

**IDAHO DEPARTMENT OF FISH AND GAME**

**Virgil Moore, Director**

**Surveys and Inventories**

**2013 Statewide Report**



**BIG GAME HARVEST SURVEY**

Study IV, Job 1

July 1, 2012 to June 30, 2013

Prepared By:

Bruce Ackerman  
Wildlife Staff Biologist

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## **STATEWIDE REPORT SURVEYS AND INVENTORY**

**JOB TITLE:** Surveys and Inventories

**STUDY NAME:** Big Game Harvest Statewide

**PERIOD COVERED:** July 1, 2012 to June 30, 2013

### **STATEWIDE HARVEST**

#### **Abstract**

Harvest estimates are made annually for all big game species in Idaho. Harvest of moose, mountain goats, bighorn sheep, black bears, mountain lions, and gray wolves is documented from mandatory carcass checks of all harvested animals. Deer, elk, and pronghorn harvest has been estimated from a mandatory report card from all hunters, since 2001, with a follow-up telephone survey of a sample of hunters who failed to file the required report. The final figures are estimates of hunter activity and harvest based on adjustments to the values reported by hunters. Surveys of hunters are also used to estimate hunter participation for most game species and to assess hunter's opinions about current issues about hunting and regulations in Idaho.

#### **Introduction**

Prior to 1998, a telephone survey was conducted following the fall hunting season for all big game species (mule and white-tailed deer, elk, pronghorn, moose, bighorn sheep, mountain goats, black bears, and mountain lions).

Increasing costs of conducting the telephone harvest survey and budget limitations resulted in moose, mountain goats, and bighorn sheep being eliminated from the telephone 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 pronghorn (Table 1). Subsequently, the minimum harvest of moose, mountain goats, bighorn sheep, black bear, mountain lion, and gray wolf has been calculated from mandatory harvest check information (Table 2, Appendix A).

### **DEER, ELK, AND PRONGHORN ANTELOPE**

Beginning in 1998, the telephone surveys for deer and elk were changed to a mandatory harvest report. In 2001, hunters were required to file a report about their hunt and harvest success, whether or not they harvested. In 2001, pronghorn were also added to the harvest report. Hunters are required to report the number of days hunted, by weapon and game management unit (GMU), whether they harvested an animal, and if so, the date, GMU, weapon used, sex, and antler points (deer and elk) or horn length (pronghorn).

Results were tabulated for general, controlled, depredation, landowner appreciation and super hunts (631 different controlled hunts available in 2012); by 99 GMUs; by 29 elk management zones; and by harvest weapon (rifle/shotgun, archery, muzzleloader). Starting in 2005, estimates for mule deer and white-tailed deer were estimated separately (tabulating the deer species primarily hunted for, the species harvested, days hunted, and weapon used). Harvest data from all years are stored in a large database.

Since 1998, Systems Consultants, Inc. (SCI) of Fallon, Nevada, had been contracted to receive and process the raw harvest reports for deer, elk, and pronghorn hunters. However in July 2010, we changed to Active Outdoors (Nashville, TN). Active Outdoors already processes all license and tag sales for Idaho Fish and Game (Department), and offered to also process the hunter reports at no additional cost. This resulted in considerable savings, but also required considerable work to reprogram the hunter report forms for the web site and the automated phone system. Later, SCI was contracted in October 2010 just to receive incoming phone calls (24 hours, Oct. 2010 – Feb. 2011, continuing to 2013-2014) and to conduct the outgoing non-compliance phone survey.

Paper harvest survey forms were discontinued in June 2010, to save considerable money on data entry, postage, and printing. After June 2010, no printed report forms and return envelopes were handed out. Mail and fax responses were gradually phased out. An automated computerized telephone response system was added in August 2010. Hunters are encouraged more and more to file their reports online or by telephone.

In 2012, hunters were able to submit their reports via internet website, telephone, or automated phone response.

In 2012, Active Outdoors processed the raw data and provided it to the Department. The analysis and tabulation were performed by Department staff. A random telephone survey of individuals who did not submit a harvest report for 2012 was conducted by SCI in December 2012 and January 2013. The reported figures were modified by non-reporting expansion factors to obtain the final harvest figures.

