

**IDAHO DEPARTMENT OF FISH AND GAME**

**Steven M. Huffaker, Director**

**Project W-170-R-25**

**Job Progress Report**



**BLACK BEAR**

**Study I, Job 9**

**Prepared by:**

Jim Hayden ..... Panhandle Region  
Steve Nadeau ..... Clearwater Region  
Jeff Rohlman ..... Southwest (McCall) Region  
Randall Smith ..... Magic Valley Region  
Brad Compton, David Koehler ..... Upper Snake Region  
Mike Scott ..... Salmon Region

Compiled and edited by Steve Nadeau and Jim Unsworth.

July 1, 2000 to June 30, 2001

April 2002

Boise, Idaho



Findings in this report are preliminary in nature and not for publication without permission of the Director of the Idaho Department of Fish and Game.

The Idaho Department of Fish and Game adheres to all applicable state and federal laws and regulations related to discrimination on the basis of race, color, national origin, age, gender, or handicap. If you feel you have been discriminated against in any program, activity, or facility of the Idaho Department of Fish and Game, or if you desire further information, please write to: Idaho Department of Fish and Game, PO Box 25, Boise, ID 83707; or the Office of Human Resources, U.S. Fish and Wildlife Service, Department of the Interior, Washington, DC 20240.

This publication will be made available in alternative formats upon request. Please contact the Idaho Department of Fish and Game for assistance.

## TABLE OF CONTENTS

STATEWIDE.....	1
SUMMARY .....	1
PANHANDLE REGION .....	3
ABSTRACT.....	3
AREA 1.....	3
DAU 1A (GMU 1).....	4
DAU 1B (GMUS 2, 3, AND 5) .....	6
DAU 1C (GMUs 4 AND 4A) .....	7
DAU 1L (GMU 6) .....	9
AREA 2.....	10
DAU 2B (GMUs 7 AND 9).....	10
CLEARWATER REGION .....	24
ABSTRACT.....	24
AREA 1.....	24
DAU 1D (GMUs 8A AND 10A).....	24
DAU 1E (GMUs 8, 11, 11A AND 13) .....	26
DAU 1F (GMUs 14, 15, 16 AND 18) .....	28
AREA 2.....	30
DAU 2A (GMUs 10 AND 12).....	30
AREA 3.....	32
DAU 3A (GMUs 16A, 17, 19, AND 20).....	32
SOUTHWEST REGION .....	49
ABSTRACT.....	49
AREA 1.....	50
DAU 1G (GMUs 19A, 23, 24, AND 25).....	50
DAU 1H (GMUs 22, 31, 32, AND 32A).....	50
DAU 1K (GMUs 33, 39, AND 43).....	50
AREA 3.....	53
DAU 3B (GMUs 20A, 26, AND 27) .....	53

**TABLE OF CONTENTS (Continued)**

MAGIC VALLEY REGION .....70

    ABSTRACT.....70

    AREA 4.....70

        DAU 4A (GMUs 44, 45, 48, AND 49).....70

UPPER SNAKE REGION.....77

    ABSTRACT.....77

    AREA 4.....77

        DAU 4B (GMUs 50, 51, 58, 59, AND 59A) .....77

        DAU 4C (GMUs 60, 61, 62, AND 62A) .....80

        DAU 4D (GMUs 64, 65, 66, 66A, 67, 69, AND 76).....82

    AREA 5.....84

        GMUs 60A, 63, AND 63A .....84

SALMON REGION.....95

    ABSTRACT.....95

    AREA 1.....95

        DAU 1I (GMUs 34, 35, AND 36) .....95

        DAU 1J (GMUs 21, 21A, 28, AND 36B).....97

    AREA 4.....98

        DAU 4E (GMUs 29, 30, 30A, 36A, 37, AND 37A).....98

**LIST OF TABLES**

PANHANDLE REGION

Table 1. Desired harvest categories and harvest criteria for DAUs 1A, 1B, 1C, 1L, and 2B. ....12

Table 2. Summary of 1999 seasons by method for DAUs 1A, 1B, 1C, 1L, and 2B. ....12

Table 3. Black bear harvest by season and sex of black bear taken in DAU1A (GMU 1) 1997-2000. ....13

Table 4. Age distribution of black bears, DAU 1A (GMU 1), 1997-2000. Includes only black bear with both known age and sex. ....13

Table 5. Method of harvest of black bear taken in DAU 1A (GMU 1), 1997-2000 .....14

Table 6. Weapon type used to harvest black bear in DAU 1A (GMU 1) 1997-2000.....14

**TABLE OF CONTENTS (Continued)**

Table 7. Black bear depredation complaints handled in the Panhandle Region, 1991-2000. ....14

Table 8. 2000-2010 Black bear plan management values and criteria for DAU 1A, (GMU 1).....15

Table 9. Black bear harvest by season and sex of black bear taken in DAU 1B (GMUs 2, 3, and 5) 1996-1999. ....15

Table 10. Age distribution of black bears checked from DAU 1B (GMUs 2, 3, and 5), 1997-2000. Includes only black bear with both known age and sex. ....16

Table 11. Method of harvest of black bear taken in DAU 1B (GMUs 2, 3, and 5), 1997-2000. ....16

Table 12. Weapon type used to harvest black bear in DAU 1B (GMUs 2, 3, and 5), 1997-2000. ....17

Table 13. 2000-2010 Black bear plan management values and criteria for DAU 1B (GMUs 2, 3, and 5), 1998-2000. ....17

Table 14. Black bear harvest by season and sex of black bear taken in DAU 1C (GMUs 4 and 4A) 1997-2000. ....17

Table 15. Age distribution of black bears checked from DAU 1C, (GMUs 4 and 4A), 1997-2000. Includes only black bear with both known age and sex. ....18

Table 16. Method of harvest of black bear taken in DAU 1C (GMUs 4 and 4A), 1997-2000. ....18

Table 17. Weapon type used to harvest black bear in DAU 1C (GMUs 4 and 4A), 1997-2000. ....18

Table 18. 2000-2010 Black bear plan management values and criteria for DAU 1C, (GMUs 4 and 4A), 1998-2000. ....19

Table 19. Black bear harvest by season and sex of black bear taken in DAU 1L (GMU 6), 1997-2000. ....19

Table 20. Age distribution of black bears checked from DAU 1L (GMU 6), 1997-2000. Includes only black bear with both known age and sex. ....20

Table 21. Method of harvest of black bear taken in DAU 1L (GMU 6), 1997-2000. ....20

Table 22. Weapon type used to harvest black bear in DAU 1L (GMU 6), 1997-2000. ....20

Table 23. 2000-2010 Black bear plan management values and criteria for DAU 1L (GMU 6), 1998-2000. ....21

Table 24. Black bear harvest by season and sex of black bear taken in DAU 2B (GMUs 7 and 9) 1997-2000. ....21

Table 25. Age distribution of black bears checked from DAU 2B (GMUs 7 and 9), 1997-2000. Includes only black bear with both known age and sex. ....22

**TABLE OF CONTENTS (Continued)**

Table 26. Method of harvest of black bear taken in DAU 2B (GMUs 7 and 9), 1997-2000. ....22

Table 27. Weapon type used to harvest black bear in DAU 2B (GMUs 7 and 9),  
1997-2000. ....22

Table 28. 2000-2010 Black bear plan management values and criteria for DAU 2B,  
(GMUs 7 and 9), 1998-2000.....23

**CLEARWATER REGION**

Table 1. Summary of Seasons by Method for DAUs 1D, 1E, 1F, 2A, and 3A for 2000.....34

Table 2. Bait station survey results for the Clearwater Region, DAUs 1D, 1E, 1F, 2A, and  
3A, 1993-2000. ....35

Table 3. Black bear harvest by season and sex of black bear taken in DAU 1D (GMUs 8A  
and 10A) 1990-2000. ....36

Table 4. Age distribution of black bear checked from DAU 1D, (GMUs 8A and 10A)  
1990-2000. ....36

Table 5. Values of 2000-2010 management plan criteria for DAU 1D, 1990-2000. ....37

Table 6. Method of harvest of black bear taken in DAU 1D, (GMUs 8A and 10A) 1990-  
2000.....37

Table 7. Weapon type used to harvest black bear in DAU 1D, (GMUs 8A and 10A)  
1990-2000. ....38

Table 8. Black bear depredation complaints handled in the Clearwater Region, 1991-2000. ....38

Table 9. Black bear harvest by season and sex of black bear taken in DAU 1E (GMUs 8,  
11, 11A, and 13) 1990-2000. ....39

Table 10. Age distribution of black bear checked from DAU 1E (GMUs 8, 11, 11A, and  
13), 1992-2000.....39

Table 11. Values of the 2000-2010 management plan criteria for DAU 1E, 1990-2000.....40

Table 12. Method of harvest of black bear taken in DAU 1E (GMUs 8, 11, 11A, and 13)  
1990-2000. ....40

Table 13. Weapon type used to harvest black bear in DAU 1E, 1990-2000. ....41

Table 14. Black bear harvest by season and sex of black bear taken in 1F (GMUs 14, 15,  
16, and 18) 1990-2000. ....41

Table 15. Age distribution of black bear checked from DAU 1F (GMUs 14, 15, 16, and  
18) 1992-2000.....42

Table 16. Values of the 1992-2000 and 2000-2010 management plan criteria for DAU 1F,  
1990-2000. ....42

**TABLE OF CONTENTS (Continued)**

Table 17. Method of harvest of black bear taken in DAU 1F, (GMUs 14, 15, 16, and 18) 1990-2000. ....43

Table 18. Weapon type used to harvest black bear in DAU 1F (GMUs 14, 15, 16 and 18) 1990-2000. ....43

Table 19. Black bear harvest by season and sex of black bear taken in DAU 2A (GMUs 10 and 12) 1990-2000. ....44

Table 20. Age distribution of black bear checked from DAU 2A (GMUs 10 and 12) 1992-2000. ....44

Table 21. Values of the 2000-2010 management plans criteria for DAU 2A, 1990-2000. ....45

Table 22. Method of harvest of black bear taken in DAU 2A, (GMUs 10 and 12) 1990-2000. ....45

Table 23. Weapon type used to harvest black bear in DAU 2A, (GMUs 10 and 12) 1990-2000. ....46

Table 24. Black bear harvest by season and sex of black bear taken in DAU 3A (GMUs 16A, 17, 19, and 20) 1990-2000. ....46

Table 25. Age distribution of black bear checked from DAU 3A (GMUs 16A, 17, 19, and 20) 1990-2000. ....47

Table 26. Values of the 2000-2010 management plans criteria for DAU 3A, 1990-2000. ....47

Table 27. Method of harvest of black bear taken in DAU 3A (GMUs 16A, 17, 19, and 20) 1990-2000. ....48

Table 28. Weapon type used to harvest black bear in DAU 3A (GMUs 16A, 17, 19, and 20) 1990-2000. ....48

**SOUTHWEST REGION**

Table 1. Harvest criteria for black bear in Idaho. ....55

Table 2. Summary of Seasons by Method for DAUs 1G, 1H, and 1K, July 1, 1999 - June 30, 2000. ....55

Table 3. Bait station survey results from Council routes (DAU 1H), 1985-2001. ....56

Table 4. Black bear harvest by season and sex of black bear taken in DAU 1G (GMUs 19A, 23, 24, and 25) 1983-2000. ....57

Table 5. Age distribution of black bear checked from DAU 1G (GMUs 19A, 23, 24, and 25) 1992-2000. ....58

Table 6. Median ages and values of the 2000-2010 management plan criteria for DAU 1G (GMUs 19A, 23, 24, and 25) 1990-2000. ....58

Table 7. Method of harvest of black bear taken in DAU 1G (GMUs 19A, 23, 24, and 25) 1987-2000. ....59

**TABLE OF CONTENTS (Continued)**

Table 8. Weapon type used to harvest black bear in DAU 1G (GMUs 19A, 23, 24, and 25) 1987-2000. ....59

Table 9. Black bear harvest by season and sex of black bear taken in DAU 1H (GMUs 22, 31, 32, and 32A) 1983-2000. ....60

Table 10. Age distribution of black bear checked from DAU 1H (GMUs 22, 31, 32, and 32A) 1992-2000. ....61

Table 11. Median ages and values of the 2000-2010 management plan criteria for DAU 1H (GMUs 22, 31, 32, and 32A) 1990-2000. ....61

Table 12. Method of harvest of black bear taken in DAU 1H (GMUs 22, 31, 32, and 32A) 1987-2000. ....62

Table 13. Weapon type used to harvest black bear in DAU 1H (GMUs 22, 31, 32, and 32A) 1987-2000. ....62

Table 14. Black bear harvest by season and sex of black bear taken in 1K (GMUs 33, 39, and 43) 1983-2000. ....63

Table 15. Age distribution of black bear checked from DAU 1K (GMUs 33, 39, and 43) 1992-2000. ....64

Table 16. Median ages and values of the 2000-2010 management plan criteria for DAU 1K (GMUs 33, 39, and 43) 1990-2000. ....64

Table 17. Method of harvest of black bear taken in DAU 1K (GMUs 33, 39 and 43) 1987-2000. ....65

Table 18. Weapon type used to harvest black bear in DAU 1K (GMUs 33, 39 and 43) 1987-2000. ....65

Table 19. Black bear depredation complaints handled in the Southwest Region, 1992-2000. ....66

Table 20. Summary of Seasons by Method for DAU 3B, July 1, 1999 - June 30, 2000. ....66

Table 21. Black bear harvest by season and sex of black bear taken in DAU 3B (GMUs 20A, 26, and 27) 1983-2000. ....67

Table 22. Age distribution of black bear checked from DAU 3B (GMUs 20A, 26, and 27) 1992-2000. ....67

Table 23. Median ages and values of the 2000-2010 management plan criteria for DAU 3B (GMUs 20A, 26, and 27) 1990-2000. ....68

Table 24. Method of harvest of black bear taken in DAU 3B (GMUs 20A, 26, and 27) 1987-2000. ....68

Table 25. Weapon type used to harvest black bear in DAU 3B (GMUs 20A, 26, and 27) 1987-2000. ....69

**TABLE OF CONTENTS (Continued)**

**MAGIC VALLEY REGION**

Table 1. Summary of seasons by method for DAU 4A, 2000. ....73

Table 2. Black bear harvest by season and sex of black bear taken in DAU 4A, 1985-2000. ....73

Table 3. Age distribution of black bear checked from DAU 4A, 1994-2000.....74

Table 4. Values of the 1992-2000 and 2000-2010 management plan criteria for DAU 4A, 1988-2000. ....74

Table 5. Method of harvest of black bear taken in DAU 4A, 1987-2000. ....75

Table 6. Weapon type used to harvest black bear in DAU 4A, 1987-2000.....75

Table 7. Black bear depredation complaints handled in the Magic Valley Region, 1994-2000. ....76

**UPPER SNAKE REGION**

Table 1. Summary of Seasons by Method for DAUs 4B, 4C, and 4D, Fall 2000-Spring 2001.....85

Table 2. Black bear harvest by season and sex of black bear taken in DAU 4B (GMUs 50, 51, 58, 59, and 59A) since 1991. ....86

Table 3. Age distribution of black bear checked from DAU 4B (GMUs 50, 51, 58, 59, and 59A), 1991-2000.....86

Table 4. Values of the 1992-2000 management plan criteria for DAU 4B (GMUs 50, 51, 58, 59, and 59A), 1991-2000. ....87

Table 4. Values of the 1992-2000 management plan criteria for DAU 4B (GMUs 50, 51, 58, 59, and 59A), 1991-2000. ....87

Table 5. Method of harvest of black bear taken in DAU 4B (GMUs 50, 51, 58, 59, and 59A), 1991-2000.....87

Table 6. Weapon type used to harvest black bear in DAU 4B (GMUs 50, 51, 58, 59, and 59A), 1991-2000.....88

Table 7. Black bear depredation complaints handled in the Upper Snake Region, 1991-2000. ....88

Table 8. Black bear harvest by season and sex of black bear taken in DAU 4C (GMUs 60, 61, 62, and 62A) since 1991. ....89

Table 9. Age distribution of black bear checked from DAU 4C (GMUs 60, 61, 62, and 62A), 1991-2000.....89

Table 10. Values of the 1992-2000 management plan criteria for DAU 4C (GMUs 60, 61, 62, and 62A), 1991-2000. ....90

**TABLE OF CONTENTS (Continued)**

Table 11. Method of harvest of black bear taken in DAU 4C (GMUs 60, 61, 62, and 62A), 1991-2000. ....90

Table 12. Weapon type used to harvest black bear in DAU 4C (GMUs 60, 61, 62, and 62A), 1991-2000. ....91

Table 13. Bait station survey results from DAU 4D (GMUs 64, 65, 66, 66A, 67, 69, and 76). ....91

Table 14. Black bear harvest by season and sex of black bear taken in DAU 4D (GMUs 64, 65, 66, 66A, 67, 69, and 76) since 1991. ....92

Table 14. Black bear harvest by season and sex of black bear taken in DAU 4D (GMUs 64, 65, 66, 66A, 67, 69, and 76) since 1991. ....92

Table 15. Age distribution of black bear checked from DAU 4D (GMUs 64, 65, 66, 66A, 67, 69, and 76), 1991-2000. ....92

Table 16. Values of the 1992-2000 management plan criteria for DAU 4D (GMUs 64, 65, 66, 66A, 67, 69, and 76), 1991-2000. ....93

Table 17. Method of harvest of black bear taken in DAU 4D, 1991-2000. ....93

Table 18. Weapon used to harvest black bear taken in the Upper Snake Region portion of DAU 4D, 1991-2000. ....94

**SALMON REGION**

Table 1. Harvest criteria for black bear in Idaho. ....100

Table 2. Summary of seasons for DAUs 1I, 1J, and 4E, July 1, 2000-June 30, 2001. ....100

Table 3. Black bear harvest by season, DAU 1I<sup>a</sup>, (GMUs 34, 35 and 36) 1983-present. ....101

Table 4. Age distribution of harvested black bear, DAU 1I<sup>a</sup>, GMUs 34, 35 and 36 1995-2000. ....101

Table 5. Status of black bear population characteristics relative to management criteria, DAU 1I, 1990-present. ....102

Table 6. Method of harvest of black bear, DAU 1I (Units 34, 35, and 36), 1990-present. ....102

Table 7. Weapon type used to harvest black bear, DAU 1I (Units 34, 35, and 36), 1990-present. ....103

Table 8. Black bear harvest by season, DAU 1J<sup>a</sup>, (GMUs 21, 21A, 28 and 36B) 1983-present. ....103

Table 9. Age distribution of harvested black bear, DAU 1J<sup>a</sup>, 1995-2000. ....104

Table 10. Status of black bear population characteristics relative to management criteria, DAU 1J, 1990-present. ....104

**TABLE OF CONTENTS (Continued)**

Table 11. Method of harvest of black bear, DAU 1J (Units 21, 21A, 28, and 36B), 1990-present.....105

Table 12. Weapon type used to harvest black bear, DAU 1J (Units 21, 21A, 28, and 36B), 1990-present.....105

Table 13. Black bear harvest by season, DAU 4E<sup>a</sup>, 1983-present.....106

Table 14. Age distribution of harvested black bear, DAU 4E<sup>a</sup>, 1995-2000. ....106

Table 15. Status of black bear population characteristics relative to management criteria, DAU 4E, 1990-present.....107

Table 16. Method of harvest of black bear, DAU 4E (Units 29, 30, 30A, 36A, 37, and 37A), 1990-present. ....107

Table 17. Weapon type used to harvest black bear, DAU 4E (Units 29, 30, 30, 30A, 36A, 37 and 37A), 1990-present.....108

Table 18. Black bear depredation complaints, Salmon Region, 1990-present. ....108

**LIST OF FIGURES**

Figure 1. Twenty-one Data Analysis Units for black bear management in Idaho.....2

**PROGRESS REPORT  
SURVEYS AND INVENTORIES**

<b>STATE:</b>	<u>Idaho</u>	<b>JOB TITLE:</b>	<u>Black bear Surveys and Inventories</u>
<b>PROJECT:</b>	<u>W-170-R-25</u>		
<b>SUBPROJECT:</b>	<u>1-7</u>	<b>STUDY NAME:</b>	<u>Big Game Population Status, Trends,</u>
<b>STUDY:</b>	<u>I</u>		<u>Utilization and Associated Habitat</u>
<b>JOB:</b>	<u>9</u>		<u>Studies</u>
<b>PERIOD COVERED:</b>	<u>July 1, 2000 to June 30, 2001</u>		

**BLACK BEAR – STATEWIDE**

**SUMMARY**

The Idaho Department of Fish and Game collected harvest information on black bears in 2000 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 10 days of the kill date.

A total of 32,358 black bear tags were sold to resident and nonresident black bear hunters in 2000. The Department also issued 1,865 baiting permits and sold 3,173 resident and 115 nonresident hound hunter permits in 2000.

Successful black bear hunters checked 1,830 black bears at Department regional offices or official checkpoints. Of the black bears harvested, 907 (50%) were taken during the fall season. Males comprised 70% of the spring harvest and 63% of the fall harvest. The most common harvest technique used during 2000 was still hunting 625 (34%). Hunters using bait harvested 455 (25%) black bears, hunters using dogs took 337 (18%) black bears, and incidental hunters took 362 (20%) black bears. Archers killed 213 (17%) black bears and rifle hunters killed 1,513 (83%) black bears in 2000. Hunters using guides took 280 black bears: 50% over bait, 25% using dogs, and 14% using still hunting methods.

