

IDAHO DEPARTMENT OF FISH AND GAME

Steven M. Huffaker, Director

Project W-170-R-28

Progress Report



FURBEARER

Study III, Job 1

July 1, 2003 to June 30, 2004

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**PROGRESS REPORT
SURVEYS AND INVENTORIES**

STATE: Idaho **JOB TITLE:** Furbearer Survey
PROJECT: W-170-R-28
SUBPROJECT: 1-7 **STUDY NAME:** Statewide Fur Harvest Survey
STUDY: III
JOB: 1
PERIOD COVERED: July 1, 2003 to June 30, 2004

STUDY OBJECTIVES

1. Estimate the population size, structure, and trend of harvested furbearers.
2. Determine hunter and trapper attitudes about preferences for the furbearer program.
3. Inform trappers/hunters of the biology and status of furbearers.

PROCEDURES AND ACCOMPLISHMENTS

1. Analyze the mandatory trapper reports to estimate trends in furbearer harvest and the dollar value of species.
This was accomplished and is included in the following report.
2. Continue to collect bobcat and river otter harvest information through the mandatory export tag program.
All bobcats harvested were tagged with CITES tags and the method of harvest recorded. All river otters legally harvested were tagged with CITES tags. This information is included in the following report.
3. Compile the sex and age structure of the bobcat harvest from the analysis of lower jaws and sectioned teeth, and use this information to evaluate and monitor the statewide population.
The Idaho Fish and Game Commission decided not to require trappers to surrender the jaws of bobcats harvested in Idaho during the 2000-2001, 2001-2002, and 2002-2003 seasons. This was re-evaluated when the Commission reviewed trapping regulations in the spring of 2004. No changes were made.
4. Compile the sex and age structure of the river otter harvest from the analysis of lower jaws and sectioned teeth, and use this information to evaluate and monitor the statewide population.
This was accomplished and the sex structure is included in the following report. The age data is not available at this time. It will be available in a future report. Age data from the 2002-2003 season is provided in the following report.

5. Conduct surveys to determine the population status of selected furbearers.
A winter track survey protocol for forest carnivores was completed and the pilot study implemented statewide during winter 2002-2003. The official survey began during winter 2003-2004. This survey is primarily for lynx, wolverine, fisher, and marten. Of these species, only the marten has furbearer status. The other three species are protected.
6. Prepare an annual report on furbearer harvest.
The annual report is found herein.
7. Conduct public meetings to inform the public and obtain information on hunter/trapper acceptance of season regulations.
Public input was gathered at open house meetings hosted in each of Idaho's seven Fish and Game regions. Also, a questionnaire on proposed changes to trapping regulations was posted on the Department website. A public meeting was held in Riggins, Idaho to discuss season regulations for the 2004-2005 and 2005-2006 trapping seasons. The Statewide Furbearer Program Coordinator attended and addressed the public and the Commission.
8. Make presentations on furbearer biology to the public.
The State Furbearer Program Coordinator assisted the International Association of Fish and Wildlife Agencies with a Trapping Communication Workshop held in Boise, Idaho, in June 2004. Approximately 80 Idaho Fish and Game personnel attended the workshop. The Program Coordinator also attended a fur sale sponsored by the Idaho Trappers' Association in Mountain Home in March 2004. The Coordinator presented an update at the Idaho Trapper's Association (ITA) annual meeting in August 2003. He also attended the Upper Snake River Trappers' Association annual meeting and the National Trappers' Association national convention in Blackfoot in June 2003.

ABSTRACT

Trapping licenses sold during the 2003-2004 season totaled 975, which included 835 adult residents and ten non-residents. The number of licenses sold was up from the previous year. Harvest reports for the 2003-2004 season were submitted by 791 (81%) of the 975 licensed trappers. Last season, the Department changed the method in which trapping data is recorded. Catch-Per-Unit Effort (CPUE) is recorded instead of trapper days afield. CPUE measures the harvest per unit-of-time and will be used in predicting population trends. The fur harvest, based on 615 trappers who trapped, was 22,200 animals, down from the previous trapping season. A total of 14,871 pelts (67% of reported harvest) were sold for a value of \$394,301.99. Trappers sold their pelts for an average of \$26.51 each. The 615 trappers harvested an average of 36 pelts per trapper and sold an average of 24 pelts. Based on an average pelt price of \$26.51 and 24 pelts sold per trapper, trappers earned an average income of \$636.24. The estimated harvest for all trappers, including those that did not submit a report, was 27,407 animals taken with an estimated statewide pelt value of \$486,792.58. Muskrat, coyote, red fox, beaver, and bobcat, respectively, were the most frequently caught species. Price per pelt (for all harvested species) ranged from an average of \$213.15 for bobcats (\$214.68 in 2002-2003) to \$2.15 for muskrats (\$2.01 in 2002-2003). In total statewide value of pelts sold, the top five furbearers included bobcat, coyote, red fox, beaver, and muskrat. Pelt values were up for all furbearers except

bobcat, red fox, spotted skunk, striped skunk, and weasel. Bobcat trappers and hunters checked 1,977 animals from a two-month mid-December to mid-February season. The lynx season remained closed. The largest number of bobcats harvested (70% of the total) came from the Department's Panhandle, Clearwater, and Southwest regions. The Department affixed state tags to 102 legally harvested otters statewide during the trapping season. Trappers reported 18 non-target otters trapped during the 2003-2004 season, down from the previous season.

METHODS

Mandatory Trapper Harvest Reports

By Idaho law, licensed trappers are required to report to the Department the number of wild animals they catch, kill, and pelt during the open season and the amount received for the sale of these pelts. This report must be submitted by July 31. Any trapper failing to send in a report by this date can be refused a trapper's license the following year. Harvest reports for the 2003-2004 season were submitted by 791 (81%) of the 975 licensed trappers. Until the 1996-1997 season, this information appeared on the back of the trapping license. Once the Department switched to point-of-sale machines for the purchase of licenses, this option was no longer available. A mandatory trapper report card has been used since the 1996-1997 season. This self-addressed, postage-paid folding card is sent to trappers each spring so they may conform to Idaho law.

