

IDAHO DEPARTMENT OF FISH AND GAME

Steven M. Huffaker, Director

Project W-170-R-29

Progress Report



BIG GAME HARVEST SURVEY

Study IV, Job 1

July 1, 2004 to June 30, 2005

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PROGRESS REPORT SURVEYS AND INVENTORY

STATE:	<u>Idaho</u>	JOB TITLE:	<u>Harvest Surveys</u>
PROJECT:	<u>W-170-R-29</u>		
SUBPROJECT:	<u>8</u>	STUDY NAME:	<u>Hunter Attitude and Game</u>
STUDY:	<u>IV</u>		<u>Harvest Surveys and</u>
JOB:	<u>1</u>		<u>Inventories</u>
PERIOD COVERED:	<u>July 1, 2004 to June 30, 2005</u>		

ABSTRACT

The deer, elk, and antelope surveys were changed from a telephone survey to a mandatory harvest report in 1998. A random survey of individuals who did not submit a harvest report was conducted in February 2005. The final figures are estimates of hunter activity and harvest based on adjustments to the reported values.

Increasing costs of conducting the telephone harvest survey and budget limitations resulted in moose, mountain goats, and bighorn sheep being eliminated from this harvest survey program in 1996. Black bears and mountain lions were eliminated from the telephone survey program in 1997 to maximize information collected on harvest of deer, elk, and antelope. Subsequently, minimum harvest of moose, mountain goats, bighorn sheep, black bear, and mountain lion has been estimated from mandatory harvest check information.

INTRODUCTION

Prior to 1998, a telephone survey was conducted following each deer, elk, and antelope hunting season. Beginning in 1998, the telephone surveys for deer and elk were changed to a mandatory harvest report. Beginning in 2001, the telephone survey for antelope was changed to a mandatory harvest report and all hunters were required to file a report regardless of whether they harvested a deer, elk, or antelope. Hunters reported the number of days hunted, by weapon and management unit, whether they harvested an animal, and if so, the date, game management unit, weapon used, sex, and antler points (deer and elk) or horn length (antelope). Results were tabulated for general, controlled, depredation, and landowner appreciation hunts, by game management units and by elk zones. Mule deer and white-tailed deer are now tabulated separately.

Hunters were able to submit their reports via mail, telephone, fax, or internet. Systems Consultants, Inc., processed the harvest reports for deer, elk, and antelope hunters in 2004 and the raw data was provided to the Department for analysis. The analysis and tabulation was performed internally. A random survey of individuals who did not submit a harvest report was conducted by the Department in February 2005. The reported figures were modified by a non-reporting factor to obtain the final harvest figures.

A total of 232,600 tags were purchased by 156,100 hunters for deer, elk, and antelope hunts occurring from August to December 2004 (average 1.5 tags per hunter, maximum 6 tags per hunter). Hunters were required to report on their hunting effort and harvest success within 10 days of the end of the hunting season. One reminder letter was sent to hunters who had not reported by mid-December. A total of 183,000 harvest reports were filed by 120,700 hunters by 1 March 2005 (79% filed the required report). To estimate bias from non-compliance, we attempted to contact 7,000 of the remaining 35,400 hunters by telephone to obtain information about their harvest reports, with 2,597 hunters successfully reached (42% of missing antelope reports, 7% of missing deer and elk reports). Antelope hunters were sampled at a higher rate to increase precision. The harvest results from this sample were used to estimate the harvest by hunters who did not file reports. A summary of big game harvest is presented in Appendix A.

A survey of black bear hunters was conducted in December 2004, following spring (Apr-Jun) and fall (Aug-Nov) bear hunting seasons. This served as a comparison to the mandatory check of harvested black bears, which resulted in 2,443 bear carcasses checked in 2004. A sample of 3,000 out of 32,300 hunters purchasing bear tags was randomly selected to receive a questionnaire. To estimate bias from non-compliance, we attempted to contact those hunters not returning the questionnaire by telephone. The survey resulted in an estimate of 2,645 (± 311 , 90% CI) bears harvested. This is 8% higher than the number of carcasses checked in by hunters (92% of carcasses are reported), suggesting that not all carcasses are reported.

ACKNOWLEDGEMENTS

This survey was partially supported by Federal Aid in Wildlife Restoration (W-170-R) Statewide Big Game Harvest Survey. The 2004 harvest survey was processed by Systems Consultants, Inc., Fallon, Nevada, under contract with the Idaho Department of Fish and Game.

Table 1. Statewide estimates of harvest, number of hunters, and activity for 2004.