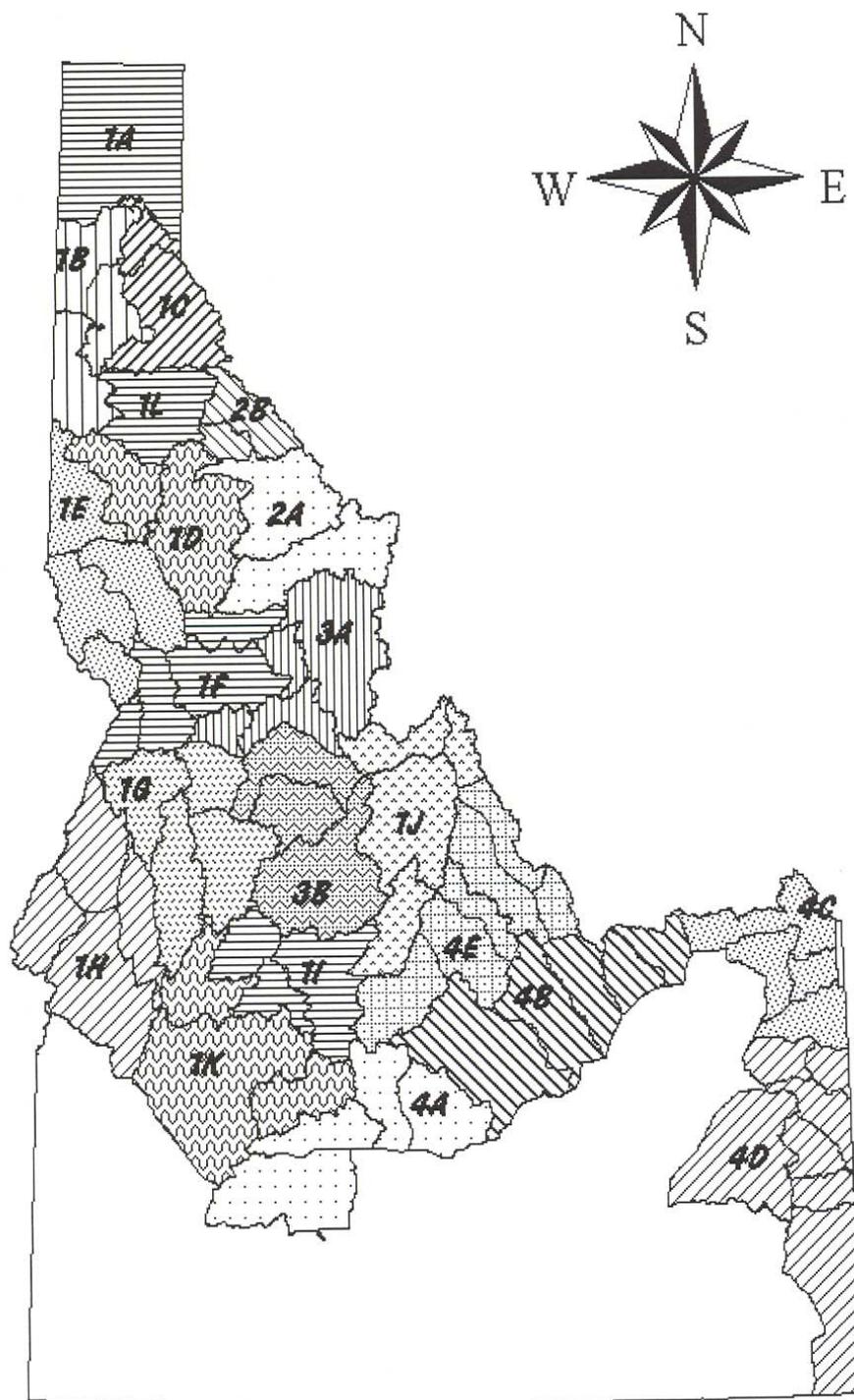


Figure 1. Twenty-one Data Analysis Units for black bear management in Idaho.

**PROGRESS REPORT  
SURVEYS AND INVENTORIES**

<b>STATE:</b>	<u>Idaho</u>	<b>JOB TITLE:</b>	<u>Black bear Surveys and Inventories</u>
<b>PROJECT:</b>	<u>W-170-R-25</u>		
<b>SUBPROJECT:</b>	<u>1</u>	<b>STUDY NAME:</b>	<u>Big Game Population Status, Trends,</u>
<b>STUDY:</b>	<u>I</u>		<u>Use, and Associated Habitat</u>
<b>JOB:</b>	<u>9</u>		<u>Studies</u>
<b>PERIOD COVERED:</b>	<u>July 1, 2000 to June 30, 2001</u>		

**BLACK BEAR - PANHANDLE REGION**

**ABSTRACT**

The reported harvest of 465 black bears in the Panhandle Region in 2000 is 26% below the previous 3-year average and 20% below the previous 5-year average. However, 1998 was an abnormal year because of a general huckleberry crop failure, resulting in very high harvest that fall. If 1998 is removed from the harvest figures, the 2000 harvest is 11% below the previous 5-year average. Female harvest (154) was 27% below the 3-year average and 14% below the 5-year average with the 1998 harvest removed. Male harvest (310) was 23% below the 3-year average and 8 % below the 5-year average with the 1998 harvest removed.

No DAUs in the Panhandle Region meet both black bear management plan objectives for harvest criteria (% females in the harvest and % males 5+ in the male harvest). DAU 1A is identified as a light harvest unit. Female harvest is in the moderate category and male harvest is categorized as light. DAUs 1B and 1C are both identified for heavy harvest. DAU 1B is moderate for both male and female criteria. DAU 1C is moderate for female and light for male harvest criteria. DAUs 1L and 2B are identified for moderate harvest. DAU 1L is moderate for females and light for male harvest criteria. DAU 2B is light in both female and male criteria. Because these criteria reflect new management direction for some DAUs, it will take time to achieve harvest targets. Depredation complaints were near normal. This is likely explained by normal berry production in 2000 and the lagging effects of the high harvest experienced during the 1998 huckleberry crop failure.

**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 2000-2010 Black Bear Species Management Plan developed desired harvest rates for each DAU based on biological and social considerations. Harvest rates will be monitored using age- and sex-based measures to determine whether goals are being achieved in each DAU. These criteria are the 3-year running average of percent females and the percent males five years or older. Harvest rates are categorized as light (<30% females, >35% males 5+), moderate (30-40% females, 25-35% males 5+, and heavy (>40% females and <25% males 5+). Desired harvest rates for the Panhandle Region are listed in Table 1. These criteria were effective beginning with the fall 1999 hunting season. A summary of the 2000 seasons for the Panhandle Region can be found in Table 2.

## DAU 1A (GMU 1)

### ABSTRACT

Reported harvest of black bear in DAU 1A was 161 during 2000. The percentage of females in the 2000 harvest was 29%, and 46% of the males in the harvest were 5+ years old. Spring harvest has been stable over the past 4 years. Fall harvest was down 56% and overall harvest declined 34%, following a 29% decline in 1999. Harvest is likely influenced by the very high kill in 1998. This DAU is targeted for light harvest. Female harvest is currently moderate and male age structure in the harvest is light.

### 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. This DAU currently exceeds the female harvest criteria (3-yr average = 32%), but continues to provide a high percentage of older males (48% males  $\geq 5$ ).

### BACKGROUND

Black bear management is heavily influenced by grizzly black 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 allowed in a portion of DAU 1A outside of these recovery areas. This area was increased and the number of permits increased for the 1999 season. During 1993 the general season was shortened from 108 to 80 days and has since been increased to the current 94 days (Table 2).

In general dense conifer habitat types characterize this DAU. Portions of the Selkirk, Cabinet, and Purcell ranges are included in this DAU, with the broad Kootenai River valley providing the only substantial agriculture area. Overall DAU 1A contains some of the highest quality black bear habitat in Idaho.

## HARVEST CHARACTERISTICS

### Mandatory Check

The 161 black bears checked during 2000 was 34% below that of the past 3-year average (Table 3). The spring 2000 kill was near normal, but the fall kill was low. The same trend was evident in 1999, with a 29% decrease in harvest.

The 183 black bears checked during 1999 was 29% below that of the past 3-year average (Table 4). The spring 1999 kill was near normal, but the fall kill was low. Berry production was average in 1999, unlike 1997 and 1998 when berry crops were poor.

### Sex Ratio/Age Structure

The percentage of females in the 2000 harvest was 29% and the 3-year average was 32%. The percentage of males  $\geq 5$  years old was 46% in 2000 and the 3-year average was 48%. While female kill exceeds the criteria for light harvest, this DAU continues to provide a high percentage of older males (Table 4).

### Method of Take

Because bait is prohibited in this DAU and hounds are restricted to a small controlled hunt, most of the harvest is by still hunting. Eighty-six percent of the 2000 black bear harvest in DAU 1A was by hunters specifically seeking and stalking black bear (Table 5).

### Weapon

Nearly all (97%) of the black bears in DAU 1A are killed with rifles (Table 6).

## DEPREDATIONS

Depredations have been a significant problem in DAU 1A, largely because of sanitation problems in the Priest Lake area. However only 19 complaints were recorded in 2000, near normal levels (Table 7). Steps have been taken to address some of these sanitation issues at county dump sites and state parks, but problems will likely persist. Berry production was normal in 2000. A very poor berry crop in 1998 was responsible for the extremely high number of problems that year. In poor berry years like that experienced in 1998, depredations will always be present.

## 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

The female harvest percent for light harvest was met in 2000, but the 3-year average is still slightly above the desired level (Table 8). The harvested male population is fairly old and meets the management criterion. Recent investigations show a very high density of black bears in DAU 1A relative to other units in the Panhandle. The female portion of the harvest should continue to be examined to see if the improving trend continues.

### DAU 1B (GMUS 2, 3, AND 5)

#### ABSTRACT

Reported black bear harvest in DAU 1B was 107 during 2000, a 27% decrease over the 1997-1999 average. The percent of females in the harvest was 41% and the males 5+ years old made up 18% of the male harvest. This DAU is targeted for heavy harvest. Female harvest is currently moderate and male age structure in the harvest is moderate.

#### 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. Female harvest meets this objective while male harvest does not. However, harvest shows a significant trend in achieving the desired male harvest levels.

#### 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

##### Mandatory Check

The 2000 harvest of 107 black bears is 27% below that for the previous 3 years, with most of the decrease in the fall season (Table 9).

##### Sex Ratio/Age Structure

The percentage of females in the 2000 harvest was 41% and the 3-year average was 40%. The percentage of males  $\geq 5$  years old was 18% in 2000 and the 3-year average was 29%. The female

harvest meets the heavy harvest targets in the 2000-2010 Black Bear Management Plan and the male harvest shows a significant trend toward the target (Table 10).

#### Method of Take

Use of baiting and hounds is substantial in DAU 1B. Forty-three percent of the black bears harvested in this DAU are taken with one of these aids (Table 11). Still hunting (44%) accounted for most of the rest of the harvest.

#### Weapon

Eighty-seven percent of the black bears taken in DAU 1B are taken with a rifle (Table 12).

### DEPREDATIONS

Fourteen depredation complaints were recorded in 2000, near normal levels (Table 7).

### DOG TRAINING SEASONS

There is no dog training season in this DAU due to the high level of private ownership and high recreation use of public lands near Coeur d'Alene.

### MANAGEMENT IMPLICATIONS

Female harvest criterion is being met in this DAU (Table 13). While the male harvest criterion is not being met, it shows a definite trend toward the desired heavy harvest category. No season changes are anticipated in this DAU.

### DAU 1C (GMUs 4 AND 4A)

#### ABSTRACT

Reported black bear harvest in DAU 1C was 95 during 2000, down 26% from the 3-year average. Females comprised 35% of the harvest and males 5+ years old made up 45% of the male harvest. This DAU is targeted for heavy harvest. Female harvest is currently moderate and male age structure in the harvest is light.

### 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 US Forest Service 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

### Mandatory Check

The 2000 harvest of 95 black bears is 26% lower than the 1997-1999 average (Table 14).

### Sex Ratio/Age Structure

The percentage of females in the 2000 harvest was 35% and the 3-year average was 34%. The percentage of males >5 years old was 45% in 2000 and the 3-year average was 42% (Table 15).

### Method of Take

This DAU has traditionally supported a substantial harvest for hunters using hounds. This type of use declined abruptly during 1992, concurrent with an increase in other categories. Only 7% of the harvest was with hounds in 1998. Hound hunting harvest increased to 25% in 1999 and 28% in 2000 (Table 16).

### Weapon

Over 90% of the black bears killed in DAU 1C are taken with rifles (Table 17).

## DEPREDTATIONS

DAU 1C has historically had few black bear depredations despite the high human presence found in the Silver Valley (Table 7). Twenty-three complaints were recorded in 2000, similar to those of 1999.

## DOG TRAINING SEASONS

The 2000 dog training season in DAU 1C was May 16-July 31.

## MANAGEMENT IMPLICATIONS

This DAU is not meeting the management goal of heavy harvest despite changes in the 2000 season (Table 18). Both criteria (% females in the harvest, % 5+-year-old males in the harvest) appear stable over the past 3 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 51 during 2000, down 42% from the previous 3-year average. Females made up 39% of the harvest and 5+ males comprised 52% of the male harvest. This DAU is targeted for moderate harvest. Female harvest is currently moderate and male age structure in the harvest is light.

### 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 US Forest Service, 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

#### Mandatory Check

Harvest in this DAU has fluctuated little since the mandatory check began in 1983, ranging between 50 and 80 black bears. Harvest the past 3 years exceeded this range, averaging 88 black bears. The harvest of 51 this year represents a significant decline of 42% (Table 19).

#### Sex Ratio/Age Structure

The percentage of females in the 2000 harvest was 39% and the 3-year average was 36%. The percentage of males  $\geq 5$  years old was 52% in 2000 and the 3-year average was 46%. Females are within the desired category of moderate harvest while males are in the light harvest category, based on the 2000-2010 Black Bear Management Plan (Table 20).

#### Method of Take

Sixty-nine percent of the black bear kill in this DAU is from still and incidental hunters (Table 21), the remainder being almost entirely with use of hounds.

## Weapons

Nearly all black bears taken in this DAU are taken with a rifle (Table 22).

## DEPREDATIONS

One depredation complaint was received in this DAU during 2000 (Table 7).

## DOG TRAINING SEASONS

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

## MANAGEMENT IMPLICATIONS

This DAU meets management criterion for female harvest (Table 23). The male harvest contains more older bears than is targeted in the Black Bear Management Plan. Newly-instituted baiting regulations may alter this aspect of the harvest. No changes in hunting regulations are anticipated in this DAU.

## AREA 2

### DAU 2B (GMUs 7 AND 9)

## ABSTRACT

Harvest of black bears in DAU 2B was 51 during 2000, 15% below the previous 3-year average. Females comprised 22% of the harvest and males 5+ years old made up 56% of the male harvest. This DAU is targeted for moderate harvest. Female and male harvests are currently in the light category.

## 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 U.S. Forest Service.

## HARVEST CHARACTERISTICS

### Mandatory Check

Harvest in this DAU is relatively low and quite variable. There was little change from the 3-year average during 2000, with 51 black bears harvested (Table 24).

### Sex Ratio/Age Structure

The percentage of females in the 2000 harvest was 22% and the 3-year average was 29%. The percentage of males  $\geq 5$  years old was 56% in 2000 and the 3-year average was 51% (Table 25).

### Method of Harvest

There was an increase in the percent of black bears killed using hounds in 1999 and 2000. Nearly 15% of the black bears were killed using hounds the past 2 years, compared to only 5-7% in previous years (Table 26).

### Weapon

Seventy-six percent of the black bears taken in this DAU are killed with a rifle (Table 27).

## DEPREDATIONS

Depredations are virtually nonexistent in this DAU (Table 7) due to the lack of private property. No depredation complaints were recorded in this DAU in 2000.

## DOG TRAINING SEASONS

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

## MANAGEMENT IMPLICATIONS

Season changes initiated in 1993 have had little effect on harvest numbers in this DAU, likely due to the low level of still-hunting here. Outfitters in this DAU have recently focused more attention on black bear hunting opportunities. This DAU does not meet management criteria for moderate harvest. Both criteria are in the light category (Table 28). Limited access will drive harvest more than season structure.

Table 1. Desired harvest categories and harvest criteria for DAUs 1A, 1B, 1C, 1L, and 2B.

DAU	Desired Harvest Category	Harvest Criteria	
		% Females	% Males $\geq$ 5
1A	Light	<30%	>35%
1B	Heavy	>40%	<25%
1C	Heavy	>40%	<25%
1L	Moderate	30-40%	25-35%
2B	Moderate	30-40%	25-35%

Table 2. Summary of 1999 seasons by method for DAUs 1A, 1B, 1C, 1L, and 2B.

Season Type <sup>a</sup>	DAU	Units	Season	
			Dates	Length (Days)
General, any legal weapon	1A <sup>b</sup>	1	9/15-10/31	47
			4/15-5/31	47
			9/15-10/9	25
General, any legal weapon	1B <sup>d</sup>	2, 3, 5	9/15-10/31	47
			4/15-5/15	31
General, any legal weapon	1C <sup>d</sup>	4, 4A	8/30-10/31	62
			4/15-5/15	31
Pursuit			5/16-7/31	77
General, any legal weapon	1L <sup>d</sup>	6	8/30-10/31	62
			4/15-5/15	31
Pursuit			5/16-7/31	77
General, any legal weapon	2B	7, 9	8/30-10/31	62
			4/15-6/30	78
Pursuit			7/1-7/31	31

<sup>a</sup> Any black bear is legal except female black bear accompanied by young.

<sup>b</sup> Dogs prohibited, bait prohibited.

<sup>c</sup> Dogs allowed, bait prohibited, 15 permits, for a portion of Unit 1.

<sup>d</sup> Dogs prohibited 4/15-4/30.

Table 3. Black bear harvest by season and sex of black bear taken in DAU1A (GMU 1) 1997-2000.

Year	<u>Spring</u>			<u>Fall</u>			<u>Entire Season</u>		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1997	64	26	90	82	60	143	<sup>a</sup> 146	86	233
1998	75	29	104	140	69	<sup>a</sup> 210	215	98	<sup>a</sup> 314
1999	76	37	113	40	28	<sup>b</sup> 70	116	65	<sup>b</sup> 183
Ave.	72	31	102	87	52	141	159	83	243
2000	70	30	100	44	16	<sup>a</sup> 61	114	46	<sup>a</sup> 161
Change	-3%	-3%	-2%	-49%	-69%	-56%	-28%	-45%	-34%

<sup>a</sup> Totals include one black bear, sex unknown.

<sup>b</sup> Totals include two black bears, sex unknown.

Table 4. Age distribution of black bears, DAU 1A (GMU 1), 1997-2000. Includes only black bear with both known age and sex.

Age	<u>1997</u>		<u>1998</u>		<u>1999</u>		<u>2000</u>	
	M	F	M	F	M	F	M	F
1	18	8	1	0	8	6	5	0
2	27	10	10	1	13	3	9	3
3	26	22	4	3	17	7	13	3
4	16	3	10	4	13	4	22	4
5	15	8	3	0	15	4	8	3
6	7	5	3	0	3	0	9	6
7	7	4	1	5	6	2	7	1
8	3	5	3	0	7	4	6	3
9	7	0	2	1	7	2	4	1
10+	11	15	11	6	12	23	7	14
Total	137	80	48	20	101	55	90	38

Table 5. Method of harvest of black bear taken in DAU 1A (GMU 1), 1997-2000

Year	<u>Bait</u>			<u>Hound</u>			<u>Still</u>			<u>Incidental</u>			<u>Unknown</u>			<u>Total</u>		
	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U
1997	1	0	0	0	1	0	84	51	0	53	28	0	8	6	1	146	86	1
1998	0	0	0	0	0	0	171	78	0	30	16	0	5	4	1	215	98	1
1999	0	0	0	0	4	0	101	43	1	13	15	0	2	3	1	116	65	2
2000	0	0	0	2	3	0	100	37	1	7	4	0	5	2	0	114	46	1

Table 6. Weapon type used to harvest black bear in DAU 1A (GMU 1) 1997-2000.

Year	<u>Rifle</u>			<u>Archery</u>			<u>Muzzleloader</u>			<u>Pistol</u>			<u>Unknown</u>			<u>Total</u>		
	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U
1997	138	83	0	1	1	0	0	0	0	4	1	0	1	1	0	144	86	1
1998	196	95	0	7	2	0	0	0	0	5	1	0	76	1	1	215	98	1
1999	109	62	1	3	0	0	0	1	0	3	2	0	1	0	1	116	65	2
2000	109	45	1	1	1	0	1	0	0	3	0	0	0	0	0	114	46	1

Table 7. Black bear depredation complaints handled in the Panhandle Region, 1991-2000.

DAU	YEAR										
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	
1A	45	13	6	18	38	18	66	167	14	19	
1B	13	3	4	10	18	22	34	103	7	14	
1C	4	1	2	0	5	2	4	46	24	23	
1L	1	1	1	0	0	0	0	17	1	1	
2B	0	1	0	0	0	0	0	7	0	0	

Table 8. 2000-2010 Black bear plan management values and criteria for DAU 1A, (GMU 1).

Year	N	Females	Males $\geq$ 5
1998	314	31%	48%
1999	183	36%	50%
2000	161	29%	46%
3-year Average		32%	48%
Desired levels		>30%	<35%

Table 9. Black bear harvest by season and sex of black bear taken in DAU 1B (GMUs 2, 3, and 5) 1996-1999.

Year	<u>Spring</u>			<u>Fall</u>			<u>Entire Season</u>		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1997	19	15	<sup>a</sup> 35	51	32	<sup>a</sup> 84	70	47	<sup>b</sup> 119
1998	42	24	66	79	59	<sup>a</sup> 139	121	83	<sup>a</sup> 205
1999	29	12	41	40	33	73	69	45	114
Ave.	30	17	47	57	41	99	87	58	146
2000	26	16	42	37	28	65	63	44	<sup>107</sup>
Change	-13%	-1%	-11%	-35%	-32%	-34%	-29%	-24%	-2%

<sup>a</sup> Total includes one black bear, sex unknown.