Mandatory trapper reports are used to estimate the statewide harvest of furbearers by licensed trappers, the distribution of the harvest, and the market value of the state's furbearer harvest. Previously, questions on how many days the trapper spent afield scouting and setting/checking traps, and how many hours, on the average, the trapper spent afield each day was included. These questions were initially included in the mandatory report beginning with the 1993-1994 trapping season and were used to gather information on trapping effort. Results of this information were then projected to estimate the statewide trapping effort both in total hours and days afield. Beginning with the 2002-2003 trapping season, these questions were changed to include Catch Per Unit Effort (CPUE). CPUE measures the harvest per unit of time and will be useful in predicting population trends. This is calculated by multiplying the total number of nights trapped by the average number of traps set per night and dividing this by the number of animals trapped. Comments by trappers are also accepted on harvest report cards.

Idaho Trapper Survey

Mandatory trapper reports may also be used to collect specific survey data as needed. The input from trappers can be important, as the secretive nature of most furbearers generally makes it difficult to obtain good data on their status. Beginning with 2002-2003, CPUE was included. As described above, CPUE measures the harvest per unit of time and will be useful in predicting population trends.

Bobcat Check-ins, Jaws, and Export Tags

By Idaho Department of Fish and Game Commission (Commission) rule, trappers and hunters are required to have all bobcats tagged with Convention on International Trade in Endangered

Species of Wild Fauna and Flora (CITES) export tags by the Department within ten days after the close of the trapping/hunting season. During the period 1977-1978 through 1980-1981, CITES export tags were made available to trappers and hunters, but they were not mandatory. Mandatory reporting has been in effect since the 1981-1982 season. During the 1979-1980 and 1980-1981 seasons, it was not mandatory to turn in jaws, but the Department issued export tags only when jaws were submitted. Starting with the 2000-2001 season, the Commission directed that it was not mandatory to turn in bobcat jaws. During spring 2004, the Commission decided not to require mandatory submission of bobcat jaws for the 2004-2005 and 2005-2006 bobcat seasons.

It is unlawful to possess raw, untagged bobcat pelts after ten days following the close of the season, and to sell, offer for sale, purchase, or offer to purchase any raw bobcat pelt which does not have an official export tag attached. Trappers and hunters are required to present the pelts of all bobcats to a regional office, the McCall office, or official checkpoint to obtain the appropriate pelt tag and complete a harvest report. Information on the harvest report includes the sex of the animal, harvest location, date harvested, method of take (trapping, calling/hunting, with hounds, incidental hunting) and beginning with the 2002-2003 season, CPUE. Mandatory harvest report data continue to be used to estimate the total statewide bobcat harvest by Department administrative region and big game management unit.

River Otter Check-ins, Jaws, and Export Tags

Trappers were mandated to surrender the entire river otter carcass to the Department within 72 hours of harvest. A two-year graduate research project is currently utilizing the carcasses for analyses of toxin levels, reproductive rates, age and sex structure, and general information on the overall status of the state's river otter population. River otter canine teeth are sent to Matson's Laboratory, Milltown, Montana, where cementum annuli are counted to determine the age of the animal. All of the collected data is provided to the U.S. Fish and Wildlife Service's (USFWS) Division of Scientific Authority (DSA) for assessment of the issuance of CITES export pelt tags for river otters harvested in future trapping seasons. The Department was approved for multi-year CITES export pelt tags in December 2003 for the 2003-2004 harvest season and subsequent river otter harvest seasons on the basis that both the USFWS Division of Management Authority and the DSA criteria have been satisfied.

Non-target Catches

By Commission rule, any trapper who captures and kills a non-target species (any species for which the season is closed) must notify the Department through the local conservation officer or regional office within 72 hours to make arrangements for Department personnel to retrieve the animal. The regulation has been in effect since the 1988-1989 season. Since the 1990-1991 trapping season, the Department has paid trappers \$5.00 for each accidentally caught fisher and river otter turned in to the Department. Since a river otter season was initiated in 2000-2001, only otters trapped after the regional quota was reached were surrendered to the Department, until the 2002-2003 trapping season, when all river otter carcasses were surrendered for research purposes. Beginning with the 1996-1997 season, trappers also received \$5.00 for each accidentally caught lynx or wolverine. Beginning with the 2004-2005 trapping season, this will

increase to \$10.00 and will also include bobcat. Most non-target animals turned in were sold at the Department's annual auction. Money from the sale of these animals was deposited into the general account in 1989 and 1990. Since 1991, the proceeds have been earmarked for use in trapper education and associated activities. Most non-target river otter pelts are being processed and used for educational purposes within the regions.

STATEWIDE RESULTS

Trapping License Sales

Trapping licenses sold during the 2003-2004 season totaled 975 and included 965 residents (835 adult and 130 junior residents under 18 years-of-age) and ten non-residents (Table 1). The number of licenses sold increased by 151 licenses, an 18% increase.

Catch-Per-Unit Effort (CPUE)

Questions on how many days the trapper spent afield scouting and checking traps, and how many hours, on the average, the trapper spent afield each day, were collected from the 1993-1994 season through the 2001-2002 season (Table 2). Beginning with the 2002-2003 trapping season, the Department began collecting data on CPUE. This is recorded per species (Table 3).

Mandatory Trapper Harvest Reports

Harvest reports were submitted by 791 (81%) of the 975 licensed trappers for the 2003-2004 season. The information submitted on these reports was used to compile the reported and estimated statewide harvest and market value of the different furbearer species taken, including the badger, beaver, bobcat, coyote, marten, mink, muskrat, otter, raccoon, red fox, spotted skunk, striped skunk, and weasel.