Species	Season	Number of hunters	Harvest	Success (%)	Days hunted
Deer	Any weapon	116,200	35,500	31	560,800
	Archery	14,100	1,700	12	100,700
	Muzzleloader	3,000	660	22	11,700
	<u>Controlled</u>	<u>13,900</u>	<u>8,300</u>	<u>60</u>	<u>69,900</u>
	Total	147,200	46,160	31	743,100
Elk	Any Weapon	54,200	10,200	19	294,500
	Archery	19,500	2,600	13	151,800
	Muzzleloader	6,300	900	14	28,700
	<u>Controlled</u>	<u>19,500</u>	<u>7,100</u>	<u>36</u>	<u>111,300</u>
	Total	99,500	20,800	21	586,300
Antelope	Archery	1,340	300	22	5,800
	<u>Controlled</u>	<u>1,560</u>	<u>1,040</u>	<u>67</u>	<u>4,900</u>
	Total	2,900	1,340	46	10,700

Table 2. Big game harvest history, 1935-present.

Year	Deer	Elk	Antelope	Black bear	Mtn. lion	Moose	Bighorn sheep	Mtn. goat
1935	7,659	1,821	144	8			1	24
1936	7,800	1,917	124	79			4	81
1937	8,795	2,133		133			6	62
1938	11,597	2,298		49			12	61
1939								
1940			400					
1941								
1942	4,952		700					
1943	11,095	2,398		61				23
1944	13,982	2,874	1,470	118				33
1945	21,263	4,392	650	150				59
1946	26,936	5,435	0	233		26	13	125
1947	18,895	6,549	461	406		24	15	67
1948	21,924	5,944	419			27		
1949	22,285	5,395	383			27		
1950	22,578	7,165	539			50		8
1951	33,250	7,492	1,349			28		21
1952	30,454	8,792	1,520	500		71	13	14
1953	47,200	12,600	1,254	500		91	18	21
1954	51,400	12,451	970	2,600		105	13	27
1955	64,074	15,799	822	2,450		108	22	51
1956	71,862	15,910	919	3,124		134	20	61
1957	62,154	13,568	1,001	3,045		91	29	78
1958	71,013	16,450	821	3,709		77	37	59
1959	70,237	13,865	679	2,367	119	59	59	59
1960	75,213	16,545	701	3,373	83	40	62	114
1961	76,001	16,572	579	2,218	164	46		140
1962	66,645	13,653	549	3,951	98	45		144
1963	63,546	14,542	774	2,444	162	52	49	171
1964	67,379	13,835	839	3,419	127	59	35	161
1965	56,438	14,064	977	2,861	108	51	53	214
1966	64,629	14,631	1,219	3,386	156	55	14	161
1967	66,350	13,397	1,286	2,700	109	50	32	127
1968	78,441	17,064	1,294	2,597	164	53	47	161
1969	67,176	12,415	1,472	3,085	143	74	46	168
1970	77,087	14,146	1,551	3,404	114	81	64	151
1971	54,927	11,009	1,465	3,786	303	86	13	137
1972	47,599	9,324	1,486	3,783	70	88	21	152
1973	54,014	12,374	1,237	1,430	87	96	15	128
1974	42,026	8,712	1,301	1,747	112	112	16	121
1975	40,102	8,981	1,314	2,285	142	93	32	102
1976	25,427	4,135	1,380	2,516	123	94	38	103
1977	39,834	6,353	1,250	2,173	160	95	27	117

Table 2. Continued.

Year	Deer	Elk	Antelope	Black bear	Mtn. lion	Moose	Bighorn sheep	Mtn. goat
1978	39,879	7,662	1,345	2,300	167	99	38	106
1979	42,549	6,344	1,430	1,718	31	104	42	79
1980	45,988	8,303	1,498	1,619	97	118	32	47
1981	50,580	9,903	1,837	1,918	198	114	46	65
1982	48,670	12,485	2,112	1,584	189	147	64	32
1983	50,600	12,700	2,400	2,100	167	229	60	41
1984	42,600	15,600	2,070	2,100	400	268	70	52
1985	48,950	15,550	2,190	1,700	170	297	79	38
1986	59,800	15,500	2,540	2,150	250	355	79	56
1987	66,400	16,100	2,600	1,950	300	363	77	70
1988	82,200	20,400	2,800	1,900	550	399	76	62
1989	95,200	22,600	3,500	2,100	340	400	98	79
1990	72,100	21,500	3,180	2,300	350	422	92	76
1991	69,100	24,100	2,950	2,100	171	428	97	85
1992	61,200	26,600	3,150	2,800	330	420	106	67
1993	45,600	20,800	2,470	1,260	450	579	80	66
1994	56,900	28,000	1,835	2,250	450	558	78	69
1995	48,400	22,400	1,540	2,040	700	637	57	44
1996 ^a	50,800	25,600	1,460	1,740	635	583	48	48
1997 ^{b,c}	38,600	18,500	1,300	1,538	834	638	61	61
1998	39,000	18,750	1,150	1,973	804	612	63	57
1999	43,300	17,500	1,150	1,819	652	775	50	48
2000	45,200	20,200	1,325	1,855	728	774	50	48
2001	53,000	19,500	1,350	1,887	628	918	48	48
2002	44,650	18,400	1,350	2,390	514	870	34	41
2003	43,500	18,400	1,300	2,415	569	933	36	33
2004	46,160	20,800	1,340	2,443	459	928	46	32

^a Because of budget shortfalls and increasing costs of conducting the telephone harvest survey, moose, bighorn sheep, and mountain goats were eliminated from the telephone survey in 1996. Harvest figures after 1996 result from mandatory harvest check-in records.

