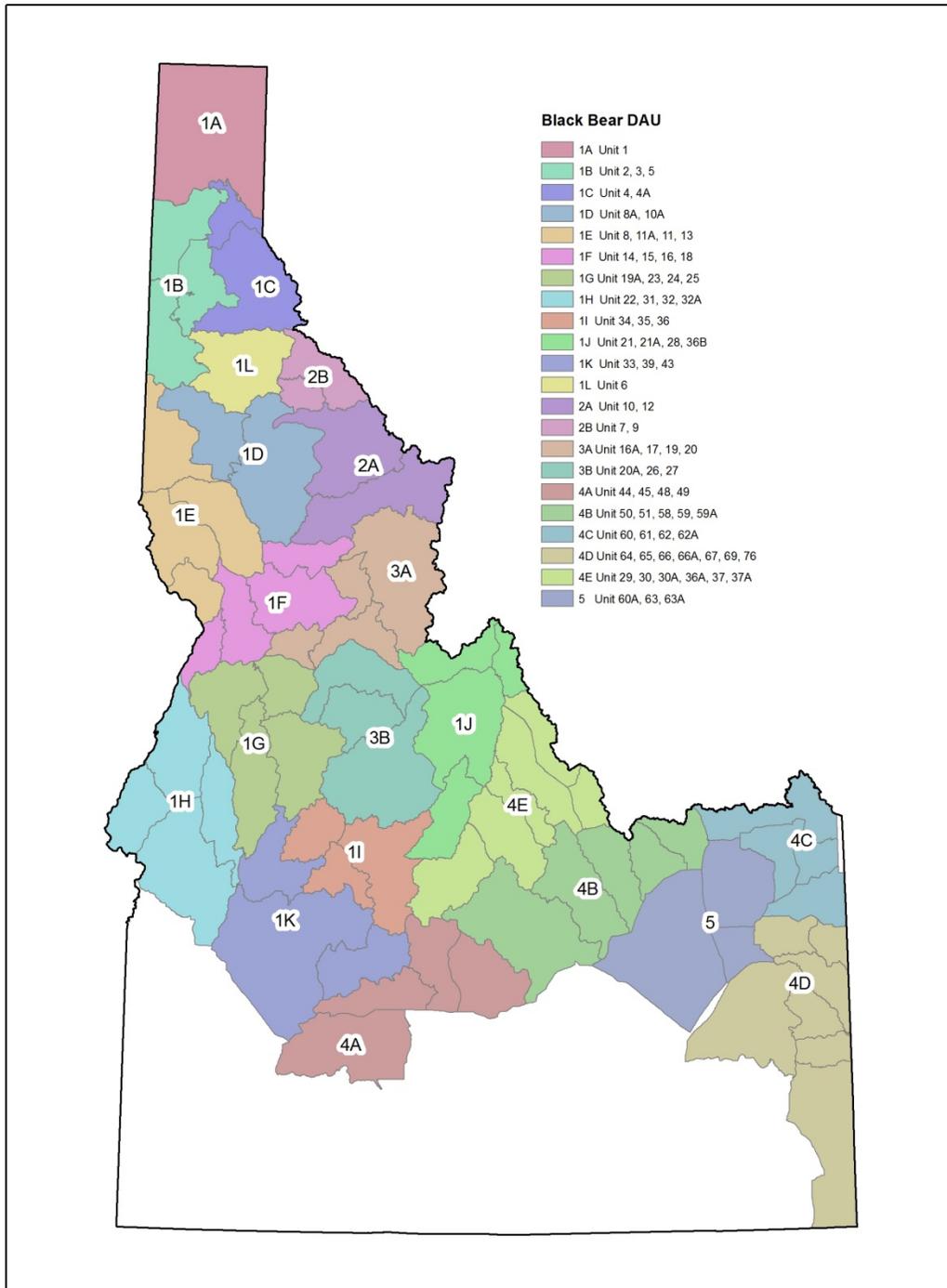


Figure 1. Twenty-two Data Analysis Units (DAU) for black bear management in Idaho.

**PROGRESS REPORT
SURVEYS AND INVENTORIES**

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STUDY:	<u>I</u>		<u>Trends, Use, and Associated</u>
JOB:	<u>9</u>		<u>Habitat Studies</u>
PERIOD COVERED:	<u>July 1, 2010 to June 30, 2011</u>		

PANHANDLE REGION

Abstract

Reported black bear harvest in Panhandle Region during 2010 was 609 bears, 5% above the previous 3-year average of 579. Female harvest (220) was 9% higher than the previous 3-year average of 200. Male harvest (388) was 3% higher than the previous 3-year average of 375. Thirty-six percent of the harvest was female, and 35% of aged male bears were age class 5 or older. Both indicators are consistent with a population managed under a moderate harvest regime. The 2010 huckleberry crop was slightly below the long term average and may have contributed to the slight increase in the harvest.

The objective for Data Analysis Unit (DAU) 1A is for light harvest and current indicators demonstrate light to moderate harvest. DAUs 1L and 2B are managed for moderate harvest, with DAU 1L demonstrating moderate harvest, and DAU 2B demonstrating light harvest. DAUs 1B and 1C are managed for heavy harvest, with DAU 1B meeting heavy harvest indicators, and DAU 1C meeting light to moderate harvest indicators.

AREA 1

Management Direction

The Department will offer a variety of hunting opportunities in Area 1. DAUs within the area include all harvest categories as defined in the 2000-2010 Black Bear Management Plan. The “reservoir concept” is not a major influence affecting Area 1. That is, harvest data reflect true population characteristics and no reservoir of un-harvested black bears exists to disperse into hunted areas. A controlled hunt allowing use of dogs is provided in a portion of GMU 1 outside the grizzly bear recovery area.

The Panhandle Region includes 4 DAUs in Area 1. DAU 1A is 1 of 2 DAUs statewide managed for light bear harvest characteristics. DAUs 1L and 2B are managed for moderate harvest objectives, while DAU 1B and 1C are managed under heavy harvest objectives.

DAU 1A (GMU 1)

Abstract

Reported harvest of black bear in DAU 1A was 179 during 2010, approximately 10% above the 2007-2009 average. The harvest composition has changed little during the past 10 years. The percentage of females in the harvest for the most recent 3 years is 35% and the percentage of males in age classes 5+ is 43%.

Management Direction

DAU 1A will be managed to maintain the light harvest targets of <30% females in the harvest and >35% of the males ≥ 5 years old.

Background

Black bear management is heavily influenced by grizzly bear management needs in this DAU, as it includes parts of the Selkirk and Cabinet-Yaak Grizzly Bear Recovery areas. Consequently, this DAU has been closed to use of bait since 1984 and to use of hounds since 1988. In 1991, a small controlled hunt allowing use of hounds was initiated in a portion of DAU 1A outside of these recovery areas.

In general, dense conifer habitat types characterize this DAU. The climate produces an abundance of huckleberries. Portions of the Selkirk, Cabinet, and Purcell ranges are included in this DAU, with the broad Kootenai River Valley providing the only substantial agricultural area. Overall, DAU 1A likely contains some of the highest-quality black bear habitat in Idaho.

Special Projects

Department Research Biologist John Beecham studied black bears in the Priest Lake portion of the Selkirk Mountains, 1979 – 1981. Additional work was conducted in GMU 4 (DAU 1C), and 6 (DAU 1L). The primary focuses of this work were basic bear ecology and developing bear management techniques. Trapping was conducted early June through mid-August of all 3 years, yielding 314 captures. This information is contained in annual Pittman-Robertson reports, and is summarized in Beecham and Rohlman (1994). Don Young, working with Dr. Beecham, completed a Master's Thesis, studying habitat use and food habits of 4 female and 5 male black bears in this area (Young 1984). During 2001, regional personnel re-trapped Beecham's study area (84 captures) to compare catch per unit effort and age/sex composition of trapped bears (IDFG unpublished data).

Grid-based bear DNA sampling was conducted in portions of the Selkirk and Purcell Ranges 2003 – 2006. This cooperative effort between Idaho Department of Fish and Game, U.S. Forest

Service Rocky Mountain Research Station, Idaho Department of Transportation, and University of Idaho included 3 primary projects: development of bear population methods, modeling relative abundance of black bears, and examining the strength of Highway 95 as a barrier to black bear gene flow (a surrogate for grizzly bear gene flow).

GPS-based radio-telemetry of black bears was conducted to model bear crossing areas of Highway 95 in the Purcell Mountains 2004-2006. Locations of 25 black bears, obtained at 20-minute intervals during the study, further defined black bear ecology in northern Idaho, and indicated bears crossed highway 95 in forested areas away from human development. Models developed on 20-minute to 6-hour datasets provided consistent results, while those developed on datasets based on 1 day or longer intervals between locations lacked precision and consistency (Lewis 2007).

For other published literature on these projects see Cushman et al. (2006), Schwartz et al. (2006) and McCall (2009).

Harvest Characteristics

Because bait is prohibited in this DAU and hounds are restricted to a small controlled hunt, most of the harvest is by still-hunting. Eighty-three percent of the 2010 black bear harvest in DAU 1A was by hunter's specifically seeking and stalking black bear (Table 2).

Thirty-nine percent of the harvest occurred in the spring in 2010, a departure from most other years; spring harvest averaged 49% the previous 3 years. Most (89%) black bears in DAU 1A were killed with rifles (Table 3). The remaining harvest was accomplished largely with archery equipment (9%). The first 16 days of the fall bear season in DAU 1A is archery-only.

Sex Ratio/Age Structure

The 2008-2010 harvest was composed of 35% females on average, higher than the target of <30% females in the harvest. Analysis of age structure indicates a relatively old male segment of the population, with 44% of the 2008-2010 male harvest reaching age class 5 or older (Table 4).

Dog-training Seasons

No dog-training season is permitted in DAU 1A (Appendix A) to prevent possible encounters with grizzly bears in and around the Selkirk and Cabinet/Yaak Recovery Areas.

Management Implications

No changes in hunting seasons are indicated by examination of management criteria (Table 5). The 3-year average of 35% females in the harvest is close to management objective and appears relatively stable since 1994. Within the male harvest, bears age 5 years and older easily meet management objectives and are likewise stable since 1994. There are no known problems with low calf elk or fawn deer ratios in this DAU.

DAU 1B (GMUs 2, 3, 5)

Abstract

Reported black bear harvest in DAU 1B was 120 during 2010, a 12% drop from the 2007-2009 average of 137 bears (Table 1). Management objectives for a heavy harvest regime are being met in this DAU.

Management Direction

To address depredation concerns in this relatively highly-populated area, DAU 1B will be managed to maintain the heavy harvest targets of <25% age 5+ black bears in the male harvest and >40% females in the total harvest.

Background

DAU 1B consists largely of developed and highly accessible areas. Mountains in this DAU are not particularly high or rugged. Although no data has been recorded in the past few years, depredations have been a substantial problem in this DAU, particularly in GMU 2, which consists largely of second-growth coniferous forest under private ownership. GMU 3 is typified by publicly owned coniferous forest with high road densities in close proximity to Coeur d'Alene. GMU 5 is similar to GMU 2 in the northern third, but the remainder consists largely of open agricultural land with stringers of coniferous forest. Much of GMU 5 is within the boundaries of the Coeur d'Alene Indian Reservation.

Harvest Characteristics

During 2010, harvest using bait was the most predominant method (47%), followed by still hunting (25%) and the use of hounds (14%) (Table 2). Seventy-five percent of the black bears harvested in DAU 1B were taken with a rifle (Table 3). Twenty-five percent of the harvest in this DAU occurred in the spring, consistent with the long term average.

Sex Ratio/Age Structure

The percentage of females in the 2008-2010 harvest was 39%. Eighteen percent of males were ≥ 5 years old for 2008-2010, within management objectives of less than 25%. This is easily the youngest age structure of the 5 DAUs in the Panhandle Region.

Dog-training Seasons

There is no dog-training season in this DAU (Appendix A) due to the high level of private ownership and high recreational use of public lands near Coeur d'Alene.

Management Implications

Both management criteria meet the heavy harvest targets in the 2000-2010 Black Bear Management Plan (Table 5). There are no known problems with low calf or fawn ratios in this DAU.

DAU 1C (GMUs 4, 4A)

Abstract

Reported black bear harvest in DAU 1C was 159 during 2010, a 15% increase over the previous 3-year average (Table 1). This DAU has historically met criteria for moderate harvest, but was targeted for heavy harvest in the 1999-2010 bear plan. Harvest criteria indicate this population remains under moderate (% females) to light (% males 5+) harvest.

Management Direction

To test the validity of the black bear harvest indicators, DAU 1C will be managed to achieve the heavy harvest targets of <25% age 5+ black bears in the male harvest and >40% females in the total harvest. To date, the harvest indicators have not been met.

Background

DAU 1C consists mainly of USFS property and a belt of private property in Silver Valley. Much of this DAU was burned by wildfires during the early 1900s. It is a popular hunting area for Coeur d'Alene and Silver Valley big game hunters. Road densities are moderate to very high.

Special Projects

Department Research Biologist John Beecham studied black bears in the central portion of the Coeur d'Alene Mountains, 1978 and 1983. Additional work was conducted in GMU 1 (DAU 1A) and 6 (DAU 1L). The primary focuses of this work were basic bear ecology and developing bear management techniques. Trapping was conducted early June through mid-August, yielding 99 captures. This information is contained in annual Pittman-Robertson reports, and is summarized in Beecham and Rohlman (1994).

During 1999, regional personnel re-trapped Beecham's study area (80 captures) to compare catch per unit effort and age/sex composition of trapped bears (IDFG unpublished data). Two additional studies were also conducted centered on this same study area.

A graduate project was conducted 2006-2008, utilizing GPS collars to examine habitat use of black bears relative to road densities characteristics and other habitat disturbances (IDFG unpublished data). Locations were obtained at 20-minute intervals for 10-25 collars each year. An effort was undertaken during 2008 to help assess the efficacy of DNA sampling to detect the radio-collared bears (IDFG unpublished data). During this study, 163 bears were identified, of

which 11 were GPS-collared. Including live trapping and DNA sampling, 191 bears (108 female, 83 male) were identified using the study area during summer 2008.

Harvest Characteristics

Forty-four percent of the harvest occurred in the spring during 2010, slightly above the 2007-2009 average of 37%. The primary method used to kill bears in DAU 1C during 2010 was baiting (35%), followed closely by the use of hounds (27%) and still/stalking (26%). Incidental harvest accounted for 10% of the 2010 harvest. Seventy-seven percent of the black bears harvested in DAU 1C were taken with a rifle, a drop from previous years (Table 3). Archery accounted for 17% of the harvest.

Sex Ratio/Age Structure

The percentage of females in the 2008-2010 harvest was 35%, lower than the 40%+ objective. The percentage of males 5+ years old was 37%, well above the desired age criterion of <25%. This criterion has not been achieved in the previous 10 years.

Dog-training Seasons

The 2010 dog-training season in DAU 1C was 1 June-31 July (Appendix A).

Management Implications

Hunting seasons were altered twice since the 1999-2010 black bear plan was initiated, in an attempt to change the population composition with more liberal seasons. During 2000, the fall hunting season was opened 30 August rather than 15 September as it was during 1999. During 2004, two weeks were added to the spring season, closing 31 May rather than 15 May. No response has been seen in management indicators. Management indicators have changed little since 1994.

DAU 1L (GMU 6)

Abstract

Harvest of black bears in DAU 1L was 81 in 2010, 5% above the 2007-2009 average. Fifty-four percent of the harvest occurred during spring (Table 1), a relatively high percentage when compared to previous years. Females made up 35% of the 3-year harvest average and are within the objectives established for this DAU. The 3-year average for the percentage of males ≥ 5 years was 28%, and was within the management objectives for this DAU.

Management Direction

DAU 1L will be managed to maintain the moderate harvest targets of 25-35% age 5+ black bears in the male harvest and 30-40% females in the total harvest. Harvest criteria falls within the desired category for both females and males. Because of the relatively small harvest in this

DAU, there is significant fluctuation in the management criteria from year to year. Baiting has been allowed within this DAU since 2000.

Background

This DAU is a mix of private property, mainly timber company lands, with a mix of USFS, Bureau of Land Management (BLM), and Idaho Department of Lands (IDL) property. This area has been influenced heavily by logging and, to a lesser extent, by the large fires of the early 1900s. Road densities range from moderate to high.

Recent season changes include the addition of bait and a 30 August opener instead of a 15 September opener (both during 2000), and a two week addition to spring hunting during 2004 (closing 31 May rather than 15 May).

Special Projects

Department Research Biologist John Beecham studied black bears in the Marble Creek drainage of the St. Joe Mountains during 1982. Additional work was conducted in GMU 4 (DAU 1A) during 1978 and 1983, and in GMU 4 (DAU 1C). The primary focus of this work was basic bear ecology and developing bear management techniques. Trapping was conducted early June through mid-August, yielding 25 captures. This information is contained in annual Pittman-Robertson reports, and is summarized in Beecham and Rohlman (1994).

During 2000, regional personnel re-trapped Beecham's study area (39 captures) to compare catch per unit effort and age/sex composition of trapped bears (IDFG unpublished data).

Harvest Characteristics

The 2010 harvest of 81 bears is 15% above the previous 3-year average of 77. Fifty-four percent of the harvest occurred during spring, an increase from recent harvest data. Spotting/stalking is the primary method used to hunt bears in this DAU, with 44% of the 2010 harvest taken in this manner (Table 2). Baiting has been allowed since fall 2000, with 28% of the 2010 harvest, an increasing trend. The use of hounds (14%) and incidental kills (10%) both represent a decreasing trend. Nearly all black bears taken in this DAU are taken with a rifle (86%, Table 3).

Sex Ratio/Age Structure

Thirty-five percent of the 2008-2010 harvest was female bears, reflective of a moderate harvest regime. The percentage of males ≥ 5 years was 28%, also indicative of moderate harvest.

Dog-training Seasons

The 2010 dog-training season in this DAU was 1 June-31 July (Appendix A).

Management Implications

The percentage of females harvested is within the moderate harvest level prescribed for this DAU as well as the percentage of male harvest reaching 5 years-of-age (Table 5).

AREA 2

DAU 2B (GMUs 7, 9)

Abstract

Harvest of black bears in DAU 2B was 70 bears during 2010, 35% above the 2007-2009 average. Spring harvest is predominant in this DAU (77% of the 2010 harvest). This DAU is targeted for moderate harvest. The percentage of females in the harvest is currently in the lightly-harvested category, as is the average male age structure criterion.

Management Direction

DAU 2B will be managed to increase harvest to the moderate harvest targets of 25-35% age 5+ black bears in the male harvest and 30-40% females in the total harvest. Seasons have been lengthened in this DAU. Few changes are anticipated in harvest levels because of the remote nature of this DAU; however, criteria will be monitored to see if significant changes do occur as a result of these changes.

Background

This DAU is the most remote from human population centers of any DAU in Panhandle Region. In addition, persistent snowdrifts make spring travel difficult, and substantial roadless areas preclude high levels of use. Most of the habitat in this DAU is managed by USFS.

DAU 2B has historically met criteria for a lightly harvested population. In the current Black Bear Plan, the Department targeted a moderate harvest objective to allow for additional hunting opportunities.

Harvest Characteristics

The 2010 harvest of 70 bears was the highest harvest in 10 years (Table 1). Seventy-seven percent of the 2010 bear harvest in this DAU took place during spring, a pattern similar to that of prior years (Table 1).

Seventy-nine percent of the 2010 harvest was taken with the use of bait, the highest percentage in Panhandle Region. Of the remaining harvest, 11% was taken still/stalking and 7% was taken incidentally to other types of hunting. One bear was killed using hounds (Table 2).

Most of the black bears harvested in this DAU are taken with a rifle (66%), but the archery harvest now makes up a significant portion of the harvest (27%) (Table 3).

Sex Ratio/Age Structure

The percentage of females in the 2008-2010 harvest was 25%, below the objective of 30-40% and trending downward. Males $\geq 5+$ made up 44% of the 3-year harvest average, above the objective of 25-35%. This DAU is slated for moderate harvest but harvest indicators are in the light category.

Dog-training Seasons

The 2010 dog-training season in this DAU was 1-31 July (Appendix A).

Management Implications

The proportion of females and adult males in the harvest indicates that this population is lightly harvested.

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Table 1. Black bear harvest by season and sex, Panhandle Region, 2001-present.

DAU Year	Spring				Fall				Entire season			
	M	F	U	Total	M	F	U	Total	M	F	U	Total
1A												
2001	57	12	1	70	35	22	1	58	92	34	2	128
2002	53	26	0	79	68	34	1	103	121	60	1	182
2003	76	43	1	120	76	37	1	114	152	80	2	234
2004	79	39	1	119	51	29	0	80	130	68	1	199
2005	69	26	1	96	39	32	1	72	108	58	2	168
2006	63	21	0	84	83	55	0	139	146	76	1	223
2007	78	20	0	98	60	50	1	111	138	70	1	209
2008	47	22	1	70	46	26	1	73	93	48	2	143
2009	49	24	0	73	41	19	0	60	90	43	0	133
2010	46	23	0	69	66	44	0	110	112	67	0	179
3-yr. avg.	47	23	0	70	51	31	1	51	98	53	1	152
1B												
2001	14	11	0	25	45	35	0	80	59	46	0	105
2002	14	17	0	31	49	37	1	87	63	54	1	118
2003	22	14	0	36	56	54	0	110	78	68	0	146
2004	27	19	0	46	37	33	0	70	64	52	0	116
2005	35	13	0	48	43	41	0	84	78	54	0	132
2006	21	14	0	35	45	44	0	89	66	58	0	124
2007	23	13	0	36	66	49	0	115	89	62	0	151
2008	8	4	0	12	64	50	0	114	72	54	0	126
2009	18	10	1	29	63	40	1	104	81	50	2	133
2010	19	11	0	30	54	36	0	90	73	47	0	120
3-yr. avg.	15	8	0	24	60	42	0	102	75	50	1	126
1C												
2001	24	5	0	29	47	24	0	71	71	29	0	100
2002	22	5	0	27	95	36	2	133	117	41	2	160
2003	36	13	0	49	65	44	0	109	101	57	0	158
2004	46	13	0	59	50	26	1	77	95	39	1	135
2005	70	33	1	104	57	38	1	96	127	71	2	200
2006	40	16	0	56	64	30	0	94	104	46	0	150
2007	52	24	1	77	51	39	0	90	103	63	1	167
2008	17	11	0	28	46	33	0	79	72	54	0	126
2009	37	8	1	46	56	33	0	89	93	41	1	135
2010	46	24	0	70	57	32	0	89	103	56	0	159
3-yr. avg.	33	15	0	48	54	32	0	86	87	47	0	134
1L												
2001	17	4	0	21	28	17	0	45	45	21	0	66
2002	25	11	0	36	65	35	1	101	90	46	1	137
2003	22	9	0	31	38	24	0	62	60	33	0	93
2004	21	9	0	30	26	22	0	48	47	31	0	78
2005	40	16	0	56	33	30	0	63	73	46	0	119

Table 1. Continued.

DAU Year	Spring				Fall				Entire season			
	M	F	U	Total	M	F	U	Total	M	F	U	Total
2006	25	11	0	36	34	18	0	52	59	29	0	88
2007	27	11	0	38	35	23	0	58	62	34	0	96
2008	14	4	0	18	27	17	0	44	41	21	0	62
2009	24	6	0	30	25	15	1	41	49	21	1	71
2010	28	16	0	44	20	17	0	37	48	33	0	81
3-yr. avg.	22	9	0	31	24	17	0	41	46	25	0	72
2B												
2001	26	17	0	43	6	3	11	20	32	20	11	63
2002	35	9	0	44	12	5	0	17	47	14	0	61
2003	29	19	0	48	11	6	0	17	40	25	0	65
2004	34	11	0	45	7	4	0	11	41	15	0	56
2005	34	13	0	47	8	3	0	11	42	16	0	58
2006	31	11	0	42	9	3	0	12	40	14	0	54
2007	39	12	0	51	7	2	0	9	46	14	0	60
2008	27	11	0	12	5	5	0	12	72	54	0	12
2009	25	5	0	30	14	3	0	17	39	8	0	47
2010	42	12	0	54	10	5	1	16	52	17	1	70
3-yr. avg.	31	9	0	41	10	4	0	14	41	14	0	55

Table 2. Method of black bear harvest, Panhandle Region, 2001-present.

DAU						
Year	Bait	Hounds	Still	Incidental	Other	Total
1A						
2001	0	7	99	6	5	117
2002	0	5	142	12	26	185
2003	1	3	191	17	25	237
2004	0	7	166	22	4	199
2005	0	3	144	14	7	168
2006	0	9	189	22	3	223
2007	0	2	181	16	10	209
2008	0	1	121	15	6	143
2009	1	3	117	9	3	133
2010	2	6	148	16	7	179
1B						
2001	29	20	28	10	2	89
2002	28	24	40	17	9	118
2003	44	34	39	23	6	146
2004	42	26	37	9	2	116
2005	45	22	48	12	7	134
2006	44	20	35	20	5	124
2007	52	21	48	27	3	151
2008	40	24	35	21	6	126
2009	52	30	35	10	6	133
2010	56	17	30	11	6	120
1C						
2001	11	31	41	12	0	95
2002	24	23	73	30	10	160
2003	21	30	60	41	6	158
2004	30	30	37	37	2	136
2005	54	26	86	30	4	200
2006	45	27	47	29	2	150
2007	46	26	56	34	5	167
2008	25	16	36	29	0	106
2009	28	29	51	14	13	135
2010	55	43	42	16	3	159
1L						
2001	4	12	25	21	0	62
2002	17	26	44	47	3	137
2003	13	21	33	24	2	93
2004	6	16	40	14	2	78
2005	25	21	57	14	2	119
2006	11	19	40	16	2	88
2007	18	18	36	24	0	96

Table 2. Continued.

DAU						
Year	Bait	Hounds	Still	Incidental	Other	Total
2008	10	9	27	16	0	62
2009	16	14	29	8	4	71
2010	23	11	36	8	3	81
2B						
2001	26	5	15	6	0	52
2002	26	11	18	4	2	61
2003	25	6	18	13	3	65
2004	26	12	14	4	0	56
2005	33	7	7	7	4	58
2006	35	5	7	5	2	54
2007	43	3	9	5	0	60
2008	35	0	4	7	1	47
2009	27	0	9	10	1	47
2010	55	1	8	5	1	70

Table 3. Weapon type used to harvest black bear, Panhandle Region, 2001-present.

