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Steven M. Huffaker, Director

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Progress Report



BLACK BEAR

Study I, Job 9

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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-27</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, 2002 to June 30, 2003</u>			

STATEWIDE

ABSTRACT

There are 21 Data Analysis Units (DAUs) for black bear management in Idaho (Figure 1). The Idaho Department of Fish and Game has collected harvest information on black bears since 1983 using a mandatory check. The mandatory check program requires successful hunters to check the hide and skull of their black bear at a Department office or checkpoint within ten days of kill. A tooth is pulled, data on kill are collected, and a pelt tag is attached.

During 2002, 28,415 resident and 2,744 non-resident bear tags were sold, accounting for 31,159 total tags sold which was a 6.7 % increase from 2001. A total of 3,008 hound-hunting permits (12 fewer than in 2001), including 134 non-resident and 2,874 resident permits, were issued during 2002. Non-resident hound permits increased slightly (four) and residents declined by 16 in 2002. Non-resident permit numbers can only be increased in the remote wilderness units while the rest of the state is restricted to 75 permits. The Department issued 1,576 bear baiting permits, a 3% increase from 2001.

Successful black bear hunters checked 2,408 bears at Department regional offices or checkpoints, a 26% increase over 2001. The Panhandle Region accounted for 698 bears (29%), the Clearwater Region 670 (28%), the Southwest Region 554 (23%), the Magic Valley Region 40 (2%), the Southeast and Upper Snake Regions combined for 198 (8%), and the Salmon Region accounted for 248 (10%). Of the bears harvested, 1,067 (45%) were harvested in the spring and 1,306 (55%) were harvested in the fall. Males comprised 69% of the spring harvest and 65% of the fall harvest. The most common harvest technique used was still hunting accounting for 789 (33%) of the bears harvested, followed by bait hunting which accounted for 581 (25%) and hound hunting which accounted for 407 (17%) of the bears harvested. Rifle hunters checked 1,896 bears while archery hunters checked 318 bears. Hunters using guides increased harvest 5% from 2001 to 372, 56% being harvested over bait.

The majority of the harvest switched from spring to fall in 2002 as compared to 2001, thus reducing the percentage of bears harvested over bait and increasing the percentage harvested by still-hunting. Fall 2002 was one of the driest on record, therefore causing bears to move extensively looking for food and thus becoming more susceptible to harvest.

North Idaho bear populations are closely tied to huckleberry productivity. In 1998, a huckleberry failure resulted in increased bear problems and fall harvest. Additionally, females entered the dens in poor condition in the fall of 1998, and cub survival and production was reduced in 1999. However, more females without cubs were available to be bred and, therefore, synchronous breeding occurred. In 2000, a large number of cubs were produced and in 2001, a pulse of one-year-olds was seen in the harvest. By 2002, large pulses of two-year-old dispersers were seen in the harvest from the Panhandle down to the Salmon River. These two-year-olds reduced the age structure of the harvest in 2002. The lack of young bears in the harvest since 1999 also resulted in increased age structure of the harvest until 2002.

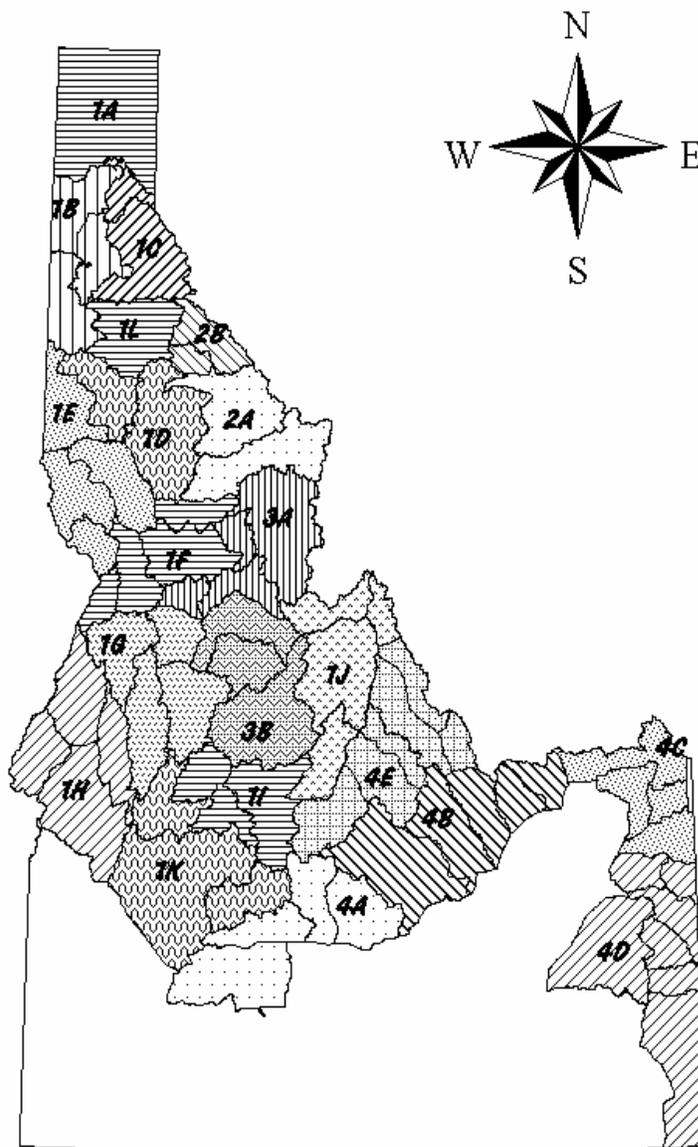


Figure 1. Twenty-one (21) data analysis units (DAUs) for black bear management in Idaho.

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PERIOD COVERED:	<u>July 1, 2002 to June 30, 2003</u>		

PANHANDLE REGION

ABSTRACT

The reported harvest of 698 black bears in the Panhandle Region in 2002 was the second highest since the mandatory check began in 1984. Female harvest (214) was 4% above that of 2001, and 20% above the 1999-2001 average. Male harvest (478) was 60% above that of 2001, and 44% above the 1999-2001 average. Six recorded kills had no information as to sex of the bear.

Only DAU 1B met both management criteria during the past three years. This DAU, including Units 2, 3, and 5, is managed for heavy harvest due to the high human population in this area. DAU 1A, managed for a light harvest, did not meet one of the two criteria, with harvest slightly heavier than desired. DAU 1L, managed for an intermediate level of harvest, did not meet one of the two criteria, with harvest slightly lighter than desired. DAUs 1C and 2B did not meet either of the two management criteria. Harvest rates in DAU 1C were lighter than the heavy harvest desired, while harvest rates in DAU 2B were lighter than the intermediate harvest levels desired. The Department has been attempting heavier harvest rates in DAU 1C to see if management criteria are responsive to changes in seasons. DAU 2B has traditionally been managed under a light harvest objective, but this was changed to an intermediate harvest objective in 1998 in order to attempt to increase calf elk recruitment. Recruitment has improved since 1998, but no substantial changes have been observed in bear management criteria for the DAU.

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 unharvested black bears exists to disperse into hunted areas. A controlled hunt allowing use of dogs is provided in a portion of Unit 1 outside the grizzly bear recovery area.

The Panhandle Region includes four DAUs in Area 1. DAU 1A is one of two DAUs statewide managed for light bear harvest characteristics. DAUs 1C and 1L are managed for moderate harvest objectives, while DAU 1B is managed under heavy harvest objectives. Hunting seasons for all DAUs (Table 1) were similar to those of 2001.

DAU 1A (GMU 1)

Abstract

Reported harvest of black bear in DAU 1A was 182 during 2002, substantially better than a year ago, and 13% above the previous three-year average. Harvest characteristics indicate this population is not over-harvested and is very near meeting “light” harvest management objectives.

Management Direction

DAU 1A will be managed to maintain the light harvest targets of <30% females in the harvest and >35% of the males \geq 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 the 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 contains some of the highest quality black bear habitat in Idaho.

Harvest Characteristics

Despite near normal weather conditions, spring harvest was low, about 20% below that of the previous three-year average. The fall harvest, however, was high, resulting in a total annual kill of 182 bears, 13% above the previous three-year average (Table 2).

Because bait is prohibited in this DAU and hounds are restricted to a small controlled hunt, most of the harvest is by still-hunting. Seventy-seven percent of the 2002 black bear harvest in DAU 1A was by hunters specifically seeking and stalking black bear (Table 3).

Nearly all of the black bears in DAU 1A are killed with rifles (Table 4).

Sex Ratio/Age Structure

Despite the decrease in harvest, the composition of the harvest does not indicate problems. The 2002 harvest was composed of 337 females, similar to the previous three-year average of 307 females. Analysis of age structure indicates large cohorts in 1994, 1996, and 2000, with 412 of male bears five years-of-age and older in the harvest (Table 5).

Dog-training Seasons

No dog-training season is permitted in DAU 1A 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 6). The three-year average of 30% females in the harvest is very close to and moving toward management objective. Within the male harvest, 49% are age five years and older, meeting management objectives. 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 119 during 2002, nearly identical with that of the past two years. Management objectives for a heavy harvest regime are being met in this DAU.

Management Direction

To address depredation concerns, 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. Depredations have been a substantial problem in this DAU, particularly in Unit 2, which consists largely of second-growth coniferous forest under private ownership. Unit 3 is typified by publicly-owned coniferous forest with high road densities in close proximity to Coeur d'Alene. Unit 5 is similar to Unit 2 in the northern third, but the remainder consists largely of open agricultural land with stringers of coniferous forest. Much of Unit 5 is within the boundaries of the Coeur d'Alene Indian Reservation.

Harvest Characteristics

Harvest has ranged only from 106 to 119 bears since 1999 (Table 2), a relatively consistent harvest level.

The majority of bears in this DAU are taken while still-hunting. However, 24% are from bait and 12% with hounds (Table 3).

Seventy-six percent of the black bears taken in DAU 1B are taken with a rifle (Table 4).

Sex Ratio/Age Structure

Age data indicates large cohorts for 1994, 1996, and 2000 (Table 5). The percentage of females in the 2002 harvest was 46% and the three-year average was 43%. The percentage of males ≥ 5 years old was 19% in 2002 and the three-year average was 21%.

Dog-training Seasons

There is no dog-training season in this DAU 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 6). There are no known problems with low calf or fawn ratios.

DAU 1C (GMUS 4, 4A)

Abstract

Reported black bear harvest in DAU 1C was 158 during 2002, about the same as reported during the recent past. This DAU is targeted for heavy harvest. Harvest criteria indicate this population is currently harvested lightly, and there is room to offer increased hunting opportunity.

Management Direction

To test the validity of the black bear harvest indicators, DAU 1C 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 1C consists mainly of U.S. Forest Service (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.

Harvest Characteristics

The 2002 harvest of 182 black bears was roughly the same as that of 1999, but substantially higher than during 2000 and 2001 (Table 2).

Bears taken by hunters stalking bears account for 46% of the total. A third are taken with the use of hounds, while the use of bait and bears taken incidental to other hunting account for the remainder (Table 3).

Over 90% of the black bears killed in DAU 1C are taken with rifles (Table 4).

Sex Ratio/Age Structure

Examination of the age structure of the kill reveals large cohorts in 1994, 1996, and 2000 (Table 5), similar to other DAUs in the Panhandle Region. The percentage of females in the 2001 harvest was 33%, dropping the three-year average to 30%. The percentage of males >5 years old was 41% in 2002, bringing the three-year average to 9%.

Dog-training Seasons

The 2002 dog-training season in DAU 1C was 16 May - 31 July.

Management Implications

This DAU is under-harvested relative to the management goal of heavy harvest (Table 6), despite a more liberal season beginning in 2000. Both criteria (% females in the harvest, % age 5+ males in the harvest) appear stable over the past three years. Further season changes may be warranted to move this DAU toward the heavy harvest category.

DAU 1L (GMU 6)

Abstract

Harvest of black bears in DAU 1L was 138 during 2002, the highest in recent years. Females made up 33% of the harvest and age 5+ males comprised 31% of the male harvest. This DAU is meeting management criteria for moderate harvest.

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 females and males fall within the light category. Because of the relatively small harvest in this DAU, there is significant fluctuation in the management criteria from year to year. Baiting is now allowed within this DAU; however, significant changes in harvest are not anticipated due to this regulation change.

Background

This DAU is a mix of private property, mainly timber company lands, with a mix of USFS, Bureau of Land Management, and Idaho Department of Lands 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.

Harvest Characteristics

Harvest increased substantially from prior years during 2002. The final 2002 harvest figure of 67 bears was about a third higher than 2000 due to a near normal fall harvest (Table 2). The spring 2002 harvest of 36 bears is in the normal range for this DAU.

Spotting/stalking is the primary method used to kill bears in this DAU, with 34% of the harvest taken in this manner (Table 3). Use of hounds and bears taken incidental to other hunting were also important. Baiting has been allowed since the fall 2000 season, and 13% of the 2002 harvest was taken with the aid of bait.

Nearly all black bears taken in this DAU are taken with a rifle (Table 4).

Sex Ratio/Age Structure

Consistent with that shown for other DAUs in the Panhandle Region, the 1994, 1996, and 2000 cohorts are larger than cohorts for other years (Table 5). Thirty-three percent of the 2002 harvest was female bears, reflective of a moderate harvest regime. Thirty-one percent of the male harvest was aged five years old or greater, reflecting an increase in young male bears in the harvest.

Dog-training Seasons

The 2002 dog-training season in this DAU was 16 May - 31 July.

Management Implications

The percentage of females in the harvest is within the moderate harvest level prescribed for this DAU. The percentage of the male harvest reaching five years-of-age is also moderate (Table 6). There appears to be some need to expand hunting opportunity in this DAU to meet harvest management objectives.

AREA 2

DAU 2B (GMUS 7, 9)

Abstract

Harvest of black bears in DAU 2B was 61 during 2002, roughly the same as taken during the past three years. This DAU is targeted for moderate harvest. The percentage of females in the harvest is currently in the lightly harvested category, as is the 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 increased 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 the 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 the USFS.

DAU 2B has historically met criteria for a lightly harvested population. In the current Bear Plan, the Department targeted a moderate harvest requirement due to census of low calf elk recruitment. This DAU still meets criteria for a lightly harvested population, but calf recruitment has improved nonetheless.

Harvest Characteristics

The 2002 harvest of 61 bears was within the range seen during the past ten years, an annual harvest of 37 to 62 bears. Sixty-eight percent of the 2002 bear harvest in this DAU took place during spring, a pattern similar to that of prior years (Table 2). While spring outfitting for black bears has increased in recent years, this has apparently been offset by a decrease in harvest from non-outfitted hunters.

Forty-three percent of the 2002 harvest was taken with the use of bait, the highest percentage in the Panhandle Region. Almost this entire take is through the efforts of outfitters. Spot and stalk hunting accounted for another 30% of the 2002 kill, with the remaining kills about evenly distributed between hound hunters and incidental harvest (Table 3).

The vast majority of the black bears taken in this DAU are killed with a rifle (Table 4).

Sex Ratio/Age Structure

The male age structure of DAU 2B was relatively old during 2002, with 49% of males reaching five years-of-age (Table 5). The number of age 5+ males has changed little over time. Twenty-three percent of the harvest was of female bears, reflecting a lightly hunted population.

Dog-training Seasons

The 2002 dog-training season in this DAU was 1-31 July.

Management Implications

Our attempt to move this population towards a younger age structure and a lower percentage of males does not appear to be successful with our current season framework (Table 6).

Table 1. Summary of 2002 seasons by method for DAUs in the Panhandle Region.

DAU	Units	Season Type	Season	
			Dates	Length (Days)
1A ^a	1	General Fall, archery only	30 Aug – 14 Sept	16
		General Fall, any legal weapon	15 Sept - 31 Oct	47
		General Spring, any legal weapon	15 Apr - 31 May	47
		Controlled Fall, any legal weapon ^b	15 Sept - 9 Oct	25
1B ^c	2, 3, 5	General Fall, any legal weapon	15 Sept - 31 Oct	47
		General Spring, any legal weapon	15 Apr - 15 May	31
1C ^{c,d}	4, 4A	General Fall, any legal weapon	30 Aug - 31 Oct	62
		General Spring, any legal weapon	15 Apr - 15 May	31
		Pursuit	16 May - 31 Jul	77
1L ^{c,d}	6	General Fall, any legal weapon	30 Aug - 31 Oct	62
		General Spring, any legal weapon	15 Apr - 15 May	31
		Pursuit	16 May - 31 Jul	77
2B ^e	7, 9	General Fall, any legal weapon	30 Aug - 31 Oct	62
		General Spring, any legal weapon	15 Apr - 30 Jun	78
		Pursuit	1 Jul - 31 Jul	31

^a Dogs and bait prohibited.

^b Dogs allowed, bait prohibited, 15 permits for a portion of Unit 1.

^c Dogs prohibited 15-30 April and 10-31 October.

^d Dogs prohibited 30 August - 14 September.

^e Dogs prohibited 10-31 October.

Table 2. Black bear harvest by season and sex for DAUs in the Panhandle Region, 1999-2002.