A total of 218,475 tags were purchased by 146,713 hunters for deer, elk, and pronghorn hunts occurring in 2012 (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 postcard was sent to 97,400 hunters who had not yet filed their reports by mid-November 2012 (one postcard per household). In past years, a reminder letter (90,000 in mid-December 2007 and mid-January 2008) had been sent to hunters who had not yet filed reports. This letter was eliminated in 2008, to reduce costs and obtain results sooner.

A total of 136,626 completed reports were filed by May 12, 2013 (63% of tags sold). Hunters had filed 104,690 reports themselves (48% filed the required report). Reporting percentages had

been declining in the last few years as a result of reducing the number of reminder mail-outs, and no penalties for non-reporting.

To estimate bias from non-compliance, we attempted to contact a random sample of 50,000 of the remaining hunters by telephone to obtain their harvest reports (increased from 40,000 in 2010). These hunters were called in December 2012 and January 2013 and 31,936 missing reports were completed by phone (15% of required reports, 28% of missing reports). This sample was larger than in 2010, and four times as large as in 2006. The harvest results from the telephone sample were used to estimate the harvest by hunters who did not file reports.

A real-time update on the number of reports filed was available for viewing in Fall 2012.  
<https://fishandgame.idaho.gov/content/mhr>

The number contacted by phone was increased to compensate for the anticipated lower percent who reported because of reduced mailings and elimination of the printed forms in 2010. Goals were to increase the statistical validity of the estimates and complete the project one month earlier. The phone sample was increased considerably over the previous years (50,000 in 2011-2012, 40,000 hunters in 2009-2010, 32,000 in 2008, 16,000 in 2007, and 8,000 in 2006). This phone survey was done one month earlier starting in 2008-2009 (Dec./Jan.) than in previous years (Jan./Feb.), to obtain results earlier. Therefore some hunters did not have as much time to report on their own as in past years. The 2012 survey was done in Dec. 2012 / Jan. 2013.

Online reporting has increased considerably over the last few years. A higher percentage was received on-line, 71%, an increasing trend in recent years (29% phone, 0.2% IVR).

Pronghorns were converted to only controlled hunts in 2009. Pronghorn hunters and those with controlled hunt tags for deer and elk were sampled at a higher rate to increase precision (47% of missing controlled hunt reports and 24% of missing general reports were completed in the phone survey). The results of the telephone non-compliance survey were used to estimate the harvest and participation by hunters who did not file reports.

Harvest data from Fall 2012 were analyzed at a general level by March 2013, so that recommendations for changes to big game regulations could be made, and analyzed at a detailed level by May 2013 so that hunters could apply for controlled hunts. The harvest results were placed on the Department web site in May 2013. Improvements were made to the process of transferring results to the web site to be integrated with the Department Hunt Planner web site for better functionality.

A summary of deer, elk, and pronghorn harvest is presented in Tables 1 and 2 and Appendix A. Estimated harvest and hunter participation for these species are also listed in other Federal Aid about each species. These harvest data are used to fill many requests for information by managers, biologists, commissioners, legislators, research collaborators, interested citizens, and other stakeholders.

## **MOOSE, BIGHORN SHEEP, MOUNTAIN GOATS, BLACK BEARS, MOUNTAIN LIONS, AND GRAY WOLVES**

Harvest of moose, bighorn sheep, mountain goats, black bears, mountain lions, and gray wolves was documented from mandatory carcass checks of all harvested animals (Table 2 and Appendix A). A total of 4,075 carcasses were checked for these species. Number of hunters that participated and days hunted are not calculated for these species. Estimated harvest and hunter participation for these species are also listed in other Federal Aid about each species.

These species were eliminated from the telephone harvest survey program in 1996-1997 to maximize information collected on harvest of deer, elk, and pronghorn. These mortality data are housed in a large database. Other documented causes of mortality are also tracked in this database, such as illegal kills, road kills, and natural mortality. These harvest databases are used to fill many requests for information by managers, biologists, commissioners, legislators, research collaborators, interested citizens, and other stakeholders. Harvest estimates are posted on the Department website. More detailed information about these species is listed in other Federal Aid reports about each species.

