IDAHO DEPARTMENT OF FISH AND GAME

Steven M. Huffaker, Director

Project W-170-R-25

Job Progress Report

ELK

Study I, Job 1

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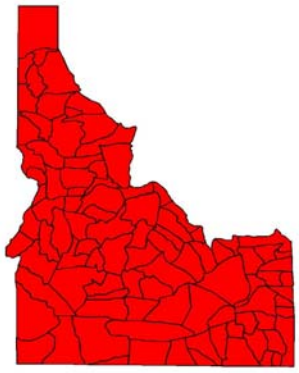
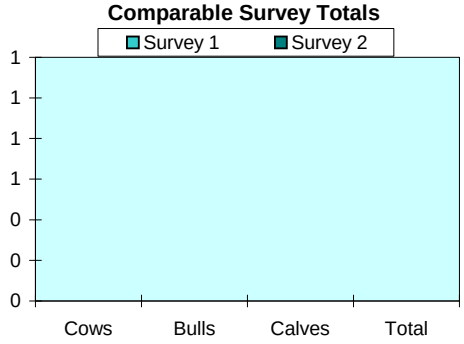


Winter Status & Objectives

Statewide	Current Status				Objective		
	Cows	Calves	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
Total	(81,400)	(21,200)	(19,500)	(11,500)	82,500	19,500	11,500
Bulls per 100 Cows			(24)	(14)		18-24	10 - 14

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

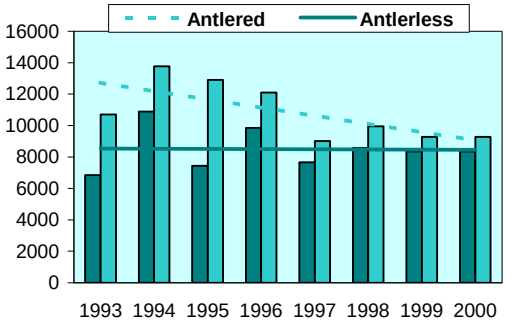
Comparable Survey Totals



Population Surveys

Statewide	Survey 1				Survey 2			
	Cows	Bulls	Calves	Total	Cows	Bulls	Calves	Total
Comparable Surveys Total	66,397	16,416	23,299	108,383	68,133	15,410	17,663	102,700
Per 100 Cows		25	36			23	26	

Harvest* with Trend



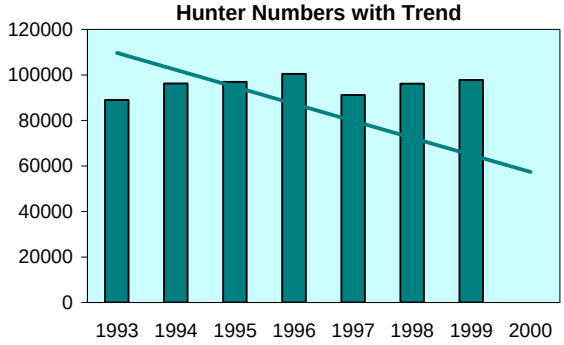
* Note: Harvest prior to 1998 does not include general primitive weapons season data

Zone Harvest Statistics

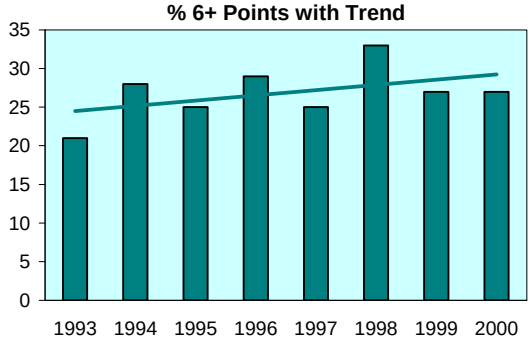
	1993	1994	1995	1996	1997	1998	1999	2000
Antlerless Harvest	6846	10885	7432	9842	7659	8583	8346	8346
'A' Tag						1450	2842	2842
'B' Tag						560	754	754
CH Tag						5986	4750	4750
Antlered Harvest	10696	13774	12900	12100	9013	9954	9286	9286
'A' Tag						2488	2688	2688
'B' Tag						4390	4855	4855
CH Tag						1729	1729	1729
Hunter Numbers	88982	96272	96997	100479	91168	96139	97731	ND
'A' Tag						25140	33341	ND
'B' Tag						37994	43966	ND
CH Tag						21286	20424	ND
% 6+ Points	21	28	25	29	25	33	27	27

Note: Telephone survey harvest data prior to 1998 does not include general primitive weapons season data. %6+ pts does not include spike-only harvest.

Hunter Numbers with Trend



% 6+ Points with Trend



PROGRESS REPORT
SURVEYS AND INVENTORY

STATE:	Idaho	**JOB TITLE:**	Elk Surveys and Inventories
PROJECT:	W-170-R-25		
SUBPROJECT:	1-7	**STUDY NAME:**	Big Game Population Status, Trends
STUDY:	I		Use, and Associated Habitat
JOB:	1		Studies

PERIOD COVERED: July 1, 2000 to June 30, 2001

ELK

STATEWIDE

Rocky mountain elk are Idaho's premier big game animal. 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.

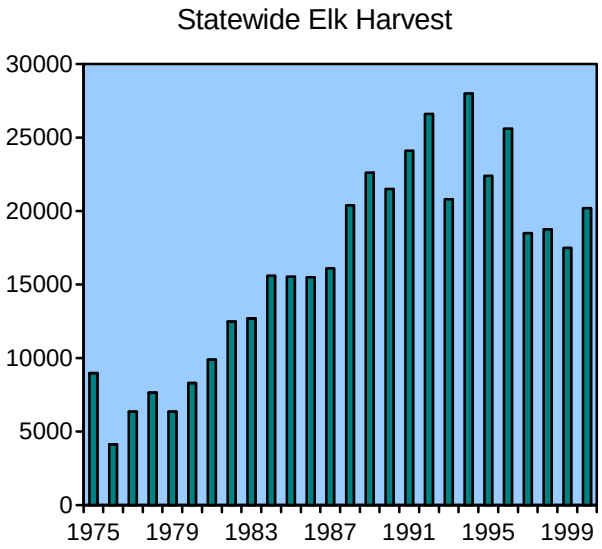
Elk hunter numbers have increased in Idaho as populations have increased. However, total pressure on the resource has dramatically increased. Human development has reduced available habitat on winter ranges and increased access into elk habitat, and technological developments and increased availability 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 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, 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. 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 winter ranges.

Although the trade-offs associated with road 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, perhaps the most critical habitat management factor facing wildlife managers is the use of roads. A comprehensive road 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 to create large blocks of habitat with nonmotorized 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 has direct control over only a minuscule 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 of the annual mortality of elk (1 year and older) 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. 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 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, interspecific issues, population performance issues, and winter feeding issues.

Monitoring population objectives will occur periodically (every 2-5 years) in most cases, and annually in some cases. In addition to these winter surveys, the Department will monitor harvest and antler point class in the harvest. Currently, the telephone harvest survey provides 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. While localized impacts from the 1996-1997 winter in north-central and north Idaho reduced populations, elk numbers throughout

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 hypothesis: 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. 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 shrubfields. However, as these shrubfields 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 125 wolves are currently within the state after being reintroduced by the U.S. Fish and Wildlife Service. 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.

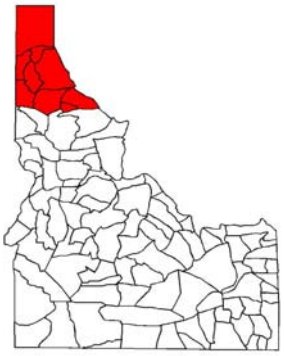
The quandary exists as to which management action to apply to improve recruitment rates and thus harvestable surplus. If density-dependent factors are primarily responsible, reducing the total population will "stimulate" the population and the harvestable surplus will increase. However, if density-independent 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
Panhandle Zone (Units 1, 2, 3, 4, 4A, 5, 6, 7, 9)

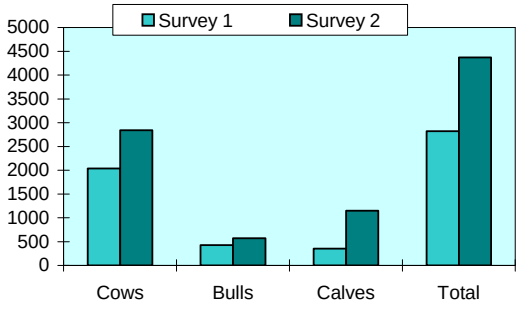
Winter Status & Objectives

	Current Status				Objective		
Unit	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
1		(1250)	(450)	(125)	1300-1900	275-425	150-225
2		(125)	(75)	(25)	150-200	40-60	15-25
3		(450)	(125)	(50)	450-650	100-150	50-75
4	1997	2009	666	521	2900-3900	550-850	325-500
4A		(75)	(25)	(20)	75-125	20-30	10-20
5		(550)	(125)	(60)	400-600	75-125	50-75
6		(2500)	(800)	(250)	3300-4000	725-875	350-525
7	1998	1044	541	417	2300-2800	500-600	250-350
9	1998	598	108	72	500-700	100-150	50-75
Zone Total		**(8601)**	**(2915)**	**(1540)**	**11375-14875**	**2385-3265**	**1250-1870**
Bulls per 100 Cows			**(34)**	**(18)**		**18-24**	**10-14**

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



Comparable Survey Totals



Population Surveys

	Survey 1					Survey 2				
Unit	Year	Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
1	ND					ND				
2	ND					ND				
3	1993	367	74	118	591	ND				
4	1991	2288	728	1019	4168	1997	2009	666	409	3097
4A	1994	121	17	36	174	ND				
5	ND					ND				
6	1993	1214	740	394	2465	ND				
7	1991	977	251	377	1605	1998	1044	541	150	1735
9	1990	626	130	136	895	1998	598	108	24	729
Trend Area	**1998**	**2040**	**424**	**353**	**2820**	**2000**	**2841**	**568**	**1149**	**4371**
Per 100 Cows			**21**	**17**				**13**	**40**	

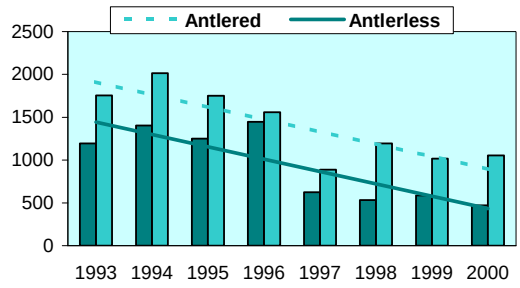
Note: ND = no survey data available.

Zone Harvest Statistics

	1993	1994	1995	1996	1997	1998	1999	2000
Antlerless Harvest	1193	1404	1251	1446	626	535	588	473
'A' Tag						53	52	59
'B' Tag						512	534	402
CH Tag						2	2	12
Antlered Harvest	1753	2014	1752	1558	889	1193	1017	1054
'A' Tag						214	225	208
'B' Tag						976	792	846
CH Tag						0	0	0
Hunter Numbers	16923	19951	19700	19921	14993	15716	14954	ND
'A' Tag						2616	2549	ND
'B' Tag						13100	12385	ND
CH Tag						20	20	ND
% 6+ Points	23	31	23	26	23	32	26	26

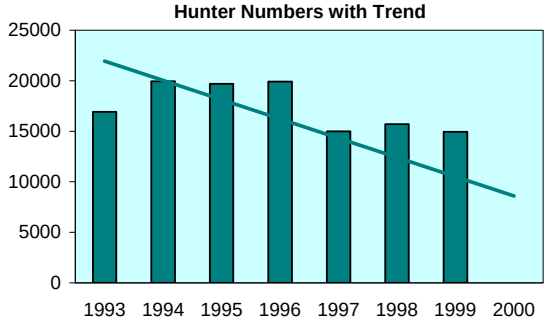
Note: Telephone survey harvest data prior to 1998 does not include general primitive weapons season data. %6+ pts does not include spike-only harvest.

Harvest* with Trend

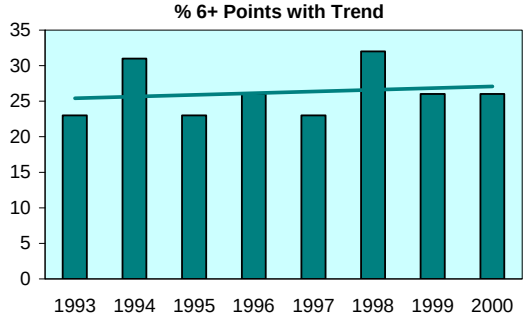


* Note: Harvest prior to 1998 does not include general primitive weapons season data.

Hunter Numbers with Trend



% 6+ Points with Trend



PANHANDLE ZONE

Management Objectives

The objectives for the Panhandle Zone 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. The severe winter of 1996-1997 negatively impacted many of the elk herds in the Panhandle Zone. Antlerless harvest may have to be reduced to meet antlerless objectives. Favorable environmental conditions since the winter of 1996-1997, particularly snow depth on winter range, have allowed substantial recovery of elk populations in this Zone. Once the population objectives have been reached, it would be appropriate to reevaluate them, given that population growth rates prior to 1996-1997 suggest a higher population could be supported.

Historical Perspective

The Panhandle Zone is a large and diverse zone consisting of Game Management Units 1, 2, 3, 4, 4A, 5, 6, 7, and 9. Traditionally, the majority of the 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 game management units. A unique feature of the Panhandle Zone is a mandatory check of all elk harvested in the zone. This database, in operation since 1982, provides valuable information relevant to the elk population.

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 the 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 (the time frame is 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 nonoffending animals.

Biological Issues

The elk populations in the core areas of this zone have shown slow, steady growth over the past 10 to 15 years. Elk numbers in the peripheral game management units (Units 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.

The severe winter of 1996-1997 reduced herd numbers in much of the Panhandle Zone. Reductions were considerable in some units. Favorable environmental conditions since the winter of 1996-1997, particularly snow depth on winter range, have allowed substantial recovery of elk populations in this Zone. Reductions in cow harvest opportunities were initiated for the 1998 season and remain in place.

Interspecific 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

Current harvest levels of black bear and mountain lion indicate that both species may be at or near the highest population levels experienced in the Panhandle Zone. 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. Wolves have recently established residency in the Panhandle Zone. The impacts of predation on elk numbers in the zone are unknown at this time.

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

There are three levels of aerial survey information needed for management of the Panhandle Zone. The "Panhandle Region Trend Area" should be surveyed annually to determine population trends. Individual units should be surveyed on a rotational basis to develop population estimates and in the near future the units impacted hardest by the winter of 1996-1997 should have herd composition counts conducted annually to monitor recruitment.

The mandatory check is needed to measure population performance across the entire zone relative to plan objectives.

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

Winter Status & Objectives

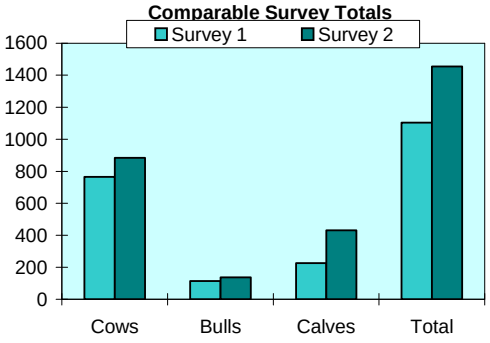
	Current Status				Objective		
Unit	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
8	1997	221	15	4	325 - 475	50 - 100	25 - 75
8A	1997	663	122	61	650 - 950	150 - 200	75 - 150
11A		(190)	(30)	(12)	100 - 150	20 - 30	10 - 20
Zone Total		**(1074)**	**(167)**	**(77)**	**1075 - 1575**	**220 - 330**	**110 - 245**
Bulls per 100 Cows			**(16)**	**(7)**		**18 - 24**	**10 - 14**

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

Population Surveys

	Survey 1					Survey 2				
Unit	Year	Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
8	ND					1997	221	15	143	378
8A	1992	765	113	226	1104	1997	663	122	288	1076
11A	ND					ND				
Comparable Surveys Total		**765**	**113**	**226**	**1104**		**884**	**137**	**431**	**1454**
Per 100 Cows			**15**	**30**				**16**	**49**	

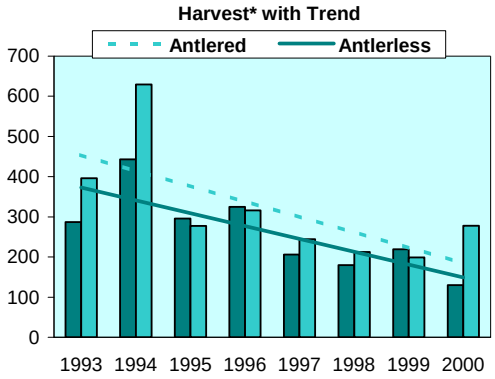
Note: ND = no survey data available.



Zone Harvest Statistics

	1993	1994	1995	1996	1997	1998	1999	2000
Antlerless Harvest	287	443	296	325	206	180	219	130
'A' Tag						18	45	30
'B' Tag								4
CH Tag	255	443	296	325	187	161	174	96
Antlered Harvest	396	629	277	316	244	212	199	278
'A' Tag						47	39	59
'B' Tag						165	159	197
CH Tag	21	3			1	1	1	22
Hunter Numbers	3776	4388	3340	3475	3326	2703	2677	ND
'A' Tag						351	424	ND
'B' Tag						1892	1811	ND
CH Tag	883	938	886	862	576	460	442	ND
% 6+ Points	18	27	20	11	35	13	25	18

Note: Telephone survey harvest data prior to 1998 does not include general primitive weapons season data. %6+ pts does not include spike-only harvest.



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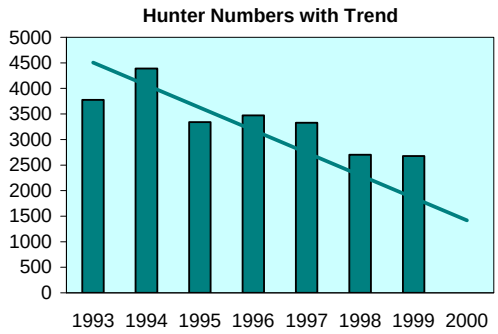
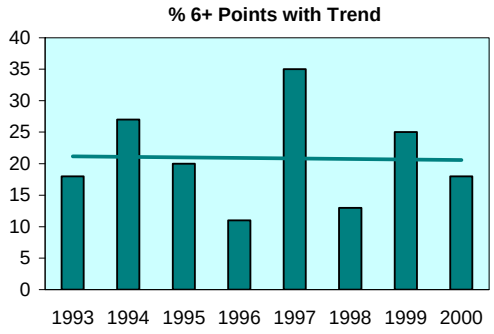




PALOUSE ZONE

Management Objectives

The objectives for the Palouse Zone area 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 a 29% increase over current numbers and likely also represents the maximum number of elk that could be sustained under the circumstances. Current antlerless harvest levels should allow the cow elk population to reach its objective within 5 years. However, 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 the 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 20th century, creating vast brushfields that provided abundant forage areas for elk. Elk numbers increased following creation of these brushfields, 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 the brushfields 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-elk only general hunting season. Elk herds then began rebuilding.

Habitat Issues

This zone contains portions of the highly productive Palouse and Camas Prairies. Dryland 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 nonforested 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 been successful in controlling elk population growth and reducing the overall damage caused by elk.

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 brushfields (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.

Recent and more accurate information on population performance is limited to a single sightability survey in Unit 8 (1997) and two surveys in Unit 8A (1992, 1997). The trend between the Unit 8A surveys indicates a stable population (growth in total numbers = -0.5%/ year), suggesting cow harvest levels in the zone have been at appropriate levels.

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

Interspecific 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.

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.

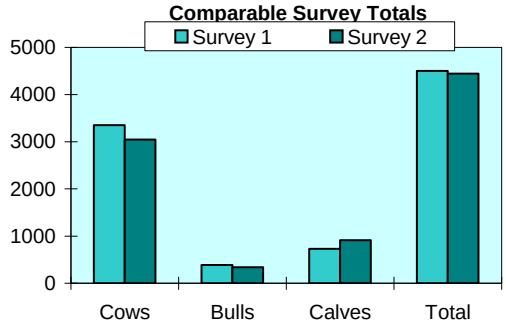
Elk
Dworshak Zone (Unit 10A)

Winter Status & Objectives

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

Population Surveys

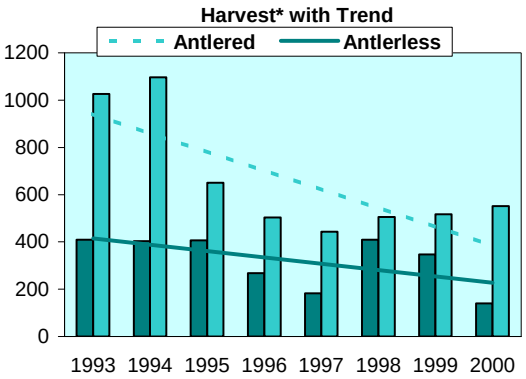
	Survey 1					Survey 2				
Unit	Year	Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
10A	1999	3355	385	734	4503	200	3045	339	914	4445
Comparable Surveys Total		**3355**	**385**	**734**	**4503**		**3045**	**339**	**914**	**4445**
Per 100 Cows			**12**	**22**				**11**	**30**	



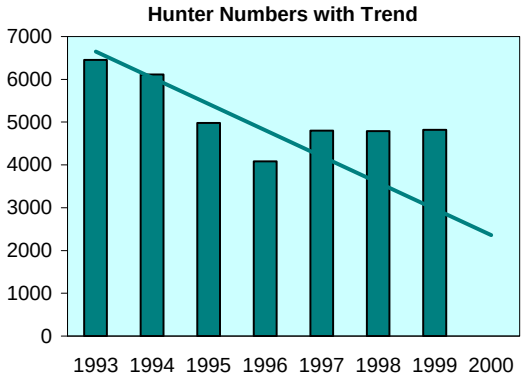
Zone Harvest Statistics

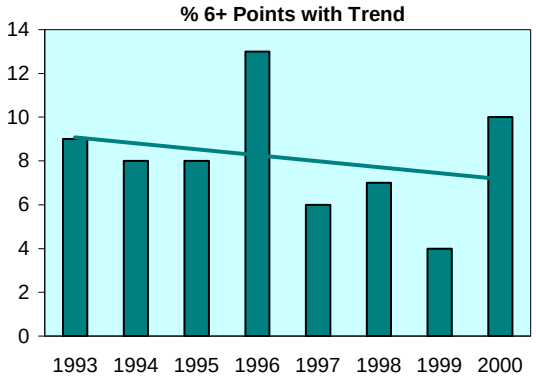
	1993	1994	1995	1996	1997	1998	1999	2000
Antlerless Harvest	410	403	407	268	182	410	347	140
'A' Tag						339	291	118
'B' Tag						27		4
CH Tag	362	403	382	268	173	44	56	18
Antlered Harvest	1026	1097	651	504	443	506	517	552
'A' Tag						133	172	110
'B' Tag						373	344	441
CH Tag	22	2		5	3		1	1
Hunter Numbers	6452	6111	4981	4079	4800	4790	4819	ND
'A' Tag						1794	1917	ND
'B' Tag						2897	2809	ND
CH Tag	713	599	748	518	479	99	93	ND
% 6+ Points	9	8	8	13	6	7	4	10

Note: Telephone survey harvest data prior to 1998 does not include general primitive weapons season data. %6+ pts does not include spike-only harvest.



* Note: Harvest prior to 1998 does not include general primitive weapons season data.





DWORSHAK ZONE

Management Objectives

The objectives for the Dworshak Zone 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 for the next 5 years. 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 after 5 years to fully exploit the potential of Unit 10A.

The zone cow harvest strategy was modified for the 2000 hunting season to address overharvest. The current goal is a harvest of 90 to 110 cow elk, which would allow the population to reach objectives in 5 years. A significant reduction in bull harvest will be required to achieve the bull and adult bull number and ratio objectives. Bull elk have declined substantially and continuously in Unit 10A (-15%/year) and are currently well below objectives.

Historical Perspective

Historically, elk herds were scattered and numbers were low in this area. Few big game animals were found along the 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 20th century, creating vast brushfields that provided abundant forage areas for elk. Elk numbers increased following creation of these brushfields, and elk numbers apparently peaked around 1950. Elk herds declined into the 1970s, partially due to: 1) maturation of the brushfields 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-elk only general hunting season. Elk herds then began rebuilding.

Habitat issues

The 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 the 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 the U.S. Forest Service (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 through 1996, recruitment averaged 34 calves:100 cows. From 1997 through 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. However, a significant reduction in bull harvest would still be required to meet management objectives.

Interspecific 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, in particular mountain lions, have increased to high levels in the last decade. In DAU 2-1, 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 periodically use the meadow complexes in the Grangemont area during summer, and pack activity is common in the upper Dworshak reservoir area during winter. Given the current low numbers of wolves, it is unlikely that they have a significant impact on elk population performance.

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.

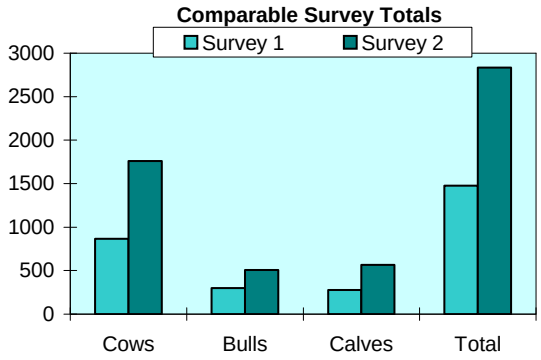
Elk
Hells Canyon Zone (Units 11, 13, 18)

Winter Status & Objectives

	Current Status				Objective		
Unit	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
11	1999	646	149	73	600 - 900	150 - 250	100 - 150
13	1994	556	105	52	500 - 700	100 - 150	50 - 100
18	2000	558	253	161	500 - 700	150 - 225	100 - 150
Zone Total		**1760**	**507**	**286**	**1600 - 2300**	**400 - 625**	**250 - 400**
Bulls per 100 Cows			**29**	**16**		**25 - 29**	**14 - 18**

Population Surveys

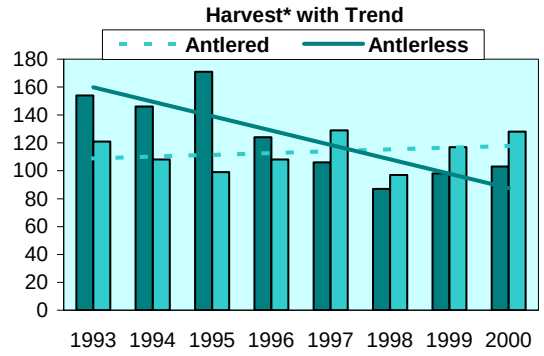
	Survey 1					Survey 2				
Unit	Year	Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
11	1996	392	88	143	623	1999	646	149	209	1004
13	1989	359	120	124	603	1994	556	105	219	880
18	1992	330	166	95	591	2000	558	253	138	949
Comparable Surveys Total		**865**	**299**	**277**	**1477**		**1760**	**507**	**566**	**2833**
Per 100 Cows			**35**	**33**				**29**	**32**	



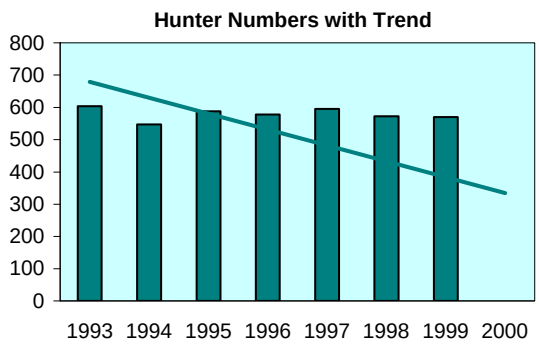
Zone Harvest Statistics

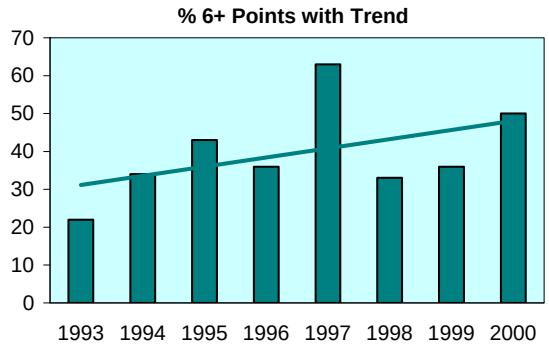
	1993	1994	1995	1996	1997	1998	1999	2000
Antlerless Harvest	154	146	171	124	106	87	98	103
'A' Tag								0
'B' Tag								1
CH Tag	154	146	171	124	106	87	98	102
Antlered Harvest	121	108	99	108	129	97	117	128
'A' Tag								0
'B' Tag								4
CH Tag	121	108	99	108	129	97	117	124
Hunter Numbers	604	547	588	578	595	572	570	ND
'A' Tag								ND
'B' Tag								ND
CH Tag	604	547	588	578	595	572	570	ND
% 6+ Points	22	34	43	36	63	33	36	50

Note: Telephone survey harvest data prior to 1998 does not include general primitive weapons season data. %6+ pts does not include spike-only harvest.



* Note: Harvest prior to 1998 does not include general primitive weapons season data.





HELLS CANYON ZONE

Management Objectives

The objectives for the Hells Canyon Zone 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 the 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 20th century, creating vast brushfields 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 the brushfields 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-elk 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 nonnative 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 dryland 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 privately- and publicly-owned land. Unit 11 is mostly private land except for the Craig Mountain Wildlife Management Area (CMWMA) along the Snake and Salmon rivers. The CMWMA consists of two 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 the Salmon River. The majority of the Hells Canyon Wilderness Area, which was designated 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 been successful 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.

Interspecific 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 DAUs 2-1 and 2-2 mountain lion harvest has increased over last several years; DAUs 1E and 1F black bear harvest has increased steadily. 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
Lolo Zone (Units 10, 12)

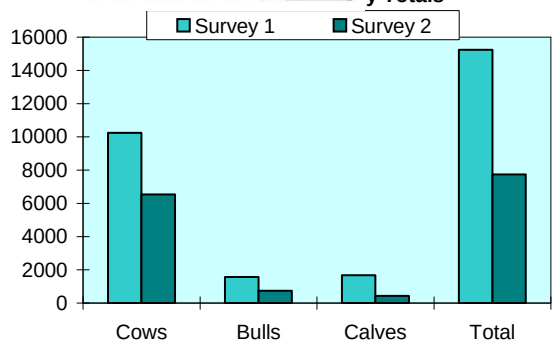
Winter Status & Objectives

	Current Status				Objective		
Unit	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
10	1998	4469	318	268	4200 - 6200	900 - 1300	500 - 750
12	1997	2060	425	327	1900 - 2900	400 - 600	225 - 350
Zone Total		**6529**	**743**	**595**	**6100 - 9100**	**1300 - 1900**	**725 - 1200**
Bulls per 100 Cows			**11**	**9**		**18 - 24**	**10 - 14**

Population Surveys

	Survey 1					Survey 2				
Unit	Year	Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
10	1994	7486	1107	1070	9729	1998	4469	318	252	5079
12	1995	2754	465	599	3832	1997	2060	425	181	2667
Comparable Surveys Total		**10240**	**1572**	**1669**	**15230**		**6529**	**743**	**433**	**7746**
Per 100 Cows			**15**	**16**				**11**	**7**	

y Totals

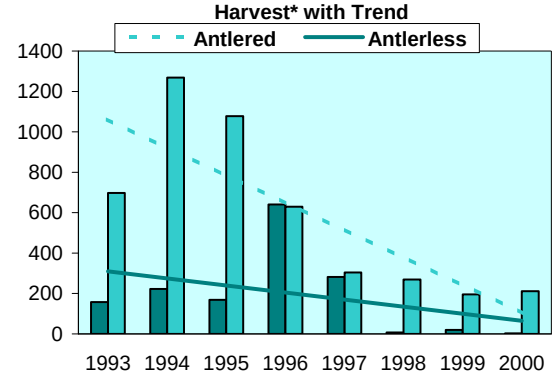


Zone Harvest Statistics

	1993	1994	1995	1996	1997	1998	1999	2000
Antlerless Harvest	158	223	168	641	282	7	20	2
'A' Tag							20	2
'B' Tag						7		0
CH Tag	158	223	160	607	272			0
Antlered Harvest	697	1268	1078	630	304	270	196	212
'A' Tag						59	6	42
'B' Tag						211	190	170
CH Tag	4	6		31	5			0
Hunter Numbers	3476	5511	5134	4365	4281	1533	1485	ND
'A' Tag						293	272	ND
'B' Tag						1240	1213	ND
CH Tag	288	331	317	1353	1615			ND
% 6+ Points	18	17	20	19	16	25	14	28

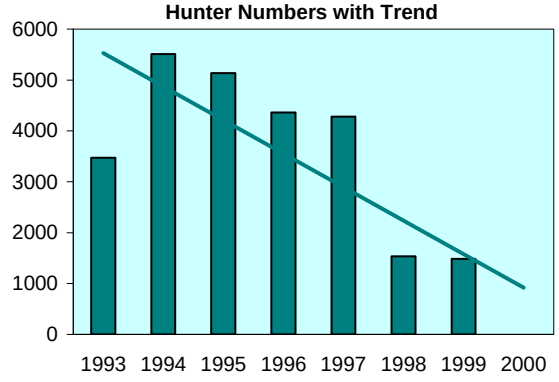
Note: Telephone survey harvest data prior to 1998 does not include general primitive weapons season data. %6+ pts does not include spike-only harvest.

Harvest* with Trend

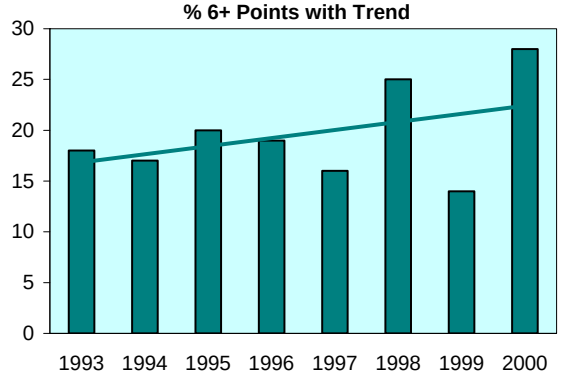


* Note: Harvest prior to 1998 does not include general primitive weapons season data.

Hunter Numbers with Trend



% 6+ Points with Trend



LOLO ZONE

Management Objectives

The objectives for the Lolo Zone 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.

If recruitment levels recover to some extent the existing antlerless and bull-only harvest strategies, with the B-Tag cap of 1,600, should allow the zone to reach the bull, bull:cow, and adult bull:cow ratio objectives. If calf recruitment recovered to predecline levels (30-40 calves:100 cows), B-Tags could be greatly liberalized. However, if calf recruitment does not increase from its current level, further restrictions will be required.

Historical Perspective

Historically, elk herds were scattered and numbers were low in this area. Few big game animals were found along the 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 20th century, creating vast brushfields that provided abundant forage areas for elk. Elk numbers increased following creation of these brushfields, and elk numbers apparently peaked around 1950. Elk herds declined into the 1970s, partially due to: 1) maturation of the brushfields 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-elk 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 productivity since the late 1980s and winter losses in 1996-1997 have contributed to dramatically decreasing elk herds within this zone. Across the history of sightability surveys (1985-present), cow elk declined 4%/year, bull elk declined 12%/year, the bull:cow ratio declined 8%/year, and calf recruitment (calf:cow ratio) declined 14%/year. 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 snowpack 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 the winter of 1996-1997 and those results suggested a 30% decline to 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 then winter calf:cow ratios often exceeded 30:100 and occasionally exceeded 40:100. From 1989 to present, ratios have dwindled continuously down to levels below 10:100. This level of recruitment is inadequate to sustain natural mortality, in the absence of hunting.

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

To address the 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. It is anticipated that if recruitment levels recover somewhat, the zone might reach objectives in 5 to 10 years under this management framework.

Interspecific 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 USFS allotment.

Predation Issues

In DAUs 2-1 and 2-2 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 lead to dramatic increases in harvest. However, black bear population performance remains well above plan objectives. A wolf pack has taken up residence in the Kelly Creek area, and the Snow Peak pack winters in the lower North Fork area in Unit 10.

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.