DAU/Year	Spring				Fall				Entire Season			
	M	F	U	Total	M	F	U	Total	M	F	U	Total
1A												
1999	76	37	0	113	40	28	2	70	116	65	2	183
2000	70	30	0	100	44	16	1	61	114	46	1	161
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
3-yr. avg.	60	23	0	83	49	24	1	74	109	47	1	157
1B												
1999	29	12	0	41	40	33	0	73	69	45	0	114
2000	26	16	0	42	37	28	0	65	63	44	0	107
2001	13	11	0	24	47	35	0	82	60	46	0	106
2002	15	17	0	32	49	37	1	87	64	54	1	119
3-yr. avg.	18	15	0	33	44	33	0	77	62	48	0	110
1C												
1999	23	20	1	44	56	33	0	89	79	53	1	133
2000	21	7	0	28	62	26	0	88	83	33	0	116
2001	24	5	0	29	47	24	0	71	71	29	0	100
2002	22	5	0	27	93	36	2	131	115	41	2	158
3-yr. avg.	22	6	0	28	67	29	1	97	90	34	1	125
1L												
1999	25	16	0	41	27	16	0	43	52	32	0	84
2000	13	7	0	20	18	13	0	31	31	20	0	51
2001	17	4	0	21	28	17	1	46	45	21	1	67
2002	25	11	0	36	66	34	2	102	91	45	2	138
3-yr. avg.	18	7	0	25	37	21	1	59	56	29	1	86
2B												
1999	28	14	0	42	10	9	0	19	38	23	0	61
2000	33	10	0	43	7	1	0	8	40	11	0	51
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
3-yr. avg.	31	12	0	43	8	3	4	15	40	15	4	59

Table 3. Method of black bear harvest for DAUs in the Panhandle Region, 1999-2002.

DAU/Method	1999			2000			2001			2002		
	M	F	U	M	F	U	M	F	U	M	F	U
1A												
Bait	0	0	0	0	0	0	0	0	0	0	0	0
Hounds	0	4	0	2	3	0	6	1	0	3	2	0
Still	101	43	1	100	37	1	70	28	1	96	43	1
Incidental	13	15	0	7	4	0	5	1	0	6	5	0
Other	2	3	1	5	2	0	1	4	0	16	9	0
Total	116	65	2	114	46	1	82	34	1	121	59	1
1B												
Bait	14	11	0	16	8	0	18	11	0	16	12	0
Hounds	17	11	0	14	8	0	14	6	0	12	12	0
Still	23	18	0	24	23	0	15	13	0	24	17	0
Incidental	14	5	0	7	4	0	7	3	0	6	11	0
Other	1	0	0	2	1	0	2	0	0	6	2	1
Total	69	45	0	63	44	0	56	33	0	64	54	1
1C												
Bait	6	7	0	9	2	0	9	2	0	18	6	0
Hounds	24	8	1	16	11	0	23	8	0	16	7	0
Still	31	15	0	30	11	0	27	14	0	54	17	1
Incidental	21	16	0	6	8	0	8	4	0	21	8	1
Other	3	0	0	1	1	0	0	0	0	7	3	0
Total	85	46	1	62	33	0	67	28	0	116	41	2
1L												
Bait	0	0	0	0	1	0	3	1	0	14	3	0
Hounds	13	8	0	9	5	0	9	3	0	21	5	0
Still	28	13	0	15	5	0	14	11	0	29	14	1
Incidental	11	11	0	7	8	0	15	6	0	26	1	1
Other	0	0	0	0	1	0	0	0	0	1	2	0
Total	52	32	0	31	20	0	41	21	0	91	25	2
2B												
Bait	10	6	0	19	5	0	16	10	0	20	6	0
Hounds	7	5	0	7	0	0	2	3	0	9	2	0
Still	12	3	0	7	3	0	11	4	0	13	5	0
Incidental	9	9	0	6	3	0	3	2	1	4	0	0
Other	0	0	0	1	0	0	0	0	0	1	1	0
Total	38	23	0	40	11	0	32	19	1	47	14	0

Table 4. Weapon type used to harvest black bear for DAUs in the Panhandle Region, 1999-2002.

DAU/Weapon	1999			2000			2001			2002		
	M	F	U	M	F	U	M	F	U	M	F	U
1A												
Rifle	109	62	1	109	45	1	91	31	1	113	56	1
Archery	3	0	0	1	1	0	1	1	0	4	4	0
Muzzleloader	0	1	0	1	0	0	0	0	0	1	0	0
Pistol	3	2	0	3	0	0	0	2	0	1	0	0
Unknown	1	0	1	0	0	0	0	0	0	2	0	0
Total	116	65	2	114	46	1	92	34	1	121	60	1
1B												
Rifle	55	41	0	54	39	0	39	40	0	56	47	1
Archery	10	2	0	6	2	0	15	3	0	5	5	0
Muzzleloader	1	0	0	1	0	0	0	0	0	2	1	0
Pistol	2	2	0	1	1	0	3	2	0	1	1	0
Unknown	1	0	0	1	2	0	3	1	0	0	0	0
Total	69	45	0	63	44	0	60	46	0	64	54	1
1C												
Rifle	78	42	1	57	29	0	63	27	0	100	35	2
Archery	1	3	0	4	3	0	7	1	0	8	4	0
Muzzleloader	0	0	0	0	0	0	0	1	0	1	0	0
Pistol	4	1	0	1	1	0	1	0	0	3	2	0
Unknown	2	0	0	0	0	0	0	0	1	3	0	0
Total	85	46	1	62	33	0	71	29	1	115	41	2
1L												
Rifle	50	30	0	29	18	0	42	12	0	81	40	1
Archery	1	1	0	1	1	0	0	1	0	7	4	1
Muzzleloader	0	0	0	0	0	0	0	1	0	1	0	0
Pistol	1	1	0	0	0	0	0	0	0	2	0	0
Unknown	0	0	0	1	1	0	1	0	1	0	1	0
Total	52	32	0	31	20	0	43	14	1	91	45	2
2B												
Rifle	36	18	0	30	9	0	30	17	0	36	13	0
Archery	1	2	0	6	0	0	1	1	1	5	1	0
Muzzleloader	1	1	0	1	1	0	1	0	0	1	0	0
Pistol	0	2	0	1	1	0	0	2	0	0	0	0
Unknown	0	0	0	2	0	0	0	0	0	3	0	0
Total	38	23	0	40	11	0	32	20	1	95	14	0

Table 5. Age distribution of black bear for DAUs in the Panhandle Region^a, 1999-2002.

DAU	Age	1999		2000		2001		2002	
		M	F	M	F	M	F	M	F
1A									
	1	8	6	5	0	13	3	9	2
	2	13	3	9	3	3	2	39	8
	3	17	7	13	3	7	3	7	1
	4	13	4	22	4	4	2	6	3
	5	15	4	8	3	11	1	4	7
	6	3	0	9	6	3	1	9	6
	7	6	2	7	1	14	3	3	4
	8	7	4	6	3	3	0	7	3
	9	7	2	4	1	5	3	5	3
	10+	12	23	7	14	8	11	9	14
	Total	101	55	90	38	71	29	98	51
1B									
	1	8	3	4	1	14	6	14	6
	2	10	2	13	3	9	6	23	11
	3	23	10	10	4	13	7	9	6
	4	3	5	10	3	6	4	4	8
	5	9	3	2	4	7	4	0	3
	6	2	4	4	4	1	1	6	2
	7	3	4	0	2	3	2	1	1
	8	3	0	1	2	1	2	2	5
	9	1	1	1	1	1	5	0	1
	10+	1	9	0	10	1	8	3	9
	Total	63	41	45	34	56	45	62	52
1C									
	1	6	2	4	0	18	4	14	4
	2	17	5	6	3	8	2	41	5
	3	16	8	9	5	9	2	2	4
	4	6	2	8	1	5	1	3	2
	5	11	8	4	1	8	4	6	5
	6	2	3	3	2	2	0	10	8
	7	7	3	4	0	6	3	3	1
	8	3	0	2	2	0	1	10	1
	9	2	7	2	5	2	0	5	2
	10+	5	4	7	6	8	10	13	8
	Total	75	42	49	25	66	27	107	40

Table 5. Continued.

DAU	Age	1999		2000		2001		2002	
		M	F	M	F	M	F	M	F
1L									
	1	0	0	0	1	8	1	9	5
	2	7	2	6	3	4	3	30	11
	3	15	9	1	2	5	3	3	4
	4	4	1	7	4	4	1	12	3
	5	8	5	4	0	5	2	2	4
	6	2	0	5	1	3	1	9	4
	7	3	4	1	0	6	2	1	1
	8	1	1	2	1	2	1	6	5
	9	3	1	0	0	1	0	4	1
	10+	6	7	3	2	3	6	3	6
	Total	49	30	29	14	41	20	79	44
2B									
	1	1	0	0	0	2	0	4	2
	2	0	0	2	0	1	2	14	1
	3	9	3	6	2	4	2	2	0
	4	7	3	8	5	3	1	3	1
	5	3	4	4	0	3	2	3	1
	6	5	1	6	1	1	0	4	2
	7	1	0	3	0	7	2	2	2
	8	1	1	3	1	2	0	6	3
	9	3	2	1	0	2	1	2	0
	10+	5	5	5	2	6	4	3	1
	Total	35	19	38	11	31	14	43	13

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

Table 6. 2000-2010 Black Bear Plan management values and criteria for DAUs in the Panhandle Region, 1993-2002.

DAU/Year	N	% Females	% Males ≥ 5	# Males ≥ 5
1A				
1993	138	36	45	37
1994	189	30	29	35
1995	164	32	42	44
1996	222	35	41	56
1997	232	37	36	50
1998	280	32	48	23
1999	181	36	50	50
2000	160	29	49	48
2001	126	27	63	45
2002	182	33	41	37
3-year avg.	174	30	49	43
Desired levels		<30	>35	
1B				
1993	59	56	27	7
1994	90	43	28	14
1995	97	29	23	15
1996	114	37	27	16
1997	117	40	23	15
1998	179	43	41	11
1999	114	39	29	19
2000	107	41	18	8
2001	106	43	25	14
2002	119	46	19	12
3-year avg.	111	43	21	11
Desired levels		>40	<25	
1C				
1993	66	36	41	16
1994	70	23	36	18
1995	84	33	29	16
1996	89	36	11	6
1997	109	39	18	11
1998	128	29	40	10
1999	131	35	40	30
2000	95	35	45	22
2001	100	29	39	26
2002	158	26	44	47
3-year avg.	118	30	43	32
Desired levels		>40	<25	

Table 6. Continued.

DAU/Year	N	% Females	% Males ≥ 5	# Males ≥ 5
1L				
1993	56	29	26	10
1994	50	32	22	7
1995	63	27	27	11
1996	62	40	45	15
1997	81	44	22	9
1998	78	27	36	8
1999	84	38	46	23
2000	51	39	52	15
2001	66	32	49	20
2002	138	33	31	25
3-year avg.	85	35	44	20
Desired levels		30-40	25-35	
2B				
1993	46	22	61	20
1994	37	41	68	15
1995	39	26	38	11
1996	56	21	48	21
1997	44	25	26	8
1998	62	26	43	12
1999	61	38	51	18
2000	51	22	58	22
2001	52	38	68	21
2002	61	23	49	20
3-year avg.	55	28	58	21
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-27</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, 2002 to June 30, 2003</u>		

CLEARWATER REGION

ABSTRACT

Reported harvest during 2002 for the Clearwater Region was 670 black bears, a 10% increase from 2001 and a 13% increase from the previous three-year average of 581 black bears. Total harvest by DAU in 2002 was 136 in 1D, 100 in 1E, 83 in 1F, 252 in 2A, and 99 in 3A.

The 2000-2010 Black Bear Management Plan criteria were met in all DAUs for objectives outlined. Since the 1993 regulation changes, much of the harvest effort has shifted from spring to fall; therefore, except for DAU 2A, baiting has been replaced by incidental and still hunting as the most popular methods used region-wide. Due to the intensive harvest efforts, increased season lengths, and bag limits, DAU 2A constituted 38% of the regional harvest. Sixty-four percent of the harvested black bears from DAU 2A were killed over bait in the spring. The rest of the regional harvest by method consisted of bait (35%), hounds (16%), still hunting (28)%, and incidental (17%). Management needs dictate continued monitoring as harvest levels continue to climb. All values should be reviewed in perspective of harvest trends, bait station surveys, road densities/access, and new hunting patterns resulting from regulation changes.

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 four over-harvest criteria in 1992. In 1993, seasons were changed to reduce the harvest of black bears in this DAU. The regulation changes apparently were successful in reducing harvest by an average of 16% over the following three years. However, from 1996-1998, harvest rebounded to an average of 123 and leveled off to about 110 during the last few years, which was about the same or higher than prior to the regulation change. When analyzed by season and method, most harvest during 2002 occurred in the fall (84%), by hound hunters (41%), incidental (37%), and still hunters (22%). During 1992, most harvest occurred

during the spring season (66%) by bait hunters (44%). High road densities have allowed hunters to access most of the available black bear habitat.

Management Direction

DAU 1D has historically received intensive black bear harvest. This DAU receives many dispersers from DAU 2A; therefore, the current high harvest can 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

Historically, season lengths in DAU 1D have been relatively long, becoming more restrictive in recent years. The 1992 season length was 107 days with a two-week pursuit season. The season length under the 1992-2000 Black Bear Management Plan was reduced to 62 days with a 77-day pursuit season. No changes in this DAU were included in the 2000-2010 Black Bear Plan. The fall season was extended in 1997 to a total season length of 78 days (Table 1). No season changes occurred during 1999, but in 2000, the fall season was extended two weeks earlier for archery hunters. Black bear baiting was not allowed.

Mixed land ownership and high road densities on USFS, Idaho Department of Lands (IDL), a private timber company, and small private landholdings characterize these units. 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.

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.

Population Surveys

Bait station surveys have not been conducted in DAU 1D since 1996 (Table 2). This technique is being evaluated for its effectiveness in monitoring population trends.

Harvest Characteristics

During 2002, 136 black bears were harvested in DAU 1D, an increase of 18% from the previous three-year average (Table 3). About 41% of the black bears were females (Table 4). Most black bears (84%) were harvested during the fall season. This is consistent with 1993-1998 harvest, but a reversal from 1990-1992 when spring harvest predominated. In 1992, age distribution for harvested animals was skewed to younger black bears. Age characteristics of harvest for 1998-2001 indicated that all criteria were again met, but the percent female is above expected levels for a stable population and possibly indicative of dispersing younger females (Table 5).

The single method of harvest most preferred by hunters in 2002 was hound hunting, accounting for 41% of the harvest, followed by incidental at 37% (Table 6). This was a reversal from 1990-1992, when baiting was the most common method used, accounting for 37% of the harvest. Weapon type used most frequently was rifle (82%) followed by archery (13%). During the 1990-1992 period, archery comprised 17% of the harvest. During 1993-1999, archery comprised only 3% of the harvest, probably a result of baiting restrictions, and the 2000-2002 increase was likely a result of the season lengthening (Table 7).

Depredations

Four reported black bear depredations occurred in DAU 1D in 2002, which is near the long term average for this DAU (Table 8).

Dog-training Seasons

An 11-week dog-training season from 16 May through 31 July was allowed in DAU 1D during 2002 (Table 1).

Management Implications

According to new management criteria, black bears were moderately harvested in DAU 1D. Under the guidance of the 1992-2000 Black Bear Management Plan, black bear harvest in 1D was reduced until the last few years when harvest rebounded to pre-1993 regulation change levels.

Except for 1998, recent harvest records show increased harvest of predominantly younger age-class black bears. This could be indicative of increased numbers of subadult dispersers dominating the harvest. The 1995-1999 records indicated that harvest shifted to the fall season, thereby increasing harvest by incidental hunters and maintaining a younger age structure in the harvest. The 2000-2010 management plan objectives allow for maintaining high harvest in this DAU. However, older age-class black bear numbers likely increased in 1998 due to poor availability of fall foods, and in 2000 due to the subsequent age-class failure of two-year-old dispersers.

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

Abstract

Hunters in DAU 1E harvested 100 black bears during 2002, a 15% increase over the previous three-year average and the highest harvest recorded. Even so, only 33% were females. Sixty-five percent of black bears harvested were killed in the fall, 40% of which were killed by still/stalk hunters.

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 hunter activity during take and dog-training seasons, and to maintain harvest levels. In addition, there is a lack of evenly dispersed quality black bear habitat and the potential for over-harvest in these isolated or fragmented habitats.

Background

DAU 1E lies mostly along the western side of the Clearwater Region and is predominantly private land. Difficult access and fragmented black bear habitat through most of the DAU have kept overall harvest unevenly dispersed. Agricultural use 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. The largest black bears in the region typically are harvested in these units. Bait station transects conducted on the Craig Mountain Wildlife Management Area (WMA) indicate an increasing trend in black bear visitation since the WMA came under Department management, concurring with the increasing harvest rates.

The climate in this DAU ranges from hot and arid along the river breaks, to cooler and moister in the higher elevations. The 2002 season length was 78 days, a reduction of 29 days from 1992. The dog-training season was 77 days (Table 1).

Population Surveys

Bait station surveys have been conducted for DAU 1E in Unit 11 due to its representative habitat types and the availability of personnel to conduct surveys. Thirteen transects were sampled in July 2002. A 13.9% visitation rate was observed in 2002 which was identical to that observed in 2001 (Table 2).

Harvest Characteristics

There were 100 black bears harvested in DAU 1E during 2002; 65% were taken in the fall. (Table 3). Adult male age criteria were in the moderate to high harvest category and the percent females harvested was 34% in 2002 (Tables 4 and 5). The most frequent method of harvest was still/stalk hunting, accounting for 40% of the harvest (Table 6). The weapon type most frequently used was rifle which accounted for 84% of the harvest, followed by archery (13%) and pistol at 2% (Table 7).