### **OTHER HUNTER SURVEYS**

Additional surveys were conducted to monitor hunter participation in 2012-2013 – number of hunters, number harvested, and days hunted, for: sandhill cranes, sage- and sharp-tailed grouse, wild turkeys, snow geese, and upland game (3 species of forest grouse (blue/dusky, ruffed, spruce), pheasants, gray partridge, chukars, quail, cottontails, snowshoe hares). Detailed information about these species is listed in other Federal Aid Statewide reports.

These harvest data are used to fill many requests for information by managers, biologists, commissioners, legislators, research collaborators, interested citizens, and other stakeholders.

### **HUNTER OPINION SURVEYS**

In addition to estimating game harvest statistics, hunter survey questionnaires are also frequently used to ask hunter's opinions about current issues about hunting and regulations in Idaho. These might include the hunter's perception of the quality of hunting, expenditures during hunting, proposed changes in regulations, or the success of various programs. Sometimes stand-alone surveys are used for more in-depth studies of hunter's opinions. These data are valuable in monitoring the quality of the hunting programs.

A stratified-random sample of hunters is typically contacted using a mailed survey questionnaire with a follow-up phone call. Participants are drawn from the list of hunters who purchased hunting licenses and/or specific relevant tags or permits. In some cases, selected hunters may respond through a web-based survey form on the internet.

Topics surveyed in 2012-2013 included:

- Elk hunter opinion survey about draft elk plan (June 2012, Apr and July 2013)
- Wildlife Summit Survey, July 2012 and at Summit Aug 2012

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- Mule deer hunter opinion survey, Unit 54 (Feb. 2013)
- Sightings of wolves by deer and elk hunters in fall 2012 (Feb 2013)

### **Elk hunter preferences – Draft Elk Management Plan**

The Department is in the process of developing a new Elk Management Plan, for 2014-2024. In 2012, the Department contracted with the University of Idaho (UI) to conduct a survey of Idaho elk hunters to better understand their motivation for elk hunting and their elk management preferences. The Department drew the stratified random sample of 6,160 hunters who purchased general tags in 2011 (May 2012, N=200 resident and 20 nonresident adult hunters in each of 29 elk hunting zones). The Department designed the survey questionnaire with UI. A total of 2,786 questionnaires were returned (48.5% response rate). The results were analyzed by UI at both statewide and zone levels. For most elk hunters, the social experience of gathering with friends and family was cited as is the most important reason for elk hunting. For others, putting meat on the table or harvesting a mature bull was important. Regardless of the reason for hunting, the common attribute that defined a quality elk hunting experience centered on being able to hunt elk every year and seeing harvestable elk. These results were very important in developing the new Elk Management Plan, 2014-2024. Results of this study were presented at the July 2012 Commission Meeting and additionally at the November meeting.

As a follow-up to the 2012 survey, the Department sought further input and interaction with the public and organizations to refine overall management direction, gather input on zone objectives and strategies, and further explore interest in hunting multiple zones. Various communication tools used during 2013 included an on-line chat (two evenings), an on-line survey (website), a second mailed survey, public meetings, and open house events.

In April 2013, the Department conducted a second mailed survey of Idaho elk hunters to explore their satisfaction with changes being considered in the draft elk plan. A stratified random sample of 3,187 hunters who purchased general tags in 2012 (100 resident and 10 nonresident adult hunters in each of 29 elk hunting zones) was drawn. Of those, 1,487 people returned surveys, a 47 percent response rate. There were also 1,064 online responses on the web site (anyone was invited to respond, but analyzed separately from the random sample).

One of the primary topics was asking hunters how they felt about a proposed change for expanding hunting opportunity to allow a hunter to hunt in two or more elk zones with one general tag. A majority of respondents approved of the proposed two-zone elk tag, and felt that the Department should proceed with plans to develop that option. Results of this study were presented at the July 2013 Commission Meeting.