DAU						
Year	Rifle	Archery	Muzzleloader	Handgun	Other	Total
1A						
2001	91	1	0	0	0	92
2002	175	8	1	1	0	185
2003	209	18	2	6	2	237
2004	189	8	1	1	0	199
2005	158	6	0	2	2	168
2006	191	25	1	1	5	223
2007	185	23	0	1	0	209
2008	130	10	0	1	2	143
2009	122	8	0	2	1	133
2010	159	17	1	1	1	179
1B						
2001	79	18	0	5	4	106
2002	103	10	3	2	0	118
2003	118	19	2	3	4	146
2004	89	21	4	2	0	116
2005	110	16	0	5	1	132
2006	104	16	0	1	3	124
2007	116	27	1	6	1	151
2008	107	15	0	3	1	126
2009	107	20	1	5	6	133
2010	90	25	0	2	3	120
1C						
2001	90	8	1	1	1	101
2002	140	12	1	5	2	160
2003	142	10	1	1	4	158
2004	115	14	2	4	1	136
2005	171	23	1	3	2	200
2006	127	19	1	2	1	150
2007	126	30	1	2	1	167
2008	91	10	0	5	1	107
2009	116	16	0	3	0	135
2010	123	27	2	6	1	159
1L						
2001	54	1	1	0	2	58
2002	122	11	1	2	1	137
2003	85	4	0	4	0	93
2004	74	3	0	1	0	78
2005	109	6	2	1	1	119
2006	83	4	0	1	0	88
2007	89	6	0	1	0	96

Table 3. Continued.

DAU						
Year	Rifle	Archery	Muzzleloader	Handgun	Other	Total
2008	57	3	1	1	0	62
2009	61	7	1	2	0	71
2010	70	10	0	1	0	81
2B						
2001	47	3	1	2	0	53
2002	49	6	1	0	5	61
2003	52	7	3	3	0	65
2004	45	9	2	0	0	56
2005	48	5	2	2	1	58
2006	42	10	1	1	0	54
2007	45	11	3	0	1	60
2008	41	6	1	0	0	48
2009	31	12	0	3	1	47
2010	46	19	3	2	0	70

Table 4. Age distribution of black bear, Panhandle Region, 2001-present.

DAU Year	Sex	Age ^a										Total
		1	2	3	4	5	6	7	8	9	10+	
1A												
2001	M	13	3	7	4	11	3	14	3	5	8	71
	F	3	2	3	2	1	1	3	0	3	11	29
2002	M	9	39	7	6	4	9	3	7	5	9	98
	F	2	8	1	3	7	6	4	3	3	14	51
2003	M	19	24	34	3	6	6	7	4	8	21	132
	F	4	10	18	2	3	2	9	8	4	9	69
2004	M	7	20	19	24	4	2	2	7	4	27	116
	F	1	7	5	13	2	1	0	7	3	26	65
2005	M	7	16	17	13	10	0	2	5	7	12	89
	F	3	4	11	6	7	0	1	0	3	11	46
2006	M	22	15	14	24	14	15	0	0	0	15	119
	F	8	4	5	8	5	7	2	3	0	18	60
2007	M	15	17	13	11	16	9	12	3	2	20	118
	F	12	9	5	6	8	5	7	0	2	11	65
2008	M	7	18	15	7	3	9	4	8	0	21	92
	F	3	7	6	2	1	3	1	4	1	16	44
2009	M	11	11	18	17	4	1	5	4	7	7	85
	F	1	6	6	4	2	4	1	1	4	8	37
2010	M	16	17	6	14	12	3	3	10	2	17	100
	F	8	7	6	7	3	4	3	4	2	9	54
1B												
2001	M	14	9	13	6	7	1	3	1	1	1	56
	F	6	6	7	4	4	1	2	2	5	8	45
2002	M	14	23	9	4	0	6	1	2	0	3	62
	F	6	11	6	8	3	2	1	5	1	9	52
2003	M	14	16	20	7	6	4	4	1	1	2	75
	F	5	15	11	2	7	5	4	4	1	11	65
2004	M	9	16	18	13	2	2	1	2	0	1	64
	F	6	10	9	4	2	0	1	0	4	11	47
2005	M	12	16	20	12	6	1	2	0	0	1	70
	F	5	14	8	6	2	1	7	1	1	7	52
2006	M	13	16	16	8	4	1	2	1	1	2	64
	F	7	7	7	5	2	3	1	7	3	9	52
2007	M	22	21	10	13	6	3	2	4	2	4	87
	F	5	17	7	5	5	4	3	3	1	10	60
2008	M	22	16	11	10	2	1	0	2	2	3	69
	F	1	4	12	5	4	3	2	3	1	18	53
2009	M	13	27	15	8	3	1	3	2	1	2	75
	F	6	11	6	7	3	1	2	2	1	8	47
2010	M	16	18	14	4	6	2	0	2	2	5	69

Table 4. Continued.

DAU Year	Sex	Age ^a										Total
		1	2	3	4	5	6	7	8	9	10+	
	F	11	5	7	2	2	1	4	0	0	11	43
1C												
2001	M	18	8	9	5	8	2	6	0	2	8	66
	F	4	2	2	1	4	0	3	1	0	10	27
2002	M	14	41	2	3	6	10	3	10	5	13	107
	F	4	5	4	2	5	8	1	1	2	8	40
2003	M	15	15	28	1	5	3	5	1	4	12	89
	F	4	8	15	4	2	0	3	0	3	10	49
2004	M	10	20	20	17	4	2	3	7	3	6	92
	F	1	3	5	8	0	2	2	2	3	10	36
2005	M	11	22	37	12	19	1	1	2	3	11	119
	F	7	11	9	5	12	1	4	1	4	13	67
2006	M	13	21	7	21	10	10	2	0	3	7	94
	F	5	5	4	5	3	3	1	1	1	7	35
2007	M	10	14	24	4	16	6	9	1	1	14	99
	F	5	5	9	8	11	2	7	0	0	14	61
2008	M	6	16	9	8	4	6	2	3	1	3	58
	F	7	7	6	2	1	2	1	4	0	12	42
2009	M	22	12	12	11	15	1	10	2	1	4	90
	F	4	6	3	3	1	1	1	6	1	11	37
2010	M	18	11	16	16	6	7	3	6	1	8	92
	F	5	5	6	3	3	3	4	7	4	9	49
1L												
2001	M	8	4	5	4	5	3	6	2	1	3	41
	F	1	3	3	1	2	1	2	1	0	6	20
2002	M	9	30	3	12	2	9	1	6	4	3	79
	F	5	11	4	3	4	4	1	5	1	6	44
2003	M	11	14	15	3	2	2	4	2	3	3	59
	F	4	5	5	2	3	1	5	2	0	6	33
2004	M	8	11	5	7	4	2	3	1	1	5	47
	F	2	4	3	6	1	4	2	3	0	4	29
2005	M	10	12	20	6	8	1	2	1	2	9	71
	F	3	6	8	5	7	1	1	1	1	10	43
2006	M	10	12	7	9	4	5	0	1	0	5	53
	F	1	6	0	3	5	4	0	2	0	5	26
2007	M	11	17	10	5	4	3	5	0	2	2	59
	F	2	4	6	6	4	2	4	0	2	3	33
2008	M	6	11	8	3	3	3	1	1	0	1	37
	F	1	4	1	5	2	2	1	0	0	3	19
2009	M	8	11	9	3	8	1	1	0	3	5	49
	F	1	5	3	0	2	3	2	0	1	4	21
2010	M	8	12	10	4	6	1	2	3	0	2	48
	F	9	6	4	4	1	2	0	3	0	3	32

Table 4. Continued.

DAU		Age ^a										Total
Year	Sex	1	2	3	4	5	6	7	8	9	10+	
2B												
2001	M	2	1	4	3	3	1	7	2	2	6	31
	F	0	2	2	1	2	0	2	0	1	4	14
2002	M	4	14	2	3	3	4	2	6	2	3	43
	F	2	1	0	1	1	2	2	3	0	1	13
2003	M	2	2	18	0	2	0	4	2	0	8	38
	F	0	2	8	0	2	2	0	0	1	8	23
2004	M	2	10	6	10	0	1	2	3	0	6	40
	F	1	1	4	3	0	1	0	1	1	6	18
2005	M	3	6	7	8	7	2	2	0	2	4	41
	F	0	2	1	0	1	0	0	0	0	9	13
2006	M	3	7	6	6	5	9	0	1	0	3	40
	F	1	1	2	2	1	3	0	0	0	4	14
2007	M	1	9	13	4	5	5	6	0	0	4	47
	F	0	1	3	3	3	0	0	0	0	6	16
2008	M	0	4	6	8	2	4	0	3	0	10	37
	F	0	1	4	3	3	0	1	1	1	4	18
2009	M	1	5	11	5	5	2	2	2	1	1	35
	F	1	0	2	0	1	1	0	0	2	1	8
2010	M	3	8	7	10	2	4	3	5	0	4	46
	F	1	0	2	1	2	2	1	1	1	3	14

^a Includes only black bear with both known age and sex.

Table 5. 2000-2010 Black Bear Plan management indicators, Panhandle Region, 2001-present.

DAU				
Year	<i>n</i>	% Females	% Males ≥ 5	# Males ≥ 5
1A				
2001	126	27	59	45
2002	185	33	37	37
2003	237	35	38	51
2004	199	34	40	46
2005	168	35	40	36
2006	224	34	36	44
2007	209	33	51	62
2008	148	34	49	46
2009	130	32	34	28
2010	179	37	47	47
3-year avg.	152	35	43	45
Desired levels		<30	>35	
1B				
2001	105	44	23	13
2002	118	46	20	12
2003	146	47	24	18
2004	116	4	13	8
2005	134	41	14	10
2006	124	47	17	11
2007	153	41	24	21
2008	126	43	14	10
2009	132	37	16	12
2010	120	39	25	17
3-year avg.	136	40	18	14
Desired levels		>40	<25	
1C				
2001	100	29	39	26
2002	160	26	42	47
2003	159	36	34	31
2004	136	29	28	26
2005	200	36	31	37
2006	150	31	34	32
2007	169	38	47	47
2008	107	41	32	19
2009	137	30	37	33
2010	159	35	34	31
3-year avg.	134	35	37	33
Desired levels		>40	<25	
1L				
2001	66	32	48	14

Table 5 Continued

DAU				
Year	<i>n</i>	% Females	% Males ≥ 5	# Males ≥ 5
2002	137	34	31	20
2003	93	35	29	25
2004	78	40	35	17
2005	119	39	32	16
2006	88	33	28	23
2007	97	36	27	15
2008	62	34	24	16
2009	72	31	35	9
2010	81	41	29	17
3-year avg.	72	35	28	14
Desired levels		30-40	25-35	
2B				
2001	52	37	68	21
2002	61	23	47	20
2003	65	38	42	16
2004	56	27	30	12
2005	58	28	41	17
2006	54	26	45	18
2007	60	23	40	18
2008	48	33	44	14
2009	47	17	37	13
2010	70	24	39	18
3-year avg.	55	25	44	16
Desired levels		30-40	25-35	

**PROGRESS REPORT
SURVEYS AND INVENTORIES**

STATE:	<u>Idaho</u>	JOB TITLE:	<u>Black Bear Surveys and</u>
PROJECT:	<u>W-170-R-34</u>		<u>Inventories</u>
SUBPROJECT:	<u>2</u>	STUDY NAME:	<u>Big Game Population Status,</u>
STUDY:	<u>1</u>		<u>Trends, Use, and Associated</u>
JOB:	<u>9</u>		<u>Habitat Studies</u>
PERIOD COVERED: <u>July 1, 2010 to June 30, 2011</u>			

CLEARWATER REGION

Abstract

Reported 2010 harvest for the Clearwater Region was 826 black bears. This compares to 750 bears harvested in 2009 and is higher than the previous 3-year average of 769. Total harvest by DAU in 2010 was 126 in DAU 1D, 83 in DAU 1E, 180 in DAU 1F, 307 in DAU 2A, and 130 in DAU 3A.

Black Bear Management Plan harvest criteria for the 2000-2010 Plan call for heavy harvest in all DAU's except DAU 3A, which is set for moderate harvest. Heavy harvest objectives were only met for DAU 1D. Harvest objectives were not achieved for the other Clearwater DAU's with the exception of percent females in DAU's 1E and 3A.

Concerns over elk calf recruitment rates in DAUs 2A and 3A led to liberalized season frameworks beginning in 1998 (2-bear bag limit, extended season length, implementation of an outfitter-overlap program, reduced price nonresident tag fees, etc.). Harvest increased markedly in these DAUs. However, harvest criteria indicate that populations are still lightly harvested. Unlike other regional DAUs, harvest in 2A and 3A occurs primarily during the spring season (81% in DAU 2A and 70% in DAU 3A based on a 3-year average) and with hunting over bait being the predominant method of take (75% and 57%, respectively) based on 2010 data. For the rest of the region (DAU's 1D, 1E, and 1F), spring harvest accounted for 33%, 45%, and 40% of the total harvest, respectively, based on the most recent 3-year average. The most common method of take in DAU 1D was hounds (40%) followed by incidental (38%), while the most common method of take for DAU 1E was bait (31%) followed by still/stalk (25%). For DAU 1F the most common method of take was baiting (44%), followed by still/stalk (25%).

No bait station surveys have been conducted in the Clearwater region since 2007. This technique has been largely abandoned on a statewide basis due to concerns over its ability to accurately monitor population trends.

AREA 1

DAU 1D (GMUs 8A, 10A)

Abstract

DAU 1D had historically been one of the most over-harvested DAUs in the region. Harvest criteria were exceeded in all 4 over-harvest criteria in 1992. In 1993, seasons were modified to reduce harvest of black bears in this DAU. The regulation changes were successful in reducing harvest by an average of 16% over the following 3 years. However, since 1996, harvest has increased to levels higher than those observed prior to the regulation change. When analyzed by season and method, most of the 2010 harvest occurred in the fall (62%) by hound hunters (40%), incidental harvest (38%), and still/stalk hunters (19%); compared to 2009 when fall harvest accounted for 62% of the total harvest by hound hunters (40%), incidental harvest (32%), and still/stalk hunters (26%). High road densities have allowed hunters to access most of the available black bear habitat. The current 2000-2010 Black Bear Management Plan specifies that DAU 1D is to be managed for harvest at the “heavy” level; harvest rates fall within these levels.

Management Direction

DAU 1D has historically exhibited signs of high black bear harvest. This DAU likely receives many dispersers from DAU 2A; therefore, the current high harvest can probably be maintained. Direction for DAU 1D is to monitor harvest data to determine if changes in harvest structure reflect a negative trend in the population or just a change in age of black bears being shot by hunters as a result of fall harvest and food availability. The population will be stabilized through regulation changes if necessary.

Background

DAU 1D typically receives high annual rainfall, as indicated by the common occurrence of western red cedar habitat types, lush forb associations, and a variety of berry species. Productive habitat provides optimal foraging for black bears.

Mixed land ownership and high road densities on USFS, IDL, a private timber company, and small private landholdings characterize these GMUs. Although the habitat provides high-quality forage, easy hunter access has led to over-harvest problems from direct mortality as a result of intensive hunting pressure.

Historically, season lengths in DAU 1D were relatively long, but have been more restrictive in recent years. The 1992 season length was 107 days with a 2-week pursuit season. The fall season length under the 1992-2000 Black Bear Management Plan was reduced to 63 days with a 61-day pursuit season. The spring general season is 47 days. No changes in this DAU were included in the 2000-2010 Black Bear Plan. But in 2000, the fall season was extended 2 weeks earlier for archery hunters. For 2010, the general spring and fall season was 47 and 63 days, respectively. Black bear baiting is not allowed.

Population Surveys

Bait station surveys have not been conducted in DAU 1D since 1996 (Table 1). This technique has been largely abandoned on a statewide basis due to concerns about its ability to accurately monitor population trends.

Harvest Characteristics

During 2010, 126 black bears were harvested in DAU 1D, compared to 121 black bears harvested in 2009 and the previous 3-year average of 133 black bears (Table 2). Females accounted for 46% of the harvest in 2010 (Table 4). Most black bears (62%) were harvested during the fall season. This is consistent with recent harvest trends, but a reversal from 1990-1992 (prior to changes designed to reduce harvest) when spring harvest predominated. Age characteristics of bears harvested from 2008-2010 indicate that criteria were met (Table 4).

The predominant method of harvest in 2010 was hound hunting, which accounted for 40% of the total harvest, followed by incidental harvest at 38% and still-hunting at 19% (Table 5). This represents a shift from 1990-1992, when baiting was the most common method used. The rifle was used to harvest 87% of black bears followed by archery at 9% (Table 6).

Depredations

No black bear depredations were reported in DAU 1D in 2010 (Table 7).

Dog-training Seasons

An 8-week dog-training season (from 1 June-31 July) was offered in DAU 1D during 2010 (Appendix A).

Management Implications

Under guidance of the previous (1992-2000) Black Bear Management Plan, black bear harvest in DAU 1D was reduced after the season framework was modified. However, harvest has rebounded to pre-1993 levels and beyond since that time. Based on current management criteria, black bears have been harvested at the heavy level in DAU 1D. Percent females (42%) met the objective of >40% for the 2008-2010 seasons; percent males ≥ 5 years old (21%) also met the objective of <25%.

Recent harvest records indicate an increased harvest of predominantly younger age-class black bears. This could be indicative of increased numbers of subadult dispersers dominating the harvest.

DAU 1E (GMUs 8, 11, 11A, 13)

Abstract

Hunters in DAU 1E harvested a total of 83 black bears during 2010, compared to 77 black bears harvested during 2009, and a 3-year average of 78. Females accounted for 39% of the 2010 harvest. Most black bears were harvested in the fall (54%) with baiting being the most common method employed (31%).

Management Direction

Because most of the black bear habitat in DAU 1E is privately owned and in steep canyons, harvest is not distributed evenly. Hound hunting is difficult and may conflict with private landowners due to fragmented ownership. Consequently, management direction is to reduce hound-hunting activity during take and dog-training seasons (closed), but to maintain harvest levels. In addition, there is a lack of evenly dispersed, quality black bear habitat leading to the potential for over-harvest in portions of these isolated and/or fragmented habitats.

Background

DAU 1E is located in the western portion of Clearwater Region and is predominantly private land. Difficult access and fragmented black bear habitat through most of the DAU have kept overall harvest unevenly distributed. Agricultural crops and sheep and cattle allotments are plentiful and characterize this DAU. Timbered habitat is clumped and interspersed with expansive grasslands along the Salmon, Snake, and lower Clearwater River breaks. Old homesteads and dispersed fruit trees provide black bears with plentiful fall foods in some areas. Some of the largest black bears in the region are typically harvested in these GMUs. Past bait station transects conducted on Craig Mountain Wildlife Management Area (WMA) indicated an increasing trend in black bear visitation since the WMA came under Department management, and is concurrent with increasing harvest rates.

The climate in this DAU ranges from hot and arid along the river breaks, to cooler and moister at the higher elevations. The 2010 fall season length was 63 days (Appendix A), a reduction of 44 days from 1992. Spring general season in 2010 was 31 days.

Population Surveys

Bait station surveys were last conducted in 2007 for DAU 1E in GMU 11. Sixteen transects were sampled in June and July 2007. A 20% visitation rate was observed (Table 1) which was a 55% decrease over that observed in 2006 (44%) and was 38% lower than the previous 3-year average of 32%. Bait station surveys were discontinued in 2008.

Harvest Characteristics

There were 83 black bears harvested in DAU 1E during 2010. This compares to a previous 3-year average of 78 bears harvested. Forty-six percent and 54% were taken in the spring and fall,

respectively (Table 2). The current 2000-2010 Black Bear Management Plan specifies that DAU 1E is to be managed for harvest at the “heavy” level; harvest criteria were at or near objective for the 2008-2010 seasons (Table 4). The most frequent method of harvest was baiting, accounting for 31% of the harvest (Table 5). Weapon type most frequently used was the rifle which accounted for 87% of the harvest (Table 6).

Depredations

Most of the land in this DAU is privately owned. Three depredation complaints were recorded during 2010 (Table 7).

Dog-training Seasons

No dog-training season has been offered in DAU 1E (Appendix A).

Management Implications

Much of the land in GMUs 8, 11, 11A, and 13 is either agricultural or river breaks, resulting in black bear habitats being isolated. Consequently, most harvest occurs along major road, river, and creek corridors at higher elevations. Many of the young black bears harvested are probably dispersing to new territories with adult black bears using better quality habitats away from roads. It is likely that without much road access, harvest will continue to reflect young dispersing black bears. The 3-year (2008-2010) harvest was 41% female and might indicate that the productive elements of the population (females) were usually selecting more isolated areas, thus reducing the likelihood of mortality. The majority of black bears in any cohort being harvested in this DAU historically are 1-, 2-, and 3-year-old dispersing males.

DAU 1F (GMUs 14, 15, 16, 18)

Abstract

Hunters in DAU 1F harvested a total of 180 black bears during 2010, compared to 159 in 2009, and a previous 3-year average of 160. About half of the black bears (49%) harvested were taken during the fall, reverting back toward pre-1993 harvest levels when spring harvest predominated. The most frequent harvest methods were bait (44%), still/stalk hunting (25%), hounds (17%), and incidental (13%). The most frequent weapon types used were rifle (85%) and archery (9%). The 2008-2010 harvest criteria indicated that percent females (33%) did not meet the target criteria of >40%. The percent males ≥ 5 years old (32%), exceeded the target of <25%. A portion of the DAU in GMU 15 was closed to harvest for research purposes for several years, but reopened in 2004.

Management Direction

Prior to 1993, black bear harvest had increased in DAU 1F, probably as a result of increased road densities into previously roadless areas. The previous Black Bear Management Plan (1992-2000) adopted a decrease in season length, more restrictions on use of dogs during take seasons,

and the dog-training season was lengthened. The direction for management was to reduce black bear harvest, improve black bear population demographics, and maintain hunting opportunity with a variety of hunting techniques. The new black bear plan for 2000-2010 calls for maintaining heavy harvest levels, whereas current harvest is at the moderate level. A portion of GMU 15 that was closed to bear harvest in 1999 due to research was reopened in 2004 to coincide with the season in the rest of the GMU.

Background

Under the 2000-2010 Black Bear Management Plan, season framework in DAU 1F is similar to that of the previous black bear plan. Under the 1992-2000 plan, fall general take season was shortened to 63 days with a dog-training season of 61 days in GMUs 14, 15, and 18 and 31 days for training in GMU 16. (Appendix A). Spring general season in 2010 was 47 days in GMUs 14, 15, and 18 and 77 days in GMU 16. Fall general season in DAU 1F was 63 days long for the 2010 season.

DAU 1F is comprised of about 80% USFS land and 20% private and state lands. Much of the area has high road densities, has been logged, and is easily accessible. There are a few areas in these GMUs that provide core security areas for black bears.

Population Surveys

Bait station surveys were most recently conducted during 2004 in conjunction with the elk productivity research study. Data were analyzed for trails and open and closed roads. In general, trails and closed roads received more visitations than did open roads. Sixty-five transects were surveyed in 2004, and 101 of 325 stations were visited by black bears, resulting in a 31% visitation rate (Table 1). Bait station surveys have not been conducted since 2004.

Harvest Characteristics

There were 180 black bears harvested in DAU 1F during 2010 with 49% being taken during the fall season (Table 2). Management objectives under the new plan allow for heavy harvest of females with management objective of >40% (Tables 3 and 4). Harvest management criteria were not met for the 2008-2010 harvest period. The most frequent methods of harvest were bait (44%), still/stalk hunting (25%), followed by hounds (17%), and incidental (13%) (Table 5). Rifle was the most frequent (85%) weapon type used to harvest a bear in 2010 (Table 6).

Depredations

One depredation complaint was recorded for this DAU in 2010 (Table 7).

Dog-training Seasons

Dog-training season ran from 1 June-31 July in DAU 1F, except for GMU 16 where the season ran from 1-31 July (Appendix A).

Management Implications

DAU 1F has historically received intensive hound hunting activity because of its proximity to population centers and easy road access. Most of the DAU is on national forest lands with high road densities. Although black bear harvest criteria indicate moderate to high harvest levels in recent years, the high-quality black bear habitat in this DAU should allow black bear populations to be maintained at desired levels in reserve and roadless areas. Currently, the harvest is fairly evenly distributed between bait, hounds, still, and incidental harvest for method of take, however baiting is becoming more popular. In recent years, harvest has increased to levels above what occurred prior to the regulation changes. The closure of the northern portion of GMU 15 had an impact on overall harvest. Harvest levels there have returned to, and exceeded, previous peak levels observed in 1998.

AREA 2

DAU 2A (GMUs 10, 12)

Abstract

In 2010, 307 black bears were harvested in DAU 2A, compared to 250 in 2009, and a previous 3-year average of 265. Thirty percent of the harvest consisted of females. Seventy-nine percent of the total harvest occurred during the spring season. Baiting accounted for 75% of the harvest and rifle was the most common weapon used (73%).

Management Direction

The 2000-2010 Black Bear Management Plan recognizes DAU 2A as having productive habitat able to maintain high levels of harvest. DAU 2A may serve as a reservoir of black bears to surrounding GMUs receiving higher harvest pressures (e.g., GMU 10A). Harvest occurs mainly on major road and river corridors in DAU 2A. Take seasons last 157 days with a 31-day dog-training season (Appendix A). The bag limit was increased to 2 black bears per year to take advantage of high black bear numbers and enhance hunter opportunity as well as reduce the bear population within the elk productivity research study area boundaries.

Background

DAU 2A probably contains the most productive black bear habitat in Clearwater Region. High moisture, abundant berry producing shrubs, dense forests, and roadless areas allow for relatively high-density populations. However, liberal hunting seasons since the late 1970s have possibly kept black bear populations below achievable levels.

Population Surveys

Intensive bait station surveys were conducted between 1997 and 2007 (Table 1). Fifty-nine transects and 290 sites were sampled with a visitation rate of 20.7% in 2007. This hit rate represented a decrease of 8% from 2006 and was 22% lower than the previous 3-year average of

27.2. In general, sites on closed roads and trails received higher visitation rates than those on open roads. Bait station surveys have not been conducted since 2007. This technique has been largely abandoned due to concerns over its ability to accurately monitor population trends.

Harvest Characteristics

In 2010, a total of 307 black bears were harvested in DAU 2A, compared to 250 in 2009, and a previous 3-year average of 265 bears harvested. Seventy-nine percent of these black bears were harvested during spring season (Table 2). Thirty percent of all black bears harvested were females. Age criteria set under the new management plan allow for increased harvest as plan goals identify this DAU to be harvested at the “heavy” range. Harvest values were below management criteria, falling within the “moderate” range for the 2008-2010 harvest period. (Table 4).

Hunting over bait accounted for 75% of the harvest in DAU 2A in 2010, followed by still/stalk at 16% (Table 5). Rifle was the most common weapon used accounting for 73% of the harvest (Table 6).

Depredations

A record 12 depredation complaints were recorded during fall 1998, an indication of a poor huckleberry crop in DAU 2A. There were no depredation complaints in DAU 2A in 2010 (Table 7).

Dog-training Seasons

Dog-training season occurred during 2010 from 1-31 July (Appendix A).

