



# **Incidental Captures of Wildlife and Domestic Dogs in Montana, 2012-2017**

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This report summarizes all incidental trapping data that FWP has from the 2012-2017 license years. Additional data are available for 2008-2011 but have not been entered into the MRRE database or used in this report.

Note that the events that are required to be reported are 1) any lynx capture, 2) any dog capture, and 3) capture of any "Protected Animal" that cannot be released unharmed. Protected Animals are those defined in Montana statute as 'Game Animals,' 'Furbearers,' or 'Migratory Birds.' Game animals are: deer, elk, antelope, moose, bighorn sheep, mountain goat, bison, bears, mountain lions, wolf, waterfowl, turkey, upland birds, sandhill crane, mourning dove, and snipe. There are 10 Furbearers: wolverine, fisher, marten, otter, mink, lynx, bobcat, swift fox, beaver, and muskrat. There are many Migratory Birds that are protected species; all birds except house sparrows, crows, starlings, pigeons, and magpies. Unprotected animals that do not require reporting are 'Predators' and 'Non-Game.' There are 6 Predators: coyote, striped skunk, spotted skunk, long-tailed weasel, short-tailed weasel, and least weasel. There are many Non-Game species such as raccoon, badger, fox, ground squirrels and rabbits.

### **Incidentally Captured Species**

Over the 6-year period that was the 2012-2017 FWP license years, a total of 349 incidental captures were reported (Table 1). Fifty-five percent of the incidental captures resulted in the release of the animal, and 45% of the animals died as a result of the capture (Table 1). Some of those animals that were released were released unharmed, and technically they were not required to be reported but were in many cases. Over the 6-year period, the total number of deaths of wildlife from incidental trapping averaged approximately 4 bobcats, 11 mountain lions, 6 otter, and an occasional other species per year (Table 1). At these rates, there are no population level effects from incidental trapping.

For those animals that were released, 33% were reported as having an injury and 67% were reported as uninjured. Injuries ranged from as minor as "some swelling" or a "minor cut" to that of "several cuts on the foot" or "some cuts and swelling of the neck." In cases of significant injury, individuals were euthanized and recorded as a death. Euthanasia occurred on 21 occasions in total.

### **Incidentals by Species Intended to Capture**

Of the 349 incidental captures, the species the set was intended for was known in 251 cases. The greatest number of incidental captures occurred in sets intended for coyote (37%), followed by bobcat (32%), beaver (14%), wolf (10%), fox (3%), marten (2%), raccoon (1%), and research fish traps (<1%).

#### Beaver sets

Beaver sets resulted in the death of 29 otter, 1 heron, and 1 Canada goose. All incidental capture of otter are cases where beaver were the target species (there was one exception, an otter death in a fisheries research hoop trap). The vast majority of otter were caught and killed in a body grip (conibear)

set for beaver. Unintended capture of otter in a body grip trap set for beaver can be reduced by moving the trigger to the side. This issue will be a focus in the planned trapper education program, and efforts to make sure all trappers understand this nuance could reduce otter incidental take to a small degree. Total number of otter taken incidentally was low relative to sustainable levels of harvest.

### Coyote Sets

Coyote sets captured 11 species on 94 occasions over the six-year period. Fifty percent of the incidental captures in coyote sets were released, and 50% died. Of the coyote sets that incidentally captured animals, type of trap was known in 88 cases; 50% of incidental captures in coyote sets were snares, 47% were footholds, and 3% were body grip (conibear) traps. Coyote footholds caught a wider variety of species (8) than snares (5), but coyote snares resulted in the death of the captured animal 73% of the time whereas footholds resulted in death 24% of the time. Excluding deaths in beaver sets, coyote snares were responsible for 41% of all deaths from incidental captures where trap type was known. This included 6 bobcats, 4 deer, 17 mountain lions, and 3 wolves over the six-year period. These levels of take are not population level concerns for any of these species.

Four of seven domestic dogs that died in traps were captured in sets for coyote (target species for the other 3 was unknown and could have included coyote). It is important to note that 3 of these dogs were at large on private property, and all other incidents involved illegal sets. Further information on dog captures is provided below.

Coyotes are classified as a predator in Montana state statute.

### Bobcat Sets

Bobcat sets captured 10 species on 81 occasions over the six-year period (~14/year). Seventy percent of the incidental captures in bobcat sets were released, and 30% died. Most incidental captures occurring in a set for bobcat were foothold traps (83%). Bobcat snares were responsible for 16%, and body grip traps set for bobcat were responsible for 1% of incidental captures in bobcat sets. The vast majority of incidental captures occurring in bobcat sets were either domestic dogs (48%) or mountain lions (38%). All dogs captured in foothold bobcat sets were released. Sixty-four percent of the mountain lions captured in bobcat foothold sets were released and 36% died or were euthanized. Six mountain lions died in snares set for bobcats.

### Wolf Sets

Wolf sets captured 7 species on 26 occasions over the six-year period (~4/year). Footholds are the only sets allowed for wolves in Montana. 73% of the incidental captures in wolf sets were released, and 27% died. Species that died or were euthanized included 2 bobcats, 1 deer, and 4 mountain lions during the six-year period. Species released from wolf traps included 1 deer, 1 elk, 8 domestic dogs, 1 grizzly bear, 1 lynx, and 7 mountain lions.