The fur harvest, based on 615 reporting trappers who trapped, was 22,200 animals (Table 4), down from 27,232 the previous trapping season. Of this total, 14,871 pelts (67%) were sold for a value of \$394,301.99. Trappers sold their pelts for an average of \$26.51 each, compared to \$14.93 for the previous year. The trappers harvested an average of 36 pelts per trapper and sold an average of 24 pelts. Based on an average pelt price of \$26.51 and 24 pelts sold per trapper, trappers earned an average income of \$636.24, down from \$641.99 the previous season. The estimated harvest for all trappers, including those who did not submit a report, was 27,407 animals taken with an estimated statewide pelt value of \$486,792.58, down from \$575,950.24 in the previous season.

The muskrat, coyote, red fox, beaver, and bobcat, respectively, were the most frequently caught species. Average price per pelt for these species were \$2.15, \$27.69, \$22.11, \$13.86, and \$213.15, respectively. Price per pelt (for all harvested species) ranged from an average of \$213.15 for bobcats (\$214.68 in 2002-2003) to \$2.15 for muskrats (\$2.01 in 2002-2003). In total statewide value of pelts sold, the top five furbearers included bobcat, coyote, red fox, beaver, and muskrat (Table 5). Pelt values were up for all furbearers except bobcat, red fox, spotted skunk, striped skunk, and weasel (Table 4).

Species harvested within a county (Table 6) may be indicative of areas with higher furbearer populations. However, harvest distribution is also partly a function of where trappers live.

Mandatory Bobcat Tagging and Harvest Reports

Bobcat trappers and hunters checked 1,977 animals from a two-month (mid-December through mid-February) season (Table 7); one animal was reported as being confiscated by Idaho Fish and Game. The lynx season remained closed; no accidental captures were reported. The largest number of bobcats harvested (70% of the total) came from the Department's Panhandle, Clearwater, and Southwest regions (Table 8). Trapping accounted for 66% of the statewide bobcat harvest, followed by the use of hounds (24%).

During the 2003-2004 season, the Commission did not require hunters and trappers to surrender jaws for aging (Table 9). This was reassessed when the Commission reviewed trapping regulations during the spring of 2004, but no changes were made. Jaws will not be collected during the 2004-2005 or 2005-2006 trapping seasons.

Some local populations in highly accessible areas may be more vulnerable to trapping and hunting than those in more remote areas, as suggested by Koehler and Hornocker (1989). There are many remote areas in Idaho that act as "refugia" and contribute to more accessible populations where bobcat numbers may be reduced due to harvest pressure. The Department will continue to monitor the harvest for over-exploitation.

Mandatory River Otter Tagging and Harvest Reports

The first river otter trapping season since 1972 was authorized during the 2000-2001 trapping season. The Idaho Fish and Game Commission originally approved a quota of 100 otters statewide. Once the regional quota was reached, trappers had 48 hours in which to have additional otters tagged, with a maximum allowable harvest statewide set at 121 otters. The harvest quota was changed to 102 animals for the trapping seasons 2002-2004; the individual trapper's quota was decreased from five to two river otters.

The Department affixed state tags to 102 legally harvested otters statewide during the trapping season (Table 10). The otter season is closed 48 hours after the harvest quota for a region is met. Trappers are allowed to keep otters within this 48-hour period, provided their personal quota of two has not been reached, which may cause the total harvest to exceed harvest quotas. Harvest quotas were met in the Panhandle, Southwest, Magic Valley, and Salmon regions. Harvest quotas were not met in the Clearwater, Southeast, and Upper Snake regions. Once the season is closed, trappers must surrender the entire river otter carcass within 72 hours of harvest. Carcasses were collected for a two-year graduate research project, which is providing analyses on toxin levels, reproductive rates, age and sex structure, and general status of the river otter population statewide. Trappers reported 18 non-target otters trapped during the 2003-2004 season, down from the previous season.

Canine teeth from 116 otter carcasses were sent to Matson's Laboratory for aging. This data is not available to date but will be provided in next year's report. Of the total river otters harvested,

including incidental captures, 62 (52%) were male and 58 (48%) were female (Table 11). The river otter age data for the 2002-2003 trapping season is available in this report (Table 12). The ages of river otters harvested during the 2002-2003 season ranged from juveniles (<1) to ten years old. Sixty-three percent of the harvested otters were two years of age or younger. Fifty-one percent of the females harvested during the 2002-2003 season were not sexually mature.

Reported Non-target Catches

Trappers were paid \$5.00 each for 18 otters surrendered to the Department for reimbursement. Since the 1993-1994 trapping season, seven fisher and 315 otters have been turned in to the Department for reimbursement (Table 13). Many of these animals were sold at the Department's annual auction with proceeds earmarked for trapper education and related projects. Other animals' pelts are processed and used for educational purposes. Among the non-target species reported trapped was a variety of birds and mammals. Non-target animals with minimal injury were released at the site of capture. Trappers reported catching 350 non-target animals during the 2003-2004 season (Table 14).

Furbearer Surveys

Winter track survey routes were delineated in each of the Department's administrative regions as a pilot project during the winter 2002-2003. Due to a lack of snow statewide, most regions were limited in the amount of routes they were capable of surveying. The official survey was implemented during the winter of 2003-2004. Target species being monitored by the winter track surveys include: American marten, fisher, Canada lynx, and wolverine. Other species to be monitored include: snowshoe hare, red squirrel, bobcat, coyote, mountain lion, and gray wolf.

Furbearer Research

The Department continues to cooperate with the Hornocker Wildlife Institute (Wildlife Conservation Society) on a wolverine and fisher research project along the Idaho and Wyoming border. This study's primary objective is to understand fisher habitat use in the Lochsa River area. The researchers are achieving this through two avenues. First, fisher are being tracked and habitat data collected at their rest sites. In addition, DNA hair snares are placed throughout the Lochsa corridor. At each site, the researchers are collecting detailed habitat data and will then correlate fisher presence/absence to habitat variables. Several presentations have been given on the work completed on Lolo Pass this winter. These were presented at the Western Forest Carnivore conference and at meetings in Washington, California, and Washington, D.C.