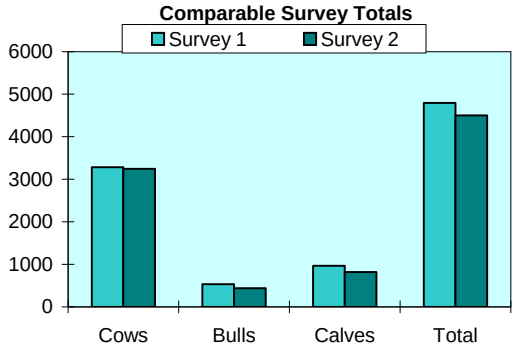
Elk
Elk City Zone (Units 14, 15, 16)

Winter Status & Objectives

	Current Status				Objective		
Unit	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
14	2000	1640	223	96	1400 - 2000	300 - 450	150 - 250
15	2000	676	92	40	950 - 1450	200 - 300	100 - 175
16	2000	927	120	59	800 - 1200	175 - 250	100 - 150
Zone Total		**3243**	**435**	**195**	**3150 - 4650**	**675 - 1000**	**350 - 575**
Bulls per 100 Cows			**13**	**6**		**18 - 24**	**10 - 14**

Population Surveys

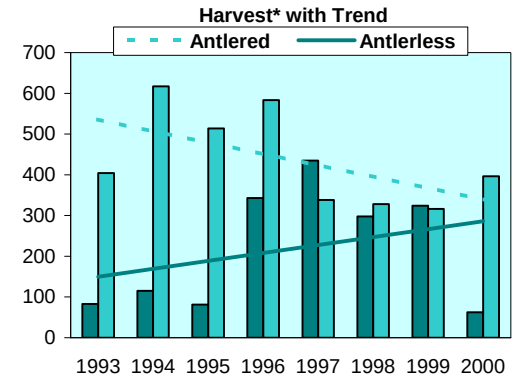
	Survey 1					Survey 2				
Unit	Year	Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
14	1993	1483	268	508	2259	2000	1640	223	446	2309
15	1998	923	162	303	1388	2000	676	92	170	945
16	1996	877	105	157	1148	2000	927	120	200	1246
Comparable Surveys Total		**3283**	**535**	**968**	**4795**		**3243**	**435**	**816**	**4500**
Per 100 Cows			**16**	**29**				**13**	**25**	



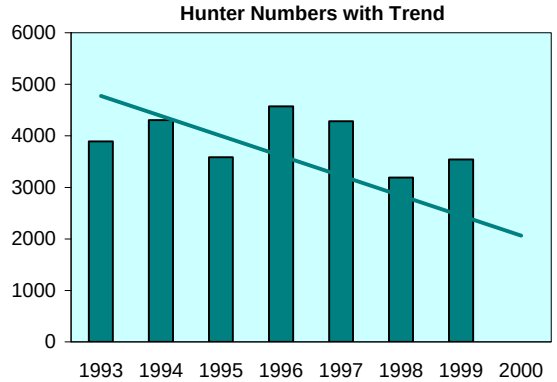
Zone Harvest Statistics

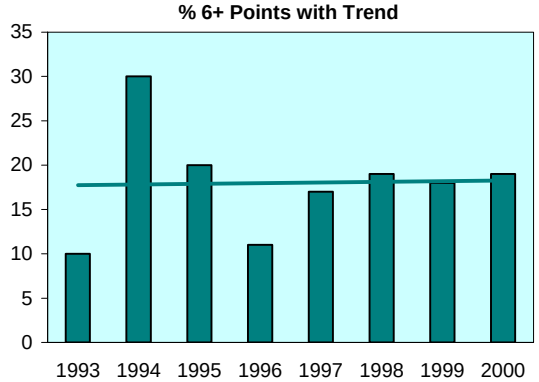
	1993	1994	1995	1996	1997	1998	1999	2000
Antlerless Harvest	83	115	81	343	435	298	324	62
'A' Tag						6	103	91
'B' Tag						7		2
CH Tag	59	115	48	343	435	285	221	29
Antlered Harvest	404	617	514	583	338	328	316	396
'A' Tag						13	65	98
'B' Tag						315	251	291
CH Tag	5				1			6
Hunter Numbers	3893	4305	3585	4574	4285	3192	3540	ND
'A' Tag						271	723	ND
'B' Tag						2147	2062	ND
CH Tag	235	221	249	996	1124	774	755	ND
% 6+ Points	10	30	20	11	17	19	18	19

Note: Telephone survey harvest data prior to 1998 does not include general primitive weapons season data. %6+ pts does not include spike-only harvest.



* Note: Harvest prior to 1998 does not include general primitive weapons season data.





ELK CITY ZONE

Management Objectives

The objectives for the Elk City Zone 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 within 5 years. However, significant restrictions will be required to achieve the bull number and ratio objectives. The current number (and ratio) of bulls is well below the objective, and bull numbers have been declining.

Historical Perspective

Historically, elk herds were scattered and numbers were low in this area. Few big game animals were found along the 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 20th century, creating vast brushfields that provided abundant forage areas for elk. Elk numbers increased following creation of these brushfields, and elk numbers apparently peaked around 1950. Elk herds declined into the 1970s, partially due to: 1) maturation of the brushfields 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-elk only general hunting season. Elk herds began rebuilding.

Habitat Issues

The prairie regions of this zone were converted to agriculture and ranching by the 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.

Landownership in this zone is approximately 80% public with the remaining 20% private. The privately owned portions are at lower elevations along the 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 outcompeting 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 landownership that reduce hunting opportunities. Livestock operators are concerned with elk use of pasture and rangeland forage during spring months prior to the release of livestock on these grounds. Some damage to grain crops occurs during the 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 are stable and bull elk are declining steadily, leading to a declining bull:cow ratio. Bull:cow ratios ranged between 12.9 and 13.6 on the 2000 surveys.

Historically, calf recruitment in Units 14 and 15 has been high, averaging 38 calves:100 cows from 1987 through 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 through 2000.

Interspecific Issues

Livestock grazes 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 area and are frequently observed. Pack activity has not been confirmed.

Winter Feeding Issues

Emergency winter feeding has not been conducted recently.

Information Requirements

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

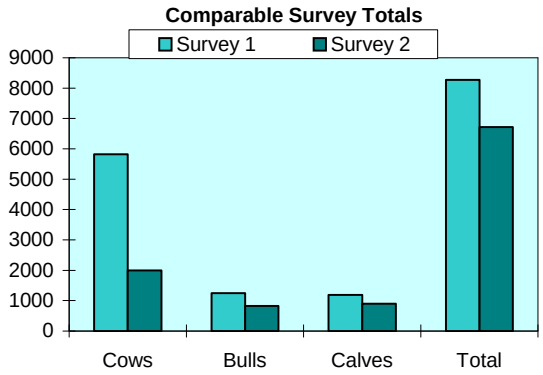
Elk
Selway Zone (Units 16A, 17, 19, 20)

Winter Status & Objectives

	Current Status				Objective		
Unit	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
16A	1999	401	51	20	650 - 950	175 - 250	100 - 150
17	1999	2493	398	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
Zone Total		**4998**	**827**	**601**	**4900 - 7300**	**1325 - 1950**	**750 - 1175**
Bulls per 100 Cows			**17**	**12**		**25-29**	**14 - 18**

Population Surveys

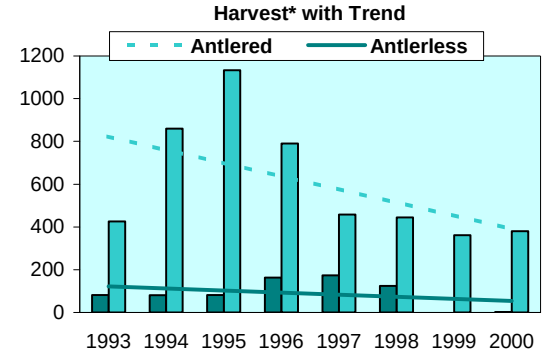
	Survey 1					Survey 2				
Unit	Year	Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
16A	1995	354	70	52	475	1999	401	51	86	539
17	1995	3447	721	764	4955	1999	2493	398	298	3188
19	1996	1149	182	243	1566	2001	1508	240	394	2142
20	1996	871	273	133	1277	2001	596	138	120	854
Comparable Surveys Total		**5821**	**1246**	**1192**	**8273**		**1998**	**827**	**898**	**6723**
Per 100 Cows			**21**	**20**				**17**	**18**	



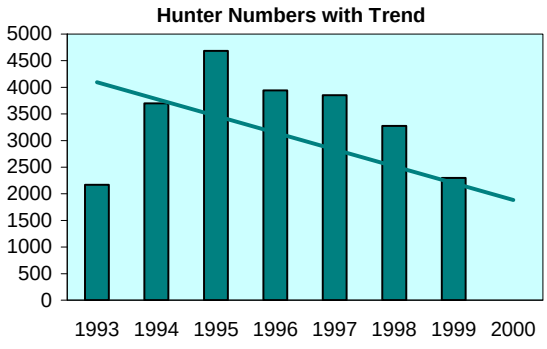
Zone Harvest Statistics

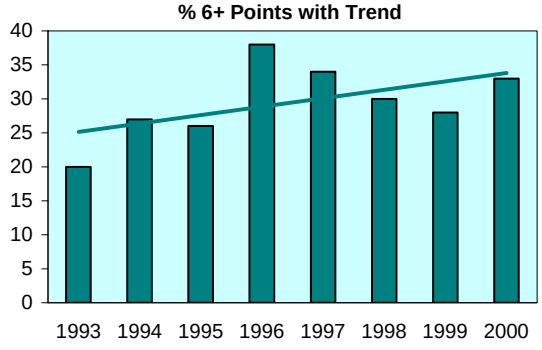
	1993	1994	1995	1996	1997	1998	1999	2000
Antlerless Harvest	81	80	81	163	173	124	0	2
'A' Tag						124		2
'B' Tag								0
CH Tag			73	163	173			0
Antlered Harvest	426	860	1133	790	458	444	362	380
'A' Tag						78	78	73
'B' Tag						366	284	307
CH Tag				140	103			0
Hunter Numbers	2170	3697	4686	3943	3852	3273	2295	ND
'A' Tag						1430	650	ND
'B' Tag						1843	1645	ND
CH Tag	265	197	190	1015	1364			ND
% 6+ Points	20	27	26	38	34	30	28	33

Note: Telephone survey harvest data prior to 1998 does not include general primitive weapons season data. %6+ pts does not include spike-only harvest.



* Note: Harvest prior to 1998 does not include general primitive weapons season data.





SELWAY ZONE

Management Objectives

The objectives in the Selway Zone 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 the Lolo Zone, management of the Selway Zone elk population and setting appropriate population objectives presents a serious quandary. Calf production and recruitment has been declining 4.4%/year. 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 the 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 20th century, creating vast brushfields that provided abundant forage areas for elk. Elk numbers increased following creation of these brushfields, and elk numbers apparently peaked around 1950. Elk herds declined into the 1970s, partially due to: 1) maturation of the brushfields 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-elk 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 Selway River to dry, steep, south-facing ponderosa pine and grassland habitat along the Salmon River. Many areas along the 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 frequented by elk.

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 through 2001, revealed declining numbers of adult elk and declining recruitment. Declining calf recruitment was initially detected in Units 16A and 17 in the 1995 surveys, while low recruitment was not observed in Units 19 and 20 until 1996. The most recent average of 18 calves:100 cows revealed unacceptably low recruitment.

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

Interspecific 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 for 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 established in this zone and pack activity does occur.

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

Winter Status & Objectives

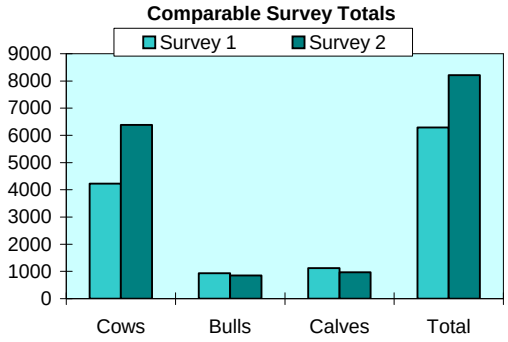
	Current Status				Objective		
Unit	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
20A	1999	1317	182	130	1050 - 1550	250 - 400	150 - 250
26	1999	(1100)	(140)	(100)	900 - 1300	200 - 350	150 - 200
27	1999	3966	533	389	1900 - 2900	500 - 800	300 - 450
Zone Total		**(6383)**	**(855)**	**(619)**	**3850 - 5750**	**950 - 1550**	**600 - 900**
Bulls per 100 Cows			**13**	**10**		**25 - 29**	**14 - 18**

In 1999 in Unit 26 incomplete survey, projected estimates included in ().

Population Surveys

	Survey 1					Survey 2				
Unit	Year	Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
20A	1989	1263	249	261	1773	1999	1317	182	169	1668
26	1989	1071	153	285	1510	1999a	1100	140	80	1320
27	1989	1897	532	579	3006	1999	3966	533	723	5224
Comparable Surveys Total		**4231**	**934**	**1125**	**6291**		**6383**	**855**	**972**	**8212**
Per 100 Cows			**22**	**27**				**13**	**15**	

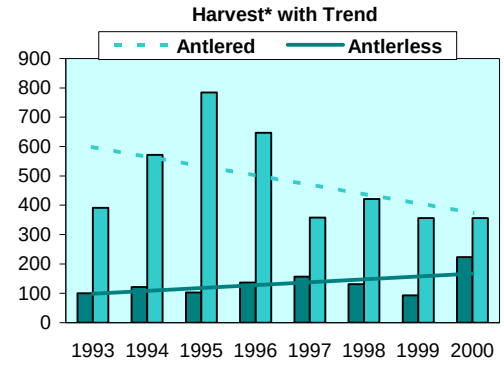
a: Incomplete survey, projected sightability estimates.



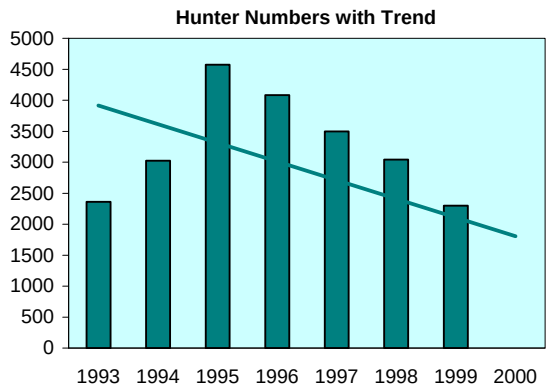
Zone Harvest Statistics

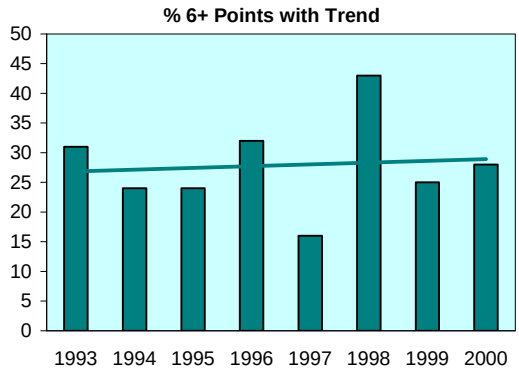
	1993	1994	1995	1996	1997	1998	1999	2000
Antlerless Harvest	100	121	103	137	157	131	93	223
'A' Tag						131	93	70
'B' Tag						0	0	153
CH Tag	100	121	103	137	157	0	0	0
Antlered Harvest	391	572	784	647	358	421	357	357
'A' Tag						104	86	82
'B' Tag	391	572	784	647	358	317	149	275
CH Tag						0	122	0
Hunter Numbers	2360	3022	4576	4085	3499	3044	2300	ND
'A' Tag						1479	1106	ND
'B' Tag	2016	2715	4132	3211	2404	1565	666	ND
CH Tag	344	307	444	874	1095	0	528	ND
% 6+ Points	31	24	24	32	16	43	25	28

Note: Telephone survey harvest data prior to 1998 does not include general primitive weapons season data. %6+ pts does not include spike-only harvest.



* Note: Harvest prior to 1998 does not include general primitive weapons season data.





MIDDLE FORK ZONE

Management Objectives

The objectives for this zone are to maintain Units 20A and 26 at current herd levels of approximately 2,400 cows and increase bull numbers from the current 350 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. To maintain herd productivity and to minimize potential impacts on mule deer, a herd reduction of about 40% is recommended in Unit 27, but will be challenging given the difficulty of obtaining sufficient antlerless harvest in the backcountry. 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 20th century. As has occurred over much of the west, elk herds expanded dramatically since the mid-1970s. Today, Middle Fork Zone winters approximately 8,200 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 have traditionally 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 more emphasis has been placed on antlerless opportunity. However, even with liberal antlerless elk hunting opportunities and seasons, harvest has consistently been <2% 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) to worse (13:100 cows), and at least partly in consequence, 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 late 1990's, dropping to 5,200 in 1999. 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 13). 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.

Interspecific 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 the USFWS appear to 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 well below carrying capacity (at which point recruitment equals mortality and there is no harvestable surplus). 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
Salmon Zone (Units 21, 21A, 28, 36B)

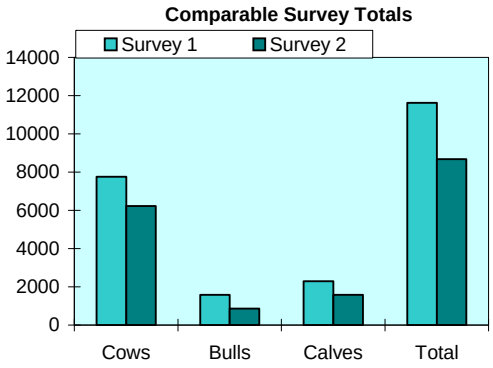
Winter Status & Objectives

	Current Status				Objective		
Unit	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
21	2001	1125	172	112	1200 - 1800	250 - 350	150 - 225
21A	2000	1149	240	154	1200 - 1800	250 - 350	150 - 225
28	2001	2560	286	164	1500 - 2300	325 - 475	175 - 275
36B	2000	1393	161	68	700 - 1100	150 - 250	75 - 125
Zone Total		**6227**	**859**	**498**	**4600 - 7000**	**975 - 1425**	**550 - 850**
Bulls per 100 Cows			**14**	**8**		**18 - 24**	**10 - 14**

Population Surveys

	Survey 1					Survey 2				
Unit	Year	Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
21	1993	1972	475	665	3112	2001	1125	172	250	1552
21A	1998	1219	377	376	1972	2000	1149	240	403	1792
28	1996	2939	530	696	4165	2001	2560	286	490	3336
36B	1997	1617	204	562	2363	2000	1393	161	442	1996
Comparable Surveys Total		**7747**	**1586**	**2299**	**11612**		**6227**	**859**	**1585**	**8676**
Per 100 Cows			**20**	**30**				**16**	**27**	

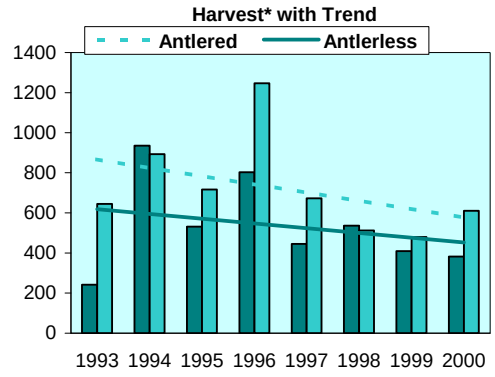
Note: ND = no survey data available.



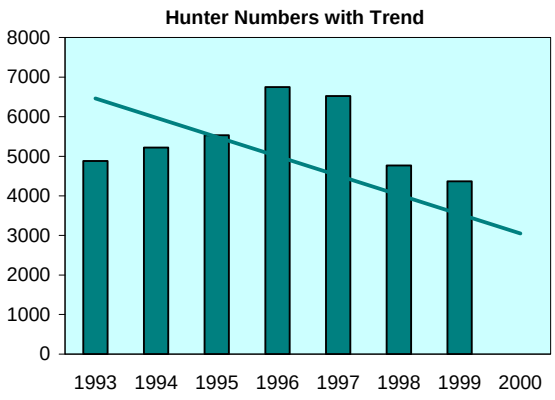
Zone Harvest Statistics

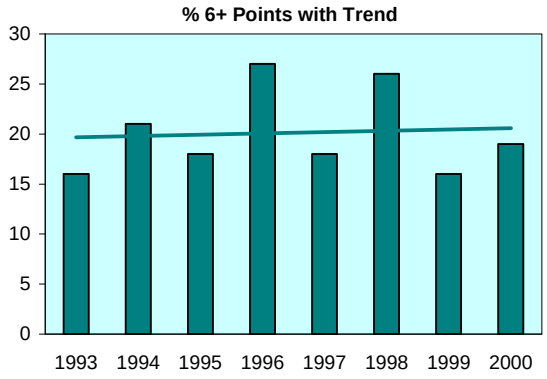
	1993	1994	1995	1996	1997	1998	1999	2000
Antlerless Harvest	241	936	531	802	446	536	409	382
'A' Tag						7	20	8
'B' Tag						0	7	0
CH Tag	241	936	531	802	446	529	382	374
Antlered Harvest	645	893	716	1247	673	513	480	610
'A' Tag						59	25	26
'B' Tag	645	893	716	1247	673	454	455	581
CH Tag						0	0	3
Hunter Numbers	4879	5222	5533	6749	6523	4766	4365	ND
'A' Tag						327	305	ND
'B' Tag	3635	3928	4145	5292	4265	3407	2931	ND
CH Tag	1244	1294	1388	1457	1724	1032	1129	ND
% 6+ Points	16	21	18	27	18	26	16	19

Note: Telephone survey harvest data prior to 1998 does not include general primitive weapons season data. %6+ pts does not include spike-only harvest.



* Note: Harvest prior to 1998 does not include general primitive weapons season data.





SALMON ZONE

Management Objectives

The objectives for this zone are to increase elk in units 21 and 21A from current herd levels of 2,700 adults to approximately 3,600 and to reduce cow elk numbers in units 28 and 36B from 4,000 to approximately 3,000 while increasing bulls from 450 to approximately 600. To stimulate and maintain herd productivity, to balance depredation concerns with a reasonably large elk population, and to minimize potential impacts on mule deer, a 5-year period of herd reduction totaling about 33% of current numbers was accomplished in Unit 21. Antlerless elk hunts continue in units 28 and 36B to achieve modest herd reduction and stabilization. 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 20th 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 the Salmon Zone winters approximately 8,700 elk. Aggressive antlerless harvests 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 in Salmon Zone in recent years, harvesting approximately 400-500 cows and 450-1,200 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 the 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.

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 the surveys in 2001. Antlerless elk harvest was discontinued in units 21 and 21A in 2000. In contrast, units 28 and 36B experienced major population increases (57% and 30%) since the early 1990s, despite modest increases in antlerless harvest. As a group, these units are only moderately productive, averaging 30-35 calves:100 cows. The decline in productivity in Unit 28 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).

Interspecific Issues

This zone contains the majority of the most productive deer units in the 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 the USFWS have become established in Unit 28. Other packs are resident in units 21 and 36B and transient in 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

Budget constraints have not allowed elk census surveys to be conducted at regular intervals. Impacts of elk on mule deer production and survival are suspected but unknown. The most productive elk herds are those maintained at a level well below carrying capacity (at which point recruitment equals mortality and there is no harvestable surplus). 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
Weiser River Zone (Units 22, 32, 32A)

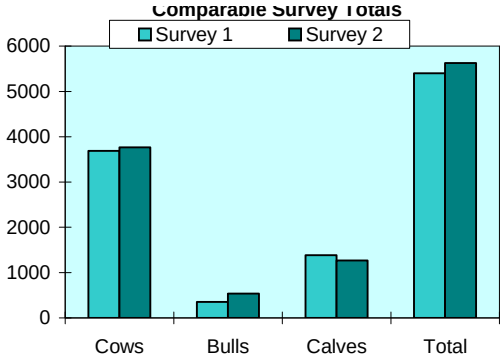
Winter Status & Objectives

	Current Status				Objective		
Unit	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
22	2000	1480	224	91	1100 - 1700	250 - 350	125 - 200
32	2000	1141	263	128	325 - 475	50 - 100	40 - 60
32A	2000	1147	102	19	700 - 1100	150 - 200	75 - 125
Zone Total		**3768**	**589**	**238**	**2125 - 3275**	**450 - 650**	**240 - 385**
Bulls per 100 Cows			**16**	**6**		**18 - 24**	**10 - 14**

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

Population Surveys

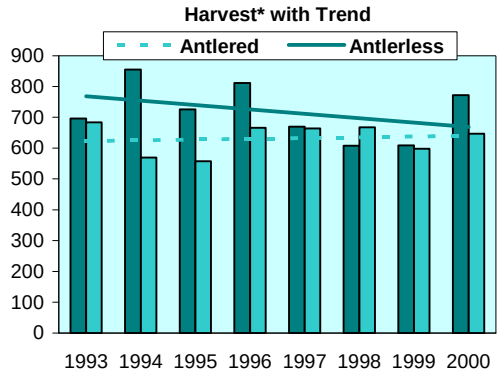
	Survey 1					Survey 2				
Unit	Year	Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
22	1997	1875	174	861	2911	2000	1480	224	515	2219
32	1991	875	91	192	1157	2000	1141	263	495	1899
32A	1994	909	88	331	1329	2000	1147	102	259	1508
Comparable Surveys Total		**3689**	**353**	**1384**	**5397**		**3768**	**539**	**1269**	**5626**
Per 100 Cows			**10**	**38**				**16**	**34**	



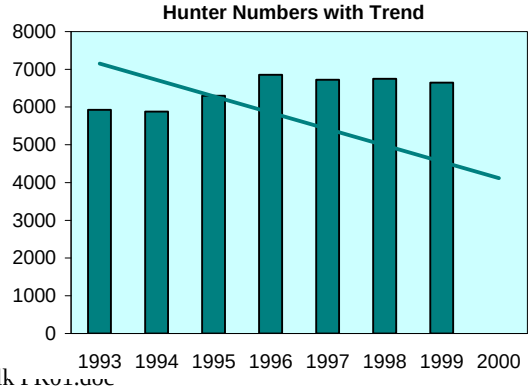
Zone Harvest Statistics

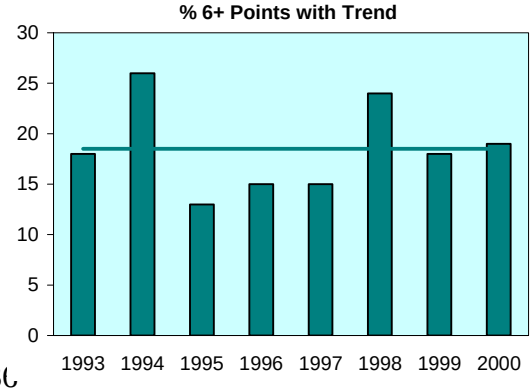
	1993	1994	1995	1996	1997	1998	1999	2000
Antlerless Harvest	696	855	726	812	670	608	609	772
'A' Tag						58	48	80
'B' Tag						0	6	1
CH Tag						550	555	691
Antlered Harvest	684	569	558	666	664	668	598	647
'A' Tag						159	153	91
'B' Tag						509	445	522
CH Tag						0	0	34
Hunter Numbers	5928	5880	6296	6858	6725	6746	6649	ND
'A' Tag						1244	1123	ND
'B' Tag						3599	3571	ND
CH Tag						1903	1955	ND
% 6+ Points	18	26	13	15	15	24	18	19

Note: Telephone survey harvest data prior to 1998 does not include general primitive weapons season data. %6+ pts does not include spike-only harvest.



* Note: Harvest prior to 1998 does not include general primitive weapons season data.





WEISER RIVER ZONE

Management Objectives

The goal for this zone 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, the 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 the 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 the bull numbers in this zone. A postseason bull population of 550+ 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 the Weiser River Zone prior to European settlement in the mid-1800s. Native American tribes hunted elk for food in the Weiser River drainage. As in other areas in Idaho, the 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 the McCall Zone on the periphery of the 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 the 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. This unit reopened to general bulls-only hunting in 1977. The implementation of bulls-only hunting spurred an increase in elk populations in the 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 the winter and a few groups of elk became year-round residents. The population of elk in the 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 dryland 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 (*Centaurea solstitialis*) and whitetop (*Cardaria draba*), is a threat to winter range habitat. The Andrus Wildlife Management

Area 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 the 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 the summer and fall months in Units 22 and 32A when elk enter agricultural fields in the 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

The Weiser River Zone contains a highly productive elk population. Calf production averages well over 40 calves:100 cows. Bull:cow ratios are low (15 bulls:100 cows) due to the high vulnerability of the open-canopied, heavily-roaded habitat. Even with the good calf production, harvest of bulls is at or exceeds production.

Interspecific 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 the Weiser River Zone. There is no indication that predation is having an impact on elk calf recruitment or survival of elk in this zone. 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 the 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 the 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 interspecific competition is needed.

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

Winter Status & Objectives

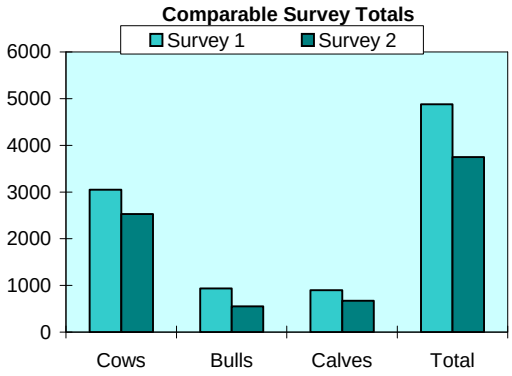
	Current Status				Objective		
Unit	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
19A	2001	469	158	131	750 - 1150	150 - 250	100 - 150
23	2001	1381	220	119	1050 - 1550	225 - 325	125 - 175
24		(50)	(10)	(5)	0	0	0
25	2001	678	174	154	700 - 1000	150 - 225	75 - 125
Zone Total		**(2578)**	**(562)**	**(409)**	**2450 - 3700**	**525 - 800**	**300 - 450**
Bulls per 100 Cows			**(22)**	**(16)**		**18 - 24**	**10 - 14**

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

Population Surveys

	Survey 1					Survey 2				
Unit	Year	Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
19A	1998	939	242	214	1392	2001	469	158	146	773
23	1997	1280	352	489	2121	2001	1381	220	402	2003
24	ND					ND				
25	1998	832	340	196	1369	2001	678	174	124	976
Comparable Surveys Total		**3051**	**934**	**899**	**4882**		**2528**	**552**	**672**	**3752**
Per 100 Cows			**31**	**29**				**22**	**27**	

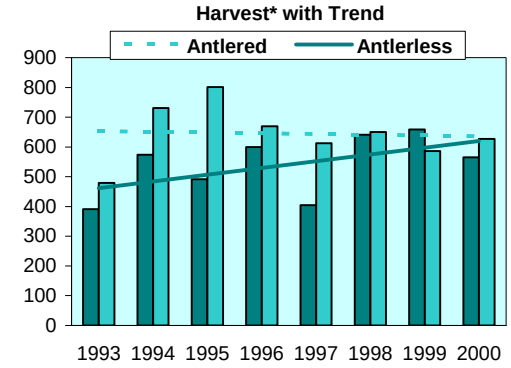
Note: ND = no survey data available.



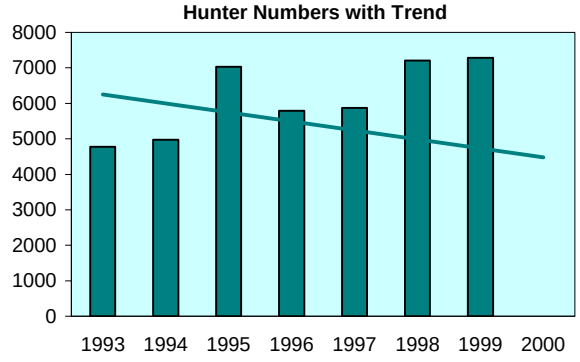
Zone Harvest Statistics

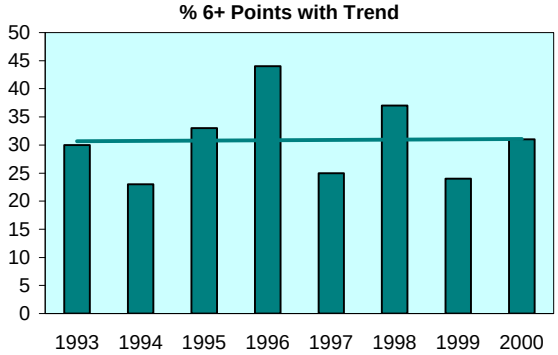
	1993	1994	1995	1996	1997	1998	1999	2000
Antlerless Harvest	391	574	491	600	405	641	659	565
'A' Tag						138	172	71
'B' Tag						7	0	2
CH Tag						496	487	492
Antlered Harvest	479	731	801	669	613	650	586	627
'A' Tag						197	120	167
'B' Tag						445	464	436
CH Tag						8	2	24
Hunter Numbers	4776	4973	7032	5788	5872	7208	7284	ND
'A' Tag						2039	1965	ND
'B' Tag						3735	3894	ND
CH Tag						1434	1425	ND
% 6+ Points	30	23	33	44	25	37	24	31

Note: Telephone survey harvest data prior to 1998 does not include general primitive weapons season data. %6+ pts does not include spike-only harvest.



* Note: Harvest prior to 1998 does not include general primitive weapons season data.





MCCALL ZONE

Management Objectives

The objective for this zone is to maintain a population of 3,075+ cow and 665+ bull elk, including 375+ adult bulls. This zone will be managed to produce the 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 the 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 of the 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 the 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 did survive. Translocation of elk from Yellowstone to places in the 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 the McCall Zone. This increase has continued to the present day peaks in elk populations.

Habitat Issues

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

Timber harvest and livestock grazing affect habitat change on the public lands on the west side of the 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. The Federal land management agencies (USFS and BLM) have active prescribed burning programs that should maintain good winter range habitat for elk in the McCall Zone. Noxious weed invasion, specifically from spotted knapweed (*Centaurea maculosa*) and yellow starthistle (*Centaurea solstitialis*), is a threat to winter ranges in the Little Salmon River and Salmon River drainages of Unit 23. Elk/human conflicts occur during the 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 (24 calves:100 cows) in Units 19A, and Unit 23 calf production has remained stable in the 30+ calves:100 cows range. Bull:cow ratios have remained high in this zone due to the relatively low hunting pressure and low road densities.

Interspecific 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 the McCall Zone. Bears are at a moderate but stable level and mountain lions are thought to be at the highest number in recent history. There is no evidence as to the extent these species prey on elk in this zone. Wolves, introduced in Idaho's backcountry in 1995, make periodic predatory appearances in the eastern half of the zone. Predation by wolves is considered insignificant at this time; however, as packs continue to establish, frequency of wolf predation in the eastern half of the zone will likely increase.

Winter Feeding Issues

The remote location of most of the 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. Approximately 75 tons of hay is supplied by the Department annually to feed 80-120 elk.

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 three potential predators on elk production is largely unknown. Information is lacking on the migration routes and patterns of elk in this zone.

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

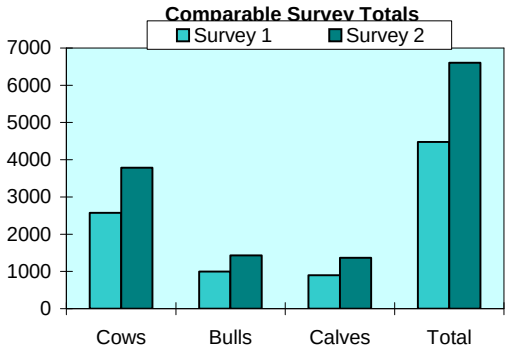
Winter Status & Objectives

	Current Status				Objective		
Unit	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
29/37A	1998	1796	632	371	1000 - 1600	300 - 500	200 - 300
37	2000	909	217	95	150 - 250	30 - 50	20 - 30
51	1999	1078	580	372	500 - 700	125 - 200	75 - 125
Zone Total		**3783**	**1429**	**838**	**1650 - 2550**	**455 - 750**	**295 - 455**
Bulls per 100 Cows			**38**	**22**		**30 - 35**	**14 - 18**

Population Surveys

	Survey 1					Survey 2				
Unit	Year	Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
29/37A	1994	1524	729	590	2853	1998	1796	632	577	3005
37	1994	472	101	131	704	2000	909	217	316	1442
51	1993	579	167	174	920	1999	1078	580	470	2155
Comparable Surveys Total		**2575**	**997**	**895**	**4477**		**3783**	**1429**	**1363**	**6602**
Per 100 Cows			**39**	**35**				**38**	**36**	

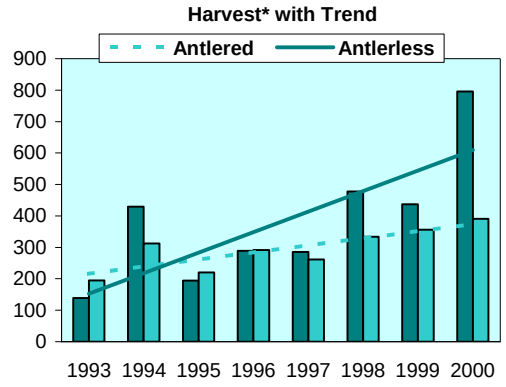
Note: ND = no survey data available.



