

**IDAHO DEPARTMENT OF FISH AND GAME**

**Steven M. Huffaker, Director**

**Project W-170-R-30**

**Progress Report**



**ELK**

Study I, Job 1

July 1, 2005 to June 30, 2006

Prepared by:

Jim Hayden, David Spicer ..... Panhandle Region  
Jay Crenshaw, Clay Hickey, Dave Koehler..... Clearwater Region  
Jon Rachael, Hollie Miyasaki, Jake Powell ..... Southwest (Nampa) Region  
Jeff Rohlman .....Southwest (McCall) Region  
Randy Smith, Regan Berkley..... Magic Valley Region  
Carl Anderson, Corey Class..... Southeast Region  
Daryl Meints, Jeff Short, Justin Naderman..... Upper Snake Region  
Tom Keegan, Curtis Hendricks.....Salmon Region

Compiled and edited by: Bradley B. Compton, State Big Game Manager

August 2006  
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Findings in this report are preliminary in nature and not for publication without permission of the Director of the Idaho Department of Fish and Game.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 .....	5
Panhandle Zone (Units 1, 2, 3, 4, 4A, 5, 6, 7, 9) .....	5
CLEARWATER REGION .....	10
Palouse Zone (Units 8, 8A, 11A).....	10
Lolo Zone (Units 10, 12) .....	14
Dworshak Zone (Unit 10A) .....	18
Hells Canyon Zone (Units 11, 13, 18) .....	22
Elk City Zone (Units 14, 15, 16).....	25
Selway Zone (Units 16A, 17, 19, 20) .....	28
SOUTHWEST (NAMPA) REGION .....	32
Sawtooth Zone (Units 33, 34, 35, 36).....	32
Owyhee-South Hills Zone (Units 38, 40, 41, 42, 46, 47, 54, 55, 57) .....	36
Boise River Zone (Unit 39).....	40
SOUTHWEST (MCCALL) REGION.....	43
McCall Zone (Units 19A, 23, 24, 25) .....	43
Middle Fork Zone (Units 20A, 26, 27).....	47
Weiser River Zone (Units 22, 32, 32A).....	50
Brownlee Zone (Unit 31).....	53
MAGIC VALLEY REGION .....	56
Pioneer Zone (Units 36A, 49, 50).....	56
Smoky Mountains Zone (Units 43, 44, 48) .....	60
Bennett Hills Zone (Units 45, 52).....	65
Big Desert Zone (Units 52A, 68).....	68
Snake River Zone (Units 53, 63, 63A, 68A).....	71
SOUTHEAST REGION .....	74
Bannock Zone (Units 56, 70, 71, 72, 73, 73A, 74).....	74
Diamond Creek Zone (Units 66A, 76).....	78
Bear River Zone (Units 75, 77, 78).....	82

TABLE OF CONTENTS (Continued)

UPPER SNAKE REGION.....86  
    Island Park Zone (Units 60, 60A, 61, 62A) .....86  
    Teton Zone (Units 62, 65).....90  
    Palisades Zone (Units 64, 67) .....94  
    Tex Creek Zone (Units 66, 69) .....97  
    Literature Cited .....99  
SALMON REGION.....101  
    Salmon Zone (Units 21, 21A, 28, 36B) .....101  
    Lemhi Zone (Units 29, 37, 37A, 51).....105  
    Beaverhead Zone (Units 30, 30A, 58, 59, 59A) .....108  
APPENDIX A.....111

**LIST OF FIGURES**

Figure 1. Statewide elk status and objectives. ....4  
Figure 2. Panhandle Zone elk status and objectives. ....9  
Figure 3. Palouse Zone elk status and objectives. ....13  
Figure 4. Lolo Zone elk status and objectives. ....17  
Figure 5. Dworshak Zone elk status and objectives. ....21  
Figure 6. Hells Canyon Zone elk status and objectives. ....24  
Figure 7. Elk City Zone elk status and objectives. ....27  
Figure 8. Selway Zone elk status and objectives. ....31  
Figure 9. Sawtooth Zone elk status and objectives.....35  
Figure 10. Owyhee-South Hills Zone elk status and objectives.....39  
Figure 11. Boise River Zone elk status and objectives.....42  
Figure 12. McCall Zone elk status and objectives.....46  
Figure 13. Middle Fork Zone elk status and objectives.....49  
Figure 14. Weiser River Zone elk status and objectives.....52  
Figure 15. Brownlee Zone elk status and objectives. ....55  
Figure 16. Pioneer Zone elk status and objectives.....59  
Figure 17. Smoky Mountains Zone elk status and objectives. ....64

TABLE OF CONTENTS (Continued)

Figure 18. Bennett Hills Zone elk status and objectives.....67  
Figure 19. Big Desert Zone elk status and objectives.....70  
Figure 20. Snake River Zone elk status and objectives. ....73  
Figure 21. Bannock Zone elk status and objectives.....77  
Figure 22. Diamond Creek Zone elk status and objectives. ....81  
Figure 23. Bear River Zone elk status and objectives. ....85  
Figure 24. Island Park Zone elk status and objectives.....89  
Figure 25. Teton Zone elk status and objectives.....93  
Figure 26. Palisades Zone elk status and objectives.....96  
Figure 27. Tex Creek Zone elk status and objectives. ....100  
Figure 28. Salmon Zone elk status and objectives.....104  
Figure 29. Lemhi Zone elk status and objectives. ....107  
Figure 30. Beaverhead Zone elk status and objectives.....110

**PROGRESS REPORT  
SURVEYS AND INVENTORIES**

<b>STATE:</b>	<u>Idaho</u>	<b>JOB TITLE:</b>	<u>Elk Surveys and Inventories</u>
<b>PROJECT:</b>	<u>W-170-R-30</u>		
<b>SUBPROJECT:</b>	<u>1-7</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>1</u>		<u>Habitat Studies</u>
<b>PERIOD COVERED:</b>	<u>July 1, 2005 to June 30, 2006</u>		

**STATEWIDE**

**Summary**

Rocky mountain elk are one of Idaho's premier big game animals. Elk are distributed throughout Idaho from the sage-dominated deserts of the south to the dense cedar-hemlock forests of the north. Elk can be classified as habitat generalists, but it must be recognized they have certain basic habitat requirements. These include food, water, and, where hunted, hiding cover and security areas (blocks of elk habitat with limited access). Availability and distribution of these habitat components on each seasonal range ultimately determine the distribution and numbers of elk that may be supported.

Elk hunter numbers have increased in Idaho as populations have increased; however, total pressure on the resource has dramatically increased. Human development has reduced available habitat on winter ranges and increased access into elk habitat, and technological developments and increased availability of leisure time have all contributed to increased hunting pressure on elk.

Access into elk habitat is a primary problem facing wildlife managers today. Roads and motorized trails built into elk habitat for timber management and other activities will increase hunter access and often increase elk vulnerability to harvest. As a general rule, the problem is one of access; that is, of increasing the number of people in elk habitat. The effects of roads and motorized trails, apart from people, are mixed. On the negative side, elk may vacate otherwise suitable habitats to avoid human activity; the period of time before elk return to such areas depends on the severity and duration of the disturbance but may extend several years. Elk habitat is reduced not only by the amount of land taken by the roads themselves, but also because elk tend to avoid areas adjacent to such roads and motorized trails. On the positive side, timber harvest often associated with construction of roads may open "closed" stands of timber, creating additional forage for elk in some important ranges.

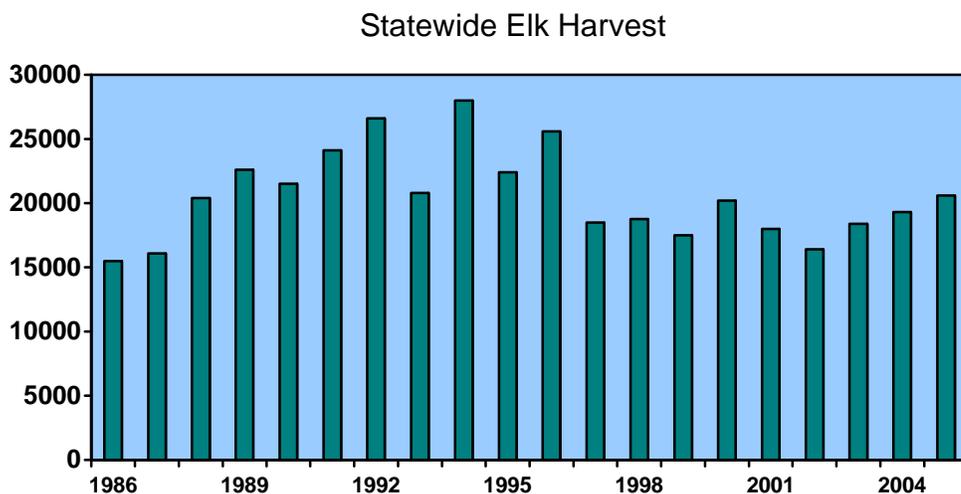
Although the trade-offs associated with road and motorized trail construction may vary with each individual situation, the increase in numbers of people associated with increased access is almost universally detrimental to elk. Elk move away from human disturbance whenever harassed, and

elk that remain in logged and roaded areas are subject to more hunters over a longer period of time than elk that live in more secluded habitats.

Because human access into elk habitat is the primary problem associated with roads and motorized trails, perhaps the most critical habitat management factor facing wildlife managers is the use of roads and motorized trails. A comprehensive road and motorized trail management program, involving key elements including timing of construction activities, limitation on use of some roads for single-use only (i.e., timber removal), and complete or periodic closures of other roads and motorized trails to create large blocks of habitat with non-motorized access, could do much to benefit elk management.

Maintenance of the quality and quantity of habitat available to elk is crucial to their long-term survival. Many human activities destroy elk habitat, render portions unusable, decrease the ability of areas to support elk, or result in abandonment of certain areas completely. The Idaho Department of Fish and Game (Department) has direct control over only a small portion of elk habitat in Idaho. The majority of elk habitat is managed by other public agencies or private landowners. We must rely on others to consider, along with us, the biological needs of the elk resource for Idaho citizens in their management programs.

Unlike deer, elk populations can generally be highly influenced by harvest. Most annual mortality of elk ( $\geq 1$  year) is associated with human harvest. Proper harvest management is to establish population goals and establish harvest opportunities that are consistent with achieving or maintaining these population objectives. In this plan, we establish objectives for wintering populations of cows, total bulls, and adult (3.5+ pre-season) bulls (Figure 1). The state has been divided into 29 elk management zones (groupings of units), dependent upon habitat similarity, management similarity, and/or discrete populations. Objectives have been established for each zone. The Idaho Fish and Game Commission (Commission) adopted a statewide minimum objective of 10 adult bulls:100 cows pre-season. Total population objectives were chosen based on habitat potential, harvest opportunity, depredation concerns, inter-specific issues, population performance issues, and winter feeding issues.



Monitoring population objectives will occur periodically (every 3-5 years) in most cases. In addition to these winter surveys, the Department will monitor harvest and antler point class in the harvest. Prior to 1998, the telephone harvest survey provided information regarding harvest. Beginning in 1998, a mandatory harvest report was implemented. Given adequate compliance, more precise information on harvest and antler point data will be available.

Overall, elk populations statewide are near all-time highs. Elk numbers throughout northern, southern, eastern, and much of western Idaho have continued to increase over time. Numerically, the state is at or near objectives for total cows, total bulls, and total adult bulls. However, individual zone objectives reflect the need for a distributional change in elk populations.

Calf:cow data collected during aerial surveys suggest declining recruitment ratios in many parts of Idaho. Declining recruitment rates can be explained by 2 possible hypotheses: 1) populations are at or near carrying capacity and density-dependent factors are regulating productivity, or 2) predation is playing a larger role in population dynamics than previously thought. Unfortunately, conclusive evidence does not exist as to which hypothesis is primarily affecting current population dynamics. Valid points can be made for either scenario.

Elk habitat in north-central Idaho was greatly improved during the early 1900s when extensive wildfires replaced heavily forested habitats with productive shrub-fields. However, as these shrub-fields have aged and conifer reestablishment has occurred, habitat potential has been reduced. Elk populations in these areas probably represent the longest established population in the state and might be expected to show density-dependent effects first. In fact, populations in north-central Idaho generally have the lowest calf:cow ratios statewide. These observations are consistent with populations that are at or near carrying capacity.

Conversely, the primary potential predators of elk including black bears, mountain lions, and wolves have increased over the last couple of decades. Approximately 600 wolves are currently within the state after being reintroduced by U.S. Fish and Wildlife Service (USFWS) in 1995. Although not well understood, an increase in total predators could reduce recruitment rates. It should be noted that in parts of the state where elk herds are productive and increasing, they have similar densities of predators to those areas where elk herds are not productive and are declining.

The quandary exists as to which management action to apply to improve recruitment rates and thus harvestable surplus. If density-dependent factors are primarily responsible, reducing the total population will “stimulate” the population and the harvestable surplus will increase. However, if density-independent factors (i.e., predation) are primarily responsible, the appropriate action would be to minimize antlerless harvest. A better understanding of the potential factors affecting elk population dynamics is needed before confidence can be gained as to what is the most appropriate management action.

# Elk Status & Objectives Statewide



### Winter Status & Objectives

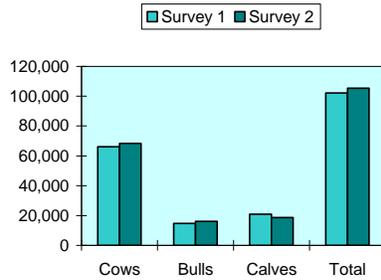
Statewide	Current Status				Objective		
	Cows	Calves	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
<b>Total</b>	(71,200)	(20,000)	(17,100)	(9,200)	82,500	19,500	11,500
<b>Bulls per 100 Cows</b>			(24)	(14)		18-24	10 - 14

Note: Estimates within parentheses are based on information other than sightability surveys.

### Population Surveys

Statewide	Survey 1				Survey 2			
	Cows	Bulls	Calves	Total	Cows	Bulls	Calves	Total
<b>Comparable Surveys Total</b>	66,049	14,785	20,905	102,161	68,344	16,126	18,648	105,449
<b>Per 100 Cows</b>		22	32			24	27	

### Comparable Survey Totals



### Zone Harvest Statistics

	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	7996	8346	8267	7932	7100	7782	7894	9475
'A' Tag	1450	2842	1917	2660	2071	2464	2678	3130
'B' Tag	560	754	590	572	564	584	745	826
CH Tag	5986	4750	5760	4700	4465	4734	4471	5519
<b>Antlered Harvest</b>	8607	9272	10174	10110	9261	10660	11357	11144
'A' Tag	2488	2688	2726	2606	2321	2634	3009	2783
'B' Tag	4390	4855	5431	5586	5043	5876	6428	6334
CH Tag	1729	1729	2017	1918	1897	2150	1920	2027
<b>Hunter Numbers</b>	84420	97731	ND	77662	83712	84782	85686	86829
'A' Tag	25140	33341	ND	27844	27567	27905	29452	29949
'B' Tag	37994	43966	ND	31020	37239	37723	37971	37376
CH Tag	21286	20424	ND	18798	18906	19154	18263	19504
<b>% 6+ Points</b>	33	27	27	28	26	31	41	46

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

### Harvest

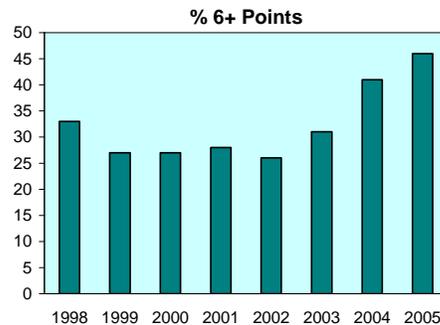
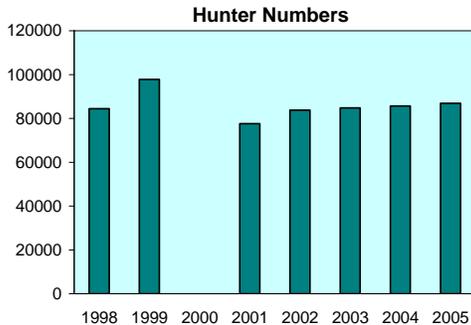
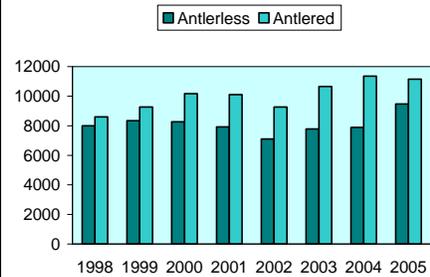


Figure 1. Statewide elk status and objectives.

**PROGRESS REPORT  
SURVEYS AND INVENTORIES**

<b>STATE:</b>	<u>Idaho</u>	<b>JOB TITLE:</b>	<u>Elk Surveys and Inventories</u>
<b>PROJECT:</b>	<u>W-170-R-30</u>		
<b>SUBPROJECT:</b>	<u>1</u>	<b>STUDY NAME:</b>	<u>Big Game Population Status,</u>
<b>STUDY:</b>	<u>1</u>		<u>Trends, Use, and Associated</u>
<b>JOB:</b>	<u>1</u>		<u>Habitat Studies</u>
<b>PERIOD COVERED:</b>	<u>July 1, 2005 to June 30, 2006</u>		

**PANHANDLE REGION**

**Panhandle Zone (Units 1, 2, 3, 4, 4A, 5, 6, 7, 9)**

**Management Objectives**

Objectives for the Panhandle Zone (Figure 2) are to establish a population of 2,900-3,900 cows and 600-800 bulls, including 350-475 adult bulls, as measured via aerial surveys of the Panhandle Zone Trend Area. A sightability survey was conducted during February and March of 2006 to estimate elk numbers in the Panhandle Zone Trend Area. Results of the survey indicated that cow numbers are slightly below objectives for the zone and bull numbers exceed objectives. During sightability surveys and herd composition surveys over the past 7 years, recruitment rates have been high with calf:cow ratios in the low to mid 40 calves per 100 cows. Regional staff anticipates, barring an extreme weather event, that the elk population will continue to experience growth and will be at or near objectives in the future.

**Historical Perspective**

Panhandle Zone is a large and diverse zone consisting of Game Management Units (GMUs) 1, 2, 3, 4, 4A, 5, 6, 7, and 9. Traditionally, the majority of elk habitat, elk numbers, and elk hunting activity occurred in Units 4, 4A, 6, 7, and 9. These units are primarily composed of forested public lands and private timber companies and consistently record some of the highest hunter densities and elk harvest densities in the state. Expanding elk herds have recently increased hunter activities in Units 1, 2, 3, and 5, particularly in the agricultural areas of Units 3 and 5.

The Panhandle Region has essentially been managed as a “zone” since 1977, when the rest of the state eliminated general season cow harvest. The Panhandle “zone” maintained general either-sex hunting opportunities with fairly consistent hunting seasons across most of the GMUs (Appendix A). A major change occurred recently in the way Panhandle Zone elk harvest statistics were collected. From 1982-2003, a unique feature of the Panhandle Zone was a mandatory check of all elk harvested in the zone. Throughout this period, over 42,000 elk were reported via the Panhandle Mandatory Check program. This database provided valuable information relevant to the elk population. Beginning with the 2004 season, harvest information for the Panhandle Zone was estimated by the statewide Mandatory Harvest Report system.

## **Habitat Issues**

Elk numbers were very low in the Panhandle Zone around the early 1900s. Major landscape changes occurred as a result of stand-replacing fires beginning in 1910. Vast areas of timber were transformed into brush fields and early succession timber stands that provided ideal conditions for elk. Additionally, elk were imported from Yellowstone National Park by sportsmen in the 1940s and released in Units 1, 4, and 6. Elk populations increased, with periodic setbacks due to extreme winter conditions. The most recent impact to elk numbers in the Panhandle Zone occurred as a result of the severe winter of 1996-1997. While it is generally accepted that habitat conditions in core areas have declined from the optimum in the 1950s and 1960s, past timber harvest, prescribed burning, and pioneering of elk into new areas will allow elk numbers to increase to pre-1997 levels and beyond. In the long-term (time frame unknown), in the absence of large-scale stand-replacing fire, elk habitat potential may decrease.

Much of the Panhandle Zone's forested habitat experienced extensive timber harvest during the 1980s and 1990s. While this high level of timber harvest created additional elk forage, the more important impact was the construction of logging roads that allowed hunters easy access to elk and increased elk vulnerability. High road densities and threats to large areas of elk security continues to be a concern despite access management plans developed by land management agencies to address wildlife and watershed issues.

Elk depredations on croplands are not a large problem and are normally handled by hazing and kill permits issued to the landowner. An occasional one-time depredation hunt will be conducted to alleviate a specific problem. Elk depredations on nursery orchards often occur, particularly at newly established sites. The high dollar-per-acre value of nursery crops requires quick, effective action that has included construction of fencing, deployment of electronic scare devices, and the use of guard dogs. Depredation hunts or increased general hunt harvest levels are not used to solve nursery depredations, as the number of offending animals is usually low and nurseries are often located adjacent to elk habitat inhabited by non-offending animals.

## **Biological Issues**

The elk populations in core GMUs (4, 4A, 6, 7, and 9) of this zone have shown an overall growth pattern over the past 10-15 years. Elk numbers in the peripheral GMUs (1, 2, 3, and 5) have shown substantial growth and now support considerable elk hunting opportunities. Growth and expansion in the Panhandle Zone elk herd have continued while offering general either-sex hunting opportunities. Calf:cow ratios indicate the potential for continued growth under the current general hunt.

## **Inter-specific Issues**

Both white-tailed and mule deer occur in all areas of the zone. White-tailed deer are the predominant deer species and maintain high densities in the lower elevations of Units 1, 2, 3, 5, and 6. Mule deer numbers appear to be stable, at much lower densities than whitetails and are found most frequently in the higher elevations of Units 1, 4, 6, 7, and 9. The moose population in the Panhandle Zone has expanded considerably over the past decade with the highest densities

occurring in Units 1 and 2. Competitive interactions may exist among deer, moose, and elk; however, the form and extent of those relationships is presently unclear.

### **Predation Issues**

Harvest levels of black bear and mountain lion indicate that both species are at fairly high population levels relative to recent historic numbers (20-40 years ago). However, both species appear to be at lower levels than 5-10 years ago. Harvest peaked for mountain lions in 1997 and recent harvest levels are less than half of the level experienced in 1997. Black bear harvest has also dropped over the past 5 years but continues to show significant fluctuation. Research conducted in adjacent areas of Idaho and other states indicates that bear and mountain lion predation may have significant impacts, particularly on elk calves.

As of June 2006, 4 packs of wolves have been documented in the St. Joe drainage of the Panhandle Zone. Three other packs are believed to exist in Unit 1 but only 2 have been officially recognized as determined by state and federal wolf management plans. At least 1 pack is believed to exist in the Coeur d'Alene Mountains of Unit 4 though there is no pack officially documented in the area. Undoubtedly, other wolves, loosely or not affiliated with known packs, exist in the region. The impacts of predation on elk numbers in the zone are unknown at this time, but current calf:cow ratios obtained during summer and winter surveys, as well as the relatively high hunter success rates of recent years, do not indicate an immediate problem.

### **Winter Feeding Issues**

Winter feeding of elk in this zone is not conducted by the Department. Numerous private individuals feed small bands of elk annually. The Department provided a minimal amount of feed for individuals to feed small groups of elk during the winter of 1996-1997. The impact was of no consequence to the elk herd in the Panhandle Zone.

### **Information Requirements**

Aerial surveys, both population estimates and herd composition surveys, are a valuable part of regional elk management but must be considered in combination with other information sources. The homogenous, heavy-cover habitat that typifies the Panhandle Zone necessitates caution when interpreting elk sightability survey results. The Panhandle Zone Trend Area continues to be the logical choice for conducting aerial surveys to estimate elk population trends that are likely representative for the entire zone. Over 70 percent of the aerial survey search units established for the Panhandle Zone are very heavy canopy cover and classified as likely to have "few" or "no" elk present during the mid-winter time period when surveys are conducted.

During this reporting period it was discovered that there were errors in the 2002 Panhandle Zone Trend Area population estimates. As a result, the 2002 results reported in this document are slightly different than results reported in previous documents.

Elk harvest, hunter success rates, and hunter satisfaction are important components of the information utilized by regional staff to provide the recreational opportunities desired by local sportsmen.

## Elk Panhandle Zone (Units 1, 2, 3, 4, 4A, 5, 6, 7, 9)



### Winter Status & Objectives

Trend Area	Survey Year	Current Status			Objective		
		Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
	2006	2718	938	524	2900 - 3900	600 - 800	350 - 475
<b>Zone Total</b>		<b>2718</b>	<b>938</b>	<b>524</b>	<b>2900 - 3900</b>	<b>600 - 800</b>	<b>350 - 475</b>
		<b>Bulls per 100 Cows</b>	<b>35</b>	<b>19</b>		<b>18-24</b>	<b>10-14</b>

Note: The Panhandle Elk Trend Area includes parts of GMUs 4, 6, and 7.

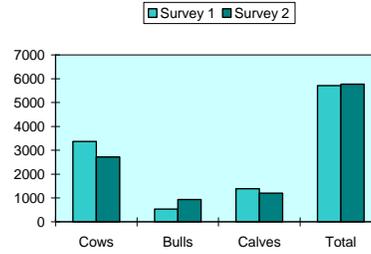
### Population Surveys

Unit	Year	Survey 1				Survey 2				
		Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
1	ND					ND				
2	ND					ND				
3	1993	367	74	118	559	ND				
4	1991	2288	728	1019	4035	1997	2009	666	409	3084
4A	1994	121	17	36	174	ND				
5	ND					ND				
6	1993	1214	740	394	2348	2002	2646	488	1216	4350
7	1991	977	251	377	1605	1998	1044	541	150	1735
9	1998	598	108	24	730	*2004	241	57	70	368
<b>Trend Area</b>	<b>2002</b>	<b>3374</b>	<b>531</b>	<b>1387</b>	<b>5709</b>	<b>2006</b>	<b>2718</b>	<b>938</b>	<b>1200</b>	<b>5772</b>
	<b>Per 100 Cows</b>		<b>16</b>	<b>41</b>				<b>35</b>	<b>44</b>	

Note: ND = no survey data available.

\* 2004 survey for Unit 9 is composition only - elk observed.

### Comparable Survey Totals



### Zone Harvest Statistics

	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	567	588	473	504	463	597	756	947
'A' Tag	53	52	59	110	68	99	80	144
'B' Tag	512	534	402	389	393	482	670	791
CH Tag	2	2	12	5	2	16	6	12
<b>Antlered Harvest</b>	1190	1017	1054	1201	1264	1565	2022	2018
'A' Tag	214	225	208	297	319	380	476	571
'B' Tag	976	792	846	903	943	1184	1543	1446
CH Tag	0	0	0	1	2	1	3	1
<b>Hunter Numbers</b>	15736	14954	ND	12407	13227	14172	15263	15617
'A' Tag	2616	2549	ND	2516	2786	3047	3346	3674
'B' Tag	13100	12385	ND	9872	10421	11082	11878	11863
CH Tag	20	20	ND	19	20	43	39	80
<b>% 6+ Points</b>	32	26	26	24	20	27	24	27

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

### Harvest

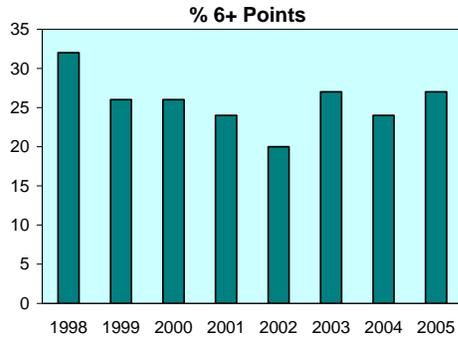
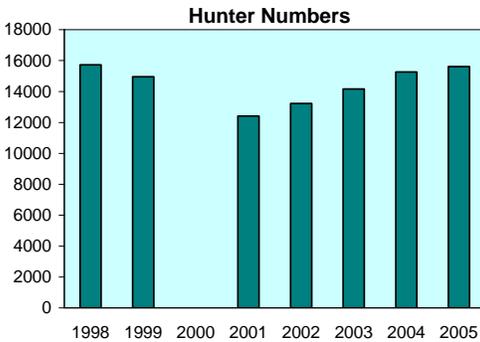
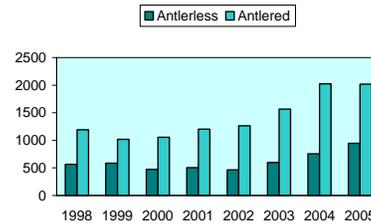


Figure 2. Panhandle Zone elk status and objectives.

**PROGRESS REPORT  
SURVEYS AND INVENTORIES**

<b>STATE:</b>	<u>Idaho</u>	<b>JOB TITLE:</b>	<u>Elk Surveys and Inventories</u>
<b>PROJECT:</b>	<u>W-170-R-30</u>		
<b>SUBPROJECT:</b>	<u>2</u>	<b>STUDY NAME:</b>	<u>Big Game Population Status,</u>
<b>STUDY:</b>	<u>1</u>		<u>Trends, Use, and Associated</u>
<b>JOB:</b>	<u>1</u>		<u>Habitat Studies</u>
<b>PERIOD COVERED:</b>	<u>July 1, 2005 to June 30, 2006</u>		

**CLEARWATER REGION**

**Palouse Zone (Units 8, 8A, 11A)**

**Management Objectives**

Objectives for Palouse Zone (Figure 3) are to establish a population of 1,325 cows and 275 bulls, including 180 adult bulls at ratios of 18-24 bulls:100 cows and 10-14 adult bulls:100 cows. The objectives related to total population level (total elk numbers) were selected to represent a reasonable balance between depredation concerns and the desire to provide a reasonably large elk population. The objective for the number of adult elk represents the maximum number of elk that could be sustained under the circumstances.

The zone presently exceeds the cow abundance objective. The addition of early A-tag cow hunting opportunity may slow the growth of the cow elk population. Conversely, bull abundance and ratios are well below objectives, suggesting that harvest rates are excessive. A significant reduction in bull harvest will be required to achieve the bull and adult bull number and ratio objectives.

**Historical Perspective**

Historically, elk herds were scattered and numbers were low in this area. Few big game animals were found along Clearwater River by Lewis and Clark in the early 1800s, probably due in part to the dense, unbroken canopy of forest that covered the entire area. Wildfires burned over vast expanses near the beginning of the twentieth century, creating vast brush-fields that provided abundant forage areas for elk. Elk numbers increased following creation of these brush-fields, and elk numbers apparently peaked around 1950. Elk herds declined, however, through the latter part of that decade and the 1960s and 1970s, partially due to: 1) maturation of brush-fields and declines in forage availability; 2) logging and road-building activity that increased vulnerability of elk to hunters under the then more liberal hunting seasons; and 3) loss of some major winter ranges. In response to declines in elk numbers, an either-sex hunting regime was replaced in 1976 with an antlered-only general hunting season. Elk herds then began rebuilding.

## **Habitat Issues**

This zone contains portions of the highly productive Palouse and Camas prairies. Dry-land agriculture began in this zone in the 1880s and, until the 1930s, large areas of native grassland existed to supply forage for the large numbers of horses and mules required to farm the area. With the development of the tractor and subsequent improvements, farming efforts intensified as equipment became more capable of handling the steep, rolling hills. Currently, virtually all non-forested land is tilled, and only small, isolated patches of perennial vegetation remain but are regularly burned or treated with herbicides. Elk numbers have only recently increased to levels that have provided significant hunting opportunities. Farmland in Units 8 and 8A provides high-quality elk forage, and as populations have grown, so have the number of depredation complaints. Farmers recall few elk problems until the last decade or so. Elk currently cause damage to grain, legumes, rapeseed, canola, and hay crops throughout this zone. Most of the crop damage occurs during summer months. Damage to conifer seedlings caused by elk is a concern where reforestation projects occur on elk winter range. Late-season antlerless elk controlled hunts have had limited success in controlling elk population growth and reducing the overall damage caused by elk. To help address depredation concerns in 2004, a green-field hunt was added to the A-tag hunt. This hunt is an antlerless hunt that runs from 1 August through 15 September within 1 mile of a cultivated field in Palouse Zone.

Additionally, timber harvest in the corporate timber, private timber, state land, and federal land areas of Unit 8A increased dramatically through the 1980s and 1990s, mostly to capture white pine mortality and respond to increased demand for timber products. This activity created vast acreages of early successional habitat, expanding elk habitat potential. Road construction associated with timber harvest is extensive in some areas. Road closures in some areas have significant potential to benefit elk through improved habitat effectiveness and reduced harvest vulnerability.

## **Biological Issues**

Elk populations in this zone have increased over the last 30 years due to increased availability of agricultural crops, natural forage, and brush-fields (both on summer and winter range). Additionally, mild winters throughout the 1980s likely enhanced calf survival. To address increasing depredation problems during the last 10 years, liberal antlerless elk harvest opportunities have been offered.

The 2004 survey in Units 8 and 8A revealed substantial growth of the cow elk population (>50%), while bull abundance declined (-25%).

Elk productivity in this zone is very high, with calf:cow ratios in the mid-40s or higher. This results in a resilient elk population and allows for a liberal season length and harvest.

## **Inter-specific Issues**

The zone supports a substantial population of white-tailed deer, while mule deer are rare. The zone's moose population has expanded substantially over the past decade. Competitive

interactions may exist among white-tailed deer, elk, and moose. However, the form and extent of those relationships is presently unclear.

Grazing by cattle occurs on almost all of the available pasture ground and poses some competitive concerns for elk, especially during drought years.

### **Predation Issues**

Increasing mountain lion harvest over the last few years likely reflects increased mountain lion numbers in this zone. Black bear numbers have probably remained static. Wolves are typically not present in the zone but may become more numerous in the future.

### **Winter Feeding Issues**

Emergency winter feeding has not been conducted recently.

### **Information Requirements**

Sightability estimates are needed periodically to monitor progress toward achieving population objectives. In addition, the information is valuable to assess population growth with respect to depredations and antlerless harvest levels.

## Elk Palouse Zone (Units 8, 8A, 11A)

### Winter Status & Objectives

Unit	Survey Year	Current Status			Objective		
		Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
8	2004	404	54	17	325 - 475	50 - 100	25 - 75
8A	2004	1000	47	4	650 - 950	150 - 200	75 - 150
11A	2002	410	47	14	100 - 150	20 - 30	10 - 20
<b>Zone Total</b>		<b>1814</b>	<b>148</b>	<b>35</b>	<b>1075 - 1575</b>	<b>220 - 330</b>	<b>110 - 245</b>
<b>Bulls per 100 Cows</b>			<b>8</b>	<b>2</b>		<b>18 - 24</b>	<b>10 - 14</b>

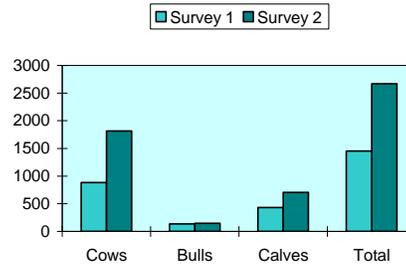


### Population Surveys

Unit	Year	Survey 1				Survey 2				
		Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
8	1997	221	15	143	379	2004	404	54	218	676
8A	1997	663	122	288	1073	2004	1000	47	341	1388
11A	ND					2002	410	47	147	604
<b>Comparable Surveys Total</b>		<b>884</b>	<b>137</b>	<b>431</b>	<b>1452</b>		<b>1814</b>	<b>148</b>	<b>706</b>	<b>2668</b>
<b>Per 100 Cows</b>			<b>15</b>	<b>49</b>				<b>8</b>	<b>39</b>	

Note: ND = no survey data available.

### Comparable Survey Totals



### Zone Harvest Statistics

	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	179	219	130	200	147	161	340	329
'A' Tag	18	45	30	50	24	39	197	187
'B' Tag			4	5	1	2	3	8
CH Tag	161	174	96	145	122	120	140	134
<b>Antlered Harvest</b>	213	199	278	306	301	374	410	371
'A' Tag	47	39	59	38	44	57	47	73
'B' Tag	165	159	197	256	251	313	356	279
CH Tag	1	1	22	12	6	4	7	19
<b>Hunter Numbers</b>	2703	2677	ND	2408	2584	2722	3060	2807
'A' Tag	351	424	ND	378	490	505	906	923
'B' Tag	1892	1811	ND	1726	1767	1966	1874	1562
CH Tag	460	442	ND	304	327	251	280	322
<b>% 6+ Points</b>	13	25	18	17	13	18	13	14

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

### Harvest

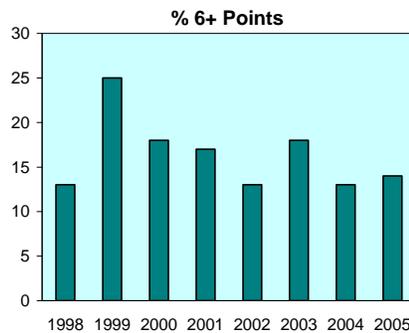
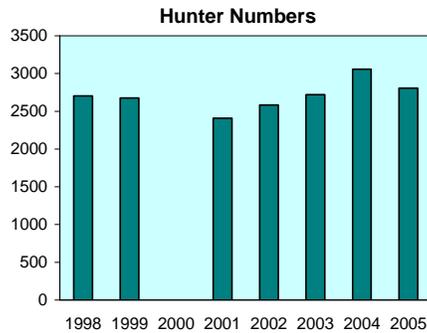
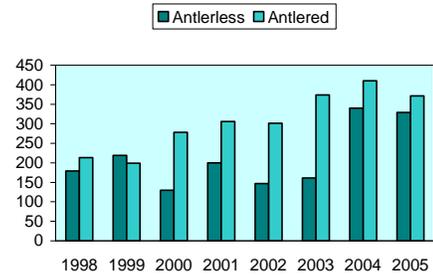


Figure 3. Palouse Zone elk status and objectives.

## **Lolo Zone (Units 10, 12)**

### **Management Objectives**

Objectives for Lolo Zone (Figure 4) are to establish a population of 7,600 cows and 1,600 bulls, including 975 adult bulls at ratios of 18-24 bulls:100 cows and 10-14 adult bulls:100 cows.

Management of the Lolo Zone elk population and setting appropriate population objectives presents a serious quandary. Existing information suggests that both predation and density dependence (habitat limitations) could be causing low calf production/recruitment. If predation is the overwhelming factor, population goals should be set higher (e.g., 15,000 adult elk), and there should be little or no cow harvest. However, if density dependence is significant, goals should be set at a low level, and cow harvest should be at moderate levels (5-10%). Also, both factors may be contributing significantly, leading to some intermediate level of objectives. At present, it is not possible to determine the relative contribution of those effects. In the absence of that knowledge, the objectives were set at intermediate levels.

### **Historical Perspective**

Historically, elk herds were scattered and numbers were low in this area. Few big game animals were found along Clearwater River by Lewis and Clark in the early 1800s, probably due in part to the dense, unbroken canopy of forest that covered the entire area. Wildfires burned over vast expanses near the beginning of the twentieth century, creating vast brush-fields that provided abundant forage areas for elk. Elk numbers increased following creation of these brush-fields, and elk numbers apparently peaked around 1950. Elk herds declined into the 1970s, partially due to: 1) maturation of brush-fields and declines in forage availability; 2) logging and road-building activity that increased vulnerability of elk to hunters under the then more liberal hunting seasons; and 3) loss of some major winter ranges. In response to declines in elk numbers, an either-sex hunting regime was replaced in 1976 with an antlered-only general hunting season. Elk herds then began rebuilding.

### **Habitat Issues**

Land ownership within this zone is almost entirely publicly-owned forest. The southern portion of the zone is within the Selway-Bitterroot Wilderness Area. Historically, habitat productivity was high in this zone. However, habitat productivity has decreased following decades of intensive fire suppression. Approximately one-third of the zone has good access for motorized vehicles with medium road densities. The remaining portion has low road densities with good trails contributing to medium-to-low big game vulnerability. Aside from damages to reforestation projects, there are no elk depredation concerns in this zone.

Until the 1930s, wildfires were the primary habitat disturbance mechanism in this zone. Between 1900 and 1934, approximately 70% of the Lochsa River drainage was burned by wildfires. Between 1926 and 1990, over 1,900 km of roads were built in this area to access marketable timber. State Highway 12 along the Lochsa River was completed in 1962 and

became the primary travel corridor. In 1964, most of the southern portion of Unit 12 was designated as part of the Selway-Bitterroot Wilderness.

### **Biological Issues**

Poor calf recruitment since the late 1980s, winter losses in 1996-1997, and a recent population decline in Unit 10 have contributed to dramatically decreasing elk herds within this zone. The current population is well below objectives.

The winter of 1996-1997 was marked by severe conditions, including extremely deep snow exceeding 200% of average snow-pack in some areas. These conditions apparently caused higher-than-normal winter mortality, leading to a dramatic decline in the Unit 10 population (-48%). In addition, a survey was conducted in Unit 12 during winter 1996-1997 and those results suggested a 30% decline at that time. This data, in combination with overwhelming anecdotal information, suggests that catastrophic winter losses occurred in Units 10 and 12.

Calf productivity and/or recruitment have declined substantially since the late 1980s. Prior to that, winter calf:cow ratios often exceeded 30:100 and occasionally exceeded 40:100. From 1989-1999, ratios dwindled continuously down to levels below 10:100. This level of recruitment is inadequate to sustain natural mortality in the absence of hunting. Between 2002 and 2004, population surveys and composition surveys have revealed recruitment levels between 27 and 30 calves:100 cows in Unit 12, and 19-26 calves:100 cows in Unit 10. However, the 2005 age composition surveys showed declines from recent levels. Most notable was the decline in Unit 12 where calves:100 cows was 13.9.

Preliminary results from current research efforts suggest that both nutrition and predation may be potential causes of low calf recruitment levels. Additional work, in an experimental framework, is needed to determine the relative significance of those potential causes.

To address low recruitment levels, declining bull numbers, and 1996-1997 winter losses, the Department capped B-tag numbers at 1,600 and closed cow elk controlled hunts beginning with the 1998 hunting season. The B-tag cap represents a 60-65% reduction in any-bull rifle hunters. Currently, low recruitment and low adult cow survival remain a concern in this zone. Without changes in survival in these demographic groups, the objectives in this zone will not be achieved in the foreseeable future.

### **Inter-specific Issues**

Both units support small white-tailed deer populations, few mule deer, and moderate-density moose populations. Moose have increased moderately over the past 20 years. Grazing by cattle occurs to a limited extent in the northwestern corner of Unit 12 on a U.S. Forest Service (USFS) allotment.

## **Predation Issues**

In most of the Clearwater Region, mountain lion harvest levels have increased over the last decade. Black bear harvest remained somewhat stable through the last 2 decades, averaging between 100 and 150 bears per year until 1998, when greatly liberalized seasons led to dramatic increases in harvest. However, black bear population performance remains well above plan objectives. Wolf packs are well-established throughout the zone and appear to be increasing. Current research indicates wolves having increased impacts on elk demographics.