## **Incidental Capture of Individual Species**

### Domestic Dog Captures

Dogs were incidentally captured on 148 occasions over the six-year period (~25/year). Dogs were released in 95% of incidents. Incidentally captured dogs were running at large in 42% of the cases and were out of command (out of sight or more than 50 ft. from road/trail) in another 16% of cases. Incidentally captured dogs were either at large or out of sight/command in nearly 60% of the cases. Approximately 40% of dog captures occurred on private land, and 60% of dog captures occurred on public land. When the target species was known, dogs were captured in coyote sets (42), bobcat sets (39), wolf sets (8), fox sets (3), and beaver sets (3). Coyote and bobcat sets accounted for 85% of dog captures. Of the 88 cases where legality of the set was recorded, 35% were not legal and 65% were legal.

Of the 143 cases where the injury level of the dog was recorded, 72% of dogs were not injured, and 28% had foot damage, swelling, or some other injury. Dogs caught in snares were not injured in 78% of cases and injured in 22% of cases. Dogs caught in footholds were not injured in 72% of cases and injured in 28% of cases. Three dogs were not injured in a body grip trap (60%) and two dogs were injured (40%).

Seven dogs died when incidentally trapped. Of the 7 dogs that died, 3 were running at large on private property, and the other 4 were illegal sets. Dogs at large on private property were killed in a legal conibear (2) or a snare (1). One illegal set consisted of a trespass where a snare captured a dog at large on its owner's property and resulted in injuries that led to euthanasia; the dog was out of sight/command, but on its owner's property. One illegal set that killed a dog was a case where a large conibear on dry land was not properly recessed as legally required and the individual had not obtained permission to trap on DNRC land; the dog was with its owner and in sight/command. Two dogs that died were with their owners, but out of sight/command when trapped in a snare; each of these was an illegal set, one trespass by the trapper and one instance where the snare was within 1000' of an occupied dwelling without written notice.

### Mountain Lion Captures

Mountain lions were the most common incidentally captured species, accounting for almost one-third of incidental captures. Sixty-seven percent of incidentally captured mountain lions were killed or euthanized. Thirty percent of lions were released, 17% were released with a foot injury and 13% were released uninjured. About 54% of the lion deaths where trap type was known were snares. All lions caught in snares died. Lions caught in footholds died or were released at approximately the same rate (19% died, 26% euthanized, and 55% released).

### Wolverine, Lynx, Grizzly

Incidental capture of these species was very rare, 3 grizzly bears, 3 lynx, and 5 wolverines over the six-year period. All grizzly bears, all lynx, and 2 of 5 wolverines were released. 3 wolverines died, one in a conibear, one in a foothold, and one in a snare.

## Birds

Several species of birds, primarily raptors, were captured incidentally on rare occasion (8 total over the six-year period). Most were captured in foothold traps (50%). Some were captured in snares (38%) and a conibear (12%).

## **Summary**

From 2012 – 2017, the number of wildlife deaths from incidental trapping in Montana averaged approximately 4 bobcats, 11 mountain lions, 6 otter, and an occasional other species per year. At these rates, death from incidental captures is not a population-level concern for any species in Montana.

Wolf sets, which can only be footholds, were not involved in a large proportion of incidental captures, and 73% of the animals incidentally captured in wolf sets were released. Coyote and bobcat sets were responsible for nearly 70% of incidental captures. When incidentally captured animals die, coyote snares are involved to a greater degree than any other species/set. Mountain lions were the most common incidentally captured species. All lions captured in snares died. The greatest degree of reduction in incidental captures might be made with a focus on equipment and methods that prevent mountain lions captures reduce non-targets in snares. Incidental death of otter can be reduced to some degree with a targeted effort to inform trappers about moving the trigger to the side on a conibear set for beaver. A mandatory trapper education program that has a focus on the above would be a logical step in the direction of reducing incidental captures.

About 25 domestic dogs are captured per year in Montana. Of these 25, on average, about 10 of these dogs are running at large. Another 5 dogs are with the owner but out of sight or verbal command. During the report period, there was one instance of a dog that was killed in a trap while it was with its owner and in sight/command; this was due to an illegal set (non-recessed large conibear), using illegal bait (whole pheasant), and it occurred on public land (DNRC) that required authorization to trap (but which had not been obtained). All of the other unfortunate incidents involving the death of a domestic dog were either dogs running at large on private property or illegal sets. When dog owners keep their dogs in sight and verbal command and trappers trap legally, dogs are not killed and are rarely captured, usually to be released with a minor injury or uninjured. The greatest degree of improvement toward reducing dog captures could be made with efforts to strictly enforce setback distances along with educating the public about keeping dogs in sight, command, and within setbacks. A mandatory trapper education program that focuses on avoiding dog captures would help.

**Table 1. Summary of incidental trapping incidents from FWP records by species and fate, 2012-2017 license years.**

	2012		2013		2014		2015		2016		2017		Total		Average/Year	
	Dead