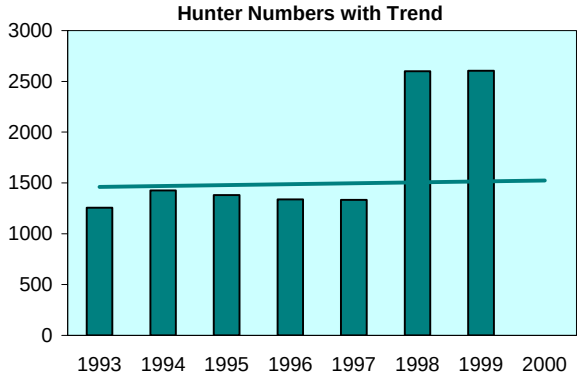
Zone Harvest Statistics

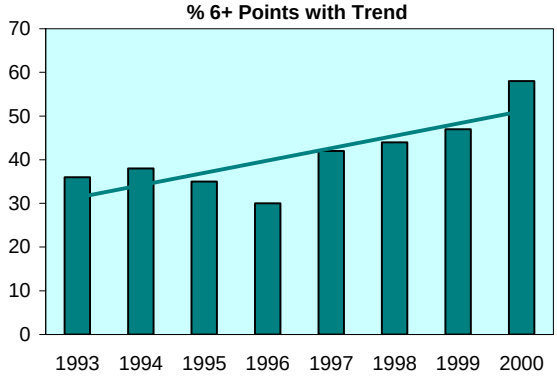
	1993	1994	1995	1996	1997	1998	1999	2000
Antlerless Harvest	139	429	194	289	285	478	437	796
'A' Tag						105	245	267
'B' Tag								0
CH Tag	139	429	194	289	285	373	192	529
Antlered Harvest	195	312	220	291	261	334	356	391
'A' Tag	40	74	45	83	69	112	132	167
'B' Tag								0
CH Tag	155	238	175	208	196	222	224	224
Hunter Numbers	1256	1427	1381	1338	1332	2600	2603	ND
'A' Tag	430	400	388	399	454	1429	1651	ND
'B' Tag								ND
CH Tag	826	1027	993	939	1107	1171	952	ND
% 6+ Points	36	38	35	30	42	44	47	58

Note: Telephone survey harvest data prior to 1998 does not include general primitive weapons season data. %6+ pts does not include spike-only harvest.



* Note: Harvest prior to 1998 does not include general primitive weapons season data.





LEMHI ZONE

Management Objectives

The objectives for this zone are to reduce the elk population to approximately 2,000 cows and 650 bulls. To stimulate and maintain herd productivity, to balance depredation concerns with maintaining a reasonably large elk population, and to minimize potential impacts on mule deer, a 5-year period of herd reduction, totaling 40-50% of current numbers, is recommended in the zone. 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 20th 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 since the mid-1970s. Today Lemhi Zone winters approximately 6,600 elk, which represents an increase of almost 2,600 elk just since the mid 1990s.

About 1,400 people have participated in rifle hunts in the Lemhi Zone in recent years. 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 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 1,200 people have participated in recent years, 70% 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 the 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 the herd had increased 50% to 1,800 cows, but was still only producing 600 calves and 600 bulls. This loss in productivity may be related to higher-than-desirable elk densities. Conversely, herds in units 37 and 51 displayed dramatic increases in numbers and productivity through the most recent surveys (1999 and 2000).

Interspecific Issues

Although historically Lemhi Zone supported highe 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, 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 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 well below carrying capacity (at which point recruitment equals mortality and there is no harvestable surplus). 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.

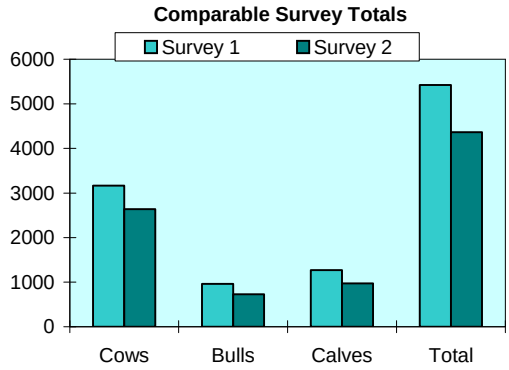
Elk
Beaverhead Zone (Units 30, 30A, 58, 59, 59A)

Winter Status & Objectives

	Current Status				Objective		
Unit	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
30	1997	1567	541	341	800 - 1200	250 - 350	150 - 250
30A	1997	307	206	144	200 - 300	40 - 60	25 - 35
58	2000	769	185	128	400 - 600	100 - 175	50 - 100
59/59A	2000	577	205	118	650 - 950	150 - 250	100 - 150
Zone Total		**3220**	**1137**	**731**	**2050 - 3050**	**540 - 835**	**325 - 535**
Bulls per 100 Cows			**35**	**23**		**25 - 29**	**14 - 18**

Population Surveys

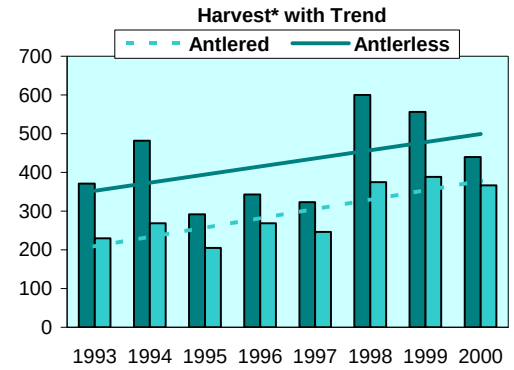
	Survey 1					Survey 2				
Unit	Year	Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
30	1997	1556	538	673	2786	2001	1103	304	338	1745
30A	1997	307	206	144	656	2001	188	33	65	286
58	1995	409	130	187	725	2000	769	185	316	1282
59/59A	1994	893	89	264	1258	2000	577	205	254	1053
Comparable Surveys Total		**3165**	**963**	**1268**	**5425**		**2637**	**727**	**973**	**4366**
Per 100 Cows			**30**	**40**				**28**	**37**	



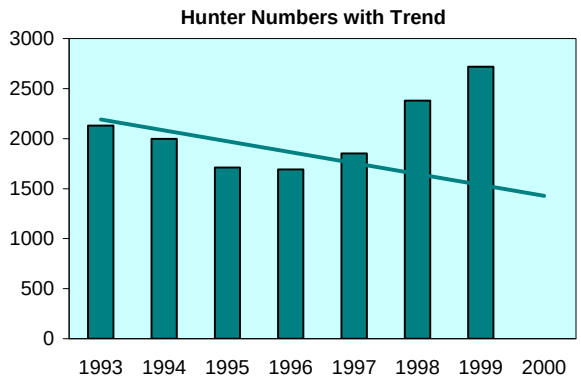
Zone Harvest Statistics

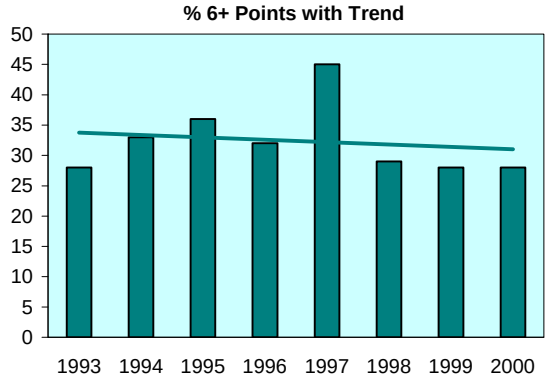
	1993	1994	1995	1996	1997	1998	1999	2000
Antlerless Harvest	371	482	292	343	323	600	556	440
'A' Tag						71	396	73
'B' Tag						0	0	0
CH Tag						529	160	367
Antlered Harvest	230	269	205	269	246	375	389	367
'A' Tag						216	218	181
'B' Tag						0	0	1
CH Tag						159	171	185
Hunter Numbers	2130	1997	1712	1691	1851	2378	2716	ND
'A' Tag						1274	2055	ND
'B' Tag						0	0	ND
CH Tag						1104	661	ND
% 6+ Points	28	33	36	32	45	29	28	28

Note: Telephone survey harvest data prior to 1998 does not include general primitive weapons season data. %6+ pts does not include spike-only harvest.



* Note: Harvest prior to 1998 does not include general primitive weapons season data.





BEAVERHEAD ZONE

Management Objectives

Objectives for Beaverhead Zone 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, to balance depredation concerns with maintaining a reasonably large elk population, and to 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 late1990s. Surveys in 2001 indicated populations may be reaching objective levels (however, there were strong indications that some elk stayed in Montana due to mild winter conditions). Continued cow harvest is consistent with goals of maintaining relatively high productivity and stabilization of herd size.

Historical Perspective

Elk abundance was low in Beaverhead Zone through much of the 20th 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 about 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 2,500 hunters annually.

Many elk in this zone, particularly in units 30 and 30A, spend the 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 though 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 have remained strong in this zone.

Interspecific 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, and elk tend to use different habitats and different forage species than livestock. During some winters elk move into Unit 63 and cause haystack depredations in the Monteview, 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 well below carrying capacity (at which point recruitment equals mortality and there is no harvestable surplus). Better information is needed to identify appropriate elk densities that will maintain optimum productivity and harvest.

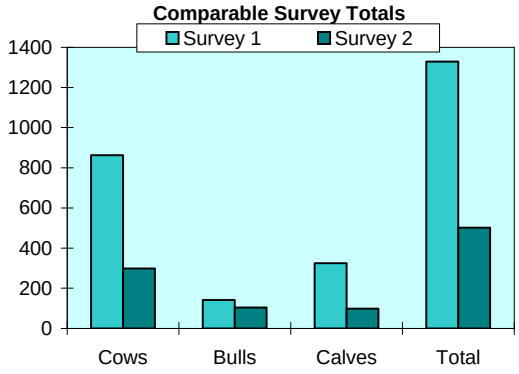
Elk
Brownlee Zone (Unit 31)

Winter Status & Objectives

	Current Status				Objective		
Unit	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
31	2000	299	104	72	550 - 850	125 - 175	50 - 100
Zone Total		**299**	**104**	**72**	**550 - 850**	**125 - 175**	**50 - 100**
Bulls per 100 Cows			**35**	**24**		**18 - 24**	**10 - 14**

Population Surveys

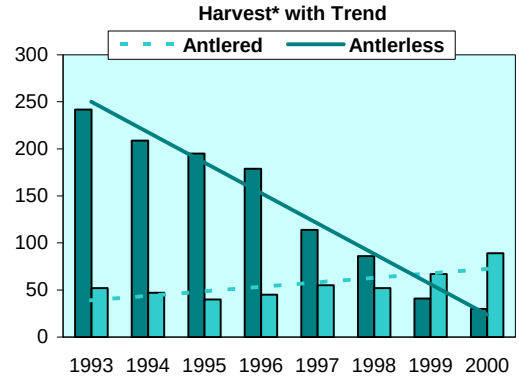
	Survey 1					Survey 2				
Unit	Year	Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
31	1993	863	141	325	1329	2000	299	104	98	501
Comparable Surveys Total		**863**	**141**	**325**	**1329**		**299**	**104**	**98**	**501**
Per 100 Cows			**16**	**38**				**35**	**33**	



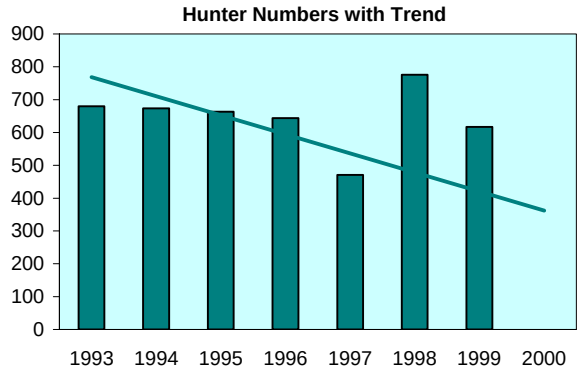
Zone Harvest Statistics

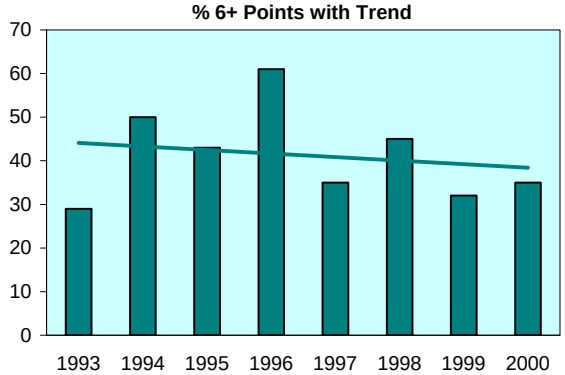
	1993	1994	1995	1996	1997	1998	1999	2000
Antlerless Harvest	242	209	195	179	114	86	41	30
'A' Tag						7	0	0
'B' Tag						0	0	0
CH Tag						80	41	30
Antlered Harvest	52	47	40	45	55	52	67	89
'A' Tag						20	31	39
'B' Tag						0	0	7
CH Tag						32	36	43
Hunter Numbers	680	673	663	644	471	776	617	ND
'A' Tag						316	251	ND
'B' Tag						0	0	ND
CH Tag						460	366	ND
% 6+ Points	29	50	43	61	35	45	32	35

Note: Telephone survey harvest data prior to 1998 does not include general primitive weapons season data. %6+ pts does not include spike-only harvest.



* Note: Harvest prior to 1998 does not include general primitive weapons season data.





BROWNLEE ZONE

Management Objectives

The objective for this zone is to maintain a population of 700+ cow and 140+ bull elk, including 75+ adult bulls. This zone will be managed to produce the 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. The current 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. General antlerless or any-bull hunting opportunity is unlikely, due to the inherent vulnerability of elk in this habitat.

Historical Perspective

Elk were present in the Brownlee Zone prior to European settlement in the mid-1800s. Native American tribes hunted elk for food in the Weiser River drainage. As in other areas in Idaho, the 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 the 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 the 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 the Brownlee Zone is in public ownership and management. Private land predominates the southern and eastern portions of the unit. Agricultural products are primarily dryland 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 midsuccessional stage. Winter ranges occur primarily on public ground. Noxious weed invasion, such as yellow starthistle (*Centaurea solstitialis*) and whitetop (*Cardaria draba*), is a threat to winter range habitat. The Andrus Wildlife Management Area 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 the summer and fall months when elk enter agricultural fields in the valley bottoms to forage.

Extensive road building from past timber harvest and mining activities contribute to the 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 greater than 35:100 cows on average. Elk have not reached their habitat potential in this zone, but have reached a threshold of tolerance among user groups concerned.

Interspecific 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 the 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 the 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 the 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 interspecific competition is needed.

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

Winter Status & Objectives

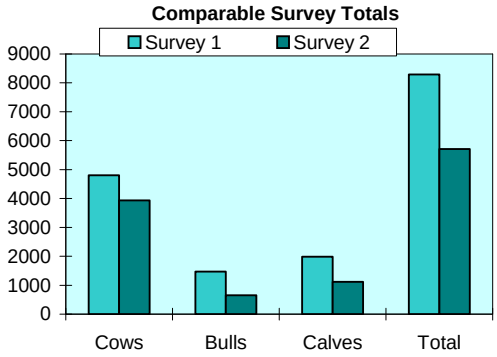
	Current Status				Objective		
Unit	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
33	2001	2114	282	116	3544	500 - 800	300 - 450
34		(0)	(0)	(0)	0	0	0
35	2001	1011	93	57	1761	50 - 100	25 - 75
36	2000	249	34	22	250 - 350	50 - 75	30 - 50
Zone Total		**(3374)**	**(409)**	**195**	**3050 - 4550**	**600 - 975**	**355 - 575**
Bulls per 100 Cows			**12**	**6**		**18 - 24**	**10 - 14**

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

Population Surveys

	Survey 1					Survey 2				
Unit	Year	Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
33	1989	3135	1138	1153	5454	2001	2114	282	1148	3544
34	ND					ND				
35	1992	1078	213	557	1848	2001	1011	93	657	1761
36	1993	592	121	274	967	2000	249	34	66	330
Comparable Surveys Total		**4805**	**1472**	**1984**	**8289**		**3933**	**657**	**1116**	**5709**
Per 100 Cows			**31**	**41**				**17**	**28**	

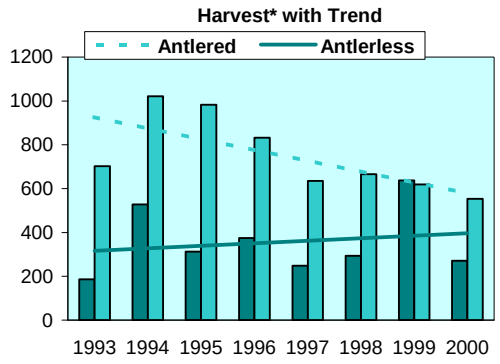
Note: ND = no survey data available.



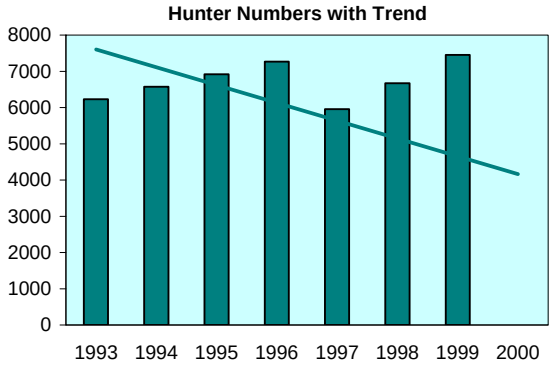
Zone Harvest Statistics

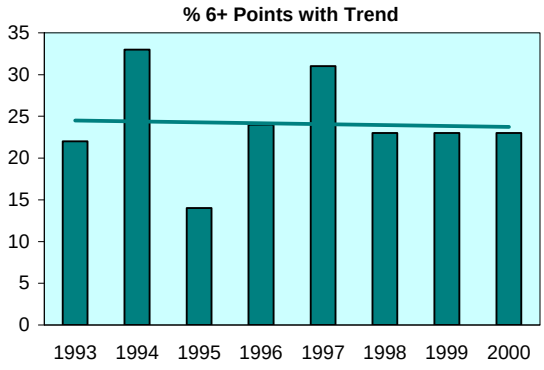
	1993	1994	1995	1996	1997	1998	1999	2000
Antlerless Harvest	186	528	312	375	249	294	638	271
'A' Tag							174	160
'B' Tag							176	15
CH Tag							288	96
Antlered Harvest	702	1021	982	833	636	666	619	554
'A' Tag							91	87
'B' Tag							525	452
CH Tag							3	15
Hunter Numbers	6227	6573	6920	7267	5955	6670	7451	ND
'A' Tag							1725	ND
'B' Tag							4603	ND
CH Tag							1123	ND
% 6+ Points	22	33	14	24	31	23	23	23

Note: Telephone survey harvest data prior to 1998 does not include general primitive weapons season data. %6+ pts does not include spike-only harvest.



* Note: Harvest prior to 1998 does not include general primitive weapons season data.





SAWTOOTH ZONE

Management Objectives

The objective is to maintain a population of ≥3,800 cows and ≥790 bulls, including ≥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 ≥750 bulls each year is desired. However, at current recruitment rates, harvest of ≤500 bulls is sustainable. These objectives reflect a balance between the need for a relatively large, huntable elk population and the concern 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 overharvested for hides and meat for mining camps in the mid- to late-1800s. The 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 5,200 elk started in the late 1970s.

The Sawtooth Zone is a popular destination for elk hunters from the Boise and Magic Valley areas. More than 7,000 sportsmen have hunted this area in the last few years.

Habitat Issues

Over 90% of this zone is managed by USFS. The 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 describe 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.

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.

Interspecific 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 to 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. As a result of a recent USFWS wolf reintroduction, $\geq$3 packs are established in Sawtooth Zone. The number of wolves in these packs is not yet large enough to have a significant impact on the elk and deer herds in the area. Impacts of wolf reintroduction on elk population dynamics remain unclear.

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 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 two decades, occasional winter feeding has allowed a wintering elk herd to become established in the Stanley area, where historically they could not survive the severe winters. This herd of 500-1,000 animals has severely impacted the small amount of natural winter range that is available.

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. The potential impacts of the new mix of large predators is unknown.

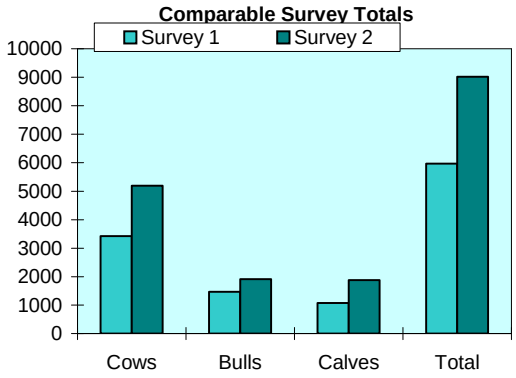
Elk
Pioneer Zone (Units 36A, 49, 50)

Winter Status & Objectives

	Current Status				Objective		
Unit	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
36A	2000	2126	595	353	1050 - 1550	300 - 500	200 - 300
49	1998	2043	888	531	1350 - 2050	500 - 700	300 - 400
50	2000	1026	431	297	950 - 1450	300 - 500	200 - 300
Zone Total		**5195**	**1914**	**1181**	**3350 - 5050**	**1100 - 1700**	**700 - 1000**
Bulls per 100 Cows			**37**	**23**		**30 - 35**	**18 - 22**

Population Surveys

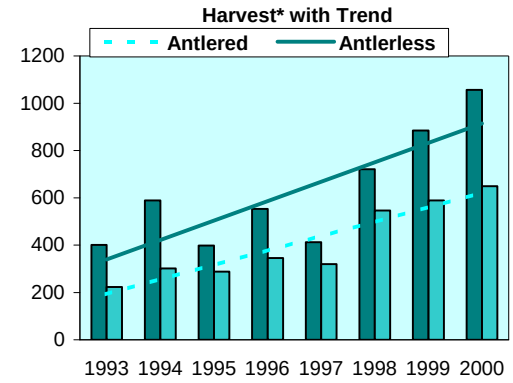
	Survey 1					Survey 2				
Unit	Year	Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
36A	1994	1474	757	393	2624	2000	2126	595	602	3322
49	1993	925	261	311	1497	1998	2043	888	815	3746
50	1999	1027	450	372	1849	2000	1026	431	464	1949
Comparable Surveys Total		**3426**	**1468**	**1076**	**5970**		**5195**	**1914**	**1881**	**9017**
Per 100 Cows			**43**	**31**				**37**	**36**	



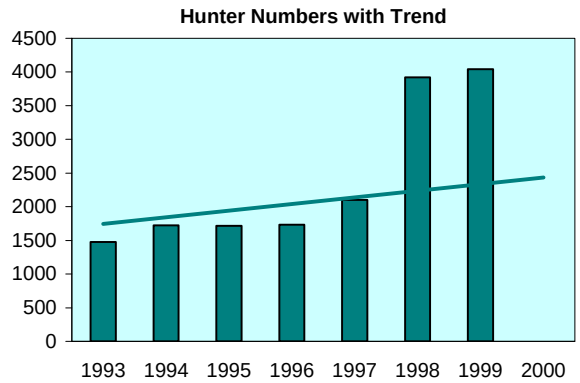
Zone Harvest Statistics

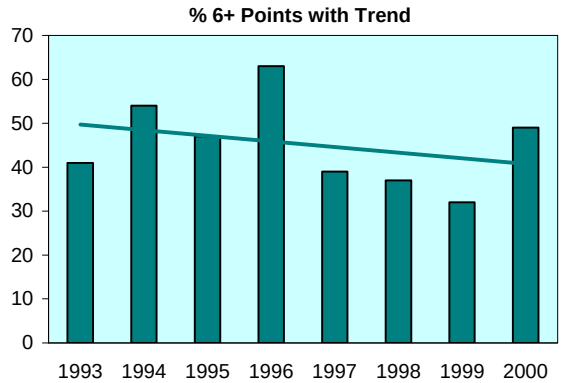
	1993	1994	1995	1996	1997	1998	1999	2000
Antlerless Harvest	401	589	398	553	412	721	884	1056
'A' Tag						44	511	109
'B' Tag						0	0	0
CH Tag						677	373	947
Antlered Harvest	223	301	288	346	320	546	589	649
'A' Tag						230	262	268
'B' Tag						0	0	1
CH Tag						316	327	380
Hunter Numbers	1477	1721	1714	1732	2101	3922	4043	ND
'A' Tag						1660	2346	ND
'B' Tag						0	0	ND
CH Tag						2262	1697	ND
% 6+ Points	41	54	47	63	39	37	32	49

Note: Telephone survey harvest data prior to 1998 does not include general primitive weapons season data. %6+ pts does not include spike-only harvest.



* Note: Harvest prior to 1998 does not include general primitive weapons season data.





PIONEER ZONE

Management Objectives

The objective for this zone is to stabilize elk herds at slightly reduced levels (about 4,200 cows and 1,350 bulls) to maintain herd productivity, and to 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 age 3+ bulls:100 cows preseason).

Historical Perspective

Elk were in low abundance in the Pioneer Zone through much of this century. These units have been managed for decades under conservative controlled hunt strategies. As has occurred over much of the west, elk herds have expanded dramatically since the mid-1970s. Today the Pioneer Zone winters approximately 7,200 elk, an increase of about 20% over that of the early 1990s.

About 4,000 people have hunted in the Pioneer Zone 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 the dominant human uses of the landscape in the Pioneer Zone. The Pioneer 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 appears to have become relatively stagnant and unproductive. Forests are slowly encroaching into shrub and grassland communities. The 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 the 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 increased from the mid-1970s until the mid-1990s and have since decreased slightly, moving toward population objective. 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 levels (30-40 calves:100 cows). In addition to high elk productivity, bull:cow ratios remain at very high levels (35+ bulls:100 cows).

Interspecific Issues

Current high elk densities may be impacting deer populations. Beginning in 2000, antlerless permits for Unit 50 were increased in an effort to reduce occupancy by elk in important mule deer winter range. The intended harvest may reduce wintering elk populations in Unit 50 to below objective.

When elk numbers are high, as they are currently, livestock operators often perceive elk to be strong competitors for range forage and impacting of riparian areas. However, elk generally remove a minor portion of the 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 the 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 the USFWS in central Idaho in 1995 have become established in the Pioneer Zone. They may become a significant factor in elk distribution and population demographics and may displace other predators through competitive interactions.

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 nonsanctioned feeders a better understanding of the problems associated with artificially fed elk.

Information Requirements

Impacts of elk on mule deer winter range are occurring and may be a limiting factor for mule deer populations. The most productive elk herds are those maintained at a level well below carrying capacity (at which point recruitment equals mortality and there is no harvestable surplus). Better information is needed to identify the appropriate elk densities, which 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.

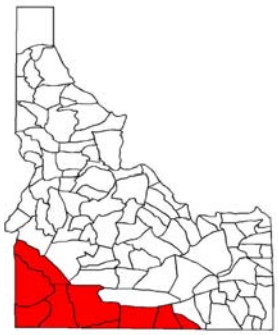
Elk

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

Winter Status & Objectives

	Current Status				Objective		
Unit	Survey Year	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		(50)	(15)	(10)	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		(75)	(30)	(15)	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
Zone Total		**(520)**	**(190)**	**(108)**	**370 - 570**	**55 - 145**	**40 - 85**
Bulls per 100 Cows			**(36)**	**(21)**		**18 - 24**	**10 - 14**

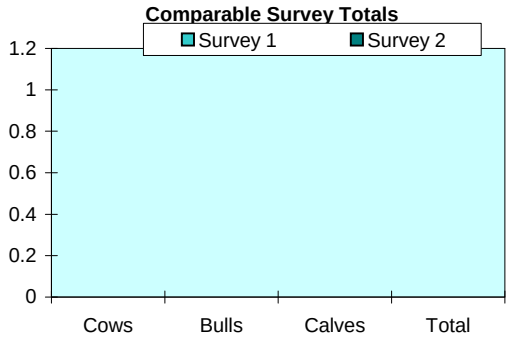
Note : Estimates within parentheses are based on information other than sightability surveys.



Population Surveys

	Survey 1					Survey 2				
Unit	Year	Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
1	ND					ND				
2	ND					ND				
3	ND					ND				
4	ND					ND				
4A	ND					ND				
5	ND					ND				
6	ND					ND				
7	ND					ND				
9	ND					1998				
Comparable Surveys Total										
Per 100 Cows										

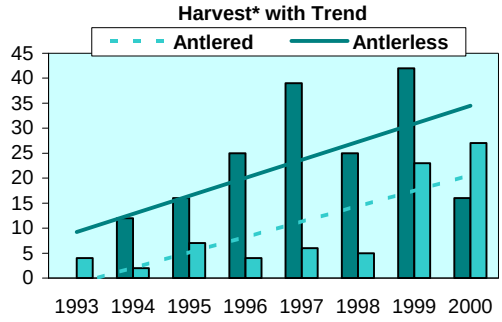
Note: ND = no survey data available.



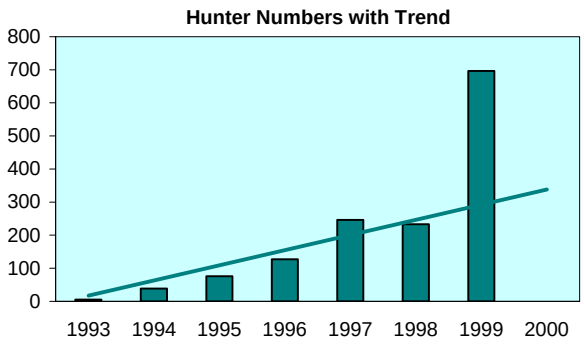
Zone Harvest Statistics

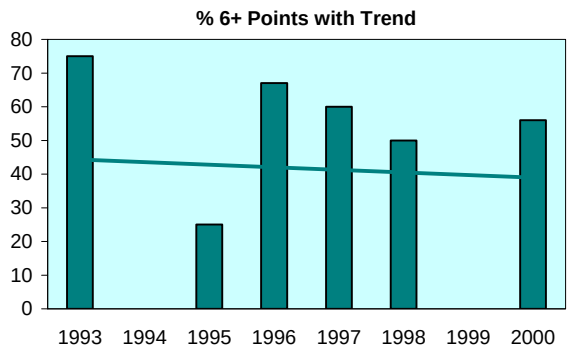
	1993	1994	1995	1996	1997	1998	1999	2000
Antlerless Harvest	0	12	16	25	39	25	42	16
'A' Tag							13	1
'B' Tag								2
CH Tag						25	29	13
Antlered Harvest	4	2	7	4	6	5	23	27
'A' Tag							20	7
'B' Tag								2
CH Tag						5	3	18
Hunter Numbers	5	39	76	127	246	233	696	ND
'A' Tag							457	ND
'B' Tag								ND
CH Tag						233	239	ND
% 6+ Points	75	0	25	67	60	50	0	56

Note: Telephone survey harvest data prior to 1998 does not include general primitive weapons season data. %6+ pts does not include spike-only harvest.



* Note: Harvest prior to 1998 does not include general primitive weapons season data.





OWYHEE-SOUTH HILLS ZONE

Management Objectives

The goal for the Owyhee-South Hills Zone is to maintain the elk herd at its current level and provide a harvest of less than 10 bulls while emphasizing the opportunity to harvest a mature bull.

Elk management decisions in Units 46 and 47 are currently subject to the Jarbidge 6-Party Elk Agreement. This agreement was developed and signed by the Idaho Department of Fish and Game, Nevada Division of Wildlife, Bureau of Land Management (Idaho and Nevada), U.S. Forest Service (USFS), and the 71 Livestock Association to facilitate a reintroduction of elk into the Jarbidge Mountains in Nevada. The agreement stipulates that a summering population of elk will not be allowed to establish in Idaho (Units 46 and 47). The 6-Party agreement expires in 2000 and elk management goals will be reexamined at that time. In Units 54, 55, and 57, elk numbers will be maintained at a level that avoids competition with mule deer during winter and minimizes depredation complaints from landowners.

Historical Perspective

The elk population in the Owyhee-South Hills Zone has been at very low levels since 1900. There have been transient elk in the area east of the Jarbidge River. The elk herd in Owyhee County has fluctuated widely since 1900. There were a few hundred elk in Owyhee County in the 1970s. After a slight decline, the herd increased to about 600 elk in the mid-1990s.

The elk in Owyhee County use habitat in three states: Nevada, Oregon, and Idaho. There is limited winter range on the west side of Owyhee County. The majority of the elk in this area move west to winter in Oregon. These movements can be over long distances. One elk calf tagged in Baker, Oregon was harvested as an adult near Murphy, Idaho, over 175 air miles. The elk wintering in Idaho between Highway 51 and the Bruneau River move south into Nevada for summer range. Most of the elk in this area are from a reintroduction program conducted by the Nevada Game and Fish Department and the Rocky Mountain Elk Foundation in the Bruneau River drainage in Nevada.

Elk were reintroduced into Unit 54 in 1914 and the population in 1917 was estimated to be 21 head. The elk population remained low in Unit 54; however, hunting seasons were authorized from 1963-1966 (15 permits). Slight increases in elk have been observed in all units of the zone east of the Bruneau River as a result of aggressive efforts to reestablish elk in Elko County, Nevada, beginning in 1980. Transient elk regularly move into Idaho from Box Elder County, Utah, and Elko County, Nevada. Resident elk in the Owyhee-South Hills Zone currently number less than 100 head.

Habitat Issues

The majority of elk habitat in Owyhee County is managed by the Bureau of Land Management. However, the small pieces of private property include very productive habitats. These productive habitats are used by elk substantially more than would be expected based on size

alone. The number of Landowner Preference Permits has been increased to allow landowners to harvest some of the elk that have been utilizing their property. The Bureau of Land Management directs management for most of the elk range in Owyhee County. In Owyhee County the spread of junipers into sage brush habitats and the conversion of sage brush-dominated habitats to crested wheatgrass/cheatgrass-dominated habitats raises concern for loss of habitat diversity in the area.

Both the USFS and the BLM manage the elk habitat in the South Hills area. Habitat conditions are currently adequate for supporting higher numbers of elk in the South Hills portion of the zone. However, high road densities and the potential for severe depredation problems are primary considerations for prohibiting a substantial expansion in the elk populations. Landowner tolerance for increasing elk numbers is presently low.

Biological Issues

The performance of this population is largely unknown due to insufficient population surveys. Anecdotal information suggests these populations are increasing. Recent estimates by local ranchers in Unit 54 put the population at +150 animals. Increases in elk numbers over the next 5-10 years are inevitable in much of this zone because substantial increases in elk are anticipated in Elko County, Nevada.

Interspecific Issues

The Owyhee-South Hills Zone has a large population of mule deer. The small elk population has had no impact on the mule deer population. In the South Hills portion of the zone (Units 46, 47, 54, 55, and 57) mule deer will be given management priority over elk.

Conflicts between elk and livestock have been a major factor in elk management in Owyhee County. The concentration of elk on the private land holdings in western Owyhee County have created significant depredation problems. The landowners' major concerns are damage to fences and loss of private rangeland forage. Any increase in the elk population would add to these conflicts. Currently there are no elk depredation concerns in the South Hills portion of the zone. However, the potential for severe conflicts with private landowners exists.

Predation Issues

There are no wolves or black bears in this zone. Mountain lions and possibly coyotes are the two large predators on elk in this area. Mountain lion populations have increased over the last 30 years. Predation does not appear to be a major factor in the dynamics of these elk herds.

Winter Feeding Issues

There has been no winter feeding of elk in this zone recently. The elk populations are small and scattered. Winter feeding for elk is not likely to be necessary in this zone.