In August 2013, the Department conducted a third survey to ask Idaho elk hunters their satisfaction with the draft Elk Management Plan. The draft plan was placed online, with the opportunity for hunters to express their comments about the plan. The survey was online only, with the comment period from 22 August to 22 September. There were 1,203 respondents who visited the web site, to review the draft plan, and 402 who left written comments. Results of this study were presented at the November 2013 Commission Meeting

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## **Wolf Sightings, Survey 2012**

Deer and elk hunters were surveyed in February 2013 about their wolf sightings while hunting in Fall 2012. Hunters (N=9,374) who had reported seeing wolves, on their MHR reporting form, while hunting deer and elk, were asked further questions about their wolf observations (live wolf sightings only). In some previous years, all wolf observations had been included (live wolves, tracks, scats, howling, etc.). Wolf sightings by respondents in 2012 were mapped and compiled by specific week of the fall season. Surveys were mailed out and responses entered by the Department. Data analysis was conducted by University of Montana staff.

The purpose of this survey is to assess the presence of wolf packs in specific drainages, as reported by hunters, as one of several sources of information to assess wolf abundance. This is one part of an occupancy modeling approach to develop an efficient, low-cost monitoring method in the future to assess where wolf packs are located, perhaps without using radio-telemetry in the future. This is the fifth year of a study in collaboration with the University of Montana and the Nez Perce Tribe. A manuscript from the first phase of this analysis, with data from the Fall 2009 and 2010, has been accepted for publication (Ausband, et al. In press, 2014).

## **Miscellaneous hunter opinion surveys**

Mule deer hunter opinion survey, GMU 54 (Feb. 2013) -- A questionnaire was mailed in February 2013 to hunters who had been archery and rifle hunting in GMU 54. Results were analyzed by Region 4 staff.

Elk hunter opinion survey about Region 1 (Feb 2013) -- A questionnaire was mailed to 1,000 Panhandle residents asking various questions about proposed changes to big game regulations, for deer, elk, black bears, mountain lions, and wolves. Results were analyzed by Region 1 staff.

## **Wildlife Summit – Citizen Surveys**

The Idaho Wildlife Summit was an important event in Idaho conservation. Citizen surveys were an important component. The Summit was held 24-26 August, 2012. Events occurred simultaneously in seven cities, from Friday evening to Sunday morning. About 630 participants attended in person, 300+ in Boise, and about 300 Department staffers had a role. Participants were regular people representing themselves or specific interest groups, attending to discuss all facets of wildlife conservation in Idaho. Some were leaders from other agencies and fish and wildlife organizations.

Idaho Fish and Game commonly gets feedback from hunters and anglers, and most of funding comes from them as well. One of the main purposes of the summit was to also reach out to people with other interests (wildlife watching, birding, photography, etc.). Factions that are often polarized from different interests, such as hunting, fishing, anti-hunting, anti-trapping, bird-watching – met together for friendly and positive discussions.

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There were presentations by four guest speakers. The entire event was streamed live from Boise on the Internet. There was an online blog going the whole time. Several videos were created on the fly, of the guest speakers speaking and the participants participating. Most of these can now be viewed online: <http://fishandgame.idaho.gov/public/about/?getPage=320>

Two sets of interviews were conducted of Idaho citizens to get their feedback, with similar questions:

- Phone survey of Idaho citizens, July 2012
- Various surveys of participants during the Summit, August 2012

In July 2012, in advance of the Wildlife Summit, the Department conducted a phone survey of Idaho residents. The Department contracted with Responsive Management, Harrisonburg VA, to conduct the phone interviews. The Wildlife and Fisheries Bureaus designed the questions to be asked. A random sample of 6,000 names was drawn by the Department of adults who purchased Idaho hunting, fishing, or combination licenses, 2009-2011. A list of random names was also purchased to represent all citizens of Idaho, and particularly represent those who are not hunters/anglers.