<sup>b</sup> Total includes two black bears, sex unknown.

Table 10. Age distribution of black bears checked from DAU 1B (GMUs 2, 3, and 5), 1997-2000. Includes only black bear with both known age and sex.

Age	1997		1998		1999		2000	
	M	F	M	F	M	F	M	F
1	18	6	0	1	8	3	4	1
2	10	6	6	3	10	2	13	3
3	16	12	0	1	23	10	10	4
4	7	2	10	6	3	5	10	3
5	7	2	2	0	9	3	2	4
6	2	1	2	3	2	4	4	4
7	2	4	1	0	3	4	0	2
8	1	3	1	1	3	0	1	2
9	2	0	1	0	1	1	1	1
10+	1	8	4	7	1	9	0	10
Total	66	44	27	22	63	41	45	34

Table 11. Method of harvest of black bear taken in DAU 1B (GMUs 2, 3, and 5), 1997-2000.

Year	Bait			Hound			Still			Incidental			Unknown			Total		
	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U
1997	11	9	0	12	11	0	25	11	1	18	16	1	4	0	0	70	47	2
1998	23	24	0	25	17	0	49	26	0	22	19	1	2	6	0	121	83	1
1999	14	11	0	17	11	0	23	18	0	14	5	0	1	0	0	69	45	0
2000	16	8	0	14	8	0	24	23	0	7	4	0	2	1	0	63	44	0

Table 12. Weapon type used to harvest black bear in DAU 1B (GMUs 2, 3, and 5), 1997-2000.

Year	<u>Rifle</u>			<u>Archery</u>			<u>Muzzleloader</u>			<u>Pistol</u>			<u>Other</u>			<u>Total</u>		
	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U
1997	59	40	2	5	4	0	1	1	0	1	1	0	4	1	0	70	47	2
1998	106	70	1	8	7	0	0	1	0	4	3	0	0	0	0	121	83	1
1999	55	41	0	10	2	0	1	0	0	2	2	0	1	0	0	69	45	0
2000	54	39	0	6	2	0	1	0	0	1	1	0	1	2	0	63	44	0

Table 13. 2000-2010 Black bear plan management values and criteria for DAU 1B (GMUs 2, 3, and 5), 1998-2000.

Year	N	Females	Males $\geq$ 5
1998	205	40%	41%
1999	114	39%	30%
2000	107	41%	18%
3-year Average		40%	29%
Desired levels		>40%	<25%

Table 14. Black bear harvest by season and sex of black bear taken in DAU 1C (GMUs 4 and 4A) 1997-2000.

Year	<u>Spring</u>			<u>Fall</u>			<u>Entire Season</u>		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1997	17	3	20	50	39	<sup>a</sup> 90	67	42	<sup>a</sup> 110
1998	40	14	54	56	33	89	96	47	143
1999	23	20	<sup>a</sup> 44	62	26	88	85	46	<sup>a</sup> 132
Ave.	27	12	39	56	33	89	83	45	128
2000	21	7	<sup>28</sup>	41	26	67	62	33	95
Change	-22%	-42%	-28%	-27%	-21%	-25%	-25%	-27%	-26%

<sup>a</sup> Total includes one black bear, sex unknown.

Table 15. Age distribution of black bears checked from DAU 1C, (GMUs 4 and 4A), 1997-2000. Includes only black bear with both known age and sex.

Age	1997		1998		1999		2000	
	M	F	M	F	M	F	M	F
1	20	10	0	1	6	2	4	0
2	10	4	3	0	17	5	6	3
3	18	6	3	0	16	8	9	5
4	3	3	9	2	6	2	8	1
5	3	4	0	2	11	8	4	1
6	0	0	3	0	2	3	3	2
7	3	2	0	1	7	3	4	0
8	1	1	3	0	3	0	2	2
9	0	2	1	0	2	7	2	5
10+	4	6	3	0	5	4	7	6
Total	62	39	25	6	75	42	49	25

Table 16. Method of harvest of black bear taken in DAU 1C (GMUs 4 and 4A), 1997-2000.

Year	Bait			Hound			Still			Incidental			Unknown			Total		
	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U
1997	6	3	0	1	2	0	35	19	0	25	16	1	1	2	0	68	42	1
1998	15	6	0	16	4	0	39	22	0	24	15	0	1	0	1	95	47	1
1999	6	7	0	24	8	1	31	15	0	21	16	0	3	0	0	85	46	1
2000	9	2	0	16	11	0	30	11	0	6	8	0	1	1	0	62	33	0

Table 17. Weapon type used to harvest black bear in DAU 1C (GMUs 4 and 4A), 1997-2000.

Year	Rifle			Archery			Muzzleloader			Pistol			Unknown			Total		
	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U
1997	60	41	1	4	0	0	1	0	0	1	0	0	1	1	0	67	42	1
1998	86	45	0	7	1	0	0	0	0	2	1	0	2	0	0	95	47	1
1999	78	42	1	1	3	0	0	0	0	4	1	0	2	0	0	85	46	1
2000	57	29	0	4	3	0	0	0	0	1	1	0	0	0	0	62	33	0

Table 18. 2000-2010 Black bear plan management values and criteria for DAU 1C, (GMUs 4 and 4A), 1998-2000.

Year	N	Females	Males $\geq$ 5
1998	143	33%	40%
1999	132	35%	40%
2000	95	35%	45%
3-year Average		34%	42%
Desired levels		>40%	<25%

Table 19. Black bear harvest by season and sex of black bear taken in DAU 1L (GMU 6), 1997-2000.

Year	<u>Spring</u>			<u>Fall</u>			<u>Entire Season</u>		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1997	14	9	23	30	27	57	44	36	80
1998	34	8	42	38	19	57	72	27	99
1999	25	16	41	27	16	43	52	32	84
Ave.									
2000	13	7	20	18	13	31	31	20	51
Change	-46%	-36%	-43%	-44%	-38%	-40%	+45%	-37%	-42%

Table 20. Age distribution of black bears checked from DAU 1L (GMU 6), 1997-2000. Includes only black bear with both known age and sex.

Age	1997		1998		1999		2000	
	M	F	M	F	M	F	M	F
1	12	6	0	0	0	0	0	1
2	6	4	5	1	7	2	6	
3	9	6	3	1	15	9	1	2
4	5	1	6	3	4	1	7	4
5	3	3	0	0	8	5	4	0
6	2	1	4	1	2	0	5	1
7	1	4	0	0	3	4	1	0
8	0	1	1	0	1	1	2	1
9	0	1	0	0	3	1	0	0
10+	3	5	3	0	6	7	3	2
Total	44	32	22	6	49	30	29	14

Table 21. Method of harvest of black bear taken in DAU 1L (GMU 6), 1997-2000.

Year	Bait			Hound			Still			Incidental			Unknown			Total		
	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U
1997	0	0	0	9	2	0	20	17	0	13	14	0	2	3	0	44	36	0
1998	0	0	0	21	2	0	34	11	0	15	13	0	0	1	0	72	27	0
1999	0	0	0	13	8	0	28	13	0	11	11	0	0	0	0	52	32	0
2000	0	1	0	9	5	0	15	5	0	7	8	0	0	1	0	31	20	0

Table 22. Weapon type used to harvest black bear in DAU 1L (GMU 6), 1997-2000.

Year	Rifle			Archery			Muzzleloader			Pistol			Other			Total		
	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U
1997	39	35	0	3	0	0	0	0	0	1	1	0	1	0	0	44	36	0
1998	68	24	0	3	1	0	0	0	0	1	1	0	0	1	0	72	27	0
1999	50	30	0	1	1	0	0	0	0	1	1	0	0	0	0	52	32	0
2000	29	18	0	1	1	0	0	0	0	0	0	0	1	1	0	31	20	0

Table 23. 2000-2010 Black bear plan management values and criteria for DAU 1L (GMU 6), 1998-2000.

Year	N	Females	Males $\geq$ 5
1998	99	27%	36%
1999	84	38%	47%
2000	51	39%	52%
3-year Average		36%	46%
Desired levels		30-40%	25-35%

Table 24. Black bear harvest by season and sex of black bear taken in DAU 2B (GMUs 7 and 9) 1997-2000.

Year	<u>Spring</u>			<u>Fall</u>			<u>Entire Season</u>		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1997	25	5	30	8	6	14	33	11	44
1998	38	12	50	16	8	24	54	20	74
1999	28	14	42	10	9	19	38	23	61
Ave.	30	10	41	11	8	19	42	18	60
2000	33	10	43	7	1	8	40	11	51
Change	+10%	0%	+5%	-36%	-87%	-58%	-5%	-39%	-15%

Table 25. Age distribution of black bears checked from DAU 2B (GMUs 7 and 9), 1997-2000. Includes only black bear with both known age and sex.

Age	1997		1998		1999		2000	
	M	F	M	F	M	F	M	F
1	5	1	0	0	1	0	0	0
2	6	0	5	0	0	0	2	0
3	10	1	7	2	9	3	6	2
4	2	2	4	2	7	3	8	5
5	2	1	1	1	3	4	4	0
6	1	0	2	2	5	1	6	1
7	2	0	5	1	1	0	3	0
8	0	0	2	0	1	1	3	1
9	0	0	0	0	3	2	1	0
10+	3	2	2	0	5	5	5	2
Total	31	7	28	8	35	19	38	11

Table 26. Method of harvest of black bear taken in DAU 2B (GMUs 7 and 9), 1997-2000.

Year	Bait			Hound			Still			Incidental			Unknown			Total		
	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U
1997	15	4	1	3	0	0	5	1	0	8	4	0	2	2	0	33	11	0
1998	16	3	0	4	1	0	17	7	0	15	9	0	0	0	0	20	54	0
1999	10	6	0	7	5	0	12	3	0	9	9	0	0	0	0	38	23	0
2000	19	5	0	7	0	0	7	3	0	6	3	0	1	0	0	40	11	0

Table 27. Weapon type used to harvest black bear in DAU 2B (GMUs 7 and 9), 1997-2000.

Year	Rifle			Archery			Muzzleload			Pistol			Unknown			Total		
	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U
1997	27	10	1	5	1	0	0	0	0	1	0	0	0	0	0	33	11	0
1998	40	18	0	8	2	0	2	0	0	2	0	0	2	0	0	54	20	0
1999	36	18	0	1	2	0	1	1	0	0	2	0	0	0	0	38	23	0
2000	30	9	0	6	0	0	1	1	0	1	1	0	2	0	0	40	11	0

Table 28. 2000-2010 Black bear plan management values and criteria for DAU 2B, (GMUs 7 and 9), 1998-2000.

Year	N	Females	Males $\geq$ 5
1998	74	27%	43%
1999	61	38%	51%
2000	51	22%	56%
3-year Average		29%	51%
Desired levels		30-40%	25-35%

**PROGRESS REPORT  
SURVEYS AND INVENTORIES**

<b>STATE:</b>	<u>Idaho</u>	<b>JOB TITLE:</b>	<u>Black bear Surveys and Inventories</u>
<b>PROJECT:</b>	<u>W-170-R-25</u>		
<b>SUBPROJECT:</b>	<u>2</u>	<b>STUDY NAME:</b>	<u>Big Game Population Status,</u>
<b>STUDY:</b>	<u>I</u>		<u>Trends, Use and Associated</u>
<b>JOB:</b>	<u>9</u>		<u>Habitat Studies</u>
<b>PERIOD COVERED:</b>	<u>July 1, 2000 to June 30, 2001</u>		

**BLACK BEAR - CLEARWATER REGION**

**ABSTRACT**

Reported harvest during 2000 for the Clearwater Region was 536 black bears, an 11% decrease from 1999 and a 6% decrease from the previous 3-year average of 569 black bears. Harvest in 1998 and 1999 was higher than ever recorded before in the Clearwater Region. Total harvest by DAU during 2000 was 1D-113, 1E-85, 1F-47, 2A-214, and 3A-77.

The 2000-2010 criteria were met in all DAUs for objectives outlined. Since the 1993 regulation changes, much of the harvest effort has changed from spring to fall; therefore, except for DAU 2A, baiting has been replaced by incidental and still hunting as the most popular techniques used region-wide. Due to the intensive harvest efforts, increased season lengths, and bag limits in 1999, DAU 2A constituted 39% of the regional harvest. Seventy-three percent of harvested black bears were killed over bait in the spring. The rest of the region harvested over bait 14% of the time, hounds 20%, still hunting 32%, and incidental 34%. Management implications indicate a need for continued monitoring as harvest levels continue to climb. All values have to be reviewed in perspective of harvest trends, scent station surveys, and known hunting effort based on road densities, amount of DAUs accessed, and new hunting patterns resulting from regulation changes.

**AREA 1**

**DAU 1D (GMUs 8A AND 10A)**

**ABSTRACT**

DAU 1D historically has been one of the most overharvested DAUs in the region. Harvest criteria were exceeded in all 4 of the 4 variables 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 3 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 2000 occurred in the fall (74%), by hound hunters (47%), incidental (39%), and

still hunters (13%). 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 2-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 2 weeks earlier for archery hunters. Black bear baiting was not allowed.

Mixed land ownership and high road densities on U.S. Forest Service, Idaho Department of Lands, private timber company, and small private landholdings characterize these units. Although the habitat provides high quality forage, easy hunter access has led to overharvest 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 2000, 113 black bears were harvested in DAU-1D, a decrease of 9% from the previous 3-year average (Table 3). About 48% of the black bears were females. Most black bears (75%) 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 1998-2000 indicated that all criteria were again met, but the percent female is above expected levels for a stable population and

indicative of dispersing younger females (Table 5). The 1998 age data criteria were met for the percent adult males, which indicated a moderate harvest level.

The single method of harvest most preferred by hunters in 2000 was still hunting, accounting for 47% of the harvest, followed by incidental (39%) (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 (85%), followed by archery (11%). 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 increase was likely a result of the season lengthening (Table 7).

### DEPREDATIONS

Eight reported black bear depredations occurred in DAU 1D in 2000, about average for this DAU (Table 8).

### DOG TRAINING SEASONS

An 11-week dog training season from 16 May-31 July was allowed in DAU 1D during 2000.

### 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 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 2 year dispersers.

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

### ABSTRACT

Hunters in DAU 1E harvested 85 black bears during 2000, an 11% increase over the previous 3-year average, and the 2<sup>nd</sup> highest harvest recorded. Even so, only 35% were females. Sixty percent of black bears harvested were killed in the fall, 33% of which were killed by incidental 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 overharvest in 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 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 moist in areas receiving more rainfall and snow at higher elevations. The 2000 season length was 78 days, a reduction of 29 days from 1992. Dog training season was 77 days (Table 1).

## POPULATION SURVEYS

Bait station surveys were conducted during July 2000 in Unit 11. Unit 11 was chosen because of representative habitat and the availability of personnel to assist. Ten transects were sampled along available roads, 6 of which were closed to public access. The trend has been upward in visitation rates since 1993 (Table 2). During 2000, transects were selected to test the difference between sardine and bacon baits. This will be continued in 2001. Fifteen percent of the stations were hit by bears during 2000.

## HARVEST CHARACTERISTICS

There were 85 black bears harvested in DAU 1E during 2000, the highest harvest ever recorded; 60% were taken in the fall (Table 9). Adult male age criteria were in the moderate-high harvest category and the percent females harvested was 34% in 2000 (Tables 10 and 11). The most effective method of harvest was incidental hunting, and accounted for 33% of the harvest (Table 12). The weapon type most frequently used was rifle, which accounted for 78% of the harvest, followed by archery (13%) and muzzleloader (6%) (Table 13).

## DEPREDTATIONS

Most of the land in this DAU is privately owned. Seven depredation complaints were recorded during 2000, down from 10 in each of the last 3 years.

## 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 GMUs 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 34% 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 1- and 2-year-old dispersing males.

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

### ABSTRACT

Hunters in DAU 1F harvested 47 black bears during last year, a 39% decrease from 1997-1999 average. Most black bears (58%) 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 methods were incidental (32%) and by still and hound each (26%) while using a rifle (92%) or bow (6%). The 2000 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 trailing 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 reason for the 40% decline in harvest the last 2 years.

## BACKGROUND

Under the 2000-2010 Black Bear Management Plan, the units and their seasons in DAU 1F were similar to the last 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% U.S. Forest Service 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 wilderness areas in these units that provide for core security areas for black bears.

## POPULATION SURVEYS

Bait station surveys were conducted during 2000 for the elk productivity research study and tetracycline baits were placed in the field. Data were analyzed for trails and open and closed roads. In general trails and closed roads received more visitations than did open roads. Sixty-eight transects were surveyed and 95 of the 340 sites were visited by black bears, resulting in a 28% visitation rate, statistically identical to 1999 (30%) (Table 2).

## HARVEST CHARACTERISTICS

There were 47 black bears harvested in DAU 1F during 2000, 57% during the fall. Females comprised 32% of the harvest in DAU 1F. Management objectives under the new plan indicate heavy-moderate harvest (Tables 15 and 16). The most frequent methods of harvest were incidental (32%), followed by the use of still and hounds at 26% each (Table 17). Rifle was the most frequent (92%) weapon type (Table 18).

## DEPREDACTIONS

Two depredation complaints were recorded for this DAU during 2000, down 15 since 1998 when there was poor fall food production.

## DOG TRAINING

Dog training season ran from 16 May to 31 July 1999 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-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 3

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 1996, 1997, and 1998.

## **AREA 2**

### **DAU 2A (GMUs 10 AND 12)**

#### **ABSTRACT**

During 2000, 214 black bears were harvested in DAU 2A, a decrease of 4% over the previous 3-year average. Of these, 29% were females. Eighty-five percent were harvested during the spring season. Bait hunting accounted for 65% of the harvest, rifle for 75%, and archery 19%. This was the third 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., GMU 10A). Harvest occurs mainly on major road and river corridors in DAU 2A. Take seasons last 128 days, with a 31-day dog training season (Table 1). The Department will continue to monitor harvest data on a 3-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 2 black bears a year to take advantage of the high black bear numbers and enhance hunter opportunity, as well as reduce the bear population within the 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. The extensive efforts included use of tetracycline baits for determining population size, and intensive overall efforts to determine trends (Table 2). Fifty-nine transects and 295 sites were sampled, with a visitation rate of 24% in 2000, down significantly from 36% during 1999 (either a result of population declines or a banner huckleberry year, or both). In general the sites on closed roads and trails received higher visitation rates than those on open roads.

## HARVEST CHARACTERISTICS

During 2000, 214 black bears were harvested in DAU 2A, an increase of 4% over the previous 3-year average. Eighty-five percent of these black bears were harvested during spring (Table 19). Of the black bears harvested, 28% were females. Age data criteria set under the new management plan allow for increased harvest. Current age criteria indicate harvest levels are light-moderate (Tables 20 and 21). Age structure of the harvest increased in 2000 along with the increase in overall harvest.

Hunting over bait accounted for 65% of the harvest in DAU 2A, followed by hound (13%), and still (11%) (Table 22). Rifle was the most common weapon used (75%), then bow (19%) (Table 23).

## DEPREDACTIONS

A record 12 depredation complaints were recorded during fall 1998, an indication of a poor huckleberry crop in DAU 2A. Only 2 complaints were recorded for 1999 and 0 in 2000.

## DOG TRAINING SEASONS

A 1-month dog training season occurred during 2000 from 1 July through 31 July.

## MANAGEMENT IMPLICATIONS

DAU 2A receives moderate hunting pressure because of its unroaded habitats, public land, and healthy black bear populations. Harvest is light-moderate in the male component and 71% are 5+-year-old 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 very 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 remained at record high harvest in 2000.

Most of the harvest in this DAU occurs in the spring, the opposite of the other DAUs in the region.

Although harvest doubled, the age structure indicates light harvest levels. Because of a drop in productivity as a result of the 1998 huckleberry failure, the age structure will be skewed until the pulse of yearlings is available in 2001 as a result of synchronous breeding in 1999.

## AREA 3

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

#### ABSTRACT

During 2000, 77 black bears were reported harvested in DAU 3A, about 13% more than the previous 3-year average. Of these, 26% were females. This is 1 of 2 DAUs in the region where the old management criteria objectives were regularly met, and new criteria suggest a lightly hunted population. About 38% of the black bears were harvested during the fall. Most black bears were harvested either by still or incidental 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, then increased to 159 days in 2000 (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. Due to intensive survey efforts in other units as part of the elk productivity study, personnel were not available to participate.

#### HARVEST CHARACTERISTICS

During 2000, 84 black bears were reported harvested in DAU 3A (Table 24). Of these, 26% were females. Only 38% of the black bears were harvested during the fall. Harvest criteria under the new plan indicate light harvest. Fifty-two percent of the males were over 5+ years of age (Tables 25 and

26) in 2000. Still hunters harvested 45%, 26% by incidental hunters, 16% by bait, and 5% by hound hunters (Tables 27). Ninety percent of the black bears were harvested using a rifle (Table 28).

The black bear population data for DAU 3A suggest that a small proportion of the overall population was harvested. Age structures and harvest criteria indicated this population was in the best condition of any DAU in the region. Still hunting during spring and incidental harvest during the fall were the most common harvest techniques. However baiting has started to increase in popularity.

#### DEPREDATIONS

No depredation occurred in this DAU during 2000, about the same as prior years.

#### DOG TRAINING SEASON

No dog training season occurred in DAU 3A during 2000. 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 2-black bear bag limit and extended seasons.

Table 1. Summary of Seasons by Method for DAUs 1D, 1E, 1F, 2A, and 3A for 2000.