Information Requirements

There are two major data needs for the elk herd in Owyhee County. First, a practical census technique has not been developed for this elk herd. The population estimates are based on reports from ranchers in the area and incidental sightings by biologists. This elk population is at a very low density, often in juniper-dominated habitats with low visibility, and often in another state, making census projects especially difficult. Second, there is a need to evaluate the impact of elk on the availability of rangeland forage to domestic livestock.

Elk
Boise River Zone (Unit 39)

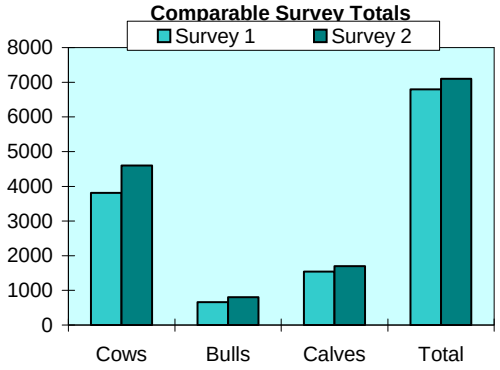
Winter Status & Objectives

	Current Status				Objective		
Unit	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
39	1998	3957	413	199	3200 - 4800	650 - 950	375 - 575
Zone Total		**3957**	**413**	**199**	**3200 - 4800**	**650 - 950**	**375 - 575**
Bulls per 100 Cows			**10**	**5**		**18 - 24**	**10 - 14**

Population Surveys

	Survey 1					Survey 2				
Unit	Year	Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
39	1990	3807	662	1538	6796	1998	3957	413	1106	5476
Comparable Surveys Total		**3807**	**662**	**1538**	**6796**		**4600**	**799**	**1697**	**7098**
Per 100 Cows			**17**	**40**				**17**	**36**	

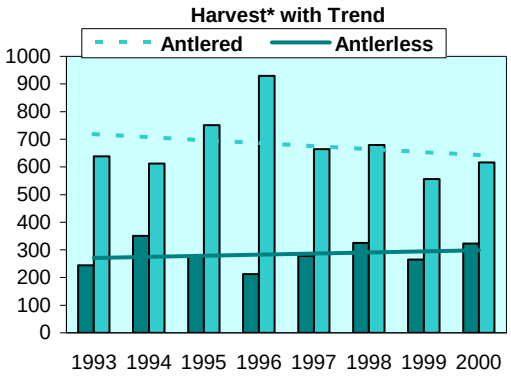
Note: ND = no survey data available.



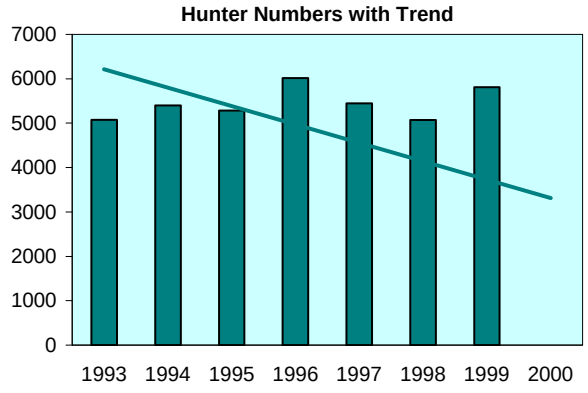
Zone Harvest Statistics

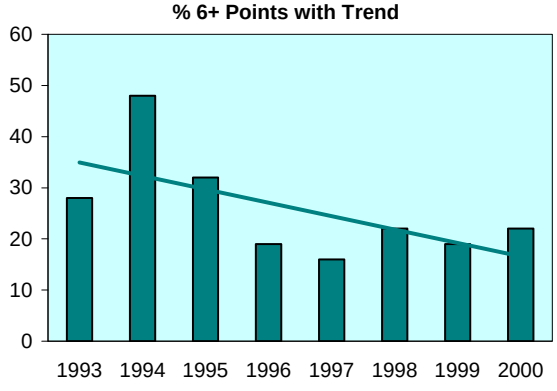
	1993	1994	1995	1996	1997	1998	1999	2000
Antlerless Harvest	244	350	279	212	278	325	265	323
'A' Tag							0	9
'B' Tag							13	2
CH Tag							252	312
Antlered Harvest	638	612	751	929	664	679	556	616
'A' Tag							46	15
'B' Tag							510	590
CH Tag							0	11
Hunter Numbers	5077	5401	5284	6016	5446	5069	5806	ND
'A' Tag							799	ND
'B' Tag							4441	ND
CH Tag							566	ND
% 6+ Points	28	48	32	19	16	22	19	22

Note: Telephone survey harvest data prior to 1998 does not include general primitive weapons season data. %6+ pts does not include spike-only harvest.



* Note: Harvest prior to 1998 does not include general primitive weapons season data.





BOISE RIVER ZONE

Management Objectives

The objective for this zone is 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. Reducing harvest rates on bulls will be necessary to achieve the objectives for this zone.

Historical Perspective

Near the turn of the century, elk herds in the Boise River drainage were heavily harvested for hides and meat for the 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 the Boise River Zone has increased right along with the growth in the elk population. This is now one of the top five elk units in the state with a harvest of nearly 1,000 bulls by 5,000 hunters.

Habitat Issues

The Boise River Zone includes 2,455 square miles of excellent elk habitat. The conditions range from wilderness situations in the Sawtooth National Recreation Area to the heavily roaded areas near Boise. The Boise National Forest manages the majority of the 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 the 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 homesites 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 the 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 the summer and transition ranges have generally improved conditions for elk.

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

28-40 calves:100 cows. Bull harvest currently exceeds potential of bull calf recruitment. As an example, in 1997, 664 bulls were harvested and an estimated 550 bull calves were recruited.

Interspecific Issues

The Boise River Zone is also one of the top five mule deer hunting units in Idaho. The recent changes to the habitat have favored elk. The winter survey flights show the separation of wintering deer and elk. The 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 the Boise River Zone. The mountain lion population is well above the levels of the 1950s. Wolves were reintroduced in Idaho in 1995 and, on occasion, have been on the northern edges of this zone. Wolves are not likely to be a significant factor for elk in the unit.

Winter Feeding Issues

Winter feeding sites were maintained along the Middle Fork Boise River for both deer and elk through the 1950s. The only elk winter feeding that has taken place in the last ten years has been around subdivisions to bait elk away from problem areas. The 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
Smoky Mountains Zone (Units 43, 44, 48)

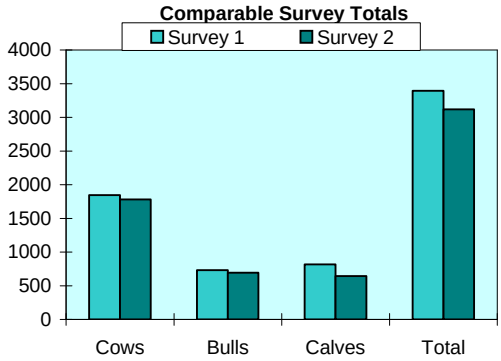
Winter Status & Objectives

	Current Status				Objective		
Unit	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
43	2000	1040	292	223	1350 - 2000	425 - 650	275 - 400
44	2000	250	157	129	150 - 250	50 - 75	30 - 50
48	1999	493	245	176	375 - 550	125 - 175	75 - 125
Zone Total		**1783**	**694**	**528**	**1875 - 2800**	**600 - 900**	**380 - 575**
Bulls per 100 Cows			**39**	**30**		**30 - 35**	**18 - 22**

Population Surveys

	Survey 1					Survey 2				
Unit	Year	Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
43	1995	1242	498	565	2595	2000	1040	292	340	1672
44	1995	168	98	87	353	2000	250	157	80	487
48	1994	434	137	164	735	1999	493	245	224	962
Comparable Surveys Total		**1844**	**733**	**816**	**3393**		**1783**	**694**	**644**	**3121**
Per 100 Cows			**40**	**44**				**39**	**36**	

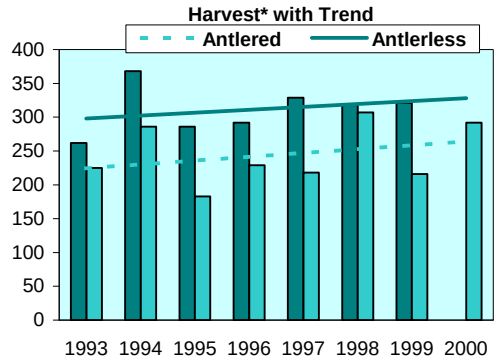
Note: ND = no survey data available.



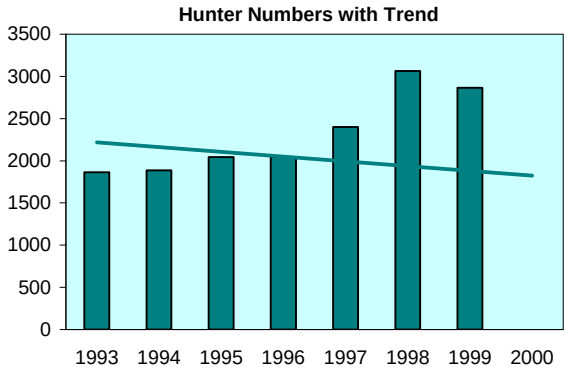
Zone Harvest Statistics

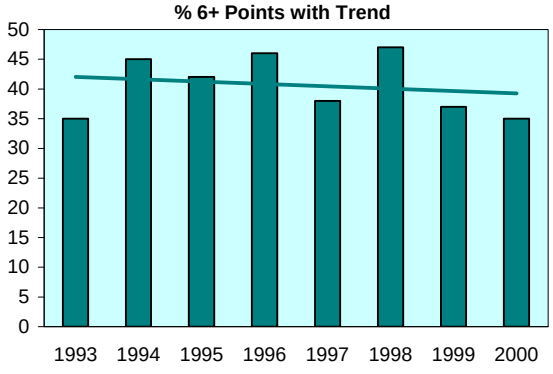
	1993	1994	1995	1996	1997	1998	1999	2000
Antlerless Harvest	262	368	286	292	329	318	321	
'A' Tag						6	26	9
'B' Tag								0
CH Tag	262	368	286	292	329	312	295	346
Antlered Harvest	225	286	183	229	218	307	216	292
'A' Tag						102	46	82
'B' Tag								1
CH Tag	225	286	183	229	218	205	170	209
Hunter Numbers	1863	1885	2045	2045	2400	3065	2866	ND
'A' Tag						861	739	ND
'B' Tag								ND
CH Tag	1863	1885	2045	2045	2400	2204	2127	ND
% 6+ Points	35	45	42	46	38	47	37	35

Note: Telephone survey harvest data prior to 1998 does not include general primitive weapons season data. %6+ pts does not include spike-only harvest.



* Note: Harvest prior to 1998 does not include general primitive weapons season data.





SMOKY MOUNTAINS ZONE

Management Objectives

The objective in this zone is to establish a population of 2,300+ cows and 700+ bulls, including 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 and 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 population levels, bull:cow ratios, and adult bull:cow ratios are within established 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 the Department began a reintroduction effort 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. Excessive use by livestock during the late 1880s and early 1890s severely damaged the Boise River and Big Wood River watersheds and reduced the area's ability to support high numbers of elk. 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 the 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 sustain these populations. 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.

Habitat productivity has probably improved on federal lands in recent years because of reductions in domestic sheep grazing and regrowth 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 the hunting seasons. Seasonal road closures have been instituted by the USFS and BLM to increase elk escapement and mitigate for the high road densities. However, oversnow 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.

Production, measured through sightability surveys and herd composition surveys at feed sites, indicate most populations are reproducing at sustainable levels (40 calves:100 cows). However, at some feed sites in the South Fork Boise River (Unit 43) observed reproductive performance is considerably lower (18 calves:100 cows). No determination has been made as to the cause of this lower production.

Interspecific Issues

The zone supports a substantial population of mule deer; a few 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 the critical winter months.

Cattle and domestic sheep have imposed the major 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 the 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. Recently, wolves have been documented in the Big Wood River (Unit 48) and South Fork of the 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.

Winter Feeding Issues

Winter feeding is the most contentious issue related to elk in this zone. The Department has 6 Commission-approved feed sites located in Units 43 and 48. These are the only elk feed sites in Idaho formally sanctioned by the Fish and Game 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 5 feed sheds (approximately 1,100 head). Recent discoveries of brucellosis at "emergency" feed sites in the 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 short stop 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 whether it is warranted or not.

Information Requirements

More detailed information is needed on 1) the 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) the 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
Bennett Hills Zone (Units 45, 52)

Winter Status & Objectives

	Current Status				Objective		
Unit	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
45	1999	154	175	150	225 - 325	50 - 75	35 - 50
52		(75)	(25)	(15)	50 - 100	10 - 20	5 - 10
Zone Total		**(229)**	**(200)**	**(165)**	**275 - 425**	**60 - 95**	**40 - 60**
Bulls per 100 Cows			**(87)**	**(72)**		**18 - 24**	**10 - 14**

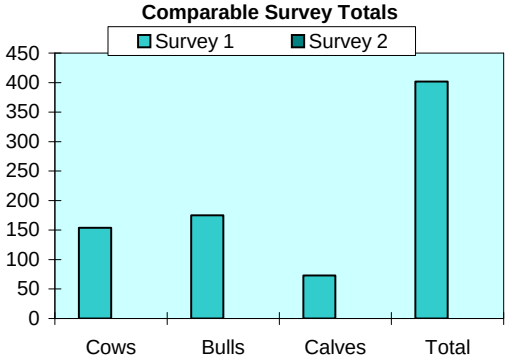
Note : Estimates within parentheses are based on information other than sightability surveys.

Population Surveys

	Survey 1					Survey 2				
Unit	Year	Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
45	1999	154	175	73	402	ND				
52	ND					ND				
Comparable Surveys Total		**154**	**175**	**73**	**402**					
Per 100 Cows			**114**	**47**						

Note: ND = no survey data available.

Comparable Survey Totals

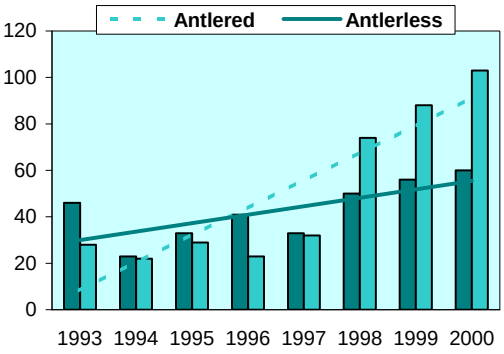


Zone Harvest Statistics

	1993	1994	1995	1996	1997	1998	1999	2000
Antlerless Harvest	46	23	33	41	33	50	56	60
'A' Tag								3
'B' Tag								0
CH Tag	46	23	33	41	33	50	56	57
Antlered Harvest	28	22	29	23	32	74	88	103
'A' Tag						26	38	42
'B' Tag								1
CH Tag	28	22	29	23	32	48	50	60
Hunter Numbers	205	155	155	155	151	794	433	ND
'A' Tag						573	213	ND
'B' Tag								ND
CH Tag	205	155	155	155	151	221	220	ND
% 6+ Points	23	19	61	43	44	54	50	43

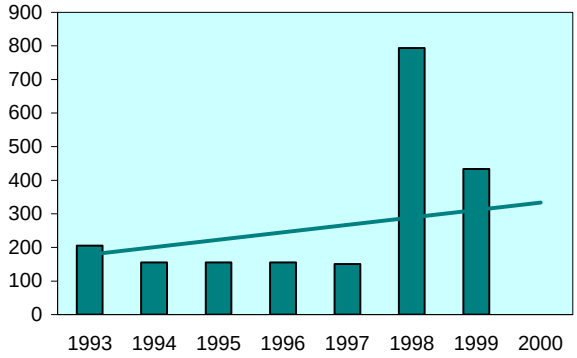
Note: Telephone survey harvest data prior to 1998 does not include general primitive weapons season data. %6+ pts does not include spike-only harvest.

Harvest* with Trend

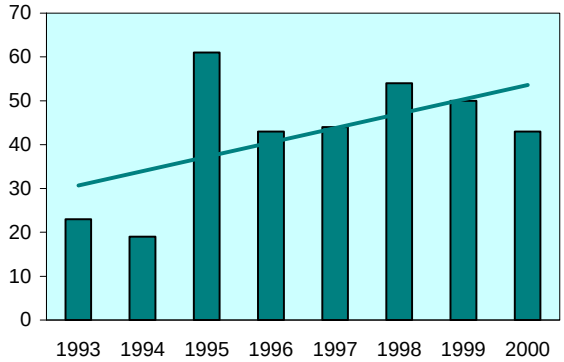


* Note: Harvest prior to 1998 does not include general primitive weapons season data.

Hunter Numbers with Trend



% 6+ Points with Trend



BENNETT HILLS ZONE

Management Objectives

The objective is to maintain a population of 350+ cows and 155+ bulls, including 55+ adult bulls, at ratios of 30-35 bulls:100 cows and 14-18 adult bulls:100 cows. One sightability survey (1999) has been conducted in the zone since population objectives were established with results indicating modifications in zone objective may be necessary. Current population levels are 154 cows, 175 bulls, 150 adult bulls, at ratios of 87 bulls:100 cows and 72 adult bulls:100 cows.

Historical Perspective

Elk were extirpated from the Bennett Hills Zone by the early 1900s as a result of unregulated hunting and habitat depletion from excessive livestock use. The recolonization of the 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, the zone is currently believed to have about 450 elk.

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

In 1965, 36 elk (9 bulls, 19 cows, and 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 the approximately 120 elk that summered in the Johnson Hill area. Early controlled firearms hunts and archery seasons were implemented in 1979 to reduce the 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 the Bennett Hills Zone until 1999 to monitor the elk population.

Habitat Issues

The Bennett Hills Zone encompasses roughly 3,700 square miles, 8% of which is managed by the USFS, 67% is managed by the BLM, 5% is administered by the 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. The 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. The 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. An elk ranching operation has recently been established in Unit 45 bringing concerns of potential loss of the genetic integrity of wild elk and possible transmission of diseases 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 (47 calves:100cows). Population size is within sustainable margins, however bull ratios are considerably higher than required to maintain the population (87 bulls:100 cows).

Interspecific Issues

This zone winters nearly all of the mule deer from management 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 the 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 three 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

With only one aerial survey being 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 winter use areas.

Elk
Big Desert Zone (Units 52A, 53, 63, 63A, 68, 68A)

Winter Status & Objectives

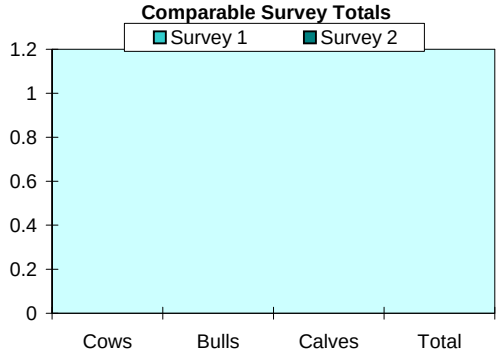
	Current Status				Objective		
Unit	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
52A		(60)	(20)	(15)	45 - 75	10 - 20	5 - 10
53		(60)	(20)	(15)	0	0	0
63		(200)	(100)	(50)	25 - 35	5 - 10	1 - 5
63A		(0)	(0)	(0)	0	0	0
68		(100)	(20)	(20)	75 - 125	15 - 25	10 - 15
68A		(0)	(0)	(0)	0	0	0
Zone Total		**(420)**	**(180)**	**(100)**	**145 - 235**	**30 - 55**	**16 - 30**
Bulls per 100 Cows			**(43)**	**(24)**		**18 - 24**	**10 - 14**

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

Population Surveys

	Survey 1					Survey 2				
Unit	Year	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				
Comparable Surveys Total										
Per 100 Cows										

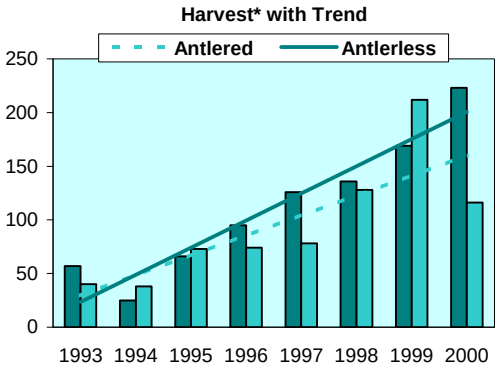
Note: ND = no survey data available.



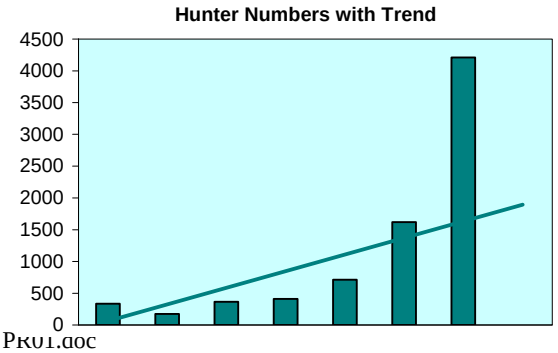
Zone Harvest Statistics

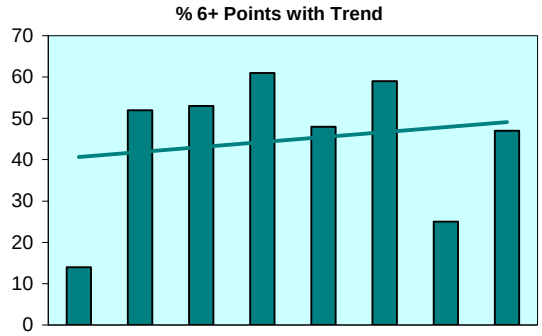
	1993	1994	1995	1996	1997	1998	1999	2000
Antlerless Harvest	57	25	66	95	126	136	169	223
'A' Tag						0	152	192
'B' Tag						0	0	0
CH Tag						136	17	31
Antlered Harvest	40	38	73	74	78	128	212	116
'A' Tag						59	205	69
'B' Tag						0	0	1
CH Tag						69	7	46
Hunter Numbers	336	171	365	411	714	1619	4211	ND
'A' Tag						1073	3961	ND
'B' Tag						0	0	ND
CH Tag						546	250	ND
% 6+ Points	14	52	53	61	48	59	25	47

Note: Telephone survey harvest data prior to 1998 does not include general primitive weapons season data. %6+ pts does not include spike-only harvest.



* Note: Harvest prior to 1998 does not include general primitive weapons season data.





BIG DESERT ZONE

Management Objectives

The objective for the Big Desert Zone is to maintain a wintering elk population of 195+ cows and 40+ bulls, including 20+ adult bulls. Although no population survey estimate exists for this zone, field reports combined with Idaho National Environmental and Engineering Laboratory (INEEL) surveys indicate that current numbers exceed objectives. The reduction in cows is necessary to alleviate significant depredation concerns in Units 53 and 63. Although depredations do occur in Unit 68, they are not as severe as elsewhere in the Big Desert Zone. The reduction in bulls and adult bulls is to 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

The elk population in the 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. Undoubtedly, the unregulated harvest of the late 1800s and early 1900s maintained at or reduced populations to relatively low levels.

Elk hunting in the 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.

Habitat Issues

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

The BLM administers the majority of the public ground (49% of total area) in the Big Desert Zone. Private ground makes up 39% while the Fort Hall Indian Reservation, INEEL, and Craters of the Moon National Park combine for the remaining 12%. Although only making up 12% of the total area, these lands provide difficult challenges for managing elk numbers within the Big Desert Zone. Hunting is either not allowed or allowed only in extremely limited capacity within these areas. The INEEL, in particular, 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 the INEEL.

A number of water guzzlers have been developed primarily for nongame, upland game, and pronghorn within the 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 the 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 INEEL aerial surveys, population surveys have not been conducted in the Big Desert Zone. Therefore, estimates for recruitment and total numbers are based on other data. Given the relatively rapid increase in elk observed over the last 10 years, it is believed that production is high. To achieve population objectives for the Big Desert Zone, with what are probably high recruitment rates, will require high harvest rates.

Interspecific Issues

Livestock, mule deer, and pronghorn are the primary ungulates sharing the range with elk in the 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 relative inaccessible nature of this zone in winter and generally limited snowfall preclude many concerns for winter feeding.

Information Requirements

The greatest data need for the 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
Island Park Zone (Units 60, 60A, 61, 62A)

Winter Status & Objectives

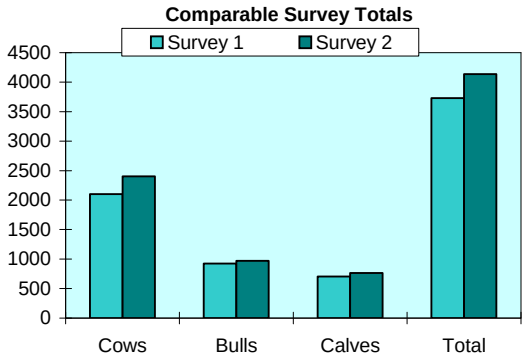
	Current Status				Objective		
Unit	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
60		(0)	(0)	(0)	0	0	0
60A	2000	2404	967	658	1200 - 1800	400 - 575	250 - 375
61		(0)	(0)	(0)	0	0	0
62A		(0)	(0)	(0)	0	0	0
Zone Total		**2404**	**967**	**658**	**1200 - 1800**	**400 - 575**	**250 - 375**
Bulls per 100 Cows			**40**	**27**		**30 - 35**	**18 - 22**

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

Population Surveys

	Survey 1					Survey 2				
Unit	Year	Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
60	ND					ND				
60A	1998	2100	924	705	3729	2000	2404	967	763	4134
61	ND					ND				
62A	ND					ND				
Comparable Surveys Total		**2100**	**924**	**705**	**3729**		**2404**	**967**	**763**	**4134**
Per 100 Cows			**44**	**34**				**40**	**32**	

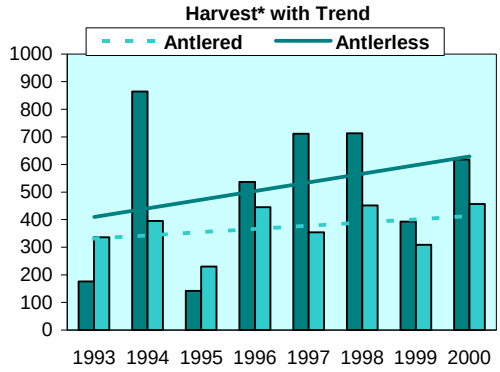
Note: ND = no survey data available.



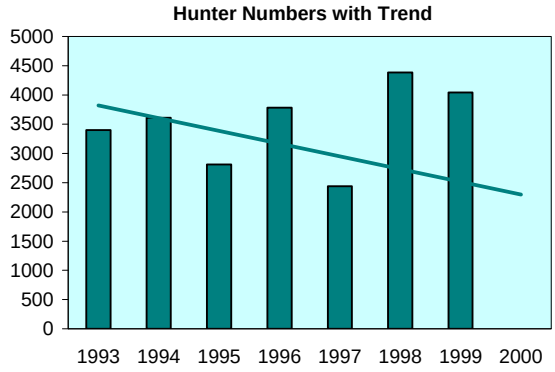
Zone Harvest Statistics

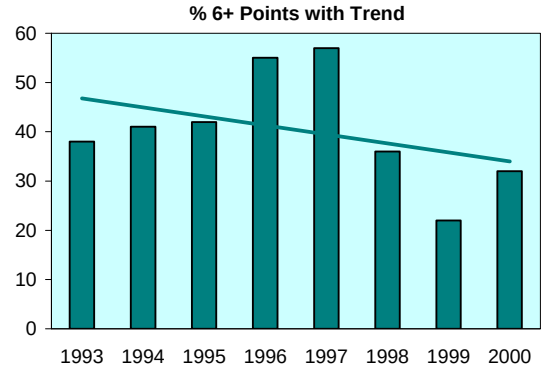
	1993	1994	1995	1996	1997	1998	1999	2000
Antlerless Harvest	176	864	142	536	711	713	393	618
'A' Tag						232	113	82
'B' Tag						0	0	0
CH Tag						481	280	536
Antlered Harvest	336	395	230	445	354	452	309	457
'A' Tag						238	185	230
'B' Tag						0	0	2
CH Tag						214	124	225
Hunter Numbers	3399	3611	2810	3783	2441	4385	4044	ND
'A' Tag						2752	2441	ND
'B' Tag						0	0	ND
CH Tag						1633	1603	ND
% 6+ Points	38	41	42	55	57	36	22	32

Note: Telephone survey harvest data prior to 1998 does not include general primitive weapons season data. %6+ pts does not include spike-only harvest.



* Note: Harvest prior to 1998 does not include general primitive weapons season data.





ISLAND PARK ZONE

Management Objectives

The management objective for the Island Park Zone is to maintain a wintering elk population of approximately 1,500 cows and 475 bulls, including 300 adult bulls. Currently, elk wintering on the Sand Creek winter range in Unit 60A are above objective. Obtaining adequate harvest on this population is difficult due to its migratory nature and the fact that significant portions of the herd spend the fall in Yellowstone National Park and Harriman State Park where they are immune to harvest. Bringing this population down to below 3,000 animals postseason is a primary objective. 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. The 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.

Historical Perspective

Elk have been present in varying numbers in at least portions of the 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 20th century, these hunts were based upon elk populations summering in Yellowstone National Park.

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

General bull hunting was restricted to spikes-only in 1991 in response to an accelerated timber harvest program on the 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 the Island Park Zone.

Habitat Issues

Most of the elk summer range in the Island Park Zone occurs on USFS lands and is dominated by gentle topography lodgepole pine communities. Douglas fir stands are common on sloping sites. Timber management practices 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 the Targhee National Forest were classified as dead or dying due to a mountain pine beetle infestation. Consequently, the USFS dramatically accelerated timber harvest. The result is an extensive network of roads and clearcuts, 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.

The 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 the Island Park Zone.

Biological Issues

Winter elk populations have been increasing steadily in the 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 has climbed steadily to the 4,134 elk counted in 2000.

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. Bull: 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 the summer and fall in Harriman State Park and Yellowstone National Park. These animals are largely unharvested, being subjected to hunting pressure only while migrating to winter range, followed with a conservative winter range controlled hunt.

Interspecific Issues

Unfortunately, little evidence exists to evaluate the potential relationships between elk, mule deer, and moose in the Island Park Zone. White-tailed deer are scattered throughout the 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 the 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 the Island Park Zone. Mountain lions are extremely rare. Coyotes are common, especially in the winter range portion of the Island Park Zone, but are not known to have much impact on elk populations. Wolves recently introduced by the USFWS in Yellowstone National Park may become established in this zone, which could affect other predators and elk.

Winter Feeding Issues

No Department-sponsored feeding activities occur in the Island Park Zone except under emergency situations. Agricultural encroachment on the Sand Creek winter range increases the

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 nonsanctioned feeders a better understanding of the 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 progress toward achieving population objectives. In addition, the information is valuable to assess the results of the recently implemented travel management policy on the Targhee National Forest.

Additionally, better knowledge of the summer/fall spatial distribution of this elk herd could improve achieving harvest objectives.

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
Teton Zone (Units 62, 65)

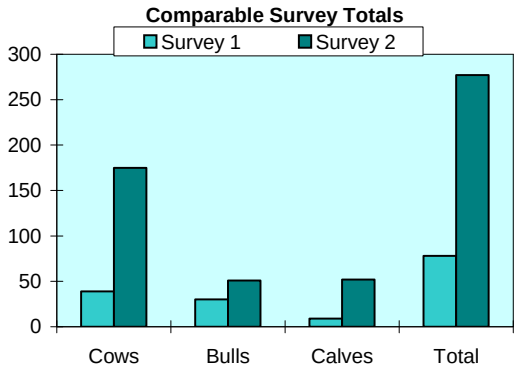
Winter Status & Objectives

	Current Status				Objective		
Unit	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
62	1992	65	25	22	100 - 150	20 - 30	10 - 20
65	1996	175	51	30	50 - 100	15 - 25	5 - 15
Zone Total		**240**	**76**	**52**	**150 - 250**	**35 - 55**	**15 - 35**
Bulls per 100 Cows			**32**	**22**		**18 - 24**	**10 - 14**

Population Surveys

	Survey 1					Survey 2				
Unit	Year	Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
62	1992	65	25	26	115	ND				
65	1993	39	30	9	78	1996	175	51	52	277
Comparable Surveys Total		**39**	**30**	**9**	**78**		**175**	**51**	**52**	**277**
Per 100 Cows			**77**	**23**				**29**	**30**	

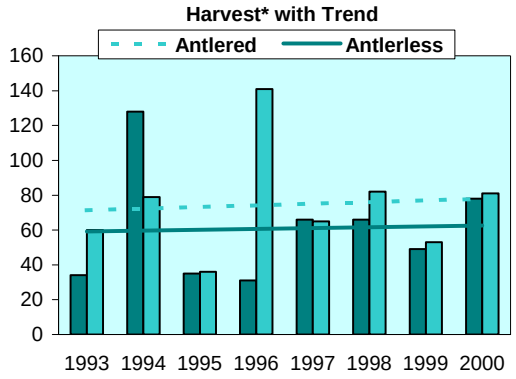
Note: ND = no survey data available.



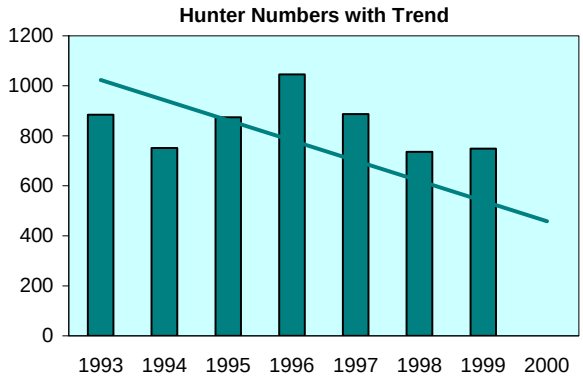
Zone Harvest Statistics

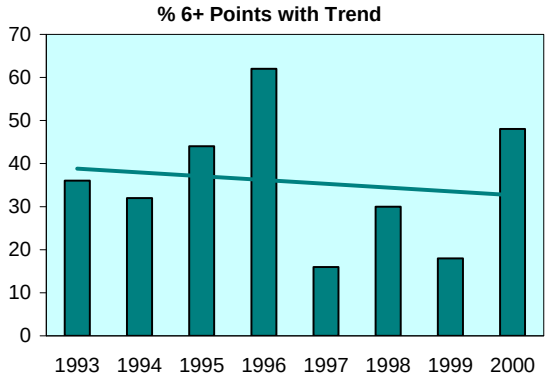
	1993	1994	1995	1996	1997	1998	1999	2000
Antlerless Harvest	34	128	35	31	66	66	49	78
'A' Tag						0	26	35
'B' Tag						0	0	0
CH Tag						66	23	43
Antlered Harvest	60	79	36	141	65	82	53	81
'A' Tag						5	0	6
'B' Tag						19	17	30
CH Tag						58	36	45
Hunter Numbers	884	751	874	1046	887	736	749	ND
'A' Tag						114	396	ND
'B' Tag						340	86	ND
CH Tag						282	267	ND
% 6+ Points	36	32	44	62	16	30	18	48

Note: Telephone survey harvest data prior to 1998 does not include general primitive weapons season data. %6+ pts does not include spike-only harvest.



* Note: Harvest prior to 1998 does not include general primitive weapons season data.





TETON ZONE

Management Objectives

The population management objective for the Teton Zone is 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 the 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, trapping and transplanting may be used if hunting is unsuccessful in achieving objectives.

Limited radio collar information suggests that well over half of the elk in this zone spend the 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 do cause depredation problems during the 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-l970s. At that time overharvest became a concern and the format was changed to allow five 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 the 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 the Teton River and its tributaries north of State Highway 33. Elk populations increased dramatically in the l990s. 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 three 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 Conservation Reserve Program (CRP). Elk winter range was lost to the construction and subsequent failure of Teton Dam, although the greatest losses associated to that event were 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 (snowmachines 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 ten years and consists of two groups. One herd winters east and south of Victor and numbers about 200. It is estimated the winter range in the area could support 50-60 animals. Addressing this overpopulation through harvest is difficult because many of the animals are in Wyoming until late winter. The other group winters along the Teton River in Teton Basin. They have increased to over 100 animals and they pose a major depredation threat in normal winters. There is an opportunity to control them with hunting.

Two groups of elk being fed in Unit 62 need to be moved or redistributed by hunting or other strategies. These animals are fed in the winter on private ranches at Teepee Creek and Conant Creek. Both as a brucellosis control method and to comply with Fish and Game Commission policy, these annual feeding operations should be eliminated. It is believed that the 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.