A Department employee and Boise State University graduate student began a river otter research project during the 2002-2003 trapping season. The project includes analyses for toxins (PCBs, mercury and other heavy metals, and organochlorines), assessing reproductive rates, age and sex structure, and general body condition of individual river otters harvested. The project is scheduled to be completed in spring 2005.

Furbearer Depredation

Beaver continue to be live-trapped in several regions to address damage complaints. When feasible, these animals are translocated to other areas in attempts to improve riparian habitat or increase the local beaver population. The Southeast Region (Pocatello) translocated ten beaver into Toponce Creek on the Caribou National Forest in Caribou County during the summer of 2003. This was in a cooperative effort with the Shoshone Bannock School. The beaver came from the Little Wood River drainage and were trapped in response to depredation complaints. Toponce Creek is a drainage that had extensive beaver activity in the past. However, beaver populations have declined in this drainage.

Department conservation officers frequently issue Furbearer Depredation Control Permits (Form WL-2) to individuals as a valuable tool in handling beaver and other furbearer damage complaints quickly and efficiently. Beginning in January 1995, Department administrative regions were required to keep accurate records on the number of permits issued and the number of animals removed. Each region is retaining this information in case questions surface regarding past depredation complaints. Beaver are typically the most common species in which kill permits are issued, followed by muskrat and raccoon.

Administrative Activities and Coordination

Department staff participated in a variety of furbearer-related activities during the year. The State Furbearer Program Coordinator assisted the International Association of Fish and Wildlife Agencies with a trapping communications workshop, titled "Trapping Matters", held in Boise, Idaho, in June 2004. Approximately 80 Department personnel attended. The workshop focused on the message that wildlife managers and biologists should provide to the public about trapping as a wildlife management tool and the perceptions and attitudes the public have about trapping.

Department personnel attended a fur sale sponsored by the Idaho Trappers' Association in Mountain Home in March 2004. Department personnel presented an update at the Idaho Trapper's Association (ITA) annual meeting in August 2003. Department personnel attended the Upper Snake River Trappers' Association annual meeting and the National Trappers' Association national convention in Blackfoot in June 2003.

Several state office and regional staff are involved in the Forest Carnivore Committee, a group of individuals representing state and federal agencies and non-governmental organizations. The primary focus of this group involves forest carnivores, including marten, fisher, lynx, and wolverine. Department staff throughout the state was involved in the collection of furbearer harvest data, including tagging bobcat and river otter pelts and collecting river otter carcasses for the two-year graduate research project.

Management Actions

At the request of the U.S. Forest Service's (USFS) Teton District, the Upper Snake Region (Idaho Falls) closed some stream sections in the Targhee Forest to beaver trapping. The USFS is releasing beaver in these streams to reestablish beaver colonies and improve riparian function.

Beaver were stocked in the North Twin Creek on USFS land in 2002 and 2003. Beaver were stocked in Trail Creek, above Mike Harris Campground, and McRenolds Reservoir. Patterson Creek may be considered for a future relocation site.

Management Implications

In 1990, Department regional furbearer coordinators (RFCs) were appointed in each region and the McCall office in compliance with the 1991-1995 Furbearer Management Plan. The function of the RFCs is to serve as a liaison with trapping organizations, trappers and other user groups, and other agencies on trapping and furbearer issues. While the RFCs have diverse natural resource backgrounds, they all share some level of expertise or interest in furbearer management in Idaho. These RFCs continue to play an important role in maintaining good working relations with trappers and other agencies and are helping the Department meet its furbearer management goals and objectives.

Observations made by Department personnel, trappers, and hunters during this reporting period provided no indication that Idaho trapping and hunting seasons have adversely impacted furbearer populations. Variable and unpredictable pelt prices continue to influence trapper/hunter participation and, consequently, the harvest of furbearers. Available information also suggests that furbearer populations are not declining.

We believe the Department is meeting its goals and objectives regarding furbearer season structure, maintaining populations and distribution, and some management programs. Conversely, some strategies proposed in the furbearer plan, including development of habitat management guidelines, mandatory trapper education, and monitoring of some species, have not been implemented.

LITERATURE CITED

- Johnson, N. F., B. A. Brown, and J. C. Bosomworth. 1981. Age and sex characteristics of bobcat canines and their use in population assessment. *The Wildlife Society Bulletin* 9 (3): 203-206.
- Koehler, G. M. and M. G. Hornocker. 1989. Influences of seasons on bobcats in Idaho. *Journal of Wildlife Management* 53 (1): 197-202.

Table 1. Trapping license sales and usable harvest reports received from trappers for the 1983-1994 through 2003-2004 trapping seasons.

Year	Licenses Sold			Total	Reports received	%	Reporting trappers who trapped		Estimated active trappers ^a
	Resident	Jr.	Nonres.				%	%	
1983-1984	1,559	-	15	1,574	930	59	-	-	-
1984-1985	1,485	-	23	1,508	664	44	-	-	-
1985-1986	1,370	-	23	1,393	1,071	77	-	-	-
1986-1987	1,473	-	24	1,497	1,112	73	-	-	-
1987-1988	1,564	-	30	1,594	1,338	86	-	-	-
1988-1989	1,266	-	22	1,288	1,045	81	-	-	-
1989-1990	921	-	17	938	722	77	-	-	-
1990-1991	636	-	7	643	508	79	-	-	-
1991-1992	678	-	8	686	478	70	-	-	-
1992-1993	666	-	7	673	525	78	-	-	-
1993-1994	588	-	8	596	489	82	425	87	518
1994-1995	738	-	10	748	547	73	432	79	591
1995-1996	631	-	7	638	445	70	362	81	518
1996-1997	772	-	7	779	590	76	463	78	610
1997-1998	740	130	12	752	586	78	473	81	609
1998-1999	612	110	14	626	502	80	381	76	476
1999-2000	451	98	9	558	459	82	362	79	441
2000-2001	504	97	6	607	492	81	390	79	480
2001-2002	546	91	10	647	519	80	415	80	518
2002-2003	690	126	8	824	657	80	513	78	643
2003-2004	835	130	10	975	791	81	615	78	761

^a Estimated active trappers is determined by multiplying the number of licenses sold by the percent of trappers who reported that they actually trapped, based on the total number of reports received.