Depredations

Most of the land in this DAU is privately owned. Three depredation complaints were recorded during 2002, down from an average of seven for the previous three-year period (Table 8).

Dog-training Seasons

In DAU 1E, 11 weeks of dog-training were allowed from 16 May through 31 July (Table 1).

Management Implications

Much of the land in Units 8, 11, 11A, and 13 is either agricultural or river breaks, and black bear habitats are 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 the roads. It is likely that without much road access, harvest will continue to reflect young dispersing black bears. Harvest was 35% female and may 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 one- and two-year old dispersing males.

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

Abstract

Hunters in DAU 1F harvested 83 black bears during 2002, a 17% increase from the 1999-2001 average. Most black bears (57%) were harvested during the fall, a change from 1990-1992 seasons when spring harvest predominated, accounting for 57% of the harvest. The most frequent harvest method was still/stalk (35%) followed by bait (25%) while using a rifle (88%) or bow (6%). The 2002 age data showed heavy harvest in young males and older females. A portion of the DAU in Unit 15 was closed to harvest for research purposes.

Management Direction

Prior to 1993, black bear harvest had increased in DAU 1F, probably as a result of increased road densities in previously unroaded areas. The Black Bear Management Plan (1992-2000) adopted a decrease in season length and more restrictions on use of training dogs during the take seasons. 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 current harvest levels. Due to research being conducted in this DAU, a portion of Unit 15 is now closed to harvest of black bears, a possible contributing factor to the 40% decline in harvest the last two years.

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, the take season was shortened to 62 days with a dog-training season of 77 days (Table 1). During 1997, the fall season was extended to 78 days.

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 units that provide for core security areas for black bears.

Population Surveys

Bait station surveys were conducted during 2002 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-four transects were surveyed and 102 of the 300 sites were visited by black bears, resulting in a 34% visitation rate (Table 2).

Harvest Characteristics

There were 83 black bears harvested in DAU 1F during 2002, 57% during the fall season (Table 3). Females comprised 24% of the harvest in DAU 1F. Management objectives under the new plan indicate heavy to moderate harvest (Tables 4 and 5). The most frequent methods of harvest were still (35%) followed by the use of hounds at 25% (Table 6). Rifle was the most frequent (88%) weapon type (Table 7).

Depredations

No depredation complaints were recorded for this DAU during 2002 (Table 8).

Dog-training Seasons

Dog-training season ran from 16 May through 31 July 2001 in DAU 1F and all season in the closure area (Table 1).

Management Implications

DAU 1F receives 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, the high quality black bear habitat in this DAU should allow black bear populations to be maintained at desired levels in reserve and unroaded areas. Currently, the harvest is distributed evenly between incidental harvest and other techniques, but is not as selective as hound hunting, bait hunting, or still hunting. During the last three years, harvest increased over the previous years, increasing above levels that occurred prior to the regulation changes. The difference in harvest has been the shift from spring to fall harvest and the continuing increase in incidental take. The closure of the northern portion of Unit 15 has had an impact on the amount of incidental harvest as well as overall harvest. Harvest has declined since its peak in 1998.

AREA 2

DAU 2A (GMUS 10, 12)

Abstract

During 2002, 252 black bears were harvested in DAU 2A, an increase of one percent over the previous three-year average of 249. Twenty-nine percent of the harvest consisted of females. Eighty-four percent were harvested during the spring season. Bait hunting accounted for 64% of the harvest, rifle for 77%, and archery 17%. This was the fourth highest level of harvest on record for this DAU.

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 units receiving higher harvest pressures (e.g., Unit 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 (Table 1). The Department will continue to monitor harvest data on a three-year average and conduct bait station surveys to obtain data to manage for a healthy population structure and harvest of black bears. Additionally, tetracycline baits may allow calculation of a population estimate for this DAU over time. The bag limit was increased to two black bears per year to take advantage of the 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 the Clearwater Region. High moisture, dense forests, and roadless areas allow for relatively dense populations. However, liberal hunting seasons since the late 1970s have probably kept black bear populations below achievable levels.

Population Surveys

Intensive bait station surveys have been conducted since 1997 as part of the elk productivity research study. These efforts have included the use of tetracycline baits for determining population size and intensive overall efforts to determine trends (Table 2). Fifty-seven transects and 285 sites were sampled with a visitation rate of 30.9% in 2002, up from 22% in 2001. In general, the sites on closed roads and trails received higher visitation rates than those on open roads.

Harvest Characteristics

During 2002, 252 black bears were harvested in DAU 2A, an increase of one percent over the previous three-year average. Eighty-four percent of these black bears were harvested during spring (Table 3). Of the black bears harvested, 29% were females. Age data criteria set under

the new management plan allow for increased harvest. Current age criteria indicate harvest levels are light to moderate (Tables 4 and 5).

Hunting over bait accounted for 64% of the harvest in DAU 2A, followed by still/stalk (19%), and incidental at 8% (Table 6). Rifle was the most common weapon used (77%), then bow at 17% (Table 7).

Depredations

A record 12 depredation complaints were recorded during fall 1998, an indication of a poor huckleberry crop in DAU 2A. No complaints were recorded for 2002 (Table 8).

Dog-training Seasons

A one-month dog-training season occurred during 2002 from 1-31 July (Table 1).

Management Implications

DAU 2A receives moderate hunting pressure because of its unroaded habitats, public land, and healthy black bear populations. Harvest is light to moderate in the male component and 71% were five-year-old or older males. The adult female segment remains secure in the unroaded segments of the DAU, especially with the restrictions on females with cubs.

DAU 2A has a potential for high black bear numbers because of the quality habitat. Harvest was reduced dramatically from 1993-1996 under the old black bear plan, but increased since 1998 to levels higher than occurred prior to the season changes. Because black bear populations appear to be healthy, an opportunity to harvest more black bears became apparent and most of the season length was extended to the end of June for the spring hunt and to the end of big game season in the fall. Harvest doubled in 1998 and has remained at a high level through 2002. Most of the harvest in this DAU occurs in the spring, unlike other DAUs in the region.

AREA 3

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

Abstract

During 2002, 99 black bears were reported harvested in DAU 3A, a 23% increase over the previous three-year average. Twenty-six percent of the harvest consisted of females. This DAU consistently met the old (1992-2000) management criteria objectives and new (2000-2010) criteria suggest a lightly hunted population. Thirty-six percent of the black bears harvested were taken during the fall. Most of the harvest occurred as result of either still or bait hunting.

Management Direction

This DAU probably serves as a reservoir of black bears for surrounding units that are more heavily harvested. The Department will manage DAU 3A to maintain or increase current 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.

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 (Table 1). 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 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 1997 (Table 2). Due to intensive survey efforts in other units as part of the elk productivity study, personnel were not available to participate.

Harvest Characteristics

During 2002, 99 black bears were reported harvested in DAU 3A (Table 3). Of these, 26% were females. Only 36% of the black bears were harvested during the fall. Harvest criteria in the new (2000-2010) plan indicate light harvest levels. Sixty-nine percent of the males were five years of age or older in 2002 (Tables 4 and 5). Most of the black bears harvested were taken over bait (Table 6). Rifle was the most common weapon used (75%), then bow at 20% (Table 7).

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

Depredations

No depredations occurred in this DAU during 2002, the same as prior years (Table 8).

Dog-training Seasons

No dog-training season occurred in DAU 3A during 2002 (Table 1). Hound hunting for black bears was not popular in this DAU due to lack of roads and high probability of losing hounds.

Management Implications

Black bear populations are healthy and within desired levels in this DAU. 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 two-black bear bag limit and extended seasons.

Table 1. Summary of 2002 seasons by method for DAUs in the Clearwater Region.

DAU	Units	Season Type	Season	
			Dates	Length (Days)
1D ^{a,b}	8A, 10A	General Fall, any legal weapon ^c	30 Aug - 31 Oct	63
		General Spring, any legal weapon	15 Apr - 15 May	31
		Pursuit	16 May - 31 Jul	77
1E ^{d,e}	8, 11, 11A, 13	General Fall, any legal weapon	30 Aug - 31 Oct ^f	63
		General Spring, any legal weapon	15 Apr - 15 May	31
1F ^{b,g}	14, 15 ^h , 16, 18	General Fall, any legal weapon	15 Sep - 31 Oct	47
		General Spring, any legal weapon	15 Apr - 15 May	31
		Pursuit	15 May - 31 Jul	77
2A ⁱ	10, 12	General Fall, any legal weapon	30 Aug - 3 Nov	66
		General Spring, any legal weapon	1 Apr - 30 Jun	91
		Pursuit	1- 31 Jul	31
3A ^j	16A, 17, 19, 20	General Fall, any legal weapon	30 Aug - 18 Nov	81
		General Spring, any legal weapon	1 Apr - 30 Jun	91

^a Bait prohibited.

^b Dogs prohibited 15-30 April and 10-31 October.

^c Archery only and dogs prohibited 30 August - 14 September.

^d Dogs prohibited 15-30 April and 30 August - 14 September in Units 8 & 11A; 15-30 April and 10-31 October in Units 11, 11A, & 13.

^e Bait prohibited 30 August - 14 September in Units 8 & 11A.

^f Fall season 15 September - 31 October in Units 11 & 13 for a season length of 47 days.

^g North portion of Unit 15 has been closed to take since 1999.

^h Unit 15 south open 30 August - 31 October for a season length of 63 days.

ⁱ Dogs prohibited 10-31 October.

^j Dogs prohibited 15 September - 31 October.

Table 2. Bait station survey results for DAUs in the Clearwater Region, 1993-2002.

Year	Unit(s) Surveyed	Survey Dates	Total Transects Available	Total Transects Sampled	Total Stations Sampled	Total Stations Visited by Black Bear	90% Confidence Interval	
							%	(+/-)
1993 ^a	10A ^b	6/21-26	15	15	75	5	6.7	4.7
	11	6/15-22	11	10	49	2	4.1	3.3
	12	6/16-21	17	17	84	3	3.6	3.3
	15, 16	6/16-21	16	16	80	5	6.3	3.3
	19, 20	6/16-23	12	8	40	0	0.0	-
1994	10A ^{b,c}	6/10-16	15	15	75	6	8.0	5.1
	11	6/9-15	10	10	50	1	2.0	3.2
	12	6/13-18	17	17	85	2	2.4	2.7
	15, 16	6/10-15	13	13	65	8	12.3	6.7
	19, 20	6/9-16	12	7	35	2	5.7	6.4
1995	10, 12	6/24-7/9	102	80	400	26	6.5	2.0
	11	6/24-7/9	10	10	50	2	4.0	4.5
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 ^d	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 ^d	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 ^d	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 ^d	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 ^d	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 ^d	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

^a First year of data, no comparisons.

^b Potlatch Corporation purchased sardines and placed transects.

^c Transects collected at 6 days.

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

Table 3. Black bear harvest by season and sex for DAUs in the Clearwater Region, 1993-2002.

DAU/Year	Spring				Fall				Entire Season			
	M	F	U	Total	M	F	U	Total	M	F	U	Total
1D												
1993	14	8	0	22	29	22	0	51	43	30	0	73
1994	21	10	0	31	23	22	0	45	44	32	0	76
1995	12	11	0	23	36	25	0	61	48	36	0	84
1996	17	15	0	32	44	32	0	76	61	47	0	108
1997	15	10	0	25	61	36	0	97	76	46	0	122
1998	28	8	0	36	45	58	0	103	73	66	0	139
1999	22	13	0	35	55	20	0	75	77	33	0	110
2000	17	11	0	28	42	43	0	85	59	54	0	113
2001	19	11	0	30	50	32	0	82	69	43	0	112
2002	15	7	0	22	65	48	1	114	80	55	1	136
3-yr. avg.	17	10	0	27	52	41	0	93	69	51	0	120
1E												
1993	9	9	0	18	13	5	0	18	22	14	0	36
1994	11	9	0	20	22	14	0	36	33	23	0	56
1995	13	8	0	21	26	9	0	35	39	17	0	56
1996	13	11	0	24	21	21	0	42	34	32	0	66
1997	19	2	0	21	32	13	0	45	51	15	0	66
1998	18	8	0	26	32	18	0	50	50	26	0	76
1999	20	13	0	33	36	19	0	55	56	32	0	88
2000	25	9	0	34	31	20	0	51	56	29	0	85
2001	30	15	0	45	23	13	0	36	53	28	0	81
2002	18	16	1	35	47	17	1	65	65	33	2	100
3-yr. avg.	24	13	0	37	34	17	0	51	58	30	1	89
1F												
1993	5	7	0	12	23	10	0	33	28	17	0	45
1994	6	6	0	12	18	8	0	26	24	14	0	38
1995	7	4	0	11	27	8	0	35	34	12	0	46
1996	18	7	0	25	39	16	0	55	57	23	0	80
1997	27	3	0	30	37	16	0	53	64	19	0	83
1998	19	10	0	29	34	25	0	59	53	35	0	88
1999	14	11	0	25	23	12	0	35	37	23	0	60
2000	19	7	0	26	30	15	0	45	49	22	0	71
2001	20	10	0	30	31	11	0	42	51	21	0	72
2002	27	9	0	36	36	11	0	47	63	20	0	83
3-yr. avg.												

Table 3. Continued.

DAU/Year	Spring				Fall				Entire Season			
	M	F	U	Total	M	F	U	Total	M	F	U	Total
2A												
1993	55	27	0	82	15	11	0	26	70	38	0	108
1994	56	20	0	76	14	8	0	22	70	28	0	98
1995	62	25	0	87	12	9	0	21	74	34	0	108
1996	82	24	0	106	28	7	0	35	110	31	0	141
1997	68	22	0	90	23	7	0	30	91	29	0	120
1998	140	73	0	213	50	28	0	78	190	101	0	291
1999	130	86	0	216	27	16	0	43	157	102	0	259
2000	132	49	0	181	21	12	0	33	153	61	0	214
2001	156	86	0	242	18	13	0	31	174	99	0	273
2002	154	57	1	212	23	17	0	40	177	74	1	252
3-yr. avg.	147	64	0	211	21	14	0	35	168	78	0	246
3A												
1993	16	13	0	29	27	11	0	38	43	24	0	67
1994	27	4	0	31	11	10	0	21	38	14	0	52
1995	31	10	0	41	16	7	0	23	47	17	0	64
1996	19	6	0	25	29	14	0	43	48	20	0	68
1997	17	5	0	22	17	7	0	24	34	12	0	46
1998	29	8	0	37	20	13	0	33	49	21	0	70
1999	37	12	0	49	27	11	0	38	64	23	0	87
2000	28	16	0	44	29	4	0	33	57	20	0	77
2001	38	10	0	48	8	9	0	17	46	19	0	65
2002	46	17	0	63	27	8	1	36	73	25	1	99
3-yr. avg.	37	14	0	51	21	7	1	29	59	21	1	81

Table 4. Age distribution of black bear for DAUs in the Clearwater Region, 1993-2002.

DAU/ Year	Sex	Age											Total
		Cub	1	2	3	4	5	6	7	8	9	10+	
1D													
1993	M	1	9	8	11	4	0	1	1	1	0	5	41
	F	0	6	3	10	1	1	3	0	2	0	3	29
1994	M	0	10	9	7	5	2	3	0	0	0	3	39
	F	1	2	7	3	4	3	1	1	2	4	2	30
1995	M	0	17	7	10	4	0	3	2	0	0	4	47
	F	0	8	4	6	0	4	3	2	1	0	6	34
1996	M	4	17	11	10	7	7	3	5	1	1	1	67
	F	2	2	18	5	7	1	1	1	3	1	2	43
1997	M	4	19	18	19	4	6	2	1	1	1	0	75
	F	1	10	6	8	0	8	1	4	1	1	5	45
1998	M	1	10	19	3	4	9	3	5	4	0	4	62
	F	0	11	13	7	5	2	4	1	1	2	9	55
1999	M	0	21	16	16	6	2	7	4	1	2	0	75
	F	0	10	4	6	3	3	1	2	2	1	1	33
2000	M	0	5	9	11	7	1	3	4	2	3	8	53
	F	4	14	10	13	6	2	5	0	1	0	1	56
2001	M	0	24	7	11	6	8	3	1	0	4	3	67
	F	0	12	5	5	1	4	4	3	0	3	3	40
2002	M	2	16	28	2	5	2	4	2	6	4	3	74
	F	0	11	12	5	2	2	3	3	4	0	10	52
1E													
1993	M	0	2	5	4	3	1	0	1	1	2	0	19
	F	0	1	1	3	0	0	0	3	2	0	4	14
1994	M	0	4	13	5	2	6	1	0	0	0	6	37
	F	0	5	2	2	2	0	4	0	0	0	1	16
1995	M	0	7	6	8	3	2	2	0	1	2	5	36
	F	0	5	1	3	2	0	1	2	0	0	1	15
1996	M	0	4	10	2	4	0	2	0	0	0	2	24
	F	0	4	7	2	5	1	3	0	1	1	3	27
1997	M	0	12	9	9	8	7	0	1	2	0	0	48
	F	0	3	6	5	1	0	0	0	0	0	0	15
1998	M	2	6	13	5	5	2	4	2	2	0	3	44
	F	1	2	7	2	5	0	2	1	0	1	3	24
1999	M	0	14	7	13	6	3	2	2	1	1	7	56
	F	0	2	3	6	6	3	2	1	2	0	6	31
2000	M	1	8	17	10	6	2	3	3	2	1	3	56
	F	0	1	3	4	6	1	3	0	3	0	7	28
2001	M	0	9	12	11	4	3	3	2	2	3	2	51
	F	0	4	6	7	2	2	0	3	0	0	4	28
2002	M	0	13	15	8	6	3	4	2	2	3	8	64
	F	0	2	7	5	4	3	3	1	2	3	3	33

Table 4. Continued.