Interspecific Issues

This zone contains a moderate mule deer population, a significant and relatively new white-tailed deer population in Teton Basin, and a strong moose population. It is grazed extensively by domestic livestock. Interspecific relationships among these species and elk are not monitored and are poorly understood. Examination of livestock impacts on elk winter range will be conducted as part of the effort to end annual winter feeding of elk in this zone.

Predation Issues

There are no known unique or unusual predator issues affecting the elk population in this zone. Wolves reintroduced by the USFWS in Yellowstone National Park in 1995 may become established, which could affect other predators, as well as elk demographics.

Winter Feeding Issues

Winter feeding is occurring at three locations in this zone on a regular basis. Continued annual feeding at these sites is in direct conflict with Fish and Game 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.

Victor - A herd of approximately fifty elk traditionally wintered in the foothills east and south of Victor. In about l990 a landowner began feeding this elk herd, which has grown each year and now numbers approximately 200 animals. The Department had 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 two winters, which were deemed to be emergency cases.

Conant Creek - In the late l950s 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 numbers 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 has successfully enlisted the support of politicians and sportsmen in continuing the feeding. Thirteen elk were fed at this site during the 2000-2001 winter.

Teepee Creek (Felt) - A landowner on Teepee Creek began feeding elk in the early l990s. 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 operation and the one at Conant Creek have short-stopped elk from migrating to winter ranges further west.

Information Requirements

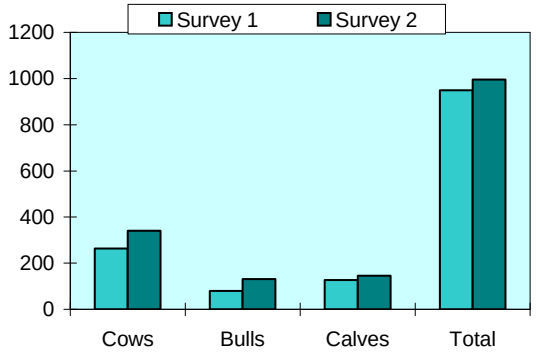
A comprehensive inventory of winter range in this zone is needed to accomplish the objective of ending annual winter feeding. The condition of some winter ranges may provide an opportunity for enhancement for elk through burning or changes in livestock management. As part of this, an assessment of the location, quality, and remaining terms of enrollment of the area's CRP lands 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 they are to be made available to elk, snow-mobiles should be discouraged.

Elk
Palisades Zone (Units 64, 67)

Winter Status & Objectives

	Current Status				Objective		
Unit	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
64/67	1998	340	131	93	400 - 600	125 - 200	75 - 125
Zone Total		**340**	**131**	**93**	**400 - 600**	**125 - 200**	**75 - 125**
Bulls per 100 Cows			**39**	**27**		**30 - 35**	**18 - 22**

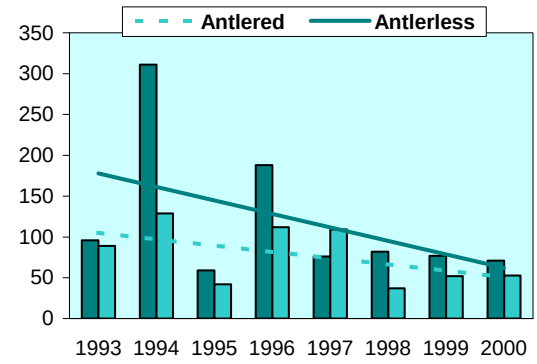
Comparable Survey Totals



Population Surveys

	Survey 1					Survey 2				
Unit	Year	Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
64/67	1993	264	80	127	950	1998	340	131	146	995
Comparable Surveys Total		**264**	**80**	**127**	**950**		**340**	**131**	**146**	**995**
Per 100 Cows			**30**	**48**				**39**	**43**	

Harvest* with Trend



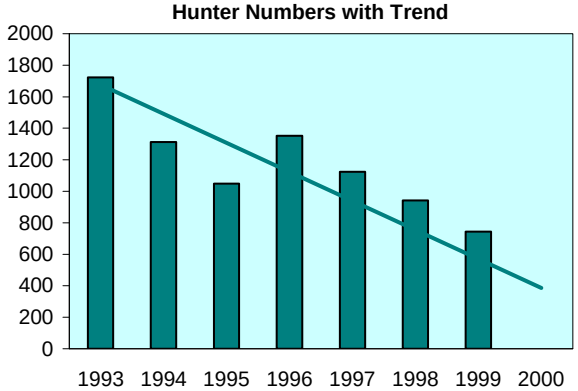
Zone Harvest Statistics

	1993	1994	1995	1996	1997	1998	1999	2000
Antlerless Harvest	96	311	59	188	76	82	77	71
'A' Tag						0	19	19
'B' Tag						0	0	0
CH Tag						82	58	52
Antlered Harvest	89	129	42	112	109	37	52	53
'A' Tag						6	6	14
'B' Tag						25	38	37
CH Tag						6	8	2
Hunter Numbers	1722	1313	1048	1353	1124	942	743	ND
'A' Tag						181	247	ND
'B' Tag						285	228	ND
CH Tag						476	268	ND
% 6+ Points	0	18	20	0	1	27	75	42

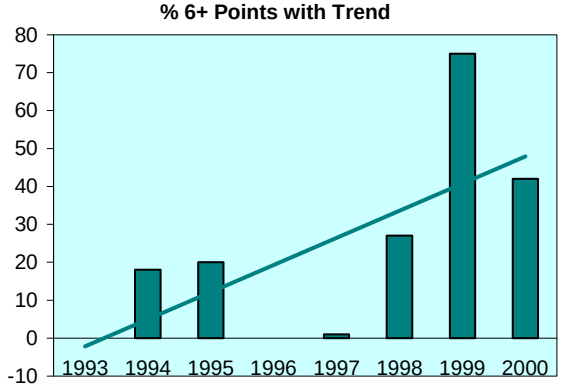
Note: Telephone survey harvest data prior to 1998 does not include general primitive weapons season data. %6+ pts does not include spike-only harvest.

* Note: Harvest prior to 1998 does not include general primitive weapons season data.

Hunter Numbers with Trend



% 6+ Points with Trend



PALISADES ZONE

Management Objectives

The population management objective for the Palisades Zone is to maintain approximately 500 cows and 160 bulls, of which 100 should be mature bulls. An aerial survey during 2000-2001 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 the 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, trapping and transplanting will also be employed. This zone offers most of what little backcountry hunting opportunity remains in southeast 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-l970s. At that time overharvest became a concern and the format was changed to allow five 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 the Snake River. In the mid-l970s the Department began feeding elk in Rainey Creek to bait them away from livestock feeding operations. This activity has continued to the present and involves approximately 150 animals. The elk population wintering in this zone has increased gradually over the last three 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. 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 appears 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 trap and remove all positive testing female animals and

transplant negative testing animals to winter ranges northwest of Dry Canyon. This process is expected to take three or more years to complete. The elk are being transplanted in an experimental effort to determine if they will return to their birthing summer ranges and then migrate back near their transplant site the following winter. Radio tracking will monitor this test.

Interspecific Issues

In addition to elk, the Palisades Zone is home to an important mule deer population and a strong moose population, and is grazed extensively by domestic livestock. Interspecific relationships among these species and elk are not well monitored and are poorly understood. Competition between elk and mule deer probably is occurring in the immediate vicinity of Rainey Creek where both species have been fed most winters since the mid-l970s.

Predation Issues

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

Winter Feeding Issues

In the late l970s, 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 feedlines. 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 determined.

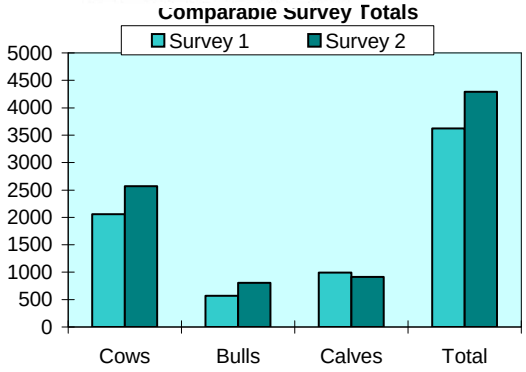
Elk
Tex Creek Zone (Units 66, 69)

Winter Status & Objectives

	Current Status				Objective		
Unit	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
66/69	2000	2569	808	460	2000 - 3000	425 - 625	250 - 350
Zone Total		**2569**	**808**	**460**	**2000 - 3000**	**425 - 625**	**250 - 350**
Bulls per 100 Cows			**32**	**18**		**18 - 24**	**10 - 14**

Population Surveys

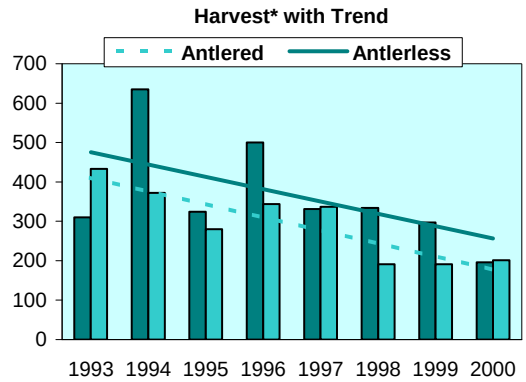
	Survey 1					Survey 2				
Unit	Year	Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
66/69	1997	2059	570	995	3623	2000	2569	808	916	4293
Comparable Surveys Total		**2059**	**570**	**995**	**3623**		**2569**	**808**	**916**	**4293**
Per 100 Cows			**28**	**48**				**32**	**36**	



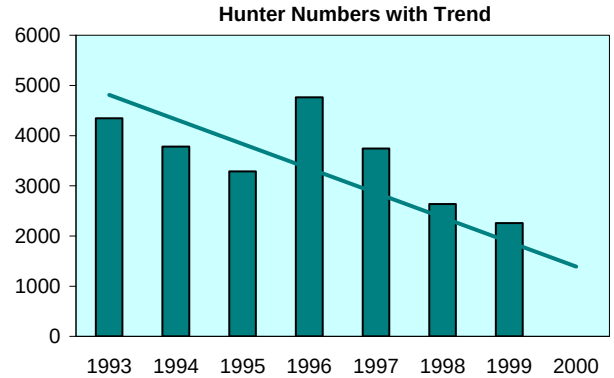
Zone Harvest Statistics

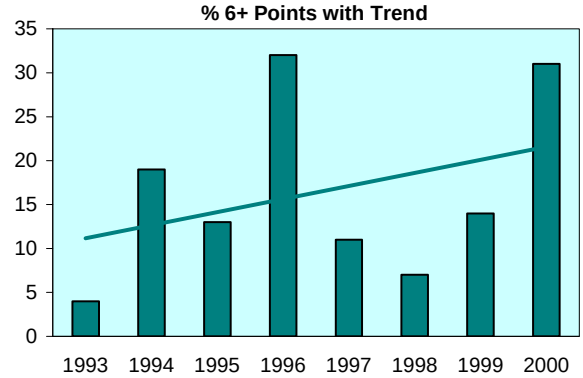
	1993	1994	1995	1996	1997	1998	1999	2000
Antlerless Harvest	310	635	324	500	331	334	297	196
'A' Tag						7	138	171
'B' Tag						0	0	0
CH Tag						327	159	125
Antlered Harvest	433	372	280	344	337	191	191	201
'A' Tag						73	73	38
'B' Tag						118	118	159
CH Tag						0	4	4
Hunter Numbers	4348	3784	3289	4763	3743	2638	2257	ND
'A' Tag						413	1168	ND
'B' Tag						827	516	ND
CH Tag						1398	573	ND
% 6+ Points	4	19	13	32	11	7	14	31

Note: Telephone survey harvest data prior to 1998 does not include general primitive weapons season data. %6+ pts does not include spike-only harvest.



* Note: Harvest prior to 1998 does not include general primitive weapons season data.





TEX CREEK ZONE

Management Objectives

The population management objective for the Tex Creek Zone is to winter approximately 2,500 cows and 525 bulls, of which 300 should be adult bulls. The most recent aerial survey information, 1999-2000, indicates that cows are at objective and bulls over 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, it is unknown what extra harvest opportunity may be available. Population manipulation will be accomplished primarily through regulated public hunting. Management will be coordinated with management of Unit 66A of the Diamond Creek Zone where a major portion of the wintering Tex Creek elk is in summer and fall. Claims resulting from crop damage will be eliminated and depredation problems will be solved using hunting as a first option.

Historical Perspective

Elk were present in the Tex Creek Zone during the late 1840s, as reported by Osborne Russell in Journal of a Trapper. During the early 20th century, elk were rarely seen according to residents of the area. The elk population increased during the l940s and by the mid-l950s depredation complaints on winter wheat were common. The first modern hunt was implemented in l952 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 4,300. Controlling the growth of the zone's elk population has driven harvest strategies during this period. Recently, historical overharvest of bulls and underharvest of cows has been addressed with implementation of the dual tag zone system and increased antlerless permits on late hunts.

Habitat Issues

Habitat throughout the 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 the USFS, BLM, IDL, and the Department. A significant portion of the private land is CRP enrolled and is contributing substantially to the area's carrying capacity during all seasons. The Tex Creek Wildlife Management Area, 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 overharvest 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 the Diamond Creek Zone winter in this zone. These elk should be managed as one 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 future management of them will be heavily influenced by the need to control this population. Placing all of the seasonal ranges of these elk in the same zone would be appropriate to accomplish this objective.

Interspecific Issues

The Tex Creek Zone supports an important deer population. This population during the l992-1993 winter sustained significant mortality. It is gradually recovering. The area also supports a strong moose population and it is grazed extensively by domestic livestock. Mule deer and elk appear to be spatially separated on winter range and there are no known conflicts between elk and moose; however, relationships among these species are not monitored or well understood.

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 has occurred twice recently – winters of l988-1989 and l992-1993. 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.

Information Requirements

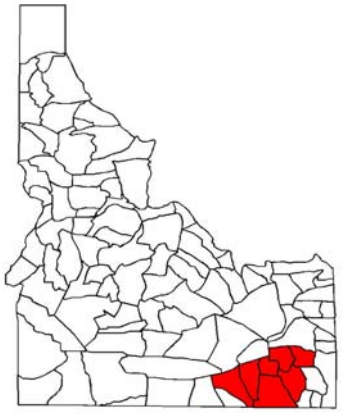
In l978, 1979, and 1980 the Department conducted radio telemetry studies of elk wintering on Tex Creek WMA, the results of which indicated these elk summered primarily in Units 66 and 66A with some going to Units 69 and 76. This work was duplicated in l998-1999 with results showing the same trends in distribution and movement. Of concern, however, is the low proportion of marked animals remaining in the zone during the summer and fall. Information from this work may result in new harvest strategies designed to favor the zone's resident animals.

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

Winter Status & Objectives

	Current Status				Objective		
Unit	Survey Year	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
Zone Total		**(1035)**	**(390)**	**(250)**	**510 - 745**	**125 - 165**	**61 - 110**
Bulls per 100 Cows			**(38)**	**(24)**		**18 - 24**	**10 - 14**

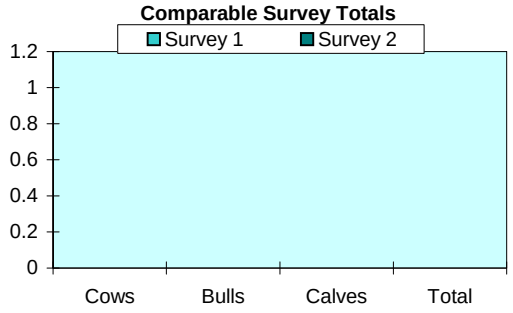
Note : Estimates within parentheses are based on information other than sightability surveys.



Population Surveys

	Survey 1					Survey 2				
Unit	Year	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				
Comparable Surveys Total										
Per 100 Cows										

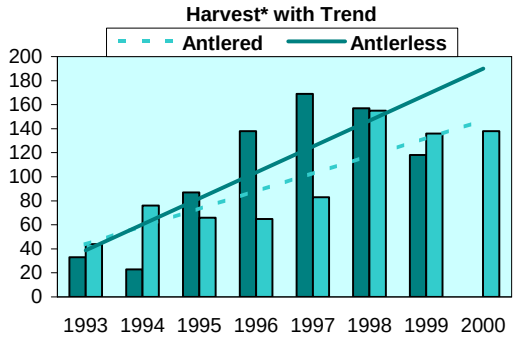
Note: ND = no survey data available.



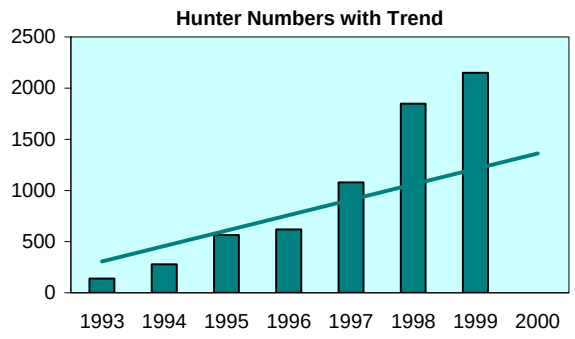
Zone Harvest Statistics

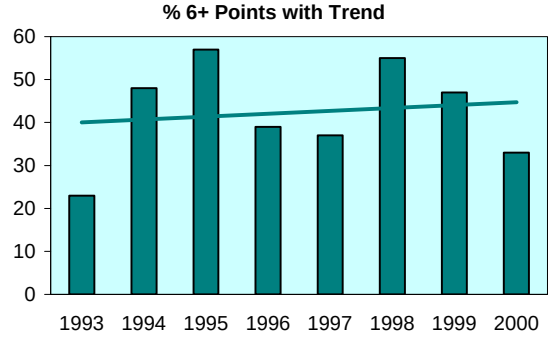
	1993	1994	1995	1996	1997	1998	1999	2000
Antlerless Harvest	33	23	87	138	169	157	118	
'A' Tag						0	85	182
'B' Tag						0	18	2
CH Tag						157	15	6
Antlered Harvest	44	76	66	65	83	155	136	138
'A' Tag						55	55	101
'B' Tag						13	24	4
CH Tag						87	57	33
Hunter Numbers	140	278	564	619	1079	1847	2149	ND
'A' Tag						622	1528	ND
'B' Tag						197	301	ND
CH Tag						1028	320	ND
% 6+ Points	23	48	57	39	37	55	47	33

Note: Telephone survey harvest data prior to 1998 does not include general primitive weapons season data. %6+ pts does not include spike-only harvest.



* Note: Harvest prior to 1998 does not include general primitive weapons season data.





BANNOCK ZONE

Management Objectives

The objective for the Bannock Zone is to maintain a wintering elk population of 625+ cows and 145+ bulls, including 85+ 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. The reduction in cows is necessary to alleviate significant depredation concerns and reduce the occupancy of elk in important mule deer winter ranges. The reduction in bulls and adult bulls is to 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 "overhunting 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 the 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, 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.

Interspecific 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.

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 to determine appropriate levels and types of hunting to help to 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
Bear River Zone (Units 75, 77, 78)

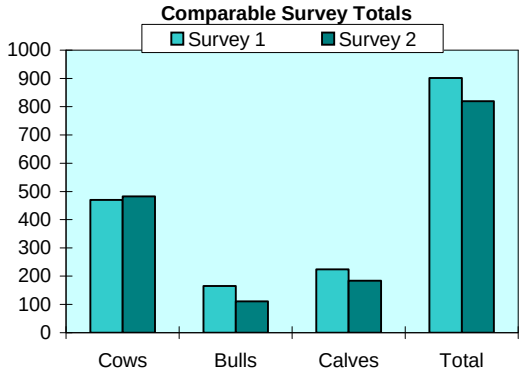
Winter Status & Objectives

	Current Status				Objective		
Unit	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
75	1996	216	21	22	200 - 300	40 - 60	25 - 35
77	1996	104	34	14	100 - 150	20 - 30	10 - 20
78	1996	163	56	21	100 - 150	20 - 30	10 - 20
Zone Total		**483**	**111**	**57**	**400 - 600**	**80 - 120**	**45 - 75**
Bulls per 100 Cows			**23**	**12**		**18 - 24**	**10 - 14**

Population Surveys

	Survey 1					Survey 2				
Unit	Year	Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
75	1991	235	105	132	471	1996	216	21	75	311
77	1992	55	12	16	84	1996	104	34	39	209
78	1992	180	48	76	347	1996	163	56	80	299
Comparable Surveys Total		**470**	**165**	**224**	**902**		**483**	**111**	**184**	**819**
Per 100 Cows			**35**	**48**				**23**	**40**	

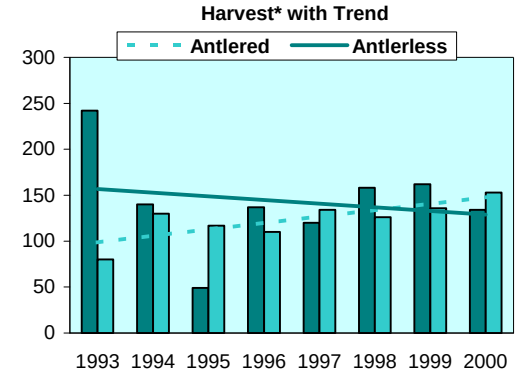
Note: ND = no survey data available.



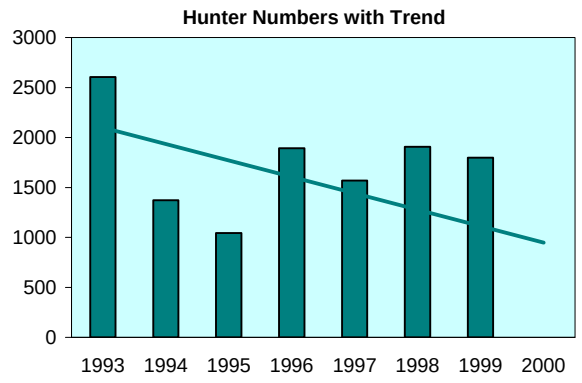
Zone Harvest Statistics

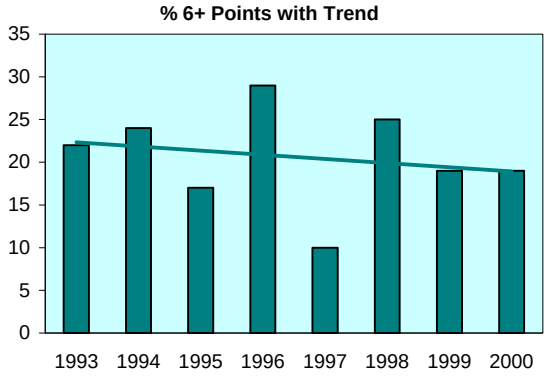
	1993	1994	1995	1996	1997	1998	1999	2000
Antlerless Harvest	242	140	49	137	120	158	162	134
'A' Tag						45	40	132
'B' Tag						0	0	0
CH Tag						113	122	2
Antlered Harvest	80	130	117	110	134	126	136	153
'A' Tag						32	26	61
'B' Tag						84	90	70
CH Tag						10	20	22
Hunter Numbers	2605	1372	1042	1892	1568	1906	1798	ND
'A' Tag						550	519	ND
'B' Tag						920	804	ND
CH Tag						436	475	ND
% 6+ Points	22	24	17	29	10	25	19	19

Note: Telephone survey harvest data prior to 1998 does not include general primitive weapons season data. %6+ pts does not include spike-only harvest.



* Note: Harvest prior to 1998 does not include general primitive weapons season data.





BEAR RIVER ZONE

Management Objectives

The objective for the Bear River Zone is to maintain a wintering elk population of 500+ cows and 100+ bulls, including 60+ 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 (1996) indicates that the population is within objectives for cows, bulls, and adult bulls. No significant changes in harvest rates are necessary.

Historical Perspective

The elk population in the 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

The Bear River Zone represents some of the highest productive habitat found in southeastern Idaho. Three main vegetational 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 the 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 homesites 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 the Bear River Zone.

Because of relatively high amounts of conifer cover, the 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 the 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.

Interspecific 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.

The 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 the 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 the 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 to 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
Diamond Creek Zone (Units 66A, 76)

Winter Status & Objectives

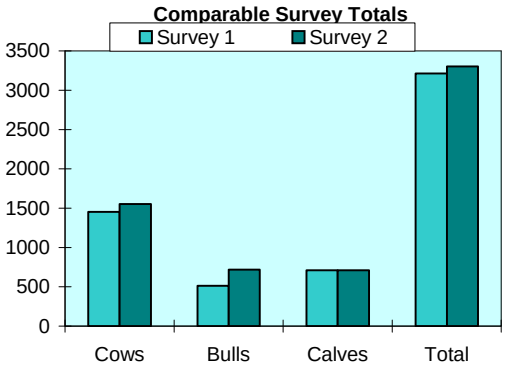
	Current Status				Objective		
Unit	Survey Year	Cows	Bulls	Adult Bulls	Cows	Bulls	Adult Bulls
66A		(50)	(25)	(20)	40 - 60	15 - 25	5 - 15
76	1999	1551	719	485	1260 - 1900	385 - 575	250 - 350
Zone Total		**(1601)**	**(744)**	**(505)**	**1300 - 1960**	**400 - 600**	**255 - 365**
Bulls per 100 Cows			**46**	**32**		**30 - 35**	**18 - 24**

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

Population Surveys

	Survey 1					Survey 2				
Unit	Year	Cows	Bulls	Calves	Total	Year	Cows	Bulls	Calves	Total
66A	ND					ND				
76	1995	1453	513	709	3213	1999	1551	719	711	3301
Comparable Surveys Total		**1453**	**513**	**709**	**3213**		**1551**	**719**	**711**	**3301**
Per 100 Cows			**35**	**49**				**46**	**46**	

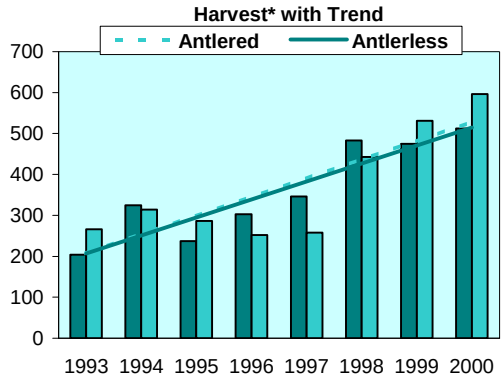
Note: ND = no survey data available.



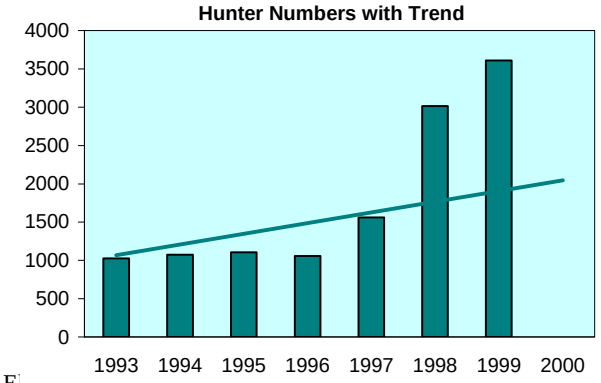
Zone Harvest Statistics

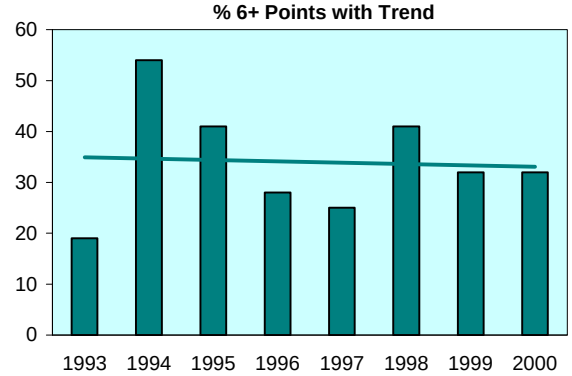
	1993	1994	1995	1996	1997	1998	1999	2000
Antlerless Harvest	204	325	237	303	346	483	475	512
'A' Tag						59	60	56
'B' Tag						0	0	0
CH Tag						424	415	456
Antlered Harvest	266	314	286	252	258	443	531	596
'A' Tag						251	285	314
'B' Tag						0	0	3
CH Tag						192	246	279
Hunter Numbers	1027	1075	1104	1058	1562	3016	3611	ND
'A' Tag						1478	1811	ND
'B' Tag						0	0	ND
CH Tag						1538	1800	ND
% 6+ Points	19	54	41	28	25	41	32	32

Note: Telephone survey harvest data prior to 1998 does not include general primitive weapons season data. %6+ pts does not include spike-only harvest.



* Note: Harvest prior to 1998 does not include general primitive weapons season data.





DIAMOND CREEK ZONE

Management Objectives

The objective for the Diamond Creek Zone is to maintain a wintering elk population of 1,600+ cows and 500+ bulls, including 310+ 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 (1995) indicates that the population is within objectives for cows, bulls, and adult bulls.

Historical Perspective

The elk population in the 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, antlered-only 9-day general seasons were offered. The last general hunting opportunity occurred in 1975 with a 3-day antlered-only season.

The most recent population survey (1995) estimated a total of 3,213 elk in Unit 76. This total represents a 1,300% 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.

Habitat Issues

The Diamond Creek Zone represents some of the most productive habitat found in southeastern Idaho. Three main vegetational 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.

Approximately 65% of the land in the 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 the 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 the Diamond Creek Zone.

Biological Issues

Calf:cow ratios, as measured during aerial surveys, indicate a healthy, productive herd in the 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.

Interspecific Issues

Although both livestock and elk numbers within the 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) overutilization 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 vegetationally suitable as deer winter range, but now 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 the 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 feed for elk has been provided during 4 winters since 1981 in the 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 the 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.

The 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.

APPENDICES

Appendix A

A history of elk harvest and hunter activity in Idaho, 1935-2000.

Season	Year	Estimated Value			
		Number of Hunters	Harvest	Percent Success	Days Hunted
Combined	1935		1,821		
	1936		1,917		
	1937		2,133		
	1938		2,298		
	1939		-		
	1940		-		
	1941		-		
	1942		-		
	1943		2,398		
	1944		2,874		
	1945		4,392		
	1946		5,435		
	1947		6,549		
	1948		5,944		
	1949		5,395		
	1950		7,165		
	1951		7,492		
	1952		8,792		
	1953		12,600		
	1954		12,451		
	1955		15,799		
	1956		15,910		
	1957		13,568		

Appendix A

A history of elk harvest and hunter activity in Idaho, 1935-2000.

Season	Year	Estimated Value			
		Number of Hunters	Harvest	Percent Success	Days Hunted
Combined	1958		16,450		
	1959		13,865		
	1960		16,545		
	1961		16,572		
	1962		13,653		
	1963		14,452		
	1964		13,835		
	1965		14,064		
	1966		14,631		
	1967		13,397		
	1968		17,064		
	1969		12,415		
	1970		14,145		
	1971		11,009		
	1972		9,324		
	1973		12,374		
	1974		8,712		
	1975		8,981		
	1976		4,135		
	1977		6,353		
	1978		7,662		
	1979		6,344		
	1980		8,303		

Appendix A

A history of elk harvest and hunter activity in Idaho, 1935-2000.

Season	Year	Estimated Value			
		Number of Hunters	Harvest	Percent Success	Days Hunted
Combined	1981		9,903		
General	1982	63,000	8,700	11	387,00
	1983	68,000	9,300	14	446,00
	1984	66,200	11,400	17	392,00
	1985	67,200	10,600	16	412,00
	1986	64,200	9,800	15	395,00
	1987	65,900	10,600	16	421,50
	1988	68,200	12,700	19	459,30
	1989	63,400	13,900	22	392,00
	1990	62,300	11,500	18	364,00
	1991	65,900	12,500	19	424,50
	1992	65,500	12,500	19	406,00
	1993	70,100	11,000	16	458,00
	1994	76,000	14,000	18	499,00
	1995	77,400	12,100	16	517,10
	1996	70,400	11,500	16	437,30
	1997	66,500	8,000	12	430,00
	1998	77,100	10,400	14	542,40
	1999	76,000	10,900	14	544,30
	2000	0	7,100	0	0
Archery	1982	13,900	400	3	62,400
	1983	8,100	300		453,00
	1984	9,500	740	8	63,000

Appendix A

A history of elk harvest and hunter activity in Idaho, 1935-2000.

Season	Year	Estimated Value			
		Number of Hunters	Harvest	Percent Success	Days Hunted
Archery	1985	8,200	500	6	57,000
	1986	11,800	900	8	80,000
	1987	14,700	1,300	9	112,80
	1988	20,300	1,300	8	152,40
	1989	22,900	1,500	16	7,000
	1990	20,400	1,800	9	158,00
	1991	21,600	1,900	9	162,00
	1992	26,000	2,600	10	196,00
	1993	26,700	1,900	7	194,60
	1994	20,000	1,900	9	149,80
	1995	21,600	1,800	8	161,40
	1996	24,600	1,700	8	187,40
	1997	17,000	1,200	7	131,00
	1998	15,100	1,700	11	123,60
	1999	15,000	1,600	11	124,70
	2000	0	1,600	0	0
Muzzleloader	1982	3,200	200	5	12,600
	1983	2,700	300	11	11,000
	1984	2,700	160	6	15,000
	1985	2,100	150	7	9,600
	1986	4,800	600	13	20,500
	1987	4,400	300	7	20,300
	1988	9,400	1,400	15	44,700

Appendix A

A history of elk harvest and hunter activity in Idaho, 1935-2000.

Season	Year	Estimated Value			
		Number of Hunters	Harvest	Percent Success	Days Hunted
Muzzleloader	1989	13,600	1,000	8	65,000
	1990	9,200	900	10	45,000
	1991	7,500	800	11	38,000
	1992	11,100	1,500	13	58,000
	1993	8,400	500	6	38,000
	1994	5,000	400	8	22,000
	1995	5,100	100	2	24,200
	1996	4,900	300	6	20,100
	1997	3,200	150	4	15,300
	1998	5,100	620	12	23,700
	1999	5,100	620	12	25,000
	2000	0	650	0	0
Controlled	1982	5,700	2,500	45	28,000
	1983	6,900	2,800	37	34,000
	1984	7,900	3,300	39	34,000
	1985	10,100	4,300	42	52,100
	1986	9,500	4,200	41	47,300
	1987	9,000	3,900	41	44,000
	1988	9,600	5,000	48	48,100
	1989	13,800	6,200	43	75,000
	1990	15,400	7,300	45	86,000
	1991	16,500	8,900	51	94,000
	1992	20,200	10,000	46	110,00

Appendix A

A history of elk harvest and hunter activity in Idaho, 1935-2000.

Season	Year	Estimated Value			
		Number of Hunters	Harvest	Percent Success	Days Hunted
Controlled	1993	22,500	7,400	30	135,00
	1994	22,800	11,700	52	129,00
	1995	24,100	8,400	35	144,10
	1996	26,900	11,900	44	151,40
	1997	30,200	9,100	31	183,40
	1998	22,700	8,400	34	124,10
	1999	20,000	6,600	31	115,50
	2000	0	8,300	0	0
Total	1982	63,000	11,550	18	490,00
	1983	68,000	12,700	19	544,00
	1984	66,200	15,600	24	504,00
	1985	67,200	15,550	23	521,10
	1986	73,700	15,500	21	542,80
	1987	74,900	16,100	21	598,60
	1988	77,800	20,400	26	704,50
	1989	77,200	22,600	29	699,00
	1990	77,700	21,500	28	653,00
	1991	82,400	24,100	29	718,50
	1992	85,700	26,600	31	770,00
	1993	92,600	20,800	22	825,00
	1994	98,800	28,000	28	799,80
	1995	101,500	22,400	22	846,80
	1996	97,300	25,600	26	796,20

Appendix A

A history of elk harvest and hunter activity in Idaho, 1935-2000.