## **Winter Feeding Issues**

Emergency winter feeding has not been conducted recently.

## **Information Requirements**

The level of the Lolo Zone B-tag cap, and any future changes in the cap, are entirely dependent upon recruitment levels. At a minimum, recruitment should be measured with composition surveys, corrected for visibility bias, yearly or every other year to establish the level and trend of calf recruitment. In addition, complete sightability surveys should be conducted frequently to evaluate population performance.

## Elk Lolo Zone (Units 10, 12)

### Winter Status & Objectives

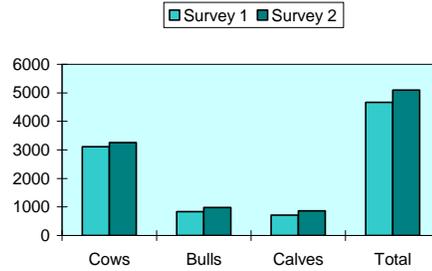
Unit	Current Status			Objective			
	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
10	2006	2276	504	252	4200 - 6200	900 - 1300	500 - 750
12	2006	978	475	163	1900 - 2900	400 - 600	225 - 350
<b>Zone Total</b>		<b>3254</b>	<b>979</b>	<b>415</b>	<b>6100 - 9100</b>	<b>1300 - 1900</b>	<b>725 - 1200</b>
<b>Bulls per 100 Cows</b>			<b>30</b>	<b>13</b>		<b>18 - 24</b>	<b>10 - 14</b>



### Population Surveys

Unit	Year	Survey 1				Survey 2				
		Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
10	2003	1832	419	371	2622	2006	2276	504	669	3449
12	2002	1281	422	343	2046	2006	978	475	196	1649
<b>Comparable Surveys Total</b>		<b>3113</b>	<b>841</b>	<b>714</b>	<b>4668</b>		<b>3254</b>	<b>979</b>	<b>865</b>	<b>5098</b>
<b>Per 100 Cows</b>			<b>27</b>	<b>23</b>				<b>30</b>	<b>27</b>	

### Comparable Survey Totals



### Zone Harvest Statistics

	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	7	20	2	2	6	5	11	6
'A' Tag	20		2	2	6	4	10	6
'B' Tag	7		0	0	0	1	1	0
CH Tag			0	0	0	0	0	0
<b>Antlered Harvest</b>	270	196	212	234	232	274	317	323
'A' Tag	59	6	42	46	46	50	53	78
'B' Tag	211	190	170	188	186	224	264	245
CH Tag			0	0	0	0	0	0
<b>Hunter Numbers</b>	1533	1485	ND	1126	1435	1493	1494	1590
'A' Tag	293	272	ND	239	322	289	334	391
'B' Tag	1240	1213	ND	887	1113	1204	1160	1194
CH Tag			ND	0	0	0	0	5
<b>% 6+ Points</b>	25	14	28	19	22	32	27	37

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

### Harvest

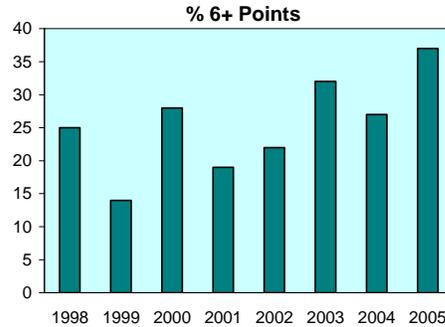
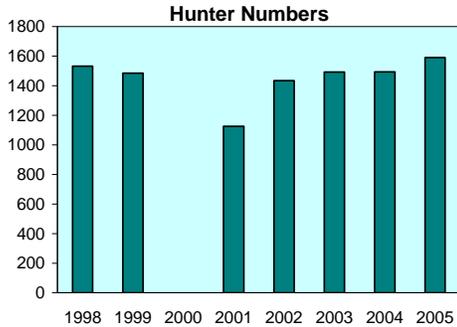
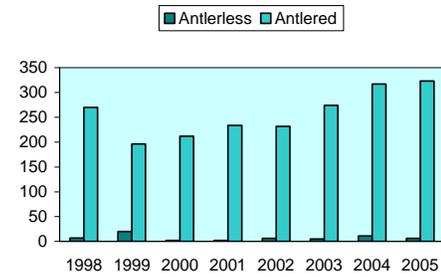


Figure 4. Lolo Zone elk status and objectives.

## **Dworshak Zone (Unit 10A)**

### **Management Objectives**

Objectives for Dworshak Zone (Figure 5) are to establish a population of 3,600 cows and 750 bulls, including 425 adult bulls at ratios of 18-24 bulls:100 cows and 10-14 adult bulls:100 cows. The objective of 3,600 cows represents a level that could be achieved, with little cow harvest, under a worse-case scenario and should be viewed only as a conservative, interim goal until 2006. Subsequently, a more liberal population goal (over 3,600 cows) should be identified to exploit the full productive potential of Unit 10A. The bull objective represents a correspondingly conservative number that would be expected under a worse-case scenario and would correspond to the 18-24 bull:100 cow objective. Likewise, the goal for bull numbers is a conservative, interim number that should be increased to fully exploit the potential of Unit 10A.

The zone cow harvest strategy was modified for the 2000 hunting season to address over-harvest. The current goal is a harvest of 90-110 cow elk, which would allow the population to reach objectives. B-tag sales were capped beginning with the 2002 hunting season to allow the zone to reach bull and adult bull objectives.

### **Historical Perspective**

Historically, elk herds were scattered and numbers were low in this area. Few big game animals were found along Clearwater River by Lewis and Clark in the early 1800s, probably due in part to the dense, unbroken canopy of forest that covered the entire area. Wildfires burned over vast expanses near the beginning of the twentieth century, creating vast brush-fields that provided abundant forage areas for elk. Elk numbers increased following creation of these brush-fields, and elk numbers apparently peaked around 1950. Elk herds declined into the 1970s, partially due to: 1) maturation of brush-fields and declines in forage availability; 2) logging and road-building activity that increased vulnerability of elk to hunters under the then more liberal hunting seasons; and 3) loss of some major winter ranges. In response to declines in elk numbers, an either-sex hunting regime was replaced in 1976 with an antlered-only general hunting season. Elk herds then began rebuilding.

### **Habitat issues**

Dworshak Zone consists of Unit 10A, which is three-fourths timberland and one-fourth open or agricultural lands and is bisected by canyons leading to Clearwater River. The first wave of timber harvest in this zone occurred during the early 1900s and consisted mostly of removing the most valuable timber species and largest trees. During the 1970s, timber harvest increased fairly dramatically, and new roads provided access to previously inaccessible areas. In 1971, Dworshak Reservoir flooded approximately 45 miles of the North Fork Clearwater River corridor with slack water and permanently removed thousands of acres of prime, low-elevation winter range for big game. During the early 1970s, only a few hundred elk were observed wintering along the river under the predominantly old-growth cedar hemlock forest. The timberland is owned predominantly by Potlatch Corporation, Idaho Department of Lands (IDL), and USFS. Access is very good throughout the zone and timber harvest occurs on most available

timber ground. High open and closed road densities contribute to high elk vulnerability and low habitat effectiveness. During the 1980s and 1990s, timber harvest occurred on almost all available state and private land as demand for timber and management of these lands intensified. Despite the reservoir, extensive logging along the river corridor improved winter range in this unit. South aspect forests were cleared to provide timber products and inadvertently provided quality winter range.

Depredations have increased on agricultural land within the past 10 years in this zone due to increases in both deer and elk populations and changes in land ownership that reduced hunting opportunities. Elk cause damage to grain, legumes, and hay crops within the south-central portion of this zone during summer months. Occasional damage to stored hay, silage, and winter wheat occurs during winters with heavy snow accumulation. Damage to conifer seedlings by elk is a concern in the remaining portions of this zone where reforestation projects overlap with elk winter range. Controlled antlerless elk seasons have been successful in reducing the overall damage in this zone.

### **Biological Issues**

Historically, Unit 10A has supported a productive elk population. From 1992-1996, recruitment averaged 34 calves:100 cows. From 1997-1999, recruitment dropped to an average of 19 calves:100 cows. However, the 2001 sightability survey revealed recruitment at 30 calves:100 cows. If this level is sustained, antlerless harvest levels might be liberalized in the future.

### **Inter-specific Issues**

Unit 10A supports a substantial white-tailed deer population, few mule deer, and a small moose population. The white-tailed deer population has increased dramatically over the past 20 years. Significant competitive interactions between white-tailed deer and elk may exist. However, the form and extent of those relationships is presently unclear.

Significant livestock grazing on rangeland in the southeastern portion of the zone impacts elk habitat potential. Most of that grazing occurs on habitats used exclusively during winter months. Additionally, range allotments are present on summer and winter habitat on USFS, IDL, and Potlatch Corporation lands elsewhere in the zone.

### **Predation Issues**

Predator numbers, mountain lions in particular, have increased to high levels in the last decade. In Units 8, 8A, 10, 10A, 11, and 11A combined, mountain lion harvest levels increased steadily from 1991 (43 lions) to a peak in 1997 (149 lions). Harvest subsequently declined. Anecdotal observations suggest this trend in harvest was related to a similar trend in mountain lion populations. Black bear harvest has increased slowly and recently stabilized. However, harvest levels remain below 2000-2010 bear management plan objectives. The long-term increase in bear and mountain lion populations may be adversely affecting elk population performance. However, there is inadequate information to objectively assess those potential impacts.

Wolves are established within Dworshak Zone. Currently, at least 2 packs inhabit the zone for part of the year.

### **Winter Feeding Issues**

Emergency winter feeding has not been conducted recently.

### **Information Requirements**

Sightability surveys will be needed periodically to evaluate population performance relative to plan objectives. Composition surveys may be conducted at more frequent intervals to evaluate potential changes in recruitment.

## Elk Dworshak Zone (Unit 10A)

### Winter Status & Objectives

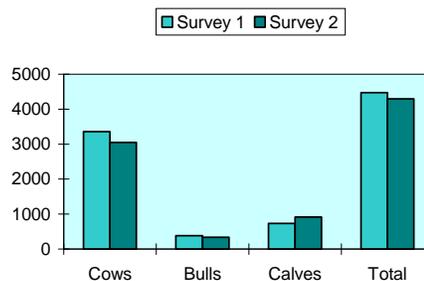
Unit	Current Status			Objective			
	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
10A	2001	3045	339	194	2900 - 4300	600 - 900	350 - 500
<b>Zone Total</b>		<b>3045</b>	<b>339</b>	<b>194</b>	<b>2900 - 4300</b>	<b>600 - 900</b>	<b>350 - 500</b>
<b>Bulls per 100 Cows</b>			<b>11</b>	<b>6</b>		<b>18 - 24</b>	<b>10 - 14</b>



### Population Surveys

Unit	Year	Survey 1				Survey 2				
		Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
10A	1999	3355	385	734	4474	2001	3045	339	914	4298
<b>Comparable Surveys Total</b>		<b>3355</b>	<b>385</b>	<b>734</b>	<b>4474</b>		<b>3045</b>	<b>339</b>	<b>914</b>	<b>4298</b>
<b>Per 100 Cows</b>			<b>11</b>	<b>22</b>				<b>11</b>	<b>30</b>	

### Comparable Survey Totals

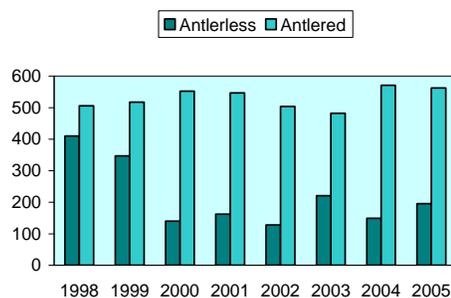


### Zone Harvest Statistics

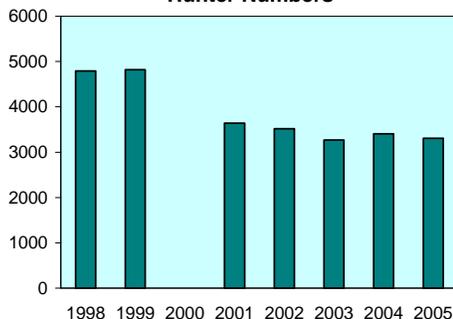
	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	410	347	140	162	128	221	149	195
'A' Tag	339	291	118	135	105	189	123	158
'B' Tag	27		4	5	1	2	5	6
CH Tag	44	56	18	22	22	30	21	31
<b>Antlered Harvest</b>	506	517	552	547	504	482	571	562
'A' Tag	133	172	110	136	96	116	128	126
'B' Tag	373	344	441	409	407	364	442	436
CH Tag		1	1	2	1	2	1	0
<b>Hunter Numbers</b>	4790	4819	ND	3639	3520	3271	3405	3308
'A' Tag	1794	1917	ND	1065	1106	1129	1152	1143
'B' Tag	2897	2809	ND	2533	2367	2098	2219	2102
CH Tag	99	93	ND	41	47	44	34	63
<b>% 6+ Points</b>	7	4	10	11	10	13	16	16

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

### Harvest



### Hunter Numbers



### % 6+ Points

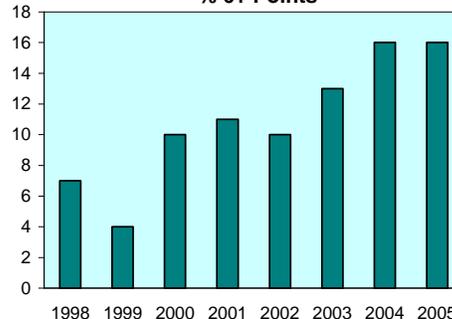


Figure 5. Dworshak Zone elk status and objectives.

## **Hells Canyon Zone (Units 11, 13, 18)**

### **Management Objectives**

Objectives for Hells Canyon Zone (Figure 6) are to establish a population of 1,950 cows and 525 bulls, including 325 adult bulls at ratios of 25-29 bulls:100 cows in Unit 11, 18-24 bulls:100 cows in Unit 13, and 30-34 bulls:100 cows in Unit 18. Current permit levels should allow Units 11, 13, and 18 elk populations to reach objectives.

### **Historical Perspective**

Historically, elk herds were scattered and numbers were low in this area. Few big game animals were found along Clearwater River by Lewis and Clark in the early 1800s, probably due in part to the dense, unbroken canopy of forest that covered the entire area. Wildfires burned over vast expanses near the beginning of the twentieth century, creating vast brush-fields that provided abundant forage areas for elk. Elk production in areas adjacent to this unit increased around the turn of the century, and elk repopulated this zone by the 1960s. Elk herds declined into the 1970s, partially due to: 1) maturation of brush-fields and declines in forage availability; 2) logging and road-building activity that increased vulnerability of elk to hunters under the then more liberal hunting seasons; and 3) loss of some major winter ranges. In response to declines in elk numbers, an either-sex hunting regime was replaced in 1976 with an antlered-only general hunting season. Elk herds then began rebuilding.

### **Habitat Issues**

Habitat productivity varies widely throughout the zone from steep, dry, river-canyon grasslands having low annual precipitation to higher elevation forests with good habitat productivity and greater precipitation. Late successional forest cover types have become fragmented within the zone. Many grassland cover types have been invaded by various weeds and non-native grasses, including cheatgrass and yellow star thistle. Road density is moderate, and access is restricted in many areas. This results in medium to low vulnerability of big game to hunters.

Historically, sheep and cattle ranchers and miners homesteaded the canyon lands in this zone, while prairie land was settled by farmers. Around the turn of the century, northern Unit 11 was under intensive use for dry-land agriculture and fruit orchards. Many resort cabins were built near and around the town of Waha. Later, many cabins were built along the mail stage route from Lewiston to Cottonwood via Soldiers Meadows and Forest. A mill was built in Winchester, along with numerous smaller mills on Craig Mountain, and the forested portion of Craig Mountain was extensively logged. The forests were frequently high-graded, and the existing forests still show the scars. In addition, past improper grazing practices severely degraded many meadow areas and allowed invasion of noxious weed species on dryer sites.

This zone contains large tracts of both private and publicly-owned land. Unit 11 is mostly private land except for Craig Mountain Wildlife Management Area (CMWMA) along the Snake and Salmon rivers. The CMWMA consists of 2 major units: the Billy Creek unit (16,123 acres), which was obtained between 1971 and 1983; and the Peter T. Johnson Mitigation Area (59,991

acres), which was acquired in 1995 as partial mitigation for Dworshak Reservoir. Unit 13 has been mostly under private ownership since settlement and is managed mostly for agriculture and livestock. Historically, sheepherders ran their flocks in the canyons of Unit 18, and some logging occurred in the forested areas of this unit. Unit 18 is two-thirds public land with the remaining in private ownership located at lower elevations along Salmon River. The majority of Hells Canyon Wilderness Area, which was designated as such in 1975, is in Unit 18.

Depredations have increased during the past 10 years in this zone due to increases in white-tailed deer and elk populations. Elk cause damage to grain, legumes, hay, and rangeland forage. Cultivated crops are the primary concern in the north, while livestock forage is the primary concern in the remaining portion of this zone. Controlled antlerless elk seasons have had limited success in reducing the overall damage.

### **Biological Issues**

Elk hunting in this zone is offered only on a controlled-hunt basis. Across the zone, sightability survey data indicate that cow and bull elk are increasing, with a declining bull:cow ratio and stable calf recruitment.

### **Inter-specific Issues**

Grazing by cattle is gradually decreasing in the zone due to reductions in USFS and Bureau of Land Management (BLM) allotments, along with land ownership shifting from private to public. Mule deer populations have declined dramatically, possibly alleviating any competitive relationships that may have existed with elk, although it is doubtful that any such effects would be significant.

### **Predation Issues**

In most of the Clearwater Region, mountain lion harvest has increased over the last several years. In DAUs 1E and 1F (Units 8, 11, 11A, 13, 14, 15, 16, and 18), black bear harvest has increased steadily, but harvest levels in both DAUs are currently below plan objectives. Wolves have not become established in this zone.

### **Winter Feeding Issues**

Emergency winter feeding has not been conducted recently.

### **Information Requirements**

Sightability surveys will be required periodically across the zone to evaluate population performance relative to plan objectives.

## Elk Hells Canyon Zone (Units 11, 13, 18)

### Winter Status & Objectives

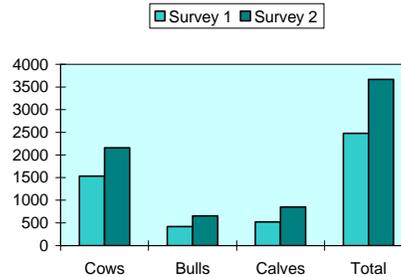
Unit	Survey Year	Current Status			Objective		
		Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
11	2002	711	220	129	600 - 900	150 - 250	100 - 150
13	2001	890	185	117	500 - 700	100 - 150	50 - 100
18	2000	558	253	161	500 - 700	150 - 225	100 - 150
<b>Zone Total</b>		<b>2159</b>	<b>658</b>	<b>407</b>	<b>1600 - 2300</b>	<b>400 - 625</b>	<b>250 - 400</b>
<b>Bulls per 100 Cows</b>			<b>30</b>	<b>19</b>		<b>25 - 29</b>	<b>14 - 18</b>



### Comparable Survey Totals

### Population Surveys

Unit	Year	Survey 1				Survey 2				
		Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
11	1999	646	149	209	1004	2002	711	220	364	1295
13	1994	556	105	219	880	2001	890	185	350	1425
18	1992	330	166	95	591	2000	558	253	138	949
<b>Comparable Surveys Total</b>		<b>1532</b>	<b>420</b>	<b>523</b>	<b>2475</b>		<b>2159</b>	<b>658</b>	<b>852</b>	<b>3669</b>
<b>Per 100 Cows</b>			<b>27</b>	<b>34</b>				<b>30</b>	<b>39</b>	



### Zone Harvest Statistics

	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	87	98	103	77	96	102	185	159
'A' Tag			0	0	0	0	0	0
'B' Tag			1	0	0	0	0	0
CH Tag	87	98	102	77	96	102	185	159
<b>Antlered Harvest</b>	97	117	128	113	137	127	178	166
'A' Tag			0	4	0	0	0	0
'B' Tag			4	3	0	0	0	0
CH Tag	97	117	124	106	137	127	178	166
<b>Hunter Numbers</b>	572	570	ND	539	575	580	817	737
'A' Tag			ND	7	11	11	0	0
'B' Tag			ND	27	20	40	0	0
CH Tag	572	570	ND	505	544	529	817	737
<b>% 6+ Points</b>	33	36	50	48	50	52	46	53

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

### Harvest

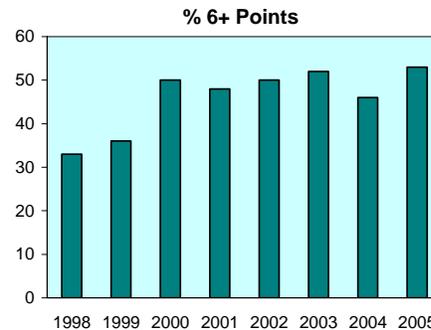
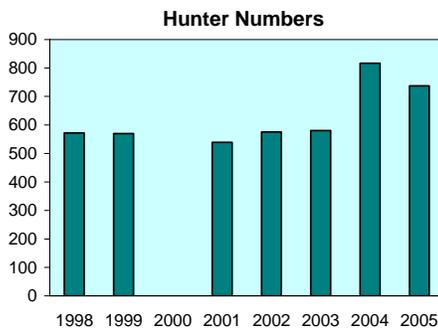
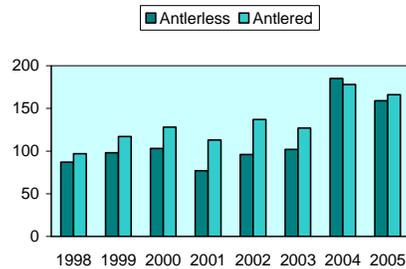


Figure 6. Hells Canyon Zone elk status and objectives.

## **Elk City Zone (Units 14, 15, 16)**

### **Management Objectives**

Objectives for Elk City Zone (Figure 7) are to establish a population of 3,900 cows and 850 bulls, including 475 adult bulls at ratios of 18-24 bulls:100 cows and 10-14 adult bulls:100 cows. The current cow harvest management strategy should allow that segment of the population to achieve its objective by 2006. B-tag sales were capped beginning with the 2002 hunting season to allow the bull segment of the population to reach objectives.

### **Historical Perspective**

Historically, elk herds were scattered and numbers were low in this area. Few big game animals were found along Clearwater River by Lewis and Clark in the early 1800s, probably due in part to the dense, unbroken canopy of forest that covered the entire area. Wildfires burned over vast expanses near the beginning of the twentieth century, creating vast brush-fields that provided abundant forage areas for elk. Elk numbers increased following creation of these brush-fields, and elk numbers apparently peaked around 1950. Elk herds declined into the 1970s, partially due to: 1) maturation of brush-fields and declines in forage availability; 2) logging and road-building activity that increased vulnerability of elk to hunters under the then more liberal hunting seasons; and 3) loss of some major winter ranges. In response to declines in elk numbers, an either-sex hunting regime was replaced in 1976 with an antlered-only general hunting season. Elk herds then began rebuilding.

### **Habitat Issues**

The prairie regions of this zone were converted to agriculture and ranching by early settlers. In 1862, gold was discovered near the current location of Elk City in Unit 15. After the readily available gold was depleted, miners turned to dredging activities where rivers ran through meadows. Crooked, American, and Red Rivers were channelized and rerouted several times during the extraction processes, which continued commercially until the 1950s. Logging began with mining activities to supply wood for the mines, but in the 1940s, logging activities became commercial and resulted in an extensive network of roads throughout a large portion of this zone. In 1964, with the passage of the Wilderness Act, a small portion of Unit 16 was designated as a part of the Selway-Bitterroot Wilderness. In 1978, portions of Units 14 and 15 were included in the Gospel Hump Wilderness.

Land ownership in this zone is approximately 80% public with the remaining 20% private. The privately-owned portions are at lower elevations along Clearwater and Salmon rivers. Approximately 8% of this zone is wilderness. Habitat productivity is relatively high in comparison to most other Clearwater Region big game units. Productive conifer forests with intermixed grasslands characterize the majority of this zone. Many forested areas have become overgrown with lodgepole pine and fir due to fire suppression during the past 40 years. Both open and closed road densities are high within the zone, contributing to significant big game vulnerability during hunting seasons along with relatively high illegal harvest throughout the year. Noxious weeds, especially yellow star thistle and spotted knapweed, have increased within

the past 15 years and in some areas, are out-competing grasses and forbs on important elk habitats.

Depredations have increased within the past 10 years in this zone due to increases in both deer and elk populations and changes in land ownership that reduce hunting opportunities. Livestock operators are concerned with elk use of pasture and rangeland forage during spring months prior to release of livestock on these grounds. Some damage to grain crops occurs during summer. Several past fencing projects have helped to reduce concerns of elk damaging stored hay during winters with heavy snow accumulation.

### **Biological Issues**

Across the zone, cow elk numbers are stable to slightly increasing while numbers of bull elk are increasing, leading to an increasing. Bull:cow ratios ranged between 12.9 and 13.6 on the 2000 surveys. In 2002, a cap of 1,790 B-tag hunters was initiated. The most recent surveys in Units 14 and 15 have showed increasing bull:cow ratios.

Historically, calf recruitment in Units 14 and 15 has been high, averaging 38 calves:100 cows from 1987-1993. However, the 2000 surveys revealed recruitment of 25 calves:100 cows, suggesting that a decline in recruitment, similar to surrounding areas, may be occurring. Chronic low recruitment is a concern in Unit 16, which averaged 19 calves:100 cows from 1990-2000.

### **Inter-specific Issues**

Livestock graze much of this zone on both private and public land. On private land on the west side of Units 14 and 16, competition with domestic livestock may be significant, especially during winter.

### **Predation Issues**

Mountain lion harvest in this zone has increased steadily over the past decade. Anecdotal information suggests a significant increase in mountain lion abundance. Black bear harvest has likewise increased over the past decade. Harvest is currently between 80 and 90 bears annually.

Wolves are well established in the zone. Pack activity has been confirmed in all 3 management units.

### **Winter Feeding Issues**

Emergency winter feeding has not been conducted recently.

### **Information Requirements**

All 3 units should be surveyed periodically to evaluate population performance relative to plan objectives.

## Elk Elk City Zone (Units 14, 15, 16)

### Winter Status & Objectives

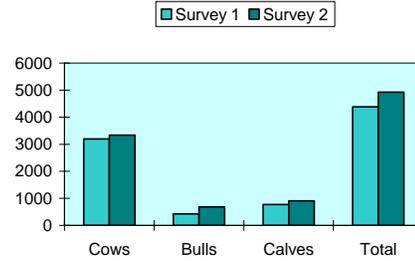
Unit	Current Status			Objective			
	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
14	2004	1478	439	295	1400 - 2000	300 - 450	150 - 250
15	2006	929	127	65	950 - 1450	200 - 300	100 - 175
16	2000	927	120	59	800 - 1200	175 - 250	100 - 150
<b>Zone Total</b>		<b>3334</b>	<b>686</b>	<b>419</b>	<b>3150 - 4650</b>	<b>675 - 1000</b>	<b>350 - 575</b>
<b>Bulls per 100 Cows</b>			<b>21</b>	<b>13</b>		<b>18 - 24</b>	<b>10 - 14</b>



### Population Surveys

Unit	Year	Survey 1				Survey 2				
		Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
14	2000	1640	223	446	2309	2004	1478	439	499	2416
15	2000	676	92	170	938	2006	929	127	205	1261
16	1996	877	105	157	1139	2000	927	120	200	1247
<b>Comparable Surveys Total</b>		<b>3193</b>	<b>420</b>	<b>773</b>	<b>4386</b>		<b>3334</b>	<b>686</b>	<b>904</b>	<b>4924</b>
<b>Per 100 Cows</b>			<b>13</b>	<b>24</b>			<b>21</b>	<b>27</b>		

### Comparable Survey Totals



### Zone Harvest Statistics

	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	298	324	122	149	118	165	208	196
'A' Tag	6	103	91	117	83	112	167	138
'B' Tag	7		2	3	2	5	5	1
CH Tag	285	221	29	29	33	48	36	57
<b>Antlered Harvest</b>	328	316	395	420	352	382	407	469
'A' Tag	13	65	98	80	64	74	57	77
'B' Tag	315	251	291	339	286	308	350	392
CH Tag	0	0	6	1	2	0	0	0
<b>Hunter Numbers</b>	3192	3540	ND	2726	2351	2447	2540	2517
'A' Tag	271	723	ND	773	832	865	875	848
'B' Tag	2147	2062	ND	1907	1456	1517	1600	1579
CH Tag	774	755	ND	46	63	65	65	90
<b>% 6+ Points</b>	19	18	19	18	23	27	31	30

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

### Harvest

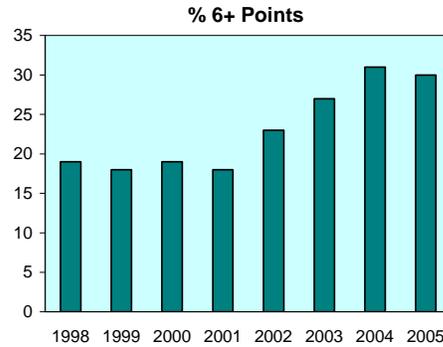
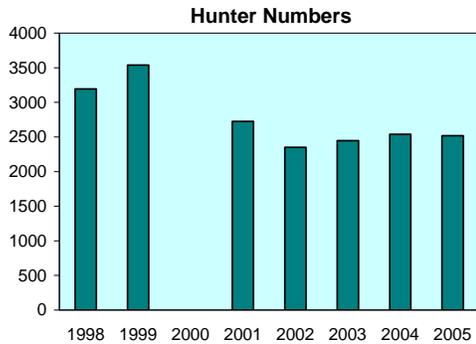
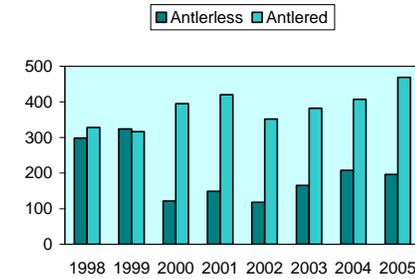


Figure 7. Elk City Zone elk status and objectives.

## **Selway Zone (Units 16A, 17, 19, 20)**

### **Management Objectives**

Objectives in Selway Zone (Figure 8) are to establish a population of 6,100 cows and 1,650 bulls, including 975 adult bulls at ratios of 25-29 bulls:100 cows and 15-18 adult bulls:100 cows.

Like Lolo Zone, management of the Selway Zone elk population and setting appropriate population objectives presents a serious quandary. Calf recruitment has declined substantially and remains at low levels. Existing information suggests that both predation and density dependence (habitat limitations) could be causing this decline. If predation is the overwhelming factor, population goals should be set higher, and there should be little or no cow harvest. However, if density dependence is significant, goals should be set at a low level, and cow harvest should be at moderate levels (5-10%). Also, both factors may be contributing significantly, leading to some intermediate level of objectives. At present, it is not possible to determine the relative contribution of those effects. In the absence of that knowledge, the objectives were set at intermediate levels.

Antlerless seasons were closed in 1998 to compensate for poor recruitment and 1996-1997 winter mortality. B-tag sales were capped at 1,255 in 2000.

### **Historical Perspective**

Historically, elk herds were scattered and numbers were low in this area. Few big game animals were found along Clearwater River by Lewis and Clark in the early 1800s, probably due in part to the dense, unbroken canopy of forest that covered the entire area. Wildfires burned over vast expanses near the beginning of the twentieth century, creating vast brush-fields that provided abundant forage areas for elk. Elk numbers increased following creation of these brush-fields, and elk numbers apparently peaked around 1950. Elk herds declined into the 1970s, partially due to: 1) maturation of brush-fields and declines in forage availability; 2) logging and road-building activity that increased vulnerability of elk to hunters under the then more liberal hunting seasons; and 3) loss of some major winter ranges. In response to declines in elk numbers, an either-sex hunting regime was replaced in 1976 with an antlered-only general hunting season. Elk herds then began rebuilding.

### **Habitat Issues**

Habitat productivity varies throughout the zone from high-precipitation, forested areas along the lower reaches of Selway River to dry, steep, south-facing ponderosa pine and grassland habitat along Salmon River. Many areas along Salmon River have a good mix of successional stages due to frequent fires within the wilderness. Fire suppression within portions of the Selway River drainage has led to decreasing forage production for big game. Road densities are low, contributing to low vulnerability for big game. Noxious weeds, especially spotted knapweed, have encroached upon many low-elevation areas of elk winter range.

Due to the rugged and remote nature of this zone, human impacts have been very limited. In 1964, almost all of Unit 17 and a small portion of Unit 16A were included in the Selway-Bitterroot Wilderness. Most of Unit 19 became part of the Gospel Hump Wilderness in 1978, and in 1980, part of Unit 20 was included in the Frank Church River-of-No-Return Wilderness.

### **Biological Issues**

Sightability survey data, collected in this zone from 1987-2001, revealed declining numbers of adult elk and declining recruitment. Declining calf recruitment was initially detected in Units 16A and 17 in 1995 surveys, while low recruitment was not observed in Units 19 and 20 until 1996. Composition surveys in Unit 17 during 2002 and 2003, and a sightability survey in 2004 revealed stable, low recruitment at 16 calves:100 cows but in 2005, it declined to 11.0 calves:100 cows. The 2004 sightability survey in Unit 16A revealed higher recruitment.

The winter of 1996-1997 was marked by severe conditions, including extremely deep snow exceeding 200% of average snow-pack in some areas. These conditions apparently caused higher than normal winter mortality leading to a significant decline in the Unit 16A and 17 herds. 1999 survey data suggested a 27% decline in adult elk over both units. 2001 survey data suggest a significant decline in Unit 20 elk and a significant increase in Unit 19 elk. However, fire activity during summer/fall 2000 may be responsible for significant changes in elk distribution among Units 19, 19A, 20, and 20A.

### **Inter-specific Issues**

The zone supports small, isolated white-tailed deer populations, low-density mule deer populations, and moderate-density moose populations. Moose have increased moderately over the past 20 years. Grazing by cattle is virtually nonexistent.

### **Predation Issues**

Selway Zone mountain lion harvest has remained static over the past decade. Black bear harvest is likewise stable. In this zone, it is doubtful that harvest levels reflect population trend but rather reflect the remote, rugged nature of the habitat which, in combination with little access, precludes significant mountain lion or bear harvest. Recent trends in mountain lion and bear populations are questionable.

Wolves are well established in this zone. Existing information suggests the presence of several packs. However, wolf data for this zone is poor and better information is needed.

### **Winter Feeding Issues**

Emergency winter feeding has not been conducted recently.

## **Information Requirements**

Aerial surveys should be conducted periodically to obtain adequate information to evaluate population performance relative to plan objectives.

## Elk Selway Zone (Units 16A, 17, 19, 20)

### Winter Status & Objectives

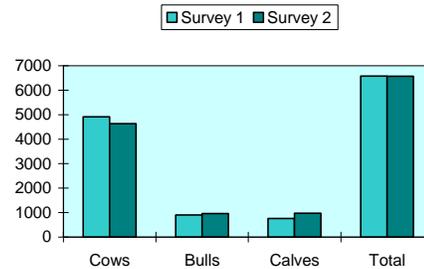
Unit	Current Status			Objective			
	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
16A	2004	457	96	42	650 - 950	175 - 250	100 - 150
17	2004	2076	486	332	2400 - 3600	650 - 975	375 - 575
19	2001	1508	240	153	1050 - 1550	300 - 400	150 - 250
20	2001	596	138	96	800 - 1200	200 - 325	125 - 200
<b>Zone Total</b>		<b>4637</b>	<b>960</b>	<b>623</b>	<b>4900 - 7300</b>	<b>1325 - 1950</b>	<b>750 - 1175</b>
<b>Bulls per 100 Cows</b>			<b>21</b>	<b>13</b>		<b>25-29</b>	<b>14 - 18</b>



### Population Surveys

Unit	Year	Survey 1				Survey 2				
		Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
16A	1999	401	51	86	538	2004	457	96	130	683
17	1999	2493	398	298	3189	2004	2076	486	332	2894
19	1996	1149	182	243	1574	2001	1508	240	394	2142
20	1996	871	273	133	1277	2001	596	138	120	854
<b>Comparable Surveys Total</b>		<b>4914</b>	<b>904</b>	<b>760</b>	<b>6578</b>		<b>4637</b>	<b>960</b>	<b>976</b>	<b>6573</b>
<b>Per 100 Cows</b>			<b>18</b>	<b>15</b>				<b>21</b>	<b>21</b>	

### Comparable Survey Totals

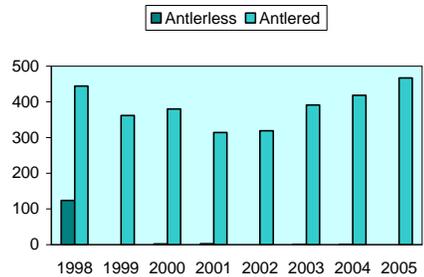


### Zone Harvest Statistics

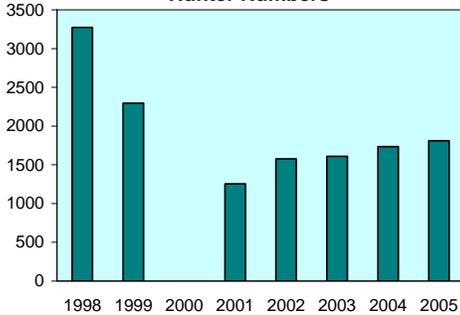
	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	124	0	2	3	0	1	1	0
'A' Tag	124		2	0	0	0	1	0
'B' Tag			0	3	0	1	0	0
CH Tag			0	0	0	0	0	0
<b>Antlered Harvest</b>	444	362	380	314	319	391	418	467
'A' Tag	78	78	73	84	66	91	115	99
'B' Tag	366	284	307	230	253	300	303	366
CH Tag			0	0	0	0	0	2
<b>Hunter Numbers</b>	3273	2295	ND	1256	1577	1608	1735	1812
'A' Tag	1430	650	ND	423	518	533	578	638
'B' Tag	1843	1645	ND	833	1059	1075	1157	1156
CH Tag			ND	0	0	0	0	18
<b>% 6+ Points</b>	30	28	33	37	30	43	34	46

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

### Harvest



### Hunter Numbers



### % 6+ Points

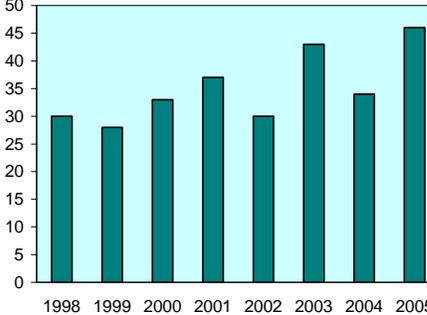


Figure 8. Selway Zone elk status and objectives.

**PROGRESS REPORT  
SURVEYS AND INVENTORIES**

<b>STATE:</b>	<u>Idaho</u>	<b>JOB TITLE:</b>	<u>Elk Surveys and Inventories</u>
<b>PROJECT:</b>	<u>W-170-R-30</u>		
<b>SUBPROJECT:</b>	<u>3, Nampa</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>1</u>		<u>Habitat Studies</u>
<b>PERIOD COVERED:</b>	<u>July 1, 2005 to June 30, 2006</u>		

**SOUTHWEST (NAMPA) REGION**

**Sawtooth Zone (Units 33, 34, 35, 36)**

**Management Objectives**

Objectives for Sawtooth Zone (Figure 9) include maintaining a population of  $\geq 3,800$  cows and  $\geq 790$  bulls, including  $\geq 465$  adult bulls in the wintering population in this zone. Bull:cow and adult bull:cow ratios will be managed at 18-24 bulls:100 cows and 10-14 adult bulls:100 cows, the statewide minimums. Summer elk numbers in Unit 36 were reduced to near objectives during the late 1990s. A harvest of  $\geq 750$  bulls each year is desired. However, at current recruitment rates, harvest of  $\leq 500$  bulls is sustainable. These objectives reflect a balance between the need for a relatively large, huntable elk population and concerns about feeding elk during winter. Unless calf production and survival increases dramatically, harvest rates will have to be reduced to achieve these goals.

**Historical Perspective**

Both mule deer and elk herds were over-harvested for hides and meat for mining camps in the mid-to-late 1800s. Lack of big game in the area resulted in the Idaho Legislature establishing the South Fork Game Preserve (now Unit 35) in 1909. This was the first game preserve in Idaho and remained in place until 1977. No hunting was allowed in the preserve until 1945. Deer populations increased rapidly. The elk herd increased to  $>1,000$  by 1940 and approximately 2,000 by the early 1950s. The rapid increase to the current population of approximately 5,700 elk started in the late 1970s.

Sawtooth Zone is a popular destination for elk hunters from the Boise and Magic Valley areas. Hunter numbers have declined to approximately 5,500 in recent years.

**Habitat Issues**

More than 90% of this zone is managed by USFS. Access ranges from heavily roaded in the Garden Valley area to the unroaded Frank Church River-of-No-Return Wilderness and Sawtooth National Recreation Area. Hunters are able to select hunting conditions from wilderness to

logged/roaded situations. In several areas, road densities are very high and access management programs could provide more area with less motorized access.

Habitat conditions on winter range have been an important consideration since the early 1930s. Reports by USFS and National Park Service biologists described degraded conditions of winter range in 1932. There have been numerous attempts to improve habitat on winter range, but none of them have shown significant success. Currently, most south and west-facing slopes in the Garden Valley area are wholly infested by rush skeletonweed, rendering thousands of acres of important winter range practically useless for elk and mule deer.

Elk have caused damage to several ranches (primarily cattle and small horse feeding operations) in the Garden Valley area over the last 10 years. Establishing bait sites nearby reduces this damage. In spring, elk concentrate on new forage growth on private rangeland. In the Stanley area, very limited winter ranges have been impacted by the small part of the herd that does not migrate in the fall. Portions of local summer range are noticeably impacted by elk.

### **Biological Issues**

Following the trend south of Salmon River, this elk population has increased dramatically in the last 20 years. Calf recruitment in the past has been high; however, indications of declines are present. Harvest data indicate that more bulls are being killed than are produced annually.

### **Inter-specific Issues**

The Garden Valley area has been a significant wintering area for mule deer. In the early 1940s, estimated winter deer populations were from 5,000-12,000. The elk population consisted of <2,000 animals. Since 1964, mule deer numbers have not exceeded 2,000 and there are approximately 5,500 elk wintering in the area. Livestock grazing has been significantly reduced over the last 60 years. Unit 34, Bear Valley, still has significant levels of cattle grazing.