Year	Sex	Age											Total
		Cub	1	2	3	4	5	6	7	8	9	10+	
1F													
1993	M	1	4	10	3	4	1	0	1	1	2	1	28
	F	0	2	1	1	0	1	0	0	1	2	8	16
1994	M	0	6	7	3	2	1	2	1	0	0	1	23
	F	0	2	2	1	1	1	1	1	0	1	3	13
1995	M	0	9	3	8	3	3	0	0	0	0	1	27
	F	0	2	2	2	2	2	1	0	0	0	0	11
1996	M	1	11	15	13	7	3	1	3	0	0	4	58
	F	0	1	7	2	2	3	0	1	0	0	4	20
1997	M	2	13	12	12	7	9	2	0	1	2	4	64
	F	1	1	3	7	1	1	1	0	0	2	2	19
1998	M	1	7	11	9	7	3	3	3	0	3	4	51
	F	0	2	6	1	7	2	3	1	1	2	6	31
1999	M	0	3	10	3	5	3	2	3	2	2	4	37
	F	0	2	4	1	2	4	0	3	0	2	5	23
2000	M	2	3	8	5	4	0	1	0	4	1	0	28
	F	0	0	3	3	2	1	0	1	0	0	5	15
2001	M	0	10	5	6	3	5	6	2	1	1	1	40
	F	0	1	3	4	1	1	0	1	0	0	2	13
2002	M	1	8	16	3	11	4	6	1	1	3	6	60
	F	0	1	5	4	0	1	0	2	0	1	4	18
2A													
1993	M	0	5	3	13	8	9	3	5	3	4	12	65
	F	0	1	6	7	5	8	2	1	2	1	6	39
1994	M	0	7	11	10	12	9	8	1	3	3	4	68
	F	0	1	6	4	4	3	2	1	0	0	5	26
1995	M	0	2	6	23	10	7	5	5	4	1	7	70
	F	1	1	3	10	3	6	1	2	2	0	3	32
1996	M	2	7	22	12	20	13	6	5	10	1	7	105
	F	0	2	7	3	2	4	3	3	0	2	4	30
1997	M	5	4	15	32	7	6	3	5	3	4	7	91
	F	1	2	5	7	0	1	1	1	2	3	6	29
1998	M	0	8	24	39	28	15	11	5	8	4	21	163
	F	1	5	6	15	9	7	4	7	2	4	25	85
1999	M	1	3	14	21	20	31	13	13	8	8	19	151
	F	0	2	9	7	14	10	10	12	5	4	23	96
2000	M	4	0	9	15	0	16	15	9	6	5	18	97
	F	2	0	2	7	13	11	4	2	0	0	8	49
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	3	100	5	7	10	9	11	10	5	10	170
	F	0	2	28	5	5	2	6	8	4	0	10	70

Table 4. Continued.

Year	Sex	Age											Total
		Cub	1	2	3	4	5	6	7	8	9	10+	
3A													
1993	M	1	1	2	4	6	8	0	3	1	1	7	34
	F	1	1	1	6	1	1	0	1	1	0	8	21
1994	M	0	3	11	1	3	3	3	2	2	2	6	36
	F	0	4	0	0	2	2	1	0	1	1	3	14
1995	M	0	1	7	9	4	3	6	1	1	1	8	41
	F	0	0	3	1	1	0	1	1	3	1	4	15
1996	M	3	5	10	7	5	1	1	2	0	0	8	42
	F	0	0	4	1	2	0	0	2	3	2	2	16
1997	M	2	2	5	7	3	3	0	2	0	2	7	33
	F	1	0	2	3	4	0	0	0	0	2	0	12
1998	M	0	1	6	6	8	9	3	1	0	3	10	47
	F	0	1	2	2	1	2	2	2	2	2	5	21
1999	M	0	2	8	12	1	3	3	2	1	4	19	55
	F	0	2	1	3	4	2	4	2	0	0	5	23
2000	M	3	2	9	5	7	2	8	7	0	0	11	54
	F	0	0	1	3	1	2	2	2	2	0	7	20
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	4	6	2	4	4	7	60
	F	0	1	2	1	4	1	1	2	3	1	4	20

Table 5. 2000-2010 Black Bear Plan management values and criteria for DAUs in the Clearwater Region, 1993-2002.

DAU/Year	N ^a	% Females	% Males ^b ≥5	# Males ^b ≥5
1D				
1993	74	41	20	8
1994	76	42	21	8
1995	84	43	19	9
1996	110	39	25	16
1997	122	38	15	11
1998	139	47	40	3
1999 ^c	110	30	21	16
2000	113	48	40	21
2001	112	38	28	19
2002	126	41	28	21
3-year avg.	117	42	32	20
Desired levels		≤40	≥20	
1E				
1993	36	40	26	5
1994	56	41	27	9
1995	58	29	35	13
1996	61	49	15	4
1997	66	23	20	10
1998	74	40	30	13
1999	86	36	29	16
2000	85	34	25	14
2001	80	35	29	15
2002	97	34	34	22
3-year avg.	87	34	29	17
Desired levels		≤40	≥20	
1F				
1993	45	38	21	6
1994	38	37	22	5
1995	46	26	15	4
1996	80	29	19	11
1997	83	23	28	18
1998	89	40	37	16
1999	60	38	43	16
2000	71	31	23	10
2001	72	29	40	16
2002	78	23	35	21
3-year avg.	74	28	33	16
Desired levels		≤35	≥20	

Table 5. Continued.

DAU/Year	N ^a	% Females	% Males ^b ≥ 5	# Males ^b ≥ 5
2A				
1993	108	35	55	36
1994	98	29	41	28
1995	108	31	41	29
1996	135	22	40	42
1997	120	24	31	28
1998	291	35	39	64
1999	259	39	61	92
2000	214	28	71	69
2001	273	36	62	104
2002	251	29	32	55
3-year avg.	246	31	55	76
Desired levels		≤ 40	≥ 25	
3A				
1993	67	36	49	20
1994	52	27	55	18
1995	64	27	49	20
1996	68	29	29	12
1997	46	26	42	14
1998	68	30	55	26
1999	87	26	52	28
2000	77	26	52	28
2001	65	29	69	31
2002	98	26	45	27
3-year avg.	80	27	55	29
Desired levels		≤ 40	≥ 30	

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

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

^c Spring only age data.

Table 6. Method of black bear harvest for DAUs in the Clearwater Region, 1993-2002.

DAU/Year	Bait	Hound	Still	Incidental	Other	Total
1D						
1993	6	21	15	31	1	74
1994	3	22	22	25	4	76
1995	0	29	17	36	1	83
1996	0	39	20	49	1	109
1997	0	46	15	61	0	122
1998	0	35	36	66	1	138
1999	0	22	48	39	0	109
2000	0	53	15	44	1	113
2001	2	49	32	29	0	112
2002	0	56	30	50	0	136
1E						
1993	6	10	10	9	1	36
1994	13	10	9	18	0	50
1995	4	16	19	18	1	58
1996	11	10	18	25	2	66
1997	7	16	12	31	0	66
1998	8	14	27	24	1	74
1999	12	18	17	39	1	87
2000	14	20	21	28	2	85
2001	12	14	39	15	0	80
2002	12	18	40	30	0	100
1F						
1993	4	17	16	6	2	45
1994	6	10	6	16	0	38
1995	4	12	2	25	1	44
1996	12	25	13	30	0	80
1997	20	20	20	23	0	83
1998	24	18	13	34	0	89
1999	16	20	9	15	0	60
2000	9	28	15	17	0	69
2001	17	17	8	12	1	55
2002	21	16	29	15	2	83
2A						
1993	38	14	29	27	1	109
1994	23	9	17	15	2	66
1995	56	11	18	22	0	107
1996	69	18	30	26	1	144
1997	65	11	24	18	2	120
1998	150	41	43	53	4	291
1999	152	17	41	47	2	259
2000	139	28	24	21	2	214
2001	199	17	39	15	2	272
2002	161	15	49	20	7	252

Table 6. Continued.

DAU/Year	Bait	Hound	Still	Incidental	Other	Total
3A						
1993	4	3	30	25	0	62
1994	11	2	8	15	3	39
1995	9	6	26	19	3	63
1996	5	1	25	32	1	64
1997	3	1	26	15	1	46
1998	16	5	25	23	1	70
1999	19	7	35	22	3	86
2000	12	4	35	20	6	77
2001	35	4	15	10	1	65
2002	39	4	39	17	0	99

Table 7. Weapon type used to harvest black bear for DAUs in the Clearwater Region, 1993-2002.

DAU/Year	Rifle	Archery	Muzzleloader	Pistol	Other	Total
1D						
1993	66	4	1	3	0	74
1994	61	9	0	3	3	76
1995	78	2	0	4	0	84
1996	101	3	0	2	0	106
1997	113	4	0	5	0	122
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	0	136
1E						
1993	33	3	0	1	0	37
1994	40	7	1	2	8	58
1995	48	7	0	3	0	58
1996	60	5	0	1	0	66
1997	62	3	0	1	0	66
1998	67	8	1	0	0	76
1999	83	3	0	1	1	88
2000	66	11	3	2	3	85
2001	73	4	0	2	1	80
2002	84	13	1	2	0	100
1F						
1993	40	4	0	1	0	45
1994	28	2	0	2	6	38
1995	38	5	1	2	0	46
1996	66	5	3	6	0	80
1997	79	3	0	1	0	83
1998	80	3	0	5	1	89
1999	55	2	0	3	0	60
2000	61	6	0	2	2	71
2001	51	2	0	1	1	55
2002	73	5	2	3	0	83
2A						
1993	81	22	0	8	1	112
1994	52	8	0	4	35	99
1995	82	19	2	4	1	108
1996	99	30	2	10	0	141
1997	89	25	1	5	0	120
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	195	44	3	6	4	252

Table 7. Continued.

DAU/Year	Rifle	Archery	Muzzleloader	Pistol	Other	Total
3A						
1993	58	1	2	4	0	65
1994	32	4	4	2	0	42
1995	57	1	2	4	0	64
1996	60	1	0	4	0	65
1997	44	0	0	2	0	46
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	74	20	2	3	0	99

Table 8. Black bear depredation complaints handled in the Clearwater Region, 1993-2002.

Year	DAU					Total
	1D	1E	1F	2A	3A	
1993	0	1	2	0	0	3
1994	0	2	1	0	0	3
1995	3	5	0	0	0	8
1996	1	7	7	1	1	17
1997	5	10	2	2	1	20
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

**PROGRESS REPORT
SURVEYS AND INVENTORIES**

STATE:	<u>Idaho</u>	JOB TITLE:	<u>Black Bear Surveys and</u>
PROJECT:	<u>W-170-R-27</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, 2002 to June 30, 2003</u>		

SOUTHWEST REGION

ABSTRACT

Four hundred eighty-four black bears were reported harvested in Area 1 of the Southwest Region in 2002. No population surveys were conducted during the reporting period. Reported harvest was 142, 71, and 271 black bears for DAUs 1G, 1H, and 1K, respectively. The reported harvest increased 4% in DAU 1G. Harvest in DAU 1H and 1K increased 16% and 33%, respectively, in 2002. Data indicate percent females and percent males greater than five years of age in the harvest criteria are being met in DAUs 1G and 1K. Harvest was well distributed among user groups in DAU 1G. Still hunting (stalking) and hound hunting methods contributed to the majority of the black bear harvest in DAU 1H. Still hunting and baiting comprised most of the black bear kill in DAU 1K in 2002. Liberalized seasons were implemented in 1998 and again in 1999 with adoption of the 2000-2010 Black Bear Species Management Plan. Data for DAU 1G indicate the harvest criteria are stable. Spring and fall permit level increases were adopted by the Commission in March of 2002. These will take effect with the spring 2004 season. Harvest data for DAU 1K indicate that the elimination of the fall split season in 1998 and increase in spring season in 2002 contributed to a significant increase in black bear harvest.

Seventy black bears were reported harvested in Area 3 of the Southwest Region in 2002. Harvest criteria are being met in this area. Harvest incidental to hunting other big game species was the dominant harvest technique in this area. 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)

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

DAU 1K (GMUS 33, 39, 43)

Management Direction

Area 1 contains 12 Data Analysis Units (DAUs). Harvest guidelines and population characteristics 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. This included high-quality controlled hunts in DAU 1H. Dog-training seasons would open the day after the spring harvest season closed and continue until 31 July in the DAUs that have a dog-training season.

The plan called for monitoring certain population characteristics as reflected in the harvest over three-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 three-year running average of percent females and percent males five years or older. Bait station survey trends are also considered when assessing population status. Harvest rates will be categorized as light, moderate, and heavy (Table 1). DAUs 1G and 1K are designated as moderate harvest rates. DAU 1H will be 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. 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 three 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 the fall of 1998 and were continued into the 2002 framework (Table 2).

Population Surveys

No population surveys were conducted during the reporting period (Table 3).

Harvest Characteristics

Reported harvest in DAU 1G was 4% higher in 2002 than in 2001 (Table 4). The black bear harvest in this DAU was greater in the fall than in the spring in 2002. Black bear age data indicate two-year old male bears were the most frequently harvested age group in 2002 (Table 5). Percent females and males five years or older harvest criteria were within acceptable limits (Table 6). There was adequate distribution of harvest among user groups in DAU 1G in 2002 (Table 7). The rifle is the most prominent weapon used for harvesting black bear in DAU 1G (Table 8).

Reported harvest increased 15% in 2002 compared to 2001 in DAU 1H (Table 4). The black bear harvest was higher in the fall as compared to the spring in 2002. Black bear age data indicate two-year old male bears were the most frequently harvested age group in 2002 (Table 5). A decrease occurred for the percent females in the harvest criteria (Table 6). Still and hound hunting methods are the dominant means of harvest in DAU 1H (Table 7). The rifle is the most used weapon of choice (Table 8).

Reported harvest increased 33% in 2002 when compared to 2001 totals in DAU 1K (Table 4). Hunters harvested more bears in the spring than in the fall season in 2002, breaking a trend of mostly fall harvest. Black bear age data indicate two-year old male bears were the most frequently harvested age group in 2002 (Table 5). The percent females in the harvest was within desired levels in 2002 (Table 6). Still hunting (stalking) and baiting methods comprised most of the black bear kill in DAU 1K in 2002 (Table 7). Rifle was the most reported weapon of choice in DAU 1K (Table 8).

Depredations

Black bear depredations occur annually in the Southwest Region. Most complaints are associated with poor garbage disposal practices. Some orchard and apiary depredations do occur. More depredations were reported in 2002 when compared to 2001 (Table 9). 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 three 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 do 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 two 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 moderately increased bear harvest. 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 has increased the bear harvest in the DAU. This change should be monitored through the 2003 seasons to assess changes in harvest criteria and subsequent impact to the bear population.

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 to 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 has not yielded the most promising results. Black bear harvest has become nearly equal between the two seasons. Fall permits were increased 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 spring 2004 season. The goal will be to increase the percentage of males in the harvest and to maintain a 30% or higher hunter success rate. It may turn out that the controlled hunt area is too small to protect the wider ranging adult male black bears, 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.

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. This increase was also apparent in the 1999 harvest. The 2000 harvest was even larger than 1998 and 1999, nearly equaling harvest levels of the early 1990s that precipitated significant season reductions in 1992 in this DAU. The Commission further expanded season lengths for the spring 2002 black bear season. This change probably contributed to the 55% higher harvest of black bears in the spring season in 2002 as compared to the three-year average. The percent female bears in the harvest parameter in DAU 1K is now near the maximum level desired. The continuing increase in harvest needs to be monitored closely to prevent large declines in the black bear population and subsequent hunter complaints.

AREA 3

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

Management Direction

Area 3 is divided into two analysis units, one north and one south of the 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 is 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 units is restricted to boat, airplane, packstring, 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 Plan (Table 2).

Population Surveys

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

Harvest Characteristics

Reported harvest increased 37% in 2002 compared to 2001 for DAU 3B (Table 4). The black bear harvest in DAU 3B was greater in the fall than spring season. Black bear age data indicate four-year old male bears were the most frequently harvested age group in 2002 (Table 5). Percent females in the harvest remained static in 2002 (Table 6). Harvest incidental to other species hunted was the primary method of kill in this DAU (Table 7). The prominent weapon of choice in DAU 3B is the rifle (Table 8).

Depredations

No depredations were reported in DAU 3B in 2002.

Management Implications

Harvest in DAU 3B is usually minor. Small sample sizes preclude 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 two-black bear bag limit, discounted non-resident bear tag fees, and a longer fall season was adopted by the Commission beginning with the 2000 season in response to sportsmen's unsubstantiated concerns of black bear predation on elk calves in the Middle Fork Elk Zone. The Department will continue to monitor the harvest criteria for DAU 3B to assess the effects of these season changes on black bear populations.

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. Summary of 2002 seasons by method for DAUs in the Southwest Region.