Management Implications

DAU 2A receives moderate hunting pressure. The DAU is characterized by roadless habitats, public land, healthy black bear populations, and liberal hunting season frameworks. Harvest is moderate in the male component with 25% ≥ 5 years old for 2008-2010 average, not quite meeting the desired objective $< 25\%$. The adult female segment remains secure in the roadless segments of the DAU, with percent females harvested (31%) below the desired objective of $> 40\%$.

DAU 2A has potential for high black bear numbers because of the quality habitat. Harvest was reduced dramatically from 1993-1996 under the previous black bear plan, but has increased dramatically since 1998 due to liberalized hunting season frameworks. Because black bear populations appear to be healthy, an opportunity to harvest more black bears became apparent and was deemed desirable to address elk calf recruitment concerns. Season length was extended to the end of June for the spring hunt and to the end of big game season in fall. Harvest more than doubled in 1998, and has remained at a high level since. Most of the harvest in this DAU typically occurs in the spring (79% in 2010).

AREA 3

DAU 3A (GMUs 16A, 17, 19, 20)

Abstract

During 2010, 130 black bears were harvested in DAU 3A, compared to the 2009 harvest of 142, and the previous 3-year average (2008-2010) of 134 bears harvested. Twenty-eight percent of the harvest consisted of females. This DAU consistently met the previous (1992-2000) management criteria objectives; the level of harvest relative to new (2000-2010) criteria have also suggested a lightly harvested population. Fifty-seven percent of the black bears taken were harvested over bait.

Management Direction

This DAU probably serves as a reservoir of black bears for surrounding GMUs that are more heavily harvested. The Department will manage DAU 3A to maintain or increase historical harvest levels and distribution, although adjustments will be implemented to conform to statewide management direction. The bag limit for this DAU was doubled for fall 1999 to take advantage of high black bear numbers and to increase opportunity while also attempting to address concerns over low elk calf recruitment.

Background

Seasons have historically been 152 days long in DAU 3A but were reduced to 94 days beginning in 1993, then increased to 109 days in 1996. Seasons were increased to 159 days in 2000 and increased again in 2002 to the current season of 172 days with a 2 bear bag limit (Appendix A). Dog-training seasons have not been allowed, primarily because of the inability of hound hunters to effectively monitor their hounds in wilderness areas.

Most of DAU 3A lies within wilderness and has relatively abundant black bear habitat. The northern portions receive substantial rainfall and provide some of the best black bear habitat in the DAU. The habitat within wilderness is varied with a range from poor- to high-quality habitat that is available throughout the year over a variety of aspects and elevations. Because of low hunting pressure and restricted access, black bear populations are probably quite healthy. Incidental harvest during other big game seasons distributes some pressure across the DAU.

Population Surveys

Black bear bait station surveys have not been conducted in DAU 3A since 1996 (Table 1).

Harvest Characteristics

In 2010, 130 black bears were harvested in DAU 3A compared to 142 in 2009 and the previous 3-year average of 134. It should also be noted that the 192 bears harvested in 2003 and the 193 in 2004 are more than double the number killed in any other year prior to 2003 in this DAU. An

outfitter area overlap program resulted in a substantial increase in hunter participation in this predominantly wilderness DAU and the corresponding increase in harvest. Of the 130 bears harvested in 2010, 28% were females. Spring harvest accounted for 65% of the total harvest. Harvest criteria in the current (2000-2010) plan indicate light harvest levels when compared to the desired moderate harvest levels. Forty-six percent of the males harvested during the 2008-2010 reporting period were ≥ 5 years old compared to the desired objective of 25-35 percent ≥ 5 years old (Tables 3 and 4). Most of the black bears harvested in 2010 were taken over bait (57%) followed by still/stalk (26%) (Table 5). Rifle was the most common weapon used (90%) to harvest a bear during the 2010 season (Table 6).

The black bear population data for DAU 3A suggest that a small proportion of the overall population is harvested. Age structures and harvest criteria indicate this population was the most lightly harvested DAU in the region.

Depredations

No depredations occurred in this DAU during 2010 (Table 7).

Dog-training Seasons

No dog-training season was offered in DAU 3A during 2009 (Appendix A). Hound hunting for black bears is impractical in this DAU due to lack of roads and high probability of losing hounds.

Management Implications

Black bear populations in this DAU are healthy and have consistently fallen below moderate harvest levels, especially the percent males ≥ 5 years old. Because of the adequate habitat within this DAU and light hunting pressure, the season structure proposed in the 2000-2010 Black Bear Management Plan allows for increased harvest, hence the 2-bear bag limit and extended seasons. This liberalized season framework also serves to address concerns over low calf elk recruitment rates.

Table 1. Bait station survey results, Clearwater Region, 1996-present.

Year	GMU(s) surveyed	Survey dates	Total transects available	Total transects sampled	Total stations sampled	Total stations visited by black bear	90% confidence interval	
							%	(+/-)
1996	10, 12	7/2-9	17	8	40	4	10.0	7.8
	11	7/3-8	10	10	50	3	6.0	5.5
	15, 16	6/28-7/13	13	10	50	5	10.0	7.0
	19, 20	6/26-7/2	12	5	25	4	16.0	12.0
1997	10, 12	7/9-14	18	48	237	21	8.9	3.0
	11	7/9-14	10	10	50	8	16.0	8.5
	15, 16	7/9-14	73	73	365	15	4.1	1.7
1997 ^a	10, 12	July-Aug	49	49	242	94	38.8	5.2
	15, 16	July-Aug	73	73	365	144	39.5	4.2
1998 ^a	10, 12	July-Aug	59	59	293	114	38.9	4.7
	15, 16	July-Aug	72	72	352	95	27.0	3.9
1999 ^a	10, 12	July-Aug	47	47	235	85	36.2	5.2
	15, 16	July-Aug	65	65	325	98	30.2	4.2
2000 ^a	10, 12	July-Aug	60	59	295	71	24.1	4.1
	11	July	10	10	47	7	14.8	8.6
	15, 16	July-Aug	68	68	340	95	27.9	4.0
2001 ^a	10, 12	July-Aug	66	66	329	72	21.9	3.8
	11	July	12	12	65	9	13.9	7.1
	15	July-Aug	64	64	316	85	26.9	4.1
2002 ^a	10, 12	July-Aug	58	57	285	88	30.9	4.5
	11	July	16	13	65	9	13.9	7.1
	15	July-Aug	60	60	300	102	34.0	4.5
2003 ^a	10, 12	July-Aug	67	67	318	87	26.7	4.1
	11	July	16	16	80	20	25.0	8.0
	15	July-Aug	67	67	325	128	39.4	4.5
2004 ^a	10,12	July-Aug	67	61	305	106	34.8	4.5
	11	July	16	16	80	27	33.8	8.8
	15	July-Aug	67	65	325	101	31.1	4.2
2005 ^a	10,12	June-Aug	67	51	253	70	27.7	4.6
	11	June-July	16	16	80	15	18.8	7.2
	15	June-July	67	49	245	86	35.1	5.0
2006 ^a	10, 12	June-July	64	64	319	61	19.1	3.7
	11	June-July	16	16	80	35	43.8	9.2
2007 ^a	10, 12	June-July	64	59	290	60	20.7	3.9
	11	June-July	16	16	80	16	20.0	7.4
2008 ^b	ND	ND	ND	ND	ND	ND	ND	ND
2009 ^b	ND	ND	ND	ND	ND	ND	ND	ND
2010 ^b	ND	ND	ND	ND	ND	ND	ND	ND

^a Transects conducted using bacon baits instead of sardines and leaving out 20 days.

^b No bait station surveys were conducted since 2007.

Table 2. Black bear harvest by season and sex, Clearwater Region, 2001-present.

DAU Year	Spring				Fall				Entire season			
	M	F	U	Total	M	F	U	Total	M	F	U	Total
1D												
2001	19	11	0	30	50	32	0	82	69	43	0	112
2002	15	8	0	23	65	48	1	114	80	56	1	137
2003	43	28	0	71	62	47	0	109	105	75	0	180
2004	39	30	1	70	47	33	0	80	86	63	1	150
2005	37	21	0	58	46	35	0	81	83	56	0	139
2006	32	26	0	58	41	42	0	83	73	68	0	141
2007	42	30	2	74	55	21	0	76	97	51	2	150
2008	24	17	0	41	68	41	0	109	92	58	0	150
2009	28	16	0	44	42	35	0	77	70	51	0	121
2010	25	23	0	48	43	35	0	78	68	58	0	126
3-yr. avg.	26	19	0	45	51	37	0	88	77	56	0	133
1E												
2001	25	13	0	38	16	11	0	27	41	24	0	65
2002	14	12	1	27	36	13	0	49	50	25	1	76
2003	14	13	0	27	24	13	0	37	38	26	0	64
2004	21	8	0	29	22	12	0	34	43	20	0	63
2005	22	6	0	28	20	17	0	37	42	23	0	65
2006	16	13	0	29	20	14	0	34	36	27	0	63
2007	16	13	0	29	15	18	0	33	31	31	0	62
2008	20	13	0	33	22	18	0	40	42	31	0	73
2009	24	10	0	34	21	23	0	44	45	33	0	78
2010	25	13	0	38	26	19	0	45	51	32	0	83
3-yr. avg.	23	12	0	35	23	20	0	43	46	32	0	78
1F												
2001	19	10	0	29	30	11	0	41	49	21	0	70
2002	31	13	0	44	47	15	1	63	78	28	1	107
2003	35	22	0	57	45	22	0	67	80	44	0	124
2004	32	22	0	54	40	18	0	58	72	40	0	112
2005	38	23	0	61	46	38	0	84	84	61	0	145
2006	40	22	0	62	47	27	0	74	87	49	0	136
2007	34	20	0	54	59	34	0	93	93	54	0	147
2008	33	15	0	48	69	25	0	94	102	40	0	142
2009	34	18	0	52	68	39	0	107	102	57	0	159
2010	66	26	0	92	59	28	1	88	125	54	1	180
3-yr. avg.	44	20	0	64	65	31	0	96	110	50	0	160
2A												
2001	155	86	0	241	18	13	0	31	173	99	0	272
2002	156	57	1	214	23	17	0	40	179	74	1	254
2003	171	99	1	271	37	16	0	53	208	115	1	324
2004	169	108	0	277	35	22	0	57	204	130	0	334

Table 2. Continued.

DAU Year	Spring				Fall				Entire season			
	M	F	U	Total	M	F	U	Total	M	F	U	Total
2005	169	106	0	275	21	11	0	32	190	117	0	307
2006	157	63	1	221	25	13	0	38	182	76	1	259
2007	163	99	0	262	37	20	0	57	200	119	0	319
2008	129	65	0	194	31	12	0	43	160	77	0	237
2009	146	60	0	206	30	14	0	44	176	74	0	250
2010	169	75	0	244	45	18	0	63	214	93	0	307
3-yr. avg.	148	67	0	215	35	15	0	50	183	82	0	265
3A												
2001	38	10	1	49	8	9	1	18	46	19	2	67
2002	47	17	1	65	27	7	0	34	74	24	1	99
2003	97	52	0	149	31	12	0	43	128	64	0	192
2004	106	49	1	156	26	11	0	37	132	60	1	193
2005	64	35	0	99	24	12	0	36	88	47	0	135
2006	83	48	0	131	14	9	0	23	97	57	0	154
2007	67	25	0	92	26	18	0	44	93	43	0	136
2008	63	33	1	97	21	10	0	31	84	43	1	128
2009	68	31	1	100	32	10	0	42	100	41	1	142
2010	62	22	0	84	32	14	0	46	94	36	0	130
3-yr. avg.	65	29	1	94	28	11	0	40	93	40	1	134

Table 3. Age distribution of black bear, Clearwater Region, 2001-present.

DAU		Age											Total
Year	Sex	Cub	1	2	3	4	5	6	7	8	9	10+	
1D													
2001	M	2	24	7	11	6	8	3	1	0	4	3	69
	F	0	12	5	5	1	4	4	3	0	3	3	40
2002	M	2	16	27	2	5	2	4	2	6	4	3	73
	F	0	11	12	5	2	2	3	3	4	0	10	52
2003	M	1	23	24	16	8	5	5	7	4	4	4	101
	F	0	13	14	6	8	7	4	5	1	4	12	74
2004	M	1	20	16	14	7	5	5	2	4	1	8	83
	F	0	5	11	7	7	3	5	4	4	3	13	62
2005	M	2	14	18	18	9	9	1	1	2	0	7	81
	F	0	7	7	18	4	4	3	1	2	3	3	52
2006	M	0	18	13	4	11	5	8	0	1	3	5	68
	F	0	10	14	10	9	3	5	0	1	3	9	64
2007	M	1	13	30	14	11	7	3	3	3	3	5	93
	F	0	6	7	13	5	4	1	3	0	2	5	46
2008	M	2	26	25	13	8	2	5	4	2	0	4	91
	F	1	5	11	9	5	2	5	3	2	0	12	55
2009	M	4	7	19	11	15	3	2	3	2	0	2	68
	F	0	4	12	4	8	5	2	2	2	0	5	44
2010	M	3	11	10	11	10	8	1	2	4	1	4	65
	F	0	12	5	3	11	4	1	2	2	1	14	55
1E													
2001	M	0	7	10	9	3	3	1	0	2	2	2	39
	F	0	4	4	5	2	2	0	3	0	0	4	24
2002	M	0	10	12	6	3	2	4	2	2	3	5	49
	F	0	1	7	5	3	3	1	1	1	1	2	25
2003	M	1	9	8	4	5	4	2	0	2	0	3	38
	F	0	4	2	6	1	2	0	1	1	2	7	26
2004	M	1	7	12	6	7	3	4	1	1	0	0	42
	F	0	4	5	3	2	1	1	0	1	0	2	19
2005	M	0	6	13	7	3	4	2	1	0	1	2	39
	F	0	0	6	3	2	2	0	4	2	0	4	23
2006	M	0	7	0	13	6	3	3	2	0	0	2	27
	F	0	5	9	5	2	2	2	0	0	0	2	36
2007	M	1	5	13	1	3	3	1	0	2	0	1	28
	F	1	6	6	2	5	3	0	0	1	1	3	30
2008	M	1	7	8	7	4	3	2	2	1	2	3	40
	F	1	8	1	4	1	3		1	1	1	7	28
2009	M	2	7	14	7	3	0	3	2	1	1	2	42
	F	0	3	10	6	3	0	6	0	1	0	3	32
2010	M	0	8	8	12	7	4	3	2	1	1	4	50
	F	0	6	6	7	1	0	1	3	0	4	1	29
1F													
2001	M	1	12	6	8	4	6	7	2	1	1	2	50

Table 3. Continued.

DAU	Year	Sex	Age										Total	
			Cub	1	2	3	4	5	6	7	8	9		10+
	2002	F	0	1	3	5	1	2	0	1	0	1	4	18
	2002	M	1	10	19	5	14	5	6	1	1	3	9	74
	2003	F	0	2	5	4	1	1	2	2	1	3	5	26
	2003	M	0	8	18	18	5	4	6	6	2	3	7	77
	2004	F	0	4	7	12	3	2	2	2	0	0	6	38
	2004	M	0	8	19	7	13	2	2	3	1	2	5	62
	2005	F	0	0	3	9	3	0	4	2	1	1	10	33
	2005	M	0	14	13	19	8	3	4	5	1	0	11	78
	2006	F	1	8	7	15	3	8	4	1	1	1	5	54
	2006	M	0	13	15	5	16	6	4	4	4	3	5	41
	2007	F	0	5	4	8	4	3	5	2	3	2	5	75
	2007	M	1	12	26	13	8	5	8	11	1	1	3	51
	2008	F	1	3	14	3	6	4	1	2	2	4	11	89
	2008	M	0	18	26	15	13	7	8	4	1	2	6	100
	2009	F	0	4	3	6	4	2	3	4	0	1	11	38
	2009	M	1	12	21	19	18	6	8	4	3	2	8	102
	2010	F	0	6	11	10	7	4	1	2	2	2	12	57
	2010	M	0	22	18	23	15	9	7	6	4	0	20	124
		F	0	6	4	13	5	5	1	1	6	2	9	52
2A	2001	M	0	23	7	11	23	28	13	23	10	5	25	168
		F	0	9	1	12	4	7	8	7	6	8	33	95
	2002	M	0	4	10	5	7	10	9	12	11	5	10	174
		F	0	3	28	5	5	2	6	8	4	0	10	71
	2003	M	1	22	41	80	6	9	6	4	9	4	22	204
		F	0	7	8	41	4	7	8	6	3	6	22	112
	2004	M	0	9	42	31	43	3	6	5	12	5	18	174
		F	1	5	14	14	32	0	5	5	8	6	23	113
	2005	M	0	9	31	59	24	30	2	5	1	5	18	184
		F	0	5	8	25	16	18	0	2	4	2	33	113
	2006	M	0	8	48	20	34	11	11	2	3	3	10	60
		F	0	1	7	6	17	4	4	1	1	0	19	150
	2007	M	0	18	35	43	20	25	5	10	0	2	16	94
		F	0	8	9	21	9	11	6	9	0	3	18	174
	2008	M	0	11	40	31	37	7	12	4	4	2	5	153
		F	0	5	10	13	12	8	5	2	7	2	11	75
	2009	M	0	10	35	58	18	17	6	13	4	3	4	168
		F	0	0	10	14	4	8	4	4	2	4	17	67
	2010	M	0	30	43	41	45	9	10	9	8	5	9	209
		F	0	7	8	11	25	7	7	4	10	2	11	92
3A	2001	M	0	2	1	6	5	7	3	8	6	3	4	45
		F	0	0	0	4	1	1	1	1	2	0	7	17
	2002	M	0	5	17	2	9	5	7	2	4	4	11	66
		F	0	1	2	1	4	1	1	2	4	1	4	21
	2003	M	0	8	10	23	3	5	6	7	6	12	44	124
		F	0	0	7	13	1	2	6	3	4	8	18	62

Table 3. Continued.

DAU		Age											Total
Year	Sex	Cub	1	2	3	4	5	6	7	8	9	10+	
2004	M	0	3	14	20	17	9	6	6	6	8	34	123
	F	0	1	5	3	14	4	1	2	4	3	19	56
2005	M	0	5	7	14	11	11	3	6	6	1	19	83
	F	0	1	1	3	8	5	0	4	0	3	16	41
2006	M	0	6	15	7	16	12	13	2	4	3	16	51
	F	0	2	3	8	11	5	2	1	3	1	15	94
2007	M	0	7	13	12	9	5	2	8	1	4	19	38
	F	0	3	6	7	4	4	5	1	1	0	7	80
2008	M	1	5	11	13	12	5	10	4	7	0	13	81
	F	0	2	4	5	3	5	1	3	2	3	8	36
2009	M	0	7	14	20	11	11	7	5	2	3	16	96
	F	0	0	4	3	7	3	5	5	1	1	12	41
2010	M	0	8	8	19	15	6	9	4	7	2	15	93
	F	0	1	1	6	7	1	2	1	1	1	13	34

Table 4. 2000-2010 Black Bear Plan management values and criteria, Clearwater Region, 2001-present.

DAU Year	<i>n</i> ^a	% Females	% Males ^b ≥5	# Males ^b ≥5
1D				
2001	112	38	28	19
2002	136	41	26	21
2003	180	42	28	29
2004	149	42	29	25
2005	139	40	25	20
2006	141	48	32	22
2007	150	34	26	24
2008	150	39	19	17
2009	121	42	18	12
2010	126	46	31	20
3-year avg.	133	42	21	16
Desired levels		>40	<25	
1E				
2001	65	37	24	10
2002	75	33	36	18
2003	64	41	29	11
2004	63	32	21	9
2005	65	35	26	10
2006	63	43	28	10
2007	62	50	23	7
2008	73	42	33	13
2009	77	42	21	9
2010	83	39	30	15
3-year avg.	78	41	26	12
Desired levels		>40	<25	
1F				
2001	70	30	39	19
2002	106	26	32	25
2003	124	35	35	28
2004	112	36	21	15
2005	145	42	31	24
2006	136	36	35	26
2007	147	37	33	29
2008	142	34	28	28
2009	159	36	30	31
2010	180	30	37	46
3-year avg.	160	33	32	35
Desired levels		>40	<25	

Table 4. Continued.

DAU Year	<i>n</i> ^a	% Females	% Males ^b ≥5	# Males ^b ≥5
2A				
2001	272	36	60	104
2002	253	29	32	57
2003	323	36	26	54
2004	334	39	24	49
2005	307	38	33	61
2006	260	29	27	40
2007	319	37	33	58
2008	237	32	22	34
2009	250	30	28	47
2010	307	30	24	50
3-year avg.	265	31	25	45
Desired levels		>40	<25	
3A				
2001	65	29	67	31
2002	98	24	45	33
2003	192	33	63	80
2004	192	31	52	69
2005	135	35	55	46
2006	154	37	53	50
2007	136	32	52	48
2008	128	34	48	39
2009	142	29	45	44
2010	130	28	46	43
3-year avg.	134	30	46	42
Desired levels		30-40	25-35	

^a Number of black bears that were sexed (excluding unknowns).

^b Number of black bears that were aged (excluding unknowns).

Table 5. Method of black bear harvest, Clearwater Region, 2001-present.

DAU						
Year	Bait	Hound	Still	Incidental	Other	Total
1D						
2001	2	49	32	29	0	112
2002	0	56	30	51	0	137
2003	1	95	30	53	1	180
2004	0	88	23	36	3	150
2005	1	66	36	34	2	139
2006	3	83	22	32	1	141
2007	1	80	32	35	2	150
2008	1	70	24	52	3	150
2009	0	49	32	39	1	121
2010	1	51	24	48	2	126
1E						
2001	12	14	24	15	3	68
2002	10	5	33	28	0	76
2003	8	9	19	23	5	64
2004	21	11	17	14	0	63
2005	16	10	21	17	1	65
2006	15	7	26	14	1	63
2007	19	8	21	11	3	62
2008	18	10	27	17	1	73
2009	20	11	25	22	0	78
2010	26	16	21	19	1	83
1F						
2001	17	22	18	12	3	72
2002	24	29	34	18	2	107
2003	40	20	34	30	0	124
2004	29	29	34	20	0	112
2005	47	24	47	25	2	145
2006	56	30	29	21	0	136
2007	53	30	26	34	4	147
2008	51	18	51	22	0	142
2009	60	26	37	34	2	159
2010	80	31	45	24	0	180
2A						
2001	199	17	39	15	2	272
2002	163	15	50	20	6	254
2003	226	17	62	16	3	324
2004	222	29	52	29	2	334
2005	236	13	40	11	7	307
2006	184	13	43	13	5	258
2007	259	11	26	21	2	319

Table 5. Continued.

DAU						
Year	Bait	Hound	Still	Incidental	Other	Total
2008	168	12	40	14	3	237
2009	181	6	37	17	9	250
2010	231	2	48	17	8	307
3A						
2001	35	4	15	10	1	65
2002	40	4	37	17	1	99
2003	108	12	54	13	5	192
2004	124	6	52	9	2	193
2005	73	8	42	11	1	135
2006	104	5	31	11	3	154
2007	89	1	31	10	5	136
2008	90	1	27	7	3	128
2009	86	1	40	10	5	142
2010	74	2	34	17	3	130

Table 6. Weapon type used to harvest black bear, Clearwater Region, 1998-present.

DAU						
Year	Rifle	Archery	Muzzleloader	Handgun	Other	Total
1D						
1998	132	3	1	3	0	139
1999	99	4	1	6	0	110
2000	97	12	0	1	3	113
2001	96	13	0	3	0	112
2002	111	18	1	6	1	137
2003	159	15	0	5	1	180
2004	130	15	0	5	0	150
2005	127	8	0	4	0	139
2006	118	13	1	4	5	141
2007	131	13	0	5	1	150
2008	120	16	0	4	10	150
2009	102	8	0	3	7	121
2010	110	11	0	3	2	126
1E						
1998	56	7	1	0	1	65
1999	64	1	0	0	0	65
2000	51	8	3	1	3	66
2001	61	3	0	2	2	68
2002	61	13	1	1	0	76
2003	54	8	0	1	1	64
2004	50	8	0	5	0	63
2005	55	8	0	2	0	65
2006	51	7	1	2	2	63
2007	54	7	0	0	1	62
2008	60	11	0	2	0	73
2009	74	2	0	2	0	78
2010	72	9	0	1	1	83
1F						
1998	94	4	0	5	2	105
1999	76	4	0	2	2	84
2000	61	6	0	2	2	71
2001	66	3	0	1	2	72
2002	96	5	2	4	0	107
2003	104	10	6	3	1	124
2004	92	7	4	7	2	112
2005	121	14	3	7	0	145
2006	111	23	0	2	0	136

Table 6. Continued.

DAU						
Year	Rifle	Archery	Muzzleloader	Handgun	Other	Total
2007	129	10	3	1	4	147
2008	125	10	4	2	1	142
2009	137	18	0	2	2	159
2010	153	16	3	5	3	180
2A						
1998	221	54	3	12	1	291
1999	197	49	3	9	1	259
2000	160	41	3	5	5	214
2001	192	53	6	15	6	272
2002	197	45	4	6	2	254
2003	254	53	9	3	5	324
2004	259	59	4	9	3	334
2005	224	69	6	6	2	307
2006	191	54	4	3	7	259
2007	221	79	6	8	5	319
2008	182	48	1	4	2	237
2009	182	61	2	4	1	250
2010	223	71	5	5	3	307
3A						
1998	63	3	0	4	0	70
1999	76	9	0	2	0	87
2000	70	4	0	1	2	77
2001	51	6	4	3	1	65
2002	73	21	2	3	0	99
2003	158	22	3	8	1	192
2004	166	17	3	7	0	193
2005	126	7	0	2	0	135
2006	136	9	3	4	2	154
2007	116	12	1	5	2	136
2008	114	11	1	2	0	128
2009	129	8	0	4	1	142
2010	117	8	0	5	0	130

Table 7. Black bear depredation complaints, Clearwater Region, 1998-present.

Year	DAU					Total
	1D	1E	1F	2A	3A	
1998	9	10	17	12	2	50
1999	6	10	1	2	1	20
2000	8	7	2	0	0	17
2001	2	5	0	3	2	12
2002	4	3	0	0	0	7
2003	6	2	4	2	0	14
2004	1	1	0	0	0	2
2005	0	1	0	0	0	1
2006	2	9	1	0	0	12
2007	1	4	4	1	0	10
2008	0	5	1	0	0	6
2009	0	2	1	0	0	3
2010	0	3	1	0	0	4

**PROGRESS REPORT
SURVEYS AND INVENTORIES**

STATE:	<u>Idaho</u>	JOB TITLE:	<u>Black Bear Surveys and</u>
PROJECT:	<u>W-170-R-34</u>		<u>Inventories</u>
SUBPROJECT:	<u>3</u>	STUDY NAME:	<u>Big Game Population Status,</u>
STUDY:	<u>1</u>		<u>Trends, Use, and Associated</u>
JOB:	<u>9</u>		<u>Habitat Studies</u>
PERIOD COVERED: <u>July 1, 2010 to June 30, 2011</u>			

SOUTHWEST REGION

Abstract

Five hundred and eighty-one black bears of known sex were reported harvested in the Southwest Region in 2010. Of those, 535 black bears were reported harvested in Area 1, and 46 were reported harvested in DAU 3B of Southwest Region.