### **Predation Issues**

Black bear and mountain lion populations are well established and apparently stable in Sawtooth Zone. Recent sightability surveys indicated a declining calf:cow ratio, but there is no evidence to indicate predation is, or is not, the cause of this decline. Current calf:cow ratios are within normal ranges for this elk herd and are not a concern at this time. As a result of a recent USFWS wolf reintroduction,  $\geq 12$  packs are established in Sawtooth Zone. Impacts of wolf reintroduction on elk population dynamics remain unclear, but will likely become a significant issue for elk management in this zone.

### **Winter Feeding Issues**

Sawtooth Zone has been a focal point for winter feeding since the 1930s. Severe winter mortality occurred on a regular basis starting in 1932 when 93 dead elk were found and 1,800 dead deer were buried along South Fork Payette River. Winter feeding programs for mule deer

started shortly thereafter. In a few years, elk were consuming more feed than mule deer. Now, winter feeding takes place approximately 2 out of every 5 years.

There has been no evidence of Brucellosis at any of the feed sites. The major concern is for feeding mule deer on limited deer winter range in Garden Valley. When mule deer are fed, elk quickly take over feed sites and exclude deer. This requires establishment of elk feeding sites to allow deer access to sufficient feed. Native range has the capability to support the current elk herd in nearly all situations. There is considerable public demand for feeding elk. This demand is both for public concern about the welfare of the herd and to develop an elk feeding sleigh ride as a tourist attraction.

In the past 2 decades, occasional winter feeding has allowed a wintering elk herd to become established in the Stanley area, where historically they could not survive severe winters. The herd grew to 500-1,000 animals and severely impacted the small amount of natural winter range available. More recently, antlerless hunting that targeted the wintering population reduced numbers to objective levels.

### **Information Requirements**

Migratory patterns of elk are largely unknown. Information about impacts of several large fires in the last 10 years on calving, summer, or winter ranges is needed. Potential impacts of the new mix of large predators are unknown. Inventory and mapping of current range of rush skeletonweed on summer and winter habitats is desirable.

## Elk Sawtooth Zone (Units 33, 34, 35, 36)

### Winter Status & Objectives

Unit	Current Status				Objective		
	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
33	2006	2326	374	140	2500 - 3700	500 - 800	300 - 450
34	ND				0	0	0
35	2006	566	60	7	300 - 500	50 - 100	25 - 75
36	2006	284	52	40	250 - 350	50 - 75	30 - 50
<b>Zone Total</b>		<b>3176</b>	<b>486</b>	<b>187</b>	<b>3050 - 4550</b>	<b>600 - 975</b>	<b>355 - 575</b>
<b>Bulls per 100 Cows</b>			<b>15</b>	<b>6</b>		<b>18 - 24</b>	<b>10 - 14</b>

Note: ND = no survey data available.

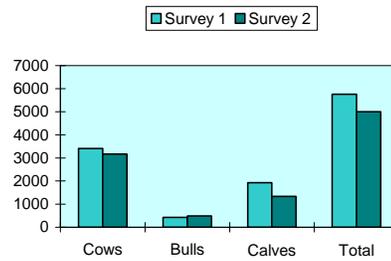


### Population Surveys

Unit	Survey 1					Survey 2				
	Year	Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
33	2001	2114	282	1148	3544	2006	2326	374	930	3630
34	ND					ND				
35	2001	1011	93	657	1761	2006	566	60	289	915
36	2003	284	52	118	454	2003	284	52	118	454
<b>Comparable Surveys Total</b>		<b>3409</b>	<b>427</b>	<b>1923</b>	<b>5759</b>		<b>3176</b>	<b>486</b>	<b>1337</b>	<b>4999</b>
<b>Per 100 Cows</b>			<b>13</b>	<b>56</b>				<b>15</b>	<b>42</b>	

Note: ND = no survey data available.

### Comparable Survey Totals



### Zone Harvest Statistics

	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	294	638	271	213	295	369	284	579
'A' Tag		174	160	122	203	274	202	469
'B' Tag		176	15	4	2	2	2	3
CH Tag		288	96	87	90	93	80	107
<b>Antlered Harvest</b>	666	619	554	611	424	526	613	596
'A' Tag		91	87	139	90	129	129	124
'B' Tag		525	452	463	330	387	476	468
CH Tag		3	15	9	4	10	8	4
<b>Hunter Numbers</b>	6670	7451	ND	5490	5680	5665	6024	5975
'A' Tag		1725	ND	1868	2123	2136	2373	2332
'B' Tag		4603	ND	3319	3253	3259	3379	3326
CH Tag		1123	ND	303	304	270	272	317
<b>% 6+ Points</b>	23	23	23	24	17	20	20	24

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

### Harvest

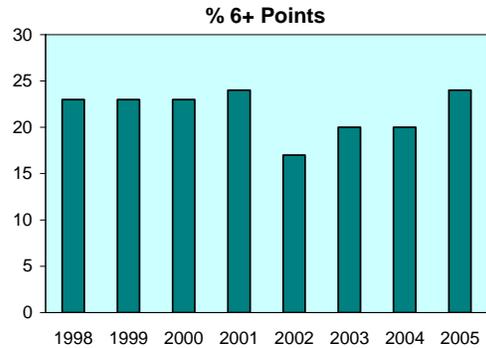
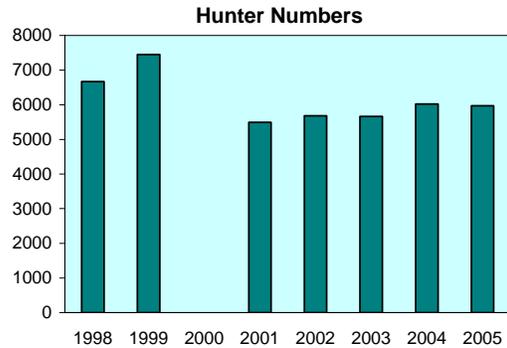
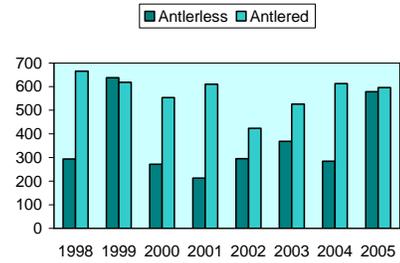


Figure 9. Sawtooth Zone elk status and objectives.

## **Owyhee-South Hills Zone (Units 38, 40, 41, 42, 46, 47, 54, 55, 57)**

### **Management Objectives**

The objective in Owyhee-South Hills Zone (Figure 10) is to provide additional hunting opportunity commensurate with the increased elk population. Harvest management will emphasize the opportunity to harvest a mature bull.

The 9 management units within this zone vary substantially in their potential to sustain elk populations under current biological and socio-political constraints. Management will retain enough flexibility to allow adjustments of elk numbers, up or down, to address issues that may arise. In Unit 54, surveys will be initiated to provide data on which to assess population status.

### **Historical Perspective**

During the late 1800s, elk in Owyhee-South Hills Zone were nearly eliminated because of unrestricted hunting and conflicts with the area's growing livestock industry. Elk densities remained low throughout the twentieth century but began to increase in the 1990s. Recently, ingress from the rapidly growing northern Nevada elk population and natural reproduction have both contributed to herd growth. In 2002, there was an estimated 850 elk in the zone.

Efforts by the Nevada Division of Wildlife (NDOW) to reestablish elk in the northern portion of that state have been very successful. Elk are expanding their range into suitable habitats in Nevada and Idaho that have not had resident elk for nearly a century. Translocations have been used to hasten the growth in elk numbers. Since the mid-1980s, 523 elk have been released into 5 areas in northern Nevada (Elko County). The overall current population (2002) is estimated to be 2,260 head with a management cap of 4,480 elk.

**Units 38, 40, 41, and 42** - During the 1970s, a few hundred elk inhabited Units 40 and 42. By the mid-1990s, this elk herd had increased to about 600 head and was estimated in 2002 having approximately 450 head. Elk in Units 40, 41, and 42 use seasonal habitats in Nevada and Oregon. In Units 40 and 42, most elk move to winter ranges in Oregon and long distance interstate movements have been documented. One elk calf tagged in Baker, Oregon, was harvested as an adult near Murphy, Idaho, over 175 miles away. In Unit 41, elk that winter east of Highway 51 move south to summer ranges in Nevada, although an increasing number are staying in Unit 41 year-long. Most of these elk originated from a reintroduction program conducted by NDOW and the Rocky Mountain Elk Foundation (RMEF) in the Bruneau River drainage in Nevada. One of the released elk was harvested in Unit 46 southwest of Castleford, Idaho, over 50 miles from the Nevada release site.

**Units 46, 47, 54, 55, and 57** - Elk numbers in these units were very low throughout the 1900s. Elk sightings were considered uncommon and management emphasized providing quality mule deer hunting opportunities. In 1916, the Department reintroduced 19 elk (17 cows, 2 bulls) into Unit 54. Following the release, elk numbers increased only slightly. In 1950, there were approximately 60 elk wintering in Unit 54. Hunting seasons were authorized from 1963-1966 (5-15 permits) but were discontinued because of low success. In 1990, the Magic Valley

RMEF chapter proposed releasing elk into Unit 54 to establish a larger, huntable resident elk population. Since ingress of elk from Utah and Nevada was beginning to occur at that time, it was decided to allow elk numbers to increase naturally without translocations. Although reliable estimates of elk numbers are currently unavailable, the population in Units 46, 47, 54, 55, and 57 in 2002 was estimated between 250 and 350 head, exceeding the 1998 objective. Elk hunting was authorized in Units 46, 47, and 54 in 2002 with 15 either-sex archery permits, 15 any-weapon antlered permits, and 15 any-weapon antlerless permits. Similar hunting seasons were authorized for 2003 to 2005 with the antlerless hunt permit level increased from 15 to 40 permits.

Because these management units have not traditionally been managed to maintain a resident elk population, the Department scoped 3 possible management scenarios with the public between December 2001 and February 2002. These scenarios were 1) do not allow an elk population to become established; 2) allow slow, carefully monitored growth of the elk herd to allow timely and effective responses to issues or conflicts that might arise; and 3) maximize elk population growth. Of the 230 people surveyed on the issue, 7% favored scenario 1, 52% favored scenario 2, and 41% favored scenario 3. Hunters overwhelmingly favored the establishment of a resident elk population. Ranchers were split between scenarios 1 and 2 and expressed concerns about the potential for elk to compete with livestock for forage on public and private grazing lands. Specifically, ranchers were concerned about elk use on private meadows in August and September and possible future reductions in AUMs on federal lands because of elk.

### **Habitat Issues**

Owyhee-South Hills Zone is comprised of 9 management units, which have varying degrees of potential for supporting elk populations. Habitat quality varies considerably between units, as does the potential for depredation problems.

The BLM manages the majority of elk habitat in Owyhee County. However, small parcels of private property include habitats that receive substantial elk use. The number of Landowner Appreciation Permits has been increased in Units 40 and 42 to provide landowners the opportunity to harvest some of the elk that utilize their property.

In Units 46, 47, 54, 55, and 57, USFS and BLM manage the majority of elk habitat. Habitat conditions are currently suitable for supporting substantially higher numbers of elk. A large amount of sagebrush, bitterbrush, and mountain shrub-dominated habitats preferred by mule deer have been altered by fire, improving elk habitat suitability. However, high road densities, the open character of habitat, and depredations are important issues that will ultimately help determine elk management objectives.

### **Biological Issues**

Because elk densities have traditionally been low in this zone, surveys have not been conducted to provide data on population dynamics. Anecdotal information suggests these populations are increasing, but accurate estimates of population size are unavailable. Increases in elk numbers over the next 5-10 years are inevitable from natural reproduction and continued ingress of elk

from Nevada. Although elk numbers in some units currently exceed population objectives established in 1998, no major biological issues have been identified.

### **Inter-specific Issues**

Owyhee-South Hills Zone has traditionally had a large population of mule deer, although deer numbers have declined during the past decade from changes in habitat and effects of drought and severe winters. The current, small elk population has had no impact on mule deer numbers.

Conflicts between elk and livestock have had a major influence on elk management in portions of Owyhee County. Concentration of elk on private land holdings in western Owyhee County has created significant depredation problems. Landowners' major concerns are damage to fences and loss of private rangeland forage. Currently, there are no elk depredation problems in this zone east of the Bruneau River, but the potential exists. Depredations that occur will be dealt with aggressively by the Department in a timely manner as specified in Idaho Code (36-1108) and Department policy. The Department will work closely with private landowners to avoid development of chronic problems. On federal lands, any resource damage attributed to elk will be jointly evaluated by the Department and managing agency.

### **Predation Issues**

Mountain lions are the primary predator on elk. Lion numbers have declined during the past 10 years concurrent with deer population declines. Predation is presently not a major factor limiting growth of these elk populations, nor is it anticipated to become a concern.

### **Winter Feeding Issues**

There has been no winter feeding of elk in this zone recently. Elk numbers will not be maintained at a higher level than can be supported by available winter habitat. Unsanctioned feeding by private individuals will be strongly discouraged. In the event that emergency feeding is necessary, elk will be reduced to resolve the problem.

### **Information Requirements**

To effectively manage elk in this zone, population surveys will be conducted to identify seasonal habitat use areas and provide data on elk status and trend - especially in those units where population increases are expected (Units 46, 47, and 54). Current estimates are based on reports from ranchers, biologists, and hunters, but better data will be necessary for management of anticipated higher numbers.

## Elk Owyhee - South Hills Zone (Units 38, 40, 41, 42, 46, 47, 54, 55, 57)

### Winter Status & Objectives

Unit	Survey Year	Current Status			Objective		
		Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
38		(0)	(0)	(0)	0	0	0
40		(150)	(40)	(25)	125 - 175	20 - 40	15 - 25
41		(155)	(45)	(20)	25 - 75	5 - 15	5 - 10
42		(175)	(70)	(40)	150 - 200	25 - 50	15 - 25
46		(10)	(5)	(3)	5 - 15	1 - 10	1 - 5
47		(20)	(10)	(5)	15 - 25	1 - 10	1 - 5
54		(150)	(50)	(30)	20 - 30	1 - 10	1 - 5
55		(20)	(10)	(5)	15 - 25	1 - 10	1 - 5
57		(20)	(10)	(5)	15 - 25	1 - 10	1 - 5
<b>Zone Total</b>		<b>(700)</b>	<b>(240)</b>	<b>(133)</b>	<b>370 - 570</b>	<b>55 - 145</b>	<b>40 - 85</b>
<b>Bulls per 100 Cows</b>			<b>(34)</b>	<b>(19)</b>		<b>18 - 24</b>	<b>10 - 14</b>

Note: Estimates within parentheses are based on information other than sightability surveys.

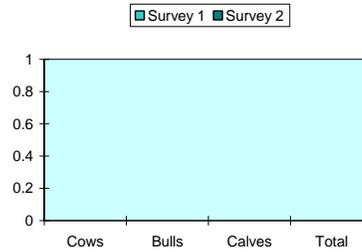


### Population Surveys

Unit	Year	Survey 1				Survey 2				
		Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
38	ND					ND				
40	ND					ND				
41	ND					ND				
42	ND					ND				
46	ND					ND				
47	ND					ND				
54	ND					ND				
55	ND					ND				
57	ND					ND				
<b>Comparable Surveys Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Per 100 Cows</b>										

Note: ND = no survey data available.

### Comparable Survey Totals

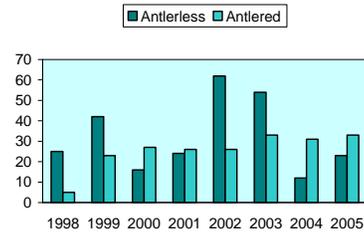


### Zone Harvest Statistics

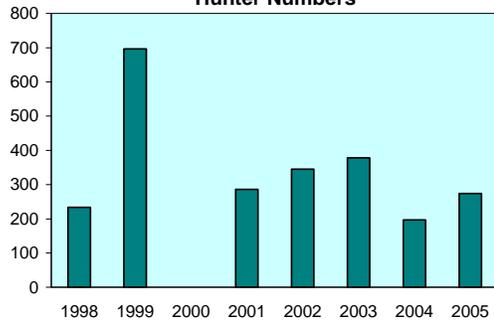
	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	25	42	16	24	62	54	12	23
'A' Tag		13	1	2	44	2	0	0
'B' Tag			2	0	0	0	0	0
CH Tag	25	29	13	22	18	52	12	23
<b>Antlered Harvest</b>	5	23	27	26	26	33	31	33
'A' Tag		20	7	2	0	2	0	0
'B' Tag			2	3	0	0	0	0
CH Tag	5	3	18	21	26	31	31	33
<b>Hunter Numbers</b>	233	696	ND	286	345	378	197	274
'A' Tag		457	ND	25	19	24	0	0
'B' Tag			ND	21	21	9	0	0
CH Tag	233	239	ND	240	305	345	197	274
<b>% 6+ Points</b>	50	0	56	58	72	67	87	63

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

### Harvest



### Hunter Numbers



### % 6+ Points

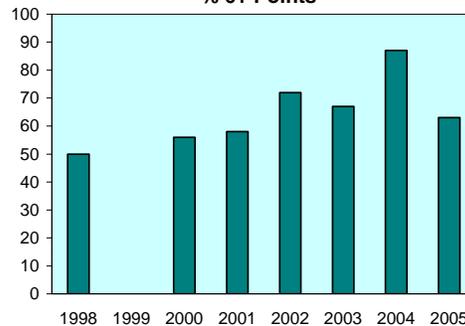


Figure 10. Owyhee-South Hills Zone elk status and objectives.

## **Boise River Zone (Unit 39)**

### **Management Objectives**

Objectives for Boise River Zone (Figure 11) are to maintain a population of 4,000+ cows and 800+ bulls, including 475+ adult bulls. The portion of the herd on the west side of the zone will be reduced to address significant landowner concerns about elk depredation. The bull:100 cow ratio will be maintained at the statewide minimum of 18-24, with 10-14 adult bulls:100 cows. This equates to maintaining the herd at its current level and providing for a harvest of 500+ bulls each year. Currently, this zone is meeting objectives for cows, but is below objectives for bulls and adult bulls.

### **Historical Perspective**

Near the turn of the century, elk herds in Boise River drainage were heavily harvested for hides and meat for mining camps in the area. Sparse elk herds in Idaho were bolstered with translocated elk from the Yellowstone area in the late 1930s. Relatively liberal either-sex seasons were maintained in this zone until the early 1970s, suppressing the herds well below habitat potential. In 1975, bulls-only hunting was implemented. Since then, the herd has increased to over 5,000 head.

The interest in elk hunting in Boise River Zone increased along with growth in the elk population. The zone is one of the most popular elk units in the state with approximately 4,500 hunters.

### **Habitat Issues**

Boise River Zone includes 2,455 square miles of excellent elk habitat. The conditions range from wilderness situations in Sawtooth National Recreation Area to the heavily roaded areas near Boise. Boise National Forest manages the majority of summer habitat occupied by elk.

There are large areas of private land on the west side of the unit in the Horseshoe Bend area. Landowners in this area have suffered significant damage to hay crops and private rangeland, especially in spring. On the south side of the unit, winter and spring concentrations of elk have been in conflict with livestock operations. The urban sprawl of subdivisions and 5-acre home-sites in the foothills around Boise have led to significant conflicts with wintering elk. The loss of winter range and conflicts with homeowners may be the most serious factor limiting elk populations in Boise River Zone.

Several large wildfires have converted shrub lands to grasslands and may have improved some wintering conditions for elk. The effects of wildfire in summer and transition ranges have generally improved conditions for elk. Additionally, rush skeletonweed has infested many of the lower southwest-facing slopes and poses a serious threat to elk winter range.

## **Biological Issues**

The implementation of bulls-only hunting and a series of mild winters in the late 1980s has increased elk survival in this zone. Calf recruitment is fair to good with a ratio of 28-50 calves per 100 cows. Bull harvest exceeded the potential for bull calf recruitment through much of the 1990s. For example, in 1997, 664 bulls were harvested and an estimated 550 bull calves were recruited. Seasons (Appendix A) were adjusted in 2002 to move the general bull hunt out of the period of overlap with general deer season with the hope of reducing bull harvest to below replacement potential. In 2004, only 484 bulls were harvested.

During winter 2003-2004, 90 elk fell through the ice while attempting to cross the Mores Creek arm of Lucky Peak Reservoir. Extensive effort was made to haze elk away from the crossing area until the ice was sufficiently thick. Additionally, 30 elk fell through ice near the mouth of Willow Creek while attempting to cross Arrowrock Reservoir in winter 2005-2006.

## **Inter-specific Issues**

Boise River Zone is also one of the top 5 mule deer hunting units in Idaho. Recent changes to habitat have favored elk. Winter survey flights show the separation of wintering deer and elk. Mule deer are not using some of the wintering areas that were used when there was a lower elk population in the 1960s.

## **Predation Issues**

Black bear and mountain lion populations are well established and apparently stable in Boise River Zone. The mountain lion population is well above levels of the 1950s. Wolves were reintroduced in Idaho in 1995. On occasion, wolves ventured into the unit during 1995-2002. By 2005, 4-5 packs established and had litters. Wolves may become a significant issue for elk management in the near future.

## **Winter Feeding Issues**

Winter feeding sites were maintained along Middle Fork Boise River for both deer and elk through the 1950s. The only elk winter feeding that has taken place in the last 10 years has been around subdivisions to bait elk away from problem areas. Native range has the capability to support the current elk herd in nearly all situations.

## **Information Requirements**

This large unit contains both winter and summer range for this elk herd. The current sightability surveys provide excellent information on the status of the entire herd. The most pressing need is an evaluation of the impact of elk on the availability of rangeland forage to livestock.

## Elk Boise River Zone (Unit 39)

### Winter Status & Objectives

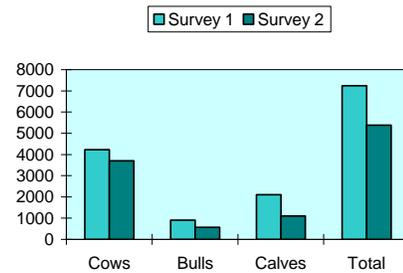
Unit	Survey Year	Current Status			Objective		
		Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
39	2005	3710	572	272	3200 - 4800	650 - 950	375 - 575
<b>Zone Total</b>		<b>3710</b>	<b>572</b>	<b>272</b>	<b>3200 - 4800</b>	<b>650 - 950</b>	<b>375 - 575</b>
<b>Bulls per 100 Cows</b>		<b>15</b>	<b>7</b>			<b>18 - 24</b>	<b>10 - 14</b>



### Population Surveys

Unit	Year	Survey 1				Survey 2				
		Cows	Bulls	Calves	Total	Cows	Bulls	Calves	Total	
39	2002	4222	908	2106	7236	2005	3710	572	1103	5385
<b>Comparable Surveys Total</b>		<b>4222</b>	<b>908</b>	<b>2106</b>	<b>7236</b>		<b>3710</b>	<b>572</b>	<b>1103</b>	<b>5385</b>
<b>Per 100 Cows</b>			<b>22</b>	<b>50</b>				<b>15</b>	<b>30</b>	

### Comparable Survey Totals



### Zone Harvest Statistics

	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	325	265	323	575	509	523	538	494
'A' Tag		0	9	53	47	54	104	105
'B' Tag		13	2	6	1	5	2	2
CH Tag		252	312	516	461	464	432	387
<b>Antlered Harvest</b>	679	556	616	544	369	427	484	502
'A' Tag		46	15	11	3	14	18	5
'B' Tag		510	590	513	345	402	451	496
CH Tag		0	11	20	21	11	15	1
<b>Hunter Numbers</b>	5069	5806	ND	5076	4842	4831	4479	4548
'A' Tag		799	ND	507	550	578	598	665
'B' Tag		4441	ND	3450	2769	2682	2741	2737
CH Tag		566	ND	1119	1523	1571	1140	1146
<b>% 6+ Points</b>	22	19	22	27	18	19	21	18

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

### Harvest

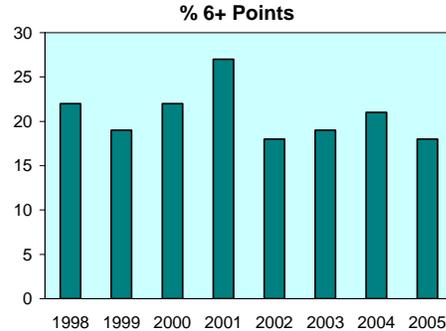
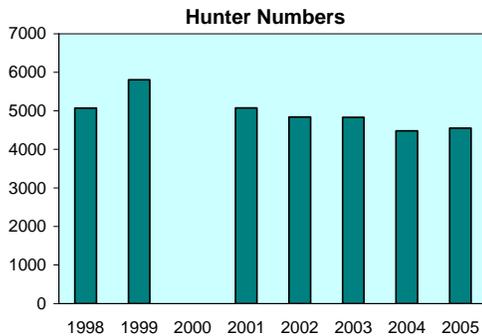
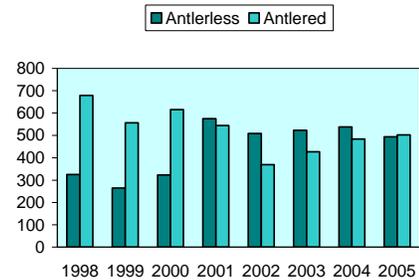


Figure 11. Boise River Zone elk status and objectives.

**PROGRESS REPORT  
SURVEYS AND INVENTORIES**

<b>STATE:</b>	<u>Idaho</u>	<b>JOB TITLE:</b>	<u>Elk Surveys and Inventories</u>
<b>PROJECT:</b>	<u>W-170-R-30</u>		
<b>SUBPROJECT:</b>	<u>3, McCall</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>1</u>		<u>Habitat Studies</u>
<b>PERIOD COVERED:</b>	<u>July 1, 2005 to June 30, 2006</u>		

**SOUTHWEST (MCCALL) REGION**

**McCall Zone (Units 19A, 23, 24, 25)**

**Management Objectives**

Objectives for McCall Zone (Figure 12) are to maintain a population of 3,075+ cow and 665+ bull elk, including 375+ adult bulls. This zone will be managed to produce statewide minimums for bull:cow ratio (18-24 bulls:100 cows) and adult bull:cow ratio (10-14 adult bulls:100 cows). The total population objective draws a balance among concerns about depredation damage, the desire for a reasonably large elk population, and concern about habitat-carrying capacity. Overall bull numbers and bull:cow ratios can be expected to decrease, but remain above the statewide minimums. The decrease in bulls will be due to increased hunter numbers and harvest as the zone absorbs some hunters displaced from other zones. Increases in road density will also affect elk vulnerability in the near future. Harvest mortality is not expected to increase in this zone initially; however, as management changes in other zones displace hunters, harvest rates may need to be adjusted.

**Historical Perspective**

Elk were abundant in McCall Zone prior to European settlement in the late 1800s. The proliferation of mining due to the gold rush in the late 1800s and early 1900s led to widespread slaughter of these animals to supply meat and hides for mining camps. As a result, elk became increasingly rare to see, and at one time were thought to be eliminated from the area. Remnant populations relegated to the more remote rugged portions of the zone survived. Translocation of elk from Yellowstone to places in McCall Zone such as New Meadows occurred in the late 1930s. Liberal either-sex hunting seasons kept population numbers of elk suppressed well into the 1970s. The implementation of bulls-only hunting in 1976 spurred an increase in elk populations in McCall Zone. This increase has continued to the present day peaks in elk populations.

## **Habitat Issues**

Over 70% of McCall Zone is in public ownership and management. Little Salmon River and North Fork Payette River valley bottoms comprise most private ownership. Private land in this zone is predominantly agricultural or rural subdivision in nature.

Timber harvest and livestock grazing affect habitat change on public lands on the west side of McCall Zone. Wildfire or prescribed burning influence habitat alteration on lands on the east side of the zone. Several large fires have burned in this zone in the last decade. A balance exists among early, mid, and late successional habitat stages that are used by elk in summer. Winter ranges occur primarily on public ground. Federal land management agencies (USFS and BLM) have active prescribed burning programs that should maintain good winter range habitat for elk in McCall Zone. Noxious weed invasion, specifically from spotted knapweed (*Centaurea maculosa*) and yellow starthistle (*Centaurea solstitialis*), is a threat to winter ranges in Little Salmon River and Salmon River drainages of Unit 23. Elk/human conflicts occur during summer and fall months when elk enter agricultural fields in the valley bottoms to forage.

Road building and its subsequent negative effect on elk vulnerability is a habitat concern facing this elk population. Road densities are estimated at less than 0.25 miles per square mile in Units 19A and 25. Road densities in Units 23 and 24 are estimated at greater than 2.5 miles per square mile. Active timber harvest programs are anticipated to dramatically increase these road densities in the near future.

## **Biological Issues**

The McCall Zone elk population performed well from the mid-1980s to early 1990s. Since then, calf production has declined from 30+ calves:100 cows to poor ( $\leq 20$  calves:100 cows) zone-wide. Bull:cow ratios have decline significantly in this zone over the last few years but still remain at or above statewide minimum goals.

## **Inter-specific Issues**

Elk must compete zone-wide primarily with mule deer and to a lesser extent with white-tailed deer. Extensive domestic sheep and cattle grazing occurs on elk range in the western part of the zone. A small number of bighorn sheep occupy a portion of rugged country less favored by elk in the northeast portion of the zone. The competitive effect of these species on one another is largely unknown.

## **Predation Issues**

Black bear and mountain lions are prevalent in McCall Zone. Bears are at a moderate but stable level, and mountain lions were thought to be at the highest number in recent history; however, anecdotal information indicate this species may be declining. There is no evidence as to the extent these species prey on elk in this zone. Wolves, introduced in Idaho's backcountry in 1995, are now well established in this zone. Predation by wolves may be a contributing factor to the declining calf:cow ratios.

### **Winter Feeding Issues**

The remote location of most winter range in this zone precludes large-scale winter feeding. In severe winters, some feeding has occurred in Unit 24. The Goldfork bait site was established in 1985 to bait elk out of winter livestock feeding operations. The Department no longer has any involvement in this operation.

### **Information Requirements**

Carrying capacity of winter ranges is unknown. This information is needed to identify appropriate elk densities that will maintain optimum productivity and harvest. Impacts of 3 potential predators on elk production is largely unknown. Information is lacking on the migration routes and patterns of elk in this zone.

## Elk McCall Zone (Units 19A, 23, 24, 25)

### Winter Status & Objectives

Unit	Current Status			Objective			
	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
19A	2005	1375	275	190	750 - 1150	150 - 250	100 - 150
23	2005	2189	389	216	1050 - 1550	225 - 325	125 - 175
24	ND				0	0	0
25	2005	766	216	183	700 - 1000	150 - 225	75 - 125
<b>Zone Total</b>		<b>4330</b>	<b>880</b>	<b>589</b>	<b>2450 - 3700</b>	<b>525 - 800</b>	<b>300 - 450</b>
<b>Bulls per 100 Cows</b>			<b>20</b>	<b>14</b>		<b>18 - 24</b>	<b>10 - 14</b>

Note: ND = no survey data available.

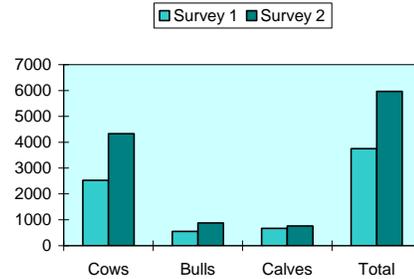


### Population Surveys

Unit	Year	Survey 1				Survey 2				
		Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
19A	2001	469	158	146	773	2005	1375	275	203	1853
23	2001	1381	220	402	2003	2005	2189	389	462	3040
24	ND					ND				
25	2001	678	174	124	976	2005	766	216	94	1076
<b>Comparable Surveys Total</b>		<b>2528</b>	<b>552</b>	<b>672</b>	<b>3752</b>		<b>4330</b>	<b>880</b>	<b>759</b>	<b>5969</b>
<b>Per 100 Cows</b>			<b>22</b>	<b>27</b>				<b>20</b>	<b>18</b>	

Note: ND = no survey data available.

### Comparable Survey Totals



### Zone Harvest Statistics

	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	641	659	565	582	423	543	562	605
'A' Tag	138	172	71	101	67	115	127	300
'B' Tag	7	0	2	4	1	0	15	4
CH Tag	496	487	492	477	355	428	420	301
<b>Antlered Harvest</b>	650	586	627	695	562	658	721	556
'A' Tag	197	120	167	230	190	221	213	182
'B' Tag	445	464	436	423	363	436	484	371
CH Tag	8	2	24	42	9	1	24	3
<b>Hunter Numbers</b>	7208	7284	ND	6188	6120	6100	6458	6352
'A' Tag	2039	1965	ND	1652	1680	1616	1774	2309
'B' Tag	3735	3894	ND	3165	3094	3105	3213	3021
CH Tag	1434	1425	ND	1371	1346	1379	1471	1022
<b>% 6+ Points</b>	37	24	31	31	27	30	39	34

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

### Harvest

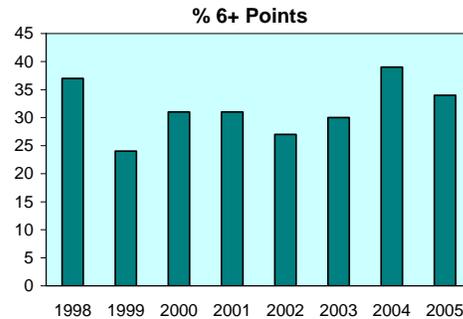
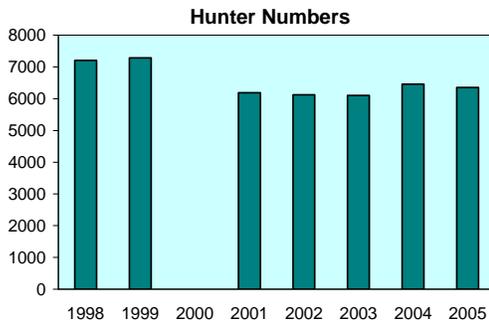
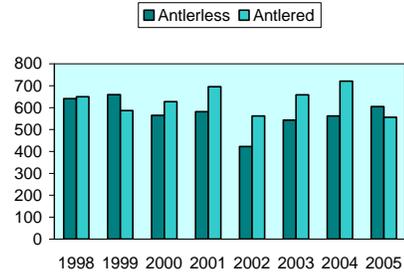


Figure 12. McCall Zone elk status and objectives.

## **Middle Fork Zone (Units 20A, 26, 27)**

### **Management Objectives**

Objectives for Middle Fork Zone (Figure 13) are to maintain Units 20A and 26 at current herd levels of approximately 2,100 cows and increase bull numbers from the current 270 to approximately 650. If future elk surveys do not reveal a change in productivity and bull:cow ratios, a reassessment of management objectives may be necessary. The objective in Unit 27 is to reduce cow numbers to approximately 2,400 cows and increase bulls to approximately 650. Herds will be managed to maintain 25-29 bulls:100 cows postseason, which translates to 14-18 mature bulls:100 cows.

### **Historical Perspective**

Elk were in low abundance in Middle Fork Zone through the early part of the 20<sup>th</sup> century. As has occurred over much of the west, elk herds expanded dramatically since the mid-1970s. Today, Middle Fork Zone winters approximately 7,500 elk. Approximately 4,000 people were hunting elk in Middle Fork Zone through 1997. Caps on hunter numbers have reduced participation to <3,000 hunters since 1998. Seasons (Appendix A) traditionally have been general hunts from mid-September to mid-late November for any bull. Much of the hunting pressure and harvest, particularly for mature bulls, has come during September. In recent years, emphasis on antlerless opportunity has been reduced. However, even with liberal antlerless elk hunting opportunities and seasons, harvest has consistently been <3% of the antlerless segment of the herd.

### **Habitat Issues**

Habitat ultimately determines elk densities and productivity. Over past decades, fire suppression contributed to conifer encroachment on forage-producing areas, particularly winter ranges. Recent large wildfires have partially reversed this trend and enhanced elk habitat. Present management policies that allow fire a larger role in wilderness ecosystems will benefit elk habitat and elk over the long run. Already established in some areas, spread of noxious weeds such as knapweed and rush skeletonweed could ultimately have significant impacts on winter range productivity.

### **Biological Issues**

Elk populations in Units 20A and 26 have performed poorly in the past decade. Calf production has gone from poor (23:100 cows) through a low of 13:100 cows and rebounded somewhat to almost 19:100 cows. At least partly as a consequence of low calf recruitment, bull:cow ratios have also been less than desirable (17 declining to 13 bulls:100 cows). In contrast, Unit 27 grew dramatically, increasing from 3,000 elk in 1989 to 6,300 in 1995. However, the herd showed signs of decline through the January 2002 survey, dropping to 4,750. Calf production and bull ratios in Unit 27 fell through the same period (from 31-36 calves:100 cows to 18, and 25-28 bulls:100 cows to 17). Large fires in Unit 27 in 1979 and 1988 enhanced elk habitat and probably significantly contributed to the rapid expansion of that wintering elk herd. Similar large fires in

Units 20A and 26 in the past decade (including large-scale fires in 2000) may help reverse the trend of declining productivity noted in the last several years.

### **Inter-specific Issues**

Current high elk densities may be having some impact on habitat capacity for deer and on deer productivity. Elk could also have an impact in some of the less rugged grassland areas used by bighorn sheep, whose diets are similar to elk. Domestic livestock grazing is minimal in this zone.

### **Predation Issues**

Black bear densities appear to be low to moderate. Mountain lion densities are at least moderate, perhaps high, and appear to have increased in recent years, probably partly due to increased elk densities. Coyotes are common, but not known to have much impact on elk populations. Wolves reintroduced by USFWS have become well established in these units. The addition of wolves will likely have an impact on bear, mountain lion, and coyote populations. At some level, predation could benefit elk herds to the extent that it keeps elk herds below habitat carrying capacity, where they can be more productive. This is particularly true for this zone, where antlerless elk harvest by hunters has been insignificant. However, excessive levels of predation can also suppress prey populations to undesirably low levels. At this point, it is unclear what the net impact of predation will be with the new mix of large predators.

### **Winter Feeding Issues**

Winter feeding has not occurred in these remote big game units.

### **Information Requirements**

Impacts of elk on mule deer production and survival are suspected but unknown. The most productive elk herds are those maintained at a level below carrying capacity. Better information is needed to identify appropriate elk densities that will maintain optimum productivity and harvest. The potential impact of the new mix of large predators is unknown. Migratory patterns are largely unknown.

## Elk Middle Fork Zone (Units 20A, 26, 27)

### Winter Status & Objectives

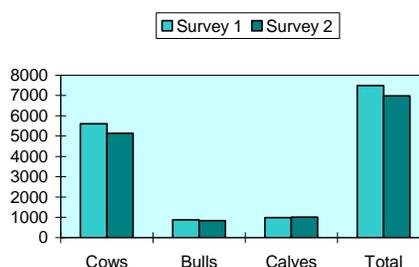
Unit	Survey Year	Current Status			Objective		
		Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
20A	2006	1498	219	119	1050 - 1550	250 - 400	150 - 250
26	2006	990	152	91	900 - 1300	200 - 350	150 - 200
27	2006	2649	463	240	1900 - 2900	500 - 800	300 - 450
<b>Zone Total</b>		<b>5137</b>	<b>834</b>	<b>450</b>	<b>3850 - 5750</b>	<b>950 - 1550</b>	<b>600 - 900</b>
<b>Bulls per 100 Cows</b>			<b>16</b>	<b>9</b>		<b>25 - 29</b>	<b>14 - 18</b>



### Population Surveys

Unit	Year	Survey 1				Survey 2				
		Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
20A	2005	1241	192	246	1679	2006	1498	219	255	1972
26	2005	830	79	141	1050	2006	990	152	128	1270
27	2002	3542	604	606	4752	2006	2649	463	624	3736
<b>Comparable Surveys Total</b>		<b>5613</b>	<b>875</b>	<b>993</b>	<b>7481</b>		<b>5137</b>	<b>834</b>	<b>1007</b>	<b>6978</b>
<b>Per 100 Cows</b>			<b>16</b>	<b>18</b>				<b>16</b>	<b>20</b>	

### Comparable Survey Totals



### Zone Harvest Statistics

	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	131	93	223	211	182	110	73	78
'A' Tag	131	93	70	92	72	71	72	78
'B' Tag	0	0	153	118	110	39	1	0
CH Tag	0	0	0	1	0	0	0	0
<b>Antlered Harvest</b>	421	357	357	277	283	309	307	355
'A' Tag	104	86	82	78	64	75	110	76
'B' Tag	317	149	275	199	219	234	197	279
CH Tag	0	122	0	0	0	0	0	0
<b>Hunter Numbers</b>	3044	2300	ND	2168	2038	1878	1841	1678
'A' Tag	1479	1106	ND	631	667	752	782	678
'B' Tag	1565	666	ND	1165	1371	1126	1059	990
CH Tag	0	528	ND	372	0	0	0	10
<b>% 6+ Points</b>	43	25	28	35	34	39	36	47

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

### Harvest

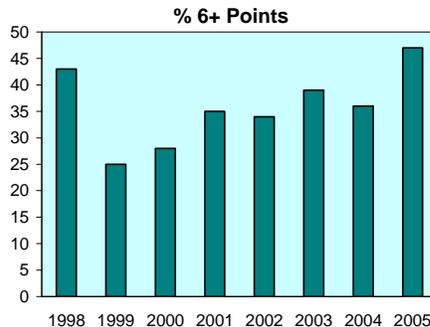
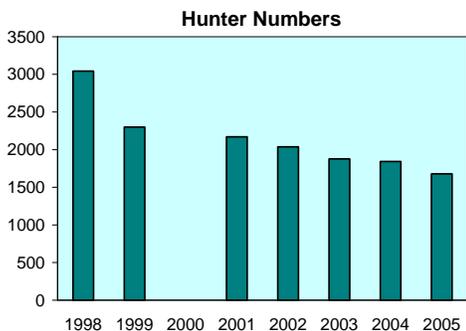
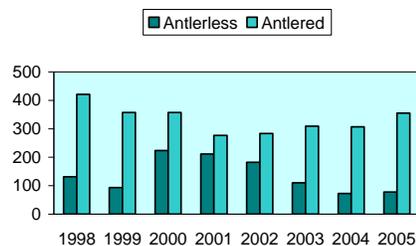


Figure 13. Middle Fork Zone elk status and objectives.