Season Type <sup>a,b</sup>	DAU	Units	Season	
			Dates	Length (Days)
General, any legal weapon (archery 8/30- 9/15)	1D <sup>a,b</sup>	8A, 10A	4/15-5/15	31
			8/30-10/31	63
General, any legal weapon	1E <sup>a</sup>	8, 11, 11A, 13	4/15-5/15	31
			9/15-10/31	47
General, any legal weapon	1F <sup>a</sup>	14, 15 <sup>c</sup> , 16, 18	4/15-5/15	31
			8/30-10/31 <sup>d</sup>	63
			9/15-10/31	47
General, any legal weapon	2A	10, 12	4/15-6/30	77
			8/30-10/31	63
General, any legal weapon	3A	16A, 17, 19, 20	4/15-6/30	81
			8/30-11/18	77
Dog-training only	1D	8A, 10A	5/16-7/31	77
Dog-training	1F	14, 18, 15, 16	5/16-7/31	77
Dog-training	2A	10, 12	7/1-7/31	31

<sup>a</sup> Unlawful to use dogs 4/15-4/30.

<sup>b</sup> Bait prohibited.

<sup>c</sup> North portion of Unit 15 was closed to take in 1999 and 2000.

<sup>d</sup> Unit 15 south.

Table 2. Bait station survey results for the Clearwater Region, DAUs 1D, 1E, 1F, 2A, and 3A, 1993-2000.

Year	Survey Number	Survey Dates	Total Trans. Avail.	Total Trans. Sampled	Total Stations Sampled	Total Stations Visited By Black bear	90% Confidence Interval %(+/-)	
1993 <sup>a</sup>	10A <sup>b</sup>	6/21-2/26	15	15	75	5	6.7	4.7
	11 <sup>a</sup>	6/15-6/22	11	10	49	2	4.1	3.3
	12	6/16-6/21	17	17	84	3	3.6	3.3
	15,16	6/16-6/21	16	16	80	5	6.3	3.3
	19,20	6/16-6/23	12	8	40	0	0.0	-
Total			71	66	328	15	4.6	1.9
1994	10A <sup>bc</sup>	6/10-6/16	15	15	75	6	8.0	5.1
	11	6/9-6/15	10	10	50	1	2.0	3.2
	12	6/13-6/18	17	17	85	2	2.4	2.7
	15, 16	6/10-6/15	13	13	65	8	12.3	6.7
	19,20	6/9-6/16	12	7	35	2	5.7	6.4
Total			67	62	310	19	6.1	2.2
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
Total			67	62	310	19	6.1	2.2
1996	8A, 10A	Not Surveyed						
	11	7/3-7/8	10	10	50	3	6.0	5.5
	10, 12	7/2-7/9	17	8	40	4	10.0	7.8
	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
Total			55	33	165	16	9.7	3.8
1997	11	7/9- 7/14	10	10	50	8	16.0	8.5
	10, 12		18	48	237	21	8.9	3.0
	15, 16		73	73	365	15	4.1	1.7
1997 <sup>d</sup>	10, 12	July-Aug	49	49	242	94	38.8	5.2
	15,16		73	73	365	144	39.5	4.2
1998 <sup>d</sup>	10, 12	July-Aug	59	59	293	114	38.9	4.7
	15, 16		72	72	352	95	27.0	3.9
1999 <sup>d</sup>	10, 12	July-Aug	47	47	235	85	36.2	5.2
	15, 16		65	65	325	98	30.2	4.2
2000	10, 12	July-Aug	60	59	295	71	24.1	4.1
	15,16	July-Aug	68	68	340	95	27.9	4.0
	11	July	10	10	47	7	14.8	8.6

<sup>a</sup> First year of data, no comparisons.

<sup>b</sup> Potlatch Corporation purchased sardines and placed transects.

<sup>c</sup> Transects collected at 6 days.

<sup>d</sup> Transects conducted using bacon baits instead of sardines and leaving out 20 days.

Table 3. Black bear harvest by season and sex of black bear taken in DAU 1D (GMUs 8A and 10A) 1990-2000.

Year	<u>Spring</u>			<u>Fall</u>			<u>Entire Season</u>		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1990	41	20	61	13	22	36	54	42	96
1991	30	28	58	25	15	40	55	43	98
1992	46	34	81	28	14	42	74	48	122
1993	14	8	23	29	22	51	43	30	74
1994	21	10	31	23	22	45	44	32	76
1995	12	11	23	36	25	61	48	36	84
1996	17	15	32	44	32	76	61	47	108
1997	15	10	25	61	36	97	77	46	122
1998	28	8	36	45	58	103	73	66	139
1999	22	13	35	55	20	75	77	33	110
1996-98 Avg.	22	10	32	54	38	92	76	48	124
2000	17	11	28	42	43	85	59	54	113
Difference (%)	-23	-10	-12	-22	+13	-8	-22	+12	-9

Table 4. Age distribution of black bear checked from DAU 1D, (GMUs 8A and 10A) 1990-2000.

Age	<u>1992</u>		<u>1993</u>		<u>1994</u>		<u>1995</u>		<u>1996</u>		<u>1997</u>		<u>1998</u>		<u>1999</u>		<u>2000</u>	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Cub	0	0	1	0	0	1	0	0	4	2	4	1	1	0	0	0	0	4
1	14	7	9	6	10	2	17	8	17	2	19	10	10	11	21	10	5	14
2	15	7	8	3	9	7	7	4	11	18	18	6	19	13	16	4	9	10
3	11	4	11	10	7	3	10	6	10	5	19	8	3	7	16	6	11	13
4	13	10	4	1	5	4	4	0	7	7	4	0	4	5	6	3	7	6
5	2	5	0	1	2	3	0	4	7	1	6	8	9	2	2	3	1	2
6	2	3	1	3	3	1	3	3	3	1	2	1	3	4	7	1	3	5
7	2	1	1	0	0	1	2	2	5	1	1	4	5	1	4	2	4	0
8	4	3	1	2	0	2	0	1	1	3	1	1	4	1	1	2	2	1
9	3	0	0	0	0	4	0	0	1	1	1	1	0	2	2	1	3	0
10+	6	8	5	3	3	2	4	6	1	2	0	5	4	9	0	1	8	1
Total	72	48	41	29	39	28	47	34	67	43	75	45	62	55	76	32	53	56

Table 5. Values of 2000-2010 management plan criteria for DAU 1D, 1990-2000.

Year	N <sup>b</sup>	% Females	% Males <sup>a</sup>	
			≥5	# Males <sup>a</sup> ≥5+
1990	96	*44	26.0	13
1991	98	*44	17.3	9
1992	122	39	26.4	19
1993	74	*41	19.5	8
1994	76	*42	20.5	8
1995	84	*43	19.1	9
1996	110	39	24.6	16
1997	122	38	14.9	11
1998	139	*47	40.3	2.5
1999 <sup>c</sup>	110	30	21.1	16
2000	113	*48	40.0	21
Desired levels		≤40%	≥20	

<sup>a</sup> Number of black bears that were aged (excluding unknowns).

<sup>b</sup> Number of black bears that were sexed (excluding unknowns).

\* Values do not meet desired criteria established in the 2000-2010 Black Bear Management Plan

Table 6. Method of harvest of black bear taken in DAU 1D, (GMUs 8A and 10A) 1990-2000.

Year	Bait	Hound	Still	Incidental	Other	Total
1990	24	29	18	23	3	94
1991	38	16	11	30	1	96
1996	54	13	17	34	6	124
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	108
1997	0	46	15	61	0	122
1998	0	35	36	66	1	139
1999	0	22	48	39	0	109
2000	0	53	15	44	1	113

Table 7. Weapon type used to harvest black bear in DAU 1D, (GMUs 8A and 10A) 1990-2000.

Year	Rifle	Archery	Muzzleloader	Pistol	Other	Total
1990	76	13	0	7	1	97
1991	67	24	2	4	1	98
1992	95	17	1	3	6	122
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

Table 8. Black bear depredation complaints handled in the Clearwater Region, 1991-2000.

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000
1D	3	0	0	3	1	5	9	6	8
1E	1	1	2	5	7	10	10	10	7
1F	6	2	1	0	7	2	17	1	2
2A	0	0	0	0	1	2	12	2	0
3A	0	0	0	0	1	1	2	1	0
Total	10	3	3	6	17	20	50	20	17

Table 9. Black bear harvest by season and sex of black bear taken in DAU 1E (GMUs 8, 11, 11A, and 13) 1990-2000.

Year	<u>Spring</u>			<u>Fall</u>			<u>Entire Season</u>		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1990	18	9	27	20	10	30	38	19	57
1991	13	10	23	23	8	31	36	18	54
1992	17	6	23	14	11	25	31	17	48
1993	9	9	18	13	5	18	21	14	35
1994	11	9	20	22	14	36	33	23	56
1995	13	8	23	26	9	35	41	17	58
1996	13	11	24	21	21	42	42	24	66
1997	19	2	21	32	13	45	51	15	66
1998	18	8	26	32	18	50	50	26	76
1999	20	13	33	36	19	55	56	32	88
1997-99 Avg.	19	8	27	33	17	50	52	24	77
2000	25	9	34	31	20	51	56	29	85
Difference (%)	+31	-12	+26	-6	+18	+2	+8	+21	+10

Table 10. Age distribution of black bear checked from DAU 1E (GMUs 8, 11, 11A, and 13), 1992-2000.

Age	<u>1992</u>		<u>1993</u>		<u>1994</u>		<u>1995</u>		<u>1996</u>		<u>1997</u>		<u>1998</u>		<u>1999</u>		<u>2000</u>	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Cub	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	1	0
1	3	4	2	1	4	5	7	5	4	4	12	3	6	2	14	2	8	1
2	10	6	5	1	13	2	6	1	10	7	9	6	13	7	7	3	17	3
3	7	1	4	3	5	2	8	3	2	2	9	5	5	2	13	6	10	4
4	0	1	3	0	2	2	3	2	4	5	8	1	5	5	6	6	6	6
5	1	2	1	0	6	0	2	0	0	1	7	0	2	0	3	3	2	1
6	3	0	0	0	1	4	2	1	2	3	0	0	4	2	2	2	3	3
7	1	1	1	3	0	0	0	2	0	0	1	0	2	1	2	1	3	0
8	0	0	1	2	0	0	1	0	0	1	2	0	2	0	1	2	2	3
9	2	0	2	0	0	0	2	0	0	1	0	0	0	1	1	0	1	0
10+	1	2	0	4	6	1	5	1	2	3	0	0	3	3	7	6	3	7
				1														
Total	28	17	19	4	37	16	37	15	26	30	51	15	44	24	56	31	56	28

Table 11. Values of the 2000-2010 management plan criteria for DAU 1E, 1990-2000.

Year	N <sup>b</sup>	% Females	% Males <sup>a</sup>	
			≥5	≥5
1990	57	33	20.6	7
1991	54	33	17.1	6
1992	48	35	28.6	8
1993	36	40	26.3	5
1994	56	*41	27.3	9
1995	58	29	35.1	13
1996	61	*49	15.4	4
1997	66	23	19.6	10
1998	74	40	29.5	13
1999	86	36	28.6	16
2000	85	34	25.0	14
Desired levels		≤40	>20	

<sup>a</sup> Number of black bears that were aged (excluding unknown).

<sup>b</sup> Number of black bears that were sexed (excluding unknown)

\*Values do not meet criteria in 1992-2000 Black bear Management Plan.

Table 12. Method of harvest of black bear taken in DAU 1E (GMUs 8, 11, 11A, and 13) 1990-2000.

Year	Bait	Hound	Still	Incidental	Other	Total
1990	13	10	9	22	1	55
1991	17	7	12	20	1	57
1996	13	10	12	10	0	45
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

Table 13. Weapon type used to harvest black bear in DAU 1E, 1990-2000.

Year	Rifle	Archery	Muzzleloader	Pistol	Other	Total
1990	43	10	0	3	1	57
1991	48	6	0	2	2	58
1992	36	6	0	3	3	48
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

Table 14. Black bear harvest by season and sex of black bear taken in 1F (GMUs 14, 15, 16, and 18) 1990-2000.

Year	<u>Spring</u>			<u>Fall</u>			<u>Entire Season</u>		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1990	19	9	28	15	11	26	34	20	54
1991	26	18	44	22	9	31	48	27	75
1992	25	13	39	16	11	27	41	24	65
1993	5	7	12	23	10	33	28	17	45
1994	6	6	12	18	8	26	24	14	38
1995	7	4	11	27	8	35	34	12	46
1996	18	7	25	39	16	55	57	23	80
1997	27	3	30	37	16	53	64	19	83
1998	19	10	29	34	25	59	53	35	88
1999	14	11	25	23	12	35	37	23	60
1997-99 Ave.	20	8	28	31	18	49	51	26	77
2000	14	11	25	23	12	35	37	23	60
Difference (%)	-30	-25	-29	-42	-50	-45	-38	-41	-39

Table 15. Age distribution of black bear checked from DAU 1F (GMUs 14, 15, 16, and 18) 1992-2000.

Age	1992		1993		1994		1995		1996		1997		1998		1999		2000	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Cub	0	0	1	0	0	0	0	0	1	0	2	1	1	0	0	0	2	0
1	3	5	4	2	6	2	9	2	11	1	13	1	7	2	3	2	3	0
2	8	2	10	1	7	2	3	2	15	7	12	3	11	6	10	4	8	3
3	8	4	3	1	3	1	8	2	13	2	12	7	9	1	3	1	5	3
4	7	3	4	0	2	1	3	2	7	2	7	1	7	7	5	2	4	2
5	4	1	1	1	1	1	3	2	3	3	9	1	3	2	3	4	0	1
6	2	1	0	0	2	1	0	1	1	0	2	1	3	3	2	0	1	0
7	3	1	1	0	1	1	0	0	3	1	0	0	3	1	3	3	0	1
8	2	1	1	1	0	0	0	0	0	0	1	0	0	1	2	0	4	0
9	2	1	2	2	0	1	0	0	0	0	2	2	3	2	2	2	1	0
10+	1	3	1	8	1	3	1	0	4	4	4	2	4	6	4	5	0	5
Total	40	22	28	16	23	13	27	11	58	20	64	19	51	29	37	23	28	15

Table 16. Values of the 1992-2000 and 2000-2010 management plan criteria for DAU 1F, 1990-2000.

Year	N <sup>b</sup>	% Females	% Males <sup>a</sup> ≥5	# Males <sup>a</sup> ≥5
1990	54	37	23.5	8
1991	75	36	21.7	10
1992	65	37	35.0	14
1993	45	38	21.4	6
1994	38	37	21.7	5
1995	46	26	14.8	4
1996	80	29	19.0	11
1997	83	23	28.1	18
1998	89	40	37.3	16
1999	60	38	43.2	16
2000	47	32	21.4	6
Desired levels		≤35%	≥20	

<sup>a</sup> Number of black bears that were aged (excluding unknowns).

<sup>b</sup> Number of black bears that were sexed (excluding unknowns).

Table 17. Method of harvest of black bear taken in DAU 1F, (GMUs 14, 15, 16, and 18) 1990-2000.

Year	Bait	Hound	Still	Incidental	Other	Total
1990	10	17	16	9	0	52
1991	22	18	23	9	1	73
1996	20	16	15	12	0	63
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	8	12	12	15	0	47

Table 18. Weapon type used to harvest black bear in DAU 1F (GMUs 14, 15, 16 and 18) 1990-2000.

Year	Rifle	Archery	Muzzleloader	Pistol	Other	Total
1990	44	5	1	2	2	55
1991	66	4	1	3	1	75
1992	49	8	1	6	2	66
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	43	3	0	1	0	47

Table 19. Black bear harvest by season and sex of black bear taken in DAU 2A (GMUs 10 and 12) 1990-2000.

Year	<u>Spring</u>			<u>Fall</u>			<u>Entire Season</u>		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1990	91	54	145	33	16	52	124	70	194
1991	108	46	156	12	12	24	120	58	178
1992	66	17	83	36	11	47	102	28	130
1993	55	27	82	15	11	26	70	38	108
1994	56	20	76	14	8	22	70	28	98
1995	62	25	87	12	9	21	74	34	108
1996	82	24	106	28	7	35	110	31	141
1997	68	22	90	23	7	30	91	29	120
1998	140	73	213	50	28	78	190	101	291
1999	130	86	216	27	16	43	157	102	259
1997-99 Average	112	60	173	33	17	50	146	77	223
2000	132	49	181	21	12	33	153	61	214
Difference (%)	+18	-18	+5	-36	-29	-34	+5	-21	-4

Table 20. Age distribution of black bear checked from DAU 2A (GMUs 10 and 12) 1992-2000.

Age	<u>1992</u>		<u>1993</u>		<u>1994</u>		<u>1995</u>		<u>1996</u>		<u>1997</u>		<u>1998</u>		<u>1999</u>		<u>2000</u>	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Cub	0	0	0	0	0	0	0	1	2	0	5	1	0	1	1	0	4	2
1	7	3	5	1	7	1	2	1	7	2	4	2	8	5	3	2	0	0
2	26	6	3	6	11	6	6	3	22	7	15	5	24	6	14	9	9	2
3	17	5	13	7	10	4	23	10	12	3	32	7	39	15	21	7	15	7
4	20	2	8	5	12	4	10	3	20	2	7	0	28	9	20	14	0	13
5	9	3	9	8	9	3	7	6	13	4	6	1	15	7	31	10	16	11
6	8	3	3	2	8	2	5	1	6	3	3	1	11	4	13	10	15	4
7	4	2	5	1	1	1	5	2	5	3	5	1	5	7	13	12	9	2
8	1	0	3	2	3	0	4	2	10	0	3	2	8	2	8	5		0
9	0	0	4	1	3	0	1	0	1	2	4	3	4	4	8	4	5	0
10+	9	1	12	6	4	5	7	3	7	4	7	6	21	25	19	23	18	8
Total	101	25	65	39	68	23	70	32	105	30	91	29	163	85	151	96	97	49

Table 21. Values of the 2000-2010 management plans criteria for DAU 2A, 1990-2000.

Year	N <sup>a</sup>	% Females	% Males <sup>a</sup> ≥5	# Males <sup>a</sup> ≥5
1990	194	36	40.4	46
1991	178	33	36.9	41
1992	130	22	30.1	31
1993 <sup>b</sup>	108	35	55.4	36
1994	98	29	41.2	28
1995	108	31	41.4	29
1996	135	22	40.0	42
1997	120	24	30.8	28
1998	291	35	39.3	64
1999	259	39	61	92
2000	214	28	71	69
Desired levels		≤40	≥25%	

<sup>a</sup> Number of black bears that were sexed (exclude unknowns).

<sup>b</sup> Number of black bears that were aged (exclude unknowns).

Table 22. Method of harvest of black bear taken in DAU 2A, (GMUs 10 and 12) 1990-2000.

Year	Bait	Hound	Still	Incidental	Other	Total
1990	64	45	44	38	1	192
1991	78	39	34	28	0	179
1992	53	17	22	29	1	122
1993	38	14	29	27	1	109
1994	23	9	17	15	2	65
1995	56	11	18	22	0	107
1996	69	18	30	26	1	139
1997	65	11	24	18	2	120
1998	150	41	43	53	4	291
1999	152	17	41	47	2	257
2000	139	28	24	21	2	214

Table 23. Weapon type used to harvest black bear in DAU 2A, (GMUs 10 and 12) 1990-2000.

Year	Rifle	Archery	Muzzleloader	Pistol	Other	Total
1990	149	31	1	11	5	197
1991	137	31	1	8	4	181
1992	85	31	0	7	10	133
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

Table 24. Black bear harvest by season and sex of black bear taken in DAU 3A (GMUs 16A, 17, 19, and 20) 1990-2000.

Year	Spring			Fall			Entire Season		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1990	22	8	30	29	16	45	51	24	75
1991	28	19	47	20	7	29	48	26	74
1992	31	20	51	27	3	30	58	23	81
1993	16	13	29	27	11	38	43	24	67
1994	27	4	31	11	10	21	38	14	52
1995	31	10	41	16	7	23	47	17	64
1996	19	6	25	29	14	43	48	20	68
1997	17	25	22	17	7	24	34	12	46
1998	29	8	37	20	13	33	49	21	70
1999	37	12	49	27	11	38	64	23	87
1997-99 Average	28	15	36	21	10	32	49	19	68
2000	28	16	44	29	4	33	57	20	77
Difference (%)	0	+7	+22	+38	-60	+3	+16	+5	+13

Table 25. Age distribution of black bear checked from DAU 3A (GMUs 16A, 17, 19, and 20) 1990-2000.

Age	1992		1993		1994		1995		1996		1997		1998		1999		2000	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Cub	0	0	1	1	0	0	0	0	3	0	2	1	0	0	0	0	3	0
1	2	0	1	1	3	4	1	0	5	0	2	0	1	1	2	2	2	0
2	9	2	2	1	11	0	7	3	10	4	5	2	6	2	8	1	9	1
3	13	3	4	6	1	0	9	1	7	1	7	3	6	2	12	3	5	3
4	9	4	6	1	3	2	4	1	5	2	3	4	8	1	1	4	7	1
5	4	2	8	1	3	2	3	0	1	0	3	0	9	2	3	2	2	2
6	3	2	0	0	3	1	6	1	1	0	0	0	3	2	3	4	8	2
7	3	3	3	1	2	0	1	1	2	2	2	0	1	2	2	2	7	2
8	4	1	1	1	2	1	1	3	0	3	0	0	0	2	1	0	0	2
9	3	0	1	0	2	1	1	1	0	2	2	2	3	2	4	0	0	0
10+	1	5	7	8	6	3	8	4	8	2	7	0	10	5	19	5	11	7
Total	51	22	41	21	33	12	41	15	42	16	33	12	47	21	55	23	54	20

Table 26. Values of the 2000-2010 management plans criteria for DAU 3A, 1990-2000.