During 2010, 18 black bears were captured in GMU 39 using foot snares, of which 7 were female. GPS collars were placed on the females with the intent of determining if they were using the area where marine protein was placed along streams for the WSU study. Additionally, female bear dens were visited to determine body condition, reproductive success, and collect other vital data. Trapping data will be compared to hair-snares grid data to determine population estimates for the study area.

Reported harvest in Area 1 was 134, 122, and 279 black bears for DAUs 1G, 1H, and 1K, respectively, during 2010 hunting seasons. The reported harvest in Area 1 in 2010 was 37% higher than that reported in 2009. Data indicate percent females and percent males ≥ 5 years-of-age in the harvest criteria are being met in all 3 DAUs. Baiting methods comprised most of the harvest in DAU 1G and 1K in 2010. Still hunting (stalking) and hound hunting methods contributed to the majority of black bear harvest in DAU 1H. Data for DAU 1G indicate harvest criteria are stable. Data for DAU 1H indicate a steady increase in harvest over the past ten years. Harvest data for DAU 1K indicate that elimination of the fall split season in 1998 and increase in spring season in 2002 contributed to a significant increase in black bear harvest.

Harvest criteria are being met in DAU 3B with current harvest levels. Harvest methods in DAU 3B were well distributed between still hunting (stalking), baiting, and incidental take. Season changes were incorporated into the 2000-2010 Black Bear Species Management Plan to make this area consistent with statewide management direction.

AREA 1

DAU 1G (GMUs 19A, 23, 24, 25)

Management Direction

Area 1 contains 12 DAUs. Harvest guidelines and population characteristic targets provide management goals for these DAUs. The 1992-2000 Black Bear Species Management Plan directed the Department to manage Area 1 to maintain or reduce harvest, improve age structure, and offer a variety of hunting opportunities.

The plan called for monitoring certain population characteristics as reflected in the harvest over 3-year segments to evaluate the status of black bear populations. In DAUs where data indicated harvest reductions were necessary, the Department would evaluate harvest distribution, hunter density, season of harvest, and hunting methods before making a recommendation. Male, female, and overall median age and percent females were the harvest criteria monitored during the 1992-2000 planning period.

New, simpler criteria were developed in the 2000-2010 Black Bear Species Management Plan and took effect in the 1999 fall hunting season. These harvest criteria are the 3-year running average of percent females and percent males ≥ 5 years old. Bait station survey trends are also considered when assessing population status. Harvest rates are categorized as light, moderate, and heavy (Table 1). DAU 1G is managed for moderate harvest rates.

Background

A statewide mandatory report requirement for harvested black bear was introduced in 1983. Most seasons in Area 1 were restricted in 1983 following implementation of the 1981-1985 Black Bear Management Plan. Area 1 was divided into DAUs when the 1986-1990 Black Bear Management Plan was implemented in 1986. Uniform seasons by DAU and more restrictive season structures were introduced at that time. Year-round black bear seasons and extra black bear tags were eliminated in DAU 1G in 1986. Slight modifications to the seasons proposed in the 1986-1990 Plan were made based on monitoring of 3 consecutive years of harvest data and were reflected in the 1992 black bear harvest season. Further season reductions were incorporated into the 1992-2000 Black Bear Management Plan and took effect with the beginning of the 1993 black bear harvest season. More liberal seasons were implemented in fall 1998 and were continued into the 2009 framework (Appendix A).

Population Surveys

No population surveys were conducted in this area during the reporting period. Previous bait station survey results are summarized in Table 2.

Harvest Characteristics

Reported harvest of known sex black bears in DAU 1G increased 17% in 2010 compared to 2009 reported harvest (Table 3). The black bear harvest in this DAU was greater in fall than spring in 2010. Age data indicate yearling male bears were the most frequently harvested age group (Table 4). Percent female in the harvest criteria was within acceptable limits (Table 5). There was adequate distribution of harvest among user groups in DAU 1G in 2010 (Table 6). The rifle is the most common weapon used for harvesting black bear in DAU 1G (Table 7).

Depredations

Black bear nuisance complaints occur regularly in DAU 1G. Most complaints are associated with poor garbage disposal practices. Some livestock, orchard, and apiary depredations have also occurred in this DAU. No livestock depredations were reported in DAU 1G in 2010 (Table 8). Tracking of depredation reports is sporadic at best and a more concerted effort is needed to improve reporting.

Management Implications

The 2000-2010 Black Bear Species Management Plan identifies 3 harvest-level targets for black bear populations: light, moderate, and heavy. Light harvest strategies provide for thriving black bear populations in which a hunter could expect to encounter a lot of black bears and have an elevated chance of harvesting one. Moderate harvest is designed to provide maximum hunter opportunity yet maintain a viable self-sustaining black bear population. Heavy harvest criteria are employed where an obvious desire exists to severely reduce a black bear population. Areas of heavy harvest may not maintain a viable, self-sustaining black bear population over the long term.

DAU 1G appeared to be within acceptable harvest levels in 1998. As a result, the first 2 weeks of October were added back into the fall season to eliminate the split that caused confusion and regulation complication for sportsmen. This season change increased bear harvest by more than 30%. Harvest parameters remained within desired limits. Subsequently, the fall 2000 season was opened on 30 August in this DAU to restore some hunter opportunity lost when seasons were curtailed in the early 1990s. This change also increased bear harvest in the DAU. The 2010 harvest season reflected the tenth year of monitoring this change. Younger bears have become more preponderant in the harvest. The current season framework appears to maintain a stable bear population in DAU 1G. The current season framework should be monitored through the 2011 season to further assess changes in harvest criteria and subsequent impact to the bear population.

DAU 1H (GMUs 22, 31, 32, 32A)

Management Direction

The 1992-2000 Black Bear Species Management Plan directed the Department to manage Area 1 to maintain or reduce harvest, improve age structure, and offer a variety of hunting opportunities. This included high quality controlled hunts in DAU 1H.

New, simpler criteria were developed in the 2000-2010 Black Bear Species Management Plan and took effect in the 1999 fall hunting season. These harvest criteria were the 3-year running average of percent females and percent males ≥ 5 years old. Bait station survey trends were also considered when assessing population status. Harvest rates were categorized as light, moderate, and heavy (Table 1). DAU 1H has been managed for light harvest of black bear.

Background

A statewide mandatory report requirement for harvested black bear was introduced in 1983. Most seasons in Area 1 were restricted in 1983 following implementation of the 1981-1985 Black Bear Management Plan. Area 1 was divided into DAUs when the 1986-1990 Black Bear Management Plan was implemented in 1986. Uniform seasons by DAU and more restrictive season structures were introduced at that time. Season restrictions in DAU 1H were designed to protect the vulnerable black bear populations in that area. Slight modifications to the seasons proposed in the 1986-1990 Plan were made based on monitoring of 3 consecutive years of harvest data and were reflected in the 1992 black bear harvest season. Further season reductions were incorporated into the 1992-2000 Black Bear Management Plan and took effect with the beginning of the 1993 black bear harvest season. More liberal seasons were implemented in fall 1998 and were continued into 2009 (Appendix A).

Population Surveys

No population surveys were conducted during the reporting period.

Harvest Characteristics

Reported harvest in 2010 was 30% higher than that reported for 2009 (Table 3). More bears were harvested in the fall than in the spring season in 2010. Age data indicate 2-year-old male bears were the most frequently harvested age group (Table 4). Percent female in the 2010 harvest was higher than that reported in 2009 (Table 5). Still and hound hunting methods are the dominant means of harvest in DAU 1H (Table 6). The rifle is the most used weapon of choice (Table 7).

Depredations

Black bear nuisance complaints occur regularly in DAU 1H. Most complaints are associated with poor garbage disposal practices. Some livestock, orchard, and apiary depredations do occur in this DAU. Two confirmed livestock depredations were reported in 2010 in DAU 1H (Table

8). Tracking of depredation reports is sporadic at best and a more concerted effort is needed to improve reporting.

Management Implications

The 2000-2010 Black Bear Species Management Plan identifies 3 harvest-level targets for black bear populations: light, moderate, and heavy. Light harvest strategies provide for thriving black bear populations in which a hunter could expect to encounter a lot of black bears and have an elevated chance of harvesting one. Moderate harvest is designed to provide maximum hunter opportunity yet maintain a viable self-sustaining black bear population. Heavy harvest criteria are employed where an obvious desire exists to severely reduce a black bear population. Areas of heavy harvest may not maintain a viable, self-sustaining black bear population over the long term.

Harvest parameters in DAU 1H showed a trend toward too many female black bears in the harvest. This did not seem logical under a conservative controlled hunt strategy; however, most black bears were harvested in September when females are vulnerable. The 15 April-15 May spring season framework is a less vulnerable time period for female black bears; hence, spring permits were increased in 1998 to attempt to skew the sex ratio of the harvest further toward male black bears. This strategy did not yield the most promising results. Black bear harvest had become nearly equal between the 2 seasons. Fall permits were increased from 30 to 50 in 2000 and the season extended to the end of October to respond to a clamor about increased black bear sightings in this DAU and another attempt at influencing male black bear harvest. This increase in permits did not lead to an appreciable increase in fall bear harvest. Subsequently, the spring and fall permit levels were increased to 75 each, beginning with the fall 2003 season. This change has caused an appreciable increase in male harvest.

The goal for the DAU is to continue to maintain the percentage of males ≥ 5 years of age in the harvest at or above 35%; maintain percent females in the harvest at or below 30%; and to maintain a 30% or higher hunter success rate (3-yr average success rate is 37%). In light of the increase in hunter success in DAU, fall permits were increased from 75 to 100 in both hunt areas (22 and 32) beginning with the 2011 season. It may turn out that the controlled hunt area is too small to protect the wider ranging adult male black bear and a harvest rate of 30% or greater females may be the norm for a lightly hunted population under these conditions. Education regarding species management plan harvest goals and population objectives is needed to help sportsmen understand that the seasons in this DAU are meant to provide for high black bear numbers and an increased chance for seeing black bears.

DAU 1K (GMUs 33, 39, 43)

Management Direction

The 1992-2000 Black Bear Species Management Plan directed the Department to manage Area 1 to maintain or reduce harvest, improve age structure, and offer a variety of hunting opportunities. This included high quality controlled hunts in DAU 1K.

The 2000-2010 Black Bear Species Management Plan maintained those objectives. New, simpler criteria were developed in the new Plan and took effect in the 1999 fall hunting season. These harvest criteria were the 3-year running average of percent females and percent males ≥ 5 years old. Bait station survey trends and other population data were also considered when assessing population status. Harvest rates were categorized as light, moderate, and heavy (Table 1). DAU 1K objectives were to manage for moderate harvest rates.

Background

A statewide mandatory report requirement for harvested black bear was introduced in 1983. Most seasons in Area 1 were restricted in 1983 following implementation of the 1981-1985 Black Bear Management Plan. Area 1 was divided into DAUs when the 1986-1990 Black Bear Management Plan was implemented in 1986. Uniform seasons by DAU and more restrictive season structures were introduced at that time. Slight modifications to the seasons proposed in the 1986-1990 Plan were made based on monitoring of 3 consecutive years of harvest data and were reflected in the 1992 black bear harvest season. Further season reductions were incorporated into the 1992-2000 Black Bear Management Plan and took effect with the beginning of the 1993 black bear harvest season. More liberal seasons were implemented in fall 1998 and were continued into the 2009 framework (Appendix A).

Population Surveys

Since 2009, the Southwest Region has assisted in a cooperative effort with Washington State University (WSU) to assess mitigation of marine-derived nutrient loss in central Idaho. This project was conducted in the North Fork Boise River drainage on the Boise National Forest in GMU 39.

A DNA hair-snare grid, consisting of 48 cells (6.25 km²) was operated in 2009. WSU identified 45 individual bears, including 24 females and 21 males from 102 hair samples collected from the grid in 2009. Of those 45 individuals, 25 had enough hair to conduct isotope analysis.

In 2010, WSU identified 73 individuals, including 39 females and 34 males. In 2011, 15 individuals were identified, including 7 females and 8 males. These samples have not been analyzed for isotopic signatures.

WSU analyzed the isotopic signatures of 44 historic black bear samples. Historic samples were collected from specimens of bears living in and around the study area between 1890 and 1930. In addition, WSU collected samples of fish carcasses and known bear food items to determine isotopic signatures and minimize the chance that local food items could have signatures that skew the results. Food samples collected within the study area showed normal terrestrial isotopic signatures (Table 9). WSU analyzed present-day bear hair, historic bear bone, and food sources for carbon and nitrogen isotopes following methods summarized in Fry et al. (1992). All bone and food samples were freeze-dried and ground. Bone samples were supplied by the Smithsonian.

In June and July 2010, the Southwest region initiated a trapping effort in coordination with WSU to place GPS collars on females within the study area. The initial study design was to monitor the movements of bears around the treatment sites to determine nutrient movement through the system as determined by nitrogen isotope measurements in hair samples. In addition, the region wanted to obtain information on female reproductive success, body condition, cub body condition, harvest rates; and to develop a mark recapture estimate to compare with the DNA efforts.

Bear trapping was initiated within the DNA hair grid area in GMU 39 in the Boise River drainage, with the intent of capturing females to identify home range size and totally fill in the DNA grid with radio collared females. Of the 18 bears captured during 2010, 7 were female and 11 were male. Female bear dens were visited during March 2011 to identify reproductive success and measure body condition. Of the 6 female dens visited, only 1 had successfully produced cubs. All 6 of these bears had been in estrus when captured. Body condition averaged 1.5-2 on a scale of 5, with 5 being the best body condition.

Harvest Characteristics

Reported harvest increased 52% in 2010 when compared to 2009 totals in DAU 1K (Table 3). Hunters harvested more bears in spring than fall in 2010. Age data indicated yearling male bears were the most frequently harvested age group (Table 4). Criteria for percent females in the harvest were within acceptable levels (Table 5). Baiting was the most frequently used method to kill black bears in DAU 1K in 2010 (Table 6). Rifle was the most reported weapon of choice in DAU 1K (Table 7).

Depredations

Black bear nuisance complaints occur regularly in DAU 1K. Most complaints are associated with poor garbage disposal practices and/or outdoor placement of domestic pet food or wild birdseed. Some livestock, orchard, and apiary depredations also occur in this DAU. No livestock depredations were recorded in DAU 1K in 2010 (Table 8). Tracking of depredation reports is sporadic at best and a more concerted effort is needed to improve reporting.

Management Implications

The 2000-2010 Black Bear Species Management Plan identifies 3 harvest-level targets for black bear populations: light, moderate, and heavy. Light harvest strategies were implemented to maintain thriving and possibly increasing black bear populations in which a hunter could expect to encounter numerous and older age class bears, and have an elevated chance of harvesting one. Moderate harvest strategies were designed to provide maximum hunter opportunity yet maintain a viable self-sustaining and static black bear population. A heavy harvest criterion was employed where objectives were to reduce a black bear population. Areas of heavy harvest may not be sustainable over the long term unless habitat between adjacent populations allows for connectivity and dispersal.

The fall split season was eliminated in 1998 in DAU 1K for the same reasons as mentioned above for DAU 1G. This change did result in a significant increase in fall black bear harvest, as well as overall annual harvest (Table 5). This increase was also apparent in the 1999 harvest. The Commission further expanded season lengths for the spring 2002 black bear season and thus harvest has been sustained over the last decade at higher levels. Major fluctuations in annual harvest seem to be closely correlated to food availability (e.g. 2007 drought and food shortage). Harvest criteria for percent female bears and percent males ≥ 5 years old in DAU 1K continues to be maintained at the level desired in 2010 (Table 5). Harvest data need to continue to be monitored closely to determine any new trends in the data.

AREA 3

DAU 3B (GMUs 20A, 26, 27)

Management Direction

Area 3 is divided into 2 analysis units, one north and one south of Salmon River. Harvest in this area is dominated by young, dispersing black bears and occurs mostly along river corridors and backcountry landing strips. The harvest is not thought to be reflective of the overall population. The Department will manage Area 3 black bear populations to maintain moderate harvest targets of 25-35% age 5+ black bears in the male harvest and 30-40% females in the total harvest. Minor season adjustments may be implemented to conform to statewide management direction. There is no dog-training season in Area 3.

Harvest in Area 3 was consistently low, resulting in small samples from which to monitor harvest parameters. Harvest criteria will be monitored but will only apply if average annual harvest is at least 30 black bears. Professional judgment will be used when average annual harvest is less than 30 black bears.

Background

A large portion of DAU 3B is roadless, lying within the Frank Church River-of-No-Return Wilderness boundaries. Except for a few mining roads penetrating the periphery, access in these GMUs is restricted to boat, airplane, pack-string, or foot travel. A statewide mandatory report requirement for harvested black bear was introduced in 1983. Year-round seasons and extra black bear tags were eliminated with implementation of the 1986-1990 Black Bear Management Plan. Seasons were shortened to conform to statewide management direction listed in the 1992-2000 Black Bear Management Plan. The fall and spring seasons were expanded again with implementation of the 2000-2010 Black Bear Species Management Plan (Appendix A).

Population Surveys

No population surveys were conducted in DAU 3B during the reporting period.

Harvest Characteristics

Reported harvest in 2010 was 10% higher than that reported in 2009 (Table 3). Black bear harvest in DAU 3B was greater in the fall than spring season. Age data indicate 4-year-old male bears were the most frequently harvested age group (Table 4). Percent females in the harvest was higher in 2010 than that reported in 2009 (Table 5). Still hunting was the primary method of harvest in this DAU (Table 6). The prominent weapon of choice in DAU 3B is the rifle (Table 7).

Depredations

One depredation was recorded in DAU 3B in 2010 (Table 8).

Management Implications

Historical harvest in DAU 3B was usually low and small sample sizes precluded meaningful interpretation of harvest criteria. Minor changes to season structure were incorporated into the 1992-2000 Black Bear Management Plan to make this DAU consistent with statewide management direction. Minor changes to the fall season structure were implemented with the 2000-2010 Black Bear Species Management Plan. A 2-black bear bag limit, discounted nonresident bear tag fees, and a longer fall season was adopted by the Commission beginning with the 2000 season in response to sportsmen's concerns of black bear predation on elk calves in the Middle Fork Elk Zone. Harvest criteria remain within acceptable limits in DAU 3B. The Department will continue to monitor harvest criteria for DAU 3B to assess the effects of season changes on black bear populations.

Literature Cited

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- Jacoby, M.E., Hilderbrand, G.V., Servheen, G., Schwartz, C.C., Arthur, S.M., Hanley, T.A., Robins, C.T., and Michener, R. 1999. Trophic relations of brown and black bears in several North American ecosystems. *J. Wildl. Manag.* 63: 921-929.

Table 1. Harvest criteria for black bear in Idaho.

Criteria	Light harvest	Moderate harvest	Heavy harvest
% Females	<30	30-40	>40
% Males \geq 5	>35	25-35	<25
Bait station survey	Increasing	Stable	Decreasing

Table 2. Bait station (pork fat and anise oil) survey results from DAU 1G, 2003-2007.

Year	Survey number	Survey dates	Total transects available	Total transects sampled	Total stations sampled	Total stations visited by black bear	90% confidence interval	
							%	(+/-)
2003	1	7/22-8/14	92	20	100	20	20	6.6
2004	1	7/7-8/3	92	48	240	70	29	4.8
2005	1	7/6-8/2	92	66	330	93	28	4.1
2006	1	7/12-8/13	92	68	340	86	25	3.9
2007	1	7/10-8/6	92	66	330	108	33	5.3

Table 3. Black bear harvest by season and sex, Southwest Region, 1999-present.

DAU Year	Spring			Fall			Entire season		
	M	F	Total	M	F	Total	M	F	Total
1G									
1999	38	16	54	51	32	83	89	48	137
2000	43	12	55	59	23	82	102	35	137
2001	34	18	52	46	33	79	80	51	131
2002	37	13	50	57	35	92	94	48	142
2003	41	12	53	57	39	96	98	51	149
2004	34	15	49	55	33	88	89	48	137
2005	35	17	52	61	29	90	96	46	142
2006	40	8	48	58	25	83	98	33	131
2007	34	23	57	70	43	112	104	66	170
2008	20	5	25	58	40	98	78	45	123
2009	39	10	49	41	25	66	80	35	115
2010	31	12	43	56	35	91	87	47	134
3-yr. avg.	30	9	39	51	33	84	81	42	123
1H									
1999	14	10	24	16	12	28	30	22	52
2000	23	13	36	15	18	33	38	31	69
2001	17	8	25	14	22	36	31	30	61
2002	25	9	34	22	16	38	47	25	72
2003	18	6	24	23	28	51	41	34	75
2004	17	14	31	33	18	51	50	32	82
2005	30	8	38	23	26	49	53	34	87
2006	26	18	44	20	25	45	46	43	89
2007	17	18	35	29	23	52	46	41	87
2008	42	15	57	28	30	58	70	45	115
2009	30	10	40	35	19	54	65	29	94
2010	40	17	57	34	31	65	74	48	122
3-yr. avg.	37	14	51	32	27	59	69	41	110
1K									
1999	66	26	92	65	42	107	131	68	199
2000	55	26	81	76	65	141	131	91	222
2001	66	30	96	65	42	107	131	72	203
2002	104	35	139	77	56	133	181	91	272
2003	87	59	146	47	29	76	134	88	222
2004	105	44	149	59	45	104	164	89	253
2005	109	54	163	48	37	85	157	91	248
2006	87	38	125	71	32	103	158	70	228
2007	110	61	171	71	45	116	181	106	287
2008	104	44	148	37	37	74	141	81	222
2009	82	36	118	36	29	63	118	65	183
2010	102	76	178	64	37	101	166	113	279

Table 3. Continued.

DAU Year	Spring			Fall			Entire season		
	M	F	Total	M	F	Total	M	F	Total
3-yr. avg.	96	52	148	45	34	79	141	86	227
3B									
1999	2	0	2	19	15	34	21	15	36
2000	3	1	4	23	13	36	26	14	40
2001	5	4	9	29	13	42	34	17	51
2002	7	5	12	40	17	57	47	22	69
2003	17	6	23	19	11	30	36	17	53
2004	12	9	21	32	12	44	44	21	65
2005	11	7	18	18	7	25	29	14	43
2006	13	7	20	22	9	31	35	16	51
2007	12	4	16	25	13	38	37	17	54
2008	10	12	22	18	10	28	28	22	50
2009	10	2	12	24	6	30	34	8	42
2010	12	5	17	21	8	29	33	13	46
3-yr. avg.	11	6	17	21	8	29	32	14	46

Table 4. Age distribution of black bear, Southwest Region, 1999-present.

DAU		Age											Unknown	Total
Year	Sex	Cub	1	2	3	4	5	6	7	8	9	10+		
1G														
1999	M	0	12	17	14	2	6	1	8	1	1	13	14	89
	F	0	6	7	6	2	5	5	3	0	3	5	6	48
2000	M	0	4	31	18	7	4	9	5	3	1	10	10	102
	F	1	1	4	4	2	3	4	4	0	1	7	4	35
2001	M	1	16	6	23	4	6	2	2	5	2	6	7	80
	F	0	4	4	4	3	4	2	7	5	1	11	6	51
2002	M	0	3	26	10	16	5	5	1	4	7	9	8	94
	F	2	8	8	2	5	3	3	2	3	0	9	3	48
2003	M	0	17	11	25	7	11	5	3	2	3	7	7	98
	F	1	8	8	7	4	7	2	1	1	1	8	3	51
2004	M	3	10	21	14	12	5	6	0	3	2	8	5	89
	F	1	0	7	8	5	5	0	2	2	3	9	6	48
2005	M	0	14	14	16	11	15	1	7	2	1	15	0	96
	F	0	3	3	7	6	8	4	2	2	2	8	1	46
2006	M	1	8	13	18	21	10	6	4	3	1	9	4	98
	F	1	2	3	3	8	4	1	1	3	1	4	2	33
2007	M	2	16	14	16	7	10	4	5	2	10	10	8	104
	F	0	11	9	7	5	7	4	3	5	3	10	2	66
2008	M	0	13	26	9	11	2	3	3	2	0	7	2	78
	F	0	2	8	6	5	1	1	4	2	1	11	4	45
2009	M	0	7	15	19	8	8	6	5	1	2	9	0	80
	F	1	7	4	8	2	3	3	2	1	1	1	2	35
2010	M	0	21	9	6	17	2	5	3	5	5	6	8	87
	F	0	7	1	7	10	4	4	2	3	1	6	2	47
1H														
1999	M	0	5	6	3	3	3	3	0	3	0	3	1	30
	F	0	1	2	3	1	3	1	1	1	0	5	4	22
2000	M	0	2	9	4	5	2	5	1	3	0	0	7	38
	F	0	0	6	2	6	3	0	3	3	0	6	2	31
2001	M	0	6	5	7	2	5	1	0	1	0	1	3	31
	F	0	1	4	7	2	4	3	0	0	2	4	3	30
2002	M	0	5	13	4	8	1	4	0	2	1	5	4	47
	F	0	2	0	4	6	2	1	0	0	1	6	3	25
2003	M	0	4	9	11	3	3	1	2	0	2	1	5	41
	F	0	5	7	5	2	2	2	3	0	1	3	4	34
2004	M	0	9	13	2	6	4	2	2	0	3	7	2	50
	F	0	3	9	4	2	1	4	0	0	0	3	6	32
2005	M	0	5	7	11	5	5	4	2	1	3	4	6	53
	F	0	6	2	3	3	4	3	1	3	4	4	1	34
2006	M	0	5	7	7	7	2	3	2	2	0	7	4	46
	F	0	3	8	5	3	4	8	2	2	2	6	0	43
2007	M	0	5	8	7	7	5	0	3	1	2	4	4	46
	F	0	2	6	4	6	2	2	1	1	4	9	4	41

Table 4. Continued.