## **Weiser River Zone (Units 22, 32, 32A)**

### **Management Objectives**

The goal for Weiser River Zone (Figure 14) is to reduce cow elk population levels to 2,700+ elk. Most antlerless elk reduction will occur in Units 22 and 32. The total population objective draws a balance between the concern about depredation damage and the need to sustain a reasonably large elk population. In the short term, reduction of antlerless elk will result in an increase in controlled antlerless elk permits. As herds are reduced and population levels are stabilized, permit levels will decrease. This zone will be managed to produce statewide minimums for bull:cow ratio (18-24 bulls:100 cows) and adult bull:cow ratio (10-14 adult bulls:100 cows). A large decrease in harvest mortality will be necessary to increase bull numbers in this zone. A postseason population of 550+ bulls, including 315+ adult bulls, is the objective for this zone. A harvest of 400+ bulls can be sustained each year.

### **Historical Perspective**

Elk were present in Weiser River Zone prior to European settlement in the mid-1800s. Native American tribes hunted elk for food in Weiser River drainage. Proliferation of mining due to the gold rush in the late 1800s and early 1900s probably led to year-round slaughter of these animals to supply meat and hides for mining camps. Subsequent intensive livestock grazing denigrated habitat in the zone. Translocation of elk from Yellowstone to places in McCall Zone on the periphery of Weiser River Zone occurred in the late 1930s to bolster sagging elk populations. Regulated livestock grazing began during the same era. Transient elk from these populations probably repopulated Weiser River Zone. Liberal either-sex hunting seasons kept population numbers of elk suppressed well into the 1970s. Unit 22 became a controlled either-sex hunt in 1971 and reopened to general bulls-only hunting in 1977. The implementation of bulls-only hunting spurred an increase in elk populations in Weiser River Zone.

The elk population in the agricultural area of the west half of Unit 32 consisted of transient elk prior to 1980. Following several hard winters, elk herds started moving into this area. Most elk were there in winter, and a few groups of elk became year-round residents. The population of elk in Weiser River Zone reached its sociological tolerance level in the early 1990s.

### **Habitat Issues**

About 60% of Units 22 and 32A and 20% of Unit 32 is in public ownership and management. Private land predominates the western portion of Unit 32 and the Weiser River valley of Units 22 and 32A. Agricultural products are primarily dry-land grazing, grain production, and hay fields.

Timber harvest, livestock grazing, and prescribed fires are the preponderant methods affecting habitat change in this zone. Most forested habitat is in the early to mid-successional stage. Winter ranges occur primarily on public ground in Unit 22, but mostly on private ground in Units 32 and 32A. Noxious weed invasion, such as yellow starthistle and whitetop (*Cardaria draba*), is a threat to winter range habitat. Andrus WMA in the southwest portion of Unit 22 is managed for elk and mule deer winter range and encompasses about 8,000 acres.

Extensive road building from past timber harvest and mining activities contribute to high vulnerability of elk during hunting seasons in this zone. The inherent lack of security cover and openings created from timber harvest compound elk vulnerability. Active timber harvest programs are anticipated to increase these road densities in the near future.

Elk/human conflicts occur during summer and fall months in Units 22 and 32A when elk enter agricultural fields in valley bottoms to forage. Resident elk in Unit 32 have caused landowners concern about damage to fences, fall-plowed fields, row crops, and alfalfa hay fields. The Department has paid an average of \$13,000 per year for damage in this area.

### **Biological Issues**

Through the 1980s and 1990s, Weiser River Zone was a highly productive elk population. Calf production averaged well over 40 calves:100 cows. Burgeoning elk populations and drought summers have probably contributed to the more recent decline to fair productivity of 30 calves:100 cows. Bull:cow ratios are low ( $\leq 15$  bulls:100 cows) due to high vulnerability of the open-canopied, heavily-roaded habitat. Even with good calf production, harvest of bulls is at or exceeds production.

### **Inter-specific Issues**

Elk compete zone-wide with mule deer for habitat. Intensive domestic sheep and cattle grazing occurs over most of the zone. The competitive effect of these species on one another is largely unknown.

### **Predation Issues**

Black bear and mountain lions occur in moderate to high numbers in Weiser River Zone. There is no indication that predation is having an impact on elk calf recruitment or survival of elk in this zone. Wolves are beginning to colonize the zone but are not a significant mortality factor at this time. Coyotes are common, but are not known to have much effect on elk populations.

### **Winter Feeding Issues**

Winter feeding takes place on an irregular basis in Weiser River Zone. Most elk feeding operations have been to bait elk away from livestock feeding operations.

### **Information Requirements**

Carrying capacity of winter ranges is unknown. This information is needed to identify appropriate elk densities, which will maintain optimum productivity and harvest. Information is lacking on migration routes and patterns of elk in this zone and interaction with elk in the adjacent Brownlee Zone. A full survey of these interacting herds is needed for these zones. Knowledge of inter-specific competition is needed.

## Elk Weiser River Zone (Units 22, 32, 32A)

Winter Status & Objectives

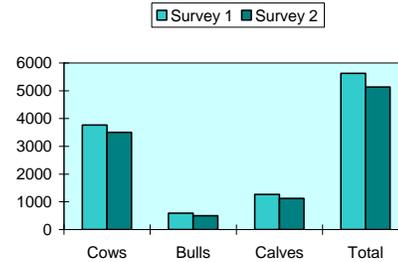
Unit	Survey Year	Current Status			Objective		
		Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
22	2004	2194	327	137	1100 - 1700	250 - 350	125 - 200
32	2004	1075	142	57	325 - 475	50 - 100	40 - 60
32A	2004	235	34	10	700 - 1100	150 - 200	75 - 125
<b>Zone Total</b>		<b>3504</b>	<b>503</b>	<b>204</b>	<b>2125 - 3275</b>	<b>450 - 650</b>	<b>240 - 385</b>
<b>Bulls per 100 Cows</b>		<b>14</b>	<b>6</b>			<b>18 - 24</b>	<b>10 - 14</b>



Comparable Survey Totals

Population Surveys

Unit	Year	Survey 1				Survey 2				
		Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
22	2000	1480	224	515	2219	2004	2194	327	709	3230
32	2000	1141	263	495	1899	2004	1075	142	336	1553
32A	2000	1147	102	259	1508	2004	235	34	83	352
<b>Comparable Surveys Total</b>		<b>3768</b>	<b>589</b>	<b>1269</b>	<b>5626</b>		<b>3504</b>	<b>503</b>	<b>1128</b>	<b>5135</b>
<b>Per 100 Cows</b>			<b>16</b>	<b>34</b>				<b>14</b>	<b>32</b>	



Zone Harvest Statistics

	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	608	609	772	1038	668	784	650	646
'A' Tag	58	48	80	472	136	235	92	104
'B' Tag	0	6	1	5	6	23	17	4
CH Tag	550	555	691	561	526	526	541	538
<b>Antlered Harvest</b>	668	598	647	633	482	1005	554	574
'A' Tag	159	153	91	97	90	244	81	86
'B' Tag	509	445	522	496	362	738	444	483
CH Tag	0	0	34	40	30	23	29	5
<b>Hunter Numbers</b>	6746	6649	ND	7503	6079	6773	5344	5559
'A' Tag	1244	1123	ND	2235	1398	1759	1158	1139
'B' Tag	3599	3571	ND	2586	2757	3244	2323	2496
CH Tag	1903	1955	ND	2682	1924	1770	1863	1924
<b>% 6+ Points</b>	24	18	19	16	16	18	19	22

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

Harvest

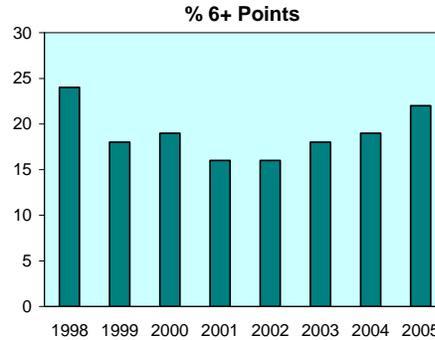
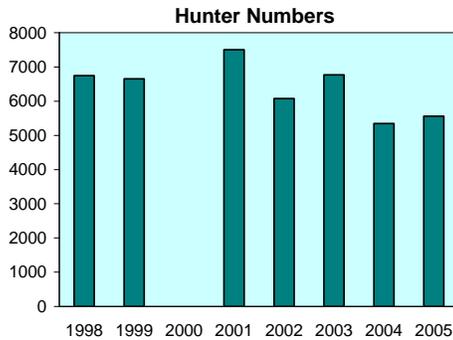
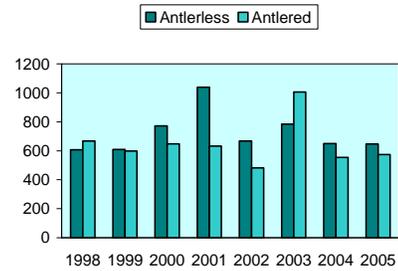


Figure 14. Weiser River Zone elk status and objectives.

## **Brownlee Zone (Unit 31)**

### **Management Objectives**

Objectives for Brownlee Zone (Figure 15) are to maintain a population of 700+ cow and 140+ bull elk, including 75+ adult bulls. This zone will be managed to produce statewide minimums for bull:cow ratio (18-24 bulls:100 cows) and adult bull:cow ratio (10-14 adult bulls:100 cows). The total population objective draws a balance between concerns about depredation damage and the need to sustain a reasonably large elk population. A harvest of 30-50 bulls per year by permit is expected to be maintained. Intense controlled antlerless hunting and animal displacement have this population below current objectives. Controlled hunt harvest opportunity will remain similar to current levels until this population increases again. General hunting opportunity was increased with the implementation of a spike-only A-tag season in 1998. This opportunity was eliminated in 2001. General antlerless or any-bull hunting opportunity is unlikely, due to inherent vulnerability of elk in this habitat.

### **Historical Perspective**

Elk were present in Brownlee Zone prior to European settlement in the mid-1800s. Native American tribes hunted elk for food in Weiser River drainage. As in other areas in Idaho, proliferation of mining due to the gold rush in the late 1800s and early 1900s probably led to year-round slaughter of these animals to supply meat and hides for mining camps. Subsequent heavy livestock grazing denigrated habitat in the zone. Translocation of elk from Yellowstone to places in Weiser River and McCall zones occurred in the late 1930s to bolster dwindling elk populations. Regulated livestock grazing occurred during the same era. Transient elk from these populations probably repopulated Brownlee Zone. Liberal either-sex hunting seasons kept population numbers of elk suppressed well into the late 1960s. Unit 31 was closed to elk hunting in 1968. The unit reopened to controlled hunting in 1976. Protected by conservative bull-only permits, this elk population expanded rapidly in the late 1980s. This population reached its sociological tolerance level in the early 1990s.

### **Habitat Issues**

About 50% of Brownlee Zone is in public ownership and management. Private land predominates southern and eastern portions of the unit. Agricultural products are primarily dry-land grazing and hay fields. Higher elevations are timbered; lower elevations are primarily shrub-steppe or desert.

Timber harvest, livestock grazing, and prescribed fires are the preponderant methods affecting habitat change in this zone. Most forested habitat is in the early to mid-successional stage. Winter ranges occur primarily on public ground. Noxious weed invasion, such as yellow starthistle and whitetop, is a threat to winter range habitat. Andrus WMA is managed for elk and mule deer winter range and comprises about 8,000 acres in the northwest part of the zone. Elk/human conflicts occur during summer and fall months when elk enter agricultural fields in valley bottoms to forage.

Extensive road building from past timber harvest and mining activities contribute to high vulnerability of elk during hunting seasons in this zone. The inherent lack of security cover and openings created from timber harvest compound elk vulnerability. Active timber harvest programs are anticipated to increase these road densities in the near future.

### **Biological Issues**

Since the mid-1980s, elk populations in this zone have performed well. Calf production is good, at or near 30:100 cows on average. Elk have not reached their habitat potential in this zone but have reached a threshold of tolerance among user groups concerned.

### **Inter-specific Issues**

Elk compete zone-wide with mule deer for habitat. Intensive domestic sheep and cattle grazing occurs over most of the zone. The competitive effect of these species on one another is largely unknown.

### **Predation Issues**

Black bear and mountain lions occur in low to moderate numbers in Brownlee Zone. There is no evidence these species have an effect on the elk population in this zone. Coyotes are common but are not known to have much effect on elk populations.

### **Winter Feeding Issues**

Winter feeding in Brownlee Zone is an extremely rare event. Winter feeding occurred on a limited basis in close proximity to domestic livestock feeding operations during the severe winter of 1992-1993.

### **Information Requirements**

Carrying capacity of winter ranges is unknown. This information is needed to identify appropriate elk densities, which will maintain optimum productivity and harvest. Information is lacking on migration routes and patterns of elk in this zone and interaction with elk in the adjacent Weiser River Zone. A population survey concurrent with the adjacent Weiser River Zone is needed. Knowledge of inter-specific competition is needed.

## Elk Brownlee Zone (Unit 31)

### Winter Status & Objectives

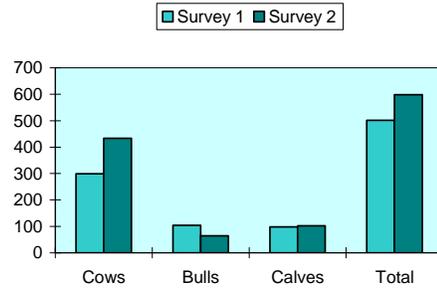
Unit	Survey Year	Current Status			Objective		
		Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
31	2004	433	64	20	550 - 850	125 - 175	50 - 100
<b>Zone Total</b>		<b>433</b>	<b>64</b>	<b>20</b>	<b>550 - 850</b>	<b>125 - 175</b>	<b>50 - 100</b>
<b>Bulls per 100 Cows</b>		<b>15</b>	<b>5</b>			<b>18 - 24</b>	<b>10 - 14</b>



### Comparable Survey Totals

### Population Surveys

Unit	Year	Survey 1				Survey 2				
		Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
31	2000	299	104	98	501	2004	433	64	102	599
<b>Comparable Surveys Total</b>		<b>299</b>	<b>104</b>	<b>98</b>	<b>501</b>		<b>433</b>	<b>64</b>	<b>102</b>	<b>599</b>
<b>Per 100 Cows</b>			<b>35</b>	<b>33</b>				<b>15</b>	<b>24</b>	



### Zone Harvest Statistics

	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	87	41	30	39	44	28	71	73
'A' Tag	7	0	0	4	0	1	1	5
'B' Tag	0	0	0	0	0	0	0	0
CH Tag	80	41	30	35	44	27	70	68
<b>Antlered Harvest</b>	52	67	82	49	43	49	28	39
'A' Tag	20	31	39	14	10	13	13	19
'B' Tag	0	0	0	0	0	0	0	0
CH Tag	32	36	43	35	33	36	15	20
<b>Hunter Numbers</b>	776	617	ND	287	304	273	416	380
'A' Tag	316	251	ND	120	106	113	140	141
'B' Tag	0	0	ND	0	0	0	0	0
CH Tag	460	366	ND	167	198	160	276	239
<b>% 6+ Points</b>	45	32	35	43	32	54	57	55

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

### Harvest

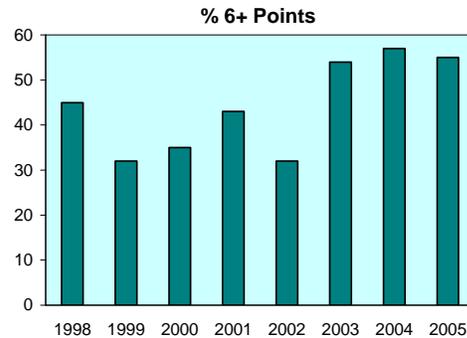
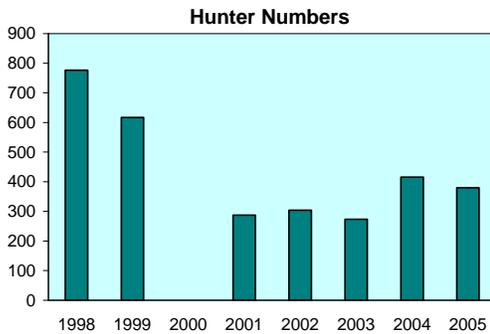
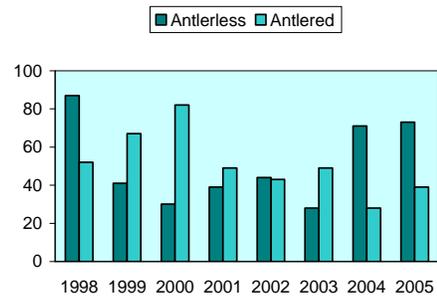


Figure 15. Brownlee Zone elk status and objectives.

**PROGRESS REPORT  
SURVEYS AND INVENTORIES**

<b>STATE:</b>	<u>Idaho</u>	<b>JOB TITLE:</b>	<u>Elk Surveys and Inventories</u>
<b>PROJECT:</b>	<u>W-170-R-30</u>		
<b>SUBPROJECT:</b>	<u>4</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>1</u>		<u>Habitat Studies</u>
<b>PERIOD COVERED:</b>	<u>July 1, 2005 to June 30, 2006</u>		

**MAGIC VALLEY REGION**

**Pioneer Zone (Units 36A, 49, 50)**

**Management Objectives**

Objectives for Pioneer Zone (Figure 16) are to stabilize elk herds at slightly reduced levels (about 4,200 cows and 1,350 bulls) to maintain herd productivity and minimize potential impacts on mule deer. This zone will continue to be managed to produce very high bull:cow ratios (30-35 bulls:100 cows postseason) and many mature bulls (18-22 bulls  $\geq$ 3 years old:100 cows).

**Historical Perspective**

Elk abundance was low in Pioneer Zone through much of the twentieth century. These units have been managed for decades under conservative controlled hunt strategies. As has occurred over much of the west, elk herds expanded dramatically since the mid-1970s. Today, Pioneer Zone winters approximately 9,000 elk, an increase of about 40% (3,700 elk) since the early 1990s.

Around 4,000 people hunt in Pioneer Zone each year since adoption of the dual-tag zone system in 1998. Conservative bull harvest management has produced exceptional bull:cow ratios and a reputation for large mature bulls. The controlled bull hunts in this zone have become very desirable; rifle permits are in high demand and difficult to draw. The area's reputation for many mature bulls has also made this zone a very attractive archery hunt.

**Habitat Issues**

Cattle ranching, livestock grazing, and recreation are dominant human uses of the landscape in Pioneer Zone. The zone is in a generally arid region where forage production can be strongly influenced by growing season precipitation. During drought years, high-elevation mesic habitats are more heavily utilized by elk while low-elevation riparian areas and wet meadows are more heavily utilized by cattle. Elk depredations on agricultural crops are common and are especially pronounced in dry years.

In some areas, elk winter in mature stands of mountain mahogany which appear relatively stagnant and unproductive. Forests are slowly encroaching into shrub and grassland communities. Spread of noxious weeds, such as knapweed and leafy spurge, could ultimately have significant impacts on winter range productivity.

Recent housing developments in the Big Wood River drainage in Unit 49 have severely reduced winter elk habitat. Continued development on remaining winter ranges will reduce elk carrying capacity in the unit. Changes in land ownership in Unit 50 are making it difficult to manage depredation problems.

### **Biological Issues**

Elk populations have been increasing steadily since the mid-1970s. Liberal antlerless permits have been offered to stabilize population growth rates, but some depredation problems continue to exist.

Recruitment measured through sightability surveys indicate most populations are reproducing at moderate to high levels (30-40 calves:100 cows). A ground herd composition count conducted in Unit 49 during January and February 2006 indicated a ratio of 40 calves:100 cows based on a total of 215 calves and 534 cows observed. We estimate that throughout the zone, bull:cow ratios remain at very high levels ( $\geq 35$  bulls:100 cows).

### **Inter-specific Issues**

Current high elk densities may be having some impact on deer populations.

When elk numbers are high, as they are currently, livestock operators often perceive elk as competing with livestock for range forage and impacting riparian areas. However, elk generally remove a minor portion of forage compared to livestock, and elk tend to use different habitats and different forage species than livestock.

### **Predation Issues**

Black bear densities appear to be low and stable in Pioneer Zone. Mountain lion densities are low to moderate and appear to have increased in recent years, probably partly due to increased elk densities. Coyotes are common, but not known to have much impact on elk populations. Wolves reintroduced by USFWS in central Idaho in 1995 are established in Pioneer Zone. They may become a significant factor in elk distribution and population demographics and may displace other predators through competitive interactions. Reports by hunters and observations by Department personnel suggest that wolf activity may be changing behavior patterns of elk in this area.

### **Winter Feeding Issues**

No Department-sponsored feeding facilities exist in this zone; however, artificial feeding of elk by private citizens in Unit 49 is an annual occurrence. Education measures undertaken to reduce

this activity have met with some success. Efforts need to continue to give non-sanctioned feeders a better understanding of problems associated with artificially-fed elk.

### **Information Requirements**

Impacts of elk on mule deer winter range are likely occurring and may be a limiting factor for mule deer populations. The most productive elk herds are those maintained at a level below carrying capacity. Better information is needed to identify appropriate elk densities that will maintain optimum productivity and harvest. Additionally, if wolves become a significant factor in elk ecology, better information regarding impacts to hunting opportunity would be beneficial.

## Elk Pioneer Zone (Units 36A, 49, 50)

Winter Status & Objectives

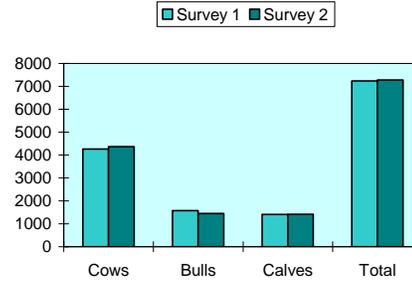
Unit	Current Status				Objective		
	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
36A	2004	1901	652	409	1050 - 1550	300 - 500	200 - 300
49	2004	1188	422	233	1350 - 2050	500 - 700	300 - 400
50	2004	1276	379	248	950 - 1450	300 - 500	200 - 300
<b>Zone Total</b>		<b>4365</b>	<b>1453</b>	<b>890</b>	<b>3350 - 5050</b>	<b>1100 - 1700</b>	<b>700 - 1000</b>
<b>Bulls per 100 Cows</b>			<b>33</b>	<b>20</b>		<b>30 - 35</b>	<b>18 - 22</b>



Population Surveys

Unit	Year	Survey 1				Survey 2				
		Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
36A	2000	2126	595	602	3323	2004	1901	652	571	3124
49	2001	1108	544	341	1993	2004	1188	422	430	2040
50	2000	1026	431	464	1921	2004	1276	379	417	2114
<b>Comparable Surveys Total</b>		<b>4260</b>	<b>1570</b>	<b>1407</b>	<b>7237</b>		<b>4365</b>	<b>1453</b>	<b>1418</b>	<b>7278</b>
<b>Per 100 Cows</b>			<b>37</b>	<b>33</b>				<b>33</b>	<b>32</b>	

Comparable Survey Totals



Zone Harvest Statistics

	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	721	884	1056	610	623	530	655	574
'A' Tag	44	511	109	67	72	59	58	32
'B' Tag	0	0	0	1	0	1	0	0
CH Tag	677	373	947	542	551	470	597	542
<b>Antlered Harvest</b>	546	589	649	605	560	504	636	543
'A' Tag	230	262	268	247	196	188	250	206
'B' Tag	0	0	1	2	0	0	0	0
CH Tag	316	327	380	356	364	316	386	337
<b>Hunter Numbers</b>	3922	4043	ND	4351	4239	3805	3994	3701
'A' Tag	1660	2346	ND	1607	1483	1434	1465	1391
'B' Tag	0	0	ND	29	14	27	0	1
CH Tag	2262	1697	ND	2715	2742	2344	2529	2309
<b>% 6+ Points</b>	37	32	49	41	43	47	56	46

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

Harvest

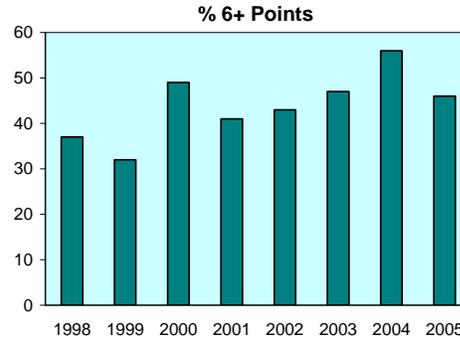
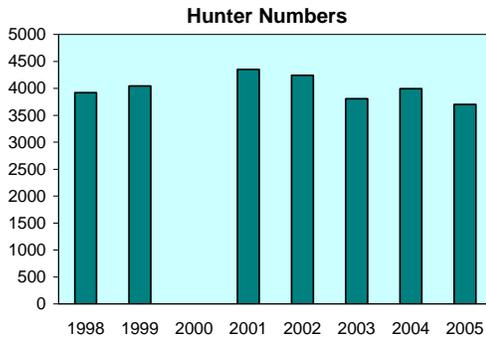
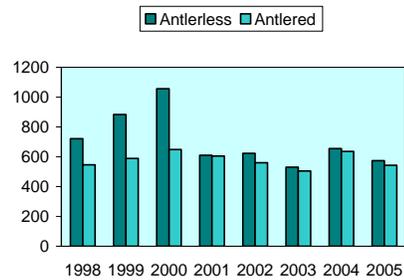


Figure 16. Pioneer Zone elk status and objectives.

## Smoky Mountains Zone (Units 43, 44, 48)

### Management Objectives

Objectives in Smoky Mountains Zone (Figure 17) are to establish a population of  $\geq 2,300$  cows and  $\geq 700$  bulls, including  $\geq 475$  adult bulls, at ratios of 30-35 bulls:100 cows and 18-22 adult bulls:100 cows. The management objective balances depredation concerns in Unit 44, feed-site capacity in Units 43 and 48, and the desire to provide the maximum elk population the habitat can sustain. The adult bull objective was selected to maximize bull quality in controlled hunts and provide adequate adult bulls to sustain quality elk populations. Currently, objectives for bull:cow ratios and adult bull:cow ratios are within established goals while population levels are below goals.

### Historical Perspective

Accounts from trappers and miners in the 1870s and 1880s indicate that elk occurred in the zone but were not as numerous as deer. Excessive use by livestock during the late 1800s and early 1900s severely damaged the Boise River and Big Wood River watersheds and reduced the area's ability to support high numbers of elk. Additionally, heavy unregulated hunting by miners, market hunters, and local settlers drastically reduced big game populations during the late 1800s. By 1905, it was difficult to find camp meat. Elk had been all but eliminated and deer observations were rare in the Boise River Basin and Big Wood River drainage.

In 1915, a reintroduction effort began with a release of elk from Yellowstone National Park into the Boise River drainage just above Arrowrock Dam. In 1930, the elk population in the Soldier Mountain area was estimated at 135 head. Reintroduction efforts continued in 1935 and 1936 with elk releases near Ketchum in the Big Wood River drainage. Elk populations increased steadily during the 1950s and 1960s, and controlled hunts were used to manage the harvest. Supplemental winter feeding of elk by the Department and private interests has occurred in this zone since the initial releases.

### Habitat Issues

Primary spring, summer, and fall habitats throughout the zone are managed by USFS, and winter ranges are a mixture of USFS, BLM, and private lands. Suitable winter ranges in Units 43 and 44 are very limited. Because of this, nearly-annual supplemental feeding must take place to maintain populations at or near current levels. In Unit 43, the South Fork Boise River corridor is critical for elk that winter away from established feed sites. In Unit 48, most of the best winter habitat exists on private land in drainage bottoms near residential areas. A substantial loss of winter range to residential development has occurred in Unit 48, and continued loss of winter range is a serious concern, as the human population in that unit continues to grow.

Habitat productivity has probably improved on federal lands in recent years because of reductions in domestic sheep grazing and re-growth of shrubs in areas with timber harvest. However, suppression of fire throughout much of this century has probably resulted in declining elk habitat quality. Many aspen communities are decadent and/or are being replaced by conifer

species and would benefit from fire. Additionally, in some areas, ponderosa pine-dominated communities would benefit from fire to reduce high densities of Douglas fir in the stands. Spotted knapweed has become established in the zone and threatens habitat productivity and diversity in several localized areas.

Depredations have been very limited in most of this zone, with the only real problems arising near urban areas where wintering elk find exposed horse hay or ornamental shrubs.

In Unit 43, high road densities from past timber harvest activities have increased elk vulnerability during hunting seasons (Appendix A). Seasonal road closures have been instituted by USFS to increase elk escapement and mitigate for high road densities. However, over-snow recreational pursuits (snowmobiling, backcountry skiing, summer home access) potentially pose a serious threat to wintering elk and could hamper the Department's ability to achieve population goals.

### **Biological Issues**

Elk populations have been increasing steadily since their reintroduction in the 1930s. Mild winters in the 1980s and early 1990s enhanced calf survival and increased population growth rates. Liberal antlerless harvest throughout this period has begun to stabilize population growth.

Data from sightability surveys and herd composition surveys at feed sites indicate that most populations are reproducing at sustainable levels (30 calves:100 cows). An aerial survey of Unit 48 conducted in February 2006 resulted in estimates of 50 calves:100 cows, and 37 bulls:100 cows. Herd composition data collected at feed sites in South Fork Boise River (Unit 43) during February 2006 indicated much a lower reproductive performance of 19 calves:100 cows based on a total of 63 calves and 332 cows observed. Therefore, calf:cow ratios observed in Unit 48 may not be representative of the entire Smoky Mountains Zone. No determination has been made as to the cause of the differences in calf production within different parts of the zone.

### **Inter-specific Issues**

The zone supports a substantial population of mule deer, numerous moose, and, at higher elevations, mountain goats. The relationship between deer and elk is presently unclear but is not believed to be a significant issue in this zone. Elk remain within the zone during winter whereas most deer migrate to winter ranges in Units 45 and 52, minimizing potential competition during critical winter months.

Cattle and domestic sheep have imposed the most significant forage demand in this zone since the 1870s. Excessive use by cattle and domestic sheep severely damaged watersheds in the late 1800s and early 1900s. Today, livestock use has been reduced to roughly 15% of historic use and competitive concerns remain but tend to be more localized.

## **Predation Issues**

Black bear populations have remained relatively static over time whereas mountain lion numbers probably increased in the late 1980s and early 1990s following increases in mule deer and elk populations. Within the last few years, wolf-pack activity and reproduction has been documented in Big Wood River (Unit 48) and South Fork Boise River drainages. Once established, they will become a potential predator on elk and may displace other predators through competitive interactions. Predation is currently not considered to be an important factor in the sustainability of elk populations in this zone. However, reports from hunters and observations by Department personnel suggest that wolf activity may be affecting elk activity patterns in this area, particularly during winter months.

## **Winter Feeding Issues**

Winter feeding is the most contentious issue related to elk in this zone. The Department has 5 Commission-approved feed sites located in Units 43 and 48. These are the only elk feed sites in Idaho formally sanctioned by the Commission. Unsanctioned private feeding also occurs at as many as 9 locations in Unit 48 and 2 locations in Unit 44 during many winters.

Elk feeding has become a “tradition” in Unit 43 with near-annual feeding operations being conducted. Without supplemental winter feeding, elk numbers in Unit 43 would probably be less than half of current numbers. Currently, the elk population in Unit 43 is managed at a level that is compatible with the capacity of the 4 feed facilities (approximately 1,100 head). Recent discoveries of brucellosis at “emergency” feed sites in Upper Snake Region may influence future management of this elk population.

Unit 48 has 1 Department-sanctioned feed site in the Warm Springs Creek drainage. It is not necessary to sustain the population but was set up to shortstop elk before they enter developed winter ranges in the town of Ketchum. The private feeding operations in the valley are a symptom of growth and the changing demographics of the populace of the Ketchum-Sun Valley area. Most private feeding operations take place regardless of whether feeding is warranted. Department personnel continue to work with private feeders to discourage feeding activity and explain the pitfalls of feeding in or near a suburban area. As a result of such discussions, Department staff worked with the owner of 1 private feed site near Ketchum to trap and transplant 108 elk during January and February 2006. These elk were moved from Ketchum to 1 of 3 release sites: most calves were moved to the Department’s Bullwhacker feed site up Warm Springs Creek, 1 group of 19 cows was moved to Bennett Mountain (Unit 45), and the remaining cows and calves were relocated to the Big Desert (Unit 52A). Only a few elk were left at the private feed site near Ketchum; the site will be monitored over the next several winters to assess whether elk continue to return or remain dispersed.

## **Information Requirements**

More detailed information is needed on 1) effects of concentrating elk for feeding purposes (i.e., are diseases present in fed elk and what is the relationship between feeding and low observed calf ratios), 2) movement patterns of fed elk to improve harvest management, and

3) more frequent sightability surveys to monitor population trends and age and sex ratios. In addition to improving harvest management, population surveys and movement studies are important to our discussions with local political factions regarding development in and around critical elk wintering areas.

## Elk Smoky Mountains Zone (Units 43, 44, 48)

### Winter Status & Objectives

Unit	Survey Year	Current Status			Objective		
		Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
43	2002	867	420	253	1350 - 2000	425 - 650	275 - 400
44	2002	250	138	103	150 - 250	50 - 75	30 - 50
48	2006	732	267	91	375 - 550	125 - 175	75 - 125
<b>Zone Total</b>		<b>1849</b>	<b>825</b>	<b>447</b>	<b>1875 - 2800</b>	<b>600 - 900</b>	<b>380 - 575</b>
<b>Bulls per 100 Cows</b>		<b>45</b>	<b>24</b>			<b>30 - 35</b>	<b>18 - 22</b>

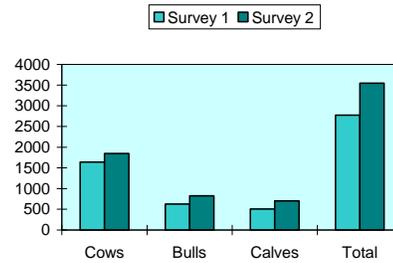
Note: 2004 - Unit 48 ground survey: 40 calves:100 cows (n=626 elk observed)



### Population Surveys

Unit	Year	Survey 1				Survey 2				
		Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
43	2000	1040	292	340	1672	2002	867	420	241	1528
44	2000	250	157	80	487	2002	250	138	94	482
48	2002	350	179	86	615	2006	732	267	368	1537
<b>Comparable Surveys Total</b>		<b>1640</b>	<b>628</b>	<b>506</b>	<b>2774</b>		<b>1849</b>	<b>825</b>	<b>703</b>	<b>3547</b>
<b>Per 100 Cows</b>		<b>38</b>	<b>31</b>				<b>45</b>	<b>38</b>		

### Comparable Survey Totals



### Zone Harvest Statistics

	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	318	321	355	271	278	110	166	212
'A' Tag	6	26	9	10	5	9	8	6
'B' Tag				1	0	0	0	0
CH Tag	312	295	346	260	273	101	158	206
<b>Antlered Harvest</b>	307	216	292	282	303	329	248	315
'A' Tag	102	46	82	81	72	68	78	118
'B' Tag			1	3	0	3	0	0
CH Tag	205	170	209	198	231	258	170	197
<b>Hunter Numbers</b>	3065	2866	ND	2622	2791	2590	2388	2240
'A' Tag	861	739	ND	740	773	743	885	796
'B' Tag			ND	27	20	12	0	0
CH Tag	2204	2127	ND	1855	1998	1835	1503	1444
<b>% 6+ Points</b>	47	37	35	47	44	42	46	33

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

### Harvest

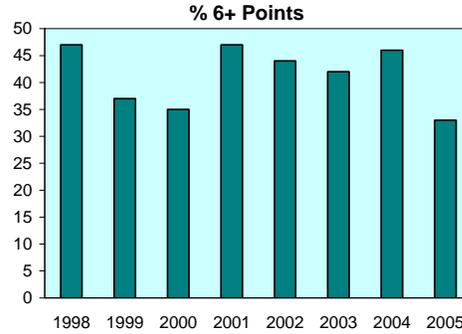
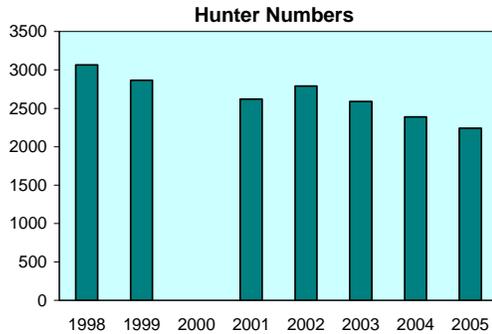
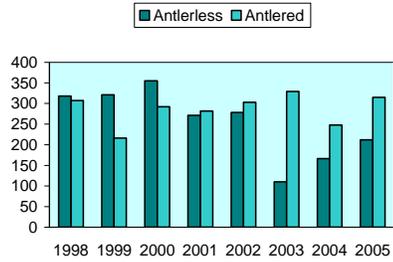


Figure 17. Smoky Mountains Zone elk status and objectives.

## **Bennett Hills Zone (Units 45, 52)**

### **Management Objectives**

Objectives for Bennett Hills Zone (Figure 18) are to maintain a population of  $\geq 350$  cows and  $\geq 155$  bulls, including  $\geq 55$  adult bulls, at ratios of 18-24 bulls:100 cows and 10-14 adult bulls:100 cows.

### **Historical Perspective**

Elk were extirpated from Bennett Hills Zone by the early 1900s as a result of unregulated hunting and habitat depletion from excessive livestock use. The re-colonization of Bennett Hills Zone by elk was slow, following the reintroduction of elk into south-central Idaho (Arrowrock Reservoir in 1915, Warm Springs Creek west of Ketchum in 1935 and 1936). During the late 1940s, elk numbered less than 50 head in Unit 45 and less than 15 head in Unit 52. Although population surveys have not been conducted recently, the zone is currently believed to have about 500-600 elk.

In Unit 45, general 5-day either-sex elk hunts were held in the western portion of the unit from 1943-1953. There were no elk seasons in Unit 45 from 1954-1963 and 1971-1978. Unit 52 was closed to all elk hunting from 1943-1978.

In 1965, 36 elk (9 bulls, 19 cows, 9 calves) trapped in Unit 48 were released in Unit 52 about 1 mile south of Magic Reservoir. By the late 1970s, the population had increased to an estimated 235 head and depredation problems occurred on wheat and alfalfa fields from approximately 120 elk that summered in the Johnson Hill area. Early controlled firearms hunts and archery seasons were implemented in 1979 to reduce depredation concerns. In 1980, the management objective was to reduce depredations and increase the elk population to 300 head. The 1986-1990 Elk Management Plan established a goal of about 400 elk for Units 45 and 52 combined. Because depredation problems were minimal and the elk population relatively small, aerial surveys were not conducted in Bennett Hills Zone until 1999 to monitor the elk population.

### **Habitat Issues**

Bennett Hills Zone encompasses roughly 3,700 square miles; 8% is managed by USFS, 67% is managed by BLM, 5% is administered by IDL, and 27% is private land. Most of Unit 52 and the southern portion of Unit 45 are primarily arid semi-desert dominated by sagebrush-grass. Mount Bennett Hills in the northern portion of Unit 45 is a low range of mountains or high plateau consisting of sagebrush-grass and mixed mountain shrub communities with small pockets of aspen and Douglas fir on northern exposures and more mesic sites. Camas Prairie on the north side of the zone is primarily private land used for pasturing livestock and growing grass and alfalfa hay.

Livestock grazing is the primary land use in the zone. There are competitive concerns during drought years when forage utilization by cattle is higher.

Private interests own or control access to important summer and fall habitats. This has been a subject of much concern by hunters unable to gain access to areas they wish to hunt. Several elk ranching operations have recently been established in Unit 45 bringing concerns of potential loss of genetic integrity of wild elk and possible transmission of disease to wild populations.

### **Biological Issues**

Elk populations in this zone have increased over the last 30 years as a result of reintroduction, conservative harvest management, and improved livestock grazing practices. The 1999 sightability survey indicated populations are reproducing at sustainable levels (24 calves:100 cows). Population size is within sustainable margins; however, bull ratios are considerably higher than required to maintain the population (58 bulls:100 cows).

During January 2006, 19 cow elk were trapped from the Ketchum area and released on Bennett Mountain. This relatively small group of elk is unlikely to have significant impacts on the elk population in the Bennett Hills Zone. The Ketchum trap site will be monitored in upcoming years to evaluate whether elk return to Ketchum or winter near their release site.

### **Inter-specific Issues**

This zone winters nearly all of the mule deer from Units 43, 44, 45, 48, and 52, and for this reason, mule deer will be given management priority over elk whenever conflicts are identified. Currently, competitive concerns are minimal; the elk population is relatively small and static, and there is little or no known overlap in winter use areas between deer and elk. A small population of pronghorn also occurs in the zone, but there is little overlap of habitat.

Livestock grazing, primarily cattle, occurs throughout federal and state-administered lands and on most of the private land that is not farmed. Specific conflicts between livestock grazing and elk have not been identified.

### **Predation Issues**

Two or 3 mountain lions and <10 black bears are taken by hunters in this zone annually, all in Unit 45. There has been no noticeable change in bear or mountain lion numbers in recent years.

### **Winter Feeding Issues**

Winter feeding has not been conducted in this zone recently and is not an issue.

### **Information Requirements**

Because only 1 aerial survey has been conducted since the development of the current plan, additional aerial surveys for elk are needed to validate the current objectives and population status. Also, additional information is needed to document specific winter use areas.

## Elk Bennett Hills Zone (Units 45, 52)

### Winter Status & Objectives

Unit	Survey Year	Current Status			Objective		
		Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
45	1999	300	175	150	225 - 325	50 - 75	35 - 50
52		(75)	(25)	(15)	50 - 100	10 - 20	5 - 10
<b>Zone Total</b>		<b>(375)</b>	<b>(200)</b>	<b>(165)</b>	<b>275 - 425</b>	<b>60 - 95</b>	<b>40 - 60</b>
<b>Bulls per 100 Cows</b>		<b>(58)</b>	<b>(44)</b>			<b>18 - 24</b>	<b>10 - 14</b>

Note: Estimates within parentheses are based on information other than sightability surveys.

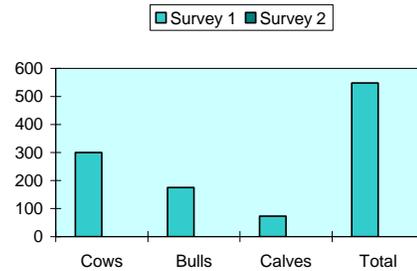


### Population Surveys

Unit	Year	Survey 1				Survey 2				
		Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
45	1999	300	175	73	548	ND				
52	ND					ND				
<b>Comparable Surveys Total</b>		<b>300</b>	<b>175</b>	<b>73</b>	<b>548</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Per 100 Cows</b>			<b>58</b>	<b>24</b>						

Note: ND = no survey data available.