DAU	Units	Season Type	Season	
			Dates	Length (Days)
1G ^a	19A	General Fall, any legal weapon	30 Aug - 31 Oct	63
		General Spring, any legal weapon	15 Apr - 15 Jun	62
		Pursuit	16 Jun - 31 Jul	46
	23, 24, 25	General Fall, any legal weapon	30 Aug - 31 Oct	63
		General Spring, any legal weapon	15 Apr - 31 May	47
		Pursuit	1 Jun - 31 Jul	61
1H ^b	22, 31	Controlled Fall ^c , any legal weapon	1 Sep - 31 Oct	61
		Controlled Spring ^d , any legal weapon	15 Apr - 22 May	38
		Pursuit	23 May - 31 July	69
	32, 32A	Controlled Fall ^c , any legal weapon	1 Sep - 31 Oct	61
		Controlled Spring ^d , any legal weapon	15 Apr - 22 May	38
		Pursuit	23 May - 31 July	69
1K	33, 39 ^c	General Fall, any legal weapon	30 Aug - 31 Oct	63
		General Spring, any legal weapon	15 Apr - 15 June	62
		Pursuit	16 June - 31 Jul	47
	43 ^a	General Fall, any legal weapon	30 Aug - 31 Oct	63
		General Spring, any legal weapon	15 Apr - 31 May	47
		Pursuit	1 Jun - 31 Jul	61
3B ^f	20A, 26, 27	General Fall, any legal weapon	30 Aug - 18 Nov	81
		General Spring, any legal weapon	15 Apr - 30 Jun	77
		Pursuit ^g	1-31 Jul	31

^a Dogs prohibited 1-31 October.

^b Bait prohibited.

^c 50 permits; dogs prohibited 1-31 October.

^d 50 permits; dogs prohibited.

^e Dogs prohibited 5-31 October.

^f Dogs prohibited 15 September - 31 October; two bear bag limit.

^g No pursuit season in Unit 20A.

Table 3. Bait station survey results from Council routes (DAU 1H), 1993-2003.

Year	Survey Number	Survey Dates	Total Transects Available	Total Transects Sampled	Total Stations Sampled	Total Stations Visited by Black Bear	90% Confidence Interval	
							%	(+/-)
1993	1	6/25-30	17	17	85	16	19	7.0
1994	1	6/30-7/5	17	17	85	15	18	6.7
1995	1	6/22-27	17	17	85	13	15	6.5
1996	1	6/27-7/2	17	17	85	30	35	8.4
1997	1	6/26-7/1	16	16	80	14	18	7.0
1998	1	7/5-13	17	17	85	19	22	7.4
1999	1	7/1-6 ^a	16	16	80	31	39	10.0
2000	1	6/22-27	17	17	85	32	38	8.6
2001	1	6/17-22	17	17	85	30	35	8.7
2002	1	6/27-7/2	17	17	85	24	28	8.2
2003 ^b	-	-	-	-	-	-	-	-

^a Nineteen stations were not checked until 7/13/99.

^b Survey not conducted

Table 4. Black bear harvest by season and sex for DAUs in the Southwest Region, 1993-2002.

DAU/Year	Spring			Fall			Entire Season		
	M	F	Total	M	F	Total	M	F	Total
1G									
1993	30	5	35	30	18	48	60	23	83
1994	22	10	32	18	12	30	40	22	62
1995	33	12	45	36	25	61	69	37	106
1996	40	17	57	36	22	58	76	39	115
1997	27	11	38	37	28	65	64	39	103
1998	38	10	48	36	19	55	74	29	103
1999	37	16	53	51	32	83	88	48	136
2000	44	12	56	57	23	80	101	35	136
2001	34	18	52	50	34	84	84	52	136
2002	37	13	50	57	35	92	94	48	142
3-yr. avg.	38	14	52	55	31	86	93	45	138
1H									
1993	5	3	8	10	5	15	15	8	23
1994	8	3	11	6	7	13	14	10	24
1995	7	1	8	11	10	21	18	11	29
1996	14	3	17	8	7	15	22	10	32
1997	15	6	21	23	8	31	38	14	52
1998	23	10	33	21	12	33	44	22	66
1999	14	10	24	16	12	28	30	22	52
2000	22	13	35	15	18	33	37	31	68
2001	17	8	25	14	22	36	31	30	61
2002	24	9	33	22	16	38	46	25	71
3-yr. avg.	21	10	31	17	19	36	38	29	67
1K									
1993	26	12	38	27	11	38	53	23	76
1994	33	20	53	44	20	64	77	40	117
1995	52	21	73	49	36	85	101	57	158
1996	47	32	79	31	20	51	78	52	130
1997	34	23	57	41	33	74	75	56	131
1998	39	24	63	75	55	130	114	79	193
1999	66	26	92	65	42	107	131	68	199
2000	54	26	80	75	65	140	129	91	220
2001	66	30	96	65	42	107	131	72	203
2002	103	35	138	77	56	133	180	91	271
3-yr. avg.	74	30	104	72	54	126	147	85	232

Table 4. Continued.

DAU/Year	Spring			Fall			Entire Season		
	M	F	Total	M	F	Total	M	F	Total
3B									
1993	4	4	8	22	16	38	26	20	46
1994	5	3	8	26	18	44	31	21	52
1995	4	7	11	14	8	22	18	15	33
1996	7	2	9	29	8	37	36	10	46
1997	5	3	8	8	8	16	13	11	24
1998	9	6	15	9	5	14	18	11	29
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	6	13	40	17	57	47	23	70
3-yr. avg.	5	4	9	31	14	45	36	18	54

Table 5. Age distribution of black bear for DAUs in the Southwest Region, 1993-2002.

DAU/ Year	Sex	Age											Unknown	Total
		Cub	1	2	3	4	5	6	7	8	9	10+		
1G														
1993	M	1	7	7	7	11	4	4	3	1	1	7	7	60
	F	0	2	3	2	2	1	1	1	0	0	4	7	23
1994	M	0	4	14	3	5	6	2	1	1	0	0	5	41
	F	0	0	6	2	1	1	4	0	0	0	3	5	22
1995	M	1	7	11	18	2	4	6	6	0	4	7	3	69
	F	0	5	7	6	1	1	3	4	1	2	5	2	37
1996	M	0	1	18	8	15	1	6	5	1	0	10	11	76
	F	1	0	5	2	3	0	1	3	1	1	10	12	39
1997	M	0	8	6	18	6	7	2	2	1	2	9	3	64
	F	0	1	5	8	1	4	1	2	1	2	8	6	39
1998	M	0	6	8	10	14	10	10	3	2	2	7	2	74
	F	0	4	6	4	3	2	3	0	0	3	0	4	29
1999	M	0	12	17	14	2	6	1	8	1	1	13	13	88
	F	0	6	7	6	2	5	5	3	0	3	5	6	48
2000	M	1	4	31	18	7	4	9	5	3	1	10	8	101
	F	1	1	4	4	2	3	4	4	0	1	7	4	35
2001	M	0	17	6	24	3	6	3	3	5	2	6	9	84
	F	0	5	4	4	3	4	2	7	5	1	11	6	52
2002	M	0	3	26	6	17	5	5	1	4	7	9	11	94
	F	2	8	8	1	4	3	3	2	3	0	9	5	48
1H														
1993	M	0	3	2	5	1	0	1	0	0	0	0	3	15
	F	0	0	1	1	1	2	0	0	0	1	1	1	8
1994	M	0	2	5	1	1	1	0	0	1	1	0	2	14
	F	0	1	1	2	1	0	2	0	0	1	1	1	10
1995	M	0	3	1	2	3	3	0	0	0	1	0	5	18
	F	0	1	3	2	1	0	1	1	0	0	1	1	11
1996	M	0	2	10	2	1	0	1	1	0	0	2	3	22
	F	0	0	4	0	0	0	0	0	0	1	1	4	10
1997	M	0	5	7	7	4	0	4	2	2	1	1	5	38
	F	0	1	0	2	2	1	2	0	1	1	3	1	14
1998	M	0	3	13	4	8	2	2	2	1	1	5	3	44
	F	0	0	4	3	2	0	2	1	3	2	1	4	22
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	6	37
	F	0	0	6	2	6	3	0	3	3	0	5	3	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	3	8	1	4	0	2	1	5	4	46
	F	0	2	0	4	6	2	1	0	0	1	6	3	25

Table 5. Continued.

DAU/ Year	Sex	Cub	Age										Unknown	Total
			1	2	3	4	5	6	7	8	9	10+		
1K														
1993	M	0	13	5	1	11	5	2	5	2	1	3	5	53
	F	0	1	2	2	2	0	1	2	0	1	4	8	23
1994	M	0	8	23	5	7	6	8	4	2	3	4	7	77
	F	0	0	12	3	2	8	3	0	0	2	6	4	40
1995	M	0	14	12	34	5	3	9	3	3	4	3	11	101
	F	0	10	3	14	3	2	6	1	2	1	6	9	57
1996	M	0	8	25	6	14	2	3	2	3	1	6	8	78
	F	0	4	14	9	6	2	0	2	1	1	5	8	52
1997	M	2	8	9	25	2	13	3	1	4	0	5	3	75
	F	0	3	9	12	2	4	1	3	4	3	9	6	56
1998	M	0	25	23	5	16	8	11	4	3	5	5	9	114
	F	0	12	7	7	9	4	7	3	1	4	17	8	79
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	2	19	21	13	15	5	10	4	8	1	11	20	129
	F	1	11	20	6	6	5	10	1	3	3	9	16	91
2001	M	0	20	11	26	3	13	8	13	1	4	7	25	131
	F	0	7	3	10	7	7	3	4	1	4	19	7	72
2002	M	2	13	46	24	26	11	10	2	13	6	16	11	180
	F	3	7	18	9	11	5	7	1	3	2	15	10	91
3B														
1993	M	1	7	1	1	1	2	4	1	1	0	4	3	26
	F	0	0	2	3	2	0	0	2	0	1	5	5	20
1994	M	0	4	4	2	3	0	0	0	2	1	13	2	31
	F	0	1	7	4	0	1	1	0	0	0	2	5	21
1995	M	0	1	3	5	0	1	0	1	0	0	1	6	18
	F	0	1	1	3	0	2	1	0	0	0	5	2	15
1996	M	0	1	5	5	10	0	0	2	2	0	7	4	36
	F	0	0	1	1	0	0	2	2	1	1	0	2	10
1997	M	0	1	0	4	4	1	0	0	0	0	1	2	13
	F	0	0	1	0	2	2	0	1	1	2	2	0	11
1998	M	0	0	1	3	1	2	0	1	2	0	3	5	18
	F	0	1	1	0	2	2	0	0	1	0	4	0	11
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	1	0	9	4	1	2	0	1	4	1	2	1	26
	F	0	1	4	2	1	1	1	1	0	0	3	0	14
2001	M	0	2	6	7	1	4	1	1	2	4	2	4	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	1	2	1	2	1	4	23

Table 6. 2000-2010 Black Bear Plan management values, criteria, and median ages for DAUs in the Southwest Region, 1993-2002.

DAU/Year	N ^a	% Median Age				% Males ≥5	# Males	N ^b
		Females	Males	Females	Total			
1G								
1993	83	28	4	4	4	38	60	69
1994	63	35	2	3	3	26	40	50
1995	106	36	3	3	3	40	67	100
1996	115	34	4	7	4	35	76	91
1997	103	37	3	5	4	38	64	93
1998	103	28	4	3	7	47	74	97
1999	136	35	3	5	3	40	88	117
2000	136	26	3	6	3	34	101	124
2001	136	38	3	7	4	33	84	121
2002	142	34	4	4	4	36	94	129
3-year avg.	138	33	3	6	4	34	93	125
Desired levels		30-40	≥4	≥6	≥5	25-35		
1H								
1993	23	35	3	5	3	8	15	19
1994	24	42	2	4	3	25	14	21
1995	29	38	4	3	3	31	18	23
1996	32	31	2	2	2	21	22	25
1997	52	27	3	6	4	30	38	46
1998	66	33	4	5	4	32	44	59
1999	52	42	4	5	4	41	30	47
2000	68	46	4	5	4	35	37	59
2001	61	49	3	4	3	29	31	55
2002	71	35	4	4	4	31	46	64
3-year avg.	67	43	4	4	4	32	38	59
Desired levels		≤30	≥4	≥6	≥5	≥35		
1K								
1993	76	30	4	6	4	38	53	63
1994	117	35	2	5	3	34	76	97
1995	156	37	3	3	3	28	99	135
1996	127	40	3	3	3	24	76	114
1997	131	43	3	4	3	36	75	120
1998	193	41	3	5	4	34	113	176
1999	199	34	3	4	3	37	131	180
2000	220	41	3	3	3	36	129	184
2001	203	35	3	5	4	43	131	171
2002	271	34	3	4	4	34	180	250
3-year avg.	231	37	3	4	4	38	147	202
Desired levels		30-40	≥4	≥6	≥5	25-35		

Table 6. Continued.

DAU/Year	N ^a	%	Median Age			%	# Males	N ^b
			Females	Males	Females			
3B								
1993	46	43	5	7	5	52	26	38
1994	50	42	8	4	4	58	29	42
1995	28	50	3	5	3	27	14	24
1996	44	25	4	7	4	33	33	41
1997	24	46	4	7	4	18	13	22
1998	29	38	5	5	5	62	18	24
1999	36	42	5	9	6	58	21	30
2000	40	35	3	4	3	40	26	39
2001	51	33	4	4	4	47	34	47
2002	70	33	4	4	4	48	47	63
3-year avg.	54	34	4	4	4	45	36	50
Desired levels		30-40	≥4	≥6	≥5	25-35		

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

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

Table 7. Method of black bear harvest for DAUs in the Southwest Region, 1993-2002.

DAU/ Year	Bait		Hound		Still		Incidental		Other		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
1G												
1993	6	1	11	9	20	4	21	8	2	1	60	23
1994	13	3	5	2	11	10	11	6	1	1	41	22
1995	14	3	14	7	25	14	16	12	0	1	69	37
1996	10	3	15	3	33	18	18	13	0	2	76	39
1997	21	5	13	4	8	13	19	17	3	0	64	39
1998	22	0	12	6	17	4	20	18	3	1	74	29
1999	17	6	21	12	21	10	28	18	1	2	88	48
2000	25	6	19	11	29	8	25	10	3	0	101	35
2001	27	11	13	16	21	15	17	9	6	1	84	52
2002	27	9	20	9	24	15	22	14	1	1	94	48
1H												
1993	0	0	6	2	5	3	3	1	1	2	15	8
1994	1	0	4	4	8	5	0	1	1	0	14	10
1995	0	0	6	6	12	4	0	1	0	0	18	11
1996	0	0	4	5	17	4	0	0	1	1	22	10
1997	0	1	11	6	24	6	1	1	2	0	38	14
1998	0	0	17	8	21	11	5	2	1	1	44	22
1999	0	0	15	9	15	11	0	2	0	0	30	22
2000	0	0	11	9	23	18	2	3	1	1	37	31
2001	0	1	9	14	17	13	5	1	0	1	31	30
2002	0	0	13	10	28	14	4	1	1	0	46	25
1K												
1993	13	4	8	5	12	3	19	8	1	3	53	23
1994	15	12	16	2	15	13	26	12	5	1	77	40
1995	24	10	16	6	36	20	22	20	3	1	101	57
1996	19	16	9	10	22	16	27	9	1	1	78	52
1997	20	9	9	7	20	18	26	21	0	1	75	56
1998	19	11	13	10	35	26	43	32	4	0	114	79
1999	29	10	17	13	52	29	31	14	2	2	131	68
2000	37	16	22	10	37	35	29	27	4	3	129	91
2001	37	18	31	21	37	19	22	12	4	3	131	73
2002	57	17	40	20	41	32	37	19	5	3	180	91
3B												
1993	0	0	0	0	10	6	16	14	0	0	26	20
1994	1	1	0	0	7	7	23	10	0	3	31	21
1995	0	0	0	0	6	10	12	4	0	1	18	15
1996	0	0	1	0	13	4	21	6	1	0	36	10
1997	0	0	0	0	6	2	6	8	1	1	13	11
1998	0	0	1	0	8	6	9	5	0	0	18	11
1999	0	0	0	0	6	4	14	11	1	0	21	15
2000	0	1	0	0	13	5	12	7	1	1	26	14
2001	1	1	1	0	9	6	21	9	2	1	34	17
2002	2	0	0	0	12	12	33	11	0	0	47	23

Table 8. Weapon type used to harvest black bear for DAUs in the Southwest Region, 1993-2002.