Phone interviews were completed with 1,605 hunters, anglers, and people from the general population (some individuals were in more than one category). Additional samples of young people, hunters, and fishers were added to ensure a comprehensive response about all Idaho citizens (completed phone interviews N=1,059 general population + 200 oversample 18-35 years old + 203 hunters + 203 fishers).

- We asked respondents 70 questions about their feelings about IDFG and wildlife in Idaho. The following summarizes the topics covered. We asked the same questions of the people attending the Wildlife Summit.
- Demographic information (their age, sex, how long lived in Idaho, where live - urban/town/rural/farm)
- How important is Idaho's wildlife to them?
- Do they hunt, fish, trap, watch, or photograph wildlife?
- How long have they participated in consumptive and non-consumptive activities?
- How important is it to them that others have those same opportunities?
- How do they feel about funding issues for IDFG missions, especially non-game species?
- How important is it to them that IDFG does 17 key mission tasks? (from the IDFG Strategic Plan)

At the Summit, participants were additionally asked about:

- What do they think about the four guest speaker's presentations?
- Do they view themselves as being Utilitarian, Mutualist, Pluralist, or Distanced? (Wildlife Value Orientation).

"Fishing Poll" -- We hired Option Technologies Interactive (Orlando, FL) to run an audience response system. We asked a total of 70 questions to collect data on the participants, both in

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person and online, to cross-reference with the citizen phone survey, as well as to generate enthusiasm among participants.

The questions at the Summit were asked using 500 electronic keypads. Keypads were handed out to participants, across the 7 cities. We asked 70 questions, similar to those above. The facilitator asked a question, and everyone punched in their answer, #1 through 9. In about 20 seconds, a graph came up on the screen summing the answers for each city. Wildlife Bureau staff analyzed these results, and compared them to the phone survey of Idaho citizens.

“Idaho Café” – Participants were divided into groups of 4 at different tables, and talked about one specific question for 20 minutes, and wrote their ideas on a large sheet of newsprint. Then they rotated to another table. Five questions were discussed in 2 hours:

- What did you come here to talk about?
- What wildlife legacy do you want to leave your children and grandchildren?
- How can we accomplish this?
- What kinds of people need to be included to achieve this?
- What can you do yourself to make this happen?

Wildlife Bureau staff entered these ideas into a database. We now have 500 pages of good ideas resulting from this talking session.

During the Summit, there was also an online chat room available for discussions by those not attending. People could watch the presentations online as they occurred, or view them later. An estimated 3,000 people viewed some portion online during the Summit, and 70-100 participated in the online chat. Participants also filled out evaluations and these data were entered by Department staff into a database.

The Wildlife Summit was very successful in creating a two-way dialogue with Idaho wildlife users. The surveys conducted were very successful at getting feedback from various publics.

Director Virgil Moore gave a presentation about the Summit at the North American Wildlife and Natural Resources Conference, Arlington, VA, 25-30 March, 2013 (Moore et al. In Press). Similar presentations have subsequently been made by Director Moore, Shane Mahoney, Michelle Beucler, and Bruce Ackerman.

A summary report from the Wildlife Summit is available on the IDFG web site (December 2012). The citizen surveys described above are discussed in this report.

<http://fishandgame.idaho.gov/public/about/?getPage=361>

- Pages 5-22, “Idaho Cafe”, discussion groups among participants
- Pages 23-29, “Fishing Poll”, survey of participants
- Pages 30-35, phone survey of Idaho citizens
- Pages 40-42, online chat room
- Pages 43-50, evaluations by participants

## **Publications or in-house reports resulting from this work.**

Statewide Species Management Reports (available via [fishandgame@idaho.gov](mailto:fishandgame@idaho.gov)) at <https://collaboration.idfg.idaho.gov/WildlifeTechnicalReports/Forms/AllItems.aspx>

## **LITERATURE CITED**

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## **PRESENTATIONS**

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Mahoney, S. 2013. Conservation as an Act of Citizenship: Idaho's Wildlife Belongs to You *Idaho Environmental Forum*, Boise, ID. July 18, 2013.