### Comparable Survey Totals

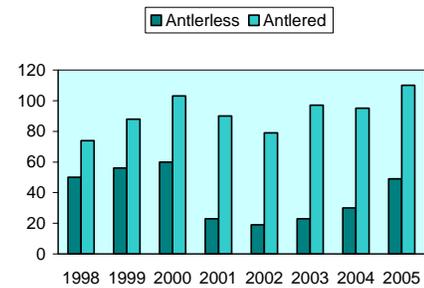


### Zone Harvest Statistics

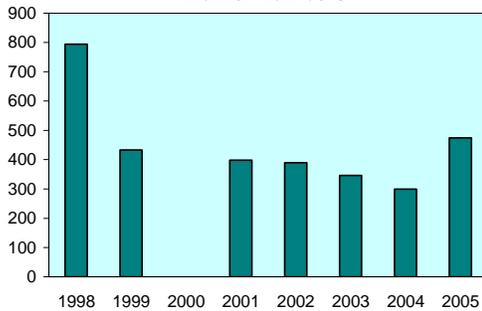
	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	50	56	60	23	19	23	30	49
'A' Tag			3	1	1	1	1	1
'B' Tag			0	0	0	0	0	0
CH Tag	50	56	57	22	18	22	29	48
<b>Antlered Harvest</b>	74	88	103	90	79	97	95	110
'A' Tag	26	38	42	27	26	30	32	21
'B' Tag			1	0	0	0	0	0
CH Tag	48	50	60	63	53	67	63	89
<b>Hunter Numbers</b>	794	433	ND	398	390	346	299	474
'A' Tag	573	213	ND	234	225	223	133	202
'B' Tag			ND	3	5	0	0	0
CH Tag	221	220	ND	161	160	123	166	272
<b>% 6+ Points</b>	54	50	43	54	43	55	49	34

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

### Harvest



### Hunter Numbers



### % 6+ Points

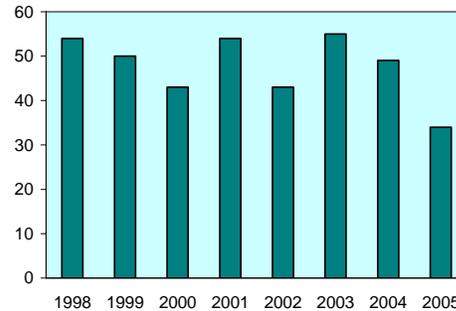


Figure 18. Bennett Hills Zone elk status and objectives.

## **Big Desert Zone (Units 52A, 68)**

### **Management Objectives**

Objectives for Big Desert Zone (Figure 19) are to maintain a wintering elk population of 120-200 cows and 25-45 bulls, including 15-25 adult bulls. Although no population survey estimate exists for this zone, field reports indicate that current total numbers may exceed objectives.

### **Historical Perspective**

The elk population in Big Desert Zone has increased substantially from early historical records. Accounts of trappers through this area in the mid-1800s suggest that, although elk were common, buffalo, bighorn sheep, and pronghorn were far more numerous. Unregulated harvest of the late 1800s and early 1900s likely reduced populations to relatively low levels.

Elk hunting in Big Desert Zone began in 1983 with 30 either-sex permits for Unit 63. Since that time, elk numbers and permit numbers have increased substantially. In 2001, Big Desert Zone was reduced from 6 units (52A, 53, 63, 63A, 68, 68A) to 2 units (52A, 68). Unlimited sales of tags also ceased in 2001 and subsequently, all elk tags have been issued on a controlled hunt basis.

### **Habitat Issues**

Big Desert Zone represents some of the least productive habitat found in eastern Idaho. Comprised of mostly dry desert shrub habitat types, Big Desert Zone provides limited summer range for elk.

The BLM administers the majority of public ground (67% of total area) in Big Desert Zone. Private ground makes up 24%, state endowment lands 4%, and other federal agencies (National Park Service, USFWS, Atomic Energy Commission) make up about 5%.

A number of water guzzlers have been developed primarily for nongame, upland game, and pronghorn within Big Desert Zone. Although the impacts to other wildlife are unknown, elk have permanently destroyed some guzzlers and can prematurely dry up storage tanks.

Wildfires continue to play a big role with habitat throughout Big Desert Zone. In many cases, fire has replaced sagebrush stands with perennial grasses, theoretically improving habitat conditions for elk.

### **Biological Issues**

With the exception of a few Idaho National Laboratory (INL) aerial surveys generally covering the northeast corner of the zone, population surveys have not been conducted in Big Desert Zone. Therefore, estimates for recruitment and total numbers are based on other data.

During January 2006, 62 elk (51 cows, 10 calves, 1 spike bull) were trapped from the Ketchum area and released north of Minidoka near Bear Trap Cave on the border between Units 52A and 68. The Ketchum trap site will be monitored in upcoming years to evaluate whether elk return to Ketchum or winter near their release site.

### **Inter-specific Issues**

Livestock, mule deer, and pronghorn are the primary ungulates sharing range with elk in Big Desert Zone. We are unaware of significant concerns regarding elk competition for forage with livestock. It is unknown what, if any, impacts an increasing elk population may have on pronghorn or mule deer.

### **Predation Issues**

Coyotes are the predominant large predators within this zone. However, they are not believed to be a significant factor in elk population dynamics.

### **Winter Feeding Issues**

Emergency supplemental feeding of elk has not been conducted recently. The relatively inaccessible nature of this zone in winter and generally limited snowfall preclude many concerns for winter feeding.

### **Information Requirements**

The greatest data need for Big Desert Zone is reliable population data that provide estimates of abundance, composition, and recruitment, and distribution data that would assist in developing effective harvest and depredation control strategies.

## Elk Big Desert Zone (Units 52A, 68)

### Winter Status & Objectives

Unit	Survey Year	Current Status			Objective		
		Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
52A		(60)	(20)	(15)	45 - 75	10 - 20	5 - 10
68		(100)	(20)	(20)	75 - 125	15 - 25	10 - 15
<b>Zone Total</b>		<b>(160)</b>	<b>(40)</b>	<b>(35)</b>	<b>120 - 200</b>	<b>25 - 45</b>	<b>15 - 25</b>
<b>Bulls per 100 Cows</b>		<b>(43)</b>	<b>(24)</b>			<b>18 - 24</b>	<b>10 - 14</b>

Note: Estimates within parentheses are based on information other than sightability surveys.

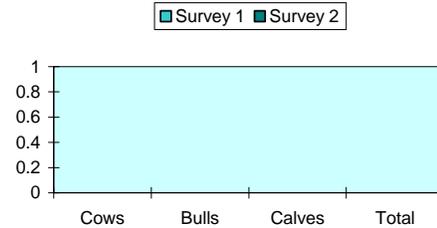


### Population Surveys

Unit	Year	Survey 1				Survey 2				
		Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
52A	ND					ND				
68	ND					ND				
<b>Comparable Surveys Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Per 100 Cows</b>										

Note: ND = no survey data available.

### Comparable Survey Totals



### Zone Harvest Statistics

	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	478	17	33	30	26	27	26	36
'A' Tag	342	0	4	0	0	0	0	0
'B' Tag	0	0	0	0	0	0	0	0
CH Tag	136	17	29	30	26	27	26	36
<b>Antlered Harvest</b>	128	212	116	27	33	35	31	37
'A' Tag	59	205	69	1	0	2	0	0
'B' Tag	0	0	1	0	0	0	0	0
CH Tag	69	7	46	26	33	33	31	37
<b>Hunter Numbers</b>	1619	4211	ND	221	217	218	183	240
'A' Tag	1073	3961	ND	19	8	9	0	0
'B' Tag	0	0	ND	3	2	3	0	0
CH Tag	546	250	ND	199	207	206	183	240
<b>% 6+ Points</b>	59	25	47	61	45	46	57	59

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

### Harvest

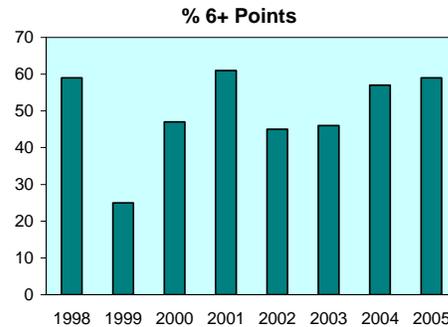
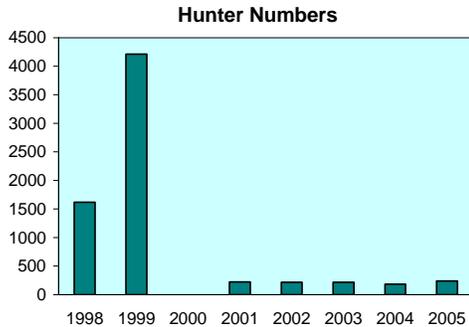
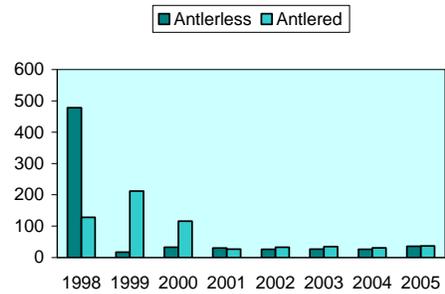


Figure 19. Big Desert Zone elk status and objectives.

## **Snake River Zone (Units 53, 63, 63A, 68A)**

### **Management Objectives**

Objectives for Snake River Zone (Figure 20) are to maintain a wintering elk population of 25 - 35 cows and 5 - 10 bulls, including 1 - 5 adult bulls. Although no population survey estimate exists for this zone, field reports combined with INL surveys indicate that current numbers exceed objectives. The low population objective is necessary to alleviate significant depredation concerns in Units 53 and 63. Aggressive harvest rates will be necessary to achieve population objectives.

### **Historical Perspective**

The elk population in Snake River Zone has increased substantially from early historical records. Accounts of trappers through this area in the mid-1800s suggest that, although elk were common, buffalo, bighorn sheep, and pronghorn were far more numerous. Undoubtedly, the unregulated harvest of the late 1800s and early 1900s maintained at or reduced populations to relatively low levels.

Snake River Zone (Units 53, 63, 63A, 68A) was contained within Big Desert Zone (Units 52A, 68) from the beginning of the zone system in 1998 through 2000.

Elk hunting in Snake River Zone began in 1983 with 30 either-sex permits for Unit 63. Since that time, elk numbers and harvest opportunity have increased substantially.

### **Habitat Issues**

Snake River Zone represents some of the least suitable habitat found in eastern and southern Idaho. Comprised of mostly agriculture and dry desert shrub habitat types, Snake River Zone provides limited summer range for elk.

The BLM administers the majority of public ground in Snake River Zone. Other primary ownership includes private and INL ground. The INL, which is largely un-hunted, provides daytime refuge for several hundred elk that forage on private cropland at night. Efforts will continue to improve management options available to the Department for elk on INL.

A number of water guzzlers have been developed primarily for nongame, upland game, and pronghorn within Snake River Zone. Although the impacts to other wildlife are unknown, elk have permanently destroyed some guzzlers and can prematurely dry up storage tanks.

Wildfires continue to play a big role with habitat throughout Snake River Zone. In many cases, fire has replaced sagebrush stands with perennial grasses, theoretically improving habitat conditions for elk.

## **Biological Issues**

With the exception of a few INL aerial surveys, population surveys have not been conducted in Snake River Zone. Therefore, estimates for recruitment and total numbers are based on other data. Given the relatively rapid increase in elk observed over the last 15 years, it is believed that production is high. To achieve population objectives for Snake River Zone, with what are probably high recruitment rates, will require high harvest rates.

## **Inter-specific Issues**

Livestock, mule deer, and pronghorn are the primary ungulates sharing the range with elk in Snake River Zone. We are unaware of significant concerns regarding elk competition for forage with livestock. It is unknown what, if any, impacts an increasing elk population may have on pronghorn or mule deer.

## **Predation Issues**

Coyotes are the predominant large predator within this zone. However, they are not believed to be a significant factor in elk population dynamics.

## **Winter Feeding Issues**

Emergency supplemental feeding of elk has not been conducted recently. The relatively inaccessible nature of this zone in winter and generally limited snowfall preclude many concerns for winter feeding.

## **Information Requirements**

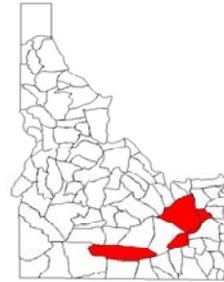
The greatest data need for Snake River Zone is reliable population data that provides estimates of abundance, composition, and recruitment, and distribution data that would assist in developing effective harvest and depredation control strategies.

## Elk Snake River Zone (Units 53, 63, 63A, 68A)

### Winter Status & Objectives

Unit	Current Status			Objective			
	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
53		(60)	(20)	(15)	0	0	0
63		(200)	(100)	(50)	25 - 35	5 - 10	1 - 5
63A		(0)	(0)	(0)	0	0	0
68A		(0)	(0)	(0)	0	0	0
<b>Zone Total</b>		<b>(260)</b>	<b>(120)</b>	<b>(65)</b>	<b>25 - 35</b>	<b>5 - 10</b>	<b>1 - 5</b>
<b>Bulls per 100 Cows</b>		<b>(46)</b>	<b>(25)</b>		<b>18 - 24</b>	<b>10 - 14</b>	

Note: Estimates within parentheses are based on information other than sightability surveys.

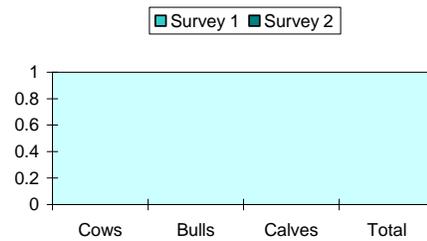


### Population Surveys

Unit	Year	Survey 1				Survey 2				
		Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
52A	ND					ND				
53	ND					ND				
63	ND					ND				
63A	ND					ND				
68	ND					ND				
68A	ND					ND				
<b>Comparable Surveys Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Per 100 Cows</b>										

Note: ND = no survey data available.

### Comparable Survey Totals

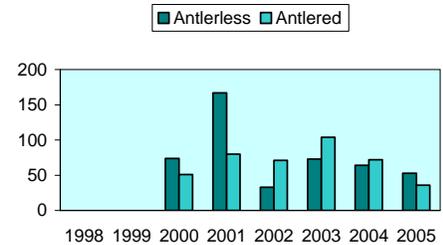


### Zone Harvest Statistics

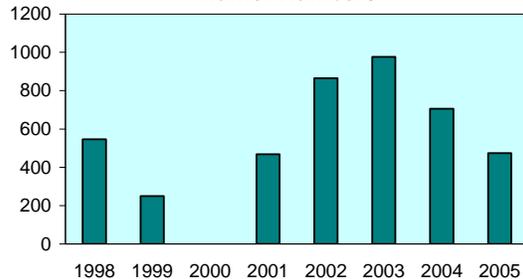
	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	0	0	74	167	33	73	64	53
'A' Tag	0	0	74	167	33	46	64	52
'B' Tag	0	0	0	0	0	0	0	0
CH Tag	0	0	0	0	0	27	0	1
<b>Antlered Harvest</b>	0	0	51	80	71	104	72	36
'A' Tag	0	0	49	79	71	71	71	36
'B' Tag	0	0	0	1	0	0	1	0
CH Tag	0	0	2	0	0	33	0	0
<b>Hunter Numbers</b>	546	250	ND	468	865	976	706	474
'A' Tag			ND	458	859	770	702	448
'B' Tag			ND	10	6	2	4	0
CH Tag	546	250	ND	0	0	204	0	26
<b>% 6+ Points</b>	0	0	47	61	20	45	48	34

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

### Harvest



### Hunter Numbers



### % 6+ Points

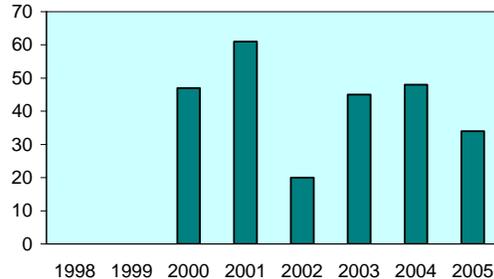


Figure 20. Snake River Zone elk status and objectives.

**PROGRESS REPORT  
SURVEYS AND INVENTORIES**

<b>STATE:</b>	<u>Idaho</u>	<b>JOB TITLE:</b>	<u>Elk Surveys and Inventories</u>
<b>PROJECT:</b>	<u>W-170-R-30</u>		
<b>SUBPROJECT:</b>	<u>5</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>1</u>		<u>Habitat Studies</u>
<b>PERIOD COVERED:</b>	<u>July 1, 2005 to June 30, 2006</u>		

**SOUTHEAST REGION**

**Bannock Zone (Units 56, 70, 71, 72, 73, 73A, 74)**

**Management Objectives**

Objectives for Bannock Zone (Figure 21) are to maintain a wintering elk population of 510 - 745 cows and 125 - 165 bulls, including 60 - 110 adult bulls. Although no population estimate exists for this zone, field reports, combined with incidental observations from deer surveys, indicate that current numbers exceed objectives. A reduction in cows is necessary to alleviate significant depredation concerns and reduce the occupancy of elk in important mule deer winter ranges. A reduction in bulls and adult bulls will provide for hunter demand of antlered elk and balance bull numbers with cow numbers. Aggressive harvest rates will be necessary to achieve population objectives.

**Historical Perspective**

According to the Pocatello Deer-Elk Herd Management Plan (1945), in the early 1900s, elk were not found in the area and “deer were a rarity.” In 1916-1917, 35 elk were transported by train from Gardiner, Montana, and released west of Pocatello. Counts in the 1930s and 1940s found 500-600 elk. By 1950, elk were reported to be spreading into the Elkhorn Mountain and John Evans Canyon areas (Unit 73), Blackrock (Unit 71), and Crystal and Midnight creeks (Unit 70).

In a 1940 report, Ted Trueblood said, “Elk (in this area) are a liability and a problem; deer would be an asset.”

Elk hunts were first offered in the zone in 1933. Elk numbers declined in the 1950s due to “over-hunting by whites and Indians,” and seasons were closed. Permit hunts were offered in some units between 1962 and 1968. Populations remained at very low levels into the late 1980s. Since that time, elk have expanded dramatically in all but Unit 73A. By the mid-1990s, all units except 73A offered some elk hunting opportunity.

## **Habitat Issues**

The topography of Bannock Zone (3,125,000 acres) is characterized by low, north-south mountain ranges separated by broad valleys. Elevations range from 4,000-9,000 feet. Mountains support mixed conifer/aspen stands on north slopes and mountain brush/grass communities on southern exposures. Juniper and mountain mahogany are common on lower slopes. Valleys are agricultural with large expanses of small grains, pasture, and hay. Grazing, logging, and urbanization are additional factors affecting habitats in the zone.

Land ownership is 55% private, 30% federal, 5% state, and 10% Indian reservation. Access is widespread with few areas more than 1 mile from some type of road.

Winter range consists of windswept ridges, Conservation Reserve Program (CRP) acreage, and other agricultural fields. Depredation damage complaints from private landowners have increased dramatically in several areas in recent years.

## **Biological Issues**

Calf recruitment rates have not been measured in this zone. However, the rapidly increasing numbers observed and changes in distribution suggest a highly productive herd. Additionally, newly-colonizing populations without any known competition tend to have high recruitment rates. Given that recruitment is probably high, high harvest rates will be necessary to achieve population objectives.

## **Inter-specific Issues**

The concurrent increase in numbers of elk and decrease in mule deer on some winter ranges has raised concerns about possible competition for forage and/or social intolerance. Livestock operators in several areas have complained about increasing elk use of forage on public land grazing allotments and private lands.

## **Predation Issues**

Mountain lions are the major natural predators of elk in the zone and are judged to be at relatively high levels in most areas; however, expanding populations of elk do not indicate that predation is significantly impacting numbers. Coyotes are quite common but not believed to be a major predator of elk. Black bears exist at extremely low levels within the zone and, therefore, are not an important source of mortality for elk.

## **Winter Feeding Issues**

Emergency supplemental feeding of elk has not been conducted in the zone. A rancher on the west side of Unit 72 has fed a small number of elk several winters for the purpose of keeping them out of his cattle feedlot. Elk have been fed on the west side of Unit 74 for the same reason.

## **Information Requirements**

Elk permits have increased significantly from conservative to relatively higher levels over the past decade. A greater level of precision in estimating elk numbers and population change (recruitment) would help in determining appropriate levels and types of hunting to help achieve population objectives.

Better understanding of mule deer/elk interactions, particularly on winter ranges, would help to determine future management direction for both species. A future question for wildlife managers and the public may be “Do we want to favor deer or elk?”

## Elk Bannock Zone (Units 56, 70, 71, 72, 73, 73A, 74)

### Winter Status & Objectives

Unit	Survey Year	Current Status			Objective		
		Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
56		(125)	(75)	(50)	100 - 150	30 - 50	20 - 30
70		(100)	(40)	(25)	50 - 75	5 - 15	5 - 10
71		(50)	(20)	(20)	50 - 75	5 - 15	5 - 10
72		(300)	(100)	(60)	50 - 75	5 - 15	5 - 10
73		(150)	(50)	(30)	100 - 150	20 - 30	10 - 20
73A		(10)	(5)	(5)	10 - 20	1 - 5	1 - 5
74		(300)	(100)	(60)	150 - 200	25 - 35	15 - 25
<b>Zone Total</b>		<b>(1035)</b>	<b>(390)</b>	<b>(250)</b>	<b>510 - 745</b>	<b>125 - 165</b>	<b>60 - 110</b>
<b>Bulls per 100 Cows</b>			<b>(38)</b>	<b>(24)</b>		<b>18 - 24</b>	<b>10 - 14</b>

Note: Estimates within parentheses are based on information other than sightability surveys.

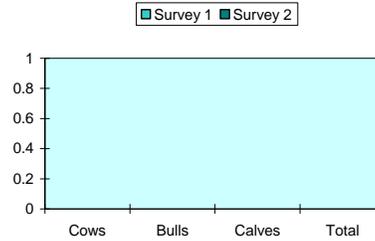


### Population Surveys

Unit	Year	Survey 1				Survey 2				
		Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
56	ND					ND				
70	ND					ND				
71	ND					ND				
72	ND					ND				
73	ND					ND				
73A	ND					ND				
74	ND					ND				
<b>Comparable Surveys Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Per 100 Cows</b>										

Note: ND = no survey data available.

### Comparable Survey Totals



### Zone Harvest Statistics

	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	157	118	190	197	187	178	154	156
'A' Tag	0	85	182	168	187	177	154	102
'B' Tag	0	18	2	1	0	0	0	0
CH Tag	157	15	6	28	0	1	0	54
<b>Antlered Harvest</b>	155	136	138	90	87	67	90	111
'A' Tag	55	55	101	36	23	22	24	20
'B' Tag	13	24	4	8	0	0	0	0
CH Tag	87	57	33	46	64	45	66	91
<b>Hunter Numbers</b>	1847	2149	ND	1682	1675	1500	1391	1500
'A' Tag	622	1528	ND	1413	1432	1291	1186	1071
'B' Tag	197	301	ND	20	5	8	4	0
CH Tag	1028	320	ND	249	238	201	201	429
<b>% 6+ Points</b>	55	47	33	47	39	57	44	44

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

### Harvest

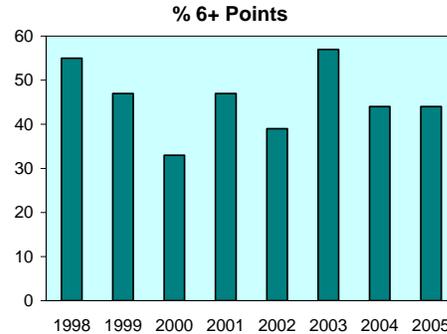
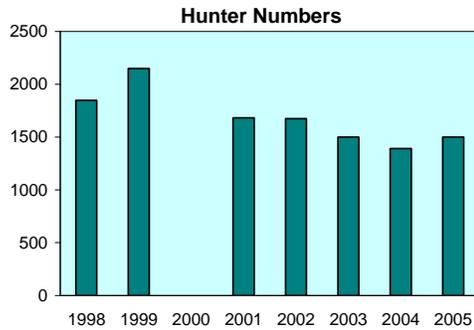
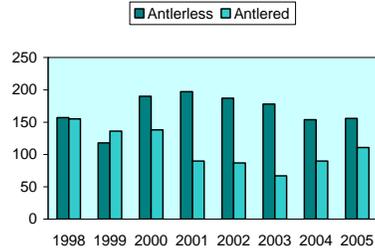


Figure 21. Bannock Zone elk status and objectives.

## **Diamond Creek Zone (Units 66A, 76)**

### **Management Objectives**

Objectives for Diamond Creek Zone (Figure 22) are to maintain a wintering elk population of 1,300 – 1,960 cows and 400 – 600 bulls, including 255 - 365 adult bulls. Limited amounts of suitable winter range in Unit 66A preclude significant increases in the wintering population for that unit. Although Unit 76 could support a higher wintering population, it would be at the expense of significant depredation concerns and increases in elk occupying mule deer winter ranges. The most recent aerial survey (2005) indicates that the population is above objectives for cows, bulls, and adult bulls.

### **Historical Perspective**

The elk population in Diamond Creek Zone has increased dramatically from early historical records. Accounts of trappers through this area in the mid-1800s suggest that although elk were common, buffalo and bighorn sheep were far more numerous. Undoubtedly, the unregulated harvest of the late 1800s and early 1900s maintained at or reduced populations to relatively low levels. By 1952, elk were believed to be numerous enough to warrant the first hunting season with 250 permits for either-sex elk in Units 66, 66A, and 69. An aerial survey of Unit 76 during February 1952 resulted in 193 elk observed with a total population estimate of 230. Elk in Unit 66A are primarily migrational and winter with elk in Units 66 and 69. The first hunt in Unit 76 began in 1964 with 75 either-sex permits.

As the elk population grew, so did hunting opportunity. Although this zone has primarily been managed via controlled permits, several general hunting seasons have occurred since regulated harvest began. Between 1955 and 1959, general hunts were held in Units 66, 66A, and 69 varying between a 3-day antlered-only to a 10-day either-sex season. Again in 1968 and 1969, 9-day antlered-only general seasons were offered. The last general hunting opportunity in Unit 66A occurred in 1975 with a 3-day antlered-only season.

The most recent population survey (2005) estimated a total of 3,613 elk in Unit 76. This total represents a 16% increase over the 2002 estimate and a 1,772% increase over the first estimate in 1952. Historically, elk in Unit 76 summered and wintered within the unit; however, as populations have increased, there has been use of wintering areas outside the unit.

In efforts to deal with depredations and potential human safety issues on highways, the Department has instituted extra tags for elk “conditioning” in late winter. These hunts are in December and designed to make private land and areas near highways as unattractive as possible for problem elk herds. They proved to be a success in the 2005 season; however, hunts did not continue into January and elk came back off public lands and returned to old habits. The Department has continued the hunts in 2006 and added some hunts for the month of January to continue pressure, forcing elk to stay on public lands.

## **Habitat Issues**

Diamond Creek Zone represents some of the most productive habitat found in southeastern Idaho. Three main vegetation types predominate: sagebrush-grassland, aspen, and conifer. Past habitat-use research indicates that aspen habitat types are highly preferred, especially during non-snow periods. Fire suppression efforts and intensive livestock grazing in the past have resulted in increased shrub and conifer cover with a reduction in the aspen component since historical times.

Approximately 65% of the land in Diamond Creek Zone is publicly owned, primarily USFS. The 35% private land is used for rangeland pasture and small grain and hay production. Depredation complaints have generally increased in the last decade. Predominate land uses of the publicly-owned ground include livestock grazing, timber management, recreation, and phosphate mining. Approximately 35% of the known U.S. reserves of phosphate ore are located in Diamond Creek Zone.

Open habitat types combined with moderate road densities (0.7-2.3 miles/square mile) and, in some cases, unrestricted ATV travel result in a relatively high vulnerability standard for elk in Diamond Creek Zone.

## **Biological Issues**

Calf:cow ratios, as measured during aerial surveys, indicate a healthy, productive herd in Diamond Creek Zone. High calf:cow ratios are consistent with growing populations that are not heavily influenced by density-dependent factors. Given these high levels of recruitment, relatively high harvest rates of antlerless elk are necessary to stabilize populations. Additionally, liberal bull harvest rates can be sustained by high recruitment rates.

## **Inter-specific Issues**

Although both livestock and elk numbers within Diamond Creek Zone are high, there appears to be little concern by livestock operators for competition for grass. However, localized concerns do exist for livestock (primarily sheep) over-utilization of ridge-tops used by wintering elk.

During the mid-1900s, Unit 76 supported a high population of mule deer with relatively few elk. Important mule deer wintering areas included Brown's Canyon to Yellowjacket Creek, east of Henry, Stump Creek, Crow Creek, and the Soda Front from Wood Canyon to Dingle. Today, these winter ranges are predominately occupied by elk. It is unknown whether habitat changes and/or competition (resource or social intolerance) have led to this change. However, there appear to be areas with suitable deer winter range vegetation that are only occupied by elk. Extensive populations of wintering mule deer are not expected to occur with current distribution and numbers of elk in this zone.

## **Predation Issues**

Potentially major predators of elk in Diamond Creek Zone include black bears and mountain lions. The black bear population is extremely low and probably has remained unchanged for many years. Mountain lions are believed to have increased during the last 30 years. However, current recruitment rates and other elk population parameters suggest this increased mountain lion population is not having a significant effect. Coyotes are common but not believed to be a significant predator on elk.

## **Winter Feeding Issues**

Emergency supplemental feeding of elk has been provided during 4 winters since 1981 in Diamond Creek Zone. Numbers of animals fed have ranged from 200-880. Recurrent emergency feeding areas include near Freedom, Thomas Fork Valley, Crow Creek, Stump Creek, and Bischoff Canyon. Additionally, it is believed that some elk summering in this zone migrate to annual winter feed grounds in adjacent Wyoming. During 1985, 122 elk were trapped near Stump Creek and translocated elsewhere. On-site testing for Brucellosis resulted in no positive responses. However, during 1992-1993, a group of 300 wintering elk in Idaho and Wyoming along the Thomas Fork Valley were trapped and marked in Wyoming. One out of the 40 elk tested showed a positive Brucellosis response.

## **Information Requirements**

Recently, observed changes in winter distribution of elk in Diamond Creek Zone are poorly understood. Possible explanations include a population that has reached habitat fill, habitat change resulting in less suitable winter range, and/or random behavioral response to differing environmental conditions. A better understanding of the processes involved in winter range selection would aid in a better ecological understanding of elk in this zone and lead to more responsive management actions.

Diamond Creek Zone has been a highly popular area for archery hunting. It is believed that a significant amount of archery harvest occurs in this zone; however, past data collection efforts have been inadequate to precisely monitor archery harvest. Better archery harvest information would enhance management efforts.

## Elk Diamond Creek Zone (Units 66A, 76)

### Winter Status & Objectives

Unit	Current Status			Objective			
	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
66A		(50)	(25)	(20)	40 - 60	15 - 25	5 - 15
76	2005	2059	934	373	1260 - 1900	385 - 575	250 - 350
<b>Zone Total</b>		<b>2059</b>	<b>934</b>	<b>373</b>	<b>1300 - 1960</b>	<b>400 - 600</b>	<b>255 - 365</b>
		<b>Bulls per 100 Cows</b>	<b>45</b>	<b>18</b>		<b>30 - 35</b>	<b>18 - 24</b>

Note: Estimates within parentheses are based on information other than sightability surveys.

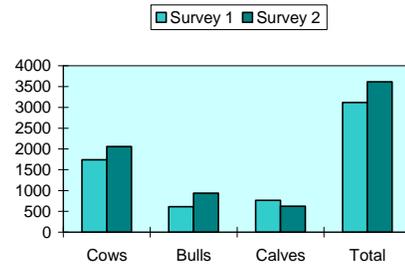


### Population Surveys

Unit	Year	Survey 1				Survey 2				
		Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
66A	ND					ND				
76	2002	1741	612	763	3116	2005	2059	934	620	3613
<b>Comparable Surveys Total</b>		<b>1741</b>	<b>612</b>	<b>763</b>	<b>3116</b>		<b>2059</b>	<b>934</b>	<b>620</b>	<b>3613</b>
		<b>Per 100 Cows</b>	<b>35</b>	<b>44</b>				<b>45</b>	<b>30</b>	

Note: ND = no survey data available.

### Comparable Survey Totals



### Zone Harvest Statistics

	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	483	475	512	509	768	632	634	717
'A' Tag	59	60	56	78	88	90	94	84
'B' Tag	0	0	0	0	0	0	0	0
CH Tag	424	415	456	431	680	542	540	633
<b>Antlered Harvest</b>	443	531	596	546	537	597	520	505
'A' Tag	251	285	314	242	224	249	262	259
'B' Tag	0	0	3	4	0	4	0	0
CH Tag	192	246	279	300	313	344	258	246
<b>Hunter Numbers</b>	3016	3611	ND	3278	3911	3855	4291	4544
'A' Tag	1478	1811	ND	1587	1869	2000	2251	2142
'B' Tag	0	0	ND	35	42	25	0	0
CH Tag	1538	1800	ND	1656	2000	1830	2040	2402
<b>% 6+ Points</b>	41	32	32	37	34	44	37	41

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

### Harvest

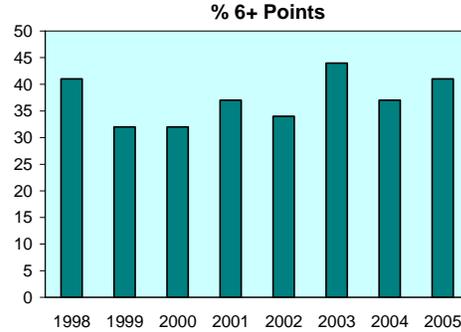
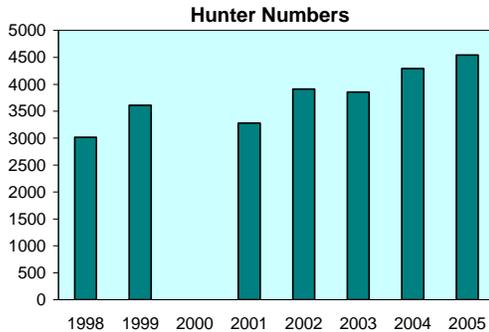
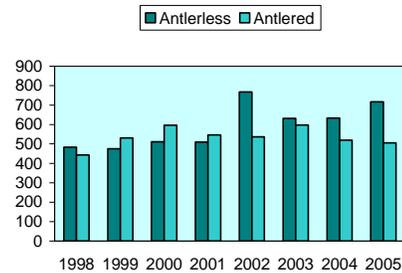


Figure 22. Diamond Creek Zone elk status and objectives.

## **Bear River Zone (Units 75, 77, 78)**

### **Management Objectives**

Objectives for Bear River Zone (Figure 23) are to maintain a wintering elk population of 400 - 600 cows and 80 - 120 bulls, including 45 - 75 adult bulls. Although this zone could support a higher wintering population, it would be at the expense of significant depredation concerns and increases in elk occupying mule deer winter ranges. The most recent aerial survey (2006) indicates that the population has remained stable and is within objectives for cows, bulls, and adult bulls. No significant changes in harvest rates are necessary.

### **Historical Perspective**

The elk population in Bear River Zone has increased substantially from early historical records. Accounts of trappers through this area in the mid-1800s suggest that although elk were common, buffalo and bighorn sheep were far more numerous. Undoubtedly, the unregulated harvest of the late 1800s and early 1900s maintained at or reduced populations to relatively low levels.

Elk hunting in this zone began in the 1940s with controlled either-sex hunts, was closed for several years, and started up again in 1956 with general hunts for either-sex. Unit 75 was closed on and off through the 1960s. From 1968 through 1975, all units were open to general either-sex hunting. Starting in 1976 through the present, all units have been open for general antlered-only opportunity. In 1984 and 1985, a few either-sex permits were offered along with the antlered-only hunt. Since 1986, antlerless-only permits have generally increased.

Prior to the late 1970s, the vast majority of elk that summered in this zone wintered in Utah. Since that time, elk wintering in this zone have dramatically increased.

### **Habitat Issues**

Bear River Zone represents some of the highest productive habitat found in southeastern Idaho. Three main vegetation types predominate: sagebrush-grassland, aspen, and conifer. Past habitat-use research indicates that aspen habitat types are highly preferred, especially during non-snow periods. Fire suppression efforts and/or intensive livestock grazing in the past has resulted in increased shrub and conifer cover with a reduction in the aspen component since historical times.

The USFS administers the majority of public ground (49% of total area) in this zone. Predominant land uses of public ground include livestock grazing, timber management, and recreation. Private ground makes up the remaining 51% and is used primarily for rangeland pasture and small grain and hay production. Since most of the potential elk winter range is privately held, depredation concerns have been significant. Several stackyards have been developed in order to alleviate some of the depredation concerns. The urban sprawl of subdivisions and small-acreage home-sites in this zone have also led to significant conflicts with wintering elk. The loss of winter range and conflicts with producers are the primary considerations limiting elk populations in Bear River Zone.

Because of relatively high amounts of conifer cover, Bear River Zone represents some of the best security cover found in southeastern Idaho. Increased use of ATVs and increases in roading will increase vulnerability standards in this zone.

### **Biological Issues**

Calf:cow ratios, as measured during aerial surveys, indicate a healthy, productive herd in Bear River Zone. High calf:cow ratios are consistent with growing populations that are not heavily influenced by density-dependent factors. Given these high levels of recruitment, relatively high harvest rates of antlerless elk are necessary to stabilize populations.

### **Inter-specific Issues**

The elk population in this zone has caused conflict with several livestock operations in the foothills. The main sources of concern are damage to fences and loss of hay, grain, and private rangeland forage.

Bear River Zone is also a highly productive mule deer area. Recent habitat changes appear to be favoring elk. Although these units do show some niche separation during winter between elk and deer, recent observations indicate that elk are beginning to occupy suitable deer winter range.

### **Predation Issues**

Potentially major predators of elk in Bear River Zone include black bears and mountain lions. The black bear population is extremely low and probably has remained unchanged for many years. Mountain lions are believed to have increased during the last 30 years. However, current recruitment rates and other elk population parameters suggest this increased mountain lion population is not having a significant effect. Coyotes are common but not believed to be a significant predator on elk.

### **Winter Feeding Issues**

Emergency winter feeding of elk only occurs periodically in this zone. The last effort occurred during the winter of 1983-1984 with 2 sites in each of Units 75 and 77. An unknown but substantial number of elk are believed to migrate and winter in Utah, with some known to use the feeding operation at Hardware Ranch.

### **Information Requirements**

An unknown but substantial number of elk are believed to migrate and winter in Utah. A better understanding of these numbers would benefit management recommendations.

Historically, harvest estimates from this zone have suffered from small sample size. The need exists for better precision of these parameters.

A more thorough understanding of mule deer/elk interactions, particularly on winter ranges, would help determine future management direction for both species. A future question for wildlife managers, land managers, and the public may be “Do we want to favor deer or elk?”

## Elk Bear River Zone (Units 75, 77, 78)

### Winter Status & Objectives

Unit	Current Status			Objective			
	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
75	2006	226	70	*	200 - 300	40 - 60	25 - 35
77	2006	41	5	*	100 - 150	20 - 30	10 - 20
78	2006	112	16	*	100 - 150	20 - 30	10 - 20
<b>Zone Total</b>		<b>379</b>	<b>91</b>	<b>*</b>	<b>400 - 600</b>	<b>80 - 120</b>	<b>45 - 75</b>
<b>Bulls per 100 Cows</b>			<b>14*</b>	<b>*</b>		<b>18 - 24</b>	<b>10 - 14</b>

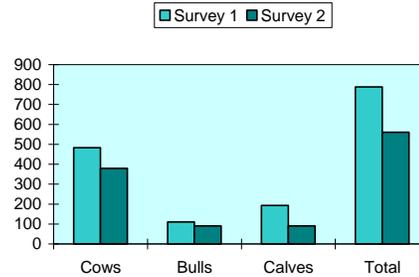
\* Adult bull numbers were unable to be obtained due to later flight time and some antler shed had occurred.



### Population Surveys

Unit	Year	Survey 1				Survey 2				
		Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
75	1996	216	21	75	312	2006	226	70	49	345
77	1996	104	34	39	177	2006	41	5	11	57
78	1996	163	56	80	299	2006	112	16	31	159
<b>Comparable Surveys Total</b>		<b>483</b>	<b>111</b>	<b>194</b>	<b>788</b>		<b>379</b>	<b>91</b>	<b>91</b>	<b>561</b>
<b>Per 100 Cows</b>			<b>23</b>	<b>40</b>				<b>24</b>	<b>24</b>	

### Comparable Survey Totals



### Zone Harvest Statistics

	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	158	162	134	198	159	184	127	127
'A' Tag	45	40	132	195	159	184	126	122
'B' Tag	0	0	0	3	0	0	1	1
CH Tag	113	122	2	0	0	0	0	4
<b>Antlered Harvest</b>	126	136	153	157	137	140	168	136
'A' Tag	32	26	61	45	26	39	60	42
'B' Tag	84	90	70	103	97	85	98	82
CH Tag	10	20	22	9	14	16	10	12
<b>Hunter Numbers</b>	1906	1798	ND	1646	1750	1800	1710	1503
'A' Tag	550	519	ND	947	1104	1083	984	704
'B' Tag	920	804	ND	676	622	693	702	709
CH Tag	436	475	ND	23	24	24	24	90
<b>% 6+ Points</b>	25	19	19	28	32	35	32	29

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

### Harvest

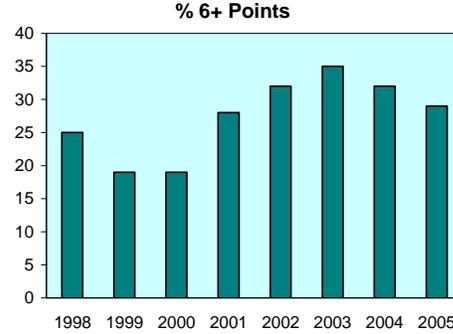
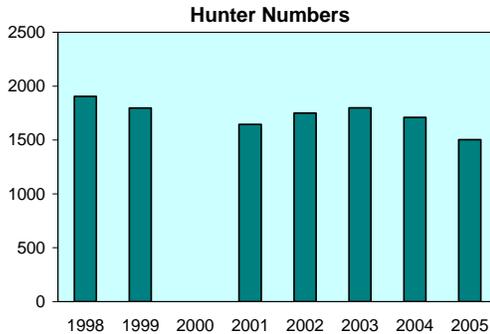
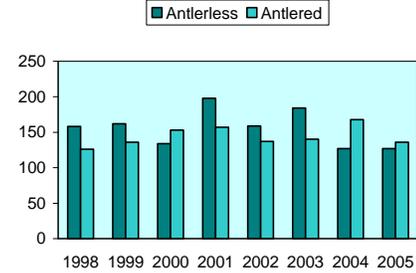


Figure 23. Bear River Zone elk status and objectives.