Table 2. Estimated trapper days afield for the 1993-1994 through 2003-2004 trapping seasons based on trapper reports received.

Year	Reporting trappers who trapped	Trappers reporting time afield	Average time afield per trapper			Projected statewide time afield		
			%	Hrs/day Days/yr		Estimated active trappers	Total hours	Total days
1993-1994	425	285	67	5.0	36.4	519	93,432	18,871
1994-1995	432	330	76	4.4	35.5	591	92,314	20,981
1995-1996	362	271	75	4.1	38.4	517	80,139	19,546
1996-1997	463	441	95	4.9	42.7	608	127,212	25,962
1997-1998	473	404	85	4.4	35.6	609	95,394	21,680
1998-1999	381	335	88	4.1	33.2	476	64,793	15,803
1999-2000	362	357	99	4.2	38.0	441	70,384	13,549
2000-2001	390	383	98	3.9	31.9	480	59,717	12,209
2001-2002	415	414	100	4.0	32.9	518	68,169	13,627
2002-2003 ^a	464	-	-	-	-	-	-	-
2003-2004	615	-	-	-	-	-	-	-

^a The trapper report card form was changed for the 2002-2003 season and no longer records the days and time afield per trapper.

Table 3. Catch-Per-Unit Effort data from trapper report cards for the 2003-2004 trapping season.

Species	Number of animals trapped ^a (a)	Total number of nights trapped (b)	Average number of traps set/night (c)	Catch-per-unit effort (b x c / a)
Badger	251	889	9	.031
Beaver	2468	4330	6	.0950
Bobcat	1153	8848	13	.0100
Coyote	3871	8766	14	.0315
Fox	2531	7024	12	.0300
Marten	571	807	19	.037
Mink	575	1943	9	.0329
Muskrat	7381	3857	16	.1200
Otter	81	774	4	.026
Raccoon	1192	4460	6	.0445
Spotted skunk	33	295	5	.022
Striped skunk	930	2401	7	.0553
Weasel	136	595	5	.046

^a Reflects only animals trapped and does not include animals hunted.

Table 4. Statewide harvest and pelt value of furbearers trapped during the 2003-2004 season based on 615 trappers who reported they trapped.

Species	Trappers reporting a harvest	Animals taken (a)	Pelts/trapper	Animals sold (b)	% Sold (b / a)	Money received (c)	Price/pelt ^a (c / b = d)	Total value (a x d = e)	Estimated statewide pelt value ^b (e / .81)	% of total value
Badger	81	281	3	137	49	\$3,909.93	\$28.54+	\$8,019.74	\$9,900.91	1.43
Beaver	246	2,468	10	1,213	49	\$16,816.20	\$13.86+	\$34,206.48	\$42,230.22	6.09
Bobcat ^c	279	1,289	5	944	73	\$201,217.91	\$213.15-	\$274,750.35	\$339,197.96	48.90
Coyote	317	4,509	14	3,276	73	\$90,713.75	\$27.69+	\$124,854.21	\$154,141.00	22.22
Marten	43	571	13	350	61	\$8,061.40	\$23.03+	\$13,150.13	\$16,234.73	2.34
Mink	124	576	5	446	77	\$4,284.62	\$9.61+	\$5,535.36	\$6,833.78	0.99
Muskrat	203	7,381	36	5,540	75	\$11,887.65	\$2.15+	\$15,869.15	\$19,591.54	2.82
Otter ^c	62	81	1	36	44	\$2,984.26	\$82.90+	\$6,714.90	\$8,290.00	1.20
Raccoon	237	1,245	5	681	55	\$7,132.53	\$10.47+	\$13,035.15	\$16,092.78	2.32
Red Fox	238	2,628	11	2,094	80	\$46,288.92	\$22.11-	\$58,105.08	\$71,734.67	10.34
Spotted Skunk	11	35	3	4	11	\$24.67	\$6.17-	\$215.95	\$266.60	0.04
Striped Skunk	101	1,000	10	98	10	\$633.85	\$6.47-	\$6,470.00	\$7,987.65	1.15
Weasel	36	136	4	52	38	\$346.30	\$6.66-	\$905.76	\$1,118.22	0.16
Actual Total (81%)		22,200	-	14,871	67	\$394,301.99	\$26.51	\$588,629.16	-	100.00
Estimated Total (100%)		27,407	-	18,359	-	\$486,792.58	-	-	\$693,620.06	-

^a Plus and minus reflects upward or downward trends in pelt value.

^b Estimated totals and statewide pelt value were determined based on the assumption that the harvest reported by trappers represented 81% of the actual harvest if all active trappers had submitted a harvest report.

^c Reflects only the number reported by trappers on the mandatory report card.

Table 5. History of statewide rank by value for animals trapped.