Year	N <sup>a</sup>	% Females	% Males <sup>a</sup>	# Males <sup>a</sup>
			≥5	≥5
1990	75	32	46.5	20
1991	74	35	46.7	21
1992	81	28	35.3	18
1993 <sup>b</sup>	67	36	48.8	20
1994	52	27	54.5	18
1995	64	27	48.8	20
1996	68	29	28.6	12
1997	46	26	42.4	14
1998	68	30	55	26
1999	87	26	52	28
2000	77	26	52	28
Desired levels		≤40	≥30	

<sup>a</sup> Number of black bears that were sexed (exclude unknowns)

<sup>b</sup> Number of black bears that were aged (exclude unknowns).

Table 27. Method of harvest of black bear taken in DAU 3A (GMUs 16A, 17, 19, and 20) 1990-2000.

Year	Bait	Hound	Still	Incidental	Other	Total
1990	10	6	34	23	2	75
1991	6	5	38	29	0	78
1992	15	12	23	21	1	71
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	69
1999	19	7	35	22	3	86
2000	12	4	35	20	6	77

Table 28. Weapon type used to harvest black bear in DAU 3A (GMUs 16A, 17, 19, and 20) 1990-2000.

Year	Rifle	Archery	Muzzleloader	Pistol	Other	Total
1990	67	5	0	3	0	75
1991	67	4	1	4	0	76
1992	69	0	1	6	0	76
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

**PROGRESS REPORT  
SURVEYS AND INVENTORIES**

<b>STATE:</b>	<u>Idaho</u>	<b>JOB TITLE:</b>	<u>Black bear Surveys and Inventories</u>
<b>PROJECT:</b>	<u>W-170-R-25</u>		
<b>SUBPROJECT:</b>	<u>3</u>	<b>STUDY NAME:</b>	<u>Big Game Population Status,</u>
<b>STUDY:</b>	<u>I</u>		<u>Trends, Utilization and Associated</u>
<b>JOB:</b>	<u>9</u>		<u>Habitat Studies</u>
<b>PERIOD COVERED:</b>	<u>July 1, 2000 to June 30, 2001</u>		

BLACK BEAR - SOUTHWEST REGION

**ABSTRACT**

Area 1: Four hundred twenty-four black bears were reported harvested in Area 1 of the Southwest Region in 2000. Bait station survey results were comparable to previous years in DAU 1H in June 2001. Reported harvest was 136, 68, and 220 black bears for DAUs 1G, 1H, and 1K, respectively. The reported harvest remained static in DAU 1G. Harvest in DAU 1H and 1K increased 31% and 11%, respectively, in 2000. 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 2000. Liberalized seasons were implemented in 1998 and again in 1999 with adoption of the 2000-2010 Black Bear Species Management Plan. The 2000 harvest results reflect the third year of monitoring the effects of these changes on black bear populations. Data for DAU 1G indicate the harvest parameters are stable. Spring permit levels were increased in 1998 in DAU 1H. Harvest data for DAU 1K indicate that the elimination of the fall split season in 1998 contributed to a significant increase in black bear harvest.

Area 3: Forty black bears were reported harvested in Area 3 of the Southwest Region in 2000. 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, AND 25)

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

DAU 1K (GMUs 33, 39, AND 43)

### MANAGEMENT DIRECTION

Area 1 contains 12 data analysis units (DAU). 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 July 31 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 recently drafted 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 seasons. More liberal seasons were implemented in the fall of 1998 and were continued into the 2000 framework (Table 2).

## POPULATION SURVEYS

Bait station surveys were conducted between June 17 and June 22, 2001, to monitor black bear population trends in the Middle Fork and Little Weiser River drainages of DAU 1H. Thirty-five percent of the stations (30 out of 85) were visited by black bear. The 2001 visitation rate was similar to that documented in 2000 (Table 3). This good visitation rate could be a continued consequence of the suspected birth pulse in 1999. Assuming the harvest rate remains constant, the visitation rate can be expected to decline slightly as this age class of animals matures and disperses.

## HARVEST CHARACTERISTICS

Reported harvest in DAU 1G was the same in 2000 as it was in 1999 (Table 4). The black bear harvest in this DAU was greater in the fall than in the spring in 2000. Black bear age data indicate two-year-old bears were the most frequently harvested age group in 2000 (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 2000 (Table 7). The rifle is the most prominent weapon used for harvesting black bear in DAU 1G (Table 8).

Reported harvest increased 31% in 2000 compared to 1999 in DAU 1H (Table 9). The black bear harvest was nearly the same in the fall as in the spring in 2000. Black bear age data indicate two-year-old bears were the most frequently harvested age group in 2000 (Table 10). An increase occurred for the percent females in the harvest criteria (Table 11). Still and hound hunting methods are the dominant means of harvest in DAU 1H (Table 12). The rifle is the most used weapon of choice (Table 13).

Reported harvest moderately increased (11%) in 2000 when compared to 1999 totals in DAU 1K (Table 14). Hunters harvested nearly twice as many bears in the fall as compared to the spring season in 2000. Black bear age data indicate two-year-old bears were the most frequently harvested age group in 2000 (Table 15). The percent females in the harvest exceeded desired levels in 2000 (Table 16). The three-year running average for percent females is at the upper cusp of the desired level. Still hunting (stalking) method comprised most of the black bear kill in DAU 1K in 2000 (Table 17). Rifle was the most reported weapon of choice in DAU 1K (Table 18).

## 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. Depredation reports were slightly higher in 2000 when compared to 1999 (Table 19).

## 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 August 30 in this DAU to restore some hunter opportunity lost when seasons were curtailed in the early 1990s. This change will be monitored for two more years to assess the 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 April 15 to May 15 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. Further monitoring will be necessary to determine if this strategy will work. It may turn out that the controlled hunt area is too small to protect the wider ranging 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. Subsequently, the spring of 1999 was late, plant phenological development was delayed, and snow packs remained at mid- and upper elevations. This contributed to a significant increase in spring black bear harvest, but overall annual harvest remained near the inflated 1998 level. The 2000 harvest was even larger than 1998 and 1999, nearly equaling harvest levels of the early 1990s which precipitated significant season reductions in 1992 in this DAU. The percent of female bears in the harvest parameter in DAU 1K is now at the maximum level desired. The Commission has further expanded season lengths for the Fall 2001 and Spring 2002 black bear seasons. The higher harvest of black bears and upcoming season expansions need to be monitored closely to prevent large declines in the black bear population and subsequent hunter complaints.

## AREA 3

### DAU 3B (GMUs 20A, 26, AND 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 judgement 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. The current season structure was formed when the spring season was shortened to conform with statewide management direction listed in the 1992-2000 Black Bear Management Plan (Table 20). The fall and spring seasons were expanded with implementation of the 2000-2010 Black Bear Species Management Plan.

#### POPULATION SURVEYS

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

#### HARVEST CHARACTERISTICS

Reported harvest increased 11% in 2000 compared to 1999 for DAU 3B (Table 21). The black bear harvest in DAU 3B was greater in the fall than spring season. Black bear age data indicate two-year-old bears were the most frequently harvested age group in 2000 (Table 22). Percent females in the harvest decreased in 2000 (Table 23). Harvest incidental to other species hunting was the primary method of kill in this DAU (Table 24). The prominent weapon of choice in DAU 3B is the rifle (Table 25).

## DEPREDATIONS

No depredations were reported in DAU 3B in 2000.

## 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 nonresident bear tag fees, and a longer fall season were 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
Percent Females	< 30%	30-40%	> 40%
Percent Males $\geq$ 5	> 35%	25-35%	< 25%
Bait Station Survey	Increasing	Stable	Decreasing

Table 2. Summary of Seasons by Method for DAUs 1G, 1H, and 1K, July 1, 1999 - June 30, 2000.

Season Type <sup>a</sup>	DAU	Units	Season	
			Dates	Length
General, any legal weapon	1G	19A	9/15-10/31	47
			4/15-6/15	62
		23, 24, 25	8/30-10/31	63
General, any legal weapon	1K		4/15-5/31	47
		33, 39	9/15-10/31	47
			4/15-5/22	38
		43	8/30-10/31	63
Dog-training only	1G	19A	4/15-5/31	47
		23, 24, 25	6/16-7/31	46
			6/1-7/31	61
Dog-training only	1H	22, 31, 32, 32A	5/16-7/31	77
Dog-training only	1K	33, 39, 43	5/23-7/31	70
		43	6/1-7/31	61
Controlled, any legal weapon <sup>b</sup>	1H	822-1 <sup>c</sup> , 832-1 <sup>d</sup>	9/1-10/31	61
		822-2 <sup>e</sup> , 832-2 <sup>f</sup>	4/15-5/15	31

<sup>a</sup> Any black bear is legal except female black bear accompanied by young.

<sup>b</sup> Bait prohibited.

<sup>c</sup> All of Units 22 and 31; 30 permits.

<sup>d</sup> All of Units 32 and 32A; 30 permits.

<sup>e</sup> All of Units 22 and 31; 50 permits; dogs prohibited.

<sup>f</sup> All of Units 32 and 32A; 50 permits; dogs prohibited.

Table 3. Bait station survey results from Council routes (DAU 1H), 1985-2001.

Year	Survey Number	Survey Dates	Total Trans. Avail.	Total Trans. Sampled	Total Stations Sampled	Total Stations Visited By Black Bear	%	90% Confidence Interval (+/-)
1985	1	6/23-6/28	17	17	85	26	31	7.7
	2	7/02-7/07	17	16	80	31	39	8.4
1986	1	6/27-7/02	17	16	80	32	40	8.8
	2	7/10-7/15	17	16	80	26	33	8.3
1987	1	6/19-6/24	17	17	85	48	56	8.1
	2	7/02-7/07	17	17	85	32	38	8.1
1988	1	6/30-7/05	17	17	85	39	46	8.4
1989	1	6/30-7/05	17	17	85	35	41	8.1
1990	1	6/27-7/02	17	17	85	24	28	7.7
1991	1	6/26-7/01	17	17	85	18	21	7.1
1992	1	6/24-6/29	17	17	85	25	29	7.3
1993	1	6/25-6/30	17	17	85	16	19	7.0
1994	1	6/30-7/05	17	17	85	15	18	6.7
1995	1	6/22-6/27	17	17	85	13	15	6.5
1996	1	6/27-7/02	17	17	85	30	35	8.4
1997	1	6/26-7/01	16	16	80	14	18	7.0
1998	1	7/05-7/13	17	17	85	19	22	7.4
1999	1	7/07-7/06 <sup>a</sup>	16	16	80	31	39	10.0
2000	1	6/22-6/27	17	17	85	32	38	8.6
2001	1	6/17-6/22	17	17	85	30	35	8.7

<sup>a</sup> Nineteen stations were not checked until 7/13/99.

Table 4. Black bear harvest by season and sex of black bear taken in DAU 1G (GMUs 19A, 23, 24, and 25) 1983-2000.

Year	<u>Spring</u>			<u>Fall</u>			<u>Entire Season</u>		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1983	28	14	42	7	6	13	35	20	55
1984	40	24	64	26	17	43	66	41	107
1985	25	26	51	26	14	40	51	40	91
1986	29	10	39	9	5	14	38	15	53
1987	28	7	35	25	12	37	53	19	72
1988	24	5	29	23	12	35	47	17	64
1989	29	17	46	23	13	36	52	30	82
1990	39	19	58	41	22	63	80	41	121
1991	27	13	40	38	21	59	65	34	99
1992	24	10	34	18	11	29	42	21	63
1993	30	5	35	30	18	48	60	23	83
1994	22	10	32	18	12	30	40	22	62
1995	33	12	45	34	25	59	67	37	104
1996	39	17	56	37	22	59	76	39	115
1997	27	11	38	37	27	64	64	38	102
1998	38	10	48	36	19	55	74	29	103
1996-1998									
Average	35	13	48	36	23	59	71	36	107
1999	37	16	53	51	32	83	88	48	136
Difference	+2	+3	+5	+15	+9	+24	+17	+12	+29

Table 5. Age distribution of black bear checked from DAU 1G (GMUs 19A, 23, 24, and 25) 1992-2000.

Age	1992		1993		1994		1995		1996		1997		1998		1999		2000	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Unk.	3	2	7	7	5	5	3	2	11	12	3	6	2	4	13	6	8	4
Cub	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1
1	4	1	7	2	4	0	7	5	1	0	8	1	6	4	12	6	4	1
2	7	3	7	3	14	6	11	7	18	5	6	5	8	6	17	7	31	4
3	10	4	7	2	3	2	18	6	8	2	18	8	10	4	14	6	18	4
4	5	2	11	2	5	1	2	1	15	3	6	1	14	3	2	2	7	2
5	1	3	4	1	6	1	4	1	1	0	7	4	10	2	6	5	4	3
6	2	0	4	1	2	4	6	3	6	1	2	1	10	3	1	5	9	4
7	0	1	3	1	1	0	6	4	5	3	2	2	3	0	8	3	5	4
8	2	2	1	0	1	0	0	1	1	1	1	1	2	0	1	0	3	0
9	1	1	1	0	0	0	4	2	0	1	2	2	2	3	1	3	1	1
10+	7	2	7	4	0	3	7	5	10	10	9	8	7	0	13	5	10	7
Total	42	21	60	23	41	22	69	37	76	39	64	39	74	29	88	48	101	35

Table 6. Median ages and values of the 2000-2010 management plan criteria for DAU 1G (GMUs 19A, 23, 24, and 25) 1990-2000.

Year	N <sup>a</sup>	% Females	Median Age			% Males		N <sup>b</sup>
			Males	Females	Total	≥5	# Males	
1990	121	34	4	5	4	37	80	89
1991	99	34	3	7	4	38	65	84
1992	63	33	3	4	4	33	42	59
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	4.5	3	40	88	117
2000	135	26	3	6	3	34	101	124
1998-2000 Avg.		30	3.5	4.5	4	40		
Desired levels		30-40	≥4	≥6	≥5	25-35		

<sup>a</sup> Number of black bears that were sexed (excluding unknowns).

<sup>b</sup> Number of black bears that were aged (excluding unknowns).

Table 7. Method of harvest of black bear taken in DAU 1G (GMUs 19A, 23, 24, and 25) 1987-2000.

Year	<u>Bait</u>		<u>Hound</u>		<u>Still</u>		<u>Incidental</u>		<u>Other</u>		<u>Total</u>	
	M	F	M	F	M	F	M	F	M	F	M	F
1987	12	2	15	6	13	8	11	2	2	1	53	19
1988	15	1	11	7	5	1	14	7	2	1	47	17
1989	13	8	15	7	7	3	11	11	6	1	52	30
1990	15	8	22	9	20	13	16	10	7	1	80	41
1991	13	5	12	7	18	10	18	12	4	0	65	34
1992	7	4	11	6	14	4	8	4	2	3	42	21
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

Table 8. Weapon type used to harvest black bear in DAU 1G (GMUs 19A, 23, 24, and 25) 1987-2000.

Year	<u>Rifle</u>		<u>Archery</u>		<u>Muzzleloader</u>		<u>Pistol</u>		<u>Other</u>		<u>Total</u>	
	M	F	M	F	M	F	M	F	M	F	M	F
1987	33	12	11	5	0	0	7	2	2	0	53	19
1988	30	12	12	1	1	0	3	4	1	0	47	17
1989	37	21	8	5	2	1	2	2	3	1	52	30
1990	55	22	15	14	0	0	6	4	4	1	80	41
1991	51	23	9	8	1	0	0	3	3	0	65	34
1992	29	14	9	5	0	0	2	1	2	1	42	21
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

Table 9. Black bear harvest by season and sex of black bear taken in DAU 1H (GMUs 22, 31, 32, and 32A) 1983-2000.

Year	<u>Spring</u>			<u>Fall</u>			<u>Entire Season</u>		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1983	3	0	3	22	10	32	25	10	35
1984	2	2	4	16	12	28	18	14	32
1985	7	3	10	16	17	33	23	20	43
1986	9	2	11	8	3	11	17	5	22
1987	8	4	12	21	18	39	29	22	51
1988	12	6	18	23	26	49	35	32	67
1989	16	15	31	30	22	52	46	37	83
1990	11	6	17	24	18	42	35	24	59
1991	15	7	22	24	9	33	39	16	55
1992	9	17	26	20	19	39	29	36	65
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
1997-99 Avg.	17	9	26	20	11	31	37	20	57
2000	22	13	35	15	18	33	37	31	68
Difference	+5	+4	+9	-5	+7	+2	0	+11	+11

Table 10. Age distribution of black bear checked from DAU 1H (GMUs 22, 31, 32, and 32A) 1992-2000.

Age	1992		1993		1994		1995		1996		1997		1998		1999		2000	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Unk.	7	5	3	1	2	1	5	1	3	4	5	1	3	4	1	4	6	3
Cub	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	5	3	3	0	2	1	3	1	2	0	5	1	3	0	5	1	2	0
2	7	6	2	1	5	1	1	3	10	4	7	0	13	4	6	2	9	6
3	2	4	5	1	1	2	2	2	2	0	7	2	4	3	3	3	4	2
4	1	2	1	1	1	1	3	1	1	0	4	2	8	2	3	1	5	6
5	0	3	0	2	1	0	3	0	0	0	0	1	2	0	3	3	2	3
6	1	6	1	0	0	2	0	1	1	0	4	2	2	2	3	1	5	0
7	1	1	0	0	0	0	0	1	1	0	2	0	2	1	0	1	1	3
8	2	0	0	0	1	0	0	0	0	0	2	1	1	3	3	1	3	3
9	0	0	0	1	1	1	1	0	0	1	1	1	1	2	0	0	0	0
10+	3	6	0	1	0	1	0	1	2	1	1	3	5	1	3	5	0	5
Total	29	36	15	8	14	10	18	11	22	10	38	14	44	22	30	22	37	31

Table 11. Median ages and values of the 2000-2010 management plan criteria for DAU 1H (GMUs 22, 31, 32, and 32A) 1990-2000.

Year	N <sup>a</sup>	% Females	Median Age			% Males ≥5	# Males	N <sup>b</sup>
			Males	Females	Total			
1990	59	41	2	3	2	18	35	47
1991	55	29	3	6	3	28	39	51
1992	65	55	2	5	3	32	29	53
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	69	45	4	4.5	4	35	37	59
1998-2000 Avg.		34	3	5	4	34		
Desired levels		≤30	≥4	≥6	≥5	≥35		

<sup>a</sup> Number of black bears that were sexed.

<sup>b</sup> Number of black bears that were aged.

Table 12. Method of harvest of black bear taken in DAU 1H (GMUs 22, 31, 32, and 32A) 1987-2000.

Year	<u>Bait</u>		<u>Hound</u>		<u>Still</u>		<u>Incidental</u>		<u>Other</u>		<u>Total</u>	
	M	F	M	F	M	F	M	F	M	F	M	F
1987	0	0	6	1	16	11	7	9	0	1	29	22
1988	1	0	6	12	18	11	9	7	1	2	35	32
1989	3	3	4	12	18	9	20	10	1	3	46	37
1990	2	0	4	6	20	6	8	11	1	1	35	24
1991	1	0	4	2	22	5	10	8	2	1	39	16
1996	0	0	2	4	13	21	12	9	2	2	29	36
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

Table 13. Weapon type used to harvest black bear in DAU 1H (GMUs 22, 31, 32, and 32A) 1987-2000.

Year	<u>Rifle</u>		<u>Archery</u>		<u>Muzzleloader</u>		<u>Pistol</u>		<u>Other</u>		<u>Total</u>	
	M	F	M	F	M	F	M	F	M	F	M	F
1987	26	20	0	0	0	0	3	2	0	0	29	22
1988	29	27	3	1	0	0	2	4	1	0	35	32
1989	41	26	2	4	0	0	3	6	0	1	46	37
1990	30	20	2	0	0	1	3	1	0	1	35	24
1991	34	14	1	1	2	0	2	1	0	0	39	16
1992	26	32	1	1	0	0	0	2	2	1	29	36
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

Table 14. Black bear harvest by season and sex of black bear taken in 1K (GMUs 33, 39, and 43) 1983-2000.

Year	<u>Spring</u>			<u>Fall</u>			<u>Entire Season</u>		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1983	29	10	39	13	5	18	42	15	57
1984	28	21	49	14	2	16	42	23	65
1985	45	23	68	14	20	34	59	43	102
1986	41	26	67	17	6	23	58	32	90
1987	25	15	40	21	9	30	46	24	70
1988	51	30	81	26	24	50	77	54	131
1989	80	28	108	46	25	71	126	53	179
1990	60	36	96	78	47	125	138	83	221
1991	56	33	89	22	16	38	78	49	127
1992	34	11	45	10	10	20	44	21	65
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
1997-99 Avg.	46	25	71	61	43	104	107	68	175
2000	54	26	80	75	65	140	129	91	220
Difference	+8	+1	+9	+14	+22	+36	+22	+23	+45

Table 15. Age distribution of black bear checked from DAU 1K (GMUs 33, 39, and 43) 1992-2000.

Age	1992		1993		1994		1995		1996		1997		1998		1999		2000	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Unk.	7	4	5	8	7	4	11	9	8	8	3	6	9	8	9	10	20	16
Cub	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	1
1	2	2	13	1	8	0	14	10	8	4	8	3	25	12	21	8	19	11
2	5	1	5	2	23	12	12	3	25	14	9	9	23	7	21	6	21	20
3	5	8	1	2	5	3	34	14	6	9	25	12	5	7	27	10	13	6
4	11	1	11	2	7	2	5	3	14	6	2	2	16	9	8	6	15	6
5	4	0	5	0	6	8	3	2	2	2	13	4	8	4	19	6	5	5
6	1	0	2	1	8	3	9	6	3	0	3	1	11	7	3	8	10	10
7	2	3	5	2	4	0	3	1	2	2	1	3	4	3	10	5	4	1
8	1	0	2	0	2	0	3	2	3	1	4	4	3	1	3	0	8	3
9	1	1	1	1	3	2	4	1	1	1	0	3	5	4	2	2	1	3
10+	5	1	3	4	4	6	3	6	6	5	5	9	5	17	8	7	11	9
Total	44	21	53	23	77	40	101	57	78	52	75	56	114	79	131	68	129	91

Table 16. Median ages and values of the 2000-2010 management plan criteria for DAU 1K (GMUs 33, 39, and 43) 1990-2000.