DAU	Year	Sex	Age										Unknown	Total
			Cub	1	2	3	4	5	6	7	8	9		
2008	M	0	9	12	5	11	5	6	8	1	2	10	1	70
	F	0	2	5	7	6	5	8	2	1	0	7	2	45
2009	M	0	8	19	8	6	3	4	5	3	3	6	0	65
	F	0	2	3	3	2	3	5	0	2	0	4	5	29
2010	M	0	9	15	7	8	4	12	1	3	3	7	5	74
	F	0	3	6	11	3	2	4	3	2	0	10	4	48
1K														
1999	M	0	21	21	27	8	19	3	10	3	2	8	9	131
	F	0	8	6	10	6	6	8	5	0	2	7	10	68
2000	M	4	19	22	13	15	5	10	4	9	1	11	18	131
	F	0	11	20	6	6	5	10	1	3	3	9	17	91
2001	M	2	21	11	27	3	13	9	13	1	4	7	20	131
	F	0	7	3	10	8	7	3	4	1	4	20	5	72
2002	M	2	13	46	24	27	11	10	2	13	6	16	11	181
	F	3	7	18	9	11	5	7	1	3	2	15	10	91
2003	M	0	19	12	30	6	15	7	3	7	5	15	15	134
	F	0	8	6	14	4	6	6	3	4	10	15	12	88
2004	M	2	8	65	13	27	4	7	2	3	3	18	12	164
	F	2	5	26	2	10	4	2	6	6	1	14	11	89
2005	M	0	25	12	49	10	21	8	6	6	2	16	2	157
	F	0	11	9	12	4	10	6	4	5	4	19	7	91
2006	M	2	14	52	18	22	5	9	6	3	6	15	6	158
	F	1	4	17	6	15	4	5	0	2	1	12	3	70
2007	M	1	38	25	40	12	22	5	7	3	3	15	10	181
	F	1	18	9	18	7	13	2	3	3	2	15	15	106
2008	M	2	8	48	11	26	10	11	4	2	5	9	5	141
	F	1	3	22	7	12	6	7	4	2	5	9	3	81
2009	M	2	10	24	35	11	9	2	10	2	4	8	1	118
	F	0	8	11	18	4	4	1	4	2	3	9	1	65
2010	M	0	38	25	13	26	11	18	3	10	0	12	10	166
	F	0	16	9	8	17	3	16	6	6	3	21	8	113
3B														
1999	M	0	2	1	3	1	3	4	1	0	0	4	2	21
	F	0	0	1	1	1	0	2	0	0	1	5	4	15
2000	M	0	0	9	4	1	2	0	1	4	1	2	2	26
	F	0	1	4	2	1	1	1	1	0	0	3	0	14
2001	M	0	3	6	7	2	4	1	1	2	4	3	1	34
	F	0	3	0	5	2	2	0	2	1	1	1	0	17
2002	M	0	1	7	4	11	5	2	0	5	0	9	3	47
	F	0	0	1	4	7	0	0	2	1	2	1	4	22
2003	M	0	4	2	4	1	8	1	1	1	0	9	5	36
	F	0	3	0	2	1	2	2	1	1	0	5	0	17
2004	M	0	4	9	4	2	6	9	1	4	1	4	0	44
	F	0	0	3	1	0	0	4	0	1	1	6	5	21
2005	M	0	3	3	5	2	0	0	2	1	2	9	2	29
	F	0	1	0	1	1	1	2	2	1	1	3	1	14
2006	M	0	2	9	3	2	2	2	2	2	1	9	1	35

Table 4. Continued.

DAU		Age											Unknown	Total
Year	Sex	Cub	1	2	3	4	5	6	7	8	9	10+		
2007	F	0	0	1	2	2	1	1	2	2	0	5	0	16
	M	0	5	0	8	4	1	1	1	3	4	8	2	37
2008	F	0	1	1	4	1	2	1	2	0	1	4	0	17
	M	0	2	4	3	2	4	0	0	2	3	5	3	28
2009	F	0	0	2	0	1	0	1	0	0	2	14	2	22
	M	0	2	0	8	3	4	0	3	1	0	12	1	34
2010	F	0	0	0	3	0	0	0	1	1	0	3	0	8
	M	0	3	1	3	5	0	4	3	1	1	8	4	33
	F	1	2	3	0	1	1	0	1	1	0	3	0	13

Table 5. 2000-2010 Black Bear Plan management values, criteria, and median ages, Southwest Region, 1999-present.

DAU					
Year	<i>n</i> ^a	% Females	% Males ≥5	# Males ^b	<i>n</i> ^c
1G					
1999	137	35	40	75	117
2000	137	26	34	92	123
2001	131	39	33	73	118
2002	142	34	36	86	131
2003	149	34	34	91	139
2004	137	35	30	84	126
2005	142	32	44	96	141
2006	131	25	35	94	125
2007	170	39	44	96	160
2008	123	37	24	76	117
2009	115	30	39	80	113
2010	134	35	33	79	124
3-year avg.	124	34	31	78	118
Desired levels		30-40	25-35		
1H					
1999	52	42	41	29	47
2000	69	45	35	31	60
2001	61	49	29	28	55
2002	72	35	31	43	65
2003	75	45	25	36	66
2004	82	39	38	48	74
2005	87	39	40	47	80
2006	89	48	38	42	85
2007	87	47	35	42	79
2008	115	39	47	69	112
2009	94	31	39	65	89
2010	122	39	43	69	113
3-year avg.	110	37	42	68	105
Desired levels		≤30	≥35		
1K					
1999	199	34	37	122	180
2000	222	41	36	113	187
2001	203	35	43	111	178
2002	272	34	34	170	251
2003	222	40	44	119	195
2004	253	35	25	152	230
2005	248	37	38	155	239
2006	228	31	29	152	219
2007	287	37	31	171	262
2008	222	37	31	136	214
2009	183	36	30	117	181

Table 5. Continued.

DAU					
Year	<i>n</i> ^a	% Females	% Males ≥ 5	# Males ^b	<i>n</i> ^c
2010	279	41	35	156	261
3-year avg.	228	38	32	136	219
Desired levels		30-40	25-35		
3B					
1999	36	42	58	19	30
2000	40	35	40	24	38
2001	51	33	47	33	50
2002	69	32	48	44	62
2003	53	32	65	31	48
2004	65	32	58	44	60
2005	43	33	50	27	40
2006	51	31	53	34	50
2007	54	31	52	35	52
2008	50	44	56	25	45
2009	42	19	61	33	41
2010	46	28	59	29	42
3-year avg.	46	31	59	29	43
Desired levels		30-40	25-35		

^a Number of black bears that were sexed (excluding unknowns).

^b Number of male black bears that were aged (excluding unknowns).

^c Total number of black bears that were aged (excluding unknowns).

Table 6. Method of black bear harvest, Southwest Region, 1999-present.

DAU						
Year	Bait	Hound	Still	Incidental	Other	Total
1G						
1999	23	33	32	46	3	137
2000	30	30	37	36	4	137
2001	29	4	13	2	83	131
2002	36	29	39	36	2	142
2003	42	32	40	35	0	149
2004	38	16	49	33	1	137
2005	45	31	32	32	2	142
2006	41	16	32	40	2	131
2007	70	18	38	37	7	170
2008	37	18	31	36	1	123
2009	60	14	23	17	2	115
2010	48	16	35	32	3	134
1H						
1999	0	24	26	2	0	52
2000	1	20	41	5	2	69
2001	1	23	30	6	1	61
2002	0	23	43	5	1	72
2003	0	31	41	3	0	75
2004	0	23	54	5	0	82
2005	0	29	53	3	2	87
2006	0	23	62	4	0	89
2007	0	29	53	3	2	87
2008	0	39	69	4	3	115
2009	0	34	56	2	3	94
2010	0	40	72	7	3	122
1K						
1999	39	30	81	45	4	199
2000	53	32	72	56	9	222
2001	46	23	26	1	107	203
2002	75	60	73	56	8	272
2003	93	47	40	34	8	222
2004	85	49	65	47	7	253
2005	104	42	53	41	8	248
2006	89	34	65	31	9	228
2007	124	32	88	32	11	287
2008	85	43	53	39	2	222
2009	85	18	47	24	9	183
2010	110	42	80	42	5	279
3B						
1999	0	0	10	25	1	36

Table 6. Continued.

DAU						
Year	Bait	Hound	Still	Incidental	Other	Total
2000	1	0	18	19	2	40
2001	2	1	15	30	3	51
2002	2	0	23	44	0	69
2003	10	1	23	18	1	53
2004	7	1	34	22	1	65
2005	6	2	23	11	1	43
2006	5	1	31	13	1	51
2007	7	4	21	21	1	54
2008	17	1	21	10	1	50
2009	12	0	15	11	4	42
2010	13	0	23	8	2	46

Table 7. Weapon type used to harvest black bear, Southwest Region, 1999-present.

DAU Year	Rifle	Archery	Muzzleloader	Handgun	Other	Total
1G						
1999	115	14	1	7	0	137
2000	111	17	0	3	6	137
2001	101	15	3	9	3	131
2002	107	23	1	7	4	142
2003	121	16	3	9	0	149
2004	100	25	5	5	2	137
2005	103	26	2	8	3	142
2006	89	31	1	7	3	131
2007	105	45	4	10	6	170
2008	92	20	1	6	4	123
2009	83	25	0	2	6	115
2010	95	29	1	5	4	134
1H						
1999	45	4	1	1	1	52
2000	61	3	0	4	1	69
2001	52	4	1	4	0	61
2002	65	4	0	3	0	72
2003	62	5	0	8	0	75
2004	69	6	2	3	2	82
2005	80	4	0	2	1	87
2006	82	4	1	2	0	89
2007	76	7	0	2	2	87
2008	100	7	2	6	0	115
2009	89	4	0	2	0	94
2010	110	4	0	6	2	122
1K						
1999	162	24	0	13	0	199
2000	180	25	2	10	5	222
2001	169	21	2	9	2	203
2002	202	44	3	17	6	272
2003	164	38	6	8	6	222
2004	191	44	7	8	3	253
2005	186	48	3	7	4	248
2006	173	37	8	7	3	228
2007	223	45	8	11	0	287
2008	171	37	3	9	2	222
2009	141	30	4	6	2	183
2010	211	44	7	10	7	279
3B						
1999	35	1	0	0	0	36

Table 7. Continued.

DAU						
Year	Rifle	Archery	Muzzleloader	Handgun	Other	Total
2000	39	0	0	1	0	40
2001	48	2	0	0	1	51
2002	67	2	0	0	0	69
2003	52	0	0	0	1	53
2004	60	0	0	2	3	65
2005	41	1	0	0	1	43
2006	47	1	0	3	0	51
2007	51	1	0	0	2	54
2008	48	0	0	2	0	50
2009	39	3	0	0	0	42
2010	43	2	0	0	1	46

Table 8. Black bear depredation complaints, Southwest Region, 1999-present.

Year	DAU				Total
	1G	1H	1K	3B	
1999	4	5	1	0	10
2000	0	2	12	0	14
2001	0	1	1	0	2
2002	0	7	2	0	9
2003	0	2	0	1	3
2004	3	3	0	0	6
2005	0	1	1	0	2
2006	1	5	2	0	8
2007	1	1	0	0	2
2008	0	1	0	0	1
2009	1	2	1	0	4
2010	0	2	0	1	3

Table 9. Average isotopic signatures of bear foods in the North Fork Boise River drainage.

	$\delta^{13}\text{C}_{\text{VPDB}} \times 1000$		$\delta^{15}\text{N}_{\text{air}} \times 1000$	
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>
Vegetation	-29.02	1.25	-0.05	0.88
Salmon Carcass	-21.67	0.08	11.99	0.2
Analog	-19.6	0.07	11.15	0.37
Terrestrial Meat	-23.6 ^a	0.6 ^a	4.3 ^a	1.00 ^a

^a Values were taken from Jacoby et al. 1999. These values are from northern Idaho.

**PROGRESS REPORT
SURVEYS AND INVENTORIES**

STATE:	<u>Idaho</u>	JOB TITLE:	<u>Black Bear Surveys and</u>
PROJECT:	<u>W-170-R-34</u>		<u>Inventories</u>
SUBPROJECT:	<u>4</u>	STUDY NAME:	<u>Big Game Population Status,</u>
STUDY:	<u>1</u>		<u>Trends, Use, and Associated</u>
JOB:	<u>9</u>		<u>Habitat Studies</u>
PERIOD COVERED: <u>July 1, 2010 to June 30, 2011</u>			

MAGIC VALLEY REGION

Abstract

Sixty-seven black bears were harvested in DAU 4A in 2010 which is 40% higher than the 10-year average of 48 bears taken in DAU 4A. A relatively high proportion of bears were harvested using bait (43%). Most black bears were taken by rifle (69%), but bows (24%), muzzleloaders (1%), and handguns (6%) were also used. Four bears were immobilized and relocated in 2010.

AREA 4

DAU 4A (GMUs 44, 45, 48, 49)

Management Direction

Management objectives in the 2000-2010 Black Bear Management Plan are to manage the DAU to maintain moderate harvest targets of 25-35% age 5+ black bears in the male harvest and 30-40% females in the total harvest.

Background

The GMUs in DAU 4A are on the southern edge of black bear range in Idaho and black bear densities are relatively low. Harvest in this DAU generally comprises less than 5% of the annual statewide black bear harvest. Urban development in the Big Wood Valley (GMUs 48 and 49) and livestock grazing are the primary influences on black bear habitat in this DAU.

Separate spring and fall seasons were implemented in GMUs 45, 48, and 49 in the 1970s. However, year-round seasons remained in GMU 44 through June 1986 because of livestock industry and landowner concerns. Restrictions on dog use apply in this DAU during October to minimize conflicts with deer and elk hunters.

Population Surveys

Bait station surveys were conducted in DAU 4A from 2003 to 2008, but were ended due to the labor intensity of these efforts relative to the amount of data they provided.

Harvest Characteristics

The 2010 spring and fall hunting seasons were unchanged from 2009 (Appendix A). Both seasons followed frameworks adopted in the 2000-2010 Black Bear Management Plan.

Sixty-seven black bears were harvested in 2010, 16% greater than the 3-year average and 40% greater than the 10-year average for this DAU. Sixty-six percent of the black bear harvest occurred during the spring season; a trend relatively consistent over the past 4 years (Table 1).

The three year average for sex and age ratios remain consistent with harvest criteria established in the 2000-2010 management plan (Table 3). Thirty-one percent of males harvested in 2010 were ≥ 5 years old while females made up 42% of the total harvest.

Baiting, still-hunting, incidental take, and hound hunting accounted for 43%, 27%, 15%, and 10% of the total hunter harvest of black bears in DAU 4A, respectively (Table 4). Two hunters (3%) used a combination of bait and hounds while 1 hunter (2%) reported harvesting a black bear by other means.

Rifles accounted for 69% of the harvest in 2010, bows 24%, handguns 6%, and muzzleloaders 1% (Table 5).

Most of the black bear complaints reported to the Department involve nuisance black bears in the Big Wood River Valley and campgrounds along the South Fork Boise River. In 2010, approximately 13 depredation complaints and 54 nuisance bear complaints were received for this DAU (Table 6). As a result of these complaints, 4 black bears were immobilized and relocated. Wildlife Service's personnel handle depredations on livestock. From 1995-2010, we received mortality reports on 25 black bears dispatched by Wildlife Services for this DAU, but no lethal removal occurred during this reporting period.

Dog-training Season

A standard dog-training season of 1 June-31 July was implemented in 2003 and remained in place through 2010.

Management Implications

Though it appears somewhat cyclical, black bear harvest in DAU 4A has increased steadily over the past 20 years with roughly 3 times as many bears being harvested now compared to the mid-1980s. It is possible this is indicative of population increases in DAU 4A. However, interpreting these data is difficult as interest in black bear hunting may influence harvest statistics. Despite increasing harvest, the data suggest black bear harvest has been moderate (3-

year running average of 36% females and 31% males ≥ 5 years old in the harvest) and remains consistent with objectives for this DAU.

Though black bear depredation problems remain at tolerable levels, complaints from residents in the Big Wood River Valley and conflicts with campers along the South Fork Boise River have, generally, risen over the past 15 years.

Table 1. Black bear harvest by season and sex, Magic Valley Region, 1994-present.

DAU Year	Spring			Fall			Entire season		
	M	F	Total	M	F	Total	M	F	Total
4A									
1994	12	5	17	7	6	13	19	11	30
1995	8	2	10	7	1	8	15	3	18
1996	7	3	10	1	2	3	8	5	13
1997	8	5	13	9	5	14	17	10	27
1998	8	5	13	9	2	11	17	7	24
1999	9	4	13	3	6	9	12	10	22
2000	10	1	11	18	13	31	28	14	42
2001	9	4	13	15	9	24	24	13	37
2002	10	2	12	15	9	24	25	11	36
2003	12	7	19	9	2	11	21	9	30
2004	22	7	29	14	10	24	36	17	53
2005	19	5	24	17	10	27	36	15	51
2006	12	2	14	12	9	24	24	11	35
2007	28	14	42	11	6	17	39	20	59
2008	27	7	34	18	17	35	45	24	69
2009	19	7	26	8	5	13	27	12	39
2010	27	17	44	12	11	23	39	28	67
3-yr. avg.	24	10	34	13	11	24	37	21	58

Table 2. Age distribution of black bear, Magic Valley Region, 1994-present.

DAU		Age											Total ^a
Year	Sex	Cub	1	2	3	4	5	6	7	8	9	10+	
4A													
1994	M	1	4	5	3	1	3	0	1	1	0	0	19
	F	0	0	1	1	2	0	1	1	1	0	3	10
1995	M	1	3	2	4	2	0	0	0	0	0	1	13
	F	0	1	0	1	0	1	0	0	0	0	2	5
1996	M	1	0	1	0	3	0	0	1	1	1	0	8
	F	0	0	1	2	2	0	0	0	0	0	0	5
1997	M	2	0	2	4	1	1	1	1	0	0	0	12
	F	1	0	4	1	0	0	1	1	1	0	1	10
1998	M	0	3	2	2	6	2	1	0	1	0	0	17
	F	2	1	1	3	1	0	0	1	0	0	1	10
1999	M	0	4	3	2	0	1	3	2	1	1	0	17
	F	1	2	1	0	1	0	0	0	0	0	1	6
2000	M	0	7	10	3	4	0	2	1	0	0	1	28
	F	0	1	2	2	2	0	2	1	1	0	1	12
2001	M	0	3	3	4	5	6	1	3	0	1	1	27
	F	0	3	2	2	0	5	0	0	0	0	1	13
2002	M	0	2	4	6	1	1	5	3	1	0	1	24
	F	0	0	3	1	1	2	1	0	0	0	2	10
2003	M	1	2	4	4	3	1	2	2	0	1	2	22
	F	0	0	2	0	0	1	0	1	0	0	4	8
2004	M	0	7	10	1	6	4	1	0	3	0	3	35
	F	0	1	4	3	2	0	0	0	2	1	4	17
2005	M	0	6	4	4	3	8	3	0	0	2	6	36
	F	0	2	3	3	0	2	3	1	1	0	0	15
2006	M	0	3	4	2	8	2	2	1	0	0	2	24
	F	0	1	3	0	0	1	2	0	2	0	2	11
2007	M	0	8	4	11	3	4	3	1	0	1	4	39
	F	0	3	2	5	2	2	0	0	3	0	2	19
2008	M	0	2	12	1	11	6	5	5	0	1	2	45
	F	0	2	8	0	1	4	1	1	1	1	5	24
2009	M	0	7	5	6	4	2	1	0	1	1	0	27
	F	0	1	1	1	3	0	1	0	0	0	4	11
2010	M	0	5	8	3	9	1	5	1	1	1	2	36
	F	0	5	3	4	4	1	3	2	0	1	4	27

^a Some bears may not have been aged; therefore, totals in this column may differ from totals reported elsewhere in this report.

Table 3. 2000-2010 Black Bear Plan management values and criteria, Magic Valley Region, 1994-present.

DAU Year	<i>n</i> ^a	% Females ^b	% Males ≥5	# Males ≥5
4A				
1994	30	37	26	5
1995	18	17	8	1
1996	13	38	38	3
1997	27	37	22	3
1998	27	37	44	4
1999	23	26	25	8
2000	40	30	14	4
2001	42	33	44	13
2002	40	30	44	12
2003	30	27	36	8
2004	52	33	31	11
2005	51	29	53	19
2006	35	31	29	7
2007	60	34	33	13
2008	69	35	42	18
2009	39	31	19	5
2010	63	42	31	11
3-yr. average	58	36	30	12
Desired levels		30-40	25-35	

^a Number of black bears that were aged (excluding unknown).

^b Number of black bears that were sexed (excluding unknown).

Table 4. Method of black bear harvest, Magic Valley Region, 1994-present.

DAU Year	Bait	Hounds	Still	Incidental	Other	Total
4A						
1994	6	8	6	9	1	30
1995	6	2	5	5	0	18
1996	2	4	6	1	0	13
1997	6	3	10	8	1	28
1998	1	7	6	10	1	25
1999	6	4	7	5	0	22
2000	3	15	11	12	1	42
2001	6	12	6	13	5	42
2002	4	13	5	13	1	36
2003	15	11	4	3	1	34
2004	15	22	9	9	1	56
2005	13	15	12	11	0	51
2006	12	3	11	7	2	35
2007	26	2	18	5	8 ^a	59
2008	11	15	16	21	6 ^a	69
2009	19	3	9	5	3 ^a	39
2010	29	7	18	10	3	67

^a Includes the number of black bears that were harvested using a combination of bait and hounds.

Table 5. Weapon type used to harvest black bear, Magic Valley Region, 1994-present.

DAU Year	Rifle	Archery	Muzzleloader	Handgun	Other	Total
4A						
1994	22	8	0	0	0	30
1995	15	1	0	2	0	18
1996	12	1	0	0	0	13
1997	24	3	0	0	1	28
1998	20	2	0	2	1	25
1999	20	1	0	1	0	22
2000	33	5	1	2	1	42
2001	30	5	2	0	4	41
2002	27	8	0	1	0	36
2003	26	1	1	1	1	30
2004	41	6	0	6	0	53
2005	40	10	0	1	0	51
2006	28	7	0	0	0	35
2007	44	10	0	4	1	59
2008	57	10	0	1	1	69
2009	30	6	2	1	0	39
2010	46	16	1	4	0	67

Table 6. Black bear depredation and nuisance complaints, Magic Valley Region, 1994-present.

DAU	Year	Depredation ^a	Nuisance	Total
4A	1994	1	9	10
	1995	1	4	5
	1996	0	1	1
	1997	2	3	5
	1998	3	5	8
	1999	1	8	9
	2000	4	6	10
	2001	5	3	8
	2002	2	11	13
	2003	0	4	4
	2004	3	15	18
	2005	1	10	11
	2006	0	17	17
	2007	2	63	65
	2008	0	40	40
	2009	0	50	50
	2010	0	67	67

^a Number of black bears killed by Wildlife Services for depredations on livestock.

**PROGRESS REPORT
SURVEYS AND INVENTORIES**

STATE:	<u>Idaho</u>	JOB TITLE:	<u>Black Bear Surveys and</u>
PROJECT:	<u>W-170-R-34</u>		<u>Inventories</u>
SUBPROJECT:	<u>6</u>	STUDY NAME:	<u>Big Game Population Status,</u>
STUDY:	<u>1</u>		<u>Trends, Use, and Associated</u>
JOB:	<u>9</u>		<u>Habitat Studies</u>
PERIOD COVERED: <u>July 1, 2010 to June 30, 2011</u>			

UPPER SNAKE REGION

Abstract

Black bear harvest increased markedly in all 3 Upper Snake/Southeast Region DAUs from the mid-1990s through the early-2000s, and has remained relatively stable since. In 2002, total black bear harvest in DAUs 4B, 4C, and 4D was the highest ever recorded, to that point, since implementation of the present DAU framework. A total of 198 black bears were harvested which was an increase of 56% over the 1999-2001 average of 127. Reasons for this increase are not well understood, but they may have been the result of drier-than-normal weather conditions, increased popularity of bear hunting, or the liberalized hunting season framework brought on by public perceptions of high predator populations and their potential negative impacts on deer and elk numbers. In 2003, harvest dropped back to a total of 165 bears, similar to the 2000-2002 average of 164, but still above the 1999-2001 average of 127. In 2005, harvest was once again up to 187 and in 2006 harvest dropped to 140. In 2007, bear harvest in DAUs 4B, 4C, and 4D once again reached an all-time high. A total of 243 bears were harvested, which was an increase of 74% over the 2006 harvest. This increased harvest was likely a result of the extremely dry conditions in the region during the 2007 season. The Upper Snake bear harvest was 191 during the 2010 season.

The 2000-2010 Black Bear Management Plan sets management objectives for DAUs 4B, 4C, and 4D to maintain harvest levels consistent with the “moderate” harvest targets of 25-35% male bears ≥ 5 years old and 30-40% females in the total harvest, calculated on a 3-year running average. These criteria apply to DAUs with an average annual harvest of ≥ 30 known-age black bears. For the 3-year running average (2008-2010), DAU 4B and 4D were within management criteria while DAU 4C harvest was below the female criteria and above the male criteria, indicating a light harvest.

Climatic Conditions

Overall, climatic conditions were very favorable throughout this reporting period. The summer of 2010 was average. The winter of 2010-2011 was severe, with more than average snow pack and crusting.

Depredations

There were no confirmed black bear depredations in the Upper Snake Region during the reporting period (Table 7).

Two orphaned black bear cubs were captured and transported to a rehabilitation center during this reporting period.

AREA 4

DAU 4B (GMUs 50, 51, 58, 59, 59A)

Abstract

In the past, harvest data has been highly variable and unreliable for this DAU. Harvest had also been too low (<30 black bears) to meet criteria specified in the Black Bear Management Plan. Only 15 black bears were harvested in 1999 and the 3-year average for 1998-2000 was 27. Harvest has stabilized recently and the 3-year average for 2008-2010 was 46 bears. In 2010, 52 black bears were reported harvested (Table 2).

Management Direction

The 2000-2010 Black Bear Management Plan sets management objectives for DAU 4B to maintain harvest levels consistent with the “moderate” harvest targets of 25-35% male bears ≥ 5 years old and 30-40% females in the total harvest, calculated on a 3-year running average.

Background

DAU 4B contains relatively dry black bear habitats where timber stands are generally distributed on moister north and east aspects. These habitats are marginal for black bear because they grow few berry-producing shrubs. Black bear populations are vulnerable to over-harvest because the limited habitat is often isolated from adjacent black bear habitat. The livestock industry is a major user of DAU 4B.

Population Surveys

A bait station survey was conducted in GMUs 50, 51, 58, 59, and 59A in July/August 2003 (Table 1). Twenty transects were set up on secondary roads or trails. A pork-fat bait with anis-oil scent were wired to a tree every mile and greater than 100 yards off the transect. GMU 50 had 7 routes with 35 stations, GMU 51 had 4 routes with 20 stations, GMU 58 had 3 routes with 15 stations, GMU 59 had 3 routes with 15 stations, and GMU 59A had 3 routes with 15 stations. Bait stations were set out for 20 days before being checked. A total of 9 baits were visited by bears; 1 in GMU 50, 1 in GMU 51, 5 in GMU 58, 1 in GMU 59, and 1 in GMU 59A. The use of this technique in this region is questionable. With such low bear densities, the hit rates are so low that trend data is considered unreliable. We have discontinued this survey for that reason.