Season	Year	Estimated Value			
		Number of Hunters	Harvest	Percent Success	Days Hunted
Total	1997	96,700	18,500	19	759,70
	1998	99,800	18,800	19	666,50
	1999	96,000	17,500	18	659,80
	2000	0	20,200	0	0

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 01

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	159	136	2288	13%	14985	0	0	0		0	159	136	295
1994	163	114	3111	9%	19726	0	0	0		0	163	114	277
1995	374	190	3187	18%	20554	0	0	0		0	374	190	564
1996	167	133	2446	12%	15692	0	0	0		0	167	133	300
1997	56	84	2273	6%	13665	0	0	0		0	56	84	140
1998	198	53	2332	11%	15681	0	0	0		0	198	53	251
1999	172	59	2547	9%	18843	0	0	0		0	172	59	231
2000	122	33	0	0%	0	0	3	0	0%	0	182	66	260

Unit: 02

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	56	24	486	16%	3125	0	0	0		0	56	24	80
1994	48	8	519	11%	3431	0	0	0		0	48	8	56
1995	17	8	583	4%	4280	0	0	0		0	17	8	25
1996	17	16	483	7%	3295	0	0	0		0	17	16	33
1997	37	19	599	9%	4041	0	0	0		0	37	19	56
1998	13	7	619	3%	3731	0	0	0		0	13	7	20
1999	20	13	765	4%	5807	0	0	0		0	20	13	33
2000	18	17	0	0%	0	0	0	0	0%	0	30	23	53

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 03

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	159	144	1355	22%	8919	0	0	0		0	159	144	303
1994	124	124	1650	15%	11168	0	0	0		0	124	124	248
1995	170	90	1557	17%	10610	0	0	0		0	170	90	260
1996	142	108	1597	16%	12364	0	0	0		0	142	108	250
1997	112	37	1506	10%	10756	0	0	0		0	112	37	149
1998	92	13	1476	7%	10230	0	0	0		0	92	13	105
1999	79	40	1333	9%	10467	0	0	0		0	79	40	119
2000	58	34	0	0%	0	0	0	0	0%	0	90	48	145

Unit: 04

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	430	367	5771	14%	48479	0	0	0		0	430	367	797
1994	493	361	6367	13%	47962	0	0	0		0	493	361	854
1995	363	234	6333	9%	50869	0	0	0		0	363	234	597
1996	291	241	4892	11%	35493	0	11	20	55%	0	291	252	543
1997	196	187	4826	8%	37085	0	3	20	15%	0	196	190	386
1998	303	158	5364	9%	42158	0	2	20	10%	0	303	160	463
1999	284	165	5101	9%	41217	0	3	20	15%	0	284	168	452
2000	175	90	0	0%	0	0	6	20	0%	0	285	127	419

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 04A

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	56	24	526	15%	4448	0	0	0		0	56	24	80
1994	74	50	539	23%	4133	0	0	0		0	74	50	124
1995	33	20	583	9%	4380	0	0	0		0	33	20	53
1996	67	33	449	22%	3677	0	0	0		0	67	33	100
1997	9	19	468	6%	3433	0	0	0		0	9	19	28
1998	26	13	375	10%	2285	0	0	0		0	26	13	39
1999	20	33	376	14%	2600	0	0	0		0	20	33	53
2000	14	5	0	0%	0	0	0	0	0%	0	23	7	29

Unit: 05

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	48	56	598	17%	3969	0	0	0		0	48	56	104
1994	84	59	824	17%	5273	0	0	0		0	84	59	143
1995	36	48	776	11%	5341	0	0	0		0	36	48	84
1996	83	67	782	19%	4826	0	0	0		0	83	67	150
1997	47	56	720	14%	5762	0	0	0		0	47	56	103
1998	66	13	803	10%	5450	0	0	0		0	66	13	79
1999	56	66	779	16%	5312	0	0	0		0	56	66	122
2000	45	31	0	0%	0	0	0	0	0%	0	67	37	107

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 06

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	486	263	2933	26%	23745	0	0	0		0	486	263	749
1994	623	359	3863	25%	31330	0	0	0		0	623	359	982
1995	438	357	3768	21%	32272	0	0	0		0	438	357	795
1996	425	424	2912	29%	20251	0	0	0		0	425	424	849
1997	234	177	2769	15%	21662	0	0	0		0	234	177	411
1998	329	106	3070	14%	26725	0	0	0		0	329	106	435
1999	238	158	2455	16%	20893	0	0	0		0	238	158	396
2000	158	69	0	0%	0	0	1	0	0%	0	253	110	374

Unit: 07

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	311	199	2312	22%	18261	0	0	0		0	311	199	510
1994	289	174	2156	21%	17462	0	0	0		0	289	174	463
1995	218	204	2263	19%	17635	0	0	0		0	218	204	422
1996	225	191	1731	24%	13162	0	0	0		0	225	191	416
1997	85	55	1347	10%	11766	0	0	0		0	85	55	140
1998	112	46	1490	11%	12716	0	0	0		0	112	46	158
1999	92	47	1419	10%	11371	0	0	0		0	92	47	139
2000	40	30	0	0%	0	0	2	0	0%	0	101	46	149

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 08

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	88	16	757	14%	5572	2	74	250	30%	0	90	90	180
1994	138	0	833	17%	6341	1	207	425	49%	0	139	207	346
1995	59	0	670	9%	4753	0	136	425	32%	0	59	136	195
1996	83	0	616	13%	3877	0	155	275	56%	0	83	155	238
1997	28	0	580	5%	4106	1	94	275	35%	0	29	94	123
1998	54	0	517	10%	3371	1	150	425	36%	0	55	150	205
1999	20	0	509	4%	3592	1	151	425	36%	0	21	151	172
2000	41	0	0	0%	0	16	26	262	0%	0	75	29	103

Unit: 08A

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	231	8	1682	14%	18979	17	162	600	30%	0	248	170	418
1994	439	0	2222	20%	16652	1	207	425	49%	0	440	207	647
1995	173	0	1514	11%	12743	0	137	425	32%	0	173	137	310
1996	200	0	1697	12%	13046	0	154	275	56%	0	200	154	354
1997	187	9	1777	11%	14946	0	94	275	34%	0	187	103	290
1998	136	10	1538	9%	11395	1	150	425	36%	0	137	160	297
1999	165	45	1533	14%	11790	1	151	425	36%	0	166	196	362
2000	115	3	0	0%	0	2	54	0	0%	0	169	84	264

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 09

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	48	80	654	20%	5141	0	0	0		0	48	80	128
1994	116	155	922	29%	6691	0	0	0		0	116	155	271
1995	103	100	650	31%	5220	0	0	0		0	103	100	203
1996	67	33	416	24%	3112	0	0	0		0	67	33	100
1997	84	19	486	21%	3545	0	0	0		0	84	19	103
1998	40	26	566	12%	4757	0	0	0		0	40	26	66
1999	46	0	409	11%	3108	0	0	0		0	46	0	46
2000	19	8	0	0%	0	0	0	0	0%	0	23	9	31

Unit: 10

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	534	0	2367	23%	18979	2	89	150	61%	0	536	89	625
1994	805	0	3619	22%	27302	3	107	150	73%	0	808	107	915
1995	681	8	3039	23%	23372	0	84	150	56%	0	681	92	773
1996	366	17	1964	20%	15309	25	446	1500	31%	0	391	463	854
1997	215	9	1899	12%	15807	2	128	1500	9%	0	217	137	354
1998	165	0	901	18%	7192	0	0	0		0	165	0	165
1999	92	13	890	12%	6105	0	0	0		0	92	13	105
2000	73	0	0	0%	0	0	0	0	0%	0	109	1	119

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 10A

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	1004	48	5739	18%	46048	24	413	950	46%	0	1028	461	1489
1994	1095	0	5512	20%	47958	2	476	775	62%	0	1097	476	1573
1995	651	25	4233	16%	35093	0	382	775	49%	0	651	407	1058
1996	499	0	3561	14%	27040	5	268	600	46%	0	504	268	772
1997	440	9	4321	10%	34756	3	173	525	34%	0	443	182	625
1998	506	292	4691	17%	38011	0	44	100	44%	0	506	336	842
1999	516	291	4712	17%	40580	1	56	100	57%	0	517	347	864
2000	335	1	0	0%	0	0	18	48	0%	0	551	140	768

Unit: 11

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	36	40	150	51%	0	36	40	76
1994	0	0	0		0	21	14	100	35%	0	21	14	35
1995	0	0	0		0	25	30	100	55%	0	25	30	55
1996	0	0	0		0	21	31	100	52%	0	21	31	52
1997	0	0	0		0	22	22	100	44%	0	22	22	44
1998	0	0	0		0	29	22	100	51%	0	29	22	51
1999	0	0	0		0	24	28	100	52%	0	24	28	52
2000	0	0	0	0%	0	34	27	100	0%	0	35	28	62

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 11A

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	56	8	454	14%	2670	2	19	150	14%	0	58	27	85
1994	49	0	395	12%	1960	0	31	150	21%	0	49	31	80
1995	45	0	274	16%	1428	0	23	150	15%	0	45	23	68
1996	33	0	300	11%	1764	0	16	150	11%	0	33	16	49
1997	28	9	393	9%	2460	0	16	75	21%	0	28	25	53
1998	7	0	151	5%	800	0	11	75	15%	0	7	11	18
1999	13	0	153	8%	604	0	23	75	31%	0	13	23	36
2000	24	0	0	0%	0	4	16	70	0%	0	34	17	52

Unit: 12

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	159	0	821	19%	6002	2	69	150	47%	0	161	69	230
1994	457	0	1561	29%	12236	3	116	200	60%	0	460	116	576
1995	397	0	1778	22%	14581	0	76	200	38%	0	397	76	473
1996	233	17	1048	24%	8470	6	160	400	42%	0	239	177	416
1997	84	0	767	11%	6407	0	54	350	15%	0	84	54	138
1998	99	7	599	18%	4722	0	0	0		0	99	7	106
1999	98	7	536	20%	4140	0	0	0		0	98	7	105
2000	64	0	0	0%	0	0	0	0	0%	0	103	1	110

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 13

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	46	93	250	56%	0	46	93	139
1994	0	0	0		0	41	83	250	50%	0	41	83	124
1995	0	0	0		0	36	110	275	53%	0	36	110	146
1996	0	0	0		0	45	69	275	41%	0	45	69	114
1997	0	0	0		0	55	67	275	44%	0	55	67	122
1998	0	0	0		0	24	44	275	25%	0	24	44	68
1999	0	0	0		0	41	47	275	32%	0	41	47	88
2000	0	0	0	0%	0	38	48	245	0%	0	38	48	87

Unit: 14

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	151	8	1060	15%	6002	0	35	100	35%	0	151	43	194
1994	212	0	1093	19%	7101	0	83	263	32%	0	212	83	295
1995	103	0	768	13%	4065	0	181	562	32%	0	103	181	284
1996	200	0	998	20%	5807	0	90	325	28%	0	200	90	290
1997	140	0	814	17%	4836	1	126	325	39%	0	141	126	267
1998	138	52	869	22%	4474	0	104	225	46%	0	138	156	294
1999	79	39	892	13%	4969	0	93	225	41%	0	79	132	211
2000	100	0	0	0%	0	6	29	48	0%	0	148	82	238

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 15

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	136	0	1793	8%	14714	0	0	0		0	136	0	136
1994	321	0	1987	16%	14134	0	0	0		0	321	0	321
1995	243	0	1689	14%	12363	0	0	0		0	243	0	243
1996	233	0	1731	13%	12097	0	138	400	35%	0	233	138	371
1997	168	0	1674	10%	11747	0	186	400	47%	0	168	186	354
1998	216	19	1626	14%	11820	0	134	325	41%	0	216	153	369
1999	197	52	1516	16%	12212	0	76	325	23%	0	197	128	325
2000	96	1	0	0%	0	0	0	0	0%	0	169	17	190

Unit: 16

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	112	16	805	16%	6640	5	24	150	19%	0	117	40	157
1994	84	0	1004	8%	7956	0	56	150	37%	0	84	56	140
1995	168	0	879	19%	6539	0	33	150	22%	0	168	33	201
1996	150	0	849	18%	5425	0	115	525	22%	0	150	115	265
1997	28	0	673	4%	4205	0	86	525	16%	0	28	86	114
1998	20	13	542	6%	3546	0	47	300	16%	0	20	60	80
1999	40	13	414	13%	2659	0	52	300	17%	0	40	65	105
2000	52	1	0	0%	0	0	0	0	0%	0	78	23	101

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 16A

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	88	0	542	16%	4081	0	9	50	18%	0	88	9	97
1994	59	0	504	12%	4078	0	18	50	36%	0	59	18	77
1995	106	0	616	17%	5734	0	18	50	36%	0	106	18	124
1996	67	0	416	16%	3528	6	68	200	37%	0	73	68	141
1997	37	10	365	13%	2984	4	21	200	13%	0	41	31	72
1998	78	13	665	14%	5303	0	0	0		0	78	13	91
1999	66	0	353	19%	2436	0	0	0		0	66	0	66
2000	28	0	0	0%	0	0	0	0	0%	0	38	0	41

Unit: 17

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	215	0	837	26%	7596	0	20	100	20%	0	215	20	235
1994	467	0	1558	30%	11130	0	38	100	38%	0	467	38	505
1995	653	8	2542	26%	18341	0	41	100	41%	0	653	49	702
1996	366	0	1481	25%	12813	113	37	725	21%	0	479	37	516
1997	168	0	1272	13%	10391	24	23	725	6%	0	192	23	215
1998	248	39	1423	20%	10417	0	0	0		0	248	39	287
1999	183	0	1062	17%	8320	0	0	0		0	183	0	183
2000	170	1	0	0%	0	0	0	0	0%	0	204	2	211

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 18

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	39	21	250	24%	0	39	21	60
1994	0	0	0		0	46	49	250	38%	0	46	49	95
1995	0	0	0		0	38	31	250	28%	0	38	31	69
1996	0	0	0		0	42	24	250	26%	0	42	24	66
1997	0	0	0		0	52	17	250	28%	0	52	17	69
1998	0	0	0		0	44	21	250	26%	0	44	21	65
1999	0	0	0		0	51	24	250	30%	0	51	24	75
2000	2	0	0	0%	0	52	27	227	0%	0	55	27	83

Unit: 19

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	88	0	271	32%	2591	0	0	0		0	88	0	88
1994	204	0	853	24%	5873	0	0	0		0	204	0	204
1995	167	0	744	22%	4592	0	0	0		0	167	0	167
1996	150	0	582	26%	4476	19	56	400	19%	0	169	56	225
1997	65	0	468	14%	3433	8	16	250	10%	0	73	16	89
1998	78	26	528	20%	4206	0	0	0		0	78	26	104
1999	59	0	403	15%	2954	0	0	0		0	59	0	59
2000	53	0	0	0%	0	0	0	0	0%	0	80	0	80

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 19A

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	32	0	215	15%	1562	0	0	0		0	32	0	32
1994	117	0	351	33%	2058	0	0	5	0%	0	117	0	117
1995	75	0	765	10%	4634	1	0	5	20%	0	76	0	76
1996	68	0	444	15%	2682	3	0	5	60%	0	71	0	71
1997	94	0	421	22%	2722	1	0	5	20%	0	95	0	95
1998	60	0	523	11%	3684	4	0	5	80%	13	64	0	64
1999	79	6	499	17%	3826	2	24	155	17%	15	81	30	111
2000	37	0	0	0%	0	0	19	145	0%	0	68	23	93

Unit: 20

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	32	0	255	13%	1921	3	52	150	37%	0	35	52	87
1994	130	0	585	22%	4530	0	24	75	32%	0	130	24	154
1995	207	0	594	35%	4642	0	14	75	19%	0	207	14	221
1996	67	0	449	15%	3095	2	4	75	8%	0	69	4	73
1997	84	0	383	22%	2825	3	14	125	14%	0	87	14	101
1998	33	13	495	9%	3794	0	0	0		0	33	13	46
1999	21	0	245	9%	2385	0	0	0		0	21	0	21
2000	40	0	0	0%	0	0	0	0	0%	0	58	0	59

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 20A

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	120	0	478	25%	3412	0	45	200	23%	0	120	45	165
1994	140	0	458	31%	3320	0	76	200	38%	0	140	76	216
1995	204	0	862	24%	5699	0	34	200	17%	0	204	34	238
1996	120	0	615	20%	4014	9	59	358	19%	0	129	59	188
1997	94	0	533	18%	3910	5	67	400	18%	0	99	67	166
1998	104	19	720	17%	5528	0	0	0		0	104	19	123
1999	85	7	353	26%	2156	0	0	0		0	85	7	92
2000	69	50	0	0%	0	0	0	0	0%	0	103	57	164

Unit: 21

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	120	0	582	21%	3882	4	96	500	20%	2679	124	96	220
1994	141	0	709	20%	4411	0	250	450	56%	1751	141	250	391
1995	112	0	751	15%	5302	0	137	450	30%	1987	112	137	249
1996	166	0	915	18%	5824	0	200	450	44%	1524	166	200	366
1997	128	0	700	18%	5494	0	83	450	18%	2109	128	83	211
1998	105	0	677	16%	4941	2	109	252	44%	1009	107	109	216
1999	79	0	571	14%	3900	0	37	200	19%	986	79	37	116
2000	73	0	0	0%	0	0	0	0	0%	0	93	2	94

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 21A

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	143	0	598	24%	3770	0	56	626	9%	3412	143	56	199
1994	222	0	549	40%	3294	0	382	600	64%	1861	222	382	604
1995	115	0	667	17%	4390	0	168	600	28%	2492	115	168	283
1996	216	0	716	30%	4925	0	265	600	44%	1660	216	265	481
1997	148	0	700	21%	5070	0	130	600	22%	2495	148	130	278
1998	118	0	539	22%	4168	0	28	62	45%	250	118	28	146
1999	66	0	473	14%	3169	0	23	100	23%	479	66	23	89
2000	130	0	0	0%	0	0	14	0	0%	0	171	15	191

Unit: 22

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	255	0	1299	20%	6791	0	205	650	32%	0	255	205	460
1994	204	0	1186	17%	6511	0	256	650	39%	0	204	256	460
1995	265	0	1374	19%	8461	0	242	700	35%	0	265	242	507
1996	325	0	1640	20%	9037	0	298	678	44%	0	325	298	623
1997	253	0	1496	17%	8203	0	268	700	38%	0	253	268	521
1998	338	32	2025	18%	12183	0	171	700	24%	4203	338	203	541
1999	280	18	1888	16%	11042	0	232	1000	23%	4852	280	250	530
2000	155	36	0	0%	0	14	317	1018	0%	0	250	379	652

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 23

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	104	0	829	13%	4496	0	152	500	30%	0	104	152	256
1994	174	0	806	22%	5310	5	228	505	46%	0	179	228	407
1995	176	0	1050	17%	7118	3	199	605	33%	0	179	199	378
1996	239	0	1145	21%	6970	0	250	578	43%	0	239	250	489
1997	206	0	1244	17%	7445	4	204	605	34%	0	210	204	414
1998	225	66	1377	21%	9956	4	207	605	35%	2845	229	273	502
1999	210	58	1333	20%	9099	0	202	605	33%	2977	210	260	470
2000	138	3	0	0%	0	12	232	516	0%	0	242	254	515

Unit: 24

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	207	0	1801	11%	9948	0	209	655	32%	0	207	209	416
1994	272	0	1462	19%	8946	0	299	600	50%	0	272	299	571
1995	254	0	1687	15%	9312	0	249	850	29%	0	254	249	503
1996	154	0	1725	9%	8849	15	263	925	30%	0	169	263	432
1997	150	0	1712	9%	9503	9	263	925	29%	0	159	263	422
1998	218	66	2211	13%	15570	0	262	925	28%	5790	218	328	546
1999	203	95	2384	13%	16436	0	218	775	28%	4913	203	313	516
2000	103	7	0	0%	0	10	189	692	0%	0	199	226	449

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 25

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	136	0	1036	13%	6544	0	30	100	30%	0	136	30	166
1994	158	0	1425	11%	8220	0	47	100	47%	0	158	47	205
1995	293	0	2287	13%	14993	0	43	100	43%	0	293	43	336
1996	205	0	1384	15%	8165	0	33	100	33%	0	205	33	238
1997	159	0	1375	12%	8044	0	22	75	29%	0	159	22	181
1998	132	7	1398	10%	9417	0	27	75	36%	379	132	34	166
1999	86	13	1380	7%	8124	0	57	150	38%	882	86	70	156
2000	66	0	0	0%	0	2	52	140	0%	0	118	62	190

Unit: 26

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	96	0	486	20%	3746	0	35	100	35%	0	96	35	131
1994	84	0	567	15%	3415	0	16	100	16%	0	84	16	100
1995	100	0	910	11%	5999	0	14	100	14%	0	100	14	114
1996	85	0	649	13%	4202	0	14	263	5%	0	85	14	99
1997	28	0	542	5%	3760	16	19	300	12%	0	44	19	63
1998	58	20	532	15%	3454	0	0	0		0	58	20	78
1999	71	20	529	17%	3196	0	0	0		0	71	20	91
2000	38	42	0	0%	0	0	0	0	0%	0	45	50	97

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 27

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	175	0	1052	17%	7532	0	20	100	20%	516	175	20	195
1994	346	0	1690	20%	11882	2	29	100	31%	576	348	29	377
1995	480	0	2360	20%	16735	0	55	250	22%	1377	480	55	535
1996	416	0	1980	21%	13096	24	63	445	20%	1812	440	63	503
1997	207	0	1401	15%	8572	20	70	500	18%	2670	227	70	297
1998	227	65	1578	19%	10567	0	0	0		0	227	65	292
1999	53	66	709	17%	4266	122	0	567	22%	3258	175	66	241
2000	135	83	0	0%	0	0	0	0	0%	0	201	116	321

Unit: 28

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	215	0	1323	16%	9015	0	50	150	33%	840	215	50	265
1994	438	0	1753	25%	10920	0	107	160	67%	633	438	107	545
1995	405	0	1798	23%	12338	0	143	300	48%	1257	405	143	548
1996	549	0	2263	24%	13728	0	201	424	47%	1500	549	201	750
1997	316	0	1894	17%	13316	0	157	557	28%	2606	316	157	473
1998	158	0	1487	11%	10926	4	226	522	44%	2090	162	226	388
1999	171	13	1325	14%	9336	0	150	475	32%	2204	171	163	334
2000	148	1	0	0%	0	1	182	313	0%	0	192	186	389

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 29

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993a	0	0	0		0	127	66	500	39%	2818	127	66	193
1994a	0	0	0		0	170	287	776	59%	3205	170	287	457
1995a	0	0	0		0	126	124	693	36%	3921	126	124	250
1996a	0	0	0		0	154	151	644	47%	3072	154	151	305
1997a	0	0	0		0	133	175	575	54%	3003	133	175	308
1998a	33	33	547	12%	5717	140	247	825	47%	4292	173	280	453
1999a	40	33	528	14%	5146	144	109	626	40%	3034	184	142	326
2000	11	78	0	0%	0	126	150	503	0%	0	201	285	486

Unit: 30

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	40	95	295	46%	1427	40	95	135
1994	0	0	0		0	45	200	325	75%	1737	45	200	245
1995	0	0	0		0	40	78	275	43%	1263	40	78	118
1996	0	0	0		0	44	176	414	53%	1447	44	176	220
1997	0	0	0		0	38	114	294	52%	1564	38	114	152
1998	46	6	196	27%	1887	63	213	475	58%	1609	109	219	328
1999	0	20	165	12%	1301	87	127	450	48%	2195	87	147	234
2000	21	9	0	0%	0	89	135	122	0%	0	123	145	276

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 30A

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	27	39	125	53%	637	27	39	66
1994	0	0	0		0	37	50	144	60%	544	37	50	87
1995	0	0	0		0	32	35	125	54%	541	32	35	67
1996	0	0	0		0	35	39	130	57%	515	35	39	74
1997	0	0	0		0	37	34	125	57%	802	37	34	71
1998	39	0	137	28%	1143	29	57	125	69%	375	68	57	125
1999	40	6	211	22%	1295	37	32	150	46%	594	77	38	115
2000	30	30	0	0%	0	42	0	137	0%	0	100	44	145

Unit: 31

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	52	242	752	39%	0	52	242	294
1994	0	0	0		0	47	209	256	100%	0	47	209	256
1995	0	0	0		0	40	195	235	100%	0	40	195	235
1996	0	0	0		0	45	179	700	32%	0	45	179	224
1997	0	0	0		0	55	161	600	36%	0	55	161	216
1998	20	7	316	9%	1851	32	80	500	22%	2538	52	87	139
1999	31	0	251	12%	1890	36	41	400	19%	2035	67	41	108
2000	26	0	0	0%	0	43	30	167	0%	0	89	30	127

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 32

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	231	0	1674	14%	8027	23	357	380	100%	0	254	357	611
1994	150	0	1331	11%	7889	0	348	700	50%	0	150	348	498
1995	128	0	1485	9%	7289	0	242	700	35%	0	128	242	370
1996	150	0	1830	8%	9635	0	249	700	36%	0	150	249	399
1997	150	0	1515	10%	7735	0	213	700	30%	0	150	213	363
1998	104	0	1026	10%	4582	0	181	700	26%	0	104	181	285
1999	104	0	1009	10%	5113	0	144	504	29%	0	104	144	248
2000	72	0	0	0%	0	11	160	498	0%	0	108	163	286

Unit: 32A

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	175	0	1475	12%	7859	0	134	450	30%	0	175	134	309
1994	215	0	1363	16%	8393	0	251	650	39%	0	215	251	466
1995	165	0	1387	12%	7391	0	242	650	37%	0	165	242	407
1996	205	0	1435	14%	8405	0	269	650	41%	0	205	269	474
1997	262	0	1843	14%	10214	0	207	650	32%	0	262	207	469
1998	195	25	1629	14%	10151	0	198	650	30%	3224	195	223	418
1999	193	31	1644	14%	9563	0	179	650	28%	3017	193	210	403
2000	197	1	0	0%	0	9	214	636	0%	0	289	230	531

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 33

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	191	0	1562	12%	7660	11	91	1029	10%	0	202	91	293
1994	179	0	1403	13%	6621	32	269	720	42%	0	211	269	480
1995	162	0	1628	10%	8657	11	179	820	23%	0	173	179	352
1996	300	0	1514	20%	8486	8	199	500	41%	0	308	199	507
1997	159	0	1627	10%	8380	0	138	500	28%	0	159	138	297
1998	282	0	2010	14%	13247	7	154	550	29%	0	289	154	443
1999	308	13	1973	16%	12086	3	130	510	26%	0	311	143	454
2000	135	1	0	0%	0	6	32	45	0%	0	207	112	328

Unit: 34

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	199	0	980	20%	5787	4	26	100	30%	0	203	26	229
1994	234	0	1259	19%	7063	0	40	100	40%	0	234	40	274
1995	333	0	1706	20%	10090	0	52	100	52%	0	333	52	385
1996	100	0	948	11%	4543	0	12	50	24%	0	100	12	112
1997	122	0	1010	12%	5808	0	13	50	26%	0	122	13	135
1998	112	33	1294	11%	9624	0	23	50	46%	0	112	56	168
1999	92	19	1283	9%	9455	0	9	49	18%	0	92	28	120
2000	53	0	0	0%	0	0	0	0	0%	0	90	16	110

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 35

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	96	0	622	15%	4121	2	13	138	11%	0	98	13	111
1994	212	0	668	32%	3877	0	41	100	41%	0	212	41	253
1995	131	0	793	17%	4839	0	16	100	16%	0	131	16	147
1996	150	0	516	29%	3328	0	24	50	48%	0	150	24	174
1997	159	0	552	29%	2946	0	19	50	38%	0	159	19	178
1998	79	7	703	12%	4256	0	23	50	46%	0	79	30	109
1999	59	6	668	10%	4134	0	17	49	35%	0	59	23	82
2000	68	1	0	0%	0	1	0	0	0%	0	113	36	152

Unit: 36

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	191	0	1554	12%	9972	8	50	300	19%	1585	199	50	249
1994	364	0	2454	15%	13546	0	178	300	59%	1113	364	178	542
1995	346	0	3763	9%	23224	0	65	300	22%	1592	346	65	411
1996	300	0	2479	12%	13046	0	132	350	38%	1440	300	132	432
1997	207	0	2091	10%	11876	0	87	400	22%	1736	207	87	294
1998	184	13	1813	11%	13162	2	47	200	25%	800	186	60	246
1999	125	32	1735	9%	11866	0	132	550	24%	2146	125	164	289
2000	88	0	0	0%	0	8	62	173	0%	0	144	84	234

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 36A

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	88	85	450	38%	2452	88	85	173
1994	0	0	0		0	130	192	625	52%	3044	130	192	322
1995	0	0	0		0	132	72	625	33%	3169	132	72	204
1996	0	0	0		0	145	254	636	63%	2722	145	254	399
1997	0	0	0		0	151	180	625	53%	2903	151	180	331
1998	59	0	394	15%	2910	127	253	875	43%	4081	186	253	439
1999	59	39	334	29%	2458	113	113	625	36%	2790	172	152	324
2000	15	17	0	0%	0	126	369	990	0%	0	163	394	567

Unit: 36B

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	167	0	1132	15%	7182	0	39	150	26%	950	167	39	206
1994	92	0	917	10%	5003	0	197	256	77%	1177	92	197	289
1995	84	0	929	9%	6507	0	83	250	33%	1413	84	83	167
1996	316	0	1398	23%	9452	0	171	256	67%	1144	316	171	487
1997	118	0	1203	10%	7171	0	80	250	32%	1663	118	80	198
1998	125	0	921	14%	5687	3	157	364	44%	1455	128	157	285
1999	132	6	682	20%	4650	0	172	550	31%	2531	132	178	310
2000	107	0	0	0%	0	2	162	351	0%	0	144	162	317

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 37

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	51	40	285	32%	1409	51	40	91
1994	0	0	0		0	44	69	210	54%	831	44	69	113
1995	0	0	0		0	32	40	200	36%	898	32	40	72
1996	0	0	0		0	39	44	200	42%	805	39	44	83
1997	0	0	0		0	38	78	217	53%	1096	38	78	116
1998	40	19	211	28%	1976	46	81	275	46%	1134	86	100	186
1999	40	19	231	26%	1750	36	67	250	41%	958	76	86	162
2000	8	33	0	0%	0	98	206	604	0%	0	127	249	382

Unit: 37A

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993a	0	0	0		0	0	0	0		0	0	0	
1994a	0	0	0		0	0	0	0		0	0	0	
1995a	0	0	0		0	0	0	0		0	0	0	
1996a	0	0	0		0	0	0	0		0	0	0	
1997a	0	0	0		0	0	0	0		0	0	0	
1998a	7	7	125	11%	784	0	0	0		0	7	7	14
1999a	0	7	92	8%	1083	0	0	0		0	0	7	7
2000	1	15	0	0%	0	58	19	74	0%	0	72	46	120

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 38

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	0	0	0		0	0	0	
1994	0	0	0		0	0	0	0		0	0	0	
1995	0	0	0		0	0	0	0		0	0	0	
1996	0	0	0		0	0	0	0		0	0	0	
1997	0	0	0		0	0	0	0		0	0	0	
1998	0	0	0		0	0	0	0		0	0	0	
1999	0	0	0		0	0	0	0		0	0	0	
2000	0	0	0	0%	0	0	0	0	0%	0	0	1	1

Unit: 39

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	638	0	4177	15%	20461	0	244	900	27%	0	638	244	882
1994	612	0	4501	14%	21915	0	350	900	39%	0	612	350	962
1995	751	0	4559	16%	21184	0	279	725	38%	0	751	279	1030
1996	932	0	5591	17%	28105	0	214	425	50%	0	932	214	1146
1997	664	0	4910	14%	26544	0	278	575	48%	0	664	278	942
1998	614	6	5069	12%	25399	55	319	675	55%	0	669	325	994
1999	566	3	4766	12%	24461	0	252	566	45%	0	566	255	821
2000	479	2	0	0%	0	11	312	642	0%	0	616	323	1009

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 40

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	0	0	0		0	0	0	
1994	0	0	0		0	0	0	0		0	0	0	
1995	0	0	0		0	0	0	0		0	0	0	
1996	0	0	0		0	0	0	0		0	0	0	
1997	0	0	0		0	0	0	0		0	0	0	
1998	0	0	0		0	0	0	0		0	0	0	
1999	0	0	0		0	0	0	0		0	0	0	
2000	0	0	0	0%	0	15	13	253	0%	0	16	13	34

Unit: 41

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	0	0	0		0	0	0	
1994	0	0	0		0	0	0	0		0	0	0	
1995	0	0	0		0	0	0	0		0	0	0	
1996	0	0	0		0	0	0	0		0	0	0	
1997	0	0	0		0	0	0	0		0	0	0	
1998	0	0	0		0	0	0	0		0	0	0	
1999	0	0	0		0	0	0	0		0	0	0	
2000	1	0	0	0%	0	1	0	0	0%	0	2	0	2

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 42

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	0	0	0		0	0	0	
1994	0	0	0		0	0	0	0		0	0	0	
1995	0	0	0		0	0	0	0		0	0	0	
1996	0	0	0		0	0	0	0		0	0	0	
1997	0	0	0		0	0	0	0		0	0	0	
1998	0	0	0		0	0	0	0		0	0	0	
1999	0	0	0		0	0	0	0		0	0	0	
2000	0	0	0	0%	0	0	0	0	0%	0	0	0	0

Unit: 43

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	112	54	905	18%	5068	112	54	166
1994	0	0	0		0	185	140	905	36%	5215	185	140	325
1995	0	0	0		0	107	125	1305	18%	6636	107	125	232
1996	0	0	0		0	101	112	1375	15%	6065	101	112	213
1997	0	0	0		0	130	160	1410	21%	7436	130	160	290
1998	77	6	561	15%	3628	97	121	1420	15%	6612	174	127	301
1999	33	0	443	7%	3495	78	115	1420	14%	7515	111	115	226
2000	8	0	0	0%	0	63	115	1096	0%	0	95	119	242

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 44

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	61	106	555	30%	2924	61	106	167
1994	0	0	0		0	42	72	555	21%	2935	42	72	114
1995	0	0	0		0	36	69	405	26%	2014	36	69	105
1996	0	0	0		0	55	81	405	34%	1506	55	81	136
1997	0	0	0		0	35	50	410	21%	2155	35	50	85
1998	6	0	64	9%	185	39	61	410	24%	2047	45	61	106
1999	13	13	111	23%	346	42	84	382	33%	1818	55	97	152
2000	5	0	0	0%	0	61	87	387	0%	0	68	87	160

Unit: 45

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993a	0	0	0		0	55	57	420	27%	1886	55	57	112
1994b	0	0	0		0	34	41	285	26%	1729	34	41	75
1995b	0	0	0		0	50	52	285	36%	1552	50	52	102
1996b	0	0	0		0	38	67	285	37%	1374	38	67	105
1997b	0	0	0		0	53	68	290	42%	1709	53	68	121
1998c	25	0	566	4%	3568	48	50	230	43%	1146	73	50	123
1999c	38	0	201	19%	1005	50	56	224	47%	830	88	56	144
2000	28	0	0	0%	0	52	51	272	0%	0	86	53	142

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 46

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	0	0	0		0	0	0	
1994	0	0	0		0	0	0	0		0	0	0	
1995	0	0	0		0	0	0	0		0	0	0	
1996	0	0	0		0	0	0	0		0	0	0	
1997	0	0	0		0	0	0	0		0	0	0	
1998	0	0	0		0	0	0	0		0	0	0	
1999	0	0	0		0	0	0	0		0	0	0	
2000	0	1	0	0%	0	1	0	0	0%	0	1	1	2

Unit: 47

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	0	0	0		0	0	0	
1994	0	0	0		0	0	0	0		0	0	0	
1995	0	0	0		0	0	0	0		0	0	0	
1996	0	0	0		0	0	0	0		0	0	0	
1997	0	0	0		0	0	0	0		0	0	0	
1998	0	0	0		0	0	0	0		0	0	0	
1999	0	0	0		0	0	0	0		0	0	0	
2000	3	1	0	0%	0	0	0	0	0%	0	3	1	4

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 48

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	52	102	580	27%	2719	52	102	154
1994	0	0	0		0	59	156	580	37%	3018	59	156	215
1995	0	0	0		0	40	92	580	23%	2595	40	92	132
1996	0	0	0		0	73	99	580	30%	2147	73	99	172
1997	0	0	0		0	56	119	580	30%	2900	56	119	175
1998	19	0	230	8%	1766	47	130	590	30%	2633	66	130	196
1999	0	13	222	6%	1832	50	96	590	25%	2504	50	109	159
2000	21	0	0	0%	0	85	144	750	0%	0	129	149	288