Year	N <sup>a</sup>	% Females	Median Age			% Males		
			Males	Females	Total	≥5	# Males	N <sup>b</sup>
1990	221	38	3	3	3	36	138	160
1991	127	39	4	5	4	41	78	109
1992	65	32	4	3	4	38	44	54
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
1998-2000 Avg.		39	3	4	4	36		
Desired levels		30-40	≥4	≥6	≥5	25-35		

<sup>a</sup> Number of black bears that were sexed.

<sup>b</sup> Number of black bears that were aged.

Table 17. Method of harvest of black bear taken in DAU 1K (GMUs 33, 39 and 43) 1987-2000.

Year	<u>Bait</u>		<u>Hound</u>		<u>Still</u>		<u>Incidental</u>		<u>Other</u>		<u>Total</u>	
	M	F	M	F	M	F	M	F	M	F	M	F
1987	17	8	4	4	14	5	8	6	3	1	46	24
1988	30	11	14	14	14	12	16	15	3	2	77	54
1989	41	18	28	8	24	8	21	14	12	5	126	53
1990	22	15	30	13	40	31	35	17	11	7	138	83
1991	21	14	9	9	30	13	14	10	4	3	78	49
1996	16	5	10	1	11	7	6	7	1	1	44	21
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

Table 18. Weapon type used to harvest black bear in DAU 1K (GMUs 33, 39 and 43) 1987-2000.

Year	<u>Rifle</u>		<u>Archery</u>		<u>Muzzleloader</u>		<u>Pistol</u>		<u>Other</u>		<u>Total</u>	
	M	F	M	F	M	F	M	F	M	F	M	F
1987	33	16	10	5	0	0	3	3	0	0	46	24
1988	37	37	21	10	3	1	13	5	3	1	77	54
1989	78	32	29	13	1	1	11	5	7	2	126	53
1990	99	56	25	17	1	0	12	8	1	2	138	83
1991	51	37	22	10	0	0	5	1	0	1	78	49
1992	23	13	17	6	0	1	4	0	0	1	44	21
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

Table 19. Black bear depredation complaints handled in the Southwest Region, 1992-2000.

DAU	YEAR								
	1992	1993	1994	1995	1996	1997	1998	1999	2000
1G	4	4	3	7	11	1	5	4	0
1H	2	0	0	2	4	1	1	5	2
1K	5	2	3	11	3	2	5	1	12
3B	0	0	1	1	1	1	0	0	0
Total	11	6	7	21	19	5	11	10	14

Table 20. Summary of Seasons by Method for DAU 3B, July 1, 1999 - June 30, 2000.

Season Type <sup>a</sup>	DAU	Units	Season	
			Dates	Length
General, any legal weapon <sup>b</sup>	3B	20A, 26, 27	8/30-11/18	81
			4/15-6/30	77
Dog-training only	3B	20A, 26, 27	None	

<sup>a</sup> Any black bear is legal except female black bear accompanied by young.

<sup>b</sup> Two bear bag limit.

Table 21. Black bear harvest by season and sex of black bear taken in DAU 3B (GMUs 20A, 26, and 27) 1983-2000.

Year	<u>Spring</u>			<u>Fall</u>			<u>Entire Season</u>		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1983	5	1	6	0	3	3	5	4	9
1984	4	5	9	8	2	10	12	7	19
1985	8	2	10	9	3	12	17	5	22
1986	9	1	10	13	12	25	22	13	35
1987	9	2	11	16	9	25	25	11	36
1988	16	5	21	11	9	20	27	14	41
1989	9	7	16	10	1	11	19	8	27
1990	1	2	3	16	13	19	17	15	32
1991	13	7	20	7	8	15	20	15	35
1992	5	4	9	5	3	8	10	7	17
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
1997-99 Avg.	5	3	8	12	9	21	17	12	29
2000	3	1	4	23	13	36	26	14	40
Difference	-2	-2	-4	+11	+4	+15	+9	+2	+11

Table 22. Age distribution of black bear checked from DAU 3B (GMUs 20A, 26, and 27) 1992-2000.

Age	<u>1992</u>		<u>1993</u>		<u>1994</u>		<u>1995</u>		<u>1996</u>		<u>1997</u>		<u>1998</u>		<u>1999</u>		<u>2000</u>	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Unk.	3	1	3	5	2	5	6	2	4	2	2	0	5	0	2	4	1	0
Cub	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
1	0	1	7	0	4	1	1	1	1	0	1	0	0	1	2	0	0	1
2	1	1	1	2	4	7	3	1	5	1	0	1	1	1	1	1	9	4
3	0	1	1	3	2	4	5	3	5	1	4	0	3	0	3	1	4	2
4	0	1	1	2	3	0	0	0	10	0	4	2	1	2	1	1	1	1
5	0	0	2	0	0	1	1	2	0	0	1	2	2	2	3	0	2	1
6	2	0	4	0	0	1	0	1	0	2	0	0	0	0	4	2	0	1
7	1	0	1	2	0	0	1	0	2	2	0	1	1	0	1	0	1	1
8	2	0	1	0	2	0	0	0	2	1	0	1	2	1	0	0	4	0
9	0	0	0	1	1	0	0	0	0	1	0	2	0	0	0	1	1	0
10+	1	2	4	5	13	2	1	5	7	0	1	2	3	4	4	5	2	3
Total	10	7	26	20	31	21	18	15	36	10	13	11	18	11	21	15	26	14

Table 23. Median ages and values of the 2000-2010 management plan criteria for DAU 3B (GMUs 20A, 26, and 27) 1990-2000.

Year	N1 <sup>a</sup>	% Females	Median Age			% Males		N2 <sup>b</sup>
			Males	Females	Total	≥5	# Males	
1990	32	47	4	4	4	44	17	19
1991	35	43	7	7	7	89	20	30
1992	17	41	7	4	6	86	10	13
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	6.5	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	3.5	3	40	26	39
1998-2000 Avg.		38	5	5	5	53		
Desired levels		30-40	≥4	≥6	≥5	25-35		

<sup>b</sup> Number of black bears that were sexed (excluding unknowns).

<sup>c</sup> Number of black bears that were aged (excluding unknowns).

Table 24. Method of harvest of black bear taken in DAU 3B (GMUs 20A, 26, and 27) 1987-2000.

Year	<u>Bait</u>		<u>Hound</u>		<u>Still</u>		<u>Incidental</u>		<u>Other</u>		<u>Total</u>	
	M	F	M	F	M	F	M	F	M	F	M	F
1987	0	0	1	0	8	5	11	3	5	3	25	11
1988	1	0	1	0	14	8	14	5	2	1	32	14
1989	2	0	3	0	6	8	5	0	3	0	19	8
1990	1	1	0	0	5	6	11	8	0	0	17	15
1991	0	1	1	0	13	6	5	7	1	1	20	15
1992	1	0	0	0	5	3	4	3	0	1	10	7
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

Table 25. Weapon type used to harvest black bear in DAU 3B (GMUs 20A, 26, and 27) 1987-2000.

Year	<u>Rifle</u>		<u>Archery</u>		<u>Muzzleloader</u>		<u>Pistol</u>		<u>Other</u>		<u>Total</u>	
	M	F	M	F	M	F	M	F	M	F	M	F
1987	25	8	0	0	0	0	0	0	5	3	25	11
1988	31	14	0	0	0	0	0	0	2	1	32	14
1989	18	8	0	0	0	0	0	0	3	0	19	8
1990	16	13	0	1	0	0	0	1	0	0	17	15
1991	19	13	0	0	0	0	0	1	1	1	20	15
1992	10	6	0	0	0	0	0	1	0	0	10	7
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

**PROGRESS REPORT  
SURVEYS AND INVENTORIES**

<b>STATE:</b>	<u>Idaho</u>	<b>JOB TITLE:</b>	<u>Black bear Surveys and Inventories</u>
<b>PROJECT:</b>	<u>W-170-R-25</u>		
<b>SUBPROJECT:</b>	<u>4</u>	<b>STUDY NAME:</b>	<u>Big Game Population Status, Trends,</u>
<b>STUDY:</b>	<u>I</u>		<u>Utilization and Associated Habitat</u>
<b>JOB:</b>	<u>9</u>		<u>Studies</u>
<b>PERIOD COVERED:</b>	<u>July 1, 2000 to June 30, 2001</u>		

**BLACK BEAR - MAGIC VALLEY REGION**

**ABSTRACT**

Forty-two black bears were harvested in DAU 4A in 2000, 68% above the 1997-1999 mean of 25 black bears. This is the largest number of bears harvested in this DAU during the last 13 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 7%, 36%, 29%, and 26%, respectively, of the black bears harvested. Most black bears were taken by rifle (78%), while only 5 black bear (12%) were killed with archery equipment. The Department received 6 depredation complaints and USDA Wildlife Services responded to 4 complaints.

**AREA 4**

DAU 4A (GMUs 44, 45, 48, AND 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 use apply in Units 44, 45, 48, and 49 during October to minimize conflicts with deer and elk hunters.

## HARVEST CHARACTERISTICS

The 2000 spring hunting season was unchanged from the previous 7 years, while the fall season structure was changed by eliminating the two-week hound hunting closure in September. Both seasons followed frameworks adopted in the 2000-2010 Black Bear Management Plan (Table 1).

Forty-two black bears were harvested in 2000, which is well above the average for this DAU. Seventy-four percent of the black bear harvest occurred during the fall season, which is a substantial change from the 1987-1999 seasons when 63% of the annual harvest occurred during the spring season (Table 2). This change in harvest occurred even though access to mid and high elevations during the 2000 spring season was good because of a moderate snowpack and warm spring weather.

Seventy-eight percent of the black bears harvested in 2000 were less than 5 years old (Table 3). Total harvest (sample size) of black bears in DAU 4A in 2000 was adequate for the first time since 1990 to allow application of harvest criteria established in the 1992-2000 and 2000-2010 management plans (Table 4).

Still and incidental hunting accounted for 55% of the total harvest of all black bears harvested in this DAU in 2000. Three of 42 black bears were taken over bait in 2000 compared to 6 of 22 in 1999. Hound hunting comprised 36% of the remaining harvest for 2000 (Table 5).

Rifles and archery equipment accounted for 78% and 5% of the 2000 black bear harvest, respectively. Archery harvest as a percentage of the harvest was similar in 1999 and 2000 while rifle harvest as a percentage of the total harvest dropped (Table 6).

Most depredation complaints involve nuisance black bears in the Big Wood River Valley. In 2000, 6 complaints were received on black bears getting into garbage cans, dumpsters or bird feeders in Unit 48 (Table 7).

Wildlife Services personnel handle depredations on livestock. From 1987-1999, we received mortality reports on 15 black bears harvested by Wildlife Services (3-1988, 1-1990, 3-1993, 1-1994, 1-1995, 0-1996, 2-1997, 3-1998, 1-1999) for this DAU. In 2000 Wildlife Services personnel harvested 4 black bears.

## DOG TRAINING SEASON

A standard season of May 23-July 31 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 (1998-2000 average of 31% females in the harvest and 28% 5+-year-old males), and it is believed the black bear population has increased slightly in recent years. Both percent females in the harvest and percent 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 2000 as a result of dry habitat conditions and increased encroachment of humans into black bear habitat.

Table 1. Summary of seasons by method for DAU 4A, 2000.

Season type	DAU	Units	Season	
			Dates	Length
General, any legal weapon	4A	44, 45, 48, 49	4/15-5/22	38
			8/30-10/31	63
Pursuit only	4A	44, 45, 48, 49	5/23-7/31	70

Table 2. Black bear harvest by season and sex of black bear taken in DAU 4A, 1985-2000.

Year	Spring			Fall			Entire Season		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1987	13	2	15	1	1	2	14	3	17
1988	13	7	20	7	2	9	20	9	29
1989	11	3	14	5	6	11	16	9	25
1990	12	9	21	5	6	11	17	15	32
1991	13	8	21	2	2	4	15	10	25
1992	7	4	11	4	1	5	11	5	16
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
1997-99 Avg.	8.7	4.7	13.3	7.3	4.3	11.7	16.0	9.0	25.0
2000	10	1	11	18	13	31	28	14	42
Difference %	+15	-79%	-17%	+147%	+202%	+165%	+75%	+55%	+68%

Table 3. Age distribution of black bear checked from DAU 4A, 1994-2000.

Age	1994		1995		1996		1997		1998		1999		2000	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Cub	1	0	1	0	1	0	2	1	0	2	0	1	0	0
1	4	0	3	1	0	0	0	0	3	1	4	2	7	1
2	5	1	2	0	1	1	2	4	2	1	3	1	10	2
3	3	1	4	1	0	2	4	1	2	3	2	0	3	2
4	1	2	2	0	3	2	1	0	6	1	0	1	4	2
5	3	0	0	1	0	0	1	0	2	0	1	0	0	0
6	0	1	0	0	0	0	1	1	1	0	3	0	2	2
7	1	1	0	0	1	0	1	1	0	1	2	0	1	1
8	1	1	0	0	1	0	0	1	1	0	1	0	0	1
9	0	0	0	0	1	0	0	0	0	0	1	0	0	0
10+	0	3	1	2	0	0	0	1	0	1	0	1	1	1
Total	19	10	13	4	8	5	12	10	17	10	17	6	28	12

Table 4. Values of the 1992-2000 and 2000-2010 management plan criteria for DAU 4A, 1988-2000.

Year	N <sup>a</sup>	% Females	Median Age			% Males ≥ 5 yrs.
			Males	Females	Total	
1988	19	31	3	2	3	
1989	21	36	3	3	3	
1990	31	47	2	5	3	
1991	23	40	4	5	4	
1992	16	31	3	3	3	
1993	17	24	3	10+	3	15
1994	30	37	2	7.5	4	26
1995	18	17	3	5	3	8
1996	13	38	4	3	4	38
1997	27	37	4	3	3.5	22
1998	27	37	3	3	3	44
1999	23	26	3	2.5	3	25
2000	40	30	2	4	2.5	14
1998-2000 Avg.	29	31	3	3	3	28
(Desired Levels)		30-40%	≥4	≥6	≥5	25-35%

<sup>a</sup> Number of black bears that were aged. Sample sizes typically have been too small to make reliable inferences from the data about population trends.

Table 5. Method of harvest of black bear taken in DAU 4A, 1987-2000.

Year	<u>Bait</u>		<u>Hound</u>		<u>Still</u>		<u>Incidental</u>		<u>Other</u>		<u>Total</u>	
	M	F	M	F	M	F	M	F	M	F	M	F
1988	8	3	4	1	3	1	3	3	0	0	18	8
1989	8	1	2	1	3	3	3	4	0	0	16	9
1990	6	4	5	1	1	3	5	7	0	0	17	15
1991	4	6	4	0	5	3	2	1	0	0	15	10
1992	3	1	4	1	3	2	1	1	0	0	11	5
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

Table 6. Weapon type used to harvest black bear in DAU 4A, 1987-2000.

Year	<u>Rifle</u>		<u>Archery</u>		<u>Muzzleloader</u>		<u>Pistol</u>		<u>Other</u>		<u>Total</u>	
	M	F	M	F	M	F	M	F	M	F	M	F
1987	5	0	8	2	0	0	1	0	0	0	14	2
1988	14	6	6	2	0	0	0	1	0	0	20	9
1989	5	6	8	2	0	0	2	1	0	0	15	9
1990	11	10	4	5	0	0	2	0	0	0	17	15
1991	10	4	5	6	0	0	0	0	0	0	15	10
1992	6	4	4	1	0	0	0	0	0	0	10	5
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

Table 7. Black bear depredation complaints handled in the Magic Valley Region, 1994-2000.

DAU	1994	1995	1996	1997	1998	1999	2000
4A	9	4	1	3	5	8	6
Total	9	4	1	3	5	8	6

**PROGRESS REPORT  
SURVEYS AND INVENTORIES**

<b>STATE:</b>	<u>Idaho</u>	<b>JOB TITLE:</b>	<u>Black bear Surveys and Inventories</u>
<b>PROJECT:</b>	<u>W-170-R-25</u>		
<b>SUBPROJECT:</b>	<u>5 and 6</u>	<b>STUDY NAME:</b>	<u>Big Game Population Status, Trends, Use, and Associated Habitat</u>
<b>STUDY:</b>	<u>I</u>		
<b>JOB:</b>	<u>9</u>		<u>Studies</u>
<b>PERIOD COVERED:</b>	<u>July 1, 2000 to June 30, 2001</u>		

BLACK BEAR - UPPER SNAKE REGION

**ABSTRACT**

Black bear harvest has increased markedly in recent years in all three Upper Snake/Southeast Region DAUs. In 2000, 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 132 black bears were harvested (38 in DAU 4B, 38 in 4C, and 56 in 4D). The 132 black bears harvested in 2000 is an increase of 83% over the 1991-1999 average of 72. 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% age  $\geq$ 5 black bears in the male harvest and 30-40% females in the total harvest, calculated on a three-year running average. These criteria apply only to DAUs with an average annual harvest of 30 black bears. Only DAU 4D had an average annual harvest of 30 black bears for the 1998-2000 period and both criteria values fell within the target ranges. Values for DAUs 4B, 4C, and 4D were 20, 42, and 27 for percent 5+ males, respectively. Percent females in the harvest were 40, 27, and 33 for DAUs 4B, 4C, and 4D, respectively.

For all DAUs combined: the trend in average age of harvested males and females has been downward over the last few years, as has the percent of harvested black bears aged at 5 years or older. This information combined with decreasing incidences of depredations and nuisance calls suggests that black bear populations in the Upper Snake Region may be declining.

**AREA 4**

DAU 4B (GMUs 50, 51, 58, 59, AND 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). The ten-year average for the

1990s was 21. Another confounding factor has been the highly variable nature of the harvest. A total of only 15 black bears was harvested in 1999, the lowest total since the implementation of the current DAU framework in 1986. In 2000, a total of 38 black bears were taken, representing the highest total ever recorded for this DAU and, also, the first time that 30 black bears were harvested in a calendar year. Consequently, harvest data has been highly variable and unreliable. The 2000-2010 Black Bear Management Plan specifies that DAU 4B is to be managed at the “moderate” harvest level. For the 1998-2000 period, percent of the male harvest comprised of animals  $\geq 5$  failed to meet the target range while percent females in the harvest was within the moderate range. Bait and hound hunters have historically accounted for the majority of the harvest by method of take for this DAU. This trend continued in 2000 as 17 (47%) black bears were harvested over bait and 9 (25%) were taken by hound hunters, based on the 36 black bears for which method of harvest was known.

### 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% age 5+ black bears in the male harvest and 30-40% females in the total harvest, calculated on a three-year running average.

### BACKGROUND

Area 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 harvest because the limited habitat is often isolated from adjacent black bear habitat. The livestock industry is a major user of Area 4B.

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

Spring and summer weather conditions during 2000 were warmer and drier than normal. Winter precipitation was well below normal while temperatures were near the 30-year average. The spring of 2000 came early, and warm and dry conditions have persisted.

### POPULATION SURVEYS

No population surveys were conducted during this reporting period.

### 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 judgement of Department biologists.

Thirty-eight black bears were checked from DAU 4B in 2000, the highest total ever recorded since the establishment of the present DAU framework in 1986. The 38 black bears harvested represented a 153% increase from the 15 taken in 1999 and was 81% higher than the previous ten-year average of 21 (Table 2). Age was determined for 35 of the 38 black bears harvested in 2000. Historical age distribution of black bear checked from DAU 4B is shown in Table 3.

While harvest management criteria do not technically apply in this DAU due to low average annual harvest levels, harvest data and plan criteria are presented in Table 4. 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 or older and 30-40% of the total harvest being female. Values for the 1998-2000 period were within the target range for percent of the total harvest being female (40) while percent of the male harvest comprised of animals  $\geq 5$  (20) fell below the target range.

The breakdown of harvest by method and weapon type is shown in Tables 5 and 6, respectively. Bait and hound hunters have historically accounted for the majority of the harvest by method of take for this DAU. The trend continued in 2000 as 17 (47%) of the harvest occurred over bait and 9 (25%) were taken by hound hunters, based on the 36 black bears for which method of harvest was known.

#### DEPREDACTIONS

Two black bear nuisance complaints were received from DAU 4B during this reporting period (Table 7). One complaint involved a subadult that had to be trapped and moved from a yard in Arco. This black bear was relocated to a distant location in Unit 50. The second complaint involved a black bear that had been fed and habituated to humans at Stoddard Creek Campground in Unit 59. This animal was trapped and moved to Unit 61.

#### DOG TRAINING SEASONS

The 2000 dog training season ran from June 16-July 31 (46 days) in DAU 4B.