Season	Species ^a											Spotted skunk	Striped skunk	Weasel
	Badger	Beaver	Bobcat	Coyote	Marten	Mink	Muskrat	Otter ^b	Raccoon	Red fox				
1992-1993	9	3	2	1	7	6	5	-	8	4	-	-	10	
1993-1994	9	3	4	1	6	7	5	-	8	2	-	-	10	
1994-1995	10	3	4	2	6	7	5	-	8	1	-	9	11	
1995-1996	9	3	5	4	7	8	2	-	6	1	-	11	10	
1996-1997	9	2	3	4	8	7	1	-	6	5	12	10	11	
1997-1998	9	1	3	5	8	7	2	-	6	4	12	10	11	
1998-1999	9	1	2	5	8	7	4	-	6	3	12	10	11	
1999-2000	9	2	1	5	10	7	4	-	8	3	12	6	11	
2000-2001	11	3	1	4	6	9	5	8	7	2	13	10	12	
2001-2002	11	3	1	4	10	8	5	7	6	2	-	9	12	
2002-2003	11	4	1	3	6	10	5	8	7	2	12	9	13	
2003-2004	8	4	1	2	6	11	5	9	7	3	13	10	12	

^a Non-target “other” species trapped are excluded from this ranking.

^b Otter was not included on the trapper report card until the 2000-2001 season.

Table 6. Distribution of the furbearer harvest in Idaho by county, as reported by trappers for the 2003-2004 season.

County	Species												
	Badger	Beaver	Bobcat	Spotted skunk	Coyote	Red fox	Marten	Mink	Muskrat	Raccoon	Otter	Striped skunk	Weasel
Ada	9	42	8	0	157	121	0	36	99	76	0	214	8
Adams	3	4	55	0	125	14	2	0	5	14	0	7	1
Bannock	2	22	31	0	48	61	0	54	571	73	0	51	0
Bear Lake	8	83	8	0	51	167	0	53	303	63	1	44	4
Benewah	0	21	37	0	4	0	0	9	15	8	0	1	18
Bingham	6	68	23	1	105	182	0	0	58	36	2	8	0
Blaine	0	117	3	0	0	0	0	0	0	6	1	0	0
Boise	0	13	9	0	37	65	52	0	0	13	3	27	0
Bonner	0	54	38	0	13	0	6	5	16	14	6	6	24
Bonneville	4	199	52	11	164	286	27	8	196	21	0	23	0
Boundary	0	63	8	0	4	0	12	11	49	25	1	3	4
Butte	3	41	28	0	19	6	0	0	0	0	0	0	0
Camas	35	11	0	0	165	90	0	0	0	4	2	40	0
Canyon	6	176	0	0	50	185	0	42	399	47	2	31	0
Caribou	15	122	11	0	52	71	0	50	239	29	0	15	10
Cassia	13	14	33	2	166	110	0	21	15	7	6	35	0
Clark	3	40	20	0	60	59	2	0	11	1	0	0	0
Clearwater	0	42	17	0	13	0	4	10	21	16	2	0	8
Custer	4	105	37	0	108	102	72	10	63	15	4	5	0
Elmore	12	36	9	0	195	79	0	0	423	12	8	8	0
Franklin	3	22	7	3	24	104	0	24	321	139	0	7	2
Fremont	0	57	1	0	17	19	68	19	207	61	4	50	17
Gem	4	64	7	0	51	76	0	30	231	49	2	28	0
Gooding	0	82	11	7	87	81	0	44	1605	89	3	85	0
Idaho	0	21	127	0	50	8	6	16	15	41	1	21	6
Jefferson	6	86	0	4	20	31	0	2	409	40	1	13	0
Jerome	2	13	0	0	20	24	0	0	140	0	0	1	0
Kootenai	0	81	35	0	112	3	0	2	158	27	0	1	2
Latah	2	16	40	0	83	0	0	1	5	10	0	2	7
Lemhi	13	119	61	0	357	75	38	19	462	41	7	8	0
Lewis	0	0	0	0	0	0	0	0	0	0	0	0	0
Lincoln	6	40	9	4	108	22	0	0	114	10	5	7	0

Table 6. Continued.

County	Species												
	Badger	Beaver	Bobcat	Spotted skunk	Coyote	Red fox	Marten	Mink	Muskrat	Raccoon	Otter	Striped skunk	Weasel
Madison	1	12	3	0	23	26	0	2	287	3	0	0	0
Minidoka	0	2	0	0	50	159	0	15	66	12	0	46	0
Nez Perce	0	5	11	0	17	0	0	0	0	4	0	13	0
Oneida	0	6	7	0	45	58	0	0	16	39	0	8	0
Owyhee	31	114	257	0	746	15	0	11	135	37	4	51	0
Payette	8	87	7	0	49	60	0	6	63	26	0	11	0
Power	3	9	2	0	43	0	0	4	24	3	0	0	0
Shoshone	0	248	78	0	15	0	16	3	52	12	6	1	23
Teton	0	22	4	0	3	1	25	7	347	0	0	0	0
Twin Falls	45	41	22	1	378	96	0	57	151	42	2	51	0
Valley	4	15	24	0	22	59	241	4	6	8	5	6	2
Washington	0	33	13	0	15	16	0	0	84	19	3	2	0

Table 7. Bobcat and lynx pelts checked in at IDFG offices by trappers and hunters and tagged with USFWS export tags, 1983-1984 through 2003-2004.

Year	Pelts tagged	
	Bobcat ^a	Lynx ^b
1983-1984	1,242	0
1984-1985	1,025	0
1985-1986	752	0
1986-1987	1,034	0
1987-1988	1,035	0
1988-1989	738	0
1989-1990	952	1
1990-1991	523	0
1991-1992	640	2
1992-1993	754	0
1993-1994	533	0
1994-1995	794	0
1995-1996	421	0
1996-1997	1,018	0
1997-1998	929	0
1998-1999	715	0
1999-2000	885	0
2000-2001	1,026	0
2001-2002	959	0
2002-2003	1,277	0
2003-2004	1,977	0

^a Pelts confiscated by IDFG are included in the bobcat totals for 2000-2001 (three), 2001-2002 (six), 2002-2003 (two), and 2003-2004 (one).

^b The lynx harvest season was closed following the 1995-1996 season.

Table 8. Bobcat harvest by method of take reported by Region for the 2003-2004 season.