**PROGRESS REPORT  
SURVEYS AND INVENTORIES**

<b>STATE:</b>	<u>Idaho</u>	<b>JOB TITLE:</b>	<u>Elk Surveys and Inventories</u>
<b>PROJECT:</b>	<u>W-170-R-30</u>		
<b>SUBPROJECT:</b>	<u>6</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>1</u>		<u>Habitat Studies</u>
<b>PERIOD COVERED:</b>	<u>July 1, 2005 to June 30, 2006</u>		

**UPPER SNAKE REGION**

**Island Park Zone (Units 60, 60A, 61, 62A)**

**Management Objectives**

Objectives for Island Park Zone (Figure 24) are to maintain a wintering elk population of approximately 1,500 cows and 475 bulls, including 300 adult bulls. Currently, elk wintering on Sand Creek winter range in Unit 60A are below objective. In the past, obtaining adequate harvest on this population was difficult due to its migratory nature and the fact that significant portions of the herd spend fall in Yellowstone National Park and Harriman State Park where they are safe from harvest. In recent years, weather during hunting season has been adequate enough to get a good harvest, and we have likely harvested the population harder than planned. Bull:cow ratios are difficult to measure for the hunted portion of the population, again, because they are inflated by those animals which avoid hunting. Island Park Zone currently provides the widest array of hunting opportunity available, including archery, centerfire, and muzzleloader seasons; early and late hunting; and controlled any-bull and either-sex hunts (Appendix A).

**Historical Perspective**

Elk have been present in varying numbers in at least portions of Island Park Zone throughout recorded history. There has been a general elk season in all or part of Fremont County since 1882. This undoubtedly is the longest running general hunting opportunity in the state. During much of the early twentieth century, these hunts were based upon elk populations summering in Yellowstone National Park.

In the late 1940s, elk were first observed wintering on high desert habitats of Unit 60A, with 582 wintering elk recorded in 1952. These wintering populations varied from about 700 to 1,200 elk until the mid-1970s, at which time the elimination of general either-sex elk hunting resulted in a rapidly increasing winter population. In winter 1999-2000, a total of 4,134 elk were estimated on Sand Creek winter range.

General bull hunting was restricted to spikes-only in 1991 in response to an accelerated timber harvest program on Targhee National Forest that resulted in poor bull escapement and low

bull:cow ratios. Antlerless elk hunting opportunity has been managed through controlled hunts and, beginning in 1993, permits have been offered for any-bull hunting opportunity throughout Island Park Zone.

### **Habitat Issues**

Most elk summer range in Island Park Zone occurs on USFS lands and is dominated by gentle topography lodgepole pine communities. Douglas fir stands are common on sloped sites. Timber management practices from 1970-1990 severely altered habitat in the Island Park Zone. In the mid-1970s, approximately two-thirds to three-fourths of the merchantable lodgepole pine stands on Targhee National Forest were classified as dead or dying due to a mountain pine beetle infestation. Consequently, USFS dramatically accelerated timber harvest. The result is an extensive network of roads and clear-cuts, which reduced elk habitat effectiveness and greatly increased elk vulnerability. Recent implementation of road and area closures in some areas and increasing security cover from forest regeneration should help offset some of these effects in the future.

Sand Creek winter range supports a vegetative complex typical of high-desert shrub-steppe dominated by sagebrush. Bitterbrush and chokecherry are prominent on areas of stabilized sand. Land ownership consists of a checkerboard of state, BLM, and private property. Cooperative use-trade agreements have benefited the elk population. Agricultural encroachment continues to threaten winter range in Island Park Zone.

Domestic elk ranching and, specifically, shooter bull operations continue to grow in this area. These operations pose several threats to wild elk including loss of available habitat behind fences, obstruction of migration routes behind fences, possible disease sources, and possible genetic pollution from escapees. In 2003, a 5,000-acre domestic elk operation was constructed on the Siddoway property on South Juniper Hill. This operation is on the fringe of historic elk winter habitat but has attracted elk to the area because of domestic elk inside the fence and put elk on top of historic deer winter range next to the fence. In 2005, the Siddoway's finished construction of a new pen on Big Grassy which is the core of the traditional elk winter range. This pen is estimated to enclose 16 square miles of prime elk and moose winter habitat and place an unknown number of domestic elk in the middle of 3,000 wintering wild elk. These issues could pose a serious problem for the Island Park Elk herd.

### **Biological Issues**

Until recently, winter elk populations had been increasing steadily in Island Park Zone since they were first noticed on the Sand Creek Desert in the late 1940s. A total of 582 were recorded in 1952. This total climbed steadily to the 4,134 elk counted in 2000 and then decreased to 3,246 in 2002 and 1,748 in 2006.

Recruitment measured through sightability surveys indicates the moderately productive nature of the herd, with calf:cow ratios typically in the 30-35 calves:100 cows range. Bull:cow ratios have rebounded markedly since the implementation of spike-only general hunting in 1991. Bulls:100 cows ratios have ranged from 40-68. It should be noted, however, that these totals are

buttressed by an unknown segment of the population that spends summer and fall in Harriman State Park and Yellowstone National Park. These animals are largely un-harvested, being subjected to hunting pressure only while migrating to winter range.

### **Inter-specific Issues**

Unfortunately, little evidence exists to evaluate the potential relationships between elk, mule deer, and moose in Island Park Zone. White-tailed deer are scattered throughout Island Park Zone but are relatively uncommon. Heavy grazing/browsing by deer, elk, and moose may alter Columbian sharp-tailed grouse habitats.

Domestic sheep and cattle grazing occurs throughout Island Park Zone which could pose some competitive concerns for elk, especially on winter range during drought years.

### **Predation Issues**

Black bear densities appear to be low and stable in Island Park Zone. Grizzly bear numbers tend to be low but possibly increasing slightly. Mountain lions are rare. Coyotes are common, especially in the winter range portion of Island Park Zone, but are not known to have much impact on elk populations. Wolves recently introduced by the USFWS in Yellowstone National Park are using the area and have become established, which could affect other predators and elk.

### **Winter Feeding Issues**

No Department-sponsored feeding activities occur in Island Park Zone except under emergency situations. Agricultural encroachment on Sand Creek winter range increases risk of elk depredations on stored crops, especially under adverse winter conditions. Some feeding by private citizens, resulting in the short-stopping of elk, has occurred on Ashton Hill in recent years. Educational efforts need to continue to give non-sanctioned feeders a better understanding of problems associated with artificially-fed elk.

Periodically, agricultural producers dump excess potatoes in the Sand Creek Desert, and elk have been observed wintering on these sites.

### **Information Requirements**

Sightability estimates are needed periodically to monitor population. Also, better knowledge of summer/fall spatial distribution of this elk herd could improve achieving harvest objectives. In addition, the information is valuable to assess the effectiveness of the travel management policy on Targhee National Forest.

Some local concern over displacement of elk onto winter range and/or private agricultural ground exists for the September archery season in Unit 60. This unit historically did not have an archery hunt prior to implementation of the dual-tag framework in 1998. Better information regarding this concern is needed. However, there is little evidence that this issue has significant biological ramifications; rather, it may be more of a social concern.

## Elk Island Park Zone (Units 60, 60A, 61, 62A)

### Winter Status & Objectives

Unit	Survey Year	Current Status			Objective		
		Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
60	ND				0	0	0
60A	2006	1069	315	168	1200 - 1800	400 - 575	250 - 375
61	ND				0	0	0
62A	ND				0	0	0
<b>Zone Total</b>		<b>1069</b>	<b>315</b>	<b>168</b>	<b>1200 - 1800</b>	<b>400 - 575</b>	<b>250 - 375</b>
<b>Bulls per 100 Cows</b>			<b>29</b>	<b>16</b>		<b>30 - 35</b>	<b>18 - 22</b>

Note: ND = no survey data available.

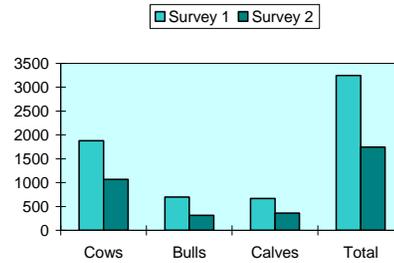


### Population Surveys

Unit	Year	Survey 1				Survey 2				
		Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
60	ND					ND				
60A	2002	1878	699	669	3246	2006	1069	315	364	1748
61	ND					ND				
62A	ND					ND				
<b>Comparable Surveys Total</b>		<b>1878</b>	<b>699</b>	<b>669</b>	<b>3246</b>		<b>1069</b>	<b>315</b>	<b>364</b>	<b>1748</b>
<b>Per 100 Cows</b>			<b>37</b>	<b>36</b>			<b>29</b>	<b>34</b>		

Note: ND = no survey data available.

### Comparable Survey Totals

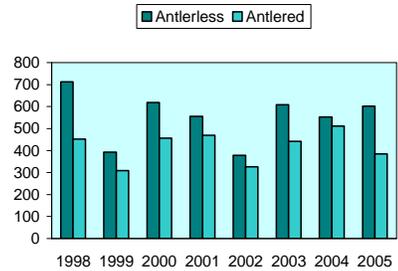


### Zone Harvest Statistics

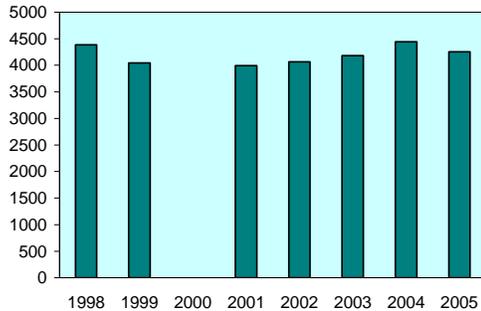
	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	713	393	618	555	378	608	553	602
'A' Tag	232	113	82	134	93	120	76	118
'B' Tag	0	0	0	0	0	0	0	0
CH Tag	481	280	536	421	285	488	477	484
<b>Antlered Harvest</b>	452	309	457	470	326	442	511	385
'A' Tag	238	185	230	232	158	159	269	171
'B' Tag	0	0	2	1	0	0	0	0
CH Tag	214	124	225	237	168	283	242	214
<b>Hunter Numbers</b>	4385	4044	ND	3994	4068	4182	4442	4255
'A' Tag	2752	2441	ND	2170	2244	2040	2302	1972
'B' Tag	0	0	ND	10	4	0	0	0
CH Tag	1633	1603	ND	1814	1820	2142	2140	2283
<b>% 6+ Points</b>	36	22	32	26	26	39	41	33

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

### Harvest



### Hunter Numbers



### % 6+ Points

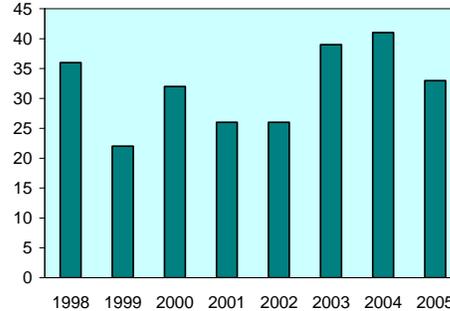


Figure 24. Island Park Zone elk status and objectives.

## **Teton Zone (Units 62, 65)**

### **Management Objectives**

Objectives for Teton Zone (Figure 25) are to maintain approximately 200 cows and 45 bulls, of which 25 should be adult bulls. This represents approximately a 17% reduction from 1996 levels and is designed to eliminate artificial feeding operations existing at Victor, Conant Creek, and Felt, as directed by the Wildlife brucellosis Task Force Report and Recommendations to the Governor (September 1998). Following elimination of feeding, the population will be allowed to recover to the extent it can be supported on natural forage. Population manipulation will be accomplished primarily through public hunting; however, capture and translocation may be used if hunting is unsuccessful in achieving objectives.

Radio-collar information suggests that well over half of the elk in this zone spend spring, summer, and fall in Wyoming or Yellowstone National Park. They often do not enter Idaho until after the standard hunting seasons are over. This presents a difficult challenge for management. These migratory elk provide little opportunity for Idaho hunters, particularly in the eastern portion of Unit 65 where they cause depredation problems during winter.

### **Historical Perspective**

Reports of elk in the 1800s and early 1900s are sketchy and inconclusive for this area; however, it is likely elk were present. General either-sex hunting was allowed until the mid-1970s. At that time, over-harvest became a concern and the format was changed to allow 5 days of general hunting for bulls only. Hunting for antlerless elk was restricted to permits. Winter range in the zone has always been limited by elevation and associated deep snows, and by agricultural development. The elk population was relatively stable through the 1980s with 50-60 animals wintering in the Game Creek/Moose Creek area, 30-40 animals wintering along Teton River in the basin, 40-50 animals being fed at a ranch on Conant Creek, and approximately 100 elk wintering in and adjacent to Teton River and its tributaries north of State Highway 33. Elk populations increased dramatically in the 1990s. The most recent survey conducted during the 2000-2001 winter estimated 340 total elk. However, mild winter conditions may have affected elk distribution.

### **Habitat Issues**

Although extensive logging and roading on national public lands over the last 3 decades has reduced elk habitat effectiveness and elk security, ample summer range remains. True winter range has always been limited in the zone due to high elevations and associated deep snows and severe temperatures. A large area of winter range in the western portion of Unit 62 has been converted to farming. Some of this land is now enrolled in the CRP program. Elk winter range was lost to the construction and subsequent failure of Teton Dam, although the greatest losses associated to that event was to deer habitat. Recently, urban sprawl, particularly in the east portion of Unit 65, has crept up the hillsides and reduced much of what limited winter range existed in that portion of the zone. Additionally, recent increases in winter recreation (snowmobiles and skiing) likely reduce suitable winter range. Efforts are underway to inventory

occupied and potential winter range in the zone as part of a strategy to end annual winter feeding of elk.

### **Biological Issues**

The most pressing biological issues in this zone relate to the overall size of the wintering population in Units 62 and 65. The Teton Basin population (Unit 65) has increased over the past 10 years and consists of 2 groups. One herd winters east and south of Victor. It is estimated the winter range in the area could support 50-60 animals. Addressing overpopulation through harvest is difficult in this area because many of the animals are in Wyoming until late winter. The other group winters along Teton River in Teton Basin. They have increased to 100 animals and pose a major depredation threat in normal winters. There is an opportunity to control them with hunting. These elk are most likely coming out of the Big Hole Mountains.

There are 2 groups of elk that have been fed in Unit 62. The Department has undergone many strategies to move or redistribute these elk through hunting. These animals have been fed in winter on private ranches at Teepee Creek and Conant Creek. The Conant Creek feed ground has been eliminated. As both a brucellosis control method and to comply with Commission policy, annual feeding operations should be eliminated. It is believed that feeding has short-stopped elk which previously migrated further to the west in winter. These elk summer in Wyoming and in the Bechler Meadows area of Yellowstone National Park.

### **Inter-specific Issues**

This zone contains a good mule deer population, a significant and relatively new white-tailed deer population in Teton Basin, and a strong moose population. The area is grazed extensively by domestic livestock. Inter-specific relationships among these species and elk are not monitored and are poorly understood. There is concern over elk herds establishing winter use in traditional mule deer winter range in Teton Canyon.

### **Predation Issues**

Black bear densities appear to be low and stable in Island Park Zone. Mountain lions are rare. Coyotes are common, especially in the winter range portion of Island Park Zone, but are not known to have much impact on elk populations. Grizzly bears are known to use this area. Wolves recently introduced by USFWS in Yellowstone National Park in 1995 are using the area and have most likely become established, which could affect elk.

### **Winter Feeding Issues**

Winter feeding is occurring at several locations in this zone on a regular basis. Continued annual feeding at these sites is in direct conflict with Commission policy and presents a brucellosis risk. Observations during the 2000-2001 aerial survey indicate that most elk in this zone are associated with private feeding operations. A description of the history of each site follows. Observations during the 2005-2006 aerial survey indicate that many elk are still associated with

private feeding in this zone but many are more spread out on smaller residential feed sites in Teton Valley.

**Victor** - A herd of approximately 50 elk traditionally wintered in the foothills east and south of Victor. Around 1990, a landowner began feeding this elk herd, which has grown each year and now numbers approximately 200 animals. The Department has rejected all requests to feed elk or establish a permanent feed ground at this site. Permanent stack yards, panels, and hazing have been employed to combat depredations at this site. A large damage payment was made to a nursery in the vicinity, which was then fenced at significant expense. The Department provided hay to this operation on 2 winters, which were deemed to be emergency cases.

**Conant Creek** - In the late 1950s, a private landowner began feeding approximately 20 elk on upper Conant Creek. Over the years, the Department has provided this landowner hay to bait the elk away from stored hay and cattle. The number of elk increased and in the interim, the Department tried to work with the landowner to solve the problem with options other than feeding. All such efforts were rejected and the landowner had successfully enlisted the support of politicians and sportsmen in continuing the feeding. Things changed in 2002 when the cattle herd tested positive for brucellosis. Since then, the cattle herd has been destroyed, a fence has been built to keep elk out of the feeding grounds, and no elk have been fed there.

**Teepee Creek (Felt)** - A landowner on Teepee Creek began feeding elk in the early 1990s. There currently are approximately 150 habituated to this operation. The Department has provided panels to the landowner to protect haystacks but has not provided any feed. It is believed this and the Conant Creek operation have short-stopped elk from migrating to winter ranges further west.

During winter 2003-2004, the Department and Winter Feeding Advisory Committee sponsored emergency feeding of 60 elk in the Packsaddle area and 80 elk east of Victor due to harsh winter conditions.

### **Information Requirements**

A comprehensive inventory of winter range in this zone is needed to accomplish the objective of ending annual winter feeding. The condition of some winter ranges may provide an opportunity for enhancement for elk, perhaps through seeding, burning, or changes in livestock management. As part of this, an assessment of the location, quality, and remaining terms of enrollment of the area's CRP lands is key if the fed populations in this zone are to become self-sufficient. Additionally, information on snowmobile use of these lands is needed. If the lands are to be made available to elk, snowmobiles should be discouraged.

## Elk Teton Zone (Units 62, 65)

Winter Status & Objectives

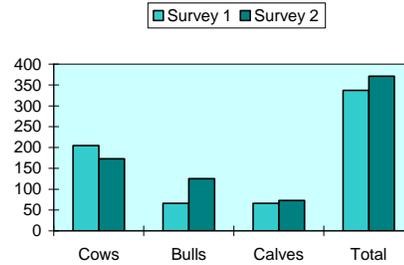
Unit	Current Status			Objective			
	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
62	2006	82	88	72	100 - 150	20 - 30	10 - 20
65	2006	91	37	23	50 - 100	15 - 25	5 - 15
<b>Zone Total</b>		<b>173</b>	<b>125</b>	<b>95</b>	<b>150 - 250</b>	<b>35 - 55</b>	<b>15 - 35</b>
<b>Bulls per 100 Cows</b>			<b>72</b>	<b>55</b>		<b>18 - 24</b>	<b>10 - 14</b>



Population Surveys

Unit	Year	Survey 1				Survey 2				
		Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
62	2001	108	49	40	197	2006	82	88	38	208
65	2001	97	17	26	140	2006	91	37	35	163
<b>Comparable Surveys Total</b>		<b>205</b>	<b>66</b>	<b>66</b>	<b>337</b>		<b>173</b>	<b>125</b>	<b>73</b>	<b>371</b>
<b>Per 100 Cows</b>			<b>32</b>	<b>32</b>				<b>72</b>	<b>42</b>	

Comparable Survey Totals



Zone Harvest Statistics

	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	66	49	78	68	63	91	83	61
'A' Tag	0	26	35	23	30	26	47	19
'B' Tag	0	0	0	0	0	1	0	0
CH Tag	66	23	43	45	33	64	36	42
<b>Antlered Harvest</b>	82	53	81	60	64	75	63	62
'A' Tag	5	0	6	11	4	16	16	9
'B' Tag	19	17	30	23	16	11	12	35
CH Tag	58	36	45	26	44	48	35	18
<b>Hunter Numbers</b>	736	749	ND	631	675	646	645	705
'A' Tag	114	396	ND	246	280	268	278	275
'B' Tag	340	86	ND	134	136	104	90	138
CH Tag	282	267	ND	251	259	274	277	292
<b>% 6+ Points</b>	30	18	48	34	37	45	41	62

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

Harvest

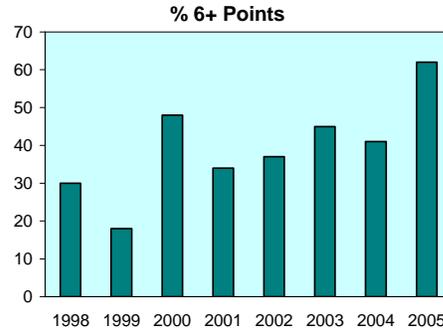
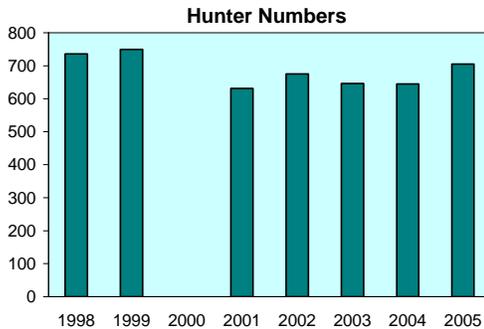
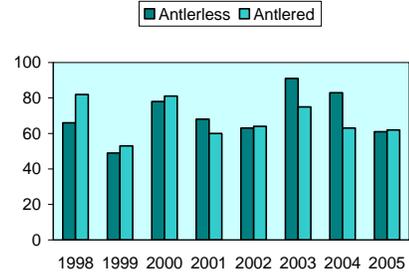


Figure 25. Teton Zone elk status and objectives.

## **Palisades Zone (Units 64, 67)**

### **Management Objectives**

Objectives for Palisades Zone (Figure 26) are to maintain approximately 500 cows and 160 bulls, of which 100 should be mature bulls. An aerial survey during 2003-2004 indicates that the population is near or at objective. Current and future management efforts will be consistent with eliminating the artificial feeding operation existing at Rainey Creek, as directed by the Wildlife Brucellosis Task Force Report and Recommendations to the Governor (September 1998). Following elimination of annual feeding, the population will be allowed to recover to the extent it can be supported on natural forage, particularly on winter ranges northwest of Dry Canyon. Population manipulation will be accomplished primarily through public hunting; however, capture and translocation will also be employed. This zone offers most of what little semi-backcountry hunting opportunity remains in eastern Idaho.

### **Historical Perspective**

Reports of elk in the 1800s and early 1900s are sketchy and inconclusive for this area; however, it is likely elk were present. General either-sex hunting was allowed until the mid-1970s. At that time, over-harvest became a concern and the format was changed to allow 5 days of general hunting for bulls only. Hunting for antlerless elk was restricted to permits. Elk damage to haystacks in Swan Valley dates back to the mid-1950s, corresponding with a loss of winter range to inundation by Palisades Reservoir on the South Fork of Snake River. In the mid-1970s, the Department began feeding elk in Rainey Creek to bait them away from livestock feeding operations. This activity has continued, when necessary, to the present and involves approximately 150 animals. The elk population wintering in this zone has increased gradually over the last 3 decades.

### **Habitat Issues**

Abundant spring, summer, and fall habitat exists in this zone. Winter range is limited and is more characteristic of mule deer habitat than elk habitat. Most elk winter range has been lost to agriculture and inundation by a large artificial reservoir, and is currently threatened by proposed housing developments. Efforts are underway to inventory both occupied and potential elk winter range in the zone as part of a strategy to end winter feeding. Opportunities to preserve or enhance winter range will be pursued. Potentially important winter ranges in the northern portion of the zone (Grandview Point) are now nearly vacant, in all probability due to displacement of elk by snowmobile activity. Winter range shrub communities on slopes in the vicinity of the mouth of Rainey Creek appear to have suffered from years of overgrazing by elk and mule deer. Mature mountain mahogany stands throughout the zone may be providing only limited forage, in addition to precluding all but a sparse understory of other species.

### **Biological Issues**

The most pressing biological issues in this zone relate to the fed elk herd at Rainey Creek. This group of about 150 animals has a documented exposure rate to brucellosis exceeding 25% based

on testing of >100 individuals. Late hunts have limited success in reducing this population. Plans have been implemented to capture and remove all positive-testing female animals and translocate negative testing animals to winter ranges northwest of Dry Canyon. This process is expected to take several years to complete. The elk are being translocated in an experimental effort to determine if they will return to their birthing summer ranges and then migrate back near their translocation site the following winter. Radio-tracking is being used to monitor this experiment.

### **Inter-specific Issues**

In addition to elk, Palisades Zone is home to an important mule deer population and a strong moose population and is grazed extensively by domestic livestock. Inter-specific relationships among these species and elk are not well-monitored and are poorly understood. Competition between elk and mule deer is probably occurring in the immediate vicinity of Rainey Creek where both species have been fed most winters since the mid-1970s. There is concern over elk herds establishing winter use in traditional mule deer winter range in the Heise area.

### **Predation Issues**

There are no known unique or unusual predator issues affecting elk populations in this zone.

### **Winter Feeding Issues**

In the late 1970s, a rancher near Irwin began feeding cattle near the mouth of Rainey Creek and along the USFS boundary. Concurrently, large areas of browse in the area were being converted to cultivation. The combination of these factors resulted in elk damaging stored hay and taking advantage of the livestock feed-lines. The Department resolved these conflicts by baiting the elk up into Rainey Creek where they have been fed ever since. It is the Department's intent to eliminate all but emergency feeding of elk in this zone. This should also reduce any brucellosis-related concerns.

### **Information Requirements**

A comprehensive inventory of winter range in this zone is needed to accomplish the objective of ending annual winter feeding. The condition of some winter ranges may provide opportunities for enhancement for elk, perhaps through burning or changes in livestock management. As part of this, an assessment of the location, quality, and remaining terms of enrollment of the area's CRP lands will be needed.

## Elk Palisades Zone (Units 64, 67)

### Winter Status & Objectives

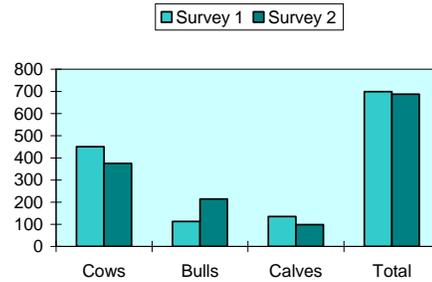
Unit	Current Status			Objective			
	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
64/65w/67	2004	375	214	113	400 - 600	125 - 200	75 - 125
<b>Zone Total</b>		<b>375</b>	<b>214</b>	<b>113</b>	<b>400 - 600</b>	<b>125 - 200</b>	<b>75 - 125</b>
<b>Bulls per 100 Cows</b>			<b>57</b>	<b>30</b>		<b>30 - 35</b>	<b>18 - 22</b>



### Comparable Survey Totals

#### Population Surveys

Unit	Year	Survey 1				Survey 2				
		Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
64/65w/67	2001	451	113	135	699	2004	375	214	99	688
<b>Comparable Surveys Total</b>		<b>451</b>	<b>113</b>	<b>135</b>	<b>699</b>		<b>375</b>	<b>214</b>	<b>99</b>	<b>688</b>
<b>Per 100 Cows</b>			<b>25</b>	<b>30</b>				<b>57</b>	<b>26</b>	



### Zone Harvest Statistics

	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	82	77	71	64	57	100	54	106
'A' Tag	0	19	19	22	16	21	54	101
'B' Tag	0	0	0	1	0	0	0	0
CH Tag	82	58	52	41	41	79	0	5
<b>Antlered Harvest</b>	37	52	53	47	58	50	69	65
'A' Tag	6	6	14	13	16	15	21	20
'B' Tag	25	38	37	34	40	35	48	44
CH Tag	6	8	2	0	2	0	0	1
<b>Hunter Numbers</b>	942	743	ND	660	711	721	767	883
'A' Tag	181	247	ND	305	300	315	477	506
'B' Tag	285	228	ND	212	259	245	290	333
CH Tag	476	268	ND	143	152	161	0	44
<b>% 6+ Points</b>	27	75	42	47	44	40	50	52

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

### Harvest

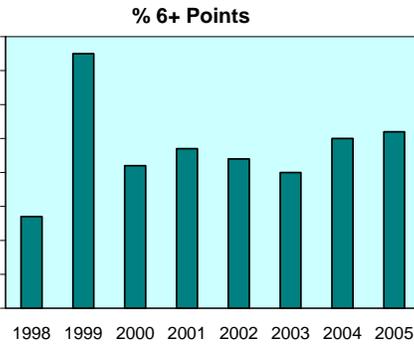
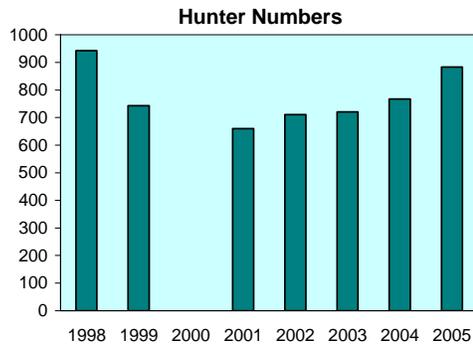
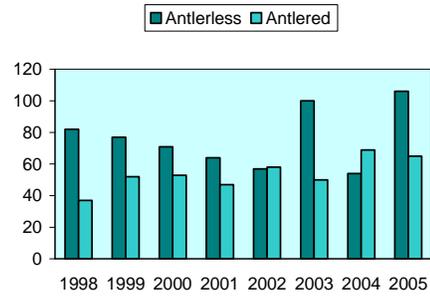


Figure 26. Palisades Zone elk status and objectives.

## **Tex Creek Zone (Units 66, 69)**

### **Management Objectives**

Objectives for Tex Creek Zone (Figure 27) are to winter approximately 2,500 cows and 525 bulls, of which 300 should be adult bulls. The most recent aerial survey information, 2004-2005, indicates that cows and bulls are above objective. However, due to the fact that a number of elk from Unit 66A winter in this zone and that objectives differ between the Tex Creek and Diamond Creek zones, extra harvest opportunity is problematic to manage. Population manipulation will be accomplished primarily through regulated public hunting. Management will be coordinated with the management of Unit 66A of Diamond Creek Zone, where a major portion of the wintering Tex Creek elk resides in summer and fall. Depredation problems will be solved using hunting as a first option.

### **Historical Perspective**

Elk were present in Tex Creek Zone during the late 1840s, as reported by Osborne Russell in *Journal of a Trapper* (1914). During the early twentieth century, elk were rarely seen according to residents of the area. The elk population increased during the 1940s and by the mid-1950s, depredation complaints on winter wheat were common. The first modern hunt was implemented in 1952 and consisted of 50 permits. Beginning in 1955, general hunting was allowed and has continued in some form to the present.

The elk population continued its growth through the following decades to the current count of 5,200. Controlling the growth of the zone's elk population has driven harvest strategies during this period. Recently, historical over-harvest of bulls and under-harvest of cows has been addressed with implementation of the dual-tag zone system with general antlerless hunts and increased antlerless permits on late controlled hunts.

### **Habitat Issues**

Habitat throughout Tex Creek Zone is or has the potential to be highly productive. The fertile, mineral rich soils of the area produce diverse plant communities including sagebrush-grasslands, extensive aspen patches, and cool moist conifer stands primarily on north- and east-facing slopes. Terrain is generally mild and much of the private land of the area is dry-farmed with cereal grains. Nearly half of the zone is private land with the balance of public lands administered by USFS, BLM, IDL, and the Department. A significant portion of private land is CRP-enrolled and is contributing substantially to the area's carrying capacity during all seasons. Tex Creek WMA, partially owned and totally managed by the Department, provides 30,000 acres of prime winter habitat for elk, mule deer, and moose in the zone. This land was purchased to mitigate for habitat inundated or destroyed by Ririe, Palisades, and Teton Dams.

### **Biological Issues**

A projected over-harvest of bull elk in this zone was occurring under the prior management scheme of 5 days of any-bull hunting. This condition was not evident on winter surveys because

the elk from Unit 66A in Diamond Creek Zone winter in this zone. These elk should be managed as 1 population in the same zone from a biological perspective. Implementation of zone management has resulted in a dramatic drop in the number of any-bull hunters and could improve the bull age structure of the population. The Tex Creek elk are productive and their future management will be heavily influenced by the need to control this population. Placing all seasonal ranges of these elk in the same zone would be appropriate to accomplish this objective.

Due to concern over total elk numbers in Unit 69 during winter being too high for the area and its impacts on the local mule deer herd, the antlerless hunt was restructured in 2004. The hunt was moved from 21 October - 7 November to 15 - 30 November. The objective of this change is to harvest more cows, especially those migrating into Unit 69 from Unit 66A. The hunt was successful in harvesting more cows but brought about some unethical hunter behavior. The later season, combined with some very unusual early storms and a lack of hunting pressure in late October and early November, brought large herds of elk onto winter range before the hunt opened. This left elk vulnerable and some hunters acted inappropriately. The hunt was successful at harvesting more elk, but even with the larger harvest, the herd was still estimated to be 5,200 animals in a post-hunt aerial survey. In 2005, the hunt was changed back to a 21 October opener but still remained open until 30 November.

### **Inter-specific Issues**

Tex Creek Zone supports an important deer population. This population during the 1992-1993 winter sustained significant mortality and is not recovering as hoped. The area also supports a strong moose population and is grazed extensively by domestic livestock. In the past, mule deer and elk appeared to be spatially separated on winter range and there were no known conflicts between elk and moose; however, relationships among these species are not monitored or well understood. There is growing concern over elk herds establishing winter use in traditional mule deer winter range in the Willow Creek Canyon complex. A graduate student research project was initiated this year to explore elk and mule deer competition in this area.

### **Predation Issues**

There are no known unique or unusual predator issues affecting the elk population in this zone.

### **Winter Feeding Issues**

Elk are not fed in this zone except on an emergency basis, which occurred during the winters of 1988-1989, 1992-1993, and 2003-2004. Because of the zone's proximity to known brucellosis-infected herds in Wyoming and Idaho, it is extremely critical that feeding on anything less than a genuine emergency basis should be avoided. Large round bales of grass-alfalfa hay have been left in the field on Tex Creek WMA periodically to attract elk to the area and hold them on that winter range.

During winter 2003-2004, approximately 2,000 elk had crossed Willow Creek and many were very close to Iona Hill. After a few elk were killed on railroad tracks close to Iona, the Department decided to drive the elk back to Tex Creek WMA and bait them there with hay to

keep them away from town and potential trouble. The operation required 2 driving operations and feeding ~76 tons of hay to over 1,400 elk. The elk were successfully held until the end of winter.

### **Information Requirements**

In 1978, 1979, and 1980, the Department conducted radio-telemetry studies of elk wintering on Tex Creek WMA, the results of which indicated these elk summered primarily in Units 66 and 66A with some summering in Units 69 and 76. This work was duplicated in 1998-1999 with results showing the same trends in distribution and movement. Of concern, however, is the low proportion of marked animals remaining in the zone during summer and fall. Information from this work may result in new harvest strategies designed to favor the zone's resident animals. The new graduate student project should hopefully shed some more light on deer/elk competition and distribution of the 2 species.

### **Literature Cited**

RUSSELL, O. 1914. Journal of a Trapper, 1834-1843. Syms-York, Boise, Idaho.

## Elk Tex Creek Zone (Units 66, 69)

### Winter Status & Objectives

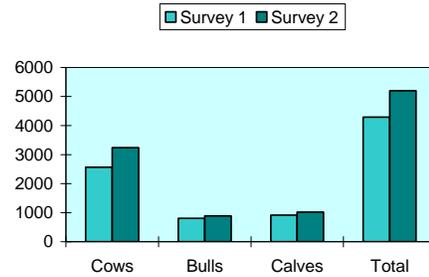
Unit	Survey Year	Current Status			Objective		
		Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
66/69	2005	3243	887	407	2000 - 3000	425 - 625	250 - 350
<b>Zone Total</b>		<b>3243</b>	<b>887</b>	<b>407</b>	<b>2000 - 3000</b>	<b>425 - 625</b>	<b>250 - 350</b>
<b>Bulls per 100 Cows</b>			<b>27</b>	<b>13</b>		<b>18 - 24</b>	<b>10 - 14</b>



### Population Surveys

Unit	Year	Survey 1				Survey 2				
		Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
66/69	2000	2569	808	916	4293	2005	3243	887	1026	5200
<b>Comparable Surveys Total</b>		<b>2569</b>	<b>808</b>	<b>916</b>	<b>4293</b>		<b>3243</b>	<b>887</b>	<b>1026</b>	<b>5200</b>
<b>Per 100 Cows</b>			<b>31</b>	<b>36</b>				<b>27</b>	<b>32</b>	

### Comparable Survey Totals



### Zone Harvest Statistics

	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	334	297	296	185	164	202	661	649
'A' Tag	7	138	171	159	143	188	634	506
'B' Tag	0	0	0	2	2	3	19	4
CH Tag	327	159	125	24	19	11	8	139
<b>Antlered Harvest</b>	191	195	201	267	265	272	380	342
'A' Tag	73	73	38	44	49	48	98	59
'B' Tag	118	118	159	223	216	224	281	266
CH Tag	0	4	4	0	0	0	1	17
<b>Hunter Numbers</b>	2638	2257	ND	2114	2168	2346	3505	4533
'A' Tag	413	1168	ND	1205	1149	1235	2173	3026
'B' Tag	827	516	ND	830	977	1072	1292	1211
CH Tag	1398	573	ND	79	42	39	40	296
<b>% 6+ Points</b>	7	14	31	32	21	30	26	28

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

### Harvest

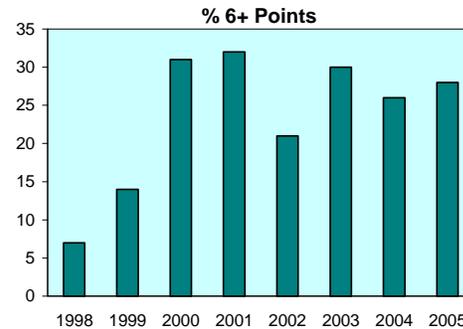
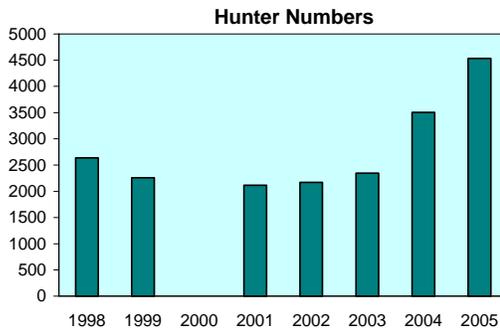
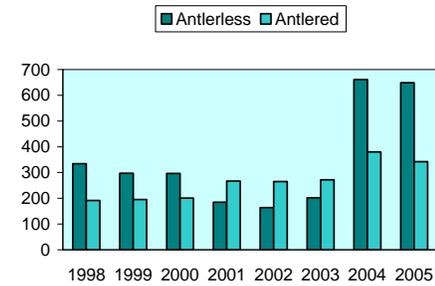


Figure 27. Tex Creek Zone elk status and objectives.

**PROGRESS REPORT  
SURVEYS AND INVENTORIES**

<b>STATE:</b>	<u>Idaho</u>	<b>JOB TITLE:</b>	<u>Elk Surveys and Inventories</u>
<b>PROJECT:</b>	<u>W-170-R-30</u>		
<b>SUBPROJECT:</b>	<u>7</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>1</u>		<u>Habitat Studies</u>
<b>PERIOD COVERED:</b>	<u>July 1, 2005 to June 30, 2006</u>		

**SALMON REGION**

**Salmon Zone (Units 21, 21A, 28, 36B)**

**Management Objectives**

Objectives for Salmon Zone (Figure 28) are to increase elk in Unit 21 from a current herd level of 1,200 adults to approximately 1,800; reduce cow elk numbers in Units 21A and 28 from 5,600 to approximately 4,100 while maintaining bulls near current levels; and reduce cows in Unit 36B from 1,600 to approximately 1,100 while increasing bulls from near 100 to 200. To stimulate and maintain herd productivity, balance depredation concerns with a reasonably large elk population, and minimize potential impacts on mule deer, a 5-year period of herd reduction totaling about 33% of previous numbers was accomplished in Unit 21 in the late 1990s. Antlerless elk hunts in Units 28 and 36B have been too low to achieve herd reduction and stabilization and will be increased. Antlerless harvest will be reinstated in Unit 21A in response to move the population toward desired levels. Salmon Zone will continue to be managed to produce general hunting opportunity and 10-14 mature bulls:100 cows postseason.

**Historical Perspective**

Although present from the time of the first white explorers and trappers, elk were in low abundance in Salmon Zone through much of the twentieth century. From 1917 until the 1940s, parts of Units 28 and 36B were designated as no hunting "game preserves." Sixty-two elk from Yellowstone Park were released in Panther Creek drainage (Unit 28) in 1937. As has occurred over much of the west, elk herds have expanded dramatically since the mid-1970s. Today, Salmon Zone winters approximately 8,700 elk. Aggressive antlerless harvest since 1992 stabilized and reduced rapidly growing herds in Units 21 and 21A, and may have reduced growth rates in the other 2 units. Declining calf recruitment and bull:cow ratios in recent years suggest that elk herds may have reached undesirable densities that contributed to declining populations.

About 4,000 people have participated in rifle hunts and 300 in archery hunts (Appendix A) in Salmon Zone in recent years, harvesting approximately 400-500 cows and 500-1,200 bulls annually.

## **Habitat Issues**

Cattle ranching, livestock grazing, mining, timber harvest, and recreation are the dominant human uses of the landscape in Salmon Zone. Elk depredations on agricultural crops are localized, but are especially pronounced in dry years.

In some areas of Salmon Zone, elk winter in mature stands of mountain mahogany that appear relatively stagnant and unproductive. Forests are slowly encroaching into shrub and grassland communities. Spread of noxious weeds such as knapweed and leafy spurge could ultimately have significant impacts on winter range productivity.

A large-scale forest fire occurred in the western portion of Unit 28 in 2000. Fires removed forest canopy in large tracts, creating conditions for increased elk forage production.

## **Biological Issues**

Aerial surveys in 1992 and 1994 found exceptionally high winter elk densities in Unit 21A, a migratory herd shared by Idaho and Montana. Winter range concerns in Idaho and depredation concerns in Montana prompted significant increases in antlerless hunting in both states with a goal of reducing the herd to 2,000-2,500 wintering elk. The average total antlerless harvest increased from about 100 animals to about 300 animals, and by 2000, the herd was reduced to approximately 1,800 animals. Similar reductions occurred in Unit 21; total winter elk numbers dropped to 1,550 during surveys in 2001. Antlerless elk harvest was discontinued in Units 21 and 21A in 2000. Elk numbers in Unit 21 have remained essentially stable, but the population in Unit 21A dramatically increased by 2005, reaching 3,345 animals. Therefore, antlerless harvest was implemented in the 2005 season

Units 28 and 36B experienced major population increases (57% and 30%, respectively) through the 1990s, despite modest increases in antlerless harvest. Antlerless harvest was reduced after 2000, particularly in Unit 28, in response to low calf:cow ratios. Total population in Unit 36B has been stable, but the sex ratio has become more skewed toward females. In contrast, cow numbers in Unit 28 reached record high numbers in 2005 and exceeded objectives by 1,000 animals. As a group, these units were only moderately productive, averaging 30-35 calves:100 cows during the 1990s; production has declined and become erratic in recent years. Zone-wide, we observed 20 calves:100 cows in 2005. The decline in productivity in Salmon Zone as elk numbers increased is worrisome. Partly as a result of this modest productivity and partly because they are relatively accessible general hunt units, Units 28 and 36B have weak bull:cow ratios (13-18 bulls per 100 cows).