#### MANAGEMENT IMPLICATIONS

Harvest management criteria do not technically apply in this DAU due to low average annual harvest. Current management criteria specified in the 2000-2010 Black Bear Management Plan have been in effect for only two years. DAU 4B is to be managed to maintain harvest in the “moderate” range (25-35% of the male harvest to consist of animals  $\geq 5$  years old and 30-40% of the total harvest being female). Values for the 1997-1999 period were both within these ranges with 27% of the male harvest 5 or older and 37% of the total harvest being female. However, for the 1998-2000 period, the percentage of the male harvest being  $\geq 5$  dropped to 20% and the female component of the harvest increased to 40%. These fluctuations are likely due to a highly variable annual harvest for this DAU (15 in 1999 and 38 in 2000) and 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, AND 62A)

#### ABSTRACT

DAU 4B has historically had a low (<30) average annual harvest. However, 32 and 38 black bears were harvested in 1999 and 2000, respectively. These are the only two years in which 30 black bears have been taken since the implementation of the current DAU framework. Consequently, harvest criteria have not technically applied to this DAU. (The 1998-2000 mean annual harvest is 28.) The 2000-2010 Black Bear Management Plan has been in effect for two years and sets harvest objectives for DAU 4C to maintain harvest levels consistent with the “moderate” level of harvest. Since the implementation of the new plan, these targets have been met or exceeded.

#### 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% age 5+ black bears in the male harvest 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 in those areas.

#### BACKGROUND

Area 4C contains a mixture of relatively dry bear habitats where timber stands are generally distributed on moister north and east aspects and moist caldera-type habitat. The dryer 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 represents the best black bear habitat in the Region. Black bear populations are vulnerable to harvest because the limited habitat is often isolated from adjacent black bear habitat. The livestock industry is a major user of Area 4C. A summary of season type and structure for DAU 4C is presented in Table 1.

Spring and summer weather conditions during 2000 were warmer and drier than normal. Winter precipitation was well below normal while temperatures were near the 30-year average. The spring of 2000 came early, and warm and dry conditions have persisted.

#### POPULATION SURVEYS

No population surveys were conducted during this reporting period.

## HARVEST CHARACTERISTICS

Historically, a relatively small number of black bears (<30) are checked from this DAU annually. Therefore harvest data are derived from small sample sizes, making conclusions drawn from them 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 judgement of Department biologists.

However, 32 black bears were checked from DAU 4C in 1999 and 38 in 2000. These totals represent the two largest totals observed for this DAU since the establishment of the present DAU framework in 1986, and are the only times that 30 black bears have been harvested in any given year. The mean annual harvest for DAU 4C still fell below 30 (28) for the 1998-2000 period. Black bear harvest by season and sex is shown in Table 8. Age distribution of black bear checked from DAU 4C is presented in Table 9.

While harvest criteria technically do not apply in this DAU due to low average annual harvest levels, harvest data and plan criteria are presented in Table 10. The 2000-2010 Black Bear Management Plan sets harvest objectives for DAU 4C to maintain harvest levels consistent with the “moderate” harvest targets of 25-35% of the male harvest to be 5 or older and 30-40% of the total harvest being female. Values for the 1998-2000 period exceeded the target for 5+ males (42%) and for the percentage of the total harvest being female (27%) indicating a light harvest.

The breakdown of 2000 harvest by method and weapon type is shown in Tables 11 and 12, respectively.

## DEPREDACTIONS

No black bear depredation complaints were received from DAU 4C during this reporting period (Table 7).

## DOG TRAINING SEASON

The 2000 dog training season ran from June 16-July 31 (46 days) in the open portion of DAU 4C (that portion of Unit 61 west of Howard Creek in Clark County) and all of Unit 60.

## MANAGEMENT IMPLICATIONS

Harvest management criteria technically do not apply in this DAU due to low average annual harvest. However, the 2000-2010 Black Bear Management Plan sets objectives for DAU 4C to maintain harvest levels consistent with the “moderate” harvest targets of 25-35% of the male harvest to consist of 5 or older black bears and 30-40% of the total harvest being female. Values for the 1997-1999 period exceeded both of these targets, indicating a lightly harvested population. For the 1998-2000 period, both values again exceeded the target ranges with the percentage of  $\geq 5$  males at 42% and the percentage of females at 27%. This population is

possibly more lightly harvested than the other DAUs in the region because of restrictions placed on baiting and hound hunting in most of the DAU because of the presence of grizzly bears.

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

### ABSTRACT

Black bear harvest has increased markedly in DAU 4D in recent years. A total of 56 black bears were taken in 2000. This represents an increase of 107% over the 1987-1996 average annual harvest of 27. Reasons for this increase are not well understood. However, management criteria in the 2000-2010 Black Bear Management Plan indicate that this population is being harvested at the target “moderate” level of harvest. Historically, a large percentage of the black bears harvested in this DAU have been taken in the spring and in association with baiting activities.

### 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% age 5+ black bears in the male harvest and 30-40% females in the total harvest, calculated on a three-year running average.

### BACKGROUND

Area 4D 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 harvest because the limited habitat is often isolated from adjacent black bear habitat. The livestock industry is a major user of Area 4D.

A summary of season type and structure for DAU 4D is presented in Table 1. Spring and summer weather conditions during 2000 were warmer and drier than normal. Winter precipitation was well below normal while temperatures were near the 30-year average. The spring of 2001 came early, and warm and dry conditions have persisted.

### POPULATION SURVEYS

A bait station survey was conducted most recently in DAU 4D from June 24-29, 1999. A total of 138 bait stations were established on 23 transects in Units 66, 66A, 67, and 76; however, no visits by black bear were recorded (Table 13).

### HARVEST CHARACTERISTICS

A total of 56 black bears were checked from DAU 4D in 2000 (Table 14). This represents the historical high for this DAU and is the third time in the past four years that a new historical high has been established or tied. Those four years also represent the only four times that as many as

30 black bears have been harvested in this DAU in the past ten-year period. The average annual harvest for the 1998-2001 period is 44.3. Age distribution of black bears checked from DAU 4D is shown in Table 15.

The 2000-2010 Black Bear Management Plan has been in effect for two years and sets harvest objectives for DAU 4D to maintain harvest levels consistent with the “moderate” harvest targets of 25-35% of the male harvest to be 5 or older and 30-40% of the total harvest being female. Values for the 1998-2000 period were both within these ranges (Table 16) with 27% of male harvest 5 or older and 33% of total harvest being female.

A large percentage of the black bears harvested in this DAU have historically been taken in the spring (Table 14) and in association with baiting activities (Table 17). Weapon type used to harvest black bears in DAU 4D is shown in Table 18.

#### DEPREDACTIONS

No black bear depredation complaints were received from DAU 4D during this reporting period (Table 7).

#### DOG TRAINING SEASON

The 2000 dog training season ran from June 16-July 31 (46 days) in DAU 4D.

#### MANAGEMENT IMPLICATIONS

Black bear harvest has increased markedly in this DAU in recent years. The 56 black bears harvested in 2000 represents a historical high for DAU 4D and is the third time in four years that a new historical high total has either been established or tied in the past four years. The 2000 total of 56 black bears represents an increase of 107% over the 1987-1996 average of 27. 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 the liberalized hunting season framework brought on by public perceptions of high predator populations and their potential negative impacts on deer and elk numbers.

However management criteria in the 2000-2010 Black Bear Management Plan indicate that this population is harvested at a rate that falls within the “moderate” range, which is the target for this DAU.

## **AREA 5**

GMUs 60A, 63, AND 63A

### **ABSTRACT**

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.

### **MANAGEMENT DIRECTION**

Black bear in Area 5 are too sparse to justify a hunting season. The Department will not likely offer an open season in Area 5 during the 2000-2010 planning period.

### **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.

### **HARVEST CHARACTERISTICS**

None.

### **DEPREDATIONS**

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

### **DOG TRAINING SEASON**

None.

### **MANAGEMENT IMPLICATIONS**

The Department will not likely offer an open season in Area 5 during the 1999-2010 planning period.

Table 1. Summary of Seasons by Method for DAUs 4B, 4C, and 4D, Fall 2000-Spring 2001.

Season Type <sup>a</sup>	DAU	Units	Season	
			Dates	Length (Days)
General, any legal weapon	4B	50, 51, 58, 59, 59A	8/30-10/31	63
			4/15-6/15	62
General, any legal weapon <sup>b</sup>	4C	60, 61, 62, 62A	8/30-10/31	63
			4/15-6/15	62
General, any legal weapon	4D	64, 65, 66, 66A, 67, 69, 76	8/30-10/31	63
			4/15-6/15	62
Pursuit only	4B	50, 51, 58, 59, 59A	6/16-7/31	46
Pursuit only <sup>c</sup>	4C	61	6/16-7/31	46
Pursuit only	4D	64, 65, 66, 66A, 67, 69, 76	6/16-7/31	46
Controlled, any legal weapon	None			

<sup>a</sup> Any black bear is legal except female black bear accompanied by young.

<sup>b</sup> Dogs and bait prohibited in that portion of Unit 61 east of Howard Creek in Clark County and in all of Units 62 and 62A.

<sup>c</sup> Only that portion of Unit 61 west of Howard Creek in Clark County. Bait prohibited.

Table 2. Black bear harvest by season and sex of black bear taken in DAU 4B (GMUs 50, 51, 58, 59, and 59A) since 1991.

Year	Spring			Fall			Entire Season		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1991	7	3	10	4	1	5	11	4	15
1992	6	5	11	7	5	12	13	10	23
1993	4	4	8	6	3	9	10	7	17
1994	10	6	16	5	4	9	15	10	25
1995	8	6	14	3	1	4	11	7	18
1996	18	4	22	3	3	6	21	7	28
1997	13	7	20	4	3	7	17	10	27
1998	12	9	21	3	4	7	15	13	28
1999	5	2	7	7	1	8	12	3	15
1997-1999 Avg.	10.0	6.0	16.0	4.7	2.7	7.3	14.7	8.7	23.3
2000	12	14	26	8	4	12	20	18	38
Difference (%)	+20	+133	+63	+70	+48	+64	+36	+107	+63

Table 3. Age distribution of black bear checked from DAU 4B (GMUs 50, 51, 58, 59, and 59A), 1991-2000.

Age	1991		1992		1993		1994		1995		1996		1997		1998		1999		2000	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Unknown	1	1	2	0	1	1	1	1	0	0	1	0	0	0	0	0	0	0	2	1
Cub	1	0	0	0	0	0	0	0	0	0	0	1	1	0	3	4	1	0	0	0
1	1	0	2	3	2	0	2	0	3	0	3	0	2	0	1	1	1	0	4	0
2	3	1	1	1	2	0	1	1	1	1	1	1	4	2	4	2	1	1	6	0
3	1	0	3	0	4	2	2	1	1	1	4	1	3	2	2	2	5	0	5	6
4	2	1	3	0	0	3	5	4	2	0	5	0	3	1	1	1	1	1	2	1
5	0	0	0	1	0	0	1	2	3	2	2	2	0	1	0	0	0	0	1	1
6	1	0	1	2	1	0	3	0	0	0	1	0	1	1	3	0	0	1	0	0
7	0	1	1	1	0	0	0	0	0	0	1	0	2	0	0	0	1	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2
9	0	0	0	0	0	0	0	0	0	1	1	1	0	1	0	0	0	0	0	1
10+	1	0	0	2	0	1	0	1	1	2	2	1	0	1	1	3	1	0	0	4
Total	11	4	13	10	10	7	15	10	11	7	21	7	17	10	15	13	11	3	22	16

Table 4. Values of the 1992-2000 management plan criteria for DAU 4B (GMUs 50, 51, 58, 59, and 59A), 1991-2000.

Year	N1	% Females	% Males $\geq$ 5	# Males $\geq$ 5
1991	15	28	20	2
1992	23	44	18	2
1993	17	41	11	1
1994	25	40	29	4
1995	18	39	36	4
1996	28	25	35	7
1997	27	37	24	4
1998	28	46	27	4
1999	15	20	18	2
2000	38	42	15	3
1998-2000 Avg.	26.7	40.0	19.6	3.0
Desired Levels		30-40%	25-35%	

Table 5. Method of harvest of black bear taken in DAU 4B (GMUs 50, 51, 58, 59, and 59A), 1991-2000.

Year	Bait		Hound		Still		Incidental		Other		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
1991	3	2	3	1	0	0	1	0	4	1	11	4
1992	3	0	4	5	3	1	3	4	0	0	13	10
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

Table 6. Weapon type used to harvest black bear in DAU 4B (GMUs 50, 51, 58, 59, and 59A), 1991-2000.

Year	Rifle		Archery		Muzzle-loader		Pistol		Other		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
1991	4	1	2	1	0	0	5	2	0	0	11	4
1992	8	6	4	2	0	0	1	2	0	0	13	10
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

Table 7. Black bear depredation complaints handled in the Upper Snake Region, 1991-2000.

DAU	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
4B	0	0	0	0	1	2	0	0	2	2
4C	0	1	1	10	11	11	8	0	1	0
4D	0	2	6	15	9	1	4	1	1	0
Total	0	3	7	25	21	14	12	1	4	2

Table 8. Black bear harvest by season and sex of black bear taken in DAU 4C (GMUs 60, 61, 62, and 62A) since 1991.

Year	Spring			Fall			Entire Season		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1991	6	2	8	3	2	5	9	4	13
1992	5	3	8	3	1	4	8	3	11
1993	7	3	10	2	3	5	9	6	15
1994	6	3	9	12	5	17	18	8	26
1995	8	7	15	10	4	14	18	11	29
1996	12	2	14	7	8	15	19	10	29
1997	12	1	13	6	4	10	18	5	23
1998	4	1	5	6	3	9	10	4	14
1999	14	3	17	10	5	15	24	8	32
1997-1999 Avg.	10.0	1.7	11.7	7.3	4.0	11.3	17.3	5.7	23.0
2000	8	6	14	19	5	24	27	11	38
Difference (%)	-20	+253	+20	+160	+25	+112	+56	+93	+65

Table 9. Age distribution of black bear checked from DAU 4C (GMUs 60, 61, 62, and 62A), 1991-2000.

Age	1991		1992		1993		1994		1995		1996		1997		1998		1999		2000	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Unknown	0	1	1	1	0	2	1	0	3	1	1	0	1	0	0	0	0	0	1	0
Cub	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0
1	1	0	1	0	0	0	6	1	4	0	3	2	1	0	1	0	6	3	3	2
2	0	1	1	0	1	0	1	1	1	1	3	1	2	0	0	0	1	0	6	2
3	3	1	0	1	2	1	3	1	3	3	3	2	3	1	1	0	3	1	6	2
4	1	0	1	2	1	1	2	1	2	1	1	1	6	2	1	2	3	1	2	0
5	0	0	3	0	1	0	1	2	2	0	3	0	3	0	1	0	3	1	2	1
6	2	0	0	0	0	0	1	0	1	1	1	0	2	0	2	1	2	1	3	2
7	0	0	0	0	1	0	1	0	0	1	1	0	1	0	0	0	3	0	0	0
8	1	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0	1	0	1	1
9	0	1	0	0	0	1	1	0	0	0	1	0	1	0	1	0	1	0	2	0
10+	1	0	1	0	2	1	0	2	2	2	1	3	1	1	1	1	1	1	1	1
Total	9	4	8	4	9	6	18	8	18	11	18	9	18	5	10	4	24	8	27	11

Table 10. Values of the 1992-2000 management plan criteria for DAU 4C (GMUs 60, 61, 62, and 62A), 1991-2000.

Year	N1	% Females	% Males $\geq$ 5	# Males $\geq$ 5
1991	13	31	44	4
1992	12	25	57	4
1993	15	40	56	5
1994	26	31	24	4
1995	29	38	33	5
1996	27	37	41	7
1997	23	22	47	8
1998	14	29	50	5
1999	32	25	46	9
2000	38	34	35	9
1998-2000 Average	28.0	27.4	41.7	8.3

Table 11. Method of harvest of black bear taken in DAU 4C (GMUs 60, 61, 62, and 62A), 1991-2000.

Year	Bait		Hound		Still		Incidental		Other		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
1991	3	0	2	0	1	1	3	3	0	0	9	4
1992	2	1	1	0	3	1	1	2	1	0	8	4
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	0	0	<sup>a</sup> 27	11

<sup>a</sup> Method of harvest not reported for one black bear.

Table 12. Weapon type used to harvest black bear in DAU 4C (GMUs 60, 61, 62, and 62A), 1991-2000.

Year	Rifle		Archery		Muzzle-loader		Pistol		Other		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
1991	1	3	6	0	1	0	1	1	0	0	9	4
1992	5	3	1	1	0	0	2	0	0	0	8	4
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

Table 13. Bait station survey results from DAU 4D (GMUs 64, 65, 66, 66A, 67, 69, and 76).

Year	Survey Number	Survey Dates	Total Trans. Avail.	Total Trans. Sampled	Total Stations Sampled	Total Stations Visited by Black Bear	90% Confidence Interval (+/-)
1992 <sup>a</sup>	1	6/24-7/11	16	16	94	0	0.0
1993 <sup>a</sup>	1	6/24-7/1	18	18	107	1	0-4.0%
1999 <sup>b</sup>	1	6/24-6/29	23	23	138	0	0.0

<sup>a</sup> Survey conducted in Units 66A and 76.

<sup>b</sup> Survey conducted in Units 66, 66A, 67, and 76.

Table 14. Black bear harvest by season and sex of black bear taken in DAU 4D (GMUs 64, 65, 66, 66A, 67, 69, and 76) since 1991.

Year	Spring			Fall			Entire Season		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1991	9	8	17	5	4	9	14	12	26
1992	9	4	13	6	6	12	15	10	25
1993	8	4	12	7	4	11	15	8	23
1994	10	3	13	5	6	11	15	9	24
1995	5	3	8	7	2	9	12	5	17
1996	13	4	17	5	7	12	18	11	29
1997	18	5	23	9	6	15	27	11	38
1998	20	5	25	5	3	<sup>b</sup> 9	25	8	<sup>a</sup> 34
1999	18	4	22	11	11	22	29	15	44
1997-1999 Average	18.7	4.7	23.3	8.3	6.7	15.3	27.0	11.3	38.7
2000	25	15	40	10	6	16	35	21	56
Difference (%)	+34	+219	+72	-20	-10	+5	+30	+86	+45

<sup>a</sup> Sex was not reported for one black bear.

Table 15. Age distribution of black bear checked from DAU 4D (GMUs 64, 65, 66, 66A, 67, 69, and 76), 1991-2000.

Age	1991		1992		1993		1994		1995		1996		1997		1998		1999		2000	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Unknown	1	2	3	0	2	1	0	0	2	0	0	0	1	0	0	0	1	1	0	2
Cub	0	0	0	0	0	0	0	1	0	0	0	1	1	0	3	1	2	2	0	0
1	2	1	2	1	1	0	3	0	0	0	0	3	2	1	3	0	6	3	6	1
2	3	2	5	2	3	4	5	2	2	2	7	1	8	0	6	2	5	4	9	3
3	3	2	3	0	0	1	5	3	5	2	3	2	3	3	3	1	6	0	5	4
4	3	0	0	1	3	0	2	1	0	0	2	1	4	3	3	1	2	1	5	1
5	1	1	1	3	2	0	0	1	1	0	2	1	3	0	3	0	1	1	3	1
6	1	1	0	1	1	0	0	0	1	0	2	0	3	2	0	1	3	1	1	1
7	0	1	1	1	1	0	0	1	0	1	0	0	1	1	3	1	1	1	3	0
8	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
9	0	0	0	0	0	1	0	0	1	0	1	1	0	0	1	1	0	1	1	
10+	0	1	0	1	2	1	0	0	0	0	1	0	1	1	1	0	1	1	2	4
Total	14	12	15	10	15	9	15	9	12	5	17	11	27	11	25	8	29	15	35	21

Table 16. Values of the 1992-2000 management plan criteria for DAU 4D (GMUs 64, 65, 66, 66A, 67, 69, and 76), 1991-2000.

Year	N1	% Females	% Males $\geq$ 5	# Males $\geq$ 5
1991	26	46	15	2
1992	25	40	17	2
1993	24	33	46	6
1994	24	38	0	0
1995	17	29	30	3
1996	28	39	35	6
1997	38	29	31	8
1998	33	24	28	7
1999	44	34	25	7
2000	56	38	29	9
1998-2000 Average	44.3	33.1	27.3	8.0

Table 17. Method of harvest of black bear taken in DAU 4D, 1991-2000.

Year	Bait		Hound		Still		Incidental		Other		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
1991	8	5	0	0	1	2	2	4	0	0	11	11
1992	6	2	2	1	2	3	5	3	0	0	15	9
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

Table 18. Weapon used to harvest black bear taken in the Upper Snake Region portion of DAU 4D, 1991-2000.

Year	Rifle		Archery		Muzzle-loader		Pistol		Other		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
1991	6	7	5	3	0	0	0	1	0	0	11	11
1992	5	7	8	2	0	0	2	0	0	0	15	9
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

**PROGRESS REPORT  
SURVEYS AND INVENTORIES**

<b>STATE:</b>	<u>Idaho</u>	<b>JOB TITLE:</b>	<u>Black bear Surveys and Inventories</u>
<b>PROJECT:</b>	<u>W-170-R-25</u>		
<b>SUBPROJECT:</b>	<u>7</u>	<b>STUDY NAME:</b>	<u>Big Game Population Status, Trends, Use, and Associated Habitat</u>
<b>STUDY:</b>	<u>I</u>		
<b>JOB:</b>	<u>9</u>		<u>Studies</u>
<b>PERIOD COVERED:</b>	<u>July 1, 2000 to June 30, 2001</u>		

**BLACK BEAR - SALMON REGION**

**ABSTRACT**

Salmon Region is responsible for DAUs 1I, 1J, and 4E. In these DAUs black bear depredation problems and hunter harvest tend to peak during dry years. Conversely, depredations and harvest are minimal during wet years. For example, in 1994, a dry year, depredation complaints reached an all-time high of 64 complaints and 171 black bears were harvested. In the wet years of 1997 and 1998, there were few depredation problems and about 100 black bears 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, indicator 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. Bait and hound hunters appear to be more selective in the animals they take (30% females) compared to still and incidental hunters (40% females).

