Chapter 21

Furbearing Mammals

Reg. Rothwell

 <u>INTRODUCTION</u> – Twenty-two species of mammals would be considered furbearing animals in Wyoming based on past commercial use of their pelts. However, not all are currently harvested for this purpose. Species and their current legal status are identified below:

<u>Status</u>	Species	<u>Status</u>
1,7	skunk	2
1	white tail jackrabbit	2
1	black tail jackrabbit	2
1	gray wolf	2,5,6
1	wolverine	3
1	fisher	3
1	river otter	3
1	gray fox	3
2	black-footed ferret	3,6
2	Canada lynx	3,6
2	swift fox	4
	<u>Status</u> 1,7 1 1 1 1 1 1 1 2 2 2 2	StatusSpecies1,7skunk1white tail jackrabbit1black tail jackrabbit1gray wolf1wolverine1fisher1river otter1gray fox2black-footed ferret2Canada lynx2swift fox

¹ State-classified "furbearing animal" (Wyoming Statute 23-1-101)

² State-classified "predatory animal" (W.S. 23-1-101)

³ State-classified "protected animal" (W.S. 23-1-101)

⁴ State-classified "protected non-game mammal" (Chapter 52, Section 11 of the Wyoming Game and Fish Commission Regulations)

⁵ State-classified "trophy game animal" (W.S. 23-1-101)

⁶ Federally-listed, "threatened" or "endangered" species

⁷ Federally-regulated interstate / international trade under CITES

Eight species are classified as "furbearing animals" by Wyoming statute. Persons holding a furbearer license can take these species by legal methods during open seasons. In addition, 6 species are classified as predatory animals. Predatory animals can be taken at any time, by any method, without a license. They are commonly trapped or hunted for their pelts. The gray wolf is classified as a predatory animal throughout much of Wyoming, and a trophy game animal in northwest portions of the State (W.S. 23-1-304 and Wyoming Gray Wolf Management Plan). As of this writing, wolves in the lower 48 states remain protected under the federal Endangered Species Act. However, the USFWS is proposing to remove wolves in Wyoming, Idaho, and Montana from the federal list of endangered and threatened species in early 2008, at which time the state will assume full management authority. Five furbearing species are fully protected under Wyoming Statute and may not be taken with traps or by any other method. Among these are the Canada lynx and black-footed ferret, which are also federally listed endangered species. The bobcat is a state-designated furbearer, but it is also listed in Appendix II of the Convention on International Trade in Endangered Species (CITES). The CITES listing is based on the similarity of the bobcat to other spotted cats that are endangered. The Wyoming Game and Fish Department (WGFD) is required to submit a status report annually to the Division of Scientific Authority, U.S. Fish and Wildlife Service (USFWS), to certify the pelts were legally taken for interstate or international trade. The report must contain an analysis of the effect of harvest on bobcat populations. The species discussed in this chapter include the 8 species designated by the state as furbearing animals, and 6 species (excluding the wolf) designated as predatory animals.

In recent years, sales of furbearer trapping licenses ranged from highs of 1300 to 1500 in the early and mid 1980s, to a low of 669 in 1990. License sales then rose through the 1990s and early 2000s to 1496 in 2005, generating \$57,369 in sales that year.

- II. <u>DISTRIBUTION</u> The 14 furbearing and predatory animals occupy a variety of habitats throughout the state. Badgers primarily inhabit prairie, basin shrub, and foothill shrub communities, although they have been documented in some unlikely places such as spruce-fir forests at approximately 10,000 feet elevation in the Wind River Range and in alpine tundra. The marten is a semi-arboreal carnivore, found primarily in coniferous forests of the state's mountains. Raccoons are most commonly associated with riparian zones and urban and agricultural development at elevations lower than 6500 feet. The other terrestrial furbearers are generalists inhabiting most habitats. The 3 aquatic furbearers were historically found in all waters of the state below timberline and occupy most of these habitats today. Some historic beaver and river otter habitats are currently vacant.
- III. <u>MANAGEMENT FRAMEWORK</u> Furbearer management areas were delineated to collect, compile and summarize harvest data. Before 1999, aquatic and terrestrial furbearer management areas were separate. Although this distinction was logical, it created needless complexity because the state does not manage the species differentially. Bobcat data were compiled based on small and upland game management areas. To simplify data compilation, the same small and upland game management areas were adopted for all furbearers. Each of the 6 bobcat management areas encompasses 2 to 8 of the 34 furbearer management areas to maintain consistency with past data reporting (Figure 1). Management information for furbearers is included in the WGFD Annual Report of Small and Upland Game and Furbearer Harvest prepared by Biological Services each summer. More detailed analysis of bobcat data is provided in WGFD's CITES report to the USFWS Division of Scientific Authority. That report is prepared annually in late summer.