DAU/ Year	Rifle		Archery		Muzzleloader		Pistol		Other		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
1G												
1993	48	18	7	3	0	0	4	2	1	0	60	23
1994	33	20	6	1	0	0	1	0	1	1	41	22
1995	62	34	3	2	1	0	3	0	0	1	69	37
1996	60	33	12	5	1	0	3	1	0	0	76	39
1997	50	36	8	3	2	0	2	0	2	0	64	39
1998	65	27	7	1	0	0	2	1	0	0	74	29
1999	72	42	11	3	1	0	4	3	0	0	88	48
2000	83	26	13	4	0	0	1	3	4	2	101	35
2001	60	44	12	3	1	2	7	2	4	1	84	52
2002	69	38	17	6	1	0	5	2	2	2	94	48
1H												
1993	11	3	1	1	1	0	1	2	1	2	15	8
1994	14	8	0	0	0	0	0	2	0	0	14	10
1995	18	8	0	1	0	0	0	1	0	1	18	11
1996	19	8	2	1	0	0	0	0	1	1	22	10
1997	36	10	2	2	0	0	0	2	0	0	38	14
1998	41	19	3	3	0	0	0	0	0	0	44	22
1999	25	20	3	1	1	0	0	1	1	0	30	22
2000	34	27	1	2	0	0	2	1	0	1	37	31
2001	28	24	1	3	0	1	2	2	0	0	31	30
2002	43	21	3	1	0	0	0	3	0	0	46	25
1K												
1993	42	16	7	5	1	0	3	1	0	1	53	23
1994	57	33	14	7	0	0	5	0	1	0	77	40
1995	72	47	23	6	0	1	6	3	0	0	101	57
1996	62	40	9	6	1	2	6	4	0	0	78	52
1997	62	48	10	5	1	0	2	2	0	1	75	56
1998	100	70	10	5	1	1	3	3	0	0	114	79
1999	107	55	15	9	0	0	9	4	0	0	131	68
2000	100	79	18	7	1	1	7	3	3	1	129	91
2001	106	63	16	5	1	1	8	1	0	2	131	72
2002	134	67	32	12	1	2	9	8	4	2	180	91
3B												
1993	26	19	0	0	0	0	0	0	0	1	26	20
1994	31	21	0	0	0	0	0	0	0	0	31	21
1995	17	15	1	0	0	0	0	0	0	0	18	15
1996	35	10	0	0	0	0	1	0	0	0	36	10
1997	13	9	0	0	0	0	0	2	0	0	13	11
1998	18	11	0	0	0	0	0	0	0	0	18	11
1999	20	15	1	0	0	0	0	0	0	0	21	15
2000	25	14	0	0	0	0	1	0	0	0	26	14
2001	31	17	2	0	0	0	0	0	1	0	34	17
2002	45	23	2	0	0	0	0	0	0	0	47	23

Table 9. Black bear depredation complaints handled in the Southwest Region, 1993-2002.

Year	1G	1H	1K	3B	Total
1993	4	0	2	0	6
1994	3	0	3	1	7
1995	7	2	11	1	21
1996	11	4	3	1	19
1997	1	1	2	1	5
1998	5	1	5	0	11
1999	4	5	1	0	10
2000	0	2	12	0	14
2001	0	1	1	0	2
2002	0	7	2	0	9

**PROGRESS REPORT
SURVEYS AND INVENTORIES**

STATE:	<u>Idaho</u>	JOB TITLE:	<u>Black Bear Surveys and</u>
PROJECT:	<u>W-170-R-27</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, 2002 to June 30, 2003</u>		

MAGIC VALLEY REGION

ABSTRACT

Forty black bears were harvested in DAU 4A in 2002, 14% above the 1999-2001 mean of 35 black bears. The 2000, 2001, and 2002 harvest of 42, 41, and 40, respectively, are the largest number of bears harvested in this DAU during the last 15 years and provides the first adequate sample of bears since 1994, which will allow the use of criteria established in the Black Bear Management Plan for monitoring black bear populations. Baiting, hound hunting, incidental, and still hunting accounted for 11%, 36%, 14%, and 36%, respectively, of the black bears harvested. Most black bears were taken by rifle (75%), while eight black bear (22%) were killed with archery equipment. The Department received nine depredation complaints and USDA Wildlife Services serviced two complaints.

AREA 4

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

Management Direction

The 1992-2000 Black Bear Management Plan directed the Department to manage DAU 4A to reduce or maintain harvest and work with the livestock industry and the USDA Wildlife Services to gather more data about black bears that are killed in defense of private property. Management objectives in the 2000-2010 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 units 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 (Units 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 Units 45, 48, and 49 in the 1970s. However, year-round seasons remained in effect in Unit 44 through June 1986 because of livestock industry and landowner concerns. Restrictions on fall dog-training apply in Units 44, 45, 48, and 49 during October to minimize conflicts with deer and elk hunters.

Harvest Characteristics

The 2002 spring and fall hunting seasons were unchanged from 2001. Both seasons followed frameworks adopted in the 2000-2010 Black Bear Management Plan (Table 1).

Forty black bears were harvested in 2002, which is well above the average for this DAU. Seventy percent of the black bear harvest occurred during the fall season, which is similar to the 2001 season (Table 2). This change in harvest occurred even though access to mid and high elevations during the 2002 spring season was good because of moderate snow pack and warm spring weather.

Fifty-two percent of the black bears harvested in 2002 were less than five years old (Table 3). Total harvest (hunter harvest and depredation kill) of black bears in DAU 4A in 2002 was adequate for the third year in a row to allow application of harvest criteria established in the 1992-2000 and 2000-2010 management plans (Table 4).

Still and incidental hunting accounted for 50% of the total hunter harvest of all black bears harvested in this DAU in 2002. Four of 36 hunter-harvested black bears were taken over bait in 2002 compared to six of 42 in 2001. Hound hunting comprised 36% of the remaining harvest for 2002 (Table 5).

Rifles and archery equipment accounted for 75% and 22% of the 2002 black bear harvest, respectively. Archery and rifle harvest as a percentage of the total hunter harvest was higher in 2002 compared to 2000 and 2001 (Table 6).

Most depredation complaints involve nuisance black bears in the Big Wood River Valley. In 2002, nine complaints were received on black bears getting into garbage cans, dumpsters, homes, or bird feeders in Unit 48 (Table 7). Two bears were euthanized for the first time in the Wood River Valley due to their lack of fear of humans and their persistent invasion of homes.

Wildlife Services personnel handle depredations on livestock. From 1993-2002, we received mortality reports on 22 black bears dispatched by Wildlife Services for this DAU (Table 7). In 2002, Wildlife Services personnel dispatched two black bears.

Dog-training Season

A standard dog-training season of 23 May - 31 July was implemented in 1993.

Management Implications

Because of the small number of black bears typically harvested in this DAU, management decisions have not been based exclusively on the established monitoring criteria. The data suggest black bear harvest has been moderate (2000-2002 average of 31% females in the harvest and 34% 5+-year-old males), and it is believed the black bear population has increased in recent years. Both percent females and males 5+ years or older in the harvest are meeting current plan objectives. Black bear complaints and depredation problems have been at tolerable levels. Nuisance complaints in the Wood River Valley continued to be high in 2002 resulting in two bears being euthanized because of their persistent home invasion behavior.

Table 1. Summary of 2002 seasons by method for DAU 4A in the Magic Valley Region.

DAU	Units	Season Type	Season	
			Dates	Length (Days)
4A	44, 45, 48, 49	General Spring, any legal weapon	15 Apr - 22 May	38
		General Fall, any legal weapon	30 Aug - 31 Oct	63
		Pursuit	23 May - 31 Jul	70

Table 2. Black bear harvest by season and sex for DAU 4A in the Magic Valley Region, 1993-2002.

Year	Spring			Fall			Entire Season		
	M	F	Total	M	F	Total	M	F	Total
1993	5	3	8	8	1	9	13	4	17
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	9	5	14	9	5	14	18	10	28
1998	8	5	13	10	2	12	18	7	25
1999	9	4	13	3	6	9	12	10	22
2000	10	1	11	18	13	31	28	14	42
2001	8	4	12	19	10	29	27	14	41
2002	10	2	12	17	11	28	27	13	40
3-yr. average	9	2	11	18	11	29	27	14	41

Table 3. Age distribution of black bear checked from DAU 4A in the Magic Valley Region, 1993-2002.

Year	Sex	Age											Total
		Cub	1	2	3	4	5	6	7	8	9	10+	
1993	M	2	2	1	3	2	0	0	1	0	0	1	12
	F	0	0	0	1	0	0	0	0	0	0	3	4
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	2	2	3	7	1	1	5	3	2	0	1	27
	F	0	0	3	2	1	3	1	0	0	0	2	12

Table 4. 2000-2010 Black Bear Plan management values and criteria for DAU 4A in the Magic Valley Region, 1993-2002.

Year	N ^a	% Females ^b	% Males ≥ 5	# Males ≥ 5
1993	17	24	15	2
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	40	32	44	12
2002	39	31	44	12
3-year average	40	31	34	9
Desired levels		30-40	25-35	

^a Number of black bears that were aged (excluding unknown). Sample sizes typically have been too small to make reliable inferences from the data about population trends.

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

Table 5. Method of black bear harvest for DAU 4A in the Magic Valley Region, 1993-2002.

Year	Bait		Hound		Still		Incidental		Other		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
1993	0	0	4	1	6	3	3	0	0	0	13	4
1994	5	1	6	2	3	3	5	4	0	1	19	11
1995	6	0	1	1	4	1	4	1	0	0	15	3
1996	2	0	4	0	2	4	0	1	0	0	8	5
1997	4	2	3	0	6	4	4	4	1	0	18	10
1998	1	0	4	3	4	2	7	3	1	0	17	8
1999	5	1	2	2	3	4	2	3	0	0	12	10
2000	3	0	10	5	7	4	7	5	1	0	28	14
2001	3	3	9	3	3	3	8	5	4	1	27	15
2002	0	4	12	1	4	1	7	6	1	0	24	12

Table 6. Weapon type used to harvest black bear for DAU 4A in the Magic Valley Region, 1993-2002.

Year	Rifle		Archery		Muzzle-loader		Pistol		Other		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
1993	13	4	0	0	0	0	0	0	0	0	13	4
1994	14	8	5	3	0	0	0	0	0	0	19	11
1995	12	3	1	0	0	0	2	0	0	0	15	3
1996	8	4	0	1	0	0	0	0	0	0	8	5
1997	15	9	2	1	0	0	0	0	1	0	18	10
1998	13	7	2	0	0	0	2	0	1	0	18	7
1999	11	9	0	1	0	0	1	0	0	0	12	10
2000	22	11	3	2	1	0	2	0	0	1	28	14
2001	19	11	3	2	2	0	0	0	3	1	27	14
2002	19	8	5	3	0	0	1	0	0	0	25	11

Table 7. Black bear depredation and nuisance complaints handled in the Magic Valley Region, 1993-2002.

DAU	Year	Depredation ^a	Nuisance
4A	1993	3	2
	1994	1	9
	1995	1	4
	1996	0	1
	1997	2	3
	1998	3	5
	1999	1	8
	2000	4	6
	2001	5	3
	2002	2	11

^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-27</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, 2002 to June 30, 2003</u>		

UPPER SNAKE REGION

ABSTRACT

Black bear harvest has increased markedly in recent years in all three Upper Snake/Southeast Region DAUs. In 2002, total black bear harvest was the highest ever recorded since the implementation of the present DAU framework in DAUs 4B, 4C, and 4D. A total of 198 black bears were harvested (47 in DAU 4B, 70 in 4C, and 81 in 4D). The 198 black bears harvested in 2002 is an increase of 56% over the 1999-2001 average of 127. Reasons for this increase are not well understood, but they may be the result of drier-than-normal weather conditions 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.

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 bear harvest ≥ 5 years old and 30-40% females in the total harvest calculated on a three-year running average. These criteria apply to DAUs with an average annual harvest of ≥ 30 known aged black bears. DAUs 4B, 4C, and 4D have three-year average annual harvests of 41, 50, and 72 black bears, respectively, for the 2000-2002 period. DAU 4C harvest falls below the percent female criteria, indicating a light harvest. DAU 4D was within the female criteria but below the male criteria, suggesting harvest was above the desired level. DAU 4B was barely within the female criteria and just within the male criteria, suggesting harvest was within the desired level but close to being above desired. Three-year average values (2000-2002) for DAUs 4B, 4C, and 4D were 25, 32, and 21, respectively, for percent males ≥ 5 years old. Three-year average values for percent females in the harvest were 39, 25, and 39 for DAUs 4B, 4C, and 4D, respectively.

AREA 4

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

Abstract

Harvest criteria specified in the Black Bear Management Plan have never technically applied to DAU 4B because of low average annual harvest (< 30 black bears). Only 15 black bears were

harvested in 1999 and the three-year average for 1998-2000 was 27. Another confounding factor has been the highly variable nature of the harvest. In 2002, 47 black bears were reported harvested, representing the highest harvest recorded for this DAU. Consequently, harvest data has been highly variable and unreliable.

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 three-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.

A summary of season framework for DAU 4B is presented in Table 1.

Spring and summer weather conditions during 2002 were warmer and drier than normal. Winter precipitation was below normal while temperatures were near the 30-year average. The spring of 2003 came early and warm, dry conditions have persisted.

Population Surveys

A bait station survey was conducted in Units 50, 51, 58, 59, and 59A in July/August 2003 (Table 2). 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. Unit 50 had seven routes with 35 stations, Unit 51 had four routes with 20 stations, Unit 58 had three routes with 15 stations, Unit 59 had three routes with 15 stations, and Unit 59A had three routes with 15 stations. Bait stations were set out for 20 days before being checked. A total of nine baits were visited by bears; one in Unit 50, one in Unit 51, five in Unit 58, one in Unit 59, and one in Unit 59A.

Harvest Characteristics

A relatively small number (<30) of black bears are typically checked from DAU 4B annually; therefore, harvest data and conclusions are tenuous. The Black Bear Management Plan states that when average annual harvest is less than 30 black bears, the black bear management criteria do not apply, and management decisions will be based on professional judgment of Department biologists.

Forty-seven black bears were checked from DAU 4B in 2002, the highest total recorded since the establishment of the present DAU framework in 1986 (Table 3). The harvest of 47 black bears

was 52% higher than the previous three-year average of 31. Age was determined for all 47 black bears harvested in 2002 (Table 4).

While harvest management criteria did not technically apply in this DAU in the past, due to low average annual harvest, levels have surpassed the minimum of 30 bears. Harvest data and plan criteria are presented in Table 5. The 2000-2010 Black Bear Management Plan sets harvest objectives for DAU 4B to maintain harvest levels consistent with the “moderate” harvest targets of 25-35% of the male harvest to be ≥ 5 years old and 30-40% of the total harvest being female. Values for the 2000-2002 period were barely within the desired level for percent of the total harvest being female (39%) and just within the male harvest criteria (25% ≥ 5 years old).

Bait and hound hunters have historically accounted for the majority of the harvest for this DAU, but incidental harvest is increasing (Table 6). This trend continued in 2002 as 16 (34%) black bears were harvested over bait and ten (21%) taken by hound hunters, based on the 47 black bears for which method of harvest was known. Incidental harvest increased from nine (23%) in 2001 to 13 (28%) in 2002. Rifle is the most popular weapon for hunting in this DAU followed by archery (Table 7).

Depredations and Nuisance

One black bear depredation complaint from Custer County involving the loss of 27 sheep/lambs was received by Wildlife Services during this reporting period (Table 8). Wildlife Services personnel verified the loss was caused by black bear. No nuisance black bear reports were received during this reporting period.

Dog-training Seasons

The 2002 dog-training season ran from 16 June - 31 July (46 days) in DAU 4B (Table 1).

Management Implications

Current management criteria specified in the 2000-2010 Black Bear Management Plan have been in effect for only three years. DAU 4B is to be managed to maintain harvest in the “moderate” range. Values for the 2000-2002 period were barely within the desired level for percent of the total harvest being female and just within the male harvest criteria, suggesting harvest was close to being above the desired level. However, this DAU has had chronic problems with inadequate sample sizes (average annual harvest <30 black bears), resulting in highly variable and unreliable indices.

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

Abstract

DAU 4C has 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 three years has exceeded 30 bears. Harvest objectives for DAU 4C have been set to maintain harvest

levels consistent with the “moderate” level of harvest. Harvest over the last three years falls below this level for percent females and falls within the desired level for percent males ≥ 5 years-of-age, indicating a light harvest level.

Management Direction

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

A summary of season framework for DAU 4C is presented in Table 1.

Spring and summer weather conditions during 2002 were warmer and drier than normal. Winter precipitation was below normal while temperatures were near the 30-year average. The spring of 2003 came early and warm, dry conditions have persisted.

Population Surveys

A bait station survey was conducted in parts of Units 61 and 62A in 2002 (Table 2). 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 nine 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 ten bait stations in Black Canyon, and one 7 miles in length with eight bait stations in the Two Top area. Bait stations were set out 9 July and rechecked 17 July. A total of five baits were visited by bears; one on the Targhee Creek/Dry Creek transect, two on the Fish Creek Road transect, and one each on the Black Canyon and Two Top transects. Of the five visitations observed, one contained a single hair sample consistent with black bear, but the other four had no evidence to identify what visited the bait.

Harvest Characteristics

The Black Bear Management Plan states that when average annual harvest is less than 30 black bears, the black bear management criteria do not apply, and management decisions will be based on professional judgment of Department biologists. Historically, a relatively small number of black bears (< 30) were checked from this DAU annually. However, the most recent three-year

average of 50 bears from DAU 4C exceeds the ≥ 30 -bear criteria (Table 3). Therefore, the management criteria in the plan can be used to direct bear management in this DAU.

In addition to hunter harvest, one male bear was also killed by a vehicle at milepost 373 on Highway 20 in September 2002.

Males have dominated harvest from this DAU with spring and fall black bear harvest relatively equally split historically (Table 3). Recently, fall harvest has greatly exceeded spring harvest. Age distribution of black bear checked from DAU 4C is presented in Table 4.

The 2000-2010 Black Bear Management Plan sets harvest objectives for DAU 4C to maintain harvest levels consistent with the “moderate” harvest targets. Values for the 2000-2002 period are within the target for males ≥ 5 years old (32%) but below the percentage of the desired level of percent females (25%), indicating a light harvest (Table 5).