During summer of 2009, the USFWS placed hair snares and motion-sensitive cameras at 70 sites in Units 58, 59, and 59A to investigate the presence of grizzly bears and document other wildlife uses (Servheen et al. 2010). The investigators found black bear hair at 47 of 70 hair snare sites. They documented 78 black bears during the total 917 camera nights the motion-sensitive cameras were deployed and functioning properly. They estimated that an average of 2.17 bears were at each visited site. They also documented 6 sows with twin cubs and 2 sows with single cubs.

Harvest Characteristics

Fifty-two black bears were checked from DAU 4B in 2009 (Table 2). This was slightly above the current 3-year average for 2007-2009 of 46. The age distribution of checked black bears from DAU 4B is presented in Table 3.

Harvest management criteria (Table 4) did not technically apply in this DAU in the past due to low average annual harvest. Since 2000, harvest levels have surpassed the minimum of 30 bears. Harvest for the 2008-2010 period was slightly above the desired female harvest criteria (39% females) and within the male harvest criteria (34% males ≥ 5 years old).

Bait and hound hunters have historically accounted for the majority of the harvest for this DAU (Table 5). This trend continued in 2010. Rifle is the most popular weapon for hunting in this DAU followed by archery (Table 6).

Dog-training Seasons

The 2010 dog-training season ran from 16 June-31 July in DAU 4B.

Management Implications

DAU 4B is to be managed to maintain harvest in the “moderate” range. Harvest for 2008-2010 was within the desired range for the female harvest criteria and within the male harvest criteria, suggesting harvest was moderate.

DAU 4C (GMUs 60, 61, 62, 62A)

Abstract

DAU 4C historically had a low (<30) average annual black bear harvest. Consequently, harvest criteria have not technically applied to this DAU. However, harvest over the last 10 years has exceeded 30 bears. Harvest objectives for DAU 4C have been set to maintain harvest levels consistent with the “moderate” level of harvest. Average harvest over 2008-2010 was below this level for percent females and above the desired level for percent males ≥ 5 years-of-age.

Management Direction

The 2000-2010 Black Bear Management Plan set management objectives for DAU 4C to maintain harvest levels consistent with “moderate” harvest targets of 25-35% males ≥ 5 years old and 30-40% females in the total harvest, calculated on a 3-year running average. DAU 4C includes part of the Greater Yellowstone Ecosystem, which supports a grizzly bear population. This DAU is managed to protect that threatened population by prohibiting bait and use of hounds to hunt black bear within the grizzly bear recovery area.

Background

DAU 4C contains a mixture of relatively dry black bear habitats where timber stands are generally distributed on moister north and east aspects and moist caldera-type habitat. The drier habitats are marginal for black bear because they grow few berry-producing shrubs, but the moist caldera habitats produce a variety of berry-producing shrubs and represent the best black bear habitat in the region. The livestock industry is a major user of DAU 4C.

Population Surveys

A bait station survey was conducted in parts of GMUs 61 and 62A in 2002 (Table 1). Two partially opened sardine cans were wired to a tree every mile along the transect (secondary road or trail). Four transects were set up: one 9.3 miles in length with 9 bait stations in the Targhee Creek/Dry Creek area, one 32 miles in length with 32 bait stations along Fish Creek Road, one 9 miles in length with 10 bait stations in Black Canyon, and one 7 miles in length with 8 bait stations in the Two Top area. Bait stations were set out 9 July and rechecked 17 July. A total of 5 baits were visited by bears; 1 on the Targhee Creek/Dry Creek transect, 2 on the Fish Creek Road transect, and 1 each on the Black Canyon and Two Top transects. Of the 5 visitations observed, 1 contained a single hair sample consistent with black bear, but the other 4 had no evidence to identify what visited the bait. The use of this technique is questionable in this region. With such low bear densities, the hit rates are so low that trend data is considered unreliable. We have discontinued this survey for that reason.

Harvest Characteristics

Historically, a relatively small number of black bears (<30) were checked from this DAU annually. However, the most recent 3-year average of 54 bears from DAU 4C exceeds the ≥ 30 -bear criteria set forth in the Black Bear Management Plan (Table 2). Therefore, management criteria in the plan can be used to direct bear management in this DAU.

Males have dominated harvest from this DAU, with spring and fall black bear harvest relatively equally split historically (Table 2). The majority of bears were harvested during the fall season in 2005, 2006, and 2007, but the 2008 harvest was again fairly evenly split between the seasons. For the 2009 and 2010 seasons, spring harvest exceeded fall harvest. Age distribution of black bear checked from DAU 4C is presented in Table 3. Harvest for the 2008-2010 period was above the desired level for males ≥ 5 years old (38%) and below the desired level for percent females (24%), indicating a light harvest (Table 4).

Still/stalk and incidental hunting combined dominate the method of take from this DAU (Table 5). This is due to restrictions on use of bait and hounds to protect grizzly bears in much of the DAU. However, the number of bears harvested over bait has grown and bait was the single most used method of take during the 2010 season (bait and hounds are allowed in Unit 60 and that portion of Unit 61 west of Howard Creek). Rifle is the most popular weapon for hunting in this DAU followed by archery (Table 6).

Dog-training Season

The 2010 dog-training season ran from 16 June-31 July in the portion of DAU 4C open to dog training (that portion of GMU 61 west of Howard Creek in Clark County).

Management Implications

The objectives for DAU 4C are to maintain “moderate” harvest levels. Harvest for the 2008-2010 seasons was above objective for males ≥ 5 years and below the desired level for percent females, indicating a light harvest. This population is more lightly harvested than other DAUs in the region because of restrictions placed on baiting and hound hunting to protect grizzly bear in most of the DAU. In an effort to bring DAU 4C into the desired levels for percent female and percent males ≥ 5 years old in the harvest and to provide more hunting opportunity, the Fish and Game Commission extended the spring take season by 15 days in 2003. That change has increased the number of spring bears taken from an average of 14 during 1994-2002 to an average of 24 during 2003-2010.

DAU 4D (GMUs 64, 65, 66, 66A, 67, 69, 76)

Abstract

With the exception of a low harvest in 2008 (50 bears), black bear harvest in DAU 4D has more than doubled in the 2000s, compared to 1994-1999. The 2010 harvest of 89 bears is higher than the 2008-2010 average for this DAU of 74 bears. Harvest objectives for DAU 4D have been set to maintain harvest levels consistent with the “moderate” level of harvest. Harvest over 2008-2010 was within this level for the female and males harvest criteria.

Management Direction

The 2000-2010 Black Bear Management Plan set management objectives for DAU 4D to maintain harvest levels consistent with “moderate” harvest targets of 25-35% males ≥ 5 years old and 30-40% females in the total harvest, calculated on a 3-year running average.

Background

DAU 4D contains relatively dry black bear habitats where timber stands are generally distributed on moister north and east aspects. Chokecherry and hawthorn are distributed along some of the streams, and huckleberry occurs in some areas throughout the DAU. These habitats are marginal

for black bear because berry-producing shrubs are limited to isolated locations within the DAU. Black bear populations may be vulnerable to over-harvest because the limited habitat is often isolated from adjacent black bear habitat. The livestock industry is a major user of DAU 4D.

Population Surveys

A bait station survey was conducted in GMUs 64, 65, 66, 66A, 67, 69, and 76 in July/August 2004 (Table 1). Twenty transects were set up on secondary roads or trails. A pork-fat bait with anis-oil scent were wired to a tree every mile and greater than 100 yards off the transect. GMU 64 had 1 route with 5 stations, GMU 65 had 1 route with 5 stations, GMU 67 had 5 routes with 25 stations, GMU 66 had 5 routes with 25 stations, and GMUs 66A and 76 had 8 routes with 40 stations. Bait stations were set out for 20 days before being checked. None of these baits were visited by bears. The use of this technique in this region is questionable. With such low bear densities, the hit rates are so low, or in this case nonexistent, that trend data is considered unreliable. We have discontinued this survey for that reason.

Harvest Characteristics

A total of 89 black bears were checked from DAU 4D in 2010 (Table 2). Harvest increased annually from 1998-2004, appeared to level off during 2005-2006, rose again for 2007, dropped substantially for 2008, and came back to around the average for 2009 and 2010. The average annual harvest for the 2008-2010 seasons was 74. Young age class bears made up most of the harvest in DAU 4D during the 2010 season (Table 3). Harvest values for the 2008-2010 seasons were 32% of male harvest ≥ 5 years old and 30% of the harvest was female, indicating a moderate harvest (Table 4).

Baiting and hound hunting were the most popular method of harvest followed by incidental hunting, and then still/stalk (Table 5). The majority of bears harvested in this DAU were taken with a rifle, followed by archery (Table 6).

Dog-training Season

The 2009 dog-training season ran from 1 June-31 July in DAU 4D.

Management Implications

Management objectives in the 2000-2010 Black Bear Management Plan indicate that this population should be harvested at a moderate level. Harvest opportunity was shortened by 2 weeks for the 2005 season because harvest data suggested the population was being harvested at a moderate to heavy level. The Idaho Fish and Game commission restored one week of opportunity during the 2011 season setting process. This change won't take effect until the spring 2012 bear season. Current levels suggest the population is being harvested at a moderate level.

AREA 5

GMUs 60A, 63, 63A

Management Direction

Historically, the Department did not offer an open season in Area 5 because black bear numbers were low and too sparse to justify a hunting season. However, bear sightings in this Area, and reports of problem bears, have increased over the last few years. Due to this, the Department opened a general black bear hunting season in the Area in 2008. There are no specific harvest expectations in this Area and the primary purpose of the season is to allow the harvest of black bears around human habitation and livestock operations.

Background

Area 5 GMUs are comprised of urban-suburban, irrigated farmland, and drier, desert-like areas. Habitat quality is marginal and few black bears occur in Area 5. Prior to the 2008 hunting season, Area 5 GMUs had no black bear hunting seasons.

Population Surveys

No black bear population surveys are conducted in Area 5.

Harvest Characteristics

The 2010 season in Area 5 ran from 30 August-31 October and 15 April-30 June. No bears were harvested in this Area during the 2008 season. One black bear (11 year old female, harvested with hounds and rifle) was taken during the fall 2009 season in Unit 60A.

Dog-training Season

The 2010 dog-training season ran from 1 July-31 July in Area 5.

Management Implications

The Department did not plan to offer an open season in Area 5 during the 2000-2010 planning period, but an increase in reported black bear activity in this area suggested an open season would likely be useful in reducing bear-human conflicts. The expectation is that bear harvest in this Area will remain low. If the harvest trend increases over time the harvest season should be re-evaluated and specific management objectives should be identified for Area 5.

LITERATURE CITED

Servheen, C., S. Eggeman, and R. Shoemaker. 2010. Surveying for Grizzly Bear Presence in the Beaverhead Mountains of Montana and Idaho: Final Report. University of Montana, Missoula, USA.

Table 1. Bait station survey results, Upper Snake and Southeast Regions, 1992-2004.

GMUs surveyed	Year	Survey dates	Total transects available	Total transects sampled	Total stations sampled	Total stations visited by black bear	% stations visited by black bear
66A, 76	1992	6/24-7/11	16	16	94	0	0.0
	1993	6/24-7/1	18	18	107	1	0.9
	2004 ^a	7/16-8/12	8	8	40	0	0.0
66, 66A, 67, 76	1999	6/24-29	23	23	138	0	0.0
64, 65, 66, 67	2004 ^a	7/16-8/12	12	12	60	0	0.0
61, 62A	2002 ^b	7/9-17	4	4	60	5	8.3
50, 51, 58, 59, 59A	2003 ^a	7/2-8/17	20	20	100	9	9.0

^a All transects were 5 miles in length with 5 bait stations per transect at 1-mile intervals along transects.

^b Transects ranged in length from 7-32 miles with bait stations at 1-mile intervals along transects.

Table 2. Black bear harvest by season and sex, Upper Snake Region, 1994-present.

DAU Year	Spring				Fall				Entire season			
	M	F	U	Total	M	F	U	Total	M	F	U	Total
4B												
1994	10	6	0	16	5	4	0	9	15	10	0	25
1995	8	6	0	14	3	1	0	4	11	7	0	18
1996	18	4	0	22	3	3	0	6	21	7	0	28
1997	13	7	0	20	4	3	0	7	17	10	0	27
1998	12	9	0	21	3	4	0	7	15	13	0	28
1999	5	2	0	7	7	1	0	8	12	3	0	15
2000	12	14	0	26	8	4	0	12	20	18	0	38
2001	18	12	0	30	4	5	0	9	22	17	0	39
2002	17	11	0	28	12	7	0	19	29	18	0	47
2003	16	6	0	22	8	5	0	13	24	11	0	35
2004	19	9	0	28	11	3	0	14	30	12	0	42
2005	18	9	0	27	8	1	0	9	26	10	0	36
2006	24	3	0	27	4	2	0	6	28	5	0	33
2007	24	19	0	43	9	6	0	15	33	25	0	58
2008	16	15	0	31	7	6	0	13	23	21	0	44
2009	22	12	0	34	6	2	0	8	28	14	0	42
2010	24	11	0	35	10	7	0	17	34	18	0	52
3 yr. avg.	21	13	0	33	8	5	0	13	28	18	0	46
4C												
1994	6	3	0	9	12	5	0	17	18	8	0	26
1995	8	7	0	15	10	4	0	14	18	11	0	29
1996	12	2	0	14	7	8	0	15	19	10	0	29
1997	12	1	0	13	6	4	0	10	18	5	0	23
1998	4	1	0	5	6	3	0	9	10	4	0	14
1999	14	3	0	17	10	5	0	15	24	8	0	32
2000	8	6	0	14	19	5	0	24	27	11	0	38
2001	13	3	0	16	18	6	1	25	31	9	1	41
2002	12	11	0	23	40	7	0	47	52	18	0	70
2003	11	6	0	17	14	9	0	23	25	15	0	40
2004	20	9	0	29	13	7	0	20	33	16	0	49
2005	18	7	0	25	28	8	0	36	46	15	0	61
2006	8	3	0	11	23	11	0	34	31	14	0	45
2007	18	5	0	23	46	18	1	65	64	23	1	88
2008	26	8	0	34	33	6	0	39	59	14	0	73
2009	24	1	0	25	10	4	0	14	34	5	0	39
2010	17	10	0	27	16	7	0	23	33	17	0	50
3 yr. avg.	22	6	0	29	20	6	0	26	42	12	0	54
4D												
1994	10	3	0	13	5	6	0	11	15	9	0	24
1995	5	3	0	8	7	2	0	9	12	5	0	17

Table 2. Continued.

DAU Year	Spring				Fall				Entire season			
	M	F	U	Total	M	F	U	Total	M	F	U	Total
1996	13	4	0	17	5	7	0	12	18	11	0	29
1997	18	5	0	23	9	6	0	15	27	11	0	38
1998	20	5	0	25	5	3	1	9	25	8	1	34
1999	18	4	0	22	11	11	0	22	29	15	0	44
2000	25	15	0	40	10	6	0	16	35	21	0	56
2001	26	19	0	45	20	14	0	34	46	33	0	79
2002	27	18	0	45	21	15	0	36	48	33	0	81
2003	29	23	0	52	18	20	0	38	47	43	0	90
2004	33	20	0	53	21	18	0	39	54	38	0	92
2005	24	14	0	38	31	21	3	55	55	35	3	93
2006	15	1	0	16	25	21	0	46	40	22	0	62
2007	24	16	0	40	35	22	0	57	59	38	0	97
2008	14	3	0	17	19	14	0	33	33	17	0	50
2009	25	10	0	35	33	14	1	48	58	24	1	83
2010	17	10	0	27	45	17	0	62	62	27	0	89
3 yr. avg.	19	8	0	26	32	15	0	48	51	23	0	74

Table 3. Age distribution of black bear, Upper Snake Region, 1994-present.

DAU Year	Sex	Age											Unknown	Total
		Cub	1	2	3	4	5	6	7	8	9	10+		
4B														
1994	M	0	2	1	2	5	1	3	0	0	0	0	1	15
	F	0	0	1	1	4	2	0	0	0	0	1	1	10
1995	M	0	3	1	1	2	3	0	0	0	0	1	0	11
	F	0	0	1	1	0	2	0	0	0	1	2	0	7
1996	M	0	3	1	4	5	2	1	1	0	1	2	1	21
	F	1	0	1	1	0	2	0	0	0	1	1	0	7
1997	M	1	2	4	3	3	0	1	2	1	0	0	0	17
	F	0	0	2	2	1	1	1	0	1	1	1	0	10
1998	M	3	1	4	2	1	0	3	0	0	0	1	0	15
	F	4	1	2	2	1	0	0	0	0	0	3	0	13
1999	M	1	1	1	5	1	0	0	1	0	0	1	0	11
	F	0	0	1	0	1	0	1	0	0	0	0	0	3
2000	M	0	4	6	5	2	1	0	0	2	0	0	2	22
	F	0	0	0	6	1	1	0	0	2	1	4	1	16
2001	M	0	3	5	3	3	1	1	4	1	1	0	0	22
	F	0	0	2	1	3	3	1	1	0	0	3	3	17
2002	M	0	4	5	5	4	4	3	0	1	0	3	0	29
	F	0	0	2	5	3	1	0	0	2	0	5	0	18
2003	M	0	1	3	6	6	4	1	1	0	0	2	0	24
	F	0	2	0	1	4	0	0	1	0	0	2	1	11
2004	M	0	2	5	9	3	3	2	2	0	0	3	1	30
	F	0	0	0	1	1	2	0	0	0	1	5	2	12
2005	M	0	3	7	5	2	2	2	2	2	0	1	0	26
	F	1	1	1	1	1	3	0	0	1	0	1	0	10
2006	M	0	1	11	3	2	1	4	2	3	0	1	0	28
	F	0	0	2	0	1	0	0	1	0	0	0	0	4
2007	M	0	5	6	7	2	3	1	2	0	1	3	0	30
	F	0	4	3	3	2	1	4	0	1	0	6	0	24
2008	M	0	1	10	3	1	2	3	1	0	1	0	0	22
	F	0	2	2	2	2	1	1	0	1	4	6	0	21
2009	M	0	0	3	10	5	2	2	2	1	1	1	0	27
	F	1	0	2	3	0	3	1	0	1	0	3	0	14
2010	M	0	2	1	2	5	1	2	0	0	0	4	0	17
	F	0	2	5	7	6	3	2	2	2	1	2	0	32
4C														
1994	M	1	6	1	3	2	1	1	1	0	1	0	1	18
	F	0	1	1	1	1	2	0	0	0	0	2	0	8
1995	M	0	4	1	3	2	2	1	0	0	0	2	3	18
	F	0	0	1	3	1	0	1	1	1	0	2	1	11
1996	M	0	3	3	3	1	3	1	1	0	1	1	1	18
	F	0	2	1	2	1	0	0	0	0	0	3	0	9
1997	M	0	1	2	3	6	3	2	1	0	1	1	1	21

Table 3. Continued.

DAU		Age											Unknown	Total
Year	Sex	Cub	1	2	3	4	5	6	7	8	9	10+		
1998	F	0	0	0	1	2	0	0	0	1	0	1	0	5
	M	2	1	0	1	1	1	2	0	0	1	1	0	10
	F	0	0	0	0	2	0	1	0	0	0	1	0	4
1999	M	0	6	1	3	3	3	2	3	1	1	1	0	24
	F	0	3	0	1	1	1	1	0	0	0	1	0	8
2000	M	0	3	6	6	2	2	3	0	1	2	1	1	27
	F	0	2	2	2	0	1	2	0	1	0	1	0	11
2001	M	0	6	4	5	2	2	2	3	2	1	3	2	32
	F	0	1	3	2 ^a	1	0	1	0	0	1	0	0	9
2002	M	0	7	12	15	4	3	2	0	1	2	5	1	52
	F	0	0	1	1	2	3	2	1	0	2	5	1	18
2003	M	0	4	3	5	2	3	0	3	0	0	4	1	25
	F	0	3	3	1	2	2	0	0	0	1	3	0	15
2004	M	0	3	8	5	4	3	2	1	1	2	3	1	33
	F	0	1	4	2	4	2	1	0	1	0	1	0	16
2005	M	4	4	10	6	2	3	1	4	0	0	4	0	38
	F	4	4	10	6	2	3	1	4	0	0	4	0	15
2006	M	0	7	8	4	4	1	1	0	1	0	2	0	28
	F	0	2	2	1	3	2	1	0	0	0	3	0	14
2007	M	4	13	12	7	10	5	3	2	3	0	2	0	61
	F	3	3	6 ^a	1	1	3	1	1	0	0	2	0	21
2008	M	1	8	11	2	6	2	4	2	2	3	11	0	52
	F	0	2	3	3	0	0	1	1	1	0	3	0	14
2009	M	0	4	5	3	10	2	0	0	3	2	2	0	31
	F	0	0	3	1	0	0	0	0	1	0	0	0	5
2010	M	1	0	2	1	3	1	1	0	1	1	5	0	16
	F	0	4	5	5	4	3	3	3	1	0	1	0	29
4D														
1994	M	0	3	5	5	2	0	0	0	0	0	0	0	15
	F	1	0	2	3	1	1	0	1	0	0	0	0	9
1995	M	0	0	2	5	0	1	1	0	0	1	0	2	12
	F	0	0	2	2	0	0	0	1	0	0	0	0	5
1996	M	0	0	7	3	2	2	2	0	0	1	1	0	18
	F	1	3	1	2	1	1	0	0	0	1	0	0	10
1997	M	1	2	8	3	4	3	3	1	0	0	1	1	27
	F	0	1	0	3	3	0	2	1	0	0	1	0	11
1998	M	3	3	6	3	3	3	0	3	0	0	1	0	25
	F	1	0	2	1	1	0	1	1	0	1	0	0	8
1999	M	2	6	5	6	2	1	3	1	0	1	1	1	29
	F	2	3	4	0	1	1	1	1	0	0	1	1	15
2000	M	0	6	9	5	5	3	1	3	0	1	2	0	35
	F	0	1	3	4	1	1	1	0	3	1	4	2	21
2001	M	0	8	6	14	9	3	3	1	0	0	2	0	46
	F	0	2	8	5	2	2	2	1	5	1	2	3	33
2002	M	0	2	15	12	5	7	2	1	0	1	2	1	48

Table 3. Continued.

DAU		Age											Unknown	Total
Year	Sex	Cub	1	2	3	4	5	6	7	8	9	10+		
2003	F	2	2	7	5	7	3	2	0	0	0	3	2	33
	M	0	10	9	15	1	4	0	2	0	0	5	1	47
2004	F	1	5	9	9	4	1	6	0	2	0	6	0	43
	M	0	8	14	4	12	7	4	1	0	1	3	0	54
2005	F	0	3	8	5	6	2	3	1	0	0	9	1	38
	M	0	7	13	19	1	10	1	0	0	1	2	0	54
2006	F	0	2	5 ^a	6	4	2	0	1	2	3 ^a	10 ^a	0	35
	M	0	3	15	8	4	2	1	2	1	0	0	0	36
2007	F	0	3	4	5	1	1	2	0	0	2	3	0	21
	M	0	10	11	15	9	4	1	1	0	0	5	0	56
2008	F	0	3	6	8	5	3	1	1	1	2	5	0	35
	M	0	6	5	4	7	4	4	1	1	0	0	0	32
2009	F	2	3	2	1	3	1	0	0	1	1	1	0	15
	M	0	3	13	10	11	6	6	3	0	3	3	0	58
2010	F	0	4 ^a	6	6	1	2	0	0	0	1	4	0	24
	M	0	2	2	7	2	2	3	1	2	0	4	0	25
	F	2	19	7	10	4	7	3	3	1	0	3	0	59

^a One bear of unknown sex.

Table 4. 2000-2010 Black Bear Plan management values and criteria, Upper Snake Region, 1994-present.

DAU				
Year	<i>n</i> ^a	% Females ^b	% Males ≥ 5	# Males ≥ 5
4B				
1994	23	39	29	4
1995	17	41	36	4
1996	27	26	35	7
1997	27	37	24	4
1998	28	46	27	4
1999	14	21	18	2
2000	35	43	15	3
2001	34	35	36	8
2002	47	38	24	7
2003	34	31	33	8
2004	39	29	34	10
2005	36	28	35	9
2006	32	13	39	11
2007	54	44	33	10
2008	43	49	32	7
2009	41	34	33	9
2010	32	35	38	12
3-year avg.	39	39	34	9
Desired levels		30-40	25-35	
4C				
1994	25	32	24	4
1995	25	40	33	5
1996	26	35	41	7
1997	22	23	47	8
1998	14	29	50	5
1999	32	25	46	11
2000	37	30	35	9
2001	40	20	41	13
2002	70	26	20	10
2003	39	38	42	10
2004	48	33	38	12
2005	53	28	32	12
2006	42	33	18	5
2007	82	25	25	15
2008	66	21	46	24
2009	36	14	29	9
2010	45	36	38	11
3-year avg.	49	24	38	15
Desired levels		30-40	25-35	

Table 4. Continued.

DAU Year	<i>n</i> ^a	% Females ^b	% Males ≥5	# Males ≥5
4D				
1994	26	35	0	0
1995	15	33	30	3
1996	27	41	35	6
1997	37	30	31	8
1998	33	24	28	7
1999	42	33	25	7
2000	53	36	29	10
2001	76	39	20	9
2002	81	41	13	6
2003	89	48	24	11
2004	94	41	30	16
2005	86	37	26	14
2006	57	37	17	6
2007	91	38	20	11
2008	47	32	31	10
2009	83	29	36	21
2010	84	30	29	17
3-year avg.	71	30	32	16
Desired levels		30-40	25-35	

^a Number of black bears that were aged (excluding unknown).

^b Number of black bears that were sexed (excluding unknown).

Table 5. Method of black bear harvest, Upper Snake Region, 1994-present.

DAU						
Year	Bait	Hounds	Still	Incidental	Other	Total
4B						
1994	5	11	3	6	0	25
1995	6	8	2	2	0	18
1996	9	14	3	2	0	28
1997	12	8	2	5	0	27
1998	10	8	4	4	0	26
1999	4	4	2	5	0	15
2000	17	9	7	3	0	36
2001	15	10	5	9	0	39
2002	16	10	6	13	2	47
2003	13	7	5	9	1	35
2004	15	20	3	7	1	46
2005	15	11	6	3	1	36
2006	13	12	1	6	1	33
2007	16	25	6	8	3	58
2008	14	20	4	5	1	44
2009	17	19	2	3	1	42
2010	14	25	2	11	0	52
4C						
1994	6	2	11	6	1	26
1995	10	3	8	7	1	29
1996	7	1	13	7	1	29
1997	6	2	12	2	0	22
1998	1	1	4	8	0	14
1999	8	1	7	14	2	32
2000	6	1	21	9	1 ^a	38
2001	9	1	17	14	0	41
2002	11	14	21	24	0	70
2003	9	3	11	15	2	40
2004	15	3	17	13	1	49
2005	11	2	20	22	3	58
2006	9	4	18	11	3	45
2007	17	2	15	48	6	88
2008	15	3	37	15	3	73
2009	13	3	11	12	0	39
2010	17	3	10	16	4	50
4D						
1994	10	1	5	8	0	24
1995	8	0	4	5	0	17
1996	13	7	3	5	1	29
1997	25	5	3	4	1	38

Table 5. Continued.