## **ACKNOWLEDGMENTS**

This survey was partially supported by Federal Aid in Wildlife Restoration (W-170-R) Statewide Big Game Harvest Survey. The 2012 raw harvest survey data for deer, elk, and pronghorn were processed by Active Outdoors, Nashville, Tennessee. Telephone services for the deer, elk, and pronghorn surveys were provided 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 2012.

Species	Season	Tags sold	Hunters	Harvest	Success (%)	Days hunted
Deer	Any weapon (rifle)	117,912	97,911	37,899	39	584,345
	Archery		15,342	2,572	17	114,493
	Muzzleloader		2,593	759	29	11,816
	Controlled	16,320	14,533	8,400	58	77,309
	Total	134,232	121,169	49,644	41	787,963
Elk	Any (rifle)	64,309	40,895	6,686	16	234,828
	Archery		17,836	2,761	15	148,375
	Muzzleloader		5,210	795	15	23,744
	Controlled	16,248	14,968	6,176	41	83,849
	Total	Total	73,161	16,418	22	490,796
Pronghorn <sup>b</sup>	(CH-Any Weapon)		1,257	994	79	3,840
	(CH-Archery)		1,494	394	26	6,736
	(CH-Muzzle)		287	148	52	1,203
	Total	3,686	3,041	1,536	50	11,779

<sup>a</sup> Deer and elk general tags are valid for any-weapon, archery, and muzzleloader seasons.

<sup>b</sup> Pronghorn tags were all converted to controlled hunt in 2009, some only for archery hunting.

“Any-weapon” means that any legal weapon can be used during that season, but most hunters used rifles (also allows shotgun, handgun, archery, cross-bow, and muzzleloader).

Table 2. Big game harvest history, 1935-2012.

Year	Deer	Elk	Pronghorn	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

Year	Deer	Elk	Pronghorn	Black bear	Mtn. lion	Moose	Bighorn sheep	Mtn. goat
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
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 <sup>a</sup>	50,800	25,600	1,460	1,740	635	583	48	48
1997 <sup>b,c</sup>	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
2005	54,050	21,470	1,410	2,425	466	835	42	48
2006	51,700	20,040	1,480	2,231	480	811	48	46
2007	54,200	19,100	1,460	2,660	440	847	57	36
2008	43,605	16,017	1,427	2,169	416	794	48	39
2009	42,189	15,813	1,335	2,091	432	781	53	42
2010	44,360	17,470	1,453	2,508	469	767	49	39
2011	41,805	15,155	1,329	2,249	499	701	53	45
2012	49,644	16,418	1,536	2,479	510	678	52	39

All data are from Calendar Year, January 2012 to December 2012, except mountain lion and gray wolf harvest, July 2012 to June 2013.

<sup>a</sup> 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.

<sup>b</sup> Harvest estimates from 1997-2000 do not include pronghorn harvest during the general archery season.

<sup>c</sup> 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  
2012  
Big Game  
Harvest Estimates**



Estimated				
Species	Permits	Hunters	Harvest	Days hunted
Deer	132,068	118,664	41,805	775,505
Elk	82,138	74,595	15,155	526,165
Pronghorn	3,574	2,950	1,329	12,167
Black Bear	33,008	---	2,249	---
Mountain Lion	22,119	---	449	---
Gray Wolf	32,801	30,246	376	---
Moose	933	---	701	---
Bighorn Sheep	87	---	53	---
Mountain Goat	51	---	45	---

All data are from Calendar Year, January 2012 to December 2012, except mountain lion and gray wolf harvest, July 2012 to June 2013.