Unit: 49

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	90	101	480	40%	2200	90	101	191
1994	0	0	0		0	97	91	480	39%	2467	97	91	188
1995	0	0	0		0	78	125	480	42%	2037	78	125	203
1996	0	0	0		0	109	125	510	46%	2310	109	125	234
1997	0	0	0		0	136	185	760	42%	4069	136	185	321
1998	85	7	552	17%	4520	103	226	770	43%	3079	188	233	421
1999	52	14	433	15%	2864	142	203	812	42%	3343	194	217	411
2000	72	0	0	0%	0	174	403	1226	0%	0	287	408	714

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 50

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	48	212	675	39%	0	48	212	260
1994	0	0	0		0	74	306	725	52%	0	74	306	380
1995	0	0	0		0	78	201	725	38%	0	78	201	279
1996	0	0	0		0	92	175	725	37%	0	92	175	267
1997	66	9	309	24%	2133	79	142	775	29%	0	145	151	296
1998	105	20	788	16%	5341	81	203	825	34%	0	186	223	409
1999	144	471	1493	41%	8439	72	57	425	30%	0	216	528	744
2000	64	48	0	0%	0	80	144	568	0%	0	199	218	430

Unit: 51

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	40	0	430	9%	1985	4	25	100	29%	0	44	25	69
1994	74	0	400	19%	1733	42	115	255	62%	0	116	115	231
1995	37	8	388	12%	1800	28	44	255	28%	0	65	52	117
1996	85	0	506	17%	1401	52	82	255	53%	0	137	82	219
1997	65	0	524	12%	2638	25	36	155	39%	0	90	36	126
1998	40	13	547	10%	4058	36	45	155	52%	0	76	58	134
1999	144	386	1493	35%	8439	47	13	195	31%	0	191	399	590
2000	26	34	0	0%	0	81	154	494	0%	0	130	216	351

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 52

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993a	0	0	0		0	0	0	0		0	0	0	
1994a	0	0	0		0	0	0	0		0	0	0	
1995a	0	0	0		0	0	0	0		0	0	0	
1996a	0	0	0		0	0	0	0		0	0	0	
1997a	0	0	0		0	0	0	0		0	0	0	
1998a	0	0	0		0	0	0	0		0	0	0	
1999a	0	0	0		0	0	0	0	0%	0	0	0	
2000	7	0	0	0%	0	8	6	0	0%	0	17	7	25

Unit: 52A

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993a	0	0	0		0	0	0	0		0	0	0	
1994a	0	0	0		0	0	0	0		0	0	0	
1995a	0	0	0		0	0	0	0		0	0	0	
1996a	0	0	0		0	0	0	0		0	0	0	
1997a	0	0	0		0	0	0	0		0	0	0	
1998b	0	0	0		0	0	0	0		0	0	0	
1999b	0	0	0		0	0	0	0	0%	0	0	0	
2000	0	0	0	0%	0	41	20	204	0%	0	41	20	61

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 53

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	0	0	0		0	0	0	
1994a	0	0	0		0	0	0	0		0	0	0	
1995a	0	0	0		0	0	0	0		0	0	0	
1996a	0	0	0		0	0	0	0		0	0	0	
1997a	0	0	0		0	0	0	0		0	0	0	
1998b	0	0	0		0	0	0	0		0	0	0	
1999	0	0	0		0	0	0	0		0	0	0	
2000	8	12	0	0%	0	0	1	0	0%	0	9	15	25

Unit: 54

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	0	0	0		0	0	0	
1994	0	0	0		0	0	0	0		0	0	0	
1995	0	0	0		0	0	0	0		0	0	0	
1996	0	0	0		0	0	0	0		0	0	0	
1997	0	0	0		0	0	0	0		0	0	0	
1998	0	0	0		0	0	0	0		0	0	0	
1999	0	0	0		0	0	0	0		0	0	0	
2000	2	0	0	0%	0	0	0	0	0%	0	2	0	2

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 55

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	0	0	0		0	0	0	
1994	0	0	0		0	0	0	0		0	0	0	
1995	0	0	0		0	0	0	0		0	0	0	
1996	0	0	0		0	0	0	0		0	0	0	
1997	0	0	0		0	0	0	0		0	0	0	
1998	0	0	0		0	0	0	0		0	0	0	
1999	0	0	0		0	0	0	0		0	0	0	
2000	0	0	0	0%	0	1	0	0	0%	0	1	0	1

Unit: 56

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	4	2	15	40%	55	4	2	6
1994	0	0	0		0	4	4	15	53%	70	4	4	8
1995	0	0	0		0	3	20	45	51%	224	3	20	23
1996	0	0	0		0	4	16	50	40%	278	4	16	20
1997	0	0	0		0	3	24	80	34%	504	3	24	27
1998	0	0	111	0%	524	15	9	95	25%	328	15	9	24
1999	0	0	40	0%	119	9	15	88	27%	479	9	15	24
2000	6	19	0	0%	0	10	6	195	0%	0	20	27	47

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 57

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	0	0	0		0	0	0	
1994	0	0	0		0	0	0	0		0	0	0	
1995	0	0	0		0	0	0	0		0	0	0	
1996	0	0	0		0	0	0	0		0	0	0	
1997	0	0	0		0	0	0	0		0	0	0	
1998	0	0	0		0	0	0	0		0	0	0	
1999	0	0	0		0	0	0	0		0	0	0	
2000	2	0	0	0%	0	0	0	0	0%	0	2	0	2

Unit: 58

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	32	0	191	17%	821	18	56	300	25%	0	50	56	106
1994	17	0	149	11%	850	29	96	300	42%	0	46	96	142
1995	36	0	162	22%	795	21	44	200	33%	0	57	44	101
1996	34	0	232	15%	1093	32	67	200	50%	0	66	67	133
1997	28	0	383	7%	2086	16	60	200	38%	0	44	60	104
1998a	26	0	150	17%	973	49	80	250	52%	0	75	80	155
1999b	66	26	317	29%	2004	19	0	100	19%	0	85	26	111
2000	18	1	0	0%	0	26	103	227	0%	0	47	107	160

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 59

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993a	56	0	693	8%	2893	21	181	460	44%	0	77	181	258
1994a	115	0	852	13%	3577	33	136	360	47%	0	148	136	284
1995a	58	0	659	9%	3017	18	135	360	43%	0	76	135	211
1996a	85	0	781	11%	2067	47	120	365	46%	0	132	120	252
1997a	113	9	823	15%	5060	24	131	365	42%	0	137	140	277
1998ab	98	46	744	19%	5113	49	179	400	57%	0	147	225	372
1999ac	106	251	1296	28%	6255	17	0	100	17%	0	123	251	374
2000	24	2	0	0%	0	17	102	278	0%	0	59	114	173

Unit: 59A

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993a	0	0	0		0	0	0	0		0	0	0	
1994a	0	0	0		0	0	0	0		0	0	0	
1995a	0	0	0		0	0	0	0		0	0	0	
1996a	0	0	0		0	0	0	0		0	0	0	
1997a	0	0	0		0	0	0	0		0	0	0	
1998a	0	0	0		0	0	0	0		0	0	0	
1999a	0	0	0		0	0	0	0		0	0	0	
2000	18	1	0	0%	0	11	27	0	0%	0	38	30	71

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 60

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	56	0	558	10%	2176	33	0	80	41%	0	89	0	89
1994	74	0	565	13%	2349	57	115	280	61%	0	131	115	246
1995	64	0	639	10%	3287	29	0	60	48%	0	93	0	93
1996	85	0	612	14%	2938	67	40	200	54%	0	152	40	192
1997	65	0	542	12%	2572	63	32	200	48%	0	128	32	160
1998a	86	4	635	14%	4709	75	125	380	53%	0	161	129	290
1999b	60	6	569	12%	5166	35	62	380	26%	0	95	68	163
2000	46	0	0	0%	0	63	146	366	0%	0	147	149	298

Unit: 60A

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	0	0	0		0	0	0	
1994	0	0	0		0	0	0	0		0	0	0	
1995	3	0	0		0	0	0	0		0	3	0	3
1996	0	0	0		0	0	0	0		0	0	0	
1997	0	0	0		0	0	0	0		0	0	0	
1998	0	0	0		0	0	0	0		0	0	0	
1999	0	0	0		0	0	0	0		0	0	0	
2000	7	1	0	0%	0	48	267	384	0%	0	67	269	345

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 61

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	80	0	662	12%	3164	100	78	1366	13%	0	180	78	258
1994	84	0	726	12%	3066	65	249	970	32%	0	149	249	398
1995	17	0	466	4%	1936	45	80	986	13%	0	62	80	142
1996	51	0	865	6%	3092	97	176	1153	24%	0	148	176	324
1997	112	0	851	13%	4153	39	163	859	24%	0	151	163	314
1998a	86	13	635	16%	4709	35	69	330	32%	0	121	82	203
1999a	99	99	1693	12%	15723	45	75	330	36%	0	144	174	318
2000	36	0	0	0%	0	70	83	559	0%	0	187	159	360

Unit: 62

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	8	0	279	3%	1188	28	21	250	20%	0	36	21	57
1994	17	0	234	7%	1021	52	82	250	54%	0	69	82	151
1995	0	0	340	0%	1448	28	21	250	20%	0	28	21	49
1996	34	0	422	8%	1606	90	14	250	42%	0	124	14	138
1997	19	0	449	4%	2600	46	66	300	37%	0	65	66	131
1998	0	0	196	0%	805	58	66	300	41%	0	58	66	124
1999	17	0	195	9%	1314	36	23	300	20%	0	53	23	76
2000	7	21	0	0%	0	44	32	286	0%	0	53	54	108

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 62A

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	151	0%	662	42	55	500	19%	0	42	55	97
1994	8	0	125	6%	453	70	109	505	35%	0	78	109	187
1995	8	0	84	10%	326	62	56	355	33%	0	70	56	126
1996	51	0	253	20%	1315	57	74	360	36%	0	108	74	182
1997	9	0	206	4%	1478	52	45	360	27%	0	61	45	106
1998	0	0	311	0%	2037	51	80	350	37%	0	51	80	131
1999	7	6	185	7%	1720	36	84	350	34%	0	43	90	133
2000	8	0	0	0%	0	44	40	321	0%	0	56	41	100

Unit: 63

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	0	0	0		0	0	0	
1994	0	0	0		0	0	0	0		0	0	0	
1995	0	0	0		0	0	0	0		0	0	0	
1996	0	0	0		0	0	0	0		0	0	0	
1997	0	0	0		0	0	0	0		0	0	0	
1998a	0	0	0		0	0	0	0		0	0	0	
1999	0	0	0		0	0	0	0		0	0	0	
2000	40	61	0	0%	0	0	0	0	0%	0	56	72	132

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 63A

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	0	0	0		0	0	0	
1994	0	0	0		0	0	0	0		0	0	0	
1995	0	0	0		0	0	0	0		0	0	0	
1996	0	0	0		0	0	0	0		0	0	0	
1997	0	0	0		0	0	0	0		0	0	0	
1998a	0	0	0		0	0	0	0		0	0	0	
1999	0	0	0		0	0	0	0		0	0	0	
2000	1	1	0	0%	0	0	1	0	0%	0	2	3	4

Unit: 64

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	359	0%	1267	0	17	125	14%	0	0	17	17
1994	42	0	267	16%	1147	0	35	75	47%	0	42	35	77
1995	17	0	209	8%	786	0	8	75	11%	0	17	8	25
1996	17	0	295	6%	717	0	19	75	25%	0	17	19	36
1997	56	0	412	14%	2076	0	0	0		0	56	0	56
1998ab	0	0	220	0%	1321	6	18	85	28%	0	6	18	24
1999ab	19	13	209	15%	1341	8	22	135	22%	0	27	35	62
2000	8	12	0	0%	0	0	30	71	0%	0	11	43	55

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 65

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	24	0	255	9%	988	0	13	100	13%	0	24	13	37
1994	8	0	167	5%	598	2	46	100	48%	0	10	46	56
1995	8	0	184	4%	730	0	14	100	14%	0	8	14	22
1996	17	0	274	6%	649	0	27	100	27%	0	17	27	44
1997	9	0	290	3%	1010	0	0	0		0	9	0	9
1998a	25	0	258	10%	1681	0	18	75	24%	0	25	18	43
1999a	0	19	254	7%	1512	0	22	125	18%	0	0	41	41
2000	18	12	0	0%	0	1	11	0	0%	0	28	24	52

Unit: 66

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	239	0	1921	12%	7078	11	238	1200	21%	0	250	238	488
1994	222	0	1289	17%	4919	0	557	1200	46%	0	222	557	779
1995	179	0	1083	17%	3981	0	230	1200	19%	0	179	230	409
1996	205	0	2068	10%	6833	10	403	1200	34%	0	215	403	618
1997	224	0	1450	15%	6762	5	233	1200	20%	0	229	233	462
1998a	93	0	641	15%	3509	0	197	1200	16%	0	93	197	290
1999a	111	80	941	20%	4589	0	140	600	23%	0	111	220	331
2000	63	61	0	0%	0	1	70	188	0%	0	109	146	264

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 66A

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	58	68	400	32%	0	58	68	126
1994	0	0	0		0	96	102	400	50%	0	96	102	198
1995	0	0	0		0	55	83	400	35%	0	55	83	138
1996	0	0	0		0	55	91	400	37%	0	55	91	146
1997	0	0	0		0	71	79	500	30%	0	71	79	150
1998a	59	7	594	11%	4552	197	419	1675	37%	0	256	426	682
1999b	46	14	471	13%	4278	96	122	1800	12%	0	142	136	278
2000	17	2	0	0%	0	156	211	1565	0%	0	236	222	473

Unit: 67

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	80	0	638	13%	2367	9	79	600	15%	0	89	79	168
1994	84	0	466	18%	1933	3	276	505	55%	0	87	276	363
1995	25	0	259	10%	1163	0	51	505	10%	0	25	51	76
1996	85	0	528	16%	1606	10	169	455	39%	0	95	169	264
1997	47	0	458	10%	2357	5	56	455	13%	0	52	56	108
1998a	32	0	233	14%	1046	6	64	460	15%	0	38	64	102
1999a	25	6	247	13%	1616	8	36	210	21%	0	33	42	75
2000	20	4	0	0%	0	2	22	90	0%	0	42	28	75

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 68

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	0	0	0		0	0	0	
1994	0	0	0		0	26	7	50	66%	0	26	7	33
1995	0	0	0		0	10	32	125	34%	0	10	32	42
1996	0	0	0		0	18	34	125	42%	0	18	34	52
1997	0	0	0		0	26	42	250	27%	0	26	42	68
1998a	20	0	342	6%	2547	69	136	600	34%	0	89	136	225
1999b	0	0	0		0	7	17	250	10%	0	7	17	24
2000	2	4	0	0%	0	5	9	0	0%	0	8	13	21

Unit: 68A

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	0	0	0		0	0	0	
1994	0	0	0		0	0	0	0		0	0	0	
1995	0	0	0		0	0	0	0		0	0	0	
1996	0	0	0		0	0	0	0		0	0	0	
1997	0	0	0		0	0	0	0		0	0	0	
1998a	0	0	0		0	0	0	0		0	0	0	
1999	0	0	0		0	0	0	0		0	0	0	
2000	0	0	0	0%	0	0	0	0	0%	0	0	0	1

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 69

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	175	0	1052	17%	4240	8	72	175	46%	0	183	72	255
1994	150	0	1120	13%	3844	0	78	175	45%	0	150	78	228
1995	101	8	756	14%	2593	0	86	250	34%	0	101	94	195
1996	120	0	1245	10%	3553	9	97	250	42%	0	129	97	226
1997	150	0	1038	14%	3685	0	93	350	27%	0	150	93	243
1998	99	0	585	17%	2255	0	130	350	37%	0	99	130	229
1999	72	60	684	19%	3250	0	19	100	19%	0	72	79	151
2000	53	73	0	0%	0	3	55	84	0%	0	92	150	250

Unit: 70

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	11	0	20	55%	0	11	0	11
1994	0	0	0		0	13	0	20	65%	0	13	0	13
1995	0	0	0		0	11	0	20	55%	0	11	0	11
1996	0	0	0		0	11	43	120	45%	0	11	43	54
1997	0	0	0		0	5	19	125	19%	0	5	19	24
1998a	6	0	62	10%	616	72	148	1025	21%	0	78	148	226
1999b	20	32	290	18%	1867	6	0	225	3%	0	26	32	58
2000	1	21	0	0%	0	8	0	25	0%	0	11	23	38

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 71

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	0	0	0		0	0	0	
1994	0	0	0		0	9	0	20	45%	0	9	0	9
1995	0	0	0		0	8	11	70	27%	0	8	11	19
1996	0	0	0		0	4	13	95	18%	0	4	13	17
1997	0	0	0		0	9	15	175	14%	0	9	15	24
1998a	0	0	49	0%	357	0	0	0		0	0	0	
1999b	13	0	211	6%	797	9	0	225	4%	0	22	0	22
2000	8	24	0	0%	0	1	0	0	0%	0	14	28	43

Unit: 72

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	0	0	0		0	0	0	
1994	0	0	0		0	16	7	100	23%	0	16	7	23
1995	0	0	0		0	6	7	200	7%	0	6	7	13
1996	0	0	0		0	12	20	200	16%	0	12	20	32
1997	0	0	0		0	28	73	425	24%	0	28	73	101
1998a	31	0	264	12%	1797	0	0	0		0	31	0	31
1999b	20	33	374	14%	1611	15	0	225	7%	0	35	33	68
2000	17	34	0	0%	0	6	0	0	0%	0	38	55	93

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 73

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	29	31	110	55%	0	29	31	60
1994	0	0	0		0	29	7	110	33%	0	29	7	36
1995	0	0	0		0	27	13	155	26%	0	27	13	40
1996	0	0	0		0	25	21	105	44%	0	25	21	46
1997	0	0	0		0	23	14	160	23%	0	23	14	37
1998a	18	0	136	13%	918	0	0	0		0	18	0	18
1999b	20	39	322	18%	1557	11	0	225	5%	0	31	39	70
2000	13	22	0	0%	0	3	0	0	0%	0	29	32	61

Unit: 73A

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	0	0	0		0	0	0	
1994	0	0	0		0	0	0	0		0	0	0	
1995	0	0	0		0	0	0	0		0	0	0	
1996	0	0	0		0	0	0	0		0	0	0	
1997	0	0	0		0	0	0	0		0	0	0	
1998a	0	0	0		0	0	0	0		0	0	0	
1999b	0	0	0		0	0	0	0		0	0	0	
2000	3	0	0	0%	0	1	0	0	0%	0	4	0	5

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 74

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	0	0	0		0	0	0	
1994	0	0	0		0	5	5	25	40%	0	5	5	10
1995	0	0	0		0	11	36	125	38%	0	11	36	47
1996	0	0	0		0	7	28	125	28%	0	7	28	35
1997	0	0	0		0	26	32	200	29%	0	26	32	58
1998a	12	0	92	13%	678	0	0	0		0	12	0	12
1999b	6	14	250	8%	1213	7	0	225	3%	0	13	14	27
2000	4	16	0	0%	0	4	0	0	0%	0	22	25	46

Unit: 75

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	122	0	1337	9%	6093	2	32	150	23%	0	124	32	156
1994	67	0	423	16%	1544	1	41	105	40%	0	68	41	109
1995	8	0	386	2%	1265	5	38	130	33%	0	13	38	51
1996	18	0	575	3%	2370	8	42	280	18%	0	26	42	68
1997	49	0	621	8%	2417	2	54	310	18%	0	51	54	105
1998a	45	45	689	13%	4785	10	113	475	26%	0	55	158	213
1999b	52	26	533	15%	4231	18	76	475	20%	0	70	102	172
2000	36	56	0	0%	0	15	2	25	0%	0	76	84	166

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 76

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	0	0	0		0	208	136	700	49%	0	208	136	344
1994	0	0	0		0	218	223	725	61%	0	218	223	441
1995	0	0	0		0	231	154	750	51%	0	231	154	385
1996	0	0	0		0	215	234	750	60%	0	215	234	449
1997	0	0	0		0	187	267	1200	38%	0	187	267	454
1998a	191	33	1418	16%	14203	0	0	0		0	191	33	224
1999b	239	46	1340	21%	13492	150	293	1800	25%	0	389	339	728
2000	83	0	0	0%	0	123	245	136	0%	0	360	290	661

Unit: 77

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	41	0	449	9%	1766	3	22	75	33%	0	44	22	66
1994	17	0	358	5%	1310	1	27	80	35%	0	18	27	45
1995	28	0	179	16%	488	0	30	105	29%	0	28	30	58
1996	18	0	592	3%	2316	2	43	105	43%	0	20	43	63
1997	20	0	326	6%	1499	4	30	110	31%	0	24	30	54
1998a	45	0	381	12%	2478	0	0	0		0	45	0	45
1999b	19	7	330	8%	1942	1	23	475	5%	0	20	30	50
2000	13	14	0	0%	0	2	0	0	0%	0	28	19	49

Appendix B

Estimated Elk Harvest Reported by Unit

Unit: 78

	General Harvest					Controlled Harvest					Total Harvest		
Year	Male	Female	Hunters	Percent Success	Hunter Days	Male	Female	Permits Issued	Percent Success	Hunter Days	Male	Female	Total
1993	71	0	531	13%	2317	3	26	75	39%	0	74	26	100
1994	50	0	293	17%	1070	4	63	130	52%	0	54	63	117
1995	8	0	117	7%	427	0	49	155	32%	0	8	49	57
1996	72	0	323	22%	1311	4	61	155	42%	0	76	61	137
1997	59	0	306	19%	1223	6	51	160	36%	0	65	51	116
1998a	26	6	375	9%	2511	0	0	0		0	26	6	32
1999b	45	7	298	17%	2167	1	23	475	5%	0	46	30	76
2000	24	14	0	0%	0	5	0	0	0%	0	49	31	78

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 01

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	0	0	0	0		0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	0	0	0	0		0
1997	0	0	0	0		0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	0	3	3		0

Unit: 02

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	0	0	0	0		0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	0	0	0	0		0
1997	0	0	0	0		0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	0	0	0		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 03

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	0	0	0	0		0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	0	0	0	0		0
1997	0	0	0	0		0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	0	0	0		0

Unit: 04

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	0	0	0	0		0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	0	0	0	0		0
1997	0	0	0	0		0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	20	0	6	6		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 04A

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	0	0	0	0		0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	0	0	0	0		0
1997	0	0	0	0		0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	0	0	0		0

Unit: 05

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	0	0	0	0		0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	0	0	0	0		0
1997	0	0	0	0		0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	0	0	0		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 06

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	0	0	0	0		0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	0	0	0	0		0
1997	0	0	0	0		0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	0	1	1		0

Unit: 07

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	0	0	0	0		0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	0	0	0	0		0
1997	0	0	0	0		0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	0	2	2		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 08

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	250	2	74	76	30%	0
1994	425	1	207	208	49%	0
1995	425	0	136	136	32%	0
1996	275	0	155	155	56%	0
1997	275	1	94	95	35%	0
1998	425	1	150	151	36%	0
1999	425	1	151	152	36%	0
2000	262	16	26	43		0

Unit: 08A

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	600	17	162	179	30%	0
1994	425	1	207	208	49%	0
1995	425	0	137	137	32%	0
1996	275	0	154	154	56%	0
1997	275	0	94	94	34%	0
1998	425	1	150	151	36%	0
1999	425	1	151	152	36%	0
2000	0	2	54	57		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 09

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	0	0	0	0		0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	0	0	0	0		0
1997	0	0	0	0		0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	0	0	0		0

Unit: 10

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	150	2	89	91	61%	0
1994	150	3	107	110	73%	0
1995	150	0	84	84	56%	0
1996	1500	25	446	471	31%	0
1997	1500	2	128	130	9%	0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	0	0	0		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 10A

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	950	24	413	437	46%	0
1994	775	2	476	478	62%	0
1995	775	0	382	382	49%	0
1996	600	5	268	273	46%	0
1997	525	3	173	176	34%	0
1998	100	0	44	44	44%	0
1999	100	1	56	57	57%	0
2000	48	0	18	20		0

Unit: 11

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	150	36	40	76	51%	0
1994	100	21	14	35	35%	0
1995	100	25	30	55	55%	0
1996	100	21	31	52	52%	0
1997	100	22	22	44	44%	0
1998	100	29	22	51	51%	0
1999	100	24	28	52	52%	0
2000	100	34	27	61		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 11A

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	150	2	19	21	14%	0
1994	150	0	31	31	21%	0
1995	150	0	23	23	15%	0
1996	150	0	16	16	11%	0
1997	75	0	16	16	21%	0
1998	75	0	11	11	15%	0
1999	75	0	23	23	31%	0
2000	70	4	16	20		0

Unit: 12

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	150	2	69	71	47%	0
1994	200	3	116	119	60%	0
1995	200	0	76	76	38%	0
1996	400	6	160	166	42%	0
1997	350	0	54	54	15%	0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	0	0	0		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 13

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	250	46	93	139	56%	0
1994	250	41	83	124	50%	0
1995	275	36	110	146	53%	0
1996	275	45	69	114	41%	0
1997	275	55	67	122	44%	0
1998	275	24	44	68	25%	0
1999	275	41	47	88	32%	0
2000	245	38	48	87		0

Unit: 14

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	100	0	35	35	35%	0
1994	263	0	83	83	32%	0
1995	562	0	181	181	32%	0
1996	325	0	90	90	28%	0
1997	325	1	126	127	39%	0
1998	225	0	104	104	46%	0
1999	225	0	93	93	41%	0
2000	48	6	29	37		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 15

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	0	0	0	0		0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	400	0	138	138	35%	0
1997	400	0	186	186	47%	0
1998	325	0	134	134	41%	0
1999	325	0	76	76	23%	0
2000	0	0	0	0		0

Unit: 16

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	150	5	24	29	19%	0
1994	150	0	56	56	37%	0
1995	150	0	33	33	22%	0
1996	525	0	115	115	22%	0
1997	525	0	86	86	16%	0
1998	300	0	47	47	16%	0
1999	300	0	52	52	17%	0
2000	0	0	0	0		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 16A

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	50	0	9	9	18%	0
1994	50	0	18	18	36%	0
1995	50	0	18	18	36%	0
1996	200	6	68	74	37%	0
1997	200	4	21	25	13%	0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	0	0	0		0

Unit: 17

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	100	0	20	20	20%	0
1994	100	0	38	38	38%	0
1995	100	0	41	41	41%	0
1996	725	113	37	150	21%	0
1997	725	24	23	47	6%	0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	0	0	0		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 18

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	250	39	21	60	24%	0
1994	250	46	49	95	38%	0
1995	250	38	31	69	28%	0
1996	250	42	24	66	26%	0
1997	250	52	17	69	28%	0
1998	250	44	21	65	26%	0
1999	250	51	24	75	30%	0
2000	227	52	27	80		0

Unit: 19

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	0	0	0	0		0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	400	19	56	75	19%	0
1997	250	8	16	24	10%	0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	0	0	0		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 19A

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	0	0	0	0		0
1994	5	0	0	0	0%	0
1995	5	1	0	1	20%	0
1996	5	3	0	3	60%	0
1997	5	1	0	1	20%	0
1998	5	4	0	4	80%	13
1999	155	2	24	26	17%	763
2000	145	0	19	21		0

Unit: 20

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	150	3	52	55	37%	0
1994	75	0	24	24	32%	0
1995	75	0	14	14	19%	0
1996	75	2	4	6	8%	0
1997	125	3	14	17	14%	0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	0	0	0		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 20A

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	200	0	45	45	23%	0
1994	200	0	76	76	38%	0
1995	200	0	34	34	17%	0
1996	358	9	59	68	19%	0
1997	400	5	67	72	18%	0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	0	0	0		0

Unit: 21

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	500	4	96	100	20%	2679
1994	450	0	250	250	56%	1751
1995	450	0	137	137	30%	1987
1996	450	0	200	200	44%	1524
1997	450	0	83	83	18%	2109
1998	252	2	109	111	44%	1009
1999	200	0	37	37	19%	986
2000	0	0	0	0		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 21A

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	626	0	56	56	9%	3412
1994	600	0	382	382	64%	1861
1995	600	0	168	168	28%	2492
1996	600	0	265	265	44%	1660
1997	600	0	130	130	22%	2495
1998	62	0	28	28	45%	250
1999	100	0	23	23	23%	479
2000	0	0	14	15		0

Unit: 22

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	650	0	205	205	32%	0
1994	650	0	256	256	39%	0
1995	700	0	242	242	35%	0
1996	678	0	298	298	44%	0
1997	700	0	268	268	38%	0
1998	700	0	171	171	24%	4203
1999	1000	0	232	232	23%	4852
2000	1018	14	317	347		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 23

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	500	0	152	152	30%	0
1994	505	5	228	233	46%	0
1995	605	3	199	202	33%	0
1996	578	0	250	250	43%	0
1997	605	4	204	208	34%	0
1998	605	4	207	211	35%	2845
1999	605	0	202	202	33%	2997
2000	516	12	232	256		0

Unit: 24

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	655	0	209	209	32%	0
1994	600	0	299	299	50%	0
1995	850	0	249	249	29%	0
1996	925	15	263	278	30%	0
1997	925	9	263	272	29%	0
1998	925	0	262	262	28%	5790
1999	775	0	218	218	28%	4913
2000	692	10	189	213		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 25

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	100	0	30	30	30%	0
1994	100	0	47	47	47%	0
1995	100	0	43	43	43%	0
1996	100	0	33	33	33%	0
1997	75	0	22	22	29%	0
1998	75	0	27	27	36%	379
1999	150	0	57	57	38%	882
2000	140	2	52	58		0

Unit: 26

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	100	0	35	35	35%	0
1994	100	0	16	16	16%	0
1995	100	0	14	14	14%	0
1996	263	0	14	14	5%	0
1997	300	16	19	35	12%	0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	0	0	0		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 27

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	100	0	20	20	20%	516
1994	100	2	29	31	31%	576
1995	250	0	55	55	22%	1377
1996	445	24	63	87	20%	1812
1997	500	20	70	90	18%	2670
1998	0	0	0	0		0
1999	567	122	0	122	22%	3258
2000	0	0	0	0		0

Unit: 28

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	150	0	50	50	33%	840
1994	160	0	107	107	67%	633
1995	300	0	143	143	48%	1257
1996	424	0	201	201	47%	1500
1997	557	0	157	157	28%	2606
1998	522	4	226	230	44%	2090
1999	475	0	150	150	32%	2204
2000	313	1	182	192		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 29

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	500	127	66	193	39%	2818
1994	776	170	287	457	59%	3205
1995	693	126	124	250	36%	3921
1996	644	154	151	305	47%	3072
1997	575	133	175	308	54%	3003
1998	825	140	247	387	47%	4292
1999	626	144	109	253	40%	3034
2000	503	126	150	276		0

Unit: 30

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	295	40	95	135	46%	1427
1994	325	45	200	245	75%	1737
1995	275	40	78	118	43%	1263
1996	414	44	176	220	53%	1447
1997	294	38	114	152	52%	1564
1998	475	63	213	276	58%	1609
1999	450	87	127	214	48%	2195
2000	122	89	135	232		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 30A

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	125	27	39	66	53%	637
1994	144	37	50	87	60%	544
1995	125	32	35	67	54%	541
1996	130	35	39	74	57%	515
1997	125	37	34	71	57%	805
1998	125	29	57	86	69%	375
1999	150	37	32	69	46%	594
2000	137	42	0	42		0

Unit: 31

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	752	52	242	294	39%	0
1994	256	47	209	256	100	0
1995	235	40	195	235	100	0
1996	700	45	179	224	32%	0
1997	600	55	161	216	36%	0
1998	500	32	80	112	22%	2538
1999	400	36	41	77	19%	2035
2000	167	43	30	75		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 32

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	380	23	357	380	100	0
1994	700	0	348	348	50%	0
1995	700	0	242	242	35%	0
1996	700	0	249	249	36%	0
1997	700	0	213	213	30%	0
1998	700	0	181	181	26%	0
1999	504	0	144	144	29%	0
2000	498	11	160	185		0

Unit: 32A

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	450	0	134	134	30%	0
1994	650	0	251	251	39%	0
1995	650	0	242	242	37%	0
1996	650	0	269	269	41%	0
1997	650	0	207	207	32%	0
1998	650	0	198	198	30%	3224
1999	650	0	179	179	28%	3017
2000	636	9	214	230		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 33

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	1029	11	91	102	10%	0
1994	720	32	269	301	42%	0
1995	820	11	179	190	23%	0
1996	500	8	199	207	41%	0
1997	500	0	138	138	28%	0
1998	550	7	154	161	29%	0
1999	510	3	130	133	26%	0
2000	45	6	32	38		0

Unit: 34

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	100	4	26	30	30%	0
1994	100	0	40	40	40%	0
1995	100	0	52	52	52%	0
1996	50	0	12	12	24%	0
1997	50	0	13	13	26%	0
1998	50	0	23	23	46%	0
1999	49	0	9	9	18%	0
2000	0	0	0	0		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 35

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	138	2	13	15	11%	0
1994	100	0	41	41	41%	0
1995	100	0	16	16	16%	0
1996	50	0	24	24	48%	0
1997	50	0	19	19	38%	0
1998	50	0	23	23	46%	0
1999	49	0	17	17	35%	0
2000	0	1	0	1		0

Unit: 36

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	300	8	50	58	19%	1585
1994	300	0	178	178	59%	1113
1995	300	0	65	65	22%	1592
1996	350	0	132	132	38%	1440
1997	400	0	87	87	22%	1736
1998	200	2	47	49	25%	800
1999	550	0	132	132	24%	2146
2000	173	8	62	71		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 36A

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	450	88	85	173	38%	2452
1994	625	130	192	322	52%	3044
1995	625	132	72	204	33%	3169
1996	636	145	254	399	63%	2722
1997	625	151	180	331	53%	2903
1998	875	127	253	380	43%	4081
1999	625	113	113	226	36%	2790
2000	990	126	369	505		0

Unit: 36B

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	150	0	39	39	26%	950
1994	256	0	197	197	77%	1177
1995	250	0	83	83	33%	1413
1996	256	0	171	171	67%	1144
1997	250	0	80	80	32%	1663
1998	364	3	157	160	44%	1455
1999	550	0	172	172	31%	2531
2000	351	2	162	169		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 37

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	285	51	40	91	32%	1409
1994	210	44	69	113	54%	831
1995	200	32	40	72	36%	898
1996	200	39	44	83	42%	805
1997	217	38	78	116	53%	1096
1998	275	46	81	127	46%	1134
1999	250	36	67	103	41%	958
2000	604	98	206	310		0

Unit: 37A

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	0	0	0	0		0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	0	0	0	0		0
1997	0	0	0	0		0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	74	58	19	77		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 38

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	0	0	0	0		0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	0	0	0	0		0
1997	0	0	0	0		0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	0	0	0		0

Unit: 39

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	900	0	244	244	27%	0
1994	900	0	350	350	39%	0
1995	725	0	279	279	38%	0
1996	425	0	214	214	50%	0
1997	575	0	278	278	48%	0
1998	675	55	319	374	55%	0
1999	566	0	252	252	45%	0
2000	642	11	312	329		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 40

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	0	0	0	0		0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	0	0	0	0		0
1997	0	0	0	0		0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	253	15	13	33		0

Unit: 41

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	0	0	0	0		0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	0	0	0	0		0
1997	0	0	0	0		0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	1	0	1		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 42

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	0	0	0	0		0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	0	0	0	0		0
1997	0	0	0	0		0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	0	0	0		0

Unit: 43

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	905	112	54	166	18%	5068
1994	905	185	140	325	36%	5215
1995	1305	107	125	232	18%	6636
1996	1375	101	112	213	15%	6065
1997	1410	130	160	290	21%	7436
1998	1420	97	121	218	15%	6612
1999	1420	78	115	193	14%	7515
2000	1096	63	115	203		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 44

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	555	61	106	167	30%	2924
1994	555	42	72	114	21%	2935
1995	405	36	69	105	26%	2014
1996	405	55	81	136	34%	1506
1997	410	35	50	85	21%	2155
1998	410	39	61	100	24%	2047
1999	382	42	84	126	33%	1818
2000	387	61	87	151		0

Unit: 45

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	420	55	57	112	27%	1886
1994	285	34	41	75	26%	1729
1995	285	50	52	102	36%	1552
1996	285	38	67	105	37%	1374
1997	290	53	68	121	42%	1709
1998	230	48	50	98	43%	1146
1999	224	50	56	106	47%	830
2000	272	52	51	106		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 46

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	0	0	0	0		0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	0	0	0	0		0
1997	0	0	0	0		0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	1	0	1		0

Unit: 47

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	0	0	0	0		0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	0	0	0	0		0
1997	0	0	0	0		0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	0	0	0		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 48