Region	Total harvest	Method of Take ^a										
		%	Trapping	%	Calling	%	With hounds	%	Incidental hunting	%	Unk.	%
Panhandle	413	21	220	53	1	0	176	43	16	4	0	0
Clearwater	400	20	193	48	10	3	69	42	27	7	1	0
Southwest	583	29	432	74	35	6	69	12	47	8	0	0
Magic Valley	137	7	116	85	7	5	9	7	5	4	0	0
Southeast	139	7	106	76	5	4	16	12	12	9	0	0
Upper Snake	109	6	98	90	4	4	3	3	4	4	0	0
Salmon	196	10	143	73	9	5	3	17	11	6	0	0
Total	1,977	100	1,308	66	71	4	475	24	122	6	1	0

^a Percentages rounded to the nearest whole number.

Table 9. Sex and age of harvested bobcats, based on examination of canines and cementum analyses, 1989-1990 through 2003-2004.

Year	Teeth examined ^a	Adult females	% ^b	Adult males	% ^b	Juveniles ^c & subadults (<2 years)	% ^b
1989-1990	725	184	25	293	40	248	34
1990-1991	418	92	22	148	35	178	43
1991-1992	581	126	22	247	42	208	36
1992-1993	754	168	22	268	36	318	42
1993-1994	504	223	44	211	42	70	14
1994-1995	776	218	28	253	33	305	39
1995-1996	413	102	25	150	36	159	38
1996-1997	948	217	23	385	41	346	36
1997-1998	913	221	24	450	49	241	26
1998-1999	490 ^d	164	33	152	31	173	35
1999-2000	782 ^e	305	39	143	18	330	42
2000-2001 ^f	0	0	0	0	0	0	0
2001-2002 ^f	0	0	0	0	0	0	0
2002-2003 ^f	0	0	0	0	0	0	0
2003-2004 ^f							
Total	7,304	2,020	-	2,700	-	2,578	-
Average	664	184	28	246	37	234	35

^a Milk canines and those with open root canals were aged as juveniles; male canines with closed root canals were aged as adults; female canines with closed root canals were sectioned and the annuli counted, sex based on canines with closed canals was determined by measurement (Johnson et al. 1981). Sex of juveniles was not determined.

^b Percent is based on the total number of teeth examined.

^c Age reflects age at last birthday, using April as the approximate date of birth.

^d The sex of one additional adult was not determined.

^e The sex of four additional adults was not determined.

^f Bobcat jaws were not collected.

Table 10. Summary of river otters trapped and tagged during the 2003-2004 otter season in Idaho.

Region	River otter harvest and quotas by region		
	Harvest quota	Date quota reached	Total harvested ^a
Panhandle	15	2/1/04	15
Clearwater	15	Not reached	6
Southwest	30	1/2/04	35
Magic Valley	20	12/31/03	26
Southeast	2	Not reached	1
Upper Snake	10	Not reached	9
Salmon	10	12/7/03	10
Total	102	-	102

^a Total harvest may exceed harvest quota. The otter season closes in each region 48 hours after the harvest quota for that region is met. Trappers are allowed to keep otters within this 48-hour period provided their personal quota of two has not been reached.

Table 11. Sex distribution of river otters harvested in Idaho during the 2003-2004 season.

Region	River otter harvest	
	Male	Female
Panhandle	10	5
Clearwater	5	4
Southwest	9	25
Magic Valley	19	12
Southeast	0	1
Upper Snake	6	3
Salmon	4	8
McCall	9	0
Total	62	58

^a These figures include carcasses collected from river otters that were legally harvested and incidentally captured.

Table 12. Age distribution of river otters harvested in Idaho during the 2002-2003^a season.

Region ^b	Age																							
	Juvenile		1		2		3		4		5		6		7		8		9		10		Unk	
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M
1	0	0	2	2	1	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1
2	1	0	1	0	4	1	0	1	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0
3	6	0	7	8	1	6	1	0	0	1	0	2	1	0	0	0	0	0	0	0	0	0	0	0
4	3	0	2	7	1	0	1	0	1	1	2	1	2	0	0	1	0	0	0	0	0	0	1	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	1	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0
7	1	0	3	2	1	1	0	0	2	0	0	0	0	1	0	0	0	0	0	7	0	1	0	1
McCall	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Unknown	3	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Total	15	0	16	22	10	9	3	1	6	3	2	4	4	1	0	1	1	1	0	7	0	2	4	2

^a Age data for the 2002-2003 season was not available at the time of the 2002-2003 report.

^b Two otters were harvested in Region 5, but carcasses were not collected.

Table 13. Fisher and otter caught accidentally by trappers and turned in to the Department for a payment of \$5.00 each, 1990-1991 through 2003-2004.

Species/Year	Region where animal was trapped ^a								Total
	1	2	3	4	5	6	7	Unk.	
Fisher									
1990-1991	0	1	0	0	0	0	0	0	1
1991-1992	0	1	0	0	0	0	0	0	1
1992-1993	0	1	0	0	0	0	0	0	1
1993-1994	0	0	0	0	0	0	0	0	0
1994-1995	0	3	0	0	0	0	0	0	3
1995-1996	0	1	0	0	0	0	0	0	1
1996-1997	0	0	0	0	0	0	0	0	0
1997-1998	0	0	0	0	0	0	0	0	0
1998-1999	0	0	0	0	0	0	0	0	0
1999-2000	0	0	0	0	0	0	0	0	0
2000-2001	1	0	0	0	0	0	0	0	1
2001-2002	0	0	0	0	0	0	0	0	0
2002-2003	0	1	0	0	0	0	0	0	1
2003-2004	1	0	0	0	0	0	0	0	1
Total	2	8	0	0	0	0	0	0	10
Otter ^b									
1990-1991	1	4	3	2	1	3	6	0	20
1991-1992	6	1	6	11	3	4	5	0	36
1992-1993	2	4	5	2	0	4	4	2	23
1993-1994	9	4	6	2	0	2	6	0	29
1994-1995	10	9	4	3	1	1	4	0	32
1995-1996	4	1	4	11	0	4	12	0	36
1996-1997	7	1	8	4	0	6	9	0	35
1997-1998	9	2	12	9	3	3	7	0	45
1998-1999	0	1	6	21	0	0	3	0	31
1999-2000	6	0	5	19	0	0	1	4	35
2000-2001	1	0	2	5	0	0	0	0	8
2001-2002	8	0	8	3	0	3	1	0	23
2002-2003	0	1	6	10	1	0	5	0	23
2003-2004	0	1	4	8	0	1	4	0	18
Total	63	29	79	110	9	31	67	6	394

^a Figures do not include road-kills and other unknown mortalities.