DAU						
Year	Bait	Hounds	Still	Incidental	Other	Total
1998	12	11	1	7	2	33
1999	19	8	5	12	0	44
2000	30	11	7	5	3	56
2001	38	14	18	6	3 ^b	79
2002	31	24	6	15	5	81
2003	35	30	16	8	1	90
2004	44	30	7	14	3	98
2005	29	32	15	15	2	93
2006	16	14	12	18	2	62
2007	36	22	12	22	5	97
2008	15	9	11	14	1	50
2009	31	22	11	15	5	84
2010	27	27	8	25	2	89

^a Method of harvest not reported for 1 black bear.

^b Method of harvest not reported for 2 black bears.

Table 6. Weapon type used to harvest black bear, Upper Snake Region, 1994-present.

DAU						
Year	Rifle	Archery	Muzzleloader	Handgun	Other	Total
4B						
1994	14	9	1	1	0	25
1995	12	2	0	3	1	18
1996	15	6	1	6	0	28
1997	11	13	0	3	0	27
1998	15	7	0	4	0	26
1999	11	1	1	2	0	15
2000	26	6	2	1	1	36
2001	26	10	0	3	0	39
2002	25	17	0	5	0	47
2003	22	7	1	4	1	35
2004	21	12	0	8	1	42
2005	24	8	0	4	0	36
2006	18	11	0	4	0	33
2007	39	16	0	3	0	58
2008	31	9	0	4	0	44
2009	27	11	0	3	1	42
2010	37	7	0	8	0	52
4C						
1994	18	5	0	3	0	26
1995	21	4	0	4	0	29
1996	21	6	1	1	0	29
1997	16	5	0	1	0	22
1998	9	4	0	1	0	14
1999	24	7	0	1	0	32
2000	27	9	0	2	0	38
2001	29	11	0	1	0	41
2002	46	17	0	7	0	70
2003	28	6	1	5	0	40
2004	32	14	0	1	2	49
2005	34	20	0	4	0	58
2006	32	11	0	2	0	45
2007	65	17	1	4	1	88
2008	50	19	1	2	1	73
2009	28	10	1	0	0	39
2010	38	10	1	0	0	39
4D						
1994	15	7	0	2	0	24
1995	13	4	0	0	0	17
1996	16	10	0	3	0	29
1997	21	7	0	9	1	38

Table 6 Continued

DAU						
Year	Rifle	Archery	Muzzleloader	Handgun	Other	Total
1998	21	6	1	4	1	33
1999	26	13	0	5	0	44
2000	31	20	1	3	1	56
2001	40	25	1	11	2 ^a	79
2002	40	19	20	2	0	81
2003	43	37	0	9	1	90
2004	57	25	1	7	2	92
2005	50	21	0	21	1	93
2006	36	18	1	6	1	62
2007	58	34	0	5	0	97
2008	33	11	0	3	3	50
2009	48	29	0	5	2	84
2010	59	21	2	5	2	89

^a One bear taken with unknown weapon.

Table 7. Black bear depredation and nuisance complaints, Upper Snake Region, 1994-present.

Year	4B		4C		4D		Total	
	Dep.	Nuis.	Dep.	Nuis.	Dep.	Nuis.	Dep.	Nuis.
1994 ^a	0		10		15		25	
1995 ^a	1		11		9		21	
1996	0	2	0	11	0	1	0	14
1997	0	0	2	6	4	0	6	6
1998	0	0	0	2	1	0	1	2
1999	1	0	1	0	1	0	3	0
2000	0	2	0	0	0	0	0	2
2001	2	1	3	0	3	1	8	2
2002	2	0	2	0	4	0	8	0
2003	0	0	1	0	5	0	6	0
2004	1	0	0	8	4	4	5	12
2005 ^b	1		2		4		7	
2006 ^b	1		1		6		8	
2007 ^{b, c}	0		1		0		1	
2008 ^{b, d}	0		0		0		0	
2009 ^b	0		0		3		3	
2010	0		0		0		0	

^a Depredation and nuisance complaints combined.

^b No exact nuisance data is available.

^c There were a significant number of nuisance complaints during fall-winter 2007.

^d There were 5 depredations on sheep in 2008 that USDA Wildlife Services were unable to confirm as black bear.

**PROGRESS REPORT
SURVEYS AND INVENTORIES**

STATE:	<u>Idaho</u>	JOB TITLE:	<u>Black Bear Surveys and</u>
PROJECT:	<u>W-170-R-34</u>		<u>Inventories</u>
SUBPROJECT:	<u>7</u>	STUDY NAME:	<u>Big Game Population Status,</u>
STUDY:	<u>1</u>		<u>Trends, Use, and Associated</u>
JOB:	<u>9</u>		<u>Habitat Studies</u>
PERIOD COVERED: <u>July 1, 2010 to June 30, 2011</u>			

SALMON REGION

Abstract

Salmon Region is responsible for DAUs 1I, 1J, and 4E. In these DAUs, black bear depredation problems and hunter harvest tend to peak during dry years. Conversely, depredations and harvest are minimal during wet years. For example, in 1994, a dry year, depredation complaints reached an all-time high of 64 complaints and 171 black bears were harvested. In the wet years of 1997 and 1998, there were few depredation problems and approximately 100 black bears were harvested. However, 1999 was also a relatively dry year, but only 100 black bears were harvested. Although the 2000-2010 Black Bear Management Plan specifies moderate to heavy harvest rates in these DAUs, management criteria indicate light harvest rates throughout the region. Accordingly, starting in fall 1999, additional days of hunting opportunity were added to spring and fall seasons in these DAUs. Harvest increased, likely in part due to regulation changes. During 2007, 2008, 2009, and 2010, 267, 206, 184, and 236 bears were harvested, respectively. Approximately 34% of the harvest has occurred during extended seasons over the last 4 years. In 2010, female harvest for bait and hound hunters was 39%, whereas female harvest for incidental and spot/stalk hunters was 34%. This seems to indicate there was not much selectivity among harvest methods.

Climate

Rainfall during summer months in 2010 was above average, with some cool, moist weather during spring and early summer. Vegetative growth appeared well above average. Winter conditions were somewhat harsh, with normal temperatures and above normal precipitation, particularly during early winter. In general, animals should have entered winter in above average body condition, and then encountered an average to harsh winter, which should have produced low to moderate over-winter survival for adults. Snow-pack (as measured at higher elevations) was approximately 114% of average by late winter. Onset of spring weather and associated plant phenology was later than normal in 2011. Water-year precipitation through June 2011 has been approximately 126% of average lower elevations (Salmon weather station). Spring and early summer conditions in 2011 were cool and wetter than average.

AREA 1

DAU 1I (GMUs 34, 35, 36)

Management Direction

Follow statewide management direction of the 2000-2010 Black Bear Management Plan. Management direction for DAU 1I is to maintain a heavy harvest rate of <25% males \geq 5 years old and >40% females in the harvest (Table 1).

Background

DAU 1I is bordered by the Frank Church Wilderness on the north and includes part of the Sawtooth Wilderness in the south. Virtually all of DAU 1I is land administered by USFS, with small amounts of private land in valley bottoms. The area is covered with high-elevation forest with the exception of open valley bottoms in Unit 36. This area typically receives high snowfall and endures cold winter temperatures. The area receives high recreational use throughout the year. Black bear season structure is currently the same as in other DAUs in the region (Appendix A).

Population Surveys

No population surveys or management studies were completed in this DAU.

Harvest Characteristics

Harvest in 2010 was 23 less than the 20-year high in 2007 and matched the previous the 3-year average (46) (Table 2). Sex and age composition of harvest in DAU 1I indicates a much lighter harvest rate than specified in the 2000-2010 management plan. The percent of males \geq 5 years old increasingly moved away from goal levels from 2001 through 2009, except for drops toward the goal of <25% in 2005 and 2010 (Table 4). With the exception of 2008 and 2010, female harvest has not reached the management goal of >40% in the past 20 years. Use of bait accounted for 57% of black bears harvested in this DAU in 2010 (Table 5). Approximately 24% of bears were taken by still hunters and incidentally to other hunting.

Depredations

Depredations in this DAU usually accounted for the majority of black bear problems in Salmon Region prior to 1994 (Table 7). Complaints were chronic problems with garbage in the same locations each year. The USFS provided bear-proof trash containers for the 1994 season in Stanley area campgrounds, which helped alleviate some problems. Since then, depredation complaints have decreased. During 2010, there were no depredation complaints (Table 7).

Management Implications

Management direction for this area is to maintain a heavy harvest rate (<25% males \geq 5 years old and >40% females in the harvest). Harvest indicator criteria for this DAU suggested a light to

moderate harvest rate during the 1990s. Accordingly, the spring 2000 black bear season ending date was extended from 7 to 30 June, creating an additional 24 days to hunt black bears. In addition, the fall 1999 season in GMU 36 opened 30 August, 16 days earlier than in prior years. Harvest during extended seasons increased from 18% of total harvest in 2000 to 65% in 2006, then decreased to 50% over the last 2 years. Currently, harvest indicator criteria suggests a light harvest rate.

DAU 1J (GMUs 21, 21A, 28, 36B)

Management Direction

Follow statewide management direction of the 2000-2010 Black Bear Management Plan. Management direction for DAU 1J is to maintain a moderate harvest rate of 25-35% males ≥ 5 years old and 30-40% females in the harvest (Table 1).

Background

DAU 1J consists of black bear habitat that varies from dense, semi-coastal forests to dry river breaks with patchy timber stands. Much of this DAU is heavily roaded, which makes black bear populations vulnerable to over-harvest.

GMUs in DAU 1J contain some of the best black bear habitat in Salmon Region. However, hunter access is good over much of this DAU, so black bear harvest rates are comparatively high. Annual harvests vary considerably due to weather fluctuations; snow melt patterns in spring and summer drought can concentrate black bears along accessible riparian areas in fall. Black bear season structure mirrors the rest of the region (Appendix A).

Most of DAU 1J is public land, primarily USFS, with some BLM and Idaho state lands. Private property in these GMUs is primarily associated with valley bottoms or patented mining claims.

Population Surveys

No population surveys or management studies were completed in this DAU.

Harvest Characteristics

During the wet years of 1996-1998, DAU 1J black bear harvest was 53-55 per year, compared to 66-82 per year during the dry 1993-1995 years (Table 2). Typical of dry years, black bear harvest increased dramatically in DAU 1J during 2000 and 2001 (103 and 102, respectively), reaching the highest levels since 1983. A dry weather pattern prevailed in 2002 and harvest reached a new high with 132 bears taken. However, harvest rates since 2000 were confounded by increased hunting opportunity and associated harvest beginning with the 1999 fall season. Harvest increased to 132 animals in 2004, equal to the record high harvest in 2002, but decreased in 2005 and 2006, to 96 and 71, respectively (Table 2). Harvest in 2010 (101) increased by 9 from 2009, and was similar to the 3-year average of 99 (Table 2).

Male age composition of DAU 1J black bear harvest indicates a lighter harvest rate than specified in the 2000-2010 management plan; however, the 3-year average for percent females in the harvest is slightly higher than the management goal (Table 4). In 2010, bait and hound hunters accounted for 52% of the harvest and still hunter and incidental take comprised 37% of the harvest.

Depredations

Black bear depredation complaints in past years were primarily related to fruit trees and garbage along Salmon River below North Fork. The USFS installed black bear-proof dumpsters at dumpsites along Salmon River for the 1994 camping season. The dry summer and fall produced very poor forage conditions and a dramatic increase in black bear complaints during 1994 and 2007. Since 1995, complaints have fluctuated widely from 0 to 23 (Table 7). There were a near-record 21 complaints received in 2010 for this DAU.

Management Implications

Management direction for this area is to maintain a moderate harvest rate (25-35% males ≥ 5 years old and 30-40% females in the harvest). During the 1990s harvest indicator criteria for percent males ≥ 5 years old and percent females suggest a light harvest rate. Accordingly, fall 1999 season opened 30 August, 16 days earlier than in prior years, and the spring 2000 black bear season ending date was extended from 15 to 30 June, creating a total of 31 additional days to hunt black bears. Extended season dates accounted for a consistent 16% of harvest during 2001-2003. Harvest during extended season dates ranged from 23% to 29% over the last 7 years. The proportion of females in the harvest has slowly trended upward over the last 10 years and has slightly exceeded 40% during 2 of the last 3 seasons. Conversely, the proportion of older males, although variable from year to year, appears relatively stable over the long term and remains above the desired level.

AREA 4

DAU 4E (GMUs 29, 30, 30A, 36A, 37, 37A)

Management Direction

Follow statewide management direction of the 2000-2010 Black Bear Management Plan. Management direction for DAU 4E is to maintain a moderate harvest rate of 25-35% males ≥ 5 years old and 30-40% females in the harvest (Table 1).

Background

Game management units in DAU 4E are generally characterized by mountain valleys separated by rugged mountain ranges. Most black bear habitat occurs in scattered pockets in the mountains. Valleys are generally agricultural land and contain little suitable black bear habitat except along creeks. Black bear populations are very vulnerable to harvest because of limited,

often isolated black bear habitats. Both harvest and pursuit-only seasons are currently in effect (Appendix A).

Population Surveys

No population surveys or management studies were completed in this DAU.

Harvest Characteristics

Prior to the extended season, 25-39 black bears were harvested in DAU 4E (Table 2). In 2010, a record high 89 black bears were harvested, which is 24 more than the previous 3-year average (Table 2). The 3-year average for male age composition of DAU 1J black bear met the goals specified in the 2000-2010 management plan; however, percent females in the harvest were higher than desired in 5 of the past 7 years (Table 4). In 2010, bait and hound hunters accounted for 52% of the harvest and still hunter and incidental take comprised 44% of the harvest.

Depredations

Except for 1994 and 2007, unusually dry years, DAU 4E experiences relatively few depredation problems (Table 7). There were 8 depredation complaints in 2010.

Management Implications

Management direction for this area is to maintain a moderate harvest rate (25-35% males ≥ 5 years old and 30-40% females in the harvest). Fall 1999 season opened 30 August, 16 days earlier than in prior years, and the spring 2000 black bear season ending date was extended from 15 to 30 June, creating a total of 31 additional days to hunt black bears. Extended season dates accounted for approximately 19% of harvest during 2001-2003. Extended season harvest has generally increased over time and contributed 32% of total harvest from 2007 to 2010. Harvest levels for this DAU suggest harvest maybe higher than goal levels, particular with regard to female take.

Table 1. Harvest criteria for black bear in Idaho.

Criteria	Light harvest	Moderate harvest	Heavy harvest
Percent females	<30%	30-40%	>40%
Percent males ≥ 5	>35%	25-35%	<25%
Bait station survey	Increasing	Stable	Decreasing

Table 2. Black bear harvest by season and sex, Salmon Region, 1994-present.

DAU Year	Spring			Fall			Entire season		
	M	F	Total	M	F	Total	M	F	Total
1I									
1994	16	7	23	18	16	34	34	23	57
1995	9	6	15	21	9	30	30	15	45
1996	9	4	13	8	3	11	17	7	24
1997	8	4	12	7	3	10	15	7	22
1998	6	2	8	7	2	9	13	4	17
1999	17	2	19	16	4	21	33	6	40
2000	22	5	27	19	4	23	41	9	50
2001	18	10	28	14	4	18	32	14	46
2002	17	8	24	15	5	20	32	13	45
2003	16	9	25	9	3	12	25	12	37
2004	23	8	31	9	5	14	32	13	45
2005	18	9	27	9	6	15	27	15	42
2006	28	4	32	6	2	8	34	6	40
2007	27	13	40	21	8	29	48	21	69
2008	19	15	34	3	3	6	22	18	40
2009	20	3	23	5	2	7	25	5	30
2010	22	14	36	4	6	10	26	20	46
3-yr. avg.	20	11	31	4	4	8	24	14	39
1J									
1994	26	11	37	31	14	45	57	25	82
1995	24	20	44	14	15	29	38	35	73
1996	25	8	33	18	4	22	43	12	55
1997	20	11	31	12	11	23	32	22	54
1998	27	7	34	14	5	19	41	12	53
1999	29	5	34	9	7	16	38	12	50
2000	46	14	60	30	13	44	76	27	104
2001	52	19	71	23	7	30	75	26	101
2002	44	23	67	44	21	66	88	44	133
2003	44	16	60	3	11	14	47	27	74
2004	51	25	76	35	21	56	86	46	132
2005	43	26	69	15	11	27	58	37	96
2006	37	22	59	8	3	11	45	25	71
2007	53	36	89	26	14	40	79	50	129
2008	40	31	71	16	16	32	56	47	103
2009	43	29	72	12	8	20	55	37	92
2010	48	20	68	23	10	33	71	30	101
3-yr. avg.	44	27	70	17	11	28	61	38	99
4E									
1994	11	9	20	10	6	16	21	15	36
1995	18	6	24	6	9	15	24	15	39

Table 2. Continued.

DAU	Spring			Fall			Entire season		
Year	M	F	Total	M	F	Total	M	F	Total
1996	13	4	17	3	5	8	16	9	25
1997	17	8	25	1	3	5	18	11	30
1998	9	9	18	2	6	8	11	15	26
1999	25	9	34	0	5	5	25	14	39
2000	17	16	33	6	3	9	23	19	42
2001	28	11	39	4	5	9	32	16	48
2002	27	15	42	15	14	29	42	29	71
2003	25	10	35	11	6	17	36	16	52
2004	26	13	39	9	11	20	35	24	59
2005	27	27	54	7	5	12	34	32	66
2006	32	14	46	3	3	6	35	17	52
2007	31	20	51	15	3	18	46	23	69
2008	28	23	51	5	7	12	33	30	63
2009	25	24	49	8	5	13	33	29	62
2010	29	23	52	22	15	37	51	38	89
3-yr. avg.	27	23	51	12	9	21	39	32	71

Table 3. Age distribution of black bear, Salmon Region, 1994-present.

DAU	Year	Sex	Age										Unknown	Total
			Cub	1	2	3	4	5	6	7	8	9		
II														
1994	M	0	4	8	2	3	5	1	1	2	1	3	4	34
	F	0	2	4	1	3	0	0	1	1	0	6	5	23
1995	M	1	5	1	3	4	1	2	2	1	2	4	4	30
	F	0	1	2	3	0	0	0	1	0	2	5	1	15
1996	M	0	2	3	2	2	3	1	1	0	0	1	2	17
	F	1	0	1	0	1	0	1	1	0	0	2	0	7
1997	M	0	0	0	4	6	3	1	0	0	0	0	1	15
	F	0	1	0	1	0	2	0	0	0	0	1	2	7
1998	M	0	0	1	1	5	1	2	0	0	0	2	1	13
	F	0	0	1	0	1	0	1	0	0	1	0	0	4
1999	M	0	1	4	4	1	6	3	5	1	1	1	6	33
	F	0	1	0	0	0	1	0	2	0	0	1	1	6
2000	M	0	2	6	12	7	1	2	3	2	2	1	3	41
	F	0	0	1	0	0	2	0	1	0	0	4	1	9
2001	M	0	3	5	6	4	5	0	0	0	1	4	4	32
	F	0	2	0	0	1	2	0	1	0	0	7	1	14
2002	M	0	0	6	7	5	2	3	1	1	1	5	1	32
	F	0	0	1	0	4	3	0	1	0	0	3	1	13
2003	M	0	6	3	2	1	3	0	1	0	2	4	3	25
	F	0	0	0	3	0	3	1	0	1	2	1	1	12
2004	M	1	0	7	3	3	5	3	4	0	1	2	3	32
	F	0	1	3	1	0	2	2	0	0	0	2	2	13
2005	M	0	0	7	7	3	4	0	1	1	1	1	2	27
	F	0	3	0	3	0	0	2	1	1	0	3	2	15
2006	M	0	2	4	2	9	0	3	5	1	1	6	1	34
	F	1	0	1	1	1	1	0	0	1	0	0	0	6
2007	M	0	6	1	13	1	14	0	3	0	2	5	3	48
	F	0	3	0	3	1	4	0	2	3	0	4	1	21
2008	M	0	0	1	1	4	2	6	2	3	0	3	0	22
	F	0	1	0	0	4	1	1	1	3	0	4	3	18
2009	M	0	1	1	10	0	5	1	3	1	0	3	0	25
	F	0	0	0	1	0	1	1	0	1	0	1	0	5
2010	M	0	5	0	0	11	1	5	2	0	0	2	0	26
	F	0	2	2	2	4	0	2	0	1	0	6	1	20
IJ														
1994	M	0	10	9	8	11	4	2	0	4	0	8	1	57
	F	0	3	1	2	5	4	1	2	0	0	6	1	25
1995	M	2	3	7	6	5	3	5	1	1	2	3	0	38
	F	2	2	6	8	2	9	0	0	0	2	4	0	35
1996	M	0	3	3	9	10	3	5	1	1	1	5	2	43

Table 3. Continued.

DAU		Age											Unknown	Total
Year	Sex	Cub	1	2	3	4	5	6	7	8	9	10+		
1997	F	0	0	0	2	4	1	1	1	1	1	1	0	12
	M	0	5	4	4	3	6	0	2	3	0	4	1	32
1998	F	1	2	2	2	2	4	0	0	1	1	4	3	22
	M	1	4	9	5	2	5	4	2	3	0	1	5	41
1999	F	0	0	1	1	1	1	2	1	2	0	3	0	12
	M	0	3	1	6	3	4	7	2	4	3	4	1	38
2000	F	0	1	1	4	0	1	0	2	0	0	2	1	12
	M	0	6	20	6	16	5	3	5	5	3	3	4	76
2001	F	0	2	7	2	7	0	2	0	3	0	4	0	27
	M	0	8	11	16	9	11	0	5	1	2	9	4	76
2002	F	0	3	0	3	1	1	2	3	1	1	10	1	26
	M	0	10	18	8	13	11	9	2	5	3	8	1	87
2003	F	0	3	8	4	10	2	5	3	0	1	6	2	42
	M	1	4	5	6	5	6	7	4	3	0	6	0	47
2004	F	0	6	1	3	2	2	2	1	0	0	10	0	27
	M	1	5	24	10	12	6	15	4	0	0	4	5	86
2005	F	0	3	11	2	12	3	5	1	2	0	6	1	46
	M	0	10	3	13	2	7	7	6	4	3	3	0	58
2006	F	0	2	1	8	3	2	1	2	3	3	10	2	37
	M	0	2	9	4	4	1	7	3	6	2	4	3	45
2007	F	0	0	6	1	6	2	1	2	3	1	3	0	25
	M	0	11	6	16	4	11	1	9	3	3	9	6	79
2008	F	2	5	2	18	2	2	0	3	0	5	10	1	50
	M	0	1	14	6	12	5	6	1	4	1	3	3	56
2009	F	0	3	8	2	9	0	3	4	3	2	11	2	47
	M	0	1	7	21	1	7	4	5	3	1	4	1	55
2010	F	0	0	5	7	2	6	3	0	2	1	9	2	37
	M	0	12	4	1	20	2	8	2	6	0	14	2	71
	F	0	3	3	2	7	1	0	0	4	2	7	1	30
4E														
1994	M	1	5	4	0	4	1	0	1	1	0	2	2	21
	F	1	1	1	4	2	0	1	0	0	0	5	0	15
1995	M	0	2	1	8	4	4	0	0	0	2	2	1	24
	F	1	0	3	3	1	0	0	1	0	0	4	2	15
1996	M	0	1	1	3	5	1	3	0	0	0	2	0	16
	F	0	1	0	2	2	0	1	0	0	0	3	0	9
1997	M	1	0	4	3	3	2	0	3	2	0	0	0	18
	F	0	0	0	3	2	1	0	0	0	0	4	1	11
1998	M	0	1	4	0	0	1	1	1	2	1	0	0	11
	F	0	2	3	0	2	2	3	0	0	0	2	1	15
1999	M	0	3	7	1	1	2	4	4	3	0	0	0	25
	F	0	1	2	3	0	1	0	0	2	1	3	1	14
2000	M	0	1	3	3	11	1	0	2	0	0	0	2	23

Table 3. Continued.

DAU		Age											Unknown	Total
Year	Sex	Cub	1	2	3	4	5	6	7	8	9	10+		
2001	F	0	1	6	3	1	0	1	1	1	0	3	2	19
	M	0	2	6	5	5	9	1	0	2	0	2	0	32
2002	F	0	0	2	4	0	1	0	2	2	1	3	1	16
	M	0	2	13	7	7	2	5	0	1	1	3	1	42
2003	F	0	4	6	4	0	1	1	0	1	2	8	2	27
	M	0	4	2	4	7	7	3	2	0	0	3	3	35
2004	F	0	0	2	1	0	4	3	0	0	0	5	1	16
	M	1	6	6	3	4	0	2	3	5	0	4	2	36
2005	F	1	1	8	0	2	1	1	2	1	0	7	0	24
	M	0	5	5	3	3	5	6	1	1	0	5	0	34
2006	F	0	2	4	2	3	8	1	1	0	0	10	1	32
	M	0	1	6	1	7	4	5	3	2	1	2	3	35
2007	F	0	2	4	2	3	1	0	0	2	0	2	1	17
	M	1	8	5	16	2	3	1	2	2	1	4	1	46
2008	F	0	2	0	6	0	3	1	3	1	1	3	3	23
	M	0	2	11	4	5	2	3	1	2	1	1	1	33
2009	F	0	0	5	2	7	1	0	2	2	2	7	2	30
	M	0	4	4	6	4	7	0	1	1	1	4	1	33
2010	F	0	0	5	5	1	3	2	1	0	3	7	2	29
	M	1	7	13	8	13	1	1	0	1	0	2	4	51
	F	1	6	2	3	6	2	1	0	1	4	11	1	38

Table 4. 2000-2010 Black Bear Plan management values and criteria, Salmon Region, 1994-present.

DAU Year	<i>n</i> ^a	% Females	% Males $\geq 5^b$	# Males $\geq 5^b$
1I				
1994	57	40	43	13
1995	45	33	46	12
1996	24	29	40	6
1997	22	32	29	4
1998	17	24	42	5
1999	39	15	63	17
2000	50	18	29	11
2001	46	30	36	10
2002	45	29	42	13
2003	37	32	46	10
2004	45	29	52	15
2005	42	36	32	8
2006	40	15	49	16
2007	69	30	53	24
2008	40	45	73	16
2009	30	17	52	13
2010	46	44	39	10
3-year avg.	39	35	54	13
Desired levels		>40	<25	
1J				
1994	81	31	31	17
1995	73	48	40	15
1996	55	22	39	16
1997	54	41	48	15
1998	53	23	42	15
1999	50	24	65	24
2000	103	26	33	24
2001	101	26	39	28
2002	132	33	44	38
2003	74	37	55	26
2004	132	35	36	29
2005	95	39	52	30
2006	70	36	55	23
2007	129	39	49	36
2008	103	46	38	20
2009	92	40	44	24
2010	101	30	46	32
3-year avg.	99	39	43	25
Desired levels		30-40	25-35	

Table 4. Continued.