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	580	52	102	154	27%	2719
1994	580	59	156	215	37%	3018
1995	580	40	92	132	23%	2595
1996	580	73	99	172	30%	2147
1997	580	56	119	175	30%	2900
1998	590	47	130	177	30%	2633
1999	590	50	96	146	25%	2504
2000	750	85	144	239		0

Unit: 49

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	480	90	101	191	40%	2200
1994	480	97	91	188	39%	2467
1995	480	78	125	203	42%	2037
1996	510	109	125	234	46%	2310
1997	760	136	185	321	42%	4069
1998	770	103	226	329	43%	3079
1999	812	142	203	345	42%	3343
2000	1226	174	403	594		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 50

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	675	48	212	260	39%	0
1994	725	74	306	380	52%	0
1995	725	78	201	279	38%	0
1996	725	92	175	267	37%	0
1997	775	79	142	221	29%	0
1998	825	81	203	284	34%	0
1999	425	72	57	129	30%	0
2000	568	80	144	232		0

Unit: 51

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	100	4	25	29	29%	0
1994	255	42	115	157	62%	0
1995	255	28	44	72	28%	0
1996	255	52	82	134	53%	0
1997	155	25	36	61	39%	0
1998	155	36	45	81	52%	0
1999	195	47	13	60	31%	0
2000	494	81	154	237		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 52

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
	1993	0	0	0		0 0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	0	0	0	0		0
1997	0	0	0	0		0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	8	6	14		0

Unit: 52A

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	0	0	0	0		0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	0	0	0	0		0
1997	0	0	0	0		0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	204	41	20	61		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 53

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	0	0	0	0		0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	0	0	0	0		0
1997	0	0	0	0		0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	0	1	1		0

Unit: 54

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	0	0	0	0		0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	0	0	0	0		0
1997	0	0	0	0		0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	0	0	0		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 55

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	0	0	0	0		0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	0	0	0	0		0
1997	0	0	0	0		0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	1	0	1		0

Unit: 56

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	15	4	2	6	40%	55
1994	15	4	4	8	53%	70
1995	45	3	20	23	51%	224
1996	50	4	16	20	40%	278
1997	80	3	24	27	34%	504
1998	95	15	9	24	25%	328
1999	88	9	15	24	27%	479
2000	195	10	6	17		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 57

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	0	0	0	0		0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	0	0	0	0		0
1997	0	0	0	0		0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	0	0	0		0

Unit: 58

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	300	18	56	74	25%	0
1994	300	29	96	125	42%	0
1995	200	21	44	65	33%	0
1996	200	32	67	99	50%	0
1997	200	16	60	76	38%	0
1998	250	49	80	129	52%	0
1999	100	19	0	19	19%	0
2000	227	26	103	133		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 59

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	460	21	181	202	44%	0
1994	360	33	136	169	47%	0
1995	360	18	135	153	43%	0
1996	365	47	120	167	46%	0
1997	365	24	131	155	42%	0
1998	400	49	179	228	57%	0
1999	100	17	0	17	17%	0
2000	278	17	102	119		0

Unit: 59A

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	0	0	0	0		0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	0	0	0	0		0
1997				0		0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	11	27	40		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 60

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	80	33	0	33	41%	0
1994	280	57	115	172	61%	0
1995	60	29	0	29	48%	0
1996	200	67	40	107	54%	0
1997	200	63	32	95	48%	0
1998	380	75	125	200	53%	0
1999	380	35	62	97	26%	0
2000	366	63	146	211		0

Unit: 60A

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	0	0	0	0		0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	0	0	0	0		0
1997	0	0	0	0		0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	384	48	267	324		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 61

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	1366	100	78	178	13%	0
1994	970	65	249	314	32%	0
1995	986	45	80	125	13%	0
1996	1153	97	176	273	24%	0
1997	859	39	163	202	24%	0
1998	330	35	69	104	32%	0
1999	330	45	75	120	36%	0
2000	559	70	83	164		0

Unit: 62

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	250	28	21	49	20%	0
1994	250	52	82	134	54%	0
1995	250	28	21	49	20%	0
1996	250	90	14	104	42%	0
1997	300	46	66	112	37%	0
1998	300	58	66	124	41%	0
1999	300	36	23	59	20%	0
2000	286	44	32	76		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 62A

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	500	42	55	97	19%	0
1994	505	70	109	179	35%	0
1995	355	62	56	118	33%	0
1996	360	57	74	131	36%	0
1997	360	52	45	97	27%	0
1998	350	51	80	131	37%	0
1999	350	36	84	120	34%	0
2000	321	44	40	87		0

Unit: 63

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	0	0	0	0		0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	0	0	0	0		0
1997	0	0	0	0		0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	0	0	0		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 63A

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	0	0	0	0		0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	0	0	0	0		0
1997	0	0	0	0		0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	0	1	1		0

Unit: 64

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	125	0	17	17	14%	0
1994	75	0	35	35	47%	0
1995	75	0	8	8	11%	0
1996	75	0	19	19	25%	0
1997	0	0	0	0		0
1998	85	6	18	24	28%	0
1999	135	8	22	30	22%	0
2000	71	0	30	31		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 65

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	100	0	13	13	13%	0
1994	100	2	46	48	48%	0
1995	100	0	14	14	14%	0
1996	100	0	27	27	27%	0
1997	0	0	0	0		0
1998	75	0	18	18	24%	0
1999	125	0	22	22	18%	0
2000	0	1	11	12		0

Unit: 66

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	1200	11	238	249	21%	0
1994	1200	0	557	557	46%	0
1995	1200	0	230	230	19%	0
1996	1200	10	403	413	34%	0
1997	1200	5	233	238	20%	0
1998	1200	0	197	197	16%	0
1999	600	0	140	140	23%	0
2000	188	1	70	73		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 66A

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	400	58	68	126	32%	0
1994	400	96	102	198	50%	0
1995	400	55	83	138	35%	0
1996	400	55	91	146	37%	0
1997	500	71	79	150	30%	0
1998	1675	197	419	616	37%	0
1999	1800	96	122	218	12%	0
2000	1565	156	211	378		0

Unit: 67

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	600	9	79	88	15%	0
1994	505	3	276	279	55%	0
1995	505	0	51	51	10%	0
1996	455	10	169	179	39%	0
1997	455	5	56	61	13%	0
1998	460	6	64	70	15%	0
1999	210	8	36	44	21%	0
2000	90	2	22	27		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 68

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	0	0	0	0		0
1994	50	26	7	33	66%	0
1995	125	10	32	42	34%	0
1996	125	18	34	52	42%	0
1997	250	26	42	68	27%	0
1998	600	69	136	205	34%	0
1999	250	7	17	24	10%	0
2000	0	5	9	14		0

Unit: 68A

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	0	0	0	0		0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	0	0	0	0		0
1997	0	0	0	0		0
1998	0	0	0	0		0
1999	0	0	0	0		0
2000	0	0	0	0		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 69

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	175	8	72	80	46%	0
1994	175	0	78	78	45%	0
1995	250	0	86	86	34%	0
1996	250	9	97	106	42%	0
1997	350	0	93	93	27%	0
1998	350	0	130	130	37%	0
1999	100	0	19	19	19%	0
2000	84	3	55	60		0

Unit: 70

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	20	11	0	11	55%	0
1994	20	13	0	13	65%	0
1995	20	11	0	11	55%	0
1996	120	11	43	54	45%	0
1997	125	5	19	24	19%	0
1998	1025	72	148	220	21%	0
1999	225	6	0	6	3%	0
2000	25	8	0	8		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 71

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	0	0	0	0		0
1994	20	9	0	9	45%	0
1995	70	8	11	19	27%	0
1996	95	4	13	17	18%	0
1997	175	9	15	24	14%	0
1998	0	0	0	0		0
1999	225	9	0	9	4%	0
2000	0	1	0	1		0

Unit: 72

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	0	0	0	0		0
1994	100	16	7	23	23%	0
1995	200	6	7	13	7%	0
1996	200	12	20	32	16%	0
1997	425	28	73	101	24%	0
1998	0	0	0	0		0
1999	225	15	0	15	7%	0
2000	0	6	0	6		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 73

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	110	29	31	60	55%	0
1994	110	29	7	36	33%	0
1995	155	27	13	40	26%	0
1996	105	25	21	46	44%	0
1997	160	23	14	37	23%	0
1998	0	0	0	0		0
1999	225	11	0	11	5%	0
2000	0	3	0	3		0

Unit: 73A

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	0	0	0	0		0
1994	0	0	0	0		0
1995	0	0	0	0		0
1996	0	0	0	0		0
1997	0	0	0	0		0
1998	0	0	0	0		0
1999	225	0	0	0	0%	0
2000	0	1	0	1		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 74

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	0	0	0	0		0
1994	25	5	5	10	40%	0
1995	125	11	36	47	38%	0
1996	125	7	28	35	28%	0
1997	200	26	32	58	29%	0
1998	0	0	0	0		0
1999	225	7	0	7	3%	0
2000	0	4	0	4		0

Unit: 75

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	150	2	32	34	23%	0
1994	105	1	41	42	40%	0
1995	130	5	38	43	33%	0
1996	280	8	42	50	18%	0
1997	310	2	54	56	18%	0
1998	475	10	113	123	26%	0
1999	475	18	76	94	20%	0
2000	25	15	2	17		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 76

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	700	208	136	344	49%	0
1994	725	218	223	441	61%	0
1995	750	231	154	385	51%	0
1996	750	215	234	449	60%	0
1997	1200	187	267	454	38%	0
1998	0	0	0	0		0
1999	1800	150	293	443	25%	0
2000	136	123	245	373		0

Unit: 77

Year	Permits Issued	Harvest				
		Male	Female	Total	Percent Success	Hunter Days
1993	75	3	22	25	33%	0
1994	80	1	27	28	35%	0
1995	105	0	30	30	29%	0
1996	105	2	43	45	43%	0
1997	110	4	30	34	31%	0
1998	0	0	0	0		0
1999	475	1	23	24	5%	0
2000	0	2	0	2		0

Appendix C

Controlled Elk Harvest Report by Unit

Unit: 78

Year	Permits Issued	Harvest			Percent Success	Hunter Days
		Male	Female	Total		
1993	75	3	26	29	39%	0
1994	130	4	63	67	52%	0
1995	155	0	49	49	32%	0
1996	155	4	61	65	42%	0
1997	160	6	51	57	36%	0
1998	0	0	0	0		0
1999	475	1	23	24	5%	0
2000	0	5	0	5		0

Appendix D

Controlled Hunt Regulations

2000 CONTROLLED HUNTS-- ANTLERED ELK

Hunt	Season	Controlled Hunt Area	Permits Offered	Permits Issued	Male	Female	Total	Success	Hunter Days
2001	Oct 10-Nov 3	11	50	50	29	1	30	N/A	N/A
2002	Oct 10-Nov 3	18	120	112	45	0	45	N/A	N/A
2003	Oct 1-Oct 14	19A	5	4	0	0	0	N/A	N/A
2004	Oct 1-Oct 14	23-1	5	5	4	0	4	N/A	N/A
2005	Oct 1-Oct 24	29-1	144	142	109	0	109	N/A	N/A
2006	Oct 1-Oct 14	30-1*	30	27	18	0	18	N/A	N/A
2007	Nov 1-Nov 30	30-2	100	95	78	0	78	N/A	N/A
2008	Nov 1-Nov 30	30A	75	72	27	0	27	N/A	N/A
2009	Oct 15-Nov 8	31	75	74	37	0	38	N/A	N/A
2010	Oct 1-Oct 31	36A-1	97	94	43	0	44	N/A	N/A
2011	Oct 1-Oct 31	36A-2	118	108	64	0	65	N/A	N/A
2012	Oct 1-Oct 24	37	150	142	79	0	79	N/A	N/A
2013	Oct 1-Oct 24	37A	70	69	48	0	48	N/A	N/A
2014	Aug 30-Sep 30	40*	5	5	4	0	4	N/A	N/A
2015	Oct 15-Nov 24	40*	40	35	8	0	8	N/A	N/A
2016	Sep 25-Oct 10	43	20	20	6	0	6	N/A	N/A
2017	Oct 15-Nov 9	43	144	134	21	0	22	N/A	N/A
2018	Nov 10-Nov 24	43	148	134	26	0	26	N/A	N/A
2019	Sep 25-Oct 10	44	10	10	9	0	9	N/A	N/A
2020	Oct 15-Nov 9	44	100	100	42	0	42	N/A	N/A
2021	Sep 25-Oct 10	45*	30	30	20	0	20	N/A	N/A
2022	Oct 15-Nov 9	45*	50	50	29	0	29	N/A	N/A
2023	Dec 1-Dec 17	45*	50	49	10	0	11	N/A	N/A
2024	Sep 25-Oct 10	48-1	20	20	9	0	9	N/A	N/A
2025	Oct 15-Nov 9	48-1	200	189	65	0	66	N/A	N/A

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Controlled Hunt Regulations

2000 CONTROLLED HUNTS-- ANTLERED ELK

Hunt	Season	Controlled Hunt Area	Permits Offered	Permits Issued	Male	Female	Total	Success	Hunter Days
2026	Sep 25-Oct 10	49*	20	20	18	0	19	N/A	N/A
2027	Oct 15-Oct 31	49*	316	299	142	0	144	N/A	N/A
2028	Oct 1-Oct 31	50-1	122	118	70	0	71	N/A	N/A
2029	Oct 1-Oct 14	51-1	20	20	14	0	14	N/A	N/A
2030	Nov 1-Nov 30	51-1	75	69	55	0	55	N/A	N/A
2031	Oct 1-Nov 30	52A*	75	72	46	0	46	N/A	N/A
2032	Oct 26-Nov 9	56-1*	200	181	32	0	33	N/A	N/A
2033	Nov 1-Nov 30	58-1*	100	96	46	1	47	N/A	N/A
2034	Oct 1-Oct 14	60-1*	30	30	13	1	14	N/A	N/A
2035	Nov 1-Nov 30	60-2	100	99	58	0	58	N/A	N/A
2036	Nov 1-Nov 30	60A	50	48	43	0	43	N/A	N/A
2037	Nov 1-Nov 10	61	98	90	31	0	38	N/A	N/A
2038	Oct 1-Oct 14	66A*	50	47	25	0	25	N/A	N/A
2039	Oct 26-Nov 9	66A*	591	570	244	1	252	N/A	N/A
2040	Oct 1-Oct 14	70*	25	25	13	0	13	N/A	N/A

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Controlled Hunt Regulations

2000 CONTROLLED HUNTS-- ANTLERLESS ELK

Hunt	Season	Controlled Hunt Area	Permits Offered	Permits Issued	Male	Female	Total	Success	Hunter Days
2041	Oct 1-Oct 14	75*	25	25	21	0	21	N/A	N/A
2042	Oct 20-Nov 13	08-1*	50	49	0	22	22	N/A	N/A
2043	Oct 20-Nov 13	08-2*	50	45	0	11	12	N/A	N/A
2044	Nov 21-Dec 31	08-1*	75	71	2	28	31	N/A	N/A
2045	Nov 21-Dec 31	08-2*	100	97	1	52	53	N/A	N/A
2046	Dec 10-Dec 31	10A	50	48	0	16	18	N/A	N/A
2047	Oct 20-Nov 13	11	50	50	0	23	23	N/A	N/A
2048	Oct 20-Dec 31	11A	75	70	4	16	20	N/A	N/A
2049	Oct 10-Nov 3	13	75	62	2	22	24	N/A	N/A
2050	Dec 10-Dec 31	14	50	48	6	29	37	N/A	N/A
2051	Oct 20-Nov 13	18	125	110	2	27	30	N/A	N/A
2052	Oct 15-Nov 8	19A	150	141	0	19	21	N/A	N/A
2053	Oct 1-Oct 14	22-1	400	362	6	101	117	N/A	N/A
2054	Oct 1-Oct 14	22-2	100	98	4	43	49	N/A	N/A
2055	Oct 25-Nov 3	22-1	400	369	3	125	130	N/A	N/A
2056	Nov 10-Nov 30	22-3	100	95	1	33	35	N/A	N/A
2057	Oct 1-Oct 14	23-2	100	97	3	44	51	N/A	N/A
2058	Oct 5-Oct 29	23-3	100	53	0	6	7	N/A	N/A
2059	Oct 15-Nov 8	23-2	150	143	1	80	84	N/A	N/A
2060	Oct 15-Dec 31	23-4	150	130	1	54	55	N/A	N/A
2061	Nov 1-Dec 15	23-3	100	88	2	41	47	N/A	N/A
2062	Oct 15-Nov 8	24-1	300	280	4	81	91	N/A	N/A
2063	Oct 15-Nov 8	24-2	150	139	1	53	56	N/A	N/A
2064	Oct 15-Nov 8	25	125	116	2	38	43	N/A	N/A
2065	Nov 10-Nov 30	28	350	313	1	176	186	N/A	N/A

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Controlled Hunt Regulations

2000 CONTROLLED HUNTS-- ANTLERLESS ELK

Hunt	Season	Controlled Hunt Area	Permits Offered	Permits Issued	Male	Female	Total	Success	Hunter Days
2066	Oct 10-Nov 30	29-2*	400	358	6	210	217	N/A	N/A
2068	Dec 1-Dec 15	30A	75	65	0	14	15	N/A	N/A
2069	Oct 1-Oct 14	31	50	46	0	19	20	N/A	N/A
2070	Oct 15-Nov 9	31	50	47	1	10	11	N/A	N/A
2071	Oct 1-Nov 3	32-1	100	93	1	26	27	N/A	N/A
2072	Aug 1-Dec 31	32-2	250	221	2	46	57	N/A	N/A
2073	Nov 1-Nov 30	32-1	200	184	8	88	101	N/A	N/A
2074	Oct 1-Oct 14	32A	400	373	2	90	97	N/A	N/A
2075	Oct 25-Nov 3	32A	100	97	2	54	57	N/A	N/A
2076	Nov 10-Nov 30	32A	100	98	5	51	57	N/A	N/A
2078	Oct 5-Oct 14	36	200	173	8	62	71	N/A	N/A
2079	Nov 10-Nov 30	36A-1	150	137	1	80	81	N/A	N/A
2080	Oct 15-Nov 20	36A-2	500	457	5	209	219	N/A	N/A
2081	Nov 25-Dec 9	36A-2	200	184	1	78	82	N/A	N/A
2082	Nov 10-Nov 30	36B	400	351	2	162	169	N/A	N/A
2083	Oct 15-Oct 31	37	200	188	8	71	81	N/A	N/A
2084	Nov 1-Nov 20	37	300	274	7	135	146	N/A	N/A
2085	Sep 25-Nov 3	39-1	100	93	1	36	37	N/A	N/A
2086	Oct 15-Nov 3	39-2	100	92	0	49	50	N/A	N/A
2087	Oct 15-Nov 3	39-3	100	97	5	53	60	N/A	N/A
2088	Aug 1-Dec 31	39-4	600	360	5	156	164	N/A	N/A
2089	Oct 15-Nov 24	40	250	213	2	13	20	N/A	N/A
2090	Oct 5-Oct 14	43	300	281	2	27	38	N/A	N/A
2091	Oct 15-Nov 9	43	300	262	2	39	45	N/A	N/A
2092	Nov 10-Nov 30	43	300	258	2	48	61	N/A	N/A

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Controlled Hunt Regulations

2000 CONTROLLED HUNTS-- ANTLERLESS ELK

Hunt	Season	Controlled Hunt Area	Permits Offered	Permits Issued	Male	Female	Total	Success	Hunter Days
2093	Oct 15-Nov 9	44	300	277	5	87	95	N/A	N/A
2094	Oct 15-Nov 9	45*	150	143	2	58	64	N/A	N/A
2095	Oct 15-Nov 9	48-2	400	354	11	103	120	N/A	N/A
2096	Oct 15-Nov 9	48-3	200	187	0	37	40	N/A	N/A
2097	Oct 5-Oct 31	49*	400	376	6	156	174	N/A	N/A
2098	Nov 10-Nov 30	49*	600	522	11	264	282	N/A	N/A
2099	Oct 15-Nov 15	50-1	200	183	7	62	70	N/A	N/A
2100	Oct 15-Dec 17	50-2	200	180	2	64	69	N/A	N/A
2101	Dec 10-Dec 31	50-2	100	84	0	16	19	N/A	N/A
2102	Nov 1-Nov 30	51-1	100	92	0	59	59	N/A	N/A
2103	Oct 1-Dec 31	51-2	300	291	2	94	98	N/A	N/A
2104	Oct 1-Nov 30	52A*	150	132	0	32	32	N/A	N/A
2105	Sep 16-Oct 14	56-2	20	14	0	4	4	N/A	N/A
2106	Nov 1-Nov 30	58-2	150	131	6	103	113	N/A	N/A
2107	Nov 1-Nov 30	59*	300	278	5	131	138	N/A	N/A
2108	Nov 1-Nov 30	60-2	250	237	2	145	149	N/A	N/A
2109	Oct 1-Nov 30	60A	350	336	4	267	280	N/A	N/A
2110	Oct 22-Nov 8	61	200	192	5	62	70	N/A	N/A
2111	Nov 1-Dec 31	62A-1*	150	136	2	26	32	N/A	N/A
2112	Nov 6-Nov 30	64*	75	71	0	36	37	N/A	N/A
2113	Nov 10-Nov 30	66*	200	188	0	92	98	N/A	N/A
2114	Oct 26-Nov 9	66A*	1000	940	22	436	470	N/A	N/A
2115	Nov 6-Nov 30	67	100	90	2	21	26	N/A	N/A
2116	Dec 1-Dec 31	69	100	84	1	34	37	N/A	N/A
2117	Nov 10-Dec 31	76*	150	136	2	56	58	N/A	N/A

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Controlled Hunt Regulations

2000 CONTROLLED HUNTS-- EITHER SEX ELK

Hunt	Season	Controlled Hunt Area	Permits Offered	Permits Issued	Male	Female	Total	Success	Hunter Days
2118	Oct 10-Nov 3	13	191	174	29	26	56	N/A	N/A
2119	Aug 1-Dec 31	51-3	25	22	10	0	10	N/A	N/A
2120	Nov 1-Dec 15	62*	281	268	43	38	81	N/A	N/A
2121	Nov 1-Nov 30	62A-2	200	185	36	22	60	N/A	N/A

2000 CONTROLLED HUNTS-- MUZZLELOADER ELK

Hunt	Season	Controlled Hunt Area	Permits Offered	Permits Issued	Male	Female	Total	Success	Hunter Days
2122	Nov 10-Nov 29	04*	20	20	0	8	8	N/A	N/A
2123	Dec 1-Dec 31	22-3	100	94	0	15	16	N/A	N/A
2124	Nov 15-Dec 10	24-3	300	273	5	50	61	N/A	N/A
2125	Nov 10-Nov 24	25	25	24	0	14	15	N/A	N/A
2126	Dec 1-Dec 31	32A	75	68	0	19	19	N/A	N/A
2127	Nov 10-Nov 24	33-2*	50	45	7	0	7	N/A	N/A
2128	Nov 11-Dec 9	61	300	275	22	19	42	N/A	N/A

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Controlled Hunt Regulations

2000 CONTROLLED HUNTS-- OUTFITTER ALLOCATION ELK

Hunt	Season	Controlled Hunt Area	Permits Offered	Permits Issued	Male	Female	Total	Success	Hunter Days
2129	Oct 10-Nov 3	13	9	9	7	0	7	N/A	N/A
2130	Oct 10-Nov 3	18	5	5	4	0	4	N/A	N/A
2131	Oct 1-Oct 24	29-1	6	3	2	0	2	N/A	N/A
2132	Oct 1-Oct 31	36A-1	3	3	1	0	1	N/A	N/A
2133	Oct 1-Oct 31	36A-2	7	7	7	0	7	N/A	N/A
2134	Oct 1-Oct 24	37A	5	5	6	0	6	N/A	N/A
2135	Oct 15-Nov 9	43	6	5	4	0	4	N/A	N/A
2136	Nov 10-Nov 24	43	2	2	0	0	0	N/A	N/A
2137	Oct 15-Oct 31	49*	9	9	8	0	8	N/A	N/A
2138	Oct 1-Oct 31	50-1	3	3	1	0	1	N/A	N/A
2139	Nov 1-Nov 10	61	2	2	2	0	2	N/A	N/A
2140	Nov 1-Dec 15	62*	19	18	6	0	6	N/A	N/A
2141	Oct 26-Nov 9	66A	9	8	3	0	3	N/A	N/A

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Controlled Hunt Regulations

ELK CONTROLLED HUNT AREA DESCRIPTIONS

Hunt Area 4 - All of Units 4 and 7.

Hunt Areas 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 Areas 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 south along the western shoreline of Dworshak Reservoir to the Unit 8A boundary at Dworshak Dam.

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 Areas 11- All of Unit 11.

Hunt Area 11A - All of Unit 11A.

Hunt Areas 13 - All of Unit 13.

Hunt Areas 14- That portion of Unit 14 north of the following boundary: Beginning on the Unit 14 west 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 Areas 18 - All of Unit 18.

Hunt Areas 19A- All of Unit 19A.

Hunt Areas 22 - 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 Areas 23 - That portion of Unit 23 within the Little Salmon River drainage, upstream from but excluding the Round Valley 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, EXCEPT the Little Goose Creek drainage and the Goose Creek drainage above Little Goose Creek are CLOSED.

Hunt Areas 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

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Controlled Hunt Regulations

ELK CONTROLLED HUNT AREA DESCRIPTIONS

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 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 Boydstun Street, then south on Boydstun 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 24-3 - All of Unit 24.

Hunt Areas 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 Areas 30-2 - All of Unit 30 and that portion of Unit 21A within the Carmen Creek drainage.

Hunt Areas 30A-1 and 30A-2 - All of Unit 30A.

Hunt Areas 31- All of Unit 31.

Hunt Areas 32-1 and 32-3 - That portion of Unit 32 south and east of the following boundary: Beginning at the mouth of Big Willow Creek, north and east on Big Willow Creek to the point where Four Mile Road crosses Big Willow Creek, then north on Four Mile Road to the Riley Butte Road, then east on the Riley Butte Road to the North Crane Road, then north on the North Crane Road to the Emmett-Council Road, then north on the Emmett-Council Road to U.S. Highway 95.

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Controlled Hunt Regulations

ELK CONTROLLED HUNT AREA DESCRIPTIONS

Hunt Area 32-2 - That portion of Unit 32 north and west of the following boundary: Beginning at the mouth of Big Willow Creek, north and east on Big Willow Creek to the point where Four Mile Road crosses Big Willow Creek, then north on Four Mile Road to the Riley Butte Road, then east on the Riley Butte Road to the North Crane Road, then north on the North Crane Road to the Emmett-Council Road, then north on the Emmett-Council Road to U.S. Highway 95.

Hunt Areas 32A- All of Unit 32A.

Hunt Area 33-1 - That portion of Unit 33 outside of the exterior boundary of the Boise National Forest.

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

Hunt Areas 36- All of Unit 36.

Hunt Areas 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 Areas 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. 93, and that portion of Unit 50 north of the Doublespring Pass Road east of U.S. 93.

Hunt Area 36B - All of Unit 36B.

Hunt Areas 37-1 and 37-2 - All of Unit 37.

Hunt Area 37A - All of Unit 37A.

Hunt Area 39-1 - That portion of Unit 39 south and east of the Blacks Creek Road and the South Fork of the Boise River.

Hunt Area 39-2 - That portion of Unit 39 south and east of State Highway 21.

Hunt Area 39-3 - That portion of Unit 39 north and west of State Highway 21.

Hunt Area 39-4 - 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 Areas 40- All of Units 40 and 42.

Hunt Areas 43- All of Unit 43.

Hunt Areas 44- All of Unit 44.

Hunt Areas 45- All of Units 45 and 52.

Hunt Areas 48-1 - All of Unit 48.

Hunt Area 48-2 - That portion of Unit 48 north of the Ketchum-Warm Springs Creek-Dollarhide Summit Road and west and south of State Highway 75.

Hunt Area 48-3 - That portion of Unit 48 south of the Ketchum-Warm Springs Creek-Dollarhide Summit Road and west and south of State Highway 75.

Hunt Areas 49 - All of Unit 49 and that portion of Unit 50 in the Copper Creek and Cottonwood Creek drainages west of the Craters of the Moon National Monument.

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Controlled Hunt Regulations

ELK CONTROLLED HUNT AREA DESCRIPTIONS

Hunt Areas 50-1- That portion of Unit 50 south of the Doublespring Pass Road east of U.S. 93, and that portion south of the Trail Creek Road west of U.S. 93 but EXCLUDING the Copper Creek and Cottonwood Creek drainages west of the Craters of the Moon National Monument.

Hunt Areas 50-2 - That portion of Unit 50 west of U.S. 93 but EXCLUDING the North Fork and East Fork of the Big Lost River drainages, and the Copper Creek and Cottonwood Creek drainages west of the Craters of the Moon National Monument.

Hunt Areas 51-1- 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 51-2 - That portion of Unit 51 south of Deer Creek and Cedar Run Creek and within one mile of private fields on which cultivated crops are currently growing, and that portion of Unit 58 south of and including the Kyle Canyon drainage north and west of State Highway 22, including all the Idaho National Engineering and Environmental Laboratory (INEEL) lands in Units 51 and 58 within the described boundary.

Hunt Area 51-3-That portion of Unit 51 south of Deer Creek and Cedar Run Creek and within one mile of private fields on which cultivated crops are currently growing, and that portion of Unit 58 south of and including the Kyle Canyon drainage north and west of State Highway 22, including all the Idaho National Engineering and Environmental Laboratory (INEEL) lands in Units 51 and 58 within the described boundary.

Hunt Areas 52A-1 and 52A-2 - All of Units 52A and 68.

Hunt Area 56-1 - All of Units 56, 70, 71, 72, 73, 73A, and 74.

Hunt Areas 56-2 - 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 60-1 - All of Units 60, 61 and 62A EXCEPT the Harriman State Park Wildlife Refuge is CLOSED.

Hunt Areas 60-2 - All of Unit 60, EXCEPT the Harriman State Park Wildlife Refuge is CLOSED.

Hunt Areas 60A- That portion of Unit 60A south of the Dubois-Kilgore Road and west of the Parker-Salem Road (Red Road).

Hunt Areas 61- All of Unit 61.

Hunt Area 62 - That portion of Unit 62 east of the following described boundary: Beginning at the junction of State Highway 33 and State Highway 32, then north on State Highway 32 to Lamont, then north on 4700 East approximately five miles to 1100 North, then west on 1100 North approximately two miles to 4500 East, then north on 4500 East to Robinson Creek, and that portion of Unit 65 east of Poleline-Bates-Cedron Highway 31 Road.

Hunt Area 62A-1 - That portion of Unit 62A west of the Henrys Fork of the Snake River and that portion of Unit 60 south of the Microwave Tower Road and east of the powerline to its intersection with Ashton Reservoir.

Hunt Area 62A-2 - That portion of Unit 62A east of the Henrys Fork of the Snake River.

Hunt Area 64 - All of Unit 64 and that portion of Unit 65 west of the Poleline-Bates-Cedron-Highway 31 Road.

Appendix D

Controlled Hunt Regulations

ELK CONTROLLED HUNT AREA DESCRIPTIONS

Hunt Area 66 - All of Unit 66, and that portion of Unit 69 north and east of the Grays Lake-Long Valley-Bone-Iona Road.

Hunt Areas 66A - All of Units 66A and 76.

Hunt Area 67 - All of Unit 67 south and east of State Highway 31, and that portion of Unit 67 north of State Highway 31, south and east of Dry Canyon and south and west of
Fleming Canyon.

Hunt Area 69 - That portion of Unit 69 south and west of the Gray's Lake-Long Valley-Bone-Iona Road.

Hunt Areas 70- All of Units 70, 71, 72, 73, 73A and 74.

Hunt Areas 75 - All of Units 75, 77 and 78.

Hunt Area 76 - That portion of Unit 66A within the Miller and Newswander Creek drainages, the Jacknife Creek drainage east of the mouth of Squaw Creek, and east of the
Cabin Creek-Haderlie Ridge Trail (Forest Service Trail 619), and that portion of Unit 76 within the following boundary: Beginning at the intersection of State Highway 34 and
the Idaho-Wyoming border, then west approximately four miles to the mouth of the South Fork of Tincup Creek and Forest Service Trail 014, then south up Trail 014 to the
Stump Creek Road, then south and east along Stump Creek Road to the Idaho-Wyoming border, then north along the border to the junction of State Highway 34, the point of

Submitted by:

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Wayne Melquist
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Federal Aid Coordinator

Tom Parker
Tom Parker, Acting Chief
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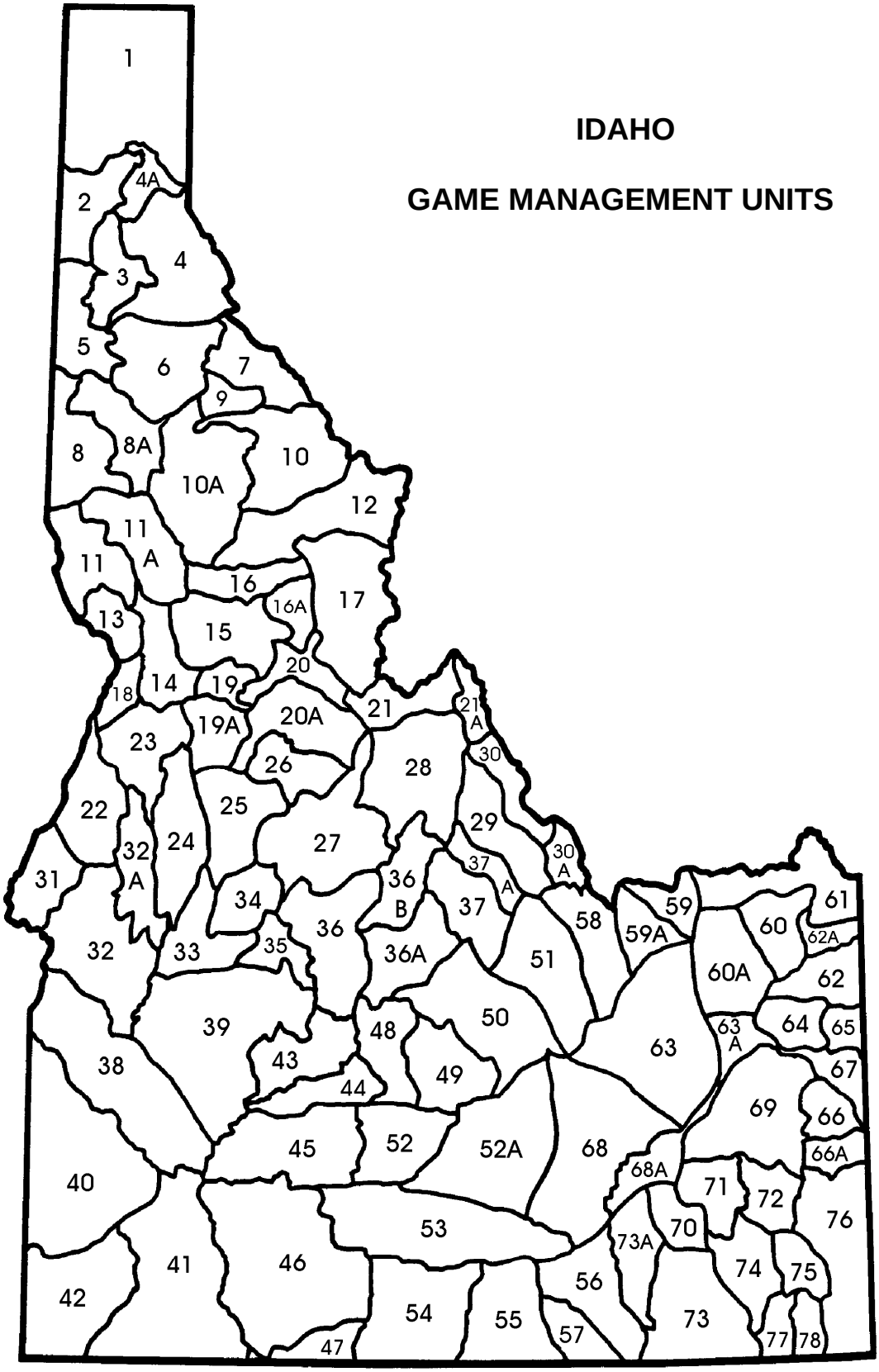
IDAHO

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.