<u>Fig. 1</u>



Bobcat (1-6) and Furbearer Management Areas

Populations of furbearers other than bobcats are not estimated in Wyoming. A POP-II simulation model was historically used to estimate bobcat numbers based on annual harvest data and life history information from the literature. However, bobcat population trends are currently monitored through indices that include harvest success and trapping effort.

- IV. <u>MONITORING</u> The WGFD does not conduct annual surveys to determine the abundance of furbearers in the state. Harvest of furbearers at the statewide level is not great enough to affect their populations, and it is not feasible to survey furbearers at the scale or intensity necessary to reliably determine the species' status. The WGFD Nongame Section conducts scent post surveys to monitor swift fox in portions of eastern Wyoming and periodically surveys the Shirley Basin black-footed ferret reintroduction site to monitor status of that small population.
- V. <u>HARVEST MANAGEMENT</u> Furbearers classified as "predatory animals" can be harvested without restriction. Trapping and hunting seasons are not regulated (harvest can occur year-round), and the WGFD does not limit the numbers that can be taken. Seasons for species classified as "furbearing animals" generally allow harvest in the spring and fall. Opening and closing dates vary, but the seasons for most species open

October 1 (bobcat season opens in November) and extend through mid to late spring. Although "bag limits" are not generally imposed for most furbearers, harvest of marten and beaver is controlled in some areas of the state where field personnel believe the number of trappers and the harvest should be limited to prevent trapper crowding or depletion of especially vulnerable populations. The current trapping regulations for furbearing animals specify exact season dates and other limitations applicable to limited quota trapping areas. Seasons are tentatively established based on recommendations from field personnel in early summer and are finalized by the Wyoming Game and Fish Commission in midsummer (July Commission meeting) each year.

Until 2002, the Biological Services Section surveyed all holders of furbearer trapping licenses in the late spring of each year. Response was poor (typically 30% or less), and follow-up mailings produced little improvement. As a result, the harvest calculated from survey returns was considered a minimum estimate. We believe the low response rate was due in part to an increasingly complex survey that requested trappers to estimate trapping effort for each species. The furbearer harvest survey was suspended in 2002 due to the limited cooperation we received. However, in the absence of any type of survey, the Department had no data to document whether trapping seasons are impacting furbearer populations. Beginning in 2006, we resurrected a simplified survey in which we only request information about the numbers of each species harvested in each furbearer management area. Biological Services will estimate overall furbearer harvests from this survey, and will use trapping success (average number of each species harvested per trapper) as an index to gauge trends in furbearer populations.

The estimate of bobcat harvest has been based on the number of pelts tagged since 1992 because this has exceeded the number reported in the survey. Some bobcat trappers may not have their pelts tagged, so the harvest, determined from tagged pelts is also considered a minimum estimate. By regulation, all bobcats harvested in Wyoming must be presented for registration. A USFWS tag is attached to each pelt as part of the CITES program. Biological Services orders the pelt tags from the USFWS each year and distributes them to the regions before the trapping season begins. Tagging records and unused tags are returned to Biological Services after the trapping season. Prior to 2003, age and sex of bobcats were determined by collecting and submitting lower jaws for tooth analysis by the WGFD laboratory at the University of Wyoming. The age and sex composition of the harvest was summarized in the CITES report prepared annually by Biological Services. Since 2003, field personnel have collected information on trapper effort (number of trap days), age class (kitten/adult), and sex the information when pelts are presented for tagging. Teeth are no longer being aged by the WGFD lab.