DAU Year	<i>n</i> ^a	% Females	% Males ≥5 ^b	# Males ≥5 ^b
4E				
1994	36	42	26	4
1995	39	39	35	8
1996	25	36	38	6
1997	29	38	39	7
1998	26	58	55	6
1999	39	36	52	13
2000	42	45	14	3
2001	48	33	44	14
2002	71	41	29	12
2003	52	31	47	15
2004	59	41	41	14
2005	66	49	53	18
2006	52	33	50	17
2007	69	33	29	13
2008	63	48	31	10
2009	62	47	44	14
2010	89	43	11	5
3-year avg.	71	46	29	10
Desired levels		30-40	25-35	

^a Number of black bears for which sex was determined (excluding unknown).

^b Number of black bears for which age was estimated (excluding unknown).

Table 5. Method of black bear harvest, Salmon Region, 1994-present.

DAU	Year	Bait	Hounds	Still	Incidental	Other	Total ^a
II							
1994	12	11	15	16	0	54	
1995	9	8	6	21	1	45	
1996	9	4	2	9	0	24	
1997	7	4	4	7	0	22	
1998	1	3	5	8	0	17	
1999	14	5	11	10	0	40	
2000	25	2	10	11	2	50	
2001	20	6	7	11	2	46	
2002	19	1	18	6	1	45	
2003	17	4	9	6	1	37	
2004	24	1	10	9	1	45	
2005	28	3	7	4	0	42	
2006	29	3	4	3	1	40	
2007	26	7	24	11	2	69	
2008	22	8	7	2	1	40	
2009	15	1	12	0	2	30	
2010	26	5	6	5	4	46	
IJ							
1994	15	26	17	23	0	81	
1995	13	22	18	20	0	73	
1996	18	16	10	10	1	55	
1997	11	17	10	15	1	54	
1998	13	15	9	14	2	53	
1999	12	17	11	9	1	50	
2000	37	15	33	15	4	104	
2001	32	17	22	16	14	101	
2002	32	21	44	31	5	133	
2003	32	14	10	12	6	74	
2004	44	15	41	30	2	132	
2005	51	11	14	17	3	96	
2006	44	7	16	2	1	70	
2007	71	0	31	21	6	129	
2008	61	4	23	12	3	103	
2009	56	3	16	12	5	92	
2010	52	6	19	18	6	101	
4E							
1994	4	14	8	9	1	36	
1995	12	9	6	12	0	39	
1996	9	5	6	5	0	25	
1997	9	12	3	6	0	30	
1998	11	5	3	7	0	26	
1999	15	12	5	5	2	39	
2000	18	10	7	7	0	42	
2001	28	6	4	7	3	48	

Table 5 Continued

DAU						
Year	Bait	Hounds	Still	Incidental	Other	Total ^a
2002	28	9	9	23	2	71
2003	25	14	4	8	1	52
2004	19	12	6	12	10	59
2005	32	10	3	15	6	66
2006	31	7	4	4	6	52
2007	37	7	4	17	4	69
2008	38	8	8	4	5	63
2009	37	6	7	7	5	62
2010	39	7	16	23	4	89

^a The sum of method types may exceed the total because hunters can identify multiple methods.

Table 6. Weapon type used to harvest black bear, Salmon Region, 1994-present.

DAU	Year	Rifle	Archery	Muzzleloader	Handgun	Other	Total
II							
1994	43	7	0	5	1	56	
1995	34	5	0	6	0	45	
1996	18	2	0	4	0	24	
1997	17	2	0	3	0	22	
1998	12	3	0	2	0	17	
1999	29	9	1	1	0	40	
2000	39	9	0	2	0	50	
2001	30	10	0	5	1	46	
2002	35	7	1	2	0	45	
2003	24	11	0	1	1	37	
2004	32	12	0	1	0	45	
2005	23	15	1	0	3	42	
2006	23	14	0	2	1	40	
2007	45	18	2	3	1	69	
2008	24	13	0	2	1	40	
2009	19	8	2	1	0	30	
2010	24	20	0	1	1	46	
IJ							
1994	60	13	0	8	0	81	
1995	57	9	0	5	2	73	
1996	46	7	0	2	0	55	
1997	43	8	1	2	0	54	
1998	41	8	2	2	0	53	
1999	42	7	0	1	0	50	
2000	85	14	1	2	2	104	
2001	85	10	3	3	0	101	
2002	111	14	1	4	2	133	
2003	57	15	0	2	0	74	
2004	111	14	1	4	2	132	
2005	75	21	0	0	0	96	
2006	56	10	2	2	0	70	
2007	99	25	1	2	2	129	
2008	81	20	0	1	1	103	
2009	70	19	0	3	0	92	
2010	76	19	2	2	2	101	
4E							
1994	25	6	2	3	0	36	
1995	28	7	0	4	0	39	
1996	21	2	0	1	1	25	
1997	22	5	0	3	0	30	
1998	20	3	0	2	1	26	
1999	22	7	0	9	1	39	
2000	28	9	0	4	1	42	
2001	30	14	1	3	0	48	

Table 6 Continued

DAU						
Year	Rifle	Archery	Muzzleloader	Handgun	Other	Total
2002	50	12	3	5	1	71
2003	41	9	0	1	1	52
2004	42	14	2	1	0	59
2005	43	18	4	1	0	66
2006	40	9	1	1	1	52
2007	53	13	2	1	0	69
2008	44	15	1	2	1	63
2009	47	12	1	2	0	62
2010	65	21	1	2	0	89

Table 7. Black bear depredation complaints, Salmon Region, 1994-present.

Year	DAU			Total
	1I	1J	4E	
1994	11	33	20	64
1995	0	6	1	7
1996	0	12	0	12
1997	0	0	0	0
1998	12	11	4	27
1999	2	1	0	3
2000	0	18	0	18
2001	1	2	1	4
2002	1	9	5	15
2003	0	3	1	4
2004	2	8	1	11
2005	5	13	3	21
2006	0	3	0	3
2007	27	23	11	61
2008	2	5	1	8
2009	0	0	2	2
2010	0	21	8	29

APPENDIX A
IDAHO
2010 SEASON
BLACK BEAR RULES

IDAHO BIG GAME SEASONS AND RULES 2010



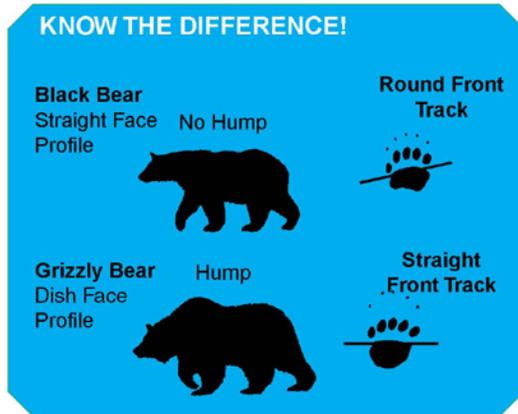
Deer, Elk, Pronghorn
August 2010 - January 2011

Black Bears, Mountain Lions
August 2010 - July 2011

Including Controlled Hunts for
Deer, Elk, Pronghorn, and Black Bears



2010 Fall / 2011 Spring Black Bear Hunting Seasons



General Rules

- Apply for spring controlled hunts Jan 15-Feb 15.
- Apply for fall controlled hunts May 1-June 5.

Bag Limit: No person may take more black bears than he or she has legal tags for.

Female Black Bear With Young: No female black bear accompanied by young may be taken.

Evidence of Sex: For black bear, external evidence of sex (either scrotum, penis, or testicles for males or vulva for females) must be left naturally attached to the hide until the mandatory check requirement has been satisfied.

Capturing Black Bears: No person may trap, snare or otherwise capture or hold black bears.

Mandatory Check and Report: Any hunter killing a black bear must, *within 10 days of kill:*

- Present the skull and hide to an Idaho Fish and Game regional office, official check point, or a Fish and Game conservation officer for removal and retention of a premolar tooth and to have the hide tagged with an official state export tag. No person, who does not possess a fur buyer or taxidermist license with appropriate import documentation, shall have, except during the open season and for 10 days after the close of the season, any raw black bear pelt that does not have an official state export tag attached (either Idaho's or another state's official export documentation).
- A hunter may authorize another person to comply with the above requirements if that person possesses enough information to accurately complete the necessary form.
- Please thaw your black bear hide and skull before bringing it in for tagging or staff may not be able to complete check-in.

Fish and Game's headquarters office is not equipped to check in bears. In the Boise area, these animals can be checked at the Fish and Game regional office in Nampa, (3101 S. Powerline Road, 208-465-8465) between 8 a.m. and 5 p.m. or by appointment at the Garden City facility, 109 W. 44th St., 208-327-7099.

Dump Grounds: No person may hunt or pursue a black bear at any time within 200 yards of the perimeter of any designated dump ground or sanitary landfill.

Special Tags

Second tags

Second tags issued for black bear may be used only in that portion of Unit 16 north of the Selway River and all of Units 10, 12, 16A, 17, 19, 20, 20A, 26, and 27. Nonresident black bear tags used in these units are available for \$31.75.

Nonresident Deer Tag for Black Bear or Mountain Lion

(Please see page 77.)

Nonresident Reduced Bear Tags

(Please see page 77.)

Bait

Bait is any substance placed to attract game animals. Bait may be used to hunt black bear but only under the following conditions:

Time: No bait or bait containers may be placed for the purpose of attracting or taking black bear before the opening of black bear take season. Except in Units 10, 12, 16A, 17, 19, 20, 20A, 26, and 27, where bait may be placed up to 7 days before the take season.

- All bait containers and materials must be removed, and all excavations refilled no later than 7 days after the close of each season; spring, fall, or dog training.

Location: No bait site may be located within 200 feet of any water (lake, pond, reservoir, year-round free-flowing spring, or year-round free-flowing stream), or within 200 yards of any maintained trail or any road.

- No bait site may be located within 1/2 mile of any designated campground or picnic area, administrative site, or dwelling.

Bait: No parts of animals or fish that are currently classified as game animals or game fish in Idaho may be used as bait. This includes game animals and fish that come from the wild and commercial domestic sources (i.e., pen raised game birds/animals or hatchery raised game fish).

- The skin must be removed from any mammal parts or carcasses used as bait.
- **No person shall use salt in any form (liquid or solid) for bait.**

Containers: No bait may be contained within paper, plastic, glass, metal, wood, or other nonbiodegradable materials, except that a single metal container with a maximum size of 55 gallons may be used if securely attached at the bait site.

- No bait may be contained in any excavated hole greater than 4 feet in diameter.

Establishment of Bait Sites: Any structures constructed at bait sites and all materials must be removed by the permit holder within 7 days after the close of the spring and fall black bear seasons.

- All bait sites must be visibly marked at the nearest tree or on the bait container using a tag supplied by Fish and Game.

Baiting Permits: All persons placing bait must possess a baiting permit issued by Fish and Game. Baiting permits are issued by mail or in person from Fish and Game regional and sub-regional offices beginning March 1 of each year.

- Baiting permits will be valid in the calendar year for which they are issued.
- A hunter may possess only one Fish and Game baiting permit each year and may maintain up to three bait sites, except the number of bait sites maintained by outfitters may be specified by the land management agency in the outfitter's operating plan.
- Bait site tags are valid for spring and fall seasons in the calendar year for which they are issued.
- No person may hunt over an unlawful bait site.
- Guides and clients of outfitters are not required to obtain a baiting permit, but they must have a copy of the outfitter's permit in their possession while hunting over a bait site.



Idaho Fish and Game photo

- Possession of a Fish and Game baiting permit does not exempt the permit holder from any restrictions placed on users of federal, state, or private lands.

Hound Hunting

Anyone hunting or pursuit tracking with hounds, unless hunting with an outfitter, must have a hound hunter permit. (Please see the section on hound hunting rules on page 68.)

Bear Identification

To prevent mistaken identity, bear hunters are encouraged to learn to identify black bears and tell them from grizzly bears in the wild. The Montana Fish, Wildlife and Parks bear identification training program is available at: <http://fwp.mt.gov/bearid/default.html>.

This link is provided for educational purposes only.



Grizzly bears may be found in 3 areas of Idaho: the Panhandle in big game units 1, 2, 3, 4, 4A, 6, 7 and 9; the Bitterroot Mountains along the Idaho/Montana border in big game units 10, 12 and 17; and Southeast Idaho in the Yellowstone Ecosystem in big game units 60, 61, 62, 62A, 64, 65, and 67.

For safety tips while hunting in grizzly bear country, taking the bear identification training program, and reporting grizzly bear observations, please visit the Fish and Game grizzly bear webpage at: <http://fishandgame.idaho.gov/cms/wildlife/grizzlies/>.



**Fall 2010/ Spring 2011 Black Bear Seasons
(Females with young are protected!)**

Units	Take Season	Dogs Prohibited	Dog Training	Notes
1	Aug 30 - Sep 14 (Archery only) Sep 15 - Oct 31 Apr 15 - May 31	Jan 1 - Dec 31	None	Bait and dogs prohibited, Caution: grizzly bears may be encountered
2, 3, 5	Aug 30 - Oct 31 Apr 15 - May 15	Aug 30 - Sep 14 Oct 10 - Oct 31 Apr 15 - Apr 30	None	Caution: grizzly bears may be encountered
4, 4A, 6	Aug 30 - Oct 31 Apr 15 - May 31	Aug 30 - Sep 14 Oct 10 - Oct 31 Apr 15 - April 30	Jun 1 - Jul 31	Caution: grizzly bears may be encountered
7, 9	Aug 30 - Oct 31 Apr 15 - Jun 30	Oct 10 - Oct 31	Jul 1 - Jul 31	Caution: grizzly bears may be encountered
8	Aug 30 - Oct 31 Apr 15 - May 15	Aug 30 - Sep 14 Oct 10 - Oct 31 Apr 15 - Apr 30	None	
8A, 10A	Aug 30 - Oct 31 Apr 15 - May 31	Aug 30 - Sep 14 Oct 10 - Oct 31 Apr 15 - Apr 30	Jun 1 - Jul 31	Bait prohibited
10, 12	Aug 30 - Nov 3 Apr 1 - Jun 30	Oct 10 - Oct 31	Jul 1 - Jul 31	2 bear bag limit, Electronic calls may be used, Caution: grizzly bears may be encountered
11	Aug 30 - Oct 31 Apr 15 - May 15	Oct 10 - Oct 31 Apr 15 - May 15	None	
11A	Aug 30 - Oct 31 Apr 15 - May 15	Aug 30 - Sep 14 Oct 10 - Oct 31 Apr 15 - Apr 30	None	
13	Aug 30 - Oct 31 Apr 15 - May 15	Oct 10 - Oct 31 Apr 15 - Apr 30	None	
14, 18	Aug 30 - Oct 31 Apr 15 - May 31	Oct 10 - Oct 31 Apr 15 - Apr 30	Jun 1 - Jul 31	
15	Aug 30 - Oct 31 Apr 15 - May 31	Aug 30 - Sep 14 Oct 10 - Oct 31 Apr 15 - Apr 30	Jun 1 - Jul 31	
16	Aug 30 - Oct 31 Apr 15 - Jun 30	Oct 10 - Oct 31 Apr 15 - Apr 30	Jul 1 - Jul 31	North of Selway River: 2 bear bag limit, Remainder of unit: 1 bear bag limit
16A, 17, 19, 20	Aug 30 - Nov 18 Apr 1 - Jun 30	Sep 15 - Oct 31	None	2 bear bag limit, Electronic calls may be used, Caution: grizzly bears may be encountered in Unit 17
19A	Aug 30 - Oct 31 Apr 15 - Jun 15	Oct 1 - Oct 31	Jun 16 - Jul 31	
20A	Aug 30 - Nov 18 Apr 1 - Jun 30	Sep 15 - Oct 31	None	2 bear bag limit
21, 21A, 28, 36B	Aug 30 - Oct 31 Apr 15 - Jun 30	Oct 10 - Oct 31	Jul 1 - Jul 31	
22, 31, 32, 32A	None		May 23 - Jul 31	Bait prohibited, Motorized Vehicle Restriction in Units 32 & 32A, See note 2, Page 60
23	Aug 30 - Oct 31 Apr 15 - May 31	Oct 1 - Oct 31	Jun 1 - Jul 31	
24, 25	Aug 30 - Oct 31 Apr 15 - May 31	Oct 5 - Oct 31	Jun 1 - Jul 31	

(continued)

 Fall 2010 / Spring 2011 Black Bear Seasons (Females with young are protected!)				
Units	Take Season	Dogs Prohibited	Dog Training	Notes
26, 27	Aug 30 - Nov 18 Apr 1 - Jun 30	Sep 15 - Oct 31	Jul 1 - Jul 31	2 bear bag limit
29, 30, 30A, 36A, 37, 37A	Aug 30 - Oct 31 Apr 15 - Jun 30	Oct 1 - Oct 31	Jul 1 - Jul 31	Motorized Vehicle Restriction, See note 2, Page 60
33	Aug 30 - Oct 31 Apr 15 - Jun 15	Oct 5 - Oct 31	Jun 16 - Jul 31	That portion of Unit 33 within the Middle Fork of the Payette River drainage downstream from but excluding Powder House Gulch drainage is closed during dog training season.
34, 35, 36	Aug 30 - Oct 31 Apr 15 - Jun 30	Oct 5 - Oct 31	Jul 1 - Jul 31	
39	Aug 30 - Oct 31 Apr 15 - Jun 15	Oct 5 - Oct 31	Jun 16 - Jul 31	
43, 44, 45, 48, 49	Aug 30 - Oct 31 Apr 15 - Jun 15	Oct 1 - Oct 31	Jun 16 - Jul 31	Motorized Vehicle Restriction in Units 45, 48 & 49, See note 2, Page 60
50, 51, 58, 59, 59A	Aug 30 - Oct 31 Apr 15 - Jun 15	Oct 1 - Oct 31	Jun 16 - Jul 31	Motorized Vehicle Restriction, See note 2, Page 60
60	Aug 30 - Oct 31 Apr 15 - Jun 30	Oct 1 - Oct 31	None	Caution: grizzly bears may be encountered
60A, 63, 63A	Aug 30 - Oct 31 Apr 15 - Jun 30	Oct 1 - Oct 31	Jul 1 - Jul 31	
61	Aug 30 - Oct 31 Apr 15 - Jun 30	Oct 1 - Oct 31	Jun 16 - Jul 31 west of Howard Creek in Clark County only.	Bait and dogs prohibited in Fremont County and east of Howard Creek in Clark County, Caution: grizzly bears may be encountered
62, 62A	Aug 30 - Oct 31 Apr 15 - Jun 30	Jan 1 - Dec 31	None	Bait and dogs prohibited, Caution: grizzly bears may be encountered
64, 65, 66, 66A, 67, 69, 76	Aug 30 - Oct 31 Apr 15 - May 31	Oct 1 - Oct 31	Jun 1 - Jul 31	Motorized Vehicle Restriction in Units 66, 66A, 69 & 76, See note 2, Page 60, Caution: grizzly bears may be encountered in Units 64, 65 & 67

 Fall 2010 Black Bear Controlled Hunts (165 Permits) (Females with young are protected!)				
Hunt No.	Controlled Hunt Areas	Permits	Season Dates	Notes
8501	1	15	Sep 15 - Oct 9	Bait prohibited. See note 1, Page 60, Caution: grizzly bears may be encountered
8502	22* (see pg 60)	75	Sep 1 - Oct 31	Bait prohibited, Dogs prohibited Oct 1 - Oct 31, See note 1, Page 60
8503	32* (see pg 60)	75	Sep 1 - Oct 31	Bait prohibited, Dogs prohibited Oct 1 - Oct 31, See note 1, Page 60, Motorized Vehicle Restriction, See note 2, Page 60

* See controlled hunt area descriptions. This hunt includes other units or parts of other units.
For details on controlled hunt rules and restrictions, please see pages 73-76.

(continued)

 Spring 2011 Black Bear Controlled Hunts (150 Permits) (Females with young are protected!)				
Hunt No.	Controlled Hunt Areas	Permits	Season Dates	Notes
8001	22* (see pg 60)	75	Apr 1 - May 22	<i>Bait and dogs prohibited</i>
8002	32* (see pg 60)	75	Apr 1 - May 22	<i>Bait and dogs prohibited, Motorized Vehicle Restriction, See note 2, Page 60</i>

Notes:

1. Controlled hunt permittees must have a hound-hunter permit to use dogs in this hunt. Any dogs used must be under the control of the permittee.
2. Motorized vehicle use as an aid to hunting for wildlife is restricted to established roadways open to motorized vehicle traffic capable of travel by full-sized automobiles – any motorized vehicle with a gross vehicle weight in excess of 1,500 pounds. See Page 70.

* See controlled hunt area descriptions. This hunt includes other units or parts of other units.

**Black Bear
Controlled Hunt Area Descriptions**

Hunt Area 1 – That portion of Unit 1 within the following boundary: Beginning at the Idaho/Washington state line where it intersects the Pend Oreille River, then northward along the Idaho/Washington state line to the Lamb Creek drainage, then southeasterly along the northern edge of the Lamb Creek divide to Priest Lake, then along the southern shore of Priest Lake to the Soldier Creek drainage, then easterly along the northern edge of the Soldier Creek drainage to the Selkirk Divide, then southerly along the Selkirk Divide to Baldy Mountain, then easterly along Little Sand Creek to the Pend Oreille River, then westerly along the northern shore of the Pend Oreille River to the point of beginning and that portion of Unit 1 within the following boundary: Beginning at the confluence of the Moyie River and the Kootenai River, then west and north on the Kootenai River to the Copeland Bridge, then east on County Road 45 to the junction with State Highway 1, then south on State Highway 1 to the intersection with State Highway 95, then north and east on State Highway 95 to where State Highway 95 crosses the Moyie River, then south on the Moyie River to the point of beginning.

Hunt Area 22 — All of Units 22 and 31.

Hunt Area 32 — All of Units 32 and 32A.



Idaho Fish and Game photo

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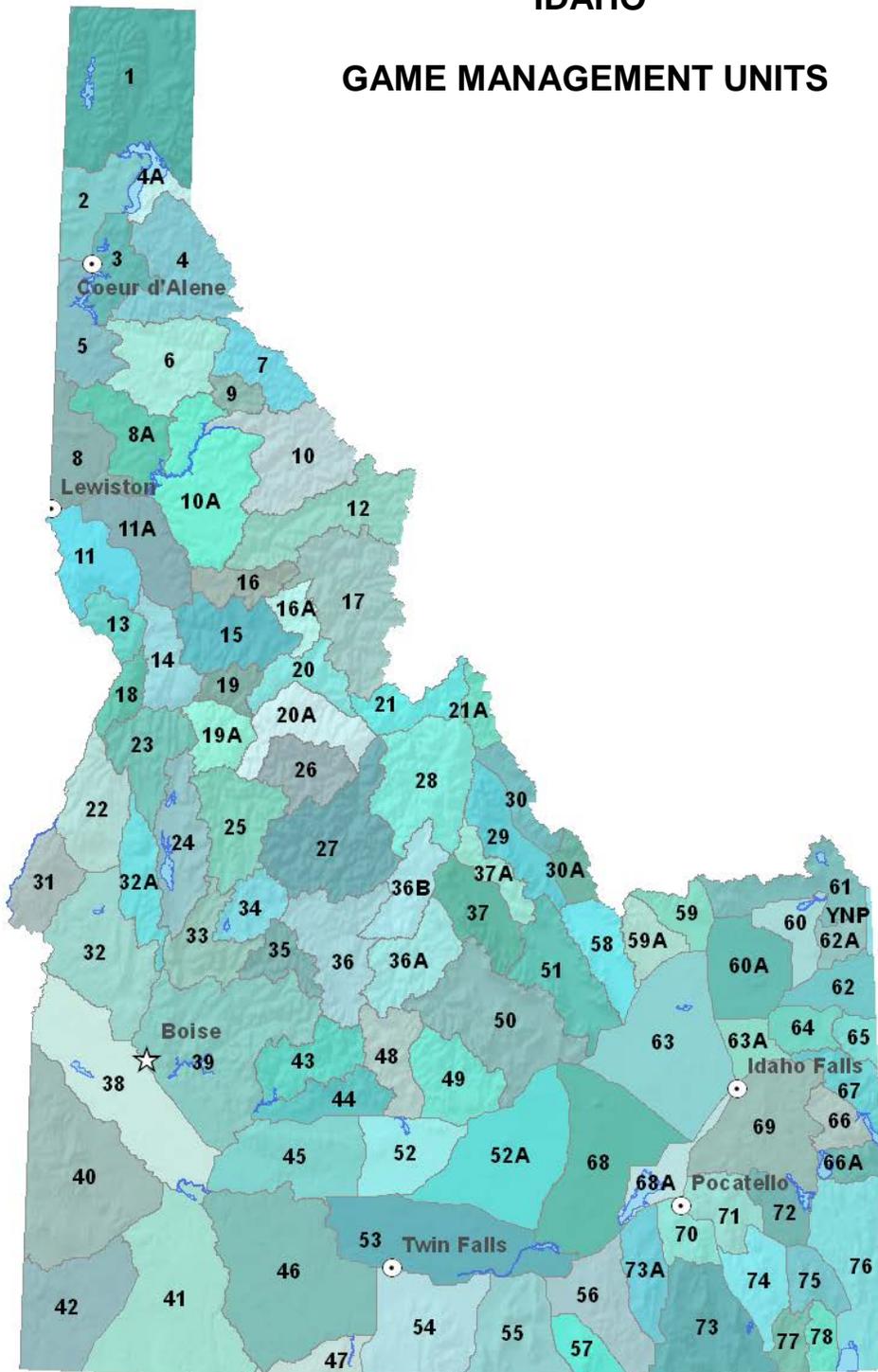
Approved by: IDAHO DEPARTMENT OF FISH AND GAME


Brad Compton, Asst. Chief
Bureau of Wildlife


Jeff Gould, Chief
Bureau of Wildlife

IDAHO

GAME MANAGEMENT UNITS



FEDERAL AID IN WILDLIFE RESTORATION

The Federal Aid in Wildlife Restoration Program consists of funds from a 10% to 11% manufacturer's excise tax collected from the sale of handguns, sporting rifles, shotguns, ammunition, and archery equipment. The Federal Aid program then allots the funds back to states through a formula based on each state's geographic area and the number of paid hunting license holders in the state. The Idaho Department of Fish and Game uses the funds to help restore, conserve, manage, and enhance wild birds and mammals for the public benefit. These funds are also used to educate hunters to develop the skills, knowledge, and attitudes necessary to be responsible, ethical hunters. Seventy-five percent of the funds for this project are from Federal Aid. The other 25% comes from license-generated funds.