**AREA 1**

DAU 1I (GMUs 34, 35, AND 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 minor 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. During 2000 vegetation cured early in the growing season, but above-average October rainfall prompted autumn green-up. Winter temperatures were mild, seldom dropping below 0°F and snow accumulation was minimal. Animals therefore entered the winter in average body condition. Snowpack was well below average (30-55% of normal) and snowmelt occurred 2-4 weeks earlier than normal. Water-year precipitation was well below average so drought conditions prevailed through the end of the reporting period.

### POPULATION SURVEYS

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

### HARVEST CHARACTERISTICS

As characteristic of a dry year, harvest in 2000 was well above the 1996-1998 average (Table 3). Dry fall seasons generally make females and young black bears much more vulnerable than usual. 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). Approximately 50% of black bears harvested in this DAU are taken by still and incidental hunters (Table 6) and all but a few hunters use rifles (Table 7).

### DEPREDATIONS

Depredations in this DAU usually accounted for the majority of the black bear problems in the Salmon Region prior to 1994 (Table 18). 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 were no depredation complaints during the reporting period.

### MANAGEMENT IMPLICATIONS

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

## DAU 1J (GMUs 21, 21A, 28, AND 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  $\geq 5$  years old and 30-40% females in the harvest (Table 1).

### BACKGROUND

Area 1 consists of black bear habitat that varies from dense, semicoastal forests to dry river breaks with patchy timber stands. Area 1 is highly roaded, which makes black bear populations vulnerable to overharvest.

DAU 1J includes units 21, 21A, 28, and 36B. These units contain some of the best black bear habitat in Salmon Region. However hunter access is also 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 which 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, the DAU 1J black bear harvest was 53-55 black bears per year, compared to 66-82/year during the dry 1993-1995 years (Table 8). Typical of dry years, black bear harvest increased dramatically in DAU 1J during 2000, reaching the highest level since 1983. 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 9 and 10). Over the last 10 years, harvest by hunters using bait and hounds has averaged under 30% females compared to still hunter harvest of 35% females and incidental hunter harvest averaging 41% females (Table 11). In most years 80-90% of black bears are taken by rifle (Table 12).

### DEPREDATIONS

Black bear depredation complaints in past years have been primarily related to fruit trees and garbage along Salmon River below North Fork. The USFS installed black bear-proof dumpsters at dump sites along 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, followed by few complaints during the wet 1995 summer, then a moderate increase during the dry 1996

summer (Table 18). No complaints were handled during the wet 1997 summer, but 11 complaints occurred in 1998. Only one complaint was received during 1999. A dry summer and fall in 2000 once again produced poor forage conditions. Eighteen complaints were reported, the highest since 1994.

## 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 August 30, 16 days earlier than in prior years, and spring 2000 black bear season ending date was extended from June 15 to June 30, creating a total of 31 additional days to hunt black bears.

## AREA 4

DAU 4E (GMUs 29, 30, 30A, 36A, 37, AND 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 streams. 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 40 in 1995 (Table 13). The 42 black bears harvested in 2000 is the highest level since 1983. Sex and age composition of DAU 4E black bear harvest indicates a somewhat lighter harvest rate than specified in the 2000-2010 management plan (Tables 14 and 15). 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. However, female composition and male age structure were outside management goals in 2000, indicating potential overharvest, a trend that will be observed carefully in future years. As in other DAUs, harvest by hunters

using bait and hounds is composed of a lower proportion of females (29%) compared to still or incidental hunters (48%) (Table 16). Most black bears are harvested by rifle (Table 17).

#### DEPREDATIONS

Except for 1994, an unusually dry year, DAU 4E experiences relatively few depredation problems (Table 18). No complaints were reported in 2000.

#### 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 August 30, 16 days earlier than in prior years, and spring 2000 black bear season ending date was extended from June 15 to June 30, creating a total of 31 additional days to hunt black bears.

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 seasons for DAUs 1I, 1J, and 4E, July 1, 2000-June 30, 2001.

Season type <sup>a</sup>	DAU	Units	Season	
			Dates	Length (days)
General, any legal weapon	1I	34, 35	9/15-10/31	47
		36	8/30-10/31	63
		34, 35, 36	4/15-6/30	77
General, any legal weapon	1J	21, 21A, 28, 36B	8/30-10/31	63
			4/15-6/30	77
General, any legal weapon	4E	29, 30, 30A, 36A, 37, 37A	8/30-10/31	63
			4/15-6/30	77
Pursuit only	1I	34, 35, 36	7/01-7/31	31
Pursuit only	1J	21, 21A, 28, 36B	7/01-7/31	31
Pursuit only	4E	29, 30, 30A, 36A, 37, 37A	7/01-7/31	31

<sup>a</sup> Bag limit includes any black bear except females accompanied by young.

Table 3. Black bear harvest by season, DAU 11<sup>a</sup>, (GMUs 34, 35 and 36) 1983-present.

Year	<u>Spring</u>			<u>Fall</u>			<u>Entire Season</u>		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1983	9	2	11	1	1	2	10	3	13
1984	7	1	8	6	2	8	13	3	16
1985	3	1	4	3	0	3	6	1	7
1986	11	2	13	8	3	11	19	5	24
1987	5	1	6	9	2	11	14	3	17
1988	9	1	10	9	4	14	18	5	24
1989	8	1	9	8	8	16	16	9	25
1990	14	0	14	7	6	13	21	6	27
1991	13	4	17	7	4	11	20	8	28
1992	17	5	22	5	1	6	22	6	28
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
1998-2000 average	15	3	18	13	3	17	28	6	35
2000	22	5	27	17	4	21	39	9	48
Difference(%)	+7	+2	+9	+4	+1	+4	+11	+3	+13

Table 4. Age distribution of harvested black bear, DAU 11<sup>a</sup>, GMUs 34, 35 and 36 1995-2000.

Age	<u>1995</u>		<u>1996</u>		<u>1997</u>		<u>1998</u>		<u>1999</u>		<u>2000</u>	
	M	F	M	F	M	F	M	F	M	F	M	F
Unknown	4	1	2	0	1	2	1	0	6	1	2	0
Cub	1	0	0	1	0	0	0	0	0	0	1	1
1	5	1	2	0	0	1	0	0	1	1	2	0
2	1	2	3	1	0	0	1	1	4	0	5	1
3	3	3	2	0	4	1	1	0	4	0	11	0
4	4	0	2	1	6	0	5	1	1	0	7	0
5	1	0	3	0	3	2	1	0	6	1	1	2
6	2	0	1	1	1	0	2	1	3	0	2	0
7	2	1	1	1	0	0	0	0	5	2	3	1
8	1	0	0	0	0	0	0	0	1	0	2	0
9	2	2	0	0	0	0	0	1	1	0	2	0
10+	4	5	1	2	0	1	2	0	1	1	1	4
Total	30	15	17	7	15	7	13	4	33	6	39	9

Table 5. Status of black bear population characteristics relative to management criteria, DAU II, 1990-present.

Year	N <sup>a</sup>	2000–2010 management criteria		N <sup>b</sup>	Median age	
		Females (%)	Males age $\geq 5$ (%)		Males	Females
1990	42	26	64	28	6	8
1991	28	29	78	18	8	5
1992	28	21	45	20	4	6
1993	40	43	62	21	6	5
1994	57	40	43	30	4	4
1995	45	33	46	26	4	8
1996	24	29	40	15	4	6
1997	23	35	29	14	4	5
1998	17	24	42	12	4	5
1999	39	15	63	27	5	7
2000	48	19	30	37	3	7
1998-2000 Avg.		*19	*45			
Desired levels		>40%	<25%			

<sup>a</sup> Number of black bears of known sex (excluding unknowns).

<sup>b</sup> Number of male black bears for which age estimated (excluding unknowns).

\* Values do not meet plan criteria.

Table 6. Method of harvest of black bear, DAU II (Units 34, 35, and 36), 1990-present.

Year	<u>Bait</u>		<u>Hound</u>		<u>Still</u>		<u>Incidental</u>		<u>Other</u>		<u>Total</u>	
	M	F	M	F	M	F	M	F	M	F	M	F
1990	11	2	7	1	6	2	7	6	0	0	31	11
1991	6	3	7	2	2	0	3	1	1	1	19	7
1992	7	1	6	1	2	2	0	0	0	0	15	4
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	121	2	4	1	8	2	9	1	0	0	33	6
2000												

Table 7. Weapon type used to harvest black bear, DAU 1I (Units 34, 35, and 36), 1990-present.

Year	<u>Rifle</u>		<u>Archery</u>		<u>Muzzleloader</u>		<u>Pistol</u>		<u>Other</u>		<u>Total</u>	
	M	F	M	F	M	F	M	F	M	F	M	F
1990	13	9	15	2	0	0	2	0	0	0	30	11
1991	7	1	9	3	0	1	3	1	0	0	19	6
1992	11	3	4	2	0	0	3	0	0	0	18	5
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

Table 8. Black bear harvest by season, DAU 1J<sup>a</sup>, (GMUs 21, 21A, 28 and 36B 1983-present.

Year	<u>Spring</u>			<u>Fall</u>			<u>Entire Season</u>		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1983	26	8	34	6	7	13	32	15	47
1984	11	10	21	16	13	29	27	23	50
1985	21	7	28	16	4	20	37	11	48
1986	23	8	31	23	18	41	46	26	72
1987	15	5	20	21	18	39	36	23	59
1988	23	8	31	25	20	45	48	28	76
1989	17	6	23	10	7	17	27	13	40
1990	24	16	40	16	16	32	40	32	72
1991	26	16	42	18	10	28	44	26	70
1992	26	8	34	8	5	13	34	13	47
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	11	31	12	11	23	32	22	54
1998	27	7	34	14	5	19	41	12	53
1999	29	5	34	9	7	16	38	12	50
1998-2000 average	34	9	43	18	8	26	52	17	69
2000	46	14	60	30	13	43	76	27	103
Difference(%)	+12	+5	+17	+12	+5	+17	+24	+10	+34

Table 9. Age distribution of harvested black bear, DAU 1J<sup>a</sup>, 1995-2000.

Age	1995		1996		1997		1998		1999		2000	
	M	F	M	F	M	F	M	F	M	F	M	F
Unknown	0	0	2	0	1	3	5	0	2	1	2	0
Cub	2	2	0	0	0	1	1	0	0	0	2	0
1	3	2	3	0	5	2	4	0	3	1	6	2
2	7	6	3	0	4	2	9	1	1	1	20	7
3	6	8	9	2	4	2	5	1	6	4	6	2
4	5	2	10	4	3	2	2	1	3	0	16	7
5	3	9	3	1	6	4	5	1	4	1	5	0
6	5	0	5	1	0	0	4	2	6	0	3	2
7	1	0	1	1	2	0	2	1	2	2	5	0
8	1	0	1	1	3	1	3	2	4	0	5	3
9	2	2	1	1	0	1	0	0	3	0	3	0
10+	3	4	5	1	4	4	1	3	4	2	3	4
Total	38	35	43	12	32	22	41	12	38	12	76	27

<sup>a</sup> Game Management Units 21, 21A, 28, and 36B.

Table 10. Status of black bear population characteristics relative to management criteria, DAU 1J, 1990-present.

Year	2000 – 2010 management criteria				Median age	
	N <sup>a</sup>	Females (%)	Males age $\geq 5$ (%)	N <sup>b</sup>	Males	Females
1990	72	44	38	39	4	6
1991	70	37	57	42	5	6
1992	47	28	50	32	5	6
1993	66	27	28	47	3	5
1994	81	31	31	55	4	5
1995	73	48	39	38	4	4
1996	55	22	39	41	4	4
1997	54	41	48	31	4	4
1998	53	23	42	36	3	6
1999	50	24	64	36	6	3
2000	103	26	32	74	4	4
1998-2000 Avg.		*24	*46			
Desired levels		30-40%	25-35%			

<sup>a</sup> Number of black bears of known sex (excluding unknowns).

<sup>b</sup> Number of male black bears for which age estimated (excluding unknowns).

\* Values do not meet plan criteria.

Table 11. Method of harvest of black bear, DAU 1J (Units 21, 21A, 28, and 36B), 1990-present.

Year	<u>Bait</u>		<u>Hound</u>		<u>Still</u>		<u>Incidental</u>		<u>Other</u>		<u>Total</u>	
	M	F	M	F	M	F	M	F	M	F	M	F
1990	7	3	15	10	10	6	7	10	0	4	39	33
1991	9	2	14	14	11	7	10	3	0	0	44	26
1992	7	3	19	4	3	5	4	0	0	0	33	13
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

Table 12. Weapon type used to harvest black bear, DAU 1J (Units 21, 21A, 28, and 36B), 1990-present.

Year	<u>Rifle</u>		<u>Archery</u>		<u>Muzzleloader</u>		<u>Pistol</u>		<u>Other</u>		<u>Total</u>	
	M	F	M	F	M	F	M	F	M	F	M	F
1990	28	25	7	1	1	0	3	5	0	1	39	32
1991	30	19	4	4	0	0	8	3	2	0	44	26
1992	20	7	8	2	1	0	5	4	0	0	34	13
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	0	2	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

Table 13. Black bear harvest by season, DAU 4E<sup>a</sup>, 1983-present.

Year	<u>Spring</u>			<u>Fall</u>			<u>Entire Season</u>		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1983	11	4	15	2	2	4	13	6	19
1984	8	10	18	3	1	4	11	11	22
1985	14	8	22	5	3	8	19	11	30
1986	19	1	20	7	3	10	26	4	30
1987	11	10	21	7	6	13	18	16	34
1988	12	5	17	12	3	15	24	8	32
1989	16	7	23	4	3	7	20	10	30
1990	18	7	25	6	1	7	24	8	32
1991	7	5	12	5	7	12	12	12	24
1992	10	2	12	0	2	2	10	4	14
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
1998-2000 Avg.	17	11	28	3	5	7	20	16	36
2000	17	16	33	6	3	9	23	19	42
Difference	0	+5	+5	+3	-2	+2	+3	+3	+6

<sup>a</sup> Game Management Units 29, 30, 30A, 36A, 37, and 37A.

Table 14. Age distribution of harvested black bear, DAU 4E<sup>a</sup>, 1995-2000.

Age	<u>1995</u>		<u>1996</u>		<u>1997</u>		<u>1998</u>		<u>1999</u>		<u>2000</u>	
	M	F	M	F	M	F	M	F	M	F	M	F
Unknown	1	2	0	0	0	1	0	1	0	1	2	2
Cub	0	1	0	0	1	0	0	0	0	0	0	0
1	2	0	1	1	0	0	1	2	3	1	1	1
2	1	3	1	0	4	0	4	3	7	2	3	6
3	8	3	3	2	3	3	0	0	1	3	3	3
4	4	1	5	2	3	2	0	2	1	0	11	1
5	4	0	1	0	2	1	1	2	2	1	1	0
6	0	0	3	1	0	0	1	3	4	0	0	1
7	0	1	0	0	3	0	1	0	4	0	2	1
8	0	0	0	0	2	0	2	0	3	2	0	1
9	2	0	0	0	0	0	1	0	0	1	0	0
10+	2	4	2	3	0	4	0	2	0	3	0	3
Total	24	15	16	9	18	11	11	15	25	14	23	19

<sup>a</sup> Game Management Units 29, 30, 30A, 36A, 37 and 37A.

Table 15. Status of black bear population characteristics relative to management criteria, DAU 4E, 1990-present.

Year	2000 – 2010 management criteria			Median age		
	N <sup>a</sup>	Females (%)	Males age ≥5 (%)	N <sup>b</sup>	Males	Females
1990	32	25	43	23	4	2
1991	24	50	27	11	2	8
1992	14	29	80	10	6	6
1993	31	29	24	21	3	3
1994	36	42	26	19	2	4
1995	39	39	33	24	4	4
1996	25	36	41	17	4	4
1997	29	38	42	19	4	5
1998	26	58	55	11	5	5
1999	39	36	52	25	5	5
2000	43	44	14	21	4	3
1998-2000 Avg.		*46	*40			
Desired levels		30-40%	25-35%			

<sup>a</sup> Number of black bears of known sex (excluding unknowns).

<sup>b</sup> Number of male black bears for which age estimated (excluding unknowns).

\* Values do not meet plan criteria.

Table 16. Method of harvest of black bear, DAU 4E (Units 29, 30, 30A, 36A, 37, and 37A), 1990-present.

Year	Bait		Hound		Still		Incidental		Other		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
1990	9	3	8	3	5	1	2	1	0	0	24	8
1991	3	2	3	3	3	4	3	2	0	0	12	11
1992	3	1	5	1	0	1	1	0	1	0	10	3
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

Table 17. Weapon type used to harvest black bear, DAU 4E (Units 29, 30, 30, 30A, 36A, 37 and 37A), 1990-present.

Year	Rifle		Archery		Muzzleloader		Pistol		Other		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
1990	9	6	9	0	0	0	6	2	0	0	24	8
1991	9	7	2	2	0	0	1	2	0	0	12	11
1992	8	1	0	1	0	0	2	1	0	0	10	3
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

Table 18. Black bear depredation complaints, Salmon Region, 1990-present.

DAU	Year										
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1I	11	7	8	22	11				12	2	0
1J	7	1	1	5	33	6	12	0	11	1	18
4E	0	0	0	3	20	1	0	0	4	0	0
Total	18	8	9	30	64	8	14	0	27	3	18

Submitted by:

*Jim Hayden*

Regional Wildlife Manager

*Jeff Rohlman*

Regional Wildlife Manager

*Randall Smith*

Regional Wildlife Manager

*Mike Scott*

Regional Wildlife Manager

*Steve Nadeau*

Regional Wildlife Habitat Biologist

*David Koehler*

Regional Wildlife Biologist

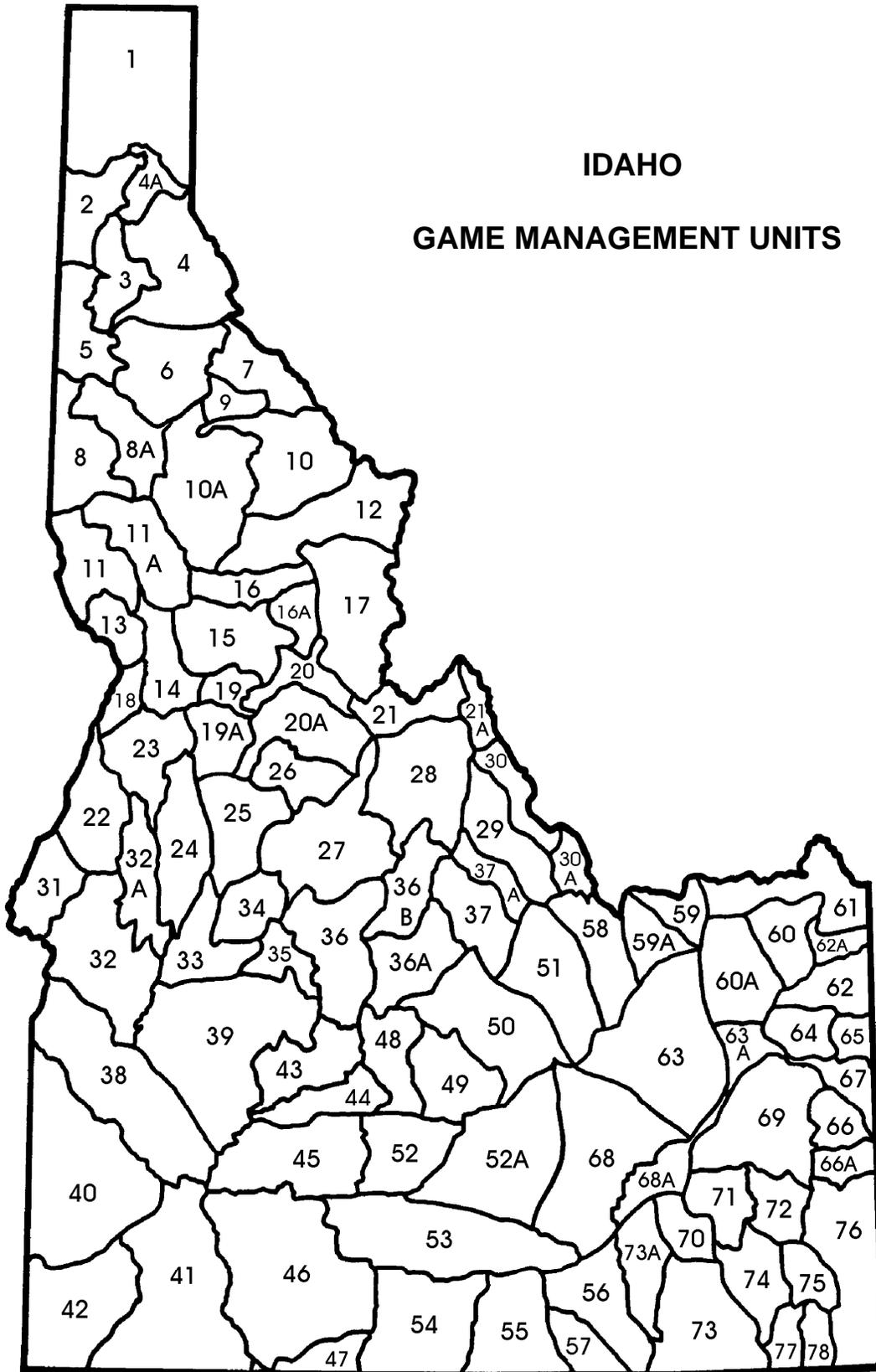
Approved by: IDAHO DEPARTMENT OF FISH AND GAME

*Wayne Melquist*

Wayne Melquist  
State Nongame Wildlife Manager  
Federal Assistance Coordinator,  
Acting Bureau Chief

# 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.