^b Harvest estimates from 1997-2000 do not include antelope harvest during the general archery season.

^c Black bear and mountain lions were dropped from the telephone survey program in 1997 because of budget restrictions. Harvest figures after 1997 result from mandatory harvest check-in records.

APPENDIX A

Summary of
2004
Big Game
Harvest Estimates



Species	Hunters	Estimated	
		Harvest	Days Hunted
Deer	147,200	46,160	743,100
Elk	99,500	20,800	586,300
Antelope	2,900	1,340	10,700
Black Bear		2,443	
Mountain Lion		459	
Moose		928	
Bighorn Sheep		46	
Mountain Goat		32	

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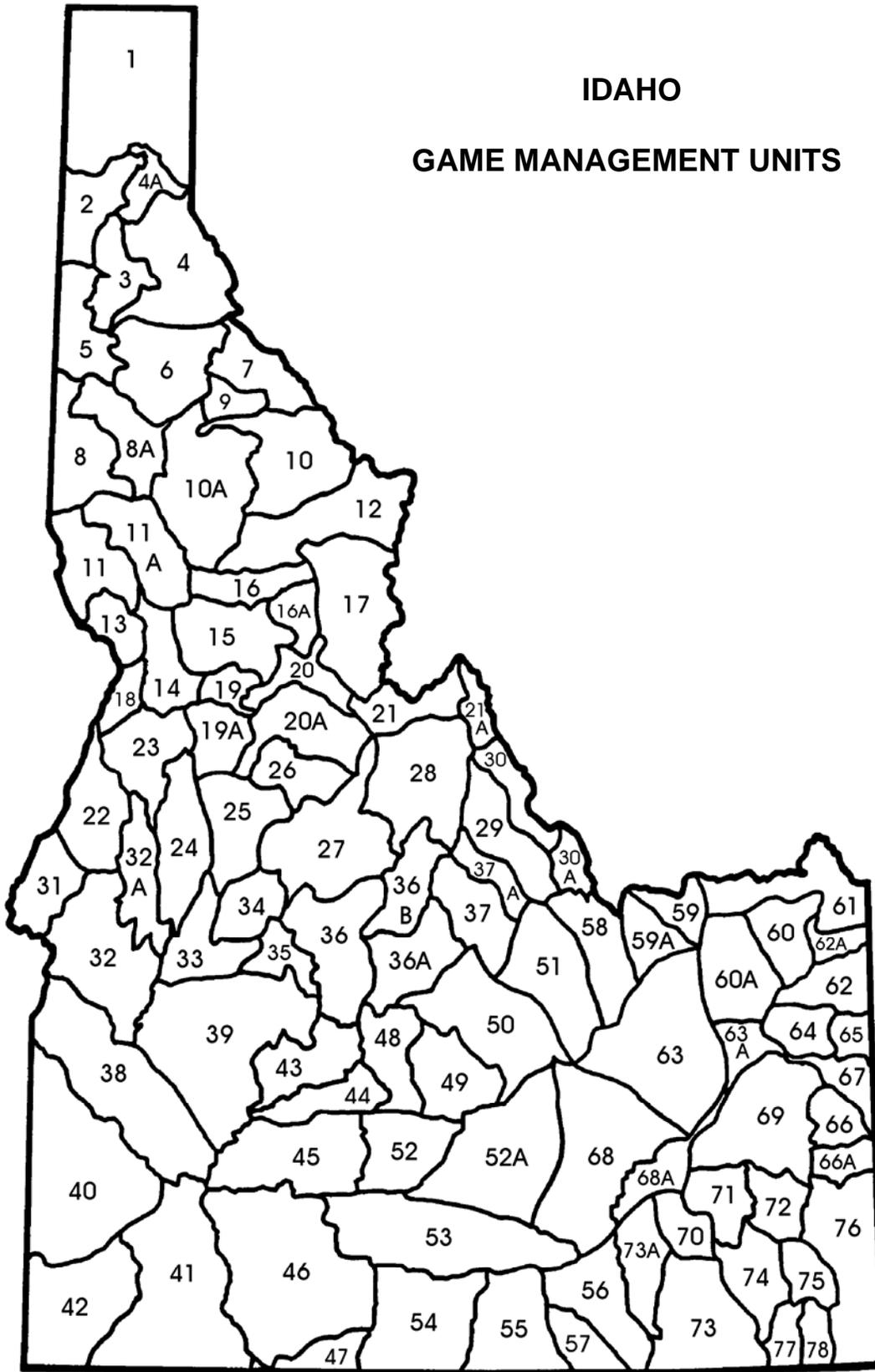
IDAHO DEPARTMENT OF FISH AND GAME

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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.