^b 2000-2001 is the first season since 1972 that river otters could be legally trapped.

Table 14. Non-target animals captured in the 2003-2004 trapping season.

Species	Captured	Released	Found dead	Unknown status
Badger	2			2
Bear	1			1
Beaver	7	2		5
Blue Heron	6	4	2	
Bobcat	9	9		
Deer	1			1
Dog	6	5		1
Ermine	1			1
Feral Cat	162	9		153
Fisher	5	4	1	
Hawk	1	1		
Hen	4		4	
Lion	15	7	4	4
Magpie	14	3	11	
Mallard Duck	8	6	2	
Muskrat	1		1	
Otter	16	1	14	1
Porcupine	37	3		34
Rabbit	8		6	2
Raccoon	12		1	11
Red Fox	5		1	4
Rock Chuck	2		2	
Skunk	4	1	2	1
Snowshoe Hare	1		1	
Squirrel	20		6	14
Wolf	1	1		
Woodrat	1		1	

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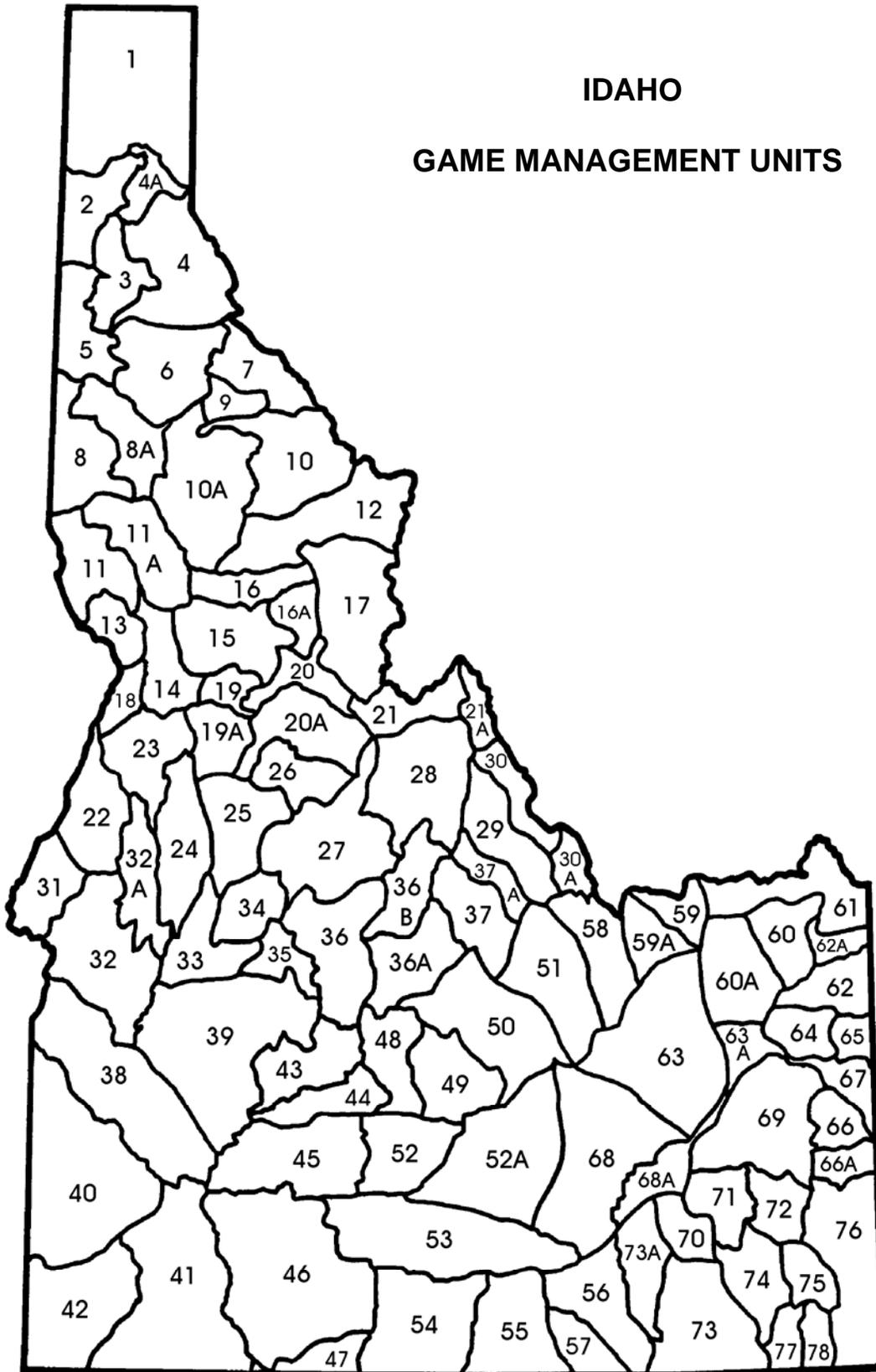
IDAHO DEPARTMENT OF FISH AND GAME

Dale E. Toweill
Wildlife Program Coordinator
Federal Aid Coordinator

James W. Unsworth, 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.