Stalking and incidental hunting dominate the method of take (Table 6) from this DAU. This is most likely due to the restrictions on use of bait and hounds to protect grizzly bear for much of the DAU. Rifle is the most popular weapon for hunting in this DAU followed by archery (Table 7).

Depredations and Nuisance

Three black bear depredation complaints were received by Wildlife Services from DAU 4C during this reporting period (Table 8). All complaints were from Clark County and involved the loss of sheep/lambs. All three bears were dispatched by Wildlife Services. No nuisance black bear reports were received during this reporting period.

Dog-training Season

The 2002 dog-training season ran from 16 June - 31 July (46 days) in the small portion of DAU 4C open to dog-training (that portion of Unit 61 west of Howard Creek in Clark County [Table 1]).

Management Implications

The objectives for DAU 4C are to maintain “moderate” harvest levels. Values for the 2000-2002 period are within the target for males ≥ 5 years old but below the percentage of the desired level of percent females, indicating a light harvest. This population is possibly more lightly harvested than the 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 2002 take season 15 days from previous years. This should provide for a heavier harvest of this DAU in future years.

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

Abstract

Black bear harvest has increased markedly in DAU 4D in recent years. A total of 81 black bears were harvested in 2002. This represents an increase of 35% over the 1999-2001 average annual harvest of 60 bears. Reasons for this increase are not well understood. Recent harvest data indicates that this population is being harvested above the target “moderate” level of harvest management criteria in the 2000-2010 Black Bear Management Plan.

Management Direction

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

A summary of season framework for DAU 4D is presented in Table 1.

Spring and summer weather conditions during 2002 were warmer and drier than normal. Winter precipitation was below normal while temperatures were near the 30-year average. The spring of 2003 came early and warm, dry conditions have persisted.

Population Surveys

No population surveys have been conducted in this DAU since 1999 (Table 2).

Harvest Characteristics

A total of 81 black bears were checked from DAU 4D in 2002 (Table 3). This represents the historical high for this DAU and is the fifth time in the past six years that a new historical high has been established or tied. Those six years also represent the only times that ≥ 30 black bears have been harvested in this DAU in the past ten-year period. The average annual harvest for the 2000-2002 period is 70. Age distribution of black bears checked from DAU 4D is shown in Table 4. Most of the bears harvested fall in the two-to-four-year-old age category.

The 2000-2010 Black Bear Management Plan sets harvest objectives for DAU 4D to maintain harvest levels consistent with the “moderate” harvest targets. Values for the 2000-2002 period were 21% of male harvest ≥ 5 years old and 39% of the harvest female (Table 5).

A large percentage of the black bears harvested in this DAU are taken in the spring (Table 3) and in association with baiting (Table 6). Forty-nine percent of the black bears harvested in this DAU were taken with a rifle (Table 7).

Depredations and Nuisance

Four black bear depredation complaints were received by Wildlife Services from DAU 4D during this reporting period (Table 8). There were three complaints from Bonneville County involving the loss of 13 sheep/lambs and one complaint from Madison County involving the loss of 17 beehives. No nuisance black bear reports were received during this reporting period.

Dog-training Season

The 2002 dog-training season ran from 16 June - 31 July (46 days) in DAU 4D (Table 1).

Management Implications

Black bear harvest has increased markedly in this DAU in recent years. The 81 black bears harvested in 2002 represents a historical high for DAU 4D and is the fifth time in six years that a new high harvest has been established. Reasons for this increased harvest are not well understood, but they may be the result of drier-than-normal conditions over the past few years or a more liberalized hunting season framework brought on by public perceptions of high predator populations and their potential negative impacts on deer and elk numbers.

Management criteria in the 2000-2010 Black Bear Management Plan indicate that this population is presently harvested slightly higher than the targeted “moderate” range for this DAU.

AREA 5

GMUS 60A, 63, 63A

Management Direction

Black bear numbers in Area 5 are low and too sparse to justify a hunting season. The Department has not offered an open season in Area 5.

Background

Area 5 units are irrigated farmland and drier, desert-like areas. Habitat quality is marginal and few black bears occur in Area 5.

Area 5 units have historically had no black bear hunting seasons.

Population Surveys

No population surveys are conducted in Area 5.

Depredations and Nuisance

No black bear depredations were reported in Area 5 during this reporting period.

Management Implications

The Department will not likely offer an open season in Area 5 during the 2000-2010 planning period.

Table 1. Summary of 2002 seasons by method for DAUs in the Upper Snake Region.

DAU	Units	Season Type ^a	Season	
			Dates	Length (Days)
4B	50, 51, 58, 59, 59A	General Fall, any legal weapon	30 Aug - 31 Oct	63
		General Spring, any legal weapon	15 Apr - 15 Jun	62
		Pursuit	16 Jun - 31 Jul	46
4C	60, 61, 62, 62A	General Fall, any legal weapon ^b	30 Aug - 31 Oct	63
		General Spring, any legal weapon ^b	15 Apr - 30 Jun	76
		Pursuit ^c	16 Jun - 31 Jul	46
4D	64, 65, 66, 66A, 67, 69, 76	General Fall, any legal weapon	30 Aug - 31 Oct	63
		General Spring, any legal weapon	15 Apr - 15 Jun	62
		Pursuit	16 Jun - 31 Jul	46

^a Any black bear is legal except female black bear accompanied by young.

^b Dogs and bait prohibited in that portion of Unit 61 east of Howard Creek in Clark County and in all of Units 60, 62, and 62A.

^c Only that portion of Unit 61 west of Howard Creek in Clark County.

Table 2. Bait station survey results for the Upper Snake and Southeast Regions, 1992-2002.

Units 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 ^a	6/24-7/11	16	16	94	0	0.0
	1993	6/24-7/1	18	18	107	1	0.9
66, 66A, 67, 76	1999 ^a	6/24-29	23	23	138	0	0.0
61, 62A	2002 ^{a,b}	7/9-17	4	4	60	5	8.3
50, 51, 58, 59, 59A	2003 ^{a,c}	7/2-8/17	20	20	100	9	9.0

^a First year of data, no comparisons.

^b Transects ranged in length from seven to 32 miles with bait stations at one-mile intervals along transects.

^c All transects were five miles in length with five bait stations per transect at one-mile intervals along transects.

Table 3. Black bear harvest by season and sex for DAUs in the Upper Snake Region, 1993-2002.

DAU/Year	Spring				Fall				Entire Season			
	M	F	U	Total	M	F	U	Total	M	F	U	Total
4B												
1993	4	4	0	8	6	3	0	9	10	7	0	17
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
3 yr. avg.	16	12	0	28	8	5	0	13	24	18	0	42
4C												
1993	7	3	0	10	2	3	0	5	9	6	0	15
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
3 yr. avg.	11	7	0	18	26	6	0	32	37	13	0	50
4D												
1993	8	4	0	12	7	4	0	11	15	8	0	23
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
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
3 yr. avg.	26	17	0	43	17	12	0	29	43	29	0	72

Table 4. Age distribution of black bear for DAUs in the Upper Snake Region, 1993-2002.

DAU/ Year	Sex	Age											Unknown	Total
		Cub	1	2	3	4	5	6	7	8	9	10+		
4B														
1993	M	0	2	2	4	0	0	1	0	0	0	0	1	10
	F	0	0	0	2	3	0	0	0	0	0	1	1	7
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
4C														
1993	M	0	0	1	2	1	1	0	1	1	0	2	0	9
	F	0	0	0	1	1	0	0	0	0	1	1	2	6
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
	F	0	0	0	1	2	0	0	0	1	0	1	0	5
1998	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	^a 2	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

Table 4. Continued.

DAU/ Year	Sex	Age											Unknown	Total
		Cub	1	2	3	4	5	6	7	8	9	10+		
4D														
1993	M	0	1	3	0	3	2	1	1	0	0	2	2	15
	F	0	0	4	1	0	0	0	0	1	1	1	1	9
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
	F	2	2	7	5	7	3	2	0	0	0	3	2	33

^a One bear of unknown sex.

Table 5. 2000-2010 Black Bear Plan management values and criteria for DAUs in the Upper Snake Region, 1993-2002.

DAU/Year	N ^a	% Females ^b	% Males ≥5	# Males ≥5
4B				
1993	15	40	11	1
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
3-year avg.	39	39	25	6
Desired levels		30-40	25-35	
4C				
1993	13	31	56	5
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
3-year avg.	49	25	32	11
Desired levels		30-40	25-35	
4D				
1993	21	38	46	6
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
3-year avg.	70	39	21	8
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 6. Method of black bear harvest for DAUs in the Upper Snake Region, 1993-2002.

DAU/ Year	Bait		Hound		Still		Incidental		Other		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
4B												
1993	2	0	5	4	1	0	2	3	0	0	10	7
1994	1	4	8	3	3	0	3	3	0	0	15	10
1995	4	2	4	4	1	1	2	0	0	0	11	7
1996	6	3	12	2	1	2	2	0	0	0	21	7
1997	7	5	6	2	1	1	3	2	0	0	17	10
1998	6	4	6	2	1	3	1	3	0	0	14	12
1999	3	1	4	0	1	1	4	1	0	0	12	3
2000	10	7	5	4	3	4	2	1	0	0	20	16
2001	10	5	6	4	2	3	3	6	0	0	21	18
2002	11	5	7	3	2	4	8	5	1	1	29	18
4C												
1993	3	1	1	1	3	0	2	4	0	0	9	6
1994	4	2	2	0	7	4	5	1	0	1	18	8
1995	7	3	1	2	5	3	5	2	0	1	18	11
1996	6	1	1	0	6	7	5	2	1	0	19	10
1997	6	0	2	0	7	5	2	0	0	0	17	5
1998	0	1	1	0	4	0	5	3	0	0	10	4
1999	7	1	1	0	4	3	11	3	1	1	24	8
2000	3	3	1	0	15	6	7	2	^a 1	0	27	11
2001	8	1	1	0	12	5	10	3	0	0	31	^b 10
2002	7	4	8	6	17	4	20	4	0	0	52	18
4D												
1993	9	3	0	0	0	1	6	4	0	0	15	8
1994	6	4	0	1	5	0	4	4	0	0	15	9
1995	6	2	0	0	3	1	3	2	0	0	12	5
1996	8	5	5	2	3	0	2	3	0	1	18	11
1997	21	4	3	2	1	2	2	2	0	1	27	11
1998	11	1	9	2	1	0	3	4	1	1	25	8
1999	14	5	5	3	2	3	8	4	0	0	29	15
2000	19	11	6	5	5	2	2	3	3	0	35	21
2001	25	13	7	7	8	10	5	1	1	0	46	^c 33
2002	20	11	16	8	3	3	7	8	2	3	48	33

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

^b One bear of unknown sex taken incidental.

^c Two females taken by unknown method.

Table 7. Weapon type used to harvest black bear for DAUs in the Upper Snake Region, 1993-2002.

DAU/ Year	Rifle		Archery		Muzzleloader		Pistol		Other		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
4B												
1993	4	4	5	2	0	0	1	1	0	0	10	7
1994	10	4	4	5	0	1	1	0	0	0	15	10
1995	8	4	2	0	0	0	1	2	0	1	11	7
1996	11	4	3	3	1	0	6	0	0	0	21	7
1997	8	3	8	5	0	0	1	2	0	0	17	10
1998	7	8	4	3	0	0	3	1	0	0	14	12
1999	8	3	1	0	1	0	2	0	0	0	12	3
2000	14	12	3	3	1	1	1	0	1	0	20	16
2001	17	9	3	7	0	0	1	2	0	0	21	18
2002	11	14	13	4	0	0	5	0	0	0	29	18
4C												
1993	7	5	1	0	0	0	1	1	0	0	9	6
1994	13	5	2	3	0	0	3	0	0	0	18	8
1995	14	7	2	2	0	0	2	2	0	0	18	11
1996	12	9	5	1	1	0	1	0	0	0	19	10
1997	12	4	4	1	0	0	1	0	0	0	17	5
1998	6	3	3	1	0	0	1	0	0	0	10	4
1999	16	8	7	0	0	0	1	0	0	0	23	9
2000	19	8	6	3	0	0	2	0	0	0	27	11
2001	21	^a 8	9	2	0	0	1	0	0	0	31	^a 10
2002	36	10	11	6	0	0	5	2	0	0	52	18
4D												
1993	8	5	7	2	0	0	0	1	0	0	15	8
1994	9	6	5	2	0	0	1	1	0	0	15	9
1995	8	5	4	0	0	0	0	0	0	0	12	5
1996	8	8	7	3	0	0	3	0	0	0	18	11
1997	14	7	6	1	0	0	6	3	1	0	27	11
1998	14	7	6	0	0	1	4	0	1	0	25	8
1999	14	12	11	2	0	0	4	1	0	0	29	15
2000	18	13	13	7	1	0	2	1	1	0	35	21
2001	23	17	14	11	1	0	6	5	1	0	^b 46	33
2002	21	19	12	7	13	7	2	0	0	0	48	33

^a One bear of unknown sex taken with a rifle.

^b One male taken with unknown weapon.

Table 8. Black bear depredation and nuisance complaints handled in the Upper Snake Region, 1993-2002.

Year	4B		4C		4D		Total	
	Dep.	Nuis.	Dep.	Nuis.	Dep.	Nuis.	Dep.	Nuis.
1993 ^a	0		1		6		7	
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

^a Depredation and nuisance complaints combined.

**PROGRESS REPORT
SURVEYS AND INVENTORIES**

STATE:	<u>Idaho</u>	JOB TITLE:	<u>Black Bear Surveys and</u>
PROJECT:	<u>W-170-R-27</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, 2002 to June 30, 2003</u>		

SALMON REGION

ABSTRACT

The 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 again 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, additional days of hunting opportunity were recently added to both the spring and fall seasons in these DAUs. Harvest increased, likely in part due to regulation changes. During 2001, 198 bears were harvested in the Salmon Region and the 2002 harvest of 248 was the largest since 1983. Approximately 16% of harvest (34/yr.) occurred during extended seasons over the last three years. Bait and hound hunters appear to be slightly more selective in the animals they take (approximately 32% females) compared to still and incidental hunters (approximately 36% females).

AREA 1

DAU 1I (GMUS 34, 35, 36)

Management Direction

Follow statewide management direction in the 2000-2010 Black Bear Management Plan. Management direction for DAU 1I is to maintain a heavy harvest rate; <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 on the south. Virtually all of DAU 1I is land administered by the 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. The area receives high recreational use throughout the year. Black bear season structure is reported in Table 2.

This area typically receives high snowfall and endures cold winter temperatures. Precipitation during summer and fall 2002 was normal to above normal, producing normal to good forage and ungulate body condition entering the 2002-2003 winter. Winter snowpack was normal to slightly above normal at higher elevations (i.e., above 7,000 feet). However, winter weather was relatively mild, particularly at lower elevations where snow conditions were variable, and much snowfall occurred later in winter than normal.

Population Surveys

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

Harvest Characteristics

Harvest in 2002 was about the same as 2001 and similar to the 1999-2001 average (Table 3). Conditions were somewhat dry through late October; dry fall seasons generally make females and young black bears much more vulnerable than under more moist conditions. Sex and age composition of harvest in DAU 1I indicates a much lighter harvest rate than specified in the 2000-2010 management plan (Tables 4 and 5). The percent of males ≥ 5 years moved closer to goal level in 2000 and 2001, but moved away from the goal level in 2002. However, the three-year average is closer to the goal. Use of hounds to harvest bears increased from 1999 through 2001, but declined in 2002. Hound-hunting still accounts for $>40\%$ of black bears harvested in this DAU (Table 6). Approximately 52% of bears are taken by still hunters and incidentally to other hunting; approximately 77% of hunters use rifles (Table 7).

Depredations

Depredations in this DAU usually accounted for the majority of black bear problems in the Salmon Region prior to 1994 (Table 8). Complaints were chronic problems with garbage in the same locations each year. The USFS provided black bear-proof trash containers for the 1994 season in Stanley area campgrounds, which helped alleviate some problems. Since then, depredation complaints have decreased. There was one depredation complaint during the reporting period.

Management Implications

Management direction for this area is to maintain a heavy harvest rate ($<25\%$ males ≥ 5 years old and $>40\%$ females in the harvest). Harvest indicator criteria for this DAU suggest a light harvest rate. Accordingly, the spring 2000 black bear season ending date was extended from 7 June to 30 June, creating an additional 24 days to hunt black bears. In addition, the fall 1999 season in Unit 36 opened 30 August, 16 days earlier than in prior years. Extended seasons accounted for 36% of harvest in 2002, up from approximately 30% in 2001.

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

Management Direction

Follow statewide management direction in the 2000-2010 Black Bear Management Plan. Management direction for DAU 1J is to maintain a moderate harvest rate; 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. This DAU is highly roaded which makes black bear populations vulnerable to overharvest.

Units in DAU 1J contain some of the best black bear habitat in the 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 is reported in Table 2.

Most of DAU 1J is public land, primarily USFS, with some BLM and Idaho State lands. Private property in these units 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 3). Typical of dry years, black bear harvest increased dramatically in DAU 1J during 2000, reaching the highest level since 1983. Conditions were again somewhat dry in 2001 and harvest remained high with 102 bears taken. A dry weather pattern prevailed in 2002 and harvest reached a new high with 132 bears taken. Average sex and age composition of DAU 1J black bear harvest indicates a lighter harvest rate than specified in the 2000-2010 management plan (Tables 4 and 5); however, percent males ≥ 5 years moved closer to goal level during the last three seasons. Over the last ten years, harvest by hunters using bait and hounds averaged 26% females compared to still hunter and incidental harvest of 33% females (Table 6). In most years, 80-85% of black bears are taken by rifle (Table 7).