## **Inter-specific Issues**

This zone contains the majority of the most productive deer units in Salmon Region; parts of Units 21, 21A, and 36B contain high densities of wintering deer. Current high elk densities may be having some impact on the area's capacity to produce deer. This may be particularly pronounced during severe winters when deep snow moves elk down onto deer winter ranges.

Similar problems may also occur with bighorn sheep, but the amount of habitat overlap is much less.

### **Predation Issues**

Black bear densities appear to be moderate in Salmon Zone. Mountain lion densities are at least moderate, perhaps high in some areas, and appear to have increased in recent years, probably partly due to increased elk densities. Coyotes are common, but not known to have much impact on elk populations. Two packs of wolves reintroduced by USFWS have become established in Unit 28. Other packs are resident in Units 21, 36B, and Unit 21A. The addition of wolves will likely have an impact on black bear, mountain lion, and coyote populations. At some level, predation could benefit elk herds to the extent that it keeps elk herds below habitat carrying capacity, where they can be more productive. However, excessive levels of predation can also suppress prey populations to undesirably low levels. At this point, it is unclear what the net impact of predation will be with the new mix of large predators.

### **Winter Feeding Issues**

Aside from an occasional small private feeding activity and a few elk fed incidental to the rare deer feeding operations, elk have not been deliberately fed recently in Salmon Zone.

### **Information Requirements**

Impacts of elk on mule deer production and survival are suspected but unknown. The most productive elk herds are those maintained at a level below carrying capacity. Better information is needed to identify appropriate elk densities that will maintain optimum productivity and harvest. Potential impact of the new mix of large predators is unknown.

## Elk Salmon Zone (Units 21, 21A, 28, 36B)

### Winter Status & Objectives

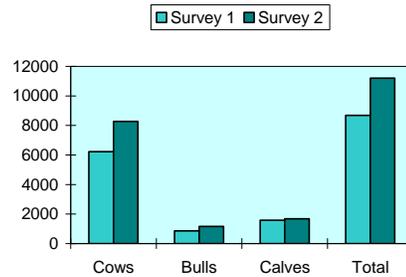
Unit	Survey Year	Current Status			Objective		
		Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
21	2005	1077	157	102	1200 - 1800	250 - 350	150 - 225
21A	2005	2279	394	215	1200 - 1800	250 - 350	150 - 225
28	2005	3327	525	275	1500 - 2300	325 - 475	175 - 275
36B	2005	1596	86	29	700 - 1100	150 - 250	75 - 125
<b>Zone Total</b>		<b>8279</b>	<b>1162</b>	<b>621</b>	<b>4600 - 7000</b>	<b>975 - 1425</b>	<b>550 - 850</b>
<b>Bulls per 100 Cows</b>			<b>14</b>	<b>8</b>		<b>18 - 24</b>	<b>10 - 14</b>



### Population Surveys

Unit	Year	Survey 1				Survey 2				
		Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
21	2001	1125	172	250	1552	2005	1077	157	165	1399
21A	2000	1149	240	403	1792	2005	2279	394	625	3345
28	2001	2560	286	490	3336	2005	3327	525	663	4547
36B	2000	1393	161	442	1996	2005	1596	86	232	1914
<b>Comparable Surveys Total</b>		<b>6227</b>	<b>859</b>	<b>1585</b>	<b>8676</b>		<b>8279</b>	<b>1162</b>	<b>1685</b>	<b>11205</b>
<b>Per 100 Cows</b>			<b>14</b>	<b>25</b>				<b>14</b>	<b>20</b>	

### Comparable Survey Totals



### Zone Harvest Statistics

	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	536	409	382	231	203	188	206	541
'A' Tag	7	20	8	43	41	47	36	97
'B' Tag	0	7	0	1	3	2	4	2
CH Tag	529	382	374	187	159	139	166	442
<b>Antlered Harvest</b>	513	480	610	662	450	643	769	691
'A' Tag	59	25	26	29	21	20	27	26
'B' Tag	454	455	581	627	415	613	725	647
CH Tag	0	0	3	6	14	10	17	18
<b>Hunter Numbers</b>	4766	4365	ND	3261	3580	3628	3699	4086
'A' Tag	327	305	ND	258	315	323	340	381
'B' Tag	3407	2931	ND	2498	2832	2972	2986	2957
CH Tag	1032	1129	ND	505	433	333	373	748
<b>% 6+ Points</b>	26	16	19	23	24	24	21	27

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

### Harvest

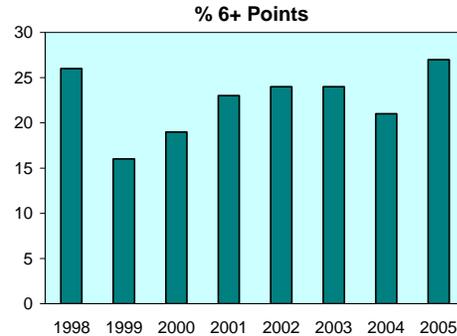
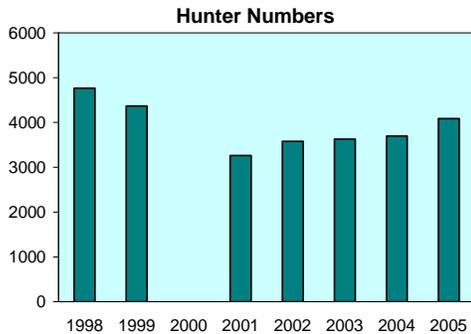
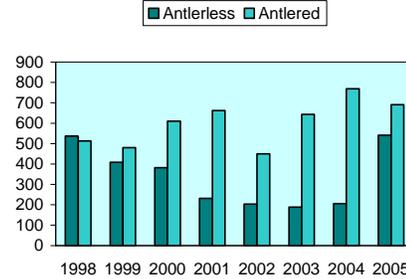


Figure 28. Salmon Zone elk status and objectives.

## **Lemhi Zone (Units 29, 37, 37A, 51)**

### **Management Objectives**

Objectives for Lemhi Zone (Figure 29) are to reduce the elk population to approximately 2,000 cows and 650 bulls. Harvest objectives designed to reduce elk numbers in Lemhi Zone through 2004 were moderately successful. The reduction was intended to stimulate and maintain herd productivity, balance depredation concerns with maintaining a reasonably large elk population, and minimize potential impacts on mule deer. Herds will be managed to maintain 10-14 mature bulls:100 cows in Unit 37, 14-18 mature bulls:100 cows in Unit 51, and 18-22 mature bulls:100 cows in Units 29 and 37A.

### **Historical Perspective**

Elk abundance was low in Lemhi Zone through much of the twentieth century. Most of the zone has been managed for decades under very conservative controlled hunt strategies. In 1993, Unit 51 changed from general any-bull harvest to general hunting for spike bulls with controlled any-bull permits. As has occurred over much of the west, elk herds have expanded dramatically from the mid-1970s through the 1990s. Today, Lemhi Zone winters approximately 5,200 elk, a reduction of 1,400 from recent highs but still 1,200 more than during the mid 1990s.

About 1,400 people each year participated in rifle hunts in Lemhi Zone through the late 1990s. However, with increases in controlled and general antlerless elk opportunities, hunter numbers have increased to approximately 3,000 per year. Conservative bull harvest management has produced exceptional bull:cow ratios and a reputation for large mature bulls. Controlled bull hunts in this zone have become very desirable; rifle permits are much in demand and difficult to draw. The area's reputation for many mature bulls has also made this zone a very attractive archery hunt; up to approximately 1,300 people have participated in recent years, 40-50% of them in Unit 29 alone.

### **Habitat Issues**

Cattle ranching, livestock grazing, and recreation are dominant human uses of the landscape in Lemhi Zone. The zone is in a generally arid region where forage production can be strongly influenced by growing season precipitation. During drought years, high elevation mesic habitats are more heavily utilized by elk, while low elevation riparian areas and wet meadows are more heavily utilized by cattle. Elk depredations on agricultural crops are common and are especially pronounced in dry years. Expanded irrigated agriculture, passage of legislation authorizing depredation payments, and legislation authorizing depredation hunts combined with increasing elk populations have led to more depredation complaints in Unit 51.

In some areas of Lemhi Zone, elk winter in mature stands of mountain mahogany which appear relatively stagnant and unproductive. In other areas, elk winter on open sagebrush-grassland ridgetops. Forests are slowly encroaching into shrub and grassland communities. Spread of noxious weeds, such as knapweed and leafy spurge, could ultimately have significant impacts on winter range productivity.

## **Biological Issues**

In 1992, Units 29 and 37A contained strongly-performing elk populations; a base of 1,200 cows was producing 600 calves and 600 bulls. By 1998 and into 2003, the herd had increased to over 1,700 cows, but was still only producing 600 calves. This loss in productivity may be related to higher-than-desirable elk densities. Through intensive antlerless harvest, the herd in Unit 37 was significantly reduced. Although herd size is still over objective levels, harvest was reduced beginning in 2003 as the herd neared desired levels.

## **Inter-specific Issues**

Although historically Lemhi Zone supported high deer densities, the zone currently has relatively modest deer populations. Current high elk densities may be having some impact on deer productivity.

When elk numbers are high, as they are currently, livestock operators often perceive elk to be strong competitors for range forage. However, elk generally remove a minor portion of forage compared to livestock.

## **Predation Issues**

Black bear densities appear to be low and stable in Lemhi Zone. Mountain lion densities are low to moderate and appear to have increased in recent years in Units 29, 37, and 37A, probably partly due to increased elk densities. Coyotes are common, but not known to have much impact on elk populations.

## **Winter Feeding Issues**

Because this is an arid area with relatively little snowfall, winter feeding has not occurred recently in Lemhi Zone.

## **Information Requirements**

Impacts of elk on mule deer production and survival are suspected but unknown. The most productive elk herds are those maintained at a level below carrying capacity. Better information is needed to identify appropriate elk densities that will maintain optimum productivity and harvest. Better information on elk migration patterns is also needed.

## Elk Lemhi Zone (Units 29, 37, 37A, 51)

### Winter Status & Objectives

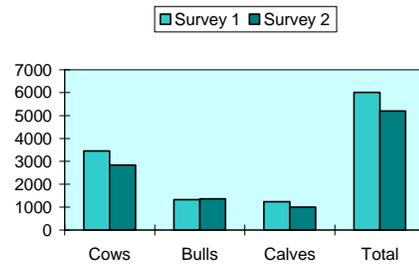
Unit	Survey Year	Current Status			Objective		
		Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
29/37A	2003	1703	805	321	1000 - 1600	300 - 500	200 - 300
37	2003	395	83	54	150 - 250	30 - 50	20 - 30
51	2003	737	479	109	500 - 700	125 - 200	75 - 125
<b>Zone Total</b>		<b>2835</b>	<b>1367</b>	<b>484</b>	<b>1650 - 2550</b>	<b>455 - 750</b>	<b>295 - 455</b>
<b>Bulls per 100 Cows</b>			<b>48</b>	<b>17</b>		<b>30 - 35</b>	<b>14 - 18</b>



### Population Surveys

Unit	Year	Survey 1				Survey 2				
		Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
29/37A	1998	1467	527	449	2443	2003	1703	805	618	3126
37	2000	909	217	316	1442	2003	395	83	100	578
51	1999	1078	580	470	2128	2003	737	479	281	1497
<b>Comparable Surveys Total</b>		<b>3454</b>	<b>1324</b>	<b>1235</b>	<b>6013</b>		<b>2835</b>	<b>1367</b>	<b>999</b>	<b>5201</b>
<b>Per 100 Cows</b>			<b>38</b>	<b>36</b>				<b>48</b>	<b>35</b>	

### Comparable Survey Totals



### Zone Harvest Statistics

	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	478	437	796	598	662	567	402	461
'A' Tag	105	245	267	200	206	234	112	125
'B' Tag			0	3	0	0	0	0
CH Tag	373	192	529	395	456	333	290	336
<b>Antlered Harvest</b>	334	356	391	409	422	412	417	389
'A' Tag	112	132	167	155	133	122	176	126
'B' Tag			0	10	0	6	0	0
CH Tag	222	224	224	244	289	284	241	263
<b>Hunter Numbers</b>	2600	2603	ND	3316	3099	3125	2904	2607
'A' Tag	1429	1651	ND	1355	1380	1492	1296	1135
'B' Tag			ND	38	23	28	0	0
CH Tag	1171	952	ND	1923	1696	1605	1608	1472
<b>% 6+ Points</b>	44	47	58	42	47	42	44	46

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

### Harvest

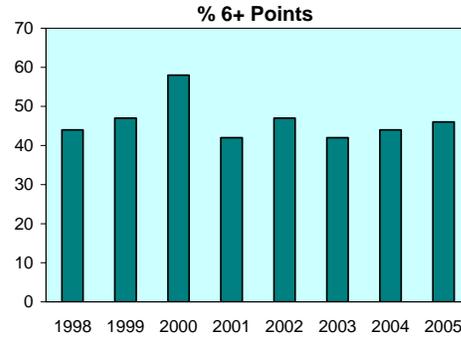
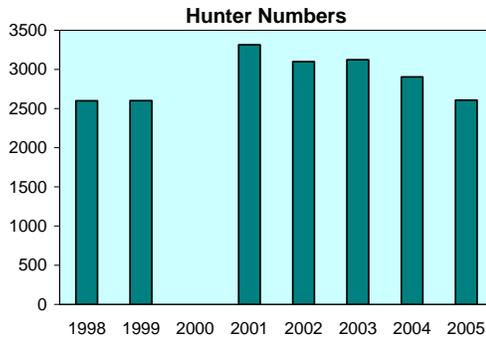
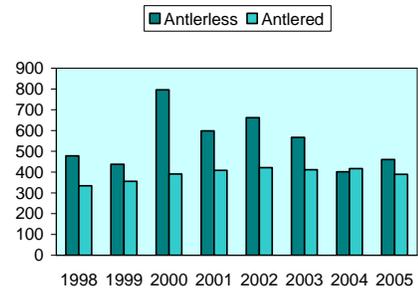


Figure 29. Lemhi Zone elk status and objectives.

## **Beaverhead Zone (Units 30, 30A, 58, 59, 59A)**

### **Management Objectives**

Objectives for Beaverhead Zone (Figure 30) are to maintain Units 58, 59, and 59A at current herd levels (about 1,300 cows and 350 bulls) and to maintain elk densities in Units 30 and 30A at approximately 1,250 cows and 325 bulls. Herds will be managed to maintain 14-18 mature bulls:100 cows in Units 58, 59, and 59A and 18-24 mature bulls:100 cows in Units 30 and 30A. To maintain herd productivity, balance depredation concerns with maintaining a reasonably large elk population, and minimize potential impacts on mule deer, a 5-year period of herd reduction totaling about 40% was recommended in Units 30 and 30A during the late 1990s. Surveys in 2004 indicated populations are at or slightly below objective levels. Accordingly, cow harvest was reduced to maintain relatively high productivity and stabilize herd size.

### **Historical Perspective**

Elk abundance was low in Beaverhead Zone through much of the twentieth century. In fact, elk numbers were apparently low enough that a few elk from Horse Prairie and Yellowstone National Park were translocated to Units 30 and 30A around 1918. Units 30 and 30A were closed to hunting through the 1940s, managed as general hunts during the 1950s, and changed to general hunts with harvest quotas in the 1960s. Since 1970, Units 30 and 30A have been managed under very conservative controlled hunt strategies. Controlled antlerless hunts were initiated in Units 59 and 59A in 1979 and in Unit 58 in 1988. In 1991, Units 58, 59, and 59A changed from general any-bull management to general hunting for spike bulls with controlled any-bull permits. As has occurred over much of the west, elk herds have expanded dramatically since the mid-1970s. Today, Beaverhead Zone winters approximately 4,400 elk and supports about 2,000 hunters annually.

Many elk in this zone, particularly in Units 30 and 30A, spend winter in Idaho and migrate to summer ranges in Montana. Traditionally, elk in Units 58, 59, and 59A summered in Idaho and wintered in Montana; however, since the early half of the 1980s, more elk are wintering in Idaho. In recent years, high elk densities have become a controversial issue with landowners and livestock grazers in both states.

### **Habitat Issues**

Cattle ranching, livestock grazing, and recreation are dominant human uses of the landscape in Beaverhead Zone. The zone is in a generally arid region where forage production can be strongly influenced by growing season precipitation. During drought years, high elevation mesic habitats are more heavily utilized by elk while low elevation riparian areas and wet meadows are more heavily utilized by cattle. Elk depredations on agricultural crops are common and are especially pronounced in dry years in Units 30, 30A, and along Medicine Lodge Creek.

Forests are slowly encroaching into shrub and grassland communities. Spread of noxious weeds, such as knapweed and leafy spurge, could ultimately have significant impacts on winter range

productivity. Elk wintering on windswept ridgetops in Units 59 and 59A are periodically subject to *Oxytropis* poisoning.

### **Biological Issues**

The elk population in Unit 30 experienced very high growth rates through the mid-1990s, despite attempts to increase antlerless harvest and considerable depredation hunt activity. Units 30A, 58, 59, and 59A show relatively stable populations. Calf production and bull:cow ratios are showing signs of decline in this zone.

### **Inter-specific Issues**

Although historically Beaverhead Zone supported high mule deer densities, the zone currently has relatively moderate deer populations. Current high elk densities may be having some impact on deer populations and/or winter range.

When elk numbers are high, as they are currently, livestock operators often perceive elk to be strong competitors for range forage. However, elk generally remove a minor portion of the forage compared to livestock. During some winters, elk move into Unit 63 and cause haystack depredations in the Montevieu, Cedar Butte, and Beaver Creek areas.

### **Predation Issues**

Black bear densities appear to be low and stable in Beaverhead Zone. Mountain lion densities are low to moderate and appear to have increased in recent years in Units 30 and 30A, probably partly due to increased elk densities. Coyotes are common, but not known to have much impact on elk populations.

### **Winter Feeding Issues**

Because this is an arid area with relatively little snowfall, winter feeding has not occurred recently in Beaverhead Zone.

### **Information Requirements**

Impacts of elk on mule deer production and survival are suspected but unknown. The most productive elk herds are those maintained at a level below carrying capacity. Better information is needed to identify appropriate elk densities that will maintain optimum productivity and harvest.

## Elk Beaverhead Zone (Units 30, 30A, 58, 59, 59A)

Winter Status & Objectives

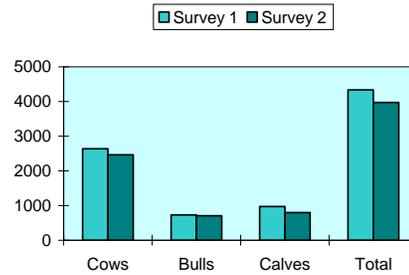
Unit	Survey Year	Current Status			Objective		
		Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
30	2004	1272	381	280	800 - 1200	250 - 350	150 - 250
30A	2004	178	122	88	200 - 300	40 - 60	25 - 35
58	2005	676	130	70	400 - 600	100 - 175	50 - 100
59/59A	2005	341	73	41	650 - 950	150 - 250	100 - 150
<b>Zone Total</b>		<b>2467</b>	<b>706</b>	<b>479</b>	<b>2050 - 3050</b>	<b>540 - 835</b>	<b>325 - 535</b>
<b>Bulls per 100 Cows</b>			<b>29</b>	<b>19</b>		<b>25 - 29</b>	<b>14 - 18</b>



Population Surveys

Unit	Year	Survey 1				Survey 2				
		Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
30	2001	1103	304	338	1745	2004	1272	381	413	2066
30A	2001	188	33	65	286	2004	178	122	61	361
58	2000	769	185	316	1270	2005	676	130	200	1006
59/59A	2000	577	205	254	1036	2005	341	73	123	537
<b>Comparable Surveys Total</b>		<b>2637</b>	<b>727</b>	<b>973</b>	<b>4337</b>		<b>2467</b>	<b>706</b>	<b>797</b>	<b>3970</b>
<b>Per 100 Cows</b>			<b>28</b>	<b>37</b>			<b>29</b>	<b>32</b>		

Comparable Survey Totals

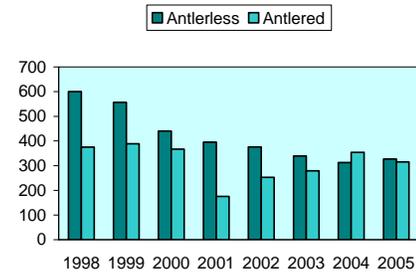


Zone Harvest Statistics

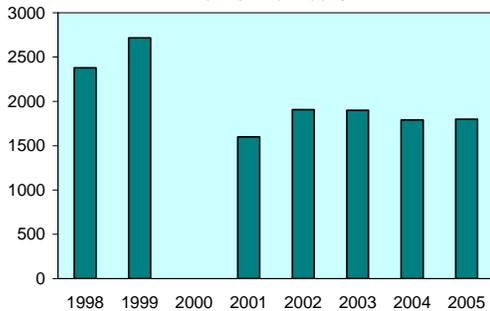
	1998	1999	2000	2001	2002	2003	2004	2005
<b>Antlerless Harvest</b>	600	556	440	395	376	339	313	327
'A' Tag	71	396	73	95	79	66	48	72
'B' Tag	0	0	0	0	0	0	0	0
CH Tag	529	160	367	300	297	273	265	255
<b>Antlered Harvest</b>	375	389	367	176	252	279	354	315
'A' Tag	216	218	181	52	102	117	208	154
'B' Tag	0	0	1	5	0	2	0	0
CH Tag	159	171	185	119	150	160	146	161
<b>Hunter Numbers</b>	2378	2716	ND	1601	1906	1899	1788	1799
'A' Tag	1274	2055	ND	646	893	906	964	1020
'B' Tag	0	0	ND	18	13	13	0	0
CH Tag	1104	661	ND	937	1000	980	824	779
<b>% 6+ Points</b>	29	28	28	40	35	37	31	40

Note: % 6+ pts does not include spike-only harvest. ND = no data available.

Harvest



Hunter Numbers



% 6+ Points

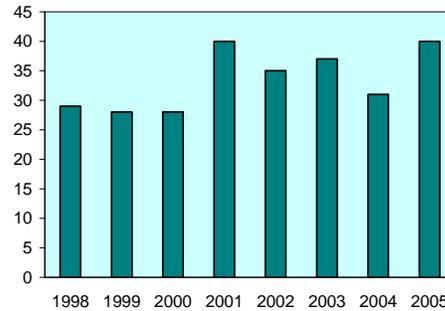


Figure 30. Beaverhead Zone elk status and objectives.

**APPENDIX A**

IDAHO

2005 SEASON

ELK RULES

# Big Game Seasons

**Deer, Elk, Antelope**  
January - December 2005

**Bear, Mountain Lion**  
August 2005 - June 2006



**RULES  
2005**



*Photo courtesy Jerry Hugo*

## **Including Controlled Hunts for Deer, Elk, Antelope, and Black Bear**

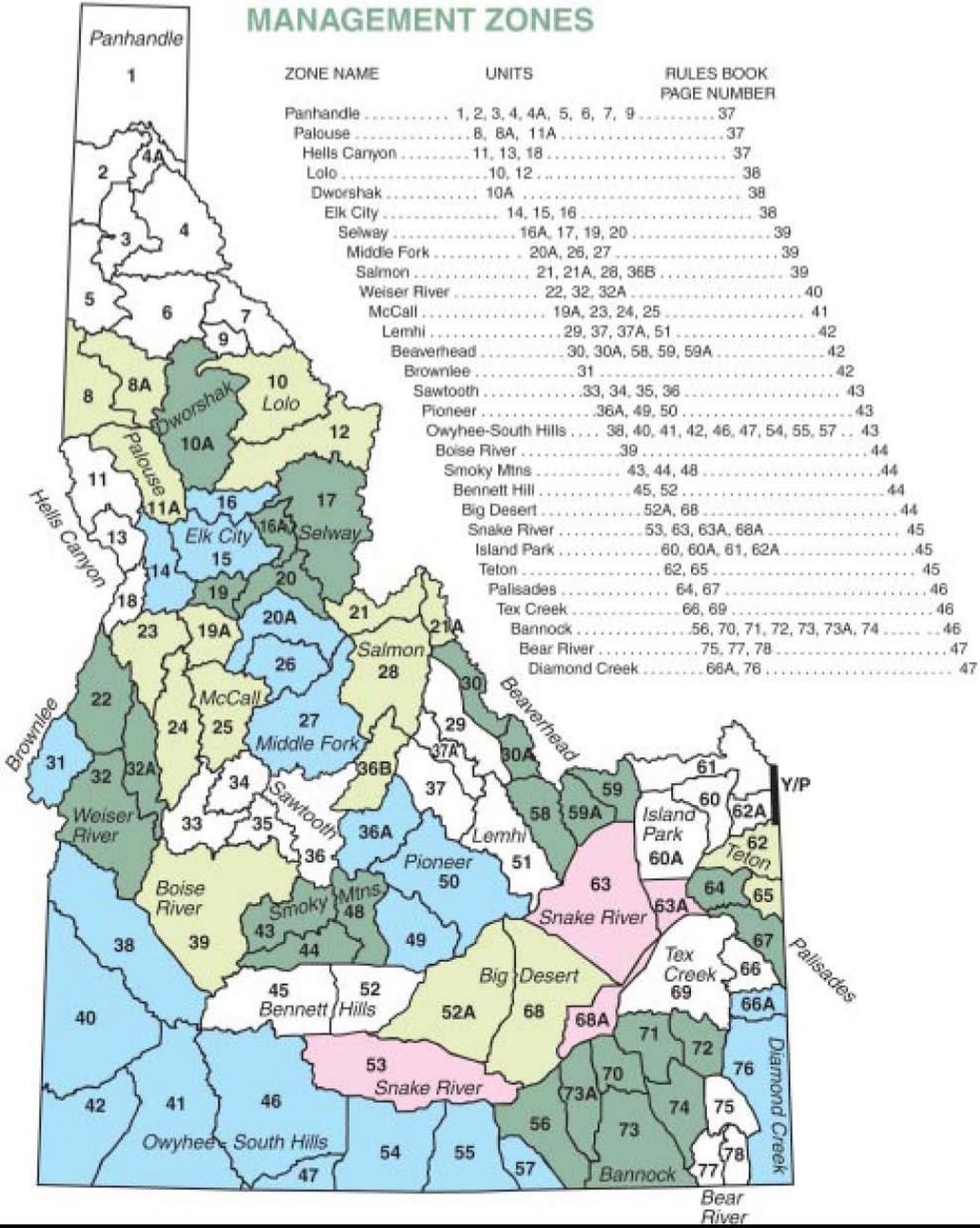
- **Controlled Hunt application period:  
May 1 - May 31.**
- **Use for all controlled hunts, including  
2006 spring bear.**
- **Apply early for controlled hunts to win big buck\$.  
See page 20 for application form.**
- **APPLY FOR A SUPER HUNT TAG, HELP PAY FOR ACCESS YES!  
See page 62.**



The colors on this map are only to distinguish zone boundaries

### 2005 ELK MANAGEMENT ZONES

ELK



## 2005 GENERAL ELK SEASONS

### PANHANDLE ZONE (Units 1, 2, 3, 4, 4A, 5, 6, 7, 9)

	August / September	October	November	December
<b>A</b> TAG	ARCHERY — any elk Aug 30 - Sep 30	ANY WEAPON — antlered only Oct 25 - Oct 31	MUZZLELOADER — antlered only UNITS 4, 7 ONLY Nov 10 - Dec 1	ARCHERY — any elk Dec 10 - Dec 23 <i>See archers caution pg 35.</i>
<b>B</b> TAG	ARCHERY — any elk Aug 30 - Sep 14	ANY WEAPON — antlered only UNITS 2, 3, 4, 4A, 5, 6, 7, 9: Oct 10 - Nov 3 UNIT 1: Oct 10 - Oct 24		MUZZLELOADER — spike only Dec 2 - Dec 8
		ANY WEAPON — any elk Oct 15 - Oct 19 EXCEPT that portion of UNIT 1 within the Priest River and within the Pend Oreille River drainage downstream from Priest River is <b>CLOSED</b> to antlerless harvest.		

### PALOUSE ZONE (Units 8, 8A, 11A)

37

	August / September	October	November	December
<b>A</b> TAG	ARCHERY — any elk Aug 30 - Sep 30 <i>See archers caution pg 35.</i> ANY WEAPON — antlerless only Near cultivated fields outside National Forest boundary. <i>See Note B, Page 41.</i> Aug 1 - Sep 15			MUZZLELOADER — spike OR antlerless UNIT 8A ONLY: Dec 2 - Dec 9 <i>See Note A, Page 41.</i>
<b>B</b> TAG	ARCHERY — spike OR antlerless Aug 30 - Sep 14	ANY WEAPON — antlered only Oct 10 - Oct 24		



*This elk season partially overlaps with a same-weapon general deer season in part of the zone. Check deer seasons beginning on page 22.*

### HELLS CANYON ZONE (Units 11, 13, 18) — Controlled Hunts Only.

ELK

ELK

LOLO ZONE (Units 10, 12)

August / September		October	November	December
<b>A TAG</b>	ARCHERY — any elk Aug 30 - Sep 30			
<b>B TAG</b>		ANY WEAPON — antlered only Oct 10 - Nov 3		
<b>Note: 1,600 B Tag Quota Available On First-Come, First-Served Basis</b>				
<p><b>Lolo Motorway Permits:</b> A Forest Service permit is required to travel the section of the Lolo Motorway (Road 500) between Parachute Road 569 and Weitas Butte Road 557 from July 15 - October 1. Permits are not required from October 2 through July 14. No permit is needed to cross into Gravey Creek on Road 107. The permits will be required during the Lewis &amp; Clark commemoration years (2003-2006). To apply for a permit or for more information, visit <a href="http://www.fs.fed.us/r1/clearwater">www.fs.fed.us/r1/clearwater</a>, or call the Lochsa Ranger District at (208) 926-4274.</p>				

DWORSHAK ZONE (Unit 10A)

August / September		October	November	December
<b>A TAG</b>	ARCHERY — any elk Aug 30 - Sep 30		MUZZLELOADER spike or antlerless: Nov 21 - Nov 24 spike ONLY: Nov 25 - Dec 9	
<b>B TAG</b>	ARCHERY — spike OR antlerless Aug 30 - Sep 14	ANY WEAPON — antlered only Oct 10 - Nov 3		
<b>Note: 2,380 B Tag Quota Available On First-Come, First-Served Basis</b>				

ELK CITY ZONE (Units 14, 15, 16)

August / September		October	November	December
<b>A TAG</b>	ARCHERY — any elk UNIT 15 ONLY Aug 30 - Sep 30		MUZZLELOADER UNITS 14, 16 ONLY: spike OR antlerless Nov 21 - Dec 9	ARCHERY — any elk UNIT 15 ONLY Dec 5 - Dec 20
<b>B TAG</b>	ARCHERY — spike OR antlerless UNIT 15 ONLY Aug 30 - Sep 14	ANY WEAPON — antlered only UNITS 15, 16: Oct 10 - Nov 3 UNIT 14: Oct 10 - Oct 24		
<b>Note: 1,790 B Tag Quota Available On First-Come, First-Served Basis</b>				

**SELWAY ZONE (Units 16A, 17, 19, 20)**

	September	October	November	December
<b>A</b> TAG		ANY WEAPON — antlered only Oct 1 - Oct 31		
<b>B</b> TAG	ANY WEAPON — antlered only Sep 15 - Sep 30		ANY WEAPON — antlered only Nov 1 - Nov 18	
<b>Note: 1,255 B Tag Quota Available On First Come, First Served Basis.</b>				

**MIDDLE FORK ZONE (Units 20A, 26, 27)**

	September	October	November	December
<b>A</b> TAG		ANY WEAPON — Oct 1 - Oct 31 Units 20A, 26 - any elk Unit 27 - antlerless or brow-tined or larger bulls ONLY		
<b>B</b> TAG	ANY WEAPON — Sep 15 - Sep 30 Units 20A, 26 - any bull Unit 27 -brow-tined or larger bulls ONLY		ANY WEAPON — Nov 1 - Nov 18 Units 20A, 26 - any bull Unit 27 - brow-tined or larger bulls ONLY	
<b>Note: 1,636 B Tag Quota Available On First Come, First Served Basis.</b>				

**SALMON ZONE (Units 21, 21A, 28, 36B)**

	August / September	October	November	December
<b>A</b> TAG	ARCHERY — any elk Aug 30 - Sep 30 <b>UNITS 21, 21A, 36B ONLY</b> See archers caution pg 35.		TRADITIONAL MUZZLELOADER - antlerless only Nov 10 - Nov 30 Units 21A, 36B ONLY	ARCHERY — any elk <b>UNIT 28 ONLY</b> Dec 1 - Dec 31
	ANY WEAPON - antlerless only Aug 1 - Sep 30 Near cultivated fields outside National Forest boundary in <b>Units 21A, 28, 36B ONLY</b> See Note B, Page 41.			
<b>B</b> TAG	ARCHERY — antlerless only Aug 30 - Sep 14 <b>UNIT 36B ONLY</b>	ANY WEAPON — antlered only Oct 15 - Nov 8		

ELK

ELK

WEISER RIVER ZONE (Units 22, 32, 32A)

August / September		October	November	December
A TAG	<p>ARCHERY — any elk Aug 30 - Sep 30 <i>See note A below.</i> <i>Motorized Vehicle Restriction</i> Units 32, 32A, <i>See Note 3,</i> <i>Page 52.</i> </p>			
	<p>ANY WEAPON — antlerless only <b>UNIT 22 ONLY</b> Aug 15 - Sep 30 <i>Outside National Forest</i> <i>System Boundary</i> <i>See Note C below.</i></p>	<p>ANY WEAPON — antlerless only <b>UNIT 32 ONLY: Aug 1 - Nov 30</b> <b>Please obtain permission to hunt private land before buying this tag!</b> <i>See Note B below,</i> <b>Extremely Limited Access.</b> <i>Motorized Vehicle Restriction</i> <i>See Note 3, Page 52.</i></p>		
B TAG		<p>ANY WEAPON — antlered only Oct 25 - Nov 3 <i>Motorized Vehicle Restriction Units 32, 32A, See Note 3, Page 52.</i></p>		

40

**Note A** — EXCEPT, that portion of Unit 32 west of the following boundary: Beginning at the Unit 32/38 boundary at Emmett, then north on Highway 52 to the Van Dussen Road, then north on the four Mile Road to the Unit 32/32A boundary is CLOSED.

**Note B** — That portion of Unit 32 west of the following boundary: Beginning at the Unit 32/38 boundary at Emmett, then north on Highway 52 to the Van Dussen Road, then north on the four Mile Road to the Unit 32/32A boundary. Most elk are on private property in this area.

**Note C** — You may hunt only outside the National Forest System Boundary. The National Forest System Boundary is a legislatively set boundary — it is not necessarily the boundary of Forest Service property. State, private, and other lands within the National Forest System Boundary are not open to hunting during this season. (Please refer to a U.S. Forest Service travel plan map for the location of this boundary.)

**MCCALL ZONE (Units 19A, 23, 24, 25)**

	August / September	October	November	December
<b>A</b> <b>TAG</b>	<b>ARCHERY</b> — any elk Aug 30 - Sep 30	<b>ANY WEAPON</b> — spike only <i>Short-range weapons ONLY</i> <i>within described boundaries in</i> <i>Unit 24, see Note A below.</i> Oct 5 - Oct 14	<b>MUZZLELOADER</b> — antlerless only Nov 10 - Dec 15 UNITS 19A, 23, 24 ONLY	
	<b>SHORT-RANGE WEAPONS ONLY</b> — antlerless only <b>UNITS 23 &amp; 24 ONLY</b> <i>Outside National Forest</i> <i>Boundary, see Note B below.</i> Aug 15 - Sep 30			
<b>B</b> <b>TAG</b>	<b>ANY WEAPON</b> — antlered only Oct 15 - Nov 3 <i>Short-range weapons only within described boundaries,</i> <i>see Note A below.</i>			

41

**Note A — Short-Range Weapons ONLY in That Portion of Unit 24 Within the Following Boundary** — Beginning in McCall at the junction of State Highway 55 and Boydston Street, then south on Boydston Street to West Valley Road, then west and south along West Valley Road and West Mountain Road to Cabarton Road, then north on Cabarton Road to State Highway 55, then north on State Highway 55 to Farm-To-Market Road then north on Farm-To-Market Road to Elo Road, then west on Elo Road to State Highway 55, then north on State Highway 55 to the point of beginning.

**Note B** — You may hunt only outside the National Forest System Boundary. The National Forest System Boundary is a legislatively set boundary — it is not necessarily the boundary of Forest Service property. State, private, and other lands within the National Forest System Boundary are not open to hunting during this season. (Please refer to a U.S. Forest Service travel plan map for the location of this boundary.)