Submitted by:

**Bruce Ackerman**  
Wildlife Staff Biologist / Biometrician

Bruce Ackerman, Wildlife Staff Biologist / Statistician,  
208-287-2753,  
[Bruce.ackerman@idfg.idaho.gov](mailto:Bruce.ackerman@idfg.idaho.gov)

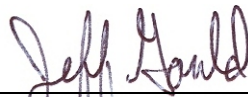
Approved by:

IDAHO DEPARTMENT OF FISH AND GAME



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Brad Compton, Asst. Chief  
Federal Aid Coordinator  
Bureau of Wildlife

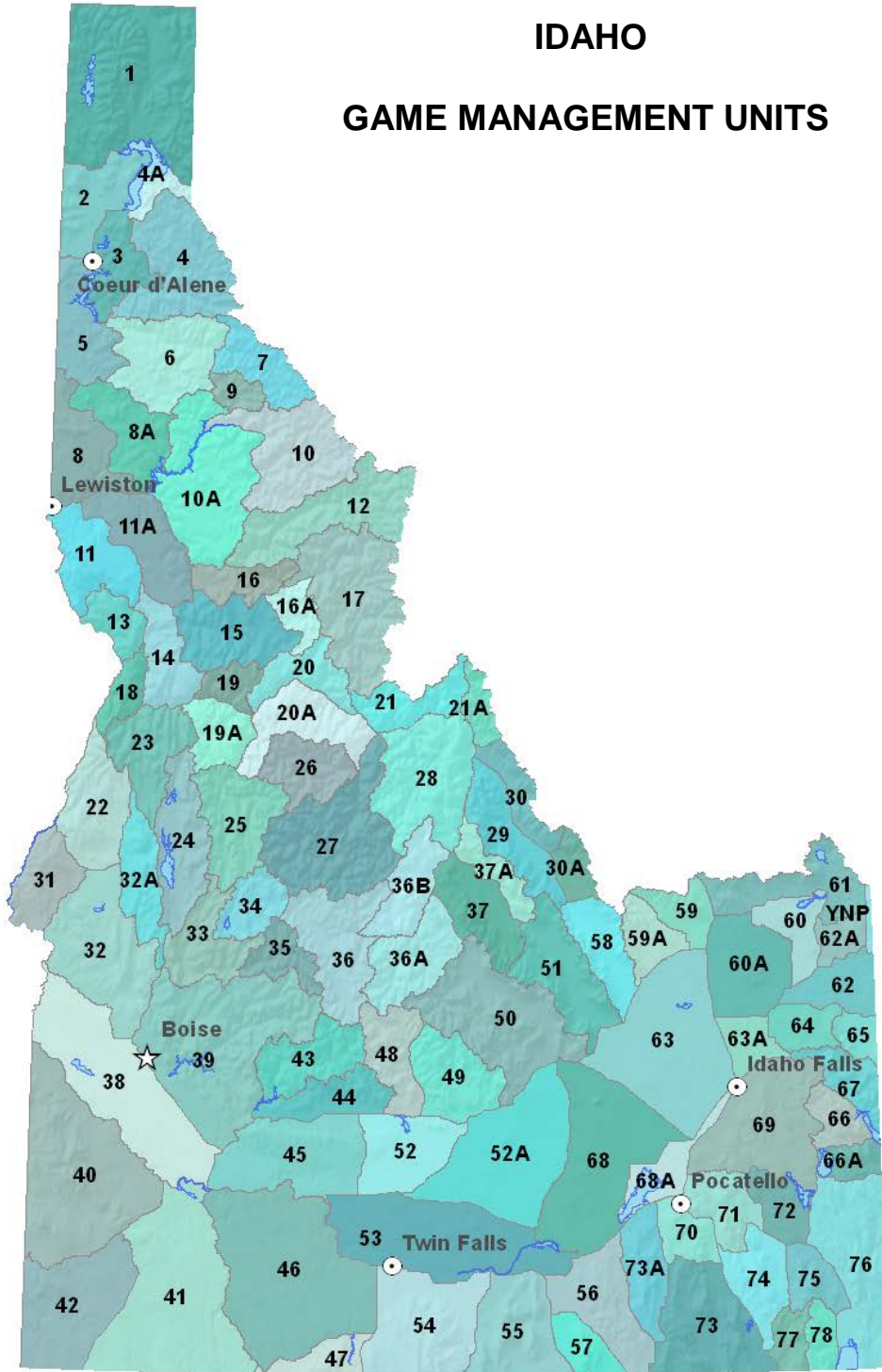


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Jeffrey Gould, Chief  
Bureau of Wildlife

# 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.