On average, trappers reported harvesting 17,490 furbearers annually from 1991-2000. Reported harvests ranged from 4,099 in 2000 to 30,537 in 1991 (Wyoming Game and Fish Department, 1991 - 2000). Coyotes comprised 30-40% of the terrestrial furbearer harvest; beaver and muskrat in roughly equal proportions comprised over 90% of the aquatic furbearer harvest. The average annual bobcat harvest from 1994-2006 was 1635. Harvest ranged from 552 in 1995 to 3,617 in 2006 (Wyoming Game and Fish Department, 1994 – 2007). VI. <u>DISTRIBUTION AND MOVEMENT</u> – The distributions of most furbearers are well known in Wyoming (Cerovski *et al*, 2004). However, better information is sought for certain species, primarily those listed as 'protected' under Wyoming Statute. Personnel should accurately document all observations and reports of lynx, otter, wolverine, fisher, black-footed ferret, swift fox, and gray fox. Locations and accompanying information should be entered in the WGFD Wildlife Observation System. These data are subsequently used for the Wyoming Bird and Mammal Atlas, and other geographic information databases. Additional distribution data are also sought for mink, both species of weasels, and spotted skunks.

VII. LITERATURE CITED AND USEFUL REFERENCES:

- Cerovski, A., M. Grenier, B. Oakleaf, L. Van Fleet, and S. Patla. 2004. Atlas of Birds, Mammals, Amphibians, and Reptiles in Wyoming. Wyoming Game & Fish Dept., Cheyenne, WY. 210pp.
- Novak, M., J. Baker, M. Obbard, and B. Malloch. 1987. Wild Furbearer Management and Conservation in North America. Ontario Ministry of Natural Resources, Toronto, Canada. 1150pp.
- Reeve, A., F. Lindzey, and S. Buskirk. 1986. Historic and Recent Distribution of Lynx in Wyoming. Wyoming Cooperative Fishery and Wildlife Research Unit, Laramie, WY. 55pp.
- Ruggiero, L., K. Aubry, S. Buskirk, L. Lyon, and W. Zielinski. 1994. The Scientific Basis for Conserving Forest Carnivores: American Marten, Fisher, Lynx, and Wolverine in the Western United States. USDA Forest Service General Technical Report RM-254. Rocky Mountain Forest and Range Experiment Station, Fort Collins, CO. 184pp.
- Wyoming Game & Fish Department. 1991. Annual Report of Upland Game and Furbearer Harvest, Cheyenne, WY. 77pp.

. 1992. Annual Report of Upland Game and Furbearer Harvest, Cheyenne, WY. 83pp

_____. 1993. Annual Report of Upland Game and Furbearer Harvest, Cheyenne, WY. 84pp

_____. 1994. Annual Report of Upland Game and Furbearer Harvest, Cheyenne, WY. 85pp.

_____. 1995. Annual Report of Upland Game and Furbearer Harvest, Cheyenne, WY. 86pp.

_____. 1996. Annual Report of Upland Game and Furbearer Harvest, Cheyenne, WY. 87pp.

- _____. 1997. Annual Report of Upland Game and Furbearer Harvest, Cheyenne, WY. 78pp.
- _____. 1998. Annual Report of Upland Game and Furbearer Harvest, Cheyenne, WY. 77pp.
- _____. 1999. Annual Report of Upland Game and Furbearer Harvest, Cheyenne, WY. 72pp.
- _____. 2000. Annual Report of Upland Game and Furbearer Harvest, Cheyenne, WY. 103pp.
- _____. 2001. Annual Report of Upland Game and Furbearer Harvest, Cheyenne, WY. 100pp.
- _____. 2002. Annual Report of Upland Game and Furbearer Harvest, Cheyenne, WY. 80pp.
- _____. 2003. Annual Report of Upland Game and Furbearer Harvest, Cheyenne, WY. 81pp.
- _____. 2004. Annual Report of Upland Game and Furbearer Harvest, Cheyenne, WY. 93pp.
- _____. 2005. Annual Report of Upland Game and Furbearer Harvest, Cheyenne, WY. 96pp.
- _____. 2006. Annual Report of Upland Game and Furbearer Harvest, Cheyenne, WY. 120pp.