Depredations

Black bear depredation complaints in past years have been primarily related to fruit trees and garbage along the Salmon River below the North Fork. The USFS installed black bear-proof dumpsters at dump sites along the Salmon River for the 1994 season. The dry summer and fall

produced very poor forage conditions and a dramatic increase in black bear complaints during 1994. Since 1995, complaints fluctuated widely from zero to 18 (Table 8). Because of dry conditions in 2002, soft mast crops were small. Consequently, complaints increased to nine for this DAU.

Management Implications

Management direction for this area is to maintain a moderate harvest rate (25-35% males \geq 5 years old and 30-40% females in the harvest). Harvest indicator criteria for this DAU suggest a light harvest rate. Accordingly, fall 1999 season opened 30 August, 16 days earlier than in prior years, and spring 2000 black bear season ending date was extended from 15 June to 30 June, creating a total of 31 additional days to hunt black bears. Extended season dates accounted for approximately 16% of harvest during the last two seasons.

AREA 4

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

Management Direction

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

Background

Units in DAU 4E generally are 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 (Table 2).

Population Surveys

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

Harvest Characteristics

Typically, 25-35 black bears are harvested in DAU 4E, ranging from 14 in 1992 to 47 in 2001 (Table 3). The 72 black bears harvested in 2002 is the highest level since 1983, an increase of 25 from 2001. Most of this increase occurred during the fall season. Sex and age composition of DAU 4E black bear harvest indicates a harvest rate within or very close to that specified in the 2000-2010 management plan (Tables 4 and 5). Percentage of females in the harvest has been within the desired range during most recent years. Male harvest age structure generally has been older than specified in the management plan. Female composition and male age structure stayed within management goals in 2002. As in other DAUs, harvest by hunters using bait and hounds

is composed of a lower proportion of females (33%) compared to still or incidental hunters (47%, Table 6). In the last three years, hunters using a rifle has been approximately 67% (Table 7).

Depredations

Except for 1994, an unusually dry year, DAU 4E experiences relatively few depredation problems (Table 8). Five complaints were reported in 2002.

Management Implications

Management direction for this area is to maintain a moderate harvest rate (25-35% males \geq 5 years old and 30-40% females in the harvest). Harvest indicator criteria for this DAU suggest harvest at or near goal levels. Fall 1999 season opened 30 August, 16 days earlier than in prior years, and spring 2000 black bear season ending date was extended from 15 June to 30 June, creating a total of 31 additional days to hunt black bears. The extended season dates accounted for approximately 20% of harvest during the last two seasons.

Table 1. Harvest criteria for black bear in Idaho.

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

Table 2. Summary of 2002 seasons by method for DAUs in the Salmon Region.

DAU	Units	Season Type ^a	Season	
			Dates	Length (Days)
1I	34, 35, 36	General Fall, any legal weapon	30 Aug - 31 Oct	63
		General Spring, any legal weapon	15 Apr - 30 Jun	77
		Pursuit	1 - 31 Jul	31
1J	21, 21A, 28, 36B	General Fall, any legal weapon	30 Aug - 31 Oct	63
		General Spring, any legal weapon	15 Apr - 30 Jun	77
		Pursuit	1 - 31 Jul	31
4E	29, 30, 30A, 36A, 37, 37A	General Fall, any legal weapon	30 Aug - 31 Oct	63
		General Spring, any legal weapon	15 Apr - 30 Jun	77
		Pursuit	1 - 31 Jul	31

^a Bag limit includes any black bear except females accompanied by young.

Table 3. Black bear harvest by season and sex for DAUs in the Salmon Region, 1993-2002.

DAU/Year	Spring			Fall			Entire Season		
	M	F	Total	M	F	Total	M	F	Total
1I									
1993	13	6	19	10	11	21	23	17	40
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	20	33	6	39
2000	22	5	27	17	4	21	39	9	48
2001	18	10	28	14	4	18	32	14	46
2002	16	8	24	15	5	20	31	13	44
3-yr. avg.	19	8	27	15	4	19	34	12	46
1J									
1993	24	11	35	24	7	31	48	18	66
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	10	30	12	11	23	32	21	53
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	43	76	27	103
2001	53	19	72	23	7	30	76	26	102
2002	44	23	67	44	21	65	88	44	132
3-yr. avg.	48	19	67	32	14	46	80	32	112
4E									
1993	11	5	16	11	4	15	22	9	31
1994	11	9	20	10	6	16	21	15	36
1995	18	6	24	6	9	15	24	15	39
1996	13	4	17	3	5	8	16	9	25
1997	17	8	25	1	3	4	18	11	29
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	27	11	38	4	5	9	31	16	47
2002	27	15	42	16	14	30	43	29	72
3-yr. avg.	24	14	38	9	7	16	32	21	53

Table 4. Age distribution of black bear for DAUs in the Salmon Region, 1993-2002.

DAU/ Year	Sex	Age											Unknown	Total
		Cub	1	2	3	4	5	6	7	8	9	10+		
II														
1993	M	0	2	1	0	5	1	2	3	2	4	1	2	23
	F	0	2	0	3	2	1	1	0	2	0	3	3	17
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	4	1	2	4	1	2	2	1	2	4	4	28
	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	5	3	5	1	1	1	6	32
	F	0	1	0	0	0	1	0	2	0	0	1	1	6
2000	M	0	2	5	11	7	1	2	2	2	2	1	5	40
	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	5	7	5	2	3	1	1	1	5	0	30
	F	0	0	1	0	4	3	0	1	0	0	3	0	12
IJ														
1993	M	0	5	5	15	9	1	1	7	0	0	4	1	48
	F	1	1	1	3	2	1	0	2	1	2	2	2	18
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	1	3	8	6	5	3	5	1	1	2	3	1	39
	F	0	2	7	8	2	9	0	0	0	2	7	0	37
1996	M	0	3	3	9	10	3	5	1	1	1	5	2	43
	F	0	0	0	2	4	1	1	1	1	1	1	0	12
1997	M	0	5	4	4	3	6	0	2	3	0	4	1	32
	F	0	2	2	2	2	4	0	0	1	1	3	4	21
1998	M	0	4	9	5	2	5	4	2	3	0	1	6	41
	F	0	0	1	1	1	1	2	1	2	0	3	0	12
1999	M	0	3	1	6	3	4	6	2	4	3	4	2	38
	F	0	1	1	4	0	1	0	2	0	0	2	1	12
2000	M	0	6	20	6	16	5	3	5	5	3	3	4	76
	F	0	2	7	2	7	0	2	0	3	0	4	0	27
2001	M	0	8	11	16	9	10	0	5	1	2	9	5	76
	F	0	3	0	3	1	1	2	3	1	1	10	1	26
2002	M	0	10	18	8	13	11	9	2	5	3	8	0	87
	F	0	3	8	4	10	2	5	3	0	1	6	0	42

Table 4. Continued.

DAU/ Year	Sex	Age											Unknown	Total
		Cub	1	2	3	4	5	6	7	8	9	10+		
4E														
1993	M	1	3	3	7	2	0	2	1	0	0	2	1	22
	F	0	2	1	2	1	0	0	1	0	0	2	0	9
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	5	4	0	0	0	2	2	2	26
	F	0	0	2	4	1	0	0	1	0	0	4	2	14
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	0	0	4	3	3	2	0	3	2	0	0	1	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
	F	0	1	6	3	1	0	1	1	1	0	3	2	19
2001	M	0	2	6	5	4	9	1	0	2	0	2	0	31
	F	0	0	2	4	0	1	0	2	2	1	3	1	16
2002	M	0	2	14	7	7	2	5	0	1	1	3	0	42
	F	0	4	6	4	0	1	1	0	1	2	8	0	27

Table 5. 2000-2010 Black Bear Plan management values and criteria for DAUs in the Salmon Region, 1993-2002.

DAU/Year	N ^a	% Females	% Males ≥5 ^b	# Males ≥5 ^b
II				
1993	40	43	62	13
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	38	16	62	16
2000	49	18	29	10
2001	46	30	36	10
2002	42	29	43	13
3-year avg.	46	26	36	11
Desired levels		>40	<25	
1J				
1993	66	27	28	13
1994	81	31	31	17
1995	73	48	39	15
1996	55	22	39	16
1997	54	40	48	15
1998	53	23	43	15
1999	50	24	64	23
2000	103	26	33	24
2001	102	25	38	27
2002	132	33	44	38
3-year avg.	112	28	38	30
Desired levels		30-40	25-35	
4E				
1993	31	29	24	5
1994	36	42	26	4
1995	39	39	33	8
1996	25	36	41	6
1997	29	38	41	7
1998	26	58	55	6
1999	39	36	52	13
2000	43	45	14	3
2001	47	34	45	14
2002	72	40	29	12
3-year avg.	54	40	29	10
Desired levels		30-40	25-35	

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

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

Table 6. Method of black bear harvest for DAUs in the Salmon Region, 1993-2002.

DAU/ Year	Bait		Hound		Still		Incidental		Other		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
1I												
1993	8	5	6	2	3	4	5	5	2	1	24	17
1994	7	5	7	4	9	6	9	7	0	0	32	22
1995	6	2	3	5	3	3	14	5	0	0	26	15
1996	7	2	3	1	0	2	7	2	0	0	17	7
1997	5	2	4	0	2	2	4	3	0	0	15	7
1998	1	0	1	2	5	0	6	2	0	0	13	4
1999	12	2	4	1	8	2	9	1	0	0	33	6
2000	21	4	1	1	8	2	10	2	1	0	41	9
2001	13	7	4	2	5	2	8	3	2	0	32	14
2002	12	7	1	0	13	4	5	1	0	1	31	13
1J												
1993	11	1	15	4	11	6	11	7	0	0	48	18
1994	10	5	24	2	11	6	11	12	0	0	56	25
1995	6	7	9	13	11	7	12	8	0	0	38	35
1996	14	4	13	3	8	2	7	3	1	0	43	12
1997	7	4	9	8	8	2	8	7	0	1	32	22
1998	9	4	14	1	6	3	10	4	2	0	41	12
1999	10	2	15	2	8	2	5	5	0	1	38	12
2000	30	7	11	4	24	9	10	5	1	2	76	27
2001	21	12	15	2	18	5	15	3	7	4	76	26
2002	24	10	15	6	27	16	21	10	1	2	88	44
4E												
1993	4	5	5	0	1	2	12	2	0	0	22	9
1994	2	2	10	4	3	5	5	4	1	0	21	15
1995	9	3	8	1	3	3	4	8	0	0	24	15
1996	6	3	5	0	3	3	2	3	0	0	16	9
1997	4	5	11	1	1	1	2	4	0	0	18	11
1998	4	7	4	1	2	1	1	6	0	0	11	15
1999	10	5	9	3	2	3	3	2	1	1	25	14
2000	7	11	7	3	5	2	4	3	0	0	23	19
2001	20	8	3	2	1	3	5	2	2	1	31	16
2002	17	11	9	2	5	4	12	11	0	0	43	28

Table 7. Weapon type used to harvest black bear for DAUs in the Salmon Region, 1993-2002.

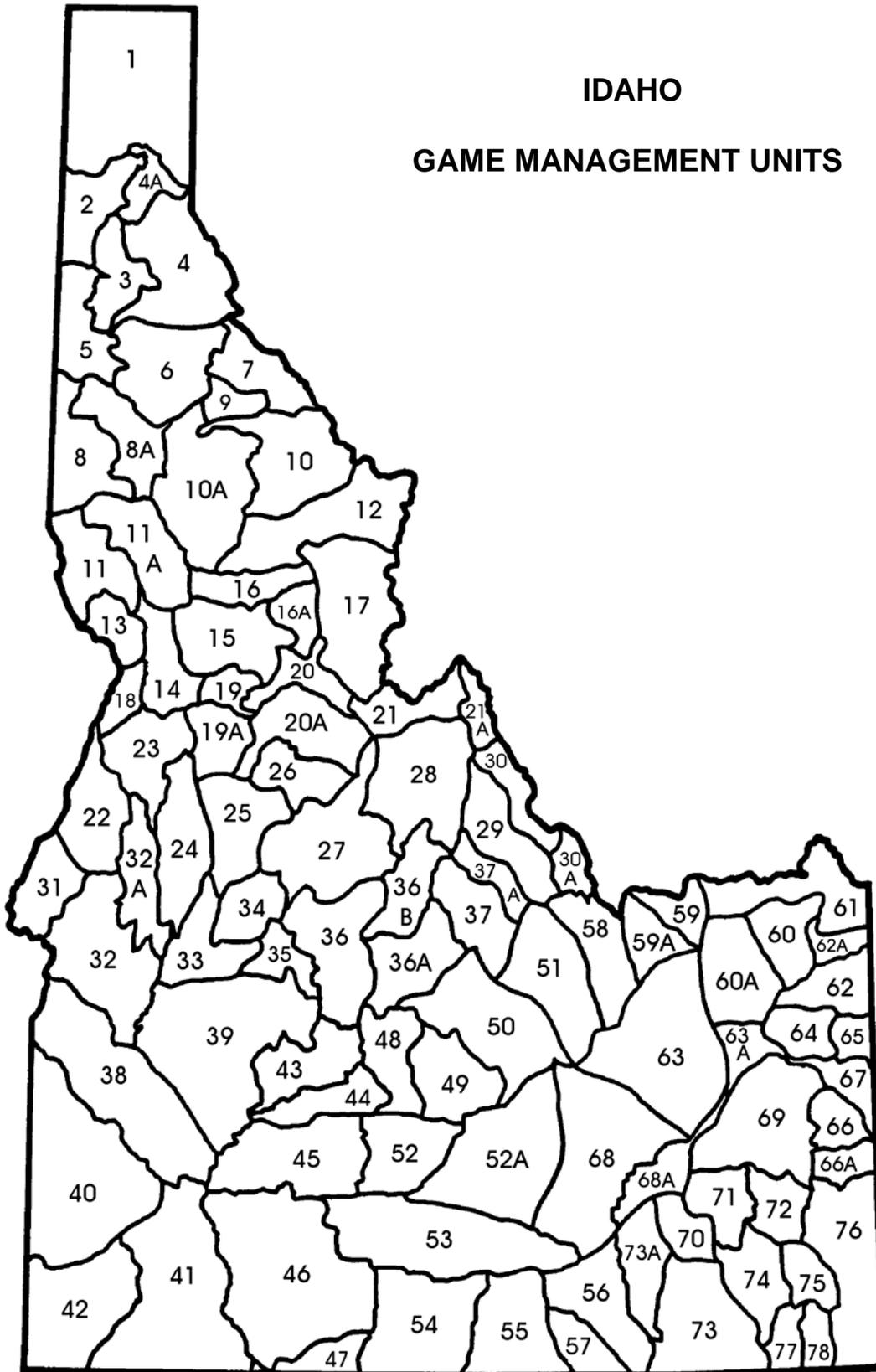
Year	Rifle		Archery		Muzzle-loader		Pistol		Other		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
II												
1993	15	16	4	1	0	0	4	0	0	0	23	17
1994	24	19	4	3	0	0	4	1	1	0	33	23
1995	23	11	3	2	0	0	4	2	0	0	30	15
1996	12	6	1	1	0	0	4	0	0	0	17	7
1997	12	5	0	2	0	0	3	0	0	0	15	7
1998	9	3	3	0	0	0	1	1	0	0	13	4
1999	24	4	8	1	1	0	0	1	0	0	33	6
2000	31	6	6	3	0	0	2	0	0	0	39	9
2001	21	9	6	4	0	0	4	1	1	0	32	14
2002	24	10	6	1	0	1	1	1	0	0	31	13
IJ												
1993	41	12	5	1	0	0	1	5	1	0	48	18
1994	40	20	9	4	0	0	7	1	0	0	56	25
1995	31	26	4	5	0	0	2	3	1	1	38	35
1996	35	11	6	1	0	0	2	0	0	0	43	12
1997	27	16	4	4	1	0	0	2	0	0	32	22
1998	31	10	7	1	1	1	2	0	0	0	41	12
1999	31	11	6	1	0	0	1	0	0	0	38	12
2000	61	23	11	3	1	0	2	0	1	1	76	27
2001	64	22	8	2	2	1	2	1	0	0	76	26
2002	73	37	12	4	0	1	3	0	0	0	88	42
4E												
1993	15	6	3	3	0	0	4	0	0	0	22	9
1994	16	9	5	1	0	2	0	3	0	0	21	15
1995	16	12	5	2	0	0	3	1	0	0	24	15
1996	12	9	2	0	0	0	1	0	1	0	16	9
1997	13	8	3	2	0	0	2	1	0	0	18	11
1998	6	14	2	1	0	0	2	0	1	0	11	15
1999	14	8	4	3	0	0	7	2	0	1	25	14
2000	15	13	5	4	0	0	3	1	0	1	23	19
2001	18	12	9	4	1	0	3	0	0	0	31	16
2002	28	23	8	4	2	1	4	1	1	0	43	29

Table 8. Black bear depredation complaints handled in the Salmon Region, 1993-2002.

Year	DAU			Total
	1I	1J	4E	
1993	22	5	3	30
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

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.