**ELK**

**LEMHI ZONE (Units 29, 37, 37A, 51)**

August / September		October	November	December
<b>A</b> <b>TAG</b>	<p>ARCHERY — any elk Aug 30 - Sep 30 <b>See archers caution pg 35.</b> <i>Motorized Vehicle Restriction</i> <i>See Note 3, Page 52.</i></p> 		<p><b>MUZZLELOADER</b> — antlerless only Nov 25 - Dec 9 <i>Motorized Vehicle Restriction, See Note 3, Page 52.</i></p>	
	<p><b>ANY WEAPON</b> — antlerless only Near cultivated fields outside National Forest boundary. <i>See Note B, Page 41.</i> <b>UNIT 37A: Aug 1 - Sep 30</b> <b>UNIT 29: Aug 1 - Sep 15</b> <i>Motorized Vehicle Restriction</i> <i>See Note 3, Page 52.</i></p>		<p><b>ANY WEAPON</b> — spike only Nov 1 - Nov 7 <b>UNITS 37, 51 ONLY</b> <i>Motorized Vehicle Restriction</i> <i>See Note 3, Page 52.</i></p>	<p><b>NOTE:</b> A pass is required from the IDFG office, 4279 Commerce Circle, Idaho Falls, to hunt on INEEL lands in Unit 51 during any general season hunt.</p>
<p><b>No B Tags in this Zone — See Controlled Hunts</b></p>				

**BEAVERHEAD ZONE (Units 30, 30A, 58, 59, 59A)**

42

August / September		October	November	December
<b>A</b> <b>TAG</b>	<p>ARCHERY — any elk Aug 30 - Sep 30 <b>See archers caution pg 29.</b> <i>Motorized Vehicle Restriction,</i> <i>See Note 3, Page 52.</i></p> 	<p><b>TRADITIONAL MUZZLELOADER ONLY</b> — antlerless only Oct 15 - Oct 31 <b>Units 30, 30A ONLY</b> <i>Motorized Vehicle Restriction,</i> <i>See Note 3, Page 52.</i></p> 	<p><b>ANY WEAPON</b> — spike only Oct 15 - Oct 31 <b>Units 58, 59, 59A ONLY</b> <i>Motorized Vehicle Restriction,</i> <i>See Note 3, Page 52.</i></p>	
	<p><b>ANY WEAPON</b> — antlerless only Near cultivated fields outside National Forest boundary. <i>See Note B, page 41.</i> <b>UNIT 30 ONLY: Aug 1 - Sep 30</b> <i>Motorized Vehicle Restriction,</i> <i>See Note 3, Page 52.</i></p>	<p><b>NOTE:</b> A pass is required from the IDFG office, 4279 Commerce Circle, Idaho Falls, to hunt on any INEEL lands in that portion of Unit 58 south of and including the Kyle Canyon drainage north and west of State Highway 22 in any general season hunt.</p>		
<p><b>No B Tags in this Zone — See Controlled Hunts</b></p>				

**BROWNLEE ZONE (Unit 31)**

August / September		October	November	December
<b>A</b> <b>TAG</b>	<p>ARCHERY — any elk Aug 30 - Sep 30</p> 			
<p><b>No B Tags in this Zone — See Controlled Hunts</b></p>				

**SAWTOOTH ZONE (Units 33, 34, 35, 36)**

	August / September	October	November	December
<b>A</b> TAG	ARCHERY — any elk Aug 30 - Sep 30	ANY WEAPON — spike only Oct 5 - Oct 14	MUZZLELOADER — antlerless only Nov 10 - Nov 30	
<b>B</b> TAG	ARCHERY — antlerless only Aug 30 - Sep 14	ANY WEAPON — antlered only Oct 15 - Nov 8		

**PIONEER ZONE (Units 36A, 49, 50)**

	August / September	October	November	December
<b>A</b> TAG	ARCHERY — any elk Aug 30 - Sep 30 See archers caution pg 35. <i>Motorized Vehicle Restriction,                      See Note 3, Page 52.</i>		ANY WEAPON — spike only Nov 1 - Nov 7 <i>Motorized Vehicle Restriction,                      See Note 3, Page 52.</i>	
	ANY WEAPON — antlerless only Near cultivated fields outside National Forest boundary. <i>See Note B on page 41.</i> <b>UNIT 36A ONLY</b> Aug 1 - Sep 30 <i>Motorized Vehicle Restriction,                      See Note 3, Page 52.</i>			
<b>No B Tags in this Zone — See Controlled Hunts</b>				

43

**OWYHEE - SOUTH HILLS ZONE (Units 38, 40, 41, 42, 46, 47, 54, 55, 57) — Controlled Hunts Only.**



**ELK**

**BOISE RIVER ZONE (Unit 39)**

	September	October	November	December
<b>A</b> TAG	TRADITIONAL MUZZLELOADER Sep 8 - Sep 30 - antlerless only 		ARCHERY ONLY — any elk Nov 10 - Nov 30 <i>See Note C, Page 47.</i>	
<b>B</b> TAG			ANY WEAPON — antlered only Nov 1 - Nov 9	

**SMOKY MOUNTAINS ZONE (Units 43, 44, 48)**

	August / September	October	November	December
<b>A</b> TAG	ARCHERY — any elk UNITS 43, 48 ONLY Aug 30 - Sep 30 <i>Motorized Vehicle Restriction Unit 48, See Note 3, Page 52.</i>		ANY WEAPON — spike only Nov 10 - Nov 16 <i>Motorized Vehicle Restriction Unit 48, See Note 3, Page 52.</i>	
<b>No B Tags in this Zone — See Controlled Hunts</b>				

44

**BENNETT HILLS ZONE (Units 45, 52)**

	September	October	November	December
<b>A</b> TAG			ANY WEAPON — spike only Nov 1 - Nov 9 <i>Motorized Vehicle Restriction, See Note 3, Page 52.</i>	
<b>No B Tags in this Zone — See Controlled Hunts</b>				

**BIG DESERT ZONE (Units 52A, 68) — Controlled Hunts Only.**

**SNAKE RIVER ZONE (Units 53, 63, 63A, 68A)**

	August / September	October	November	December
<b>A</b> TAG	ARCHERY— any elk UNIT 68A ONLY Aug 1 - Sep 30 	ARCHERY — antlerless only UNIT 68A ONLY Oct 1 - Dec 31 		
	ANY WEAPON— any elk UNITS 53, 63 ONLY Aug 1 - Aug 30 <i>Motorized Vehicle Restriction Unit 53, See Note 3, Page 52.</i> 	ANY WEAPON — antlerless only UNITS 53, 63 ONLY Sep 1 - Dec 31 <i>Motorized Vehicle Restriction Unit 53, See Note 3, Page 52.</i> 	UNIT 63A CLOSED <i>NOTE: A pass is required from the IDFG office, 4279 Commerce Circle, Idaho Falls, to hunt in Unit 63 within one-half mile inside the north and east boundary of the INEEL which is adjacent to agricultural land.</i>	
<b>No B Tags in this Zone</b>				

**ISLAND PARK ZONE (Units 60, 60A, 61, 62A)**

	August / September	October	November	December
<b>A</b> TAG	ARCHERY — any elk Aug 30 - Sep 30 	ANY WEAPON — spike only Oct 15 - Oct 28 	MUZZLELOADER — spike <i>OR</i> antlerless UNIT 61 ONLY Nov 11 - Dec 9	
<b>No B Tags in this Zone — See Controlled Hunts</b>				

**TETON ZONE (Units 62, 65)**

	August / September	October	November	December
<b>A</b> TAG	ARCHERY — any elk Aug 30 - Sep 30 	ANY WEAPON — antlerless only Oct 22 - Nov 5 		
<b>B</b> TAG	ARCHERY — spike <i>OR</i> antlerless Aug 30 - Sep 14 	ANY WEAPON — antlered only Oct 15 - Oct 21 		

**ELK**

**ELK**

**PALISADES ZONE (Units 64, 67)**

August / September		October	November	December
<b>A TAG</b>	ARCHERY — any elk Aug 30 - Sep 30 	ANY WEAPON — antlerless only Nov 15 - Nov 30 		
<b>B TAG</b>	ARCHERY — spike OR antlerless Aug 30 - Sep 14 	ANY WEAPON — antlered only Oct 15 - Oct 21 		

**TEX CREEK ZONE (Units 66, 69)**

46

August / September		October	November	December
<b>A TAG</b>	ARCHERY — any elk Aug 30 - Sep 30  <i>Motorized Vehicle Restriction See Note 3, Page 52.</i>	ANY WEAPON — antlerless only Oct 22 - Nov 30  <i>Motorized Vehicle Restriction See Note 3, Page 52.</i>		
<b>B TAG</b>	ARCHERY — spike OR antlerless Aug 30 - Sep 14  <i>Motorized Vehicle Restriction See Note 3, Page 52.</i>	ANY WEAPON — antlered only Oct 15 - Oct 21  <i>Motorized Vehicle Restriction See Note 3, Page 52.</i>		

**BANNOCK ZONE (Units 56, 70, 71, 72, 73, 73A, 74)**

August / September		October	November	December
<b>A TAG</b>	ARCHERY — any elk Aug 30 - Sep 30  <i>Motorized Vehicle Restriction Units 56, 70, 73, See Note 3, Page 52.</i>	ANY WEAPON — antlerless only <b>UNITS 70, 71, 72, 73, 73A, 74 ONLY:</b> Oct 25 - Nov 15  <i>Motorized Vehicle Restriction Units 70, 73, See Note 3, Page 52.</i>	MUZZLELOADER — antlerless only Nov 16 - Nov 30  <i>Motorized Vehicle Restriction Units 56, 70, 73, See Note 3, Page 52.</i>	
<b>No B Tags in this Zone — See Controlled Hunts</b>				

### BEAR RIVER ZONE (Units 75, 77, 78)

August / September	October	November	December
<b>A TAG</b> <b>ARCHERY</b> — any elk Aug 30 - Sep 30 <i>Motorized Vehicle Restriction,                      See Note 3, Page 52.</i>	<b>ANY WEAPON</b> — antlerless only Oct 25 - Nov 15 <i>Motorized Vehicle Restriction,                      See Note 3, Page 52.</i>	<b>MUZZLELOADER</b> — antlerless only Nov 16 - Dec 19 <i>Motorized Vehicle Restriction,                      See Note 3, Page 52.</i>  PRIVATE LANDS in that portion of Unit 75 between U.S. Highway 30 and the Bear River are <b>CLOSED</b> .	
<b>B TAG</b> <b>ARCHERY</b> — spike <i>OR</i> antlerless Aug 30 - Sep 14 <i>Motorized Vehicle Restriction,                      See Note 3, Page 52.</i>	<b>ANY WEAPON</b> — antlered only Oct 15 - Oct 24 <i>Motorized Vehicle Restriction,                      See Note 3, Page 52.</i>		

### DIAMOND CREEK ZONE (Units 66A, 76)

August / September	October	November	December
<b>A TAG</b> <b>ARCHERY</b> — any elk Aug 30 - Sep 30			
<b>No B Tags in this Zone — See Controlled Hunts</b>			

#### ELK GENERAL SEASON SPECIAL AREA DESCRIPTIONS

- **Note A — Unit 8A Muzzleloader Spike or Antlerless Hunt** — That portion of Unit 8A east of State Highway 6 and State Highway 9 and north of the following line: Beginning at the boundary of Unit 8A at its junction with State Highway 8 at Deary, then east on Highway 8 to Forest Service Road 1963 at Helmer, then south and east on Forest Service Road 1963 to Long Meadow Creek, then southeast on Long Meadow Creek to Dworshak Reservoir, then east along the shoreline of Dworshak Reservoir to the Unit 8A boundary at Dent Bridge.
- **Note B — Outside the National Forest Boundary in Palouse, Lemhi, Beaverhead and Pioneer Zones, and Units 21A, 28, and 36B in Salmon Zone— Antlerless Hunts:** These hunts open only outside National Forest boundary within one mile of private fields on which cultivated crops are currently growing. The National Forest Boundary is a legislatively set boundary — it is not necessarily the boundary of Forest Service property. State, private and other lands within the National Forest Boundary are not open to hunting during this season. (Please refer to a U.S. Forest Service travel plan map for the location of this boundary.) "Private fields on which cultivated crops are currently growing" is defined as: fields on which soil has been used or broken up for the raising of crops, and artificially irrigated pasture. "Currently" means during the current or most recent growing season. Lands enrolled in the Conservation Reserve Program (CRP) or other set-aside farm programs are specifically excluded.
- **Note C — Unit 39 Archery Hunt:** That portion of Unit 39 within Ada County and that portion within the following boundary: Beginning at the intersection of state highway 21 and the Middle Fork Boise River road (Forest Rd 268), east on Forest Rd 268 to Cottonwood Creek-Thorn Creek Road (Forest Rd 377), north and west on Forest Road 377 to State Highway 21, south and west on Highway 21 to the point of beginning is CLOSED.



**2005 CONTROLLED ELK HUNTS (22,156 Permits)**  
**ANTLERED ELK**

**CONTROLLED ELK**

Hunt No.	Season Dates	Controlled Hunt Areas	Permits	Notes
2001	Oct 10 - Nov 3	11-1	71	
2002	Oct 10 - Nov 3	18	145	
2003	Oct 1 - Oct 14	19A	5	
2004	Oct 1 - Oct 14	23-1	5	
2005	Oct 1 - Oct 24	29-1	252	<i>Motorized Vehicle Restriction, See note 3, Page 52</i>
2006	Oct 1 - Oct 14	30-1* (see pg 53)	30	<i>Motorized Vehicle Restriction, See note 3, Page 52</i>
2007	Nov 1 - Nov 30	30-2* (see pg 53)	100	<i>Motorized Vehicle Restriction Unit 30, See note 3, Page 52</i>
2008	Nov 1 - Nov 30	30A	10	<i>Motorized Vehicle Restriction, See note 3, Page 52</i>
2009	Oct 15 - Nov 8	31-2	40	
2010	Oct 1 - Oct 31	36A-1	97	<i>Motorized Vehicle Restriction, See note 3, Page 52</i>
2011	Oct 1 - Oct 31	36A-2* (see pg 53)	118	<i>Motorized Vehicle Restriction, See note 3, Page 52</i>
2012	Oct 1 - Oct 24	37	20	<i>Motorized Vehicle Restriction, See note 3, Page 52</i>
2013	Oct 1 - Oct 24	37A	94	<i>Motorized Vehicle Restriction, See note 3, Page 52</i>
2014	Aug 30 - Sep 30	40* (see pg 54)	5	
2015	Oct 15 - Nov 24	40* (see pg 54)	40	
2016	Sep 25 - Oct 10	43-1	10	
2017	Oct 15 - Nov 9	43-1	125	
2018	Nov 10 - Nov 24	43-1	125	
2019	Sep 25 - Oct 10	44	20	
2020	Oct 15 - Nov 9	44	175	
2021	Sep 25 - Oct 10	45* (see pg 54)	30	<i>Very limited access, Motorized Vehicle Restriction, See note 3, Page 52</i>
2022	Oct 15 - Nov 9	45* (see pg 54)	50	<i>Very limited access, Motorized Vehicle Restriction, See note 3, Page 52</i>
2023	Dec 1 - Dec 17	45* (see pg 54)	50	<i>Very limited access, Motorized Vehicle Restriction, See note 3, Page 52</i>
2024	Sep 25 - Oct 10	48-1	10	<i>Motorized Vehicle Restriction, See note 3, Page 52</i>
2025	Oct 15 - Nov 9	48-1	150	<i>Motorized Vehicle Restriction, See note 3, Page 52</i>
2026	Sep 25 - Oct 10	49	20	<i>Motorized Vehicle Restriction, See note 3, Page 52</i>
2027	Oct 15 - Oct 31	49	225	<i>Motorized Vehicle Restriction, See note 3, Page 52</i>
2028	Oct 1 - Oct 31	50-1	197	<i>Motorized Vehicle Restriction, See note 3, Page 52</i>
2029	Oct 1 - Oct 14	51	35	<i>Motorized Vehicle Restriction, See note 3, Page 52</i>
2030	Nov 1 - Nov 30	51	125	<i>Motorized Vehicle Restriction, See note 3, Page 52</i>
2031	Oct 1 - Nov 30	52A* (see pg 54)	75	
2032	Oct 15 - Nov 24	54* (see pg 54)	15	<i>Motorized Vehicle Restriction Unit 47, See note 3, Page 52</i>
2033	Oct 15 - Nov 9	56	20	<i>Motorized Vehicle Restriction, See note 3, Page 52</i>
2034	Nov 1 - Nov 30	58-1* (see pg 54)	75	<i>Motorized Vehicle Restriction, See note 3, Page 52</i>
2035	Oct 1 - Oct 14	60-1* (see pg 54)	50	
2036	Nov 1 - Dec 7	60-2* (see pg 54)	300	
2037	Nov 1 - Nov 10	61	148	
2038	Oct 1 - Oct 14	66A* (see pg 54)	50	<i>Includes Unit 76</i>
2039	Oct 25 - Nov 9	66A* (see pg 54)	625	<i>Includes Unit 76</i>
2040	Oct 1 - Oct 14	70* (see pg 54)	25	<i>Motorized Vehicle Restriction Units 70, 73, See note 3, Page 52</i>
2041	Oct 15 - Oct 24	70* (see pg 54)	200	<i>Motorized Vehicle Restriction Units 70, 73, See note 3, Page 52</i>
2042	Oct 1 - Oct 14	75* (see pg 54)	25	<i>Motorized Vehicle Restriction, See note 3, Page 52</i>

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

**2005 CONTROLLED HUNTS**  
**ANTLERLESS ELK**

Hunt No.	Season Dates	Controlled Hunt Areas	Permits	Notes
2043	Oct 20 - Nov 13	8-1* (see pg 52)	25	
2044	Oct 20 - Nov 13	8-2* (see pg 52)	50	
2045	Nov 21 - Dec 31	8-1* (see pg 52)	50	
2046	Nov 21 - Dec 31	8-2* (see pg 52)	100	
2047	Dec 10 - Dec 31	10A	50	
2048	Aug 1 - Sep 15	11-2	50	Very limited access
2049	Oct 20 - Nov 13	11-1	150	
2050	Oct 20 - Dec 31	11A	75	Very limited access
2051	Oct 10 - Nov 3	13	100	Very limited access
2052	Dec 10 - Dec 31	14	75	
2053	Oct 10 - Nov 3	18	75	
2054	Oct 15 - Nov 8	19A	150	
2055	Dec 1 - Dec 9	21A	150	
2056	Oct 1 - Oct 12	22-1	400	
2057	Oct 13 - Oct 24	22-1	300	
2058	Oct 25 - Nov 3	22-1	100	
2059	Oct 1 - Oct 14	22-2	100	
2060	Nov 10 - Nov 30	22-3	100	
2061	Oct 1 - Oct 14	23-2	100	
2062	Oct 5 - Nov 5	23-3	200	Very limited access
2063	Oct 15 - Nov 8	23-2	125	
2064	Oct 15 - Nov 8	23-4	150	Very limited access
2065	Oct 15 - Nov 8	24-1	300	
2066	Oct 15 - Nov 8	24-2	150	
2067	Oct 15 - Nov 8	25	125	
2068	Nov 10 - Nov 30	28	250	
2069	Nov 1 - Nov 20	29-2* (see pg 53)	400	Motorized Vehicle Restriction, See note 3, Page 52
2070	Dec 1 - Dec 9	30-2* (see pg 53)	160	Motorized Vehicle Restriction Unit 30, See note 3, Page 52
2071	Aug 1 - Dec 31	31-1	400	Landowner permission required, See note 2, Page 52
2072	Oct 1 - Oct 14	31-2	50	
2073	Oct 15 - Nov 9	31-2	50	
2074	Oct 1 - Nov 3	32-1	100	Motorized Vehicle Restriction, See note 3, Page 52 Very limited access
2075	Nov 4 - Nov 30	32-1	200	Motorized Vehicle Restriction, See note 3, Page 52 Very limited access
2076	Aug 1 - Aug 29 Oct 5 - Dec 31	32-2	400	Motorized Vehicle Restriction, See note 3, Page 52 Landowner permission required, See note 2, Page 52
2077	Oct 1 - Oct 12	32A	200	Motorized Vehicle Restriction, See note 3, Page 52
2078	Oct 13 - Oct 24	32A	200	Motorized Vehicle Restriction, See note 3, Page 52
2079	Oct 25 - Nov 3	32A	100	Motorized Vehicle Restriction, See note 3, Page 52
2080	Nov 10 - Nov 30	32A	100	Motorized Vehicle Restriction, See note 3, Page 52
2081	Dec 1 - Dec 9	33-1	100	
2082	Oct 1 - Oct 14	36-1	100	
2083	Oct 1 - Oct 14	36-2	50	
2084	Nov 10 - Nov 30	36A-1	150	Motorized Vehicle Restriction, See note 3, Page 52
2085	Oct 15 - Oct 28	36A-2* (see pg 53)	200	Motorized Vehicle Restriction, See note 3, Page 52
2086	Nov 5 - Nov 18	36A-2* (see pg 53)	200	Motorized Vehicle Restriction, See note 3, Page 52
2087	Dec 1 - Dec 15	36A-2* (see pg 53)	250	Motorized Vehicle Restriction, See note 3, Page 52
2088	Dec 1 - Dec 9	36B	250	
2089	Nov 1 - Nov 20	37	10	Motorized Vehicle Restriction, See note 3, Page 52
2090	Oct 5 - Oct 31	39-1	500	
2091	Oct 5 - Oct 31	39-2	500	
2092	Aug 1 - Nov 9 Dec 1 - Dec 31	39-3	600	Landowner permission required, See note 2, Page 52
2093	Oct 15 - Nov 24	40* (see pg 54)	100	
2094	Oct 15 - Nov 9	43-1	100	

**CONTROLLED  
ELK**

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

**2005 CONTROLLED HUNTS**  
**ANTLERLESS ELK - Continued**

**CONTROLLED ELK**

Hunt No.	Season Dates	Controlled Hunt Areas	Permits	Notes
2095	Nov 10 - Nov 30	43-1	150	
2096	Nov 10 - Nov 30	44	300	
2097	Oct 15 - Nov 9	45* (see pg 54)	100	<i>Very limited access, Motorized Vehicle Restriction, See note 3, Page 52</i>
2098	Oct 15 - Nov 9	48-2	150	<i>Motorized Vehicle Restriction, See note 3, Page 52</i>
2099	Oct 15 - Nov 9	48-3	125	<i>Motorized Vehicle Restriction, See note 3, Page 52</i>
2100	Oct 15 - Oct 31	49	150	<i>Motorized Vehicle Restriction, See note 3, Page 52</i>
2101	Nov 10 - Nov 30	49	150	<i>Motorized Vehicle Restriction, See note 3, Page 52</i>
2102	Oct 15 - Oct 28	50-1	400	<i>Motorized Vehicle Restriction, See note 3, Page 52</i>
2103	Dec 1 - Dec 15	50-2	500	<i>Motorized Vehicle Restriction, See note 3, Page 52</i>
2104	Oct 15 - Nov 3	51	350	<i>Motorized Vehicle Restriction, See note 3, Page 52</i>
2105	Dec 10 - Dec 31	51	350	<i>Motorized Vehicle Restriction, See note 3, Page 52</i>
2106	Oct 1 - Nov 30	52A* (see pg 54)	150	
2107	Oct 1 - Nov 30	54* (see pg 54)	40	<i>Motorized Vehicle Restriction Unit 47, See note 3, Page 52</i>
2108	Nov 1 - Nov 30	58-2	200	<i>Motorized Vehicle Restriction, See note 3, Page 52</i>
2109	Nov 1 - Nov 30	59* (see pg 54)	150	<i>Motorized Vehicle Restriction, See note 3, Page 52</i>
2110	Nov 1 - Nov 24	60-2* (see pg 54)	350	
2111	Nov 25 - Dec 7	60-2* (see pg 54)	350	
2112	Nov 1 - Nov 10	61	250	
2113	Nov 1 - Dec 15	62A	200	
2114	Dec 1 - Dec 14	66*	200	<i>Motorized Vehicle Restriction, See note 3, Page 52</i>
2115	Oct 25 - Nov 15	66A* (see pg 54)	1500	<i>Includes Unit 76</i>
2116	Dec 15 - Dec 31	69	100	<i>Motorized Vehicle Restriction, See note 3, Page 52</i>
2117	Dec 1 - Dec 31	73X	100	<i>Very limited access Motorized Vehicle Restriction, See note 3, Page 52</i>
2118	Dec 1 - Dec 31	74X	100	<i>Very limited access</i>
2119	Nov 16 - Dec 31	76-1 (see pg 54)	250	
2120	Dec 1 - Dec 31	76-2X	200	<i>Very limited access</i>
2121	Dec 1 - Dec 31	77X	50	<i>Short-range weapons ONLY, Motorized Vehicle Restriction, See note 3, Page 52</i>

**2005 CONTROLLED HUNTS**  
**EITHER SEX ELK**

Hunt No.	Season Dates	Controlled Hunt Areas	Permits	Notes
2122	Oct 15 - Oct 24	1	25	
2123	Oct 10 - Nov 3	13	265	<i>Very limited access</i>
2124	Nov 6 - Dec 15	62* (see pg 54)	281	<i>Antlerless ONLY Dec 1 - Dec 15</i>
2125	Nov 1 - Dec 15	62A	200	

**2005 CONTROLLED HUNTS**  
**ARCHERY ELK - Archery Permit Required**

Hunt No.	Season Dates	Controlled Hunt Areas	Permits	Notes
2126	Aug 30 - Sep 30	54* (see pg 54)	15	<i>Either sex, Motorized Vehicle Restriction Unit 47, See note 3, Page 52</i>

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

**2005 CONTROLLED HUNTS  
YOUTH ELK**

Hunt No.	Season Dates	Controlled Hunt Areas	Permits	Notes
2127	Oct 15 - Nov 30	28	146	Either sex, See note 1, Page 52
2128	Nov 10 - Nov 30	43-1	150	Either sex, See note 1, Page 52
2129	Oct 15 - Oct 28	60* (see pg 54)	200	Antlerless ONLY, See note 1, Page 52

**2005 CONTROLLED HUNTS  
MUZZLELOADER ELK**

Hunt No.	Season Dates	Controlled Hunt Areas	Permits	Notes
2130	Nov 10 - Dec 1	4* (see pg 52)	20	Either sex
2131	Dec 1 - Dec 31	22-3	100	Antlerless ONLY
2132	Nov 15 - Dec 10	25	25	Antlerless ONLY
2133	Dec 1 - Dec 31	32A	100	Motorized Vehicle Restriction, See note 3, Page 52 Antlerless ONLY
2134	Nov 10 - Nov 24	33-2* (see pg 53)	50	Antlered ONLY
2135	Nov 1 - Nov 30	54*	10	Traditional Muzzleloader ONLY, Either sex Motorized Vehicle Restriction Unit 47, See note 3, Page 52
2136	Nov 11 - Dec 9	61	300	Either sex

**2005 CONTROLLED HUNTS  
OUTFITTER ALLOCATION ELK**

Hunt No.	Season Dates	Controlled Hunt Areas	Permits	Notes
2137	Oct 10 - Nov 3	11-1	4	Antlered ONLY
2138	Oct 10 - Nov 3	13	12	Either sex
2139	Oct 10 - Nov 3	18	6	Antlered ONLY
2140	Oct 15 - Nov 30	28	4	Either sex, Youth ONLY, See note 1, Page 52
2141	Oct 1 - Oct 24	29-1	8	Antlered ONLY Motorized Vehicle Restriction, See note 3, Page 52
2142	Oct 1 - Oct 31	36A-1	3	Antlered ONLY Motorized Vehicle Restriction, See note 3, Page 52
2143	Oct 1 - Oct 31	36A-2	7	Antlered ONLY Motorized Vehicle Restriction, See note 3, Page 52
2144	Oct 1 - Oct 24	37A	6	Antlered ONLY Motorized Vehicle Restriction, See note 3, Page 52
2145	Oct 15 - Nov 9	43-1	4	Antlered ONLY
2146	Nov 10 - Nov 24	43-1	2	Antlered ONLY
2147	Nov 10 - Nov 30	43-1	5	Either sex, Youth ONLY, See note 1, Page 52
2148	Oct 15 - Oct 31	49	9	Motorized Vehicle Restriction, See note 3, Page 52 Antlered ONLY
2149	Oct 1 - Oct 31	50-1	6	Motorized Vehicle Restriction, See note 3, Page 52 Antlered ONLY
2150	Nov 1 - Nov 10	61	2	Antlered ONLY
2151	Nov 6 - Dec 15	62* (see pg 54)	19	Either sex, Antlerless ONLY Dec 1 - Dec 15
2152	Oct 25 - Nov 9	66A* (see pg 54)	12	Antlered ONLY

Prior to submitting an application for an outfitter allocated controlled hunt, you must have a written agreement with an outfitter licensed in the hunt area. Successful applicants of an outfitter allocated controlled hunt must hunt with an outfitter licensed in the hunt area. The outfitter must purchase your permit and tag by Aug. 20. Successful applicants authorize the Department to provide names and addresses to the outfitter(s) licensed for that controlled hunt. For a list of licensed outfitters in the applicable controlled hunt area, a sample written agreement, and additional information contact the Idaho Outfitters and Guides Licensing Board at their website- [www.state.id.us/oglb](http://www.state.id.us/oglb) or by calling (208) 327-7380.

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

**Notes:**

- 1 — YOUTH HUNT: ONLY hunters 12 - 17 years of age with a valid license may apply for this hunt.
- 2 — Landowner Permission Hunts. Written permission from a landowner who owns more than 159 acres in the hunt area is required to apply for this hunt. Landowner Permission Hunt Permits will be sold on a first-come, first-served basis at the Nampa, McCall and headquarters IDFG offices starting Jul 15.

*Do not apply for this hunt during the controlled hunt application period.*

- 3 — Motorized vehicle use as an aid to hunting for wildlife is restricted to established roadways open to motorized vehicle traffic capable of travel by full-sized automobiles. A full-sized automobile shall be defined as any motorized vehicle with a gross vehicle weight in excess of 1500 pounds. See page 13.

---

## ELK CONTROLLED HUNT AREA DESCRIPTIONS

**CONTROLLED  
ELK**

**Hunt Area 1** — That portion of Unit 1 within the Priest River drainage and within the Pend Oreille River drainage downstream from Priest River.

**Hunt Area 4** — All of Units 4 and 7.

**Hunt Area 8-1** — That portion of Units 8 and 8A north of the following line: Beginning at the western boundary of Unit 8 at its junction with State Highway 8, then east on Highway 8 to State Highway 9, then northwest on Highway 9 to State Highway 6, then north on Highway 6 to the Unit 8A boundary.

**Hunt Area 8-2** — That portion of Units 8 and 8A south of the following line: Beginning at the western boundary of Unit 8 at its junction with State Highway 8, then east on Highway 8 to Forest Service Road 1963 at Helmer, then south and east on Forest Service Road 1963 to Long Meadow Creek, then southeast along Long Meadow Creek to Dworshak Reservoir, then east along the shoreline of Dworshak Reservoir to the Unit 8A boundary at Dent Bridge.

**Hunt Area 10A** — That portion of Unit 10A west of the Clearwater National Forest boundary, south of Forest Service Road 250, south of State Highway 11 from Pierce to Weippe, and Jim Ford Creek from Weippe to its junction with the Clearwater River.

**Hunt Area 11-1** — All of Unit 11.

**Hunt Area 11-2** — That portion of Unit 11 within ONE mile of cultivated fields and east of the following boundary: beginning at the Unit 11/11A boundary at the junction of U.S. Highway 95 and Webb Creek Road, then southwest on Webb Creek Road to McCormack Ridge Road, then southeast on McCormack Ridge Road to the Nez Perce County/Lewis County Line, then south on the Nez Perce County/Lewis County Line to the Unit 11/13 Boundary.

**Hunt Area 11A** — All of Unit 11A.

**Hunt Area 13** — All of Unit 13.

**Hunt Area 14** — That portion of Unit 14 north of the following boundary: Beginning on the Unit 14 western boundary on the Slate Creek Road (Forest Service Road 354), then east on the Slate Creek Road to Forest Service Road 221, then north on Forest Service Road 221 to the Unit 14 east boundary.

**Hunt Area 18** — All of Unit 18.

**Hunt Area 19A** — All of Unit 19A.

**Hunt Area 21A** — All of Unit 21A.

**Hunt Area 22-1** — That portion of Unit 22 described as follows: Beginning at the junction of U.S. 95 and the West Fork Weiser River Road (Forest Service Road 127), then north on Forest Service Road 127 to Grouse Creek Road (Forest Service Road 123), then northwest on Forest Service Road 123 to the watershed divide between Lick Creek and Lost Creek drainages, then north on the divide between Lick Creek and Lost Creek drainages to Lick Creek Lookout, then west on Unit 22 boundary to the Snake River, then south on the Snake River to State Highway 71, then southeast on State Highway 71 to Cambridge, then north on U.S. 95 to the point of beginning.

**Hunt Area 22-2** — That portion of Unit 22 as follows: Beginning at the junction of U.S. 95 and the West Fork Weiser River Road (Forest Service Road 127), then north on Forest Service Road 127 to Grouse Creek Road (Forest Service Road 123), then northwest on Forest Service Road 123 to the watershed divide between Lick Creek and Lost Creek drainages, then north on the divide between Lick Creek and Lost Creek drainages to Lick Creek Lookout, then east along Unit 22 boundary to U.S. 95 to the point of beginning.

**Hunt Area 22-3** — All of Unit 22.

**Hunt Area 23-1** — All of Unit 23.

**Hunt Area 23-2** — That portion of Unit 23 within the Little Salmon River drainage, upstream from and including the Boulder Creek drainage on the west side of the Little Salmon River; and upstream from but excluding the Hazard Creek drainage on the east side of the Little Salmon River.

**Hunt Area 23-3** — That portion of Unit 23 west of U.S. 95 and north of, and excluding, the Boulder Creek drainage.

**Hunt Area 23-4** — That portion of Unit 23 which drains into the main Salmon River upstream from its confluence with the Little Salmon River to the French Creek-Burgdorf Road.

**Hunt Area 24-1** — That portion of Unit 24 within the following boundary: Beginning at the junction of State Highway 55 and the Warm Lake Road, then east along Warm Lake Road to the Unit 24/25 boundary, then north along the Unit 24/25/19A boundary to the intersection of the Unit 24/19A/23 boundaries, then south along the Unit 24/23/32A boundary to Forest Service Road 186 at No Business

(continued)

Saddle, then southeast on Forest Service Road 186 to West Mountain Road, then south on West Mountain Road to Tamarack Falls Road, then east on Tamarack Falls Road to Norwood Road, then north on Norwood Road to West Roseberry Road, then east on West Roseberry Road to State Highway 55, then south on State Highway 55 to the point of beginning. EXCEPT Short Range Weapons ONLY in that portion within the following boundary: Beginning in McCall at the junction of State Highway 55 and Boydston Street, then south on Boydston Street to West Valley Road, then west and south along West Valley Road and west Mountain Road to Tamarack Falls Road, then east on Tamarack Falls Road to Norwood Road, then north on Norwood Road to West Roseberry Road, then east on West Roseberry Road to State Highway 55, then south on State Highway 55 to Farm-to-Market Road then north on Farm-to-Market Road, to Elo Road, then west on Elo Road to State Highway 55, then north on State Highway 55 to the point of beginning.

**Hunt Area 24-2** — That portion of Unit 24 within the following boundary: Beginning north of Cascade at the junction of State Highway 55 and Warm Lake Road, then north on Highway 55 to West Roseberry Road, then west on West Roseberry Road to Norwood Road, then south on Norwood Road to Tamarack Falls Road, then west on Tamarack Falls Road to West Mountain Road, then north on West Mountain Road to Forest Service Road 186, then northwest on Forest Service Road 186 to No Business Saddle, then south along the Unit 24/32A unit boundary to the intersection of the Unit 24/32A/33 boundaries at Smith's Ferry, then north along the Unit 24/33/25 boundary to Warm Lake Road, then west on Warm Lake Road to the point of beginning. EXCEPT Short Range Weapons ONLY within the following boundary: Beginning in Donnelly at the junction of State Highway 55 and West Roseberry Road, then west on West Roseberry Road to Norwood Road, then south on Norwood Road to Tamarack Falls Road, then west on Tamarack Falls Road to West Mountain Road, then south on West Mountain Road to Cabarton Road, then north on Cabarton Road to State Highway 55, then north on State Highway 55 to the point of beginning.

**Hunt Area 25** — All of Unit 25.

**Hunt Area 28** — All of Unit 28.

**Hunt Area 29-1** — All of Unit 29.

**Hunt Area 29-2** — All of Units 29 and 37A.

**Hunt Area 30-1** — All of Units 30, 30A, 58, 59, and 59A.

**Hunt Area 30-2** — All of Unit 30 and that portion of Unit 21A within Carmen Creek drainage.

**Hunt Area 30A** — All of Unit 30A.

**Hunt Area 31-1** — That portion of Unit 31 that drains into the Snake River, upstream from and including the Grouse Creek Drainage to the U.S. Highway 95 bridge in Weiser; and that portion of Unit 31 that drains into Monroe Creek from it's mouth upstream to and including the Sheep Creek drainage.

**Hunt Area 31-2** — All of Unit 31.

**Hunt Area 32-1** — That portion of Unit 32 east of the following boundary: Beginning at the unit 32/38 boundary at

Emmett, then north on Highway 52 to the Van Dussen Road, then north on Four Mile Road to the unit 32/32A boundary.

**Hunt Area 32-2** — All of Unit 32 south and east of the following boundary: Beginning at the unit 32 boundary at Gardena, then west on the Brownlee Road to the Sweet highway, then south to highway 52, then south and west on highway 52 to the Unit 32/38 boundary.

**Hunt Area 32A** — All of Unit 32A.

**Hunt Area 33-1** — Beginning at the Unit 33 boundary on the Alder Creek Road (Forest Road 615) then west and north along the unit 33/39 boundary to Banks, then north on the unit 32/33 boundary to Smiths Ferry, then south on Forest road 689 to Murray Saddle, then north along the watershed divide between the North Fork and the Middle Fork of the Payette River to Forest Road 696 (West Fork of Scriver Creek), then east on Forest Road 696 to Forest Road 693 (Scriver Creek), then east on Forest Road 696 to Forest Road 693 (Scriver Creek), then south and east on Forest Road 693 to Forest Road 698 (Middle Fork Road), then south on Forest Road 698 to the Banks-Lowman Highway (Highway 17), then east on the Banks-Lowman Highway to Forest Road 615 (Alder Creek Road), then south on Forest Road 615 to the unit boundary, the point of beginning.

**Hunt Area 33-2** — All of Units 33 and 35 and that portion of Unit 34 south and west of the Landmark-Stanley Road.

**Hunt Area 36-1** — That portion of Unit 36 upstream from and including Redfish Lake Creek drainage and west of State Highway 75.

**Hunt Area 36-2** — That portion of Unit 36 downstream from but excluding Redfish Lake Creek drainage and that portion east of State Highway 75.

**Hunt Area 36A-1** — That portion of Unit 36A west of the East Fork of the Salmon River and that portion east of the East Fork of the Salmon River upstream from and including the West Pass Creek drainage.

**Hunt Area 36A-2** — That portion of Unit 36A east of the East Fork of the Salmon River downstream from but EXCLUDING the West Pass Creek drainage, and that portion of Unit 50 north of Trail Creek Road and west of U.S. Highway 93, and that portion of Unit 50 north of the Doublespring Pass Road east of U.S. Highway 93.

**Hunt Area 36B** — All of Unit 36B.

**Hunt Area 37** — All of Unit 37.

**Hunt Area 37A** — All of Unit 37A.

**Hunt Area 39-1** — That portion of Unit 39 south and east of State Highway 21.

**Hunt Area 39-2** — That portion of Unit 39 north and west of State Highway 21.

**Hunt Area 39-3** — That portion of Unit 39 north and west of the following boundary: Beginning in Boise, north on the Bogus Basin Road to Bogus Basin, then north on Forest Service Road 374 (Boise Ridge Road) to the Unit 39 boundary at Hawley Mountain.

**Hunt Area 40** — All of Units 40 and 42.

(continued)

CONTROLLED  
ELK

**Hunt Area 43** — All of Unit 43.

**Hunt Area 44** — All of Unit 44.

**Hunt Area 45** — All of Units 45 and 52.

**Hunt Area 48-1** — All of Unit 48.

**Hunt Area 48-2** — That portion of Unit 48 north of Trail Creek and the Ketchum-Warm Springs Creek-Dollarhide Summit Road.

**Hunt Area 48-3** — That portion of Unit 48 south of the Ketchum-Warm Springs Creek-Dollarhide Summit Road.

**Hunt Area 49** — All of Unit 49.

**Hunt Area 50-1** — That portion of Unit 50 south of the Doublespring Pass Road east of U.S. Highway 93, and that portion south of the Trail Creek Road west of U.S. Highway 93.

**Hunt Area 50-2** — That portion of Unit 50 south of the Doublespring Pass Road east of U.S. Highway 93, and that portion south of the Trail Creek Road west of U.S. Highway 93 EXCLUDING the East Fork of the Big Lost River drainages.

**Hunt Area 51** — All of Unit 51 and including that portion of this hunt within one-half mile inside the north and west boundary of the Idaho National Engineering and Environmental Laboratory (INEEL) adjacent to agricultural lands.

**Hunt Area 52A** — All of Units 52A and 68. (Caution: See Craters of the Moon closure, page 9.)

**Hunt Area 54** — All of Units 46, 47, 54, 55 and 57 and that portion of Unit 41 east of the West Fork Bruneau River.

**Hunt Area 56** — All of Unit 56.

**Hunt Area 58-1** — All of Units 58, 59, and 59A.

**Hunt Area 58-2** — All of Unit 58.

**Hunt Area 59** — All of Units 59 and 59A.

**Hunt Area 60** — All of Units 60, 60A, 61, and 62A.

**Hunt Area 60-1** — All of Units 60, 61, and 62A.

**Hunt Area 60-2** — All of Units 60 and 60A.

**Hunt Area 61** — All of Unit 61.

**Hunt Area 62** — That portion of Unit 62 within the national forest boundary and that portion of Unit 65 east of State Highway 33.

**Hunt Area 62A** — All of Unit 62A.

**Hunt Area 66** — All of Units 66 and 69.

**Hunt Area 66A** — All of Units 66A and 76.

**Hunt Area 69** — All of Unit 69.

**Hunt Area 70** — All of Units 70, 71, 72, 73, 73A, and 74.

**Hunt Area 73X** — That portion of Unit 73 east of Interstate Highway 15, south of Two-mile Canyon-Skyline-Dry Canyon Road (Forest Service Road 053), and south and east of State Highway 36 to the Utah border.

**Hunt Area 74X** — Those portions of Units 74 and 75 contained within the following: starting at the junction of Highways 30 and 34, west on Highway 30 to Lund Road, south on Lund Road to Central Road, southeast on Central Road to Mountain Road, south on Mountain Road to Gentile Road, South on Gentile Road to River Road, south on River Road to Thatcher Road, east on Thatcher Road across Highway 34 to Trout Creek Road, northeast on Trout Creek Road to Steele Lane, north on Steele Lane to Lago-Liberty Road, northeast on Lago-Liberty Road to Lago-Bench Road, northeast on Lago-Bench Road to North Bench Road, north on North Bench Road to Bench View Road, Northwest on Bench View Road to Andreassen Road, northwest on Andreassen Road to Harwood Road, north on Harwood Road to Burton Road, West on Burton Road to Highway 34, North on Highway 34 to the point of beginning.

**Hunt Area 75** — All of Units 75, 77, and 78.

**Hunt Area 76-1** — That portion of Unit 66A within the Miller and Newswander Creek drainages, the Jackknife Creek drainage east of the mouth of Squaw Creek, and east of the Cabin Creek-Haderlie Ridge Trail (Forest Service Trail 619), and the following portions of Unit 76: the drainage of Salt River east and south of the South Fork of Tincup Creek, and the drainage of the Thomas Fork of the Bear River north of State Highway 89 to the Idaho-Wyoming border.

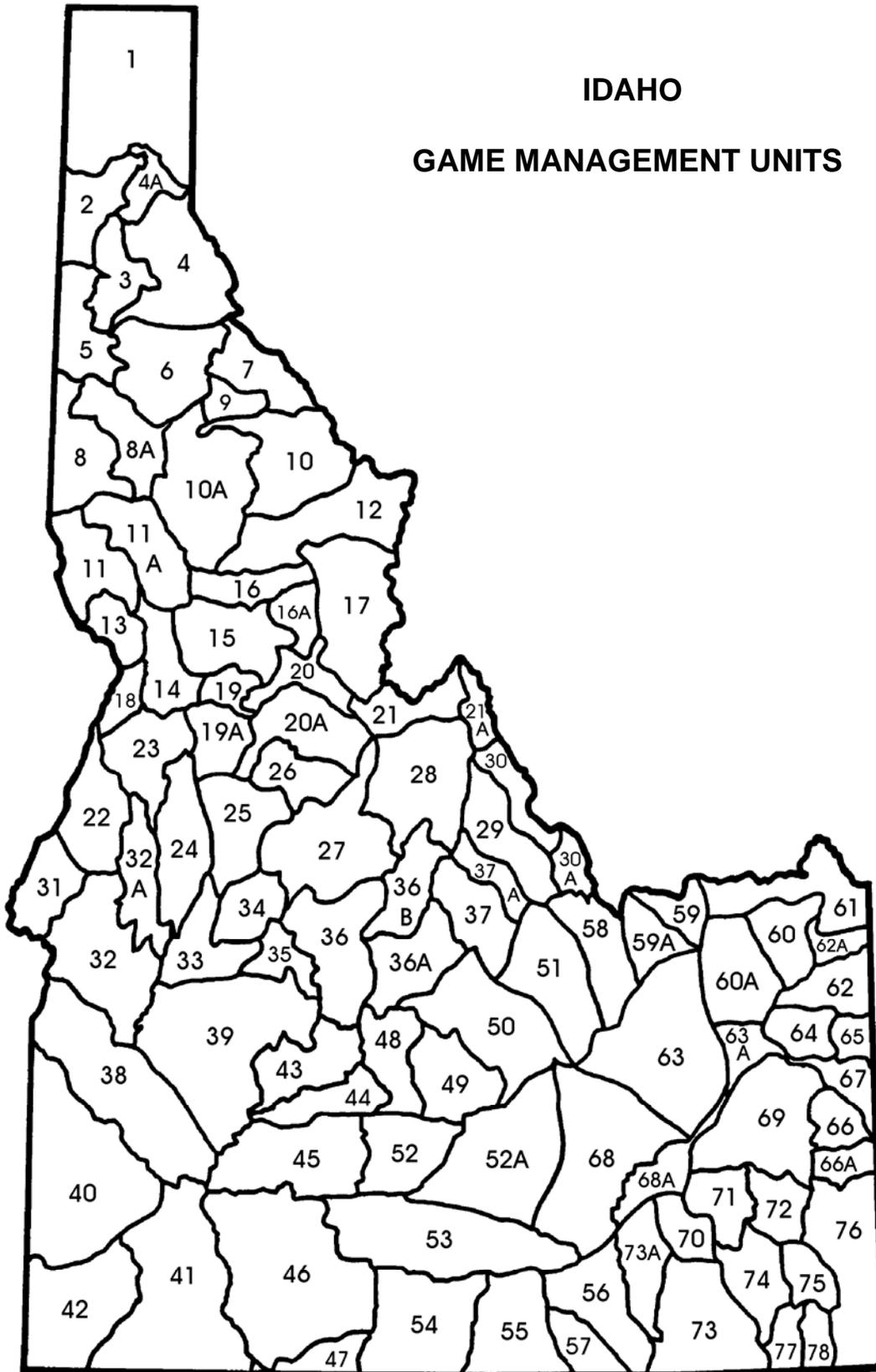
**Hunt Area 76-2X** — That portion of Unit 76 east of US Highway 30 and south of the Georgetown Canyon Road and west of the Caribou National Forest boundary, and the area south of US Highway 89 and north of US Highway 30 between Montpelier and the Wyoming border.

**Hunt Area 77X** — That portion of Unit 77 east of US Highway 91, south of the Cub Creek Road, and west of the Cache National Forest boundary to the Utah border.



# 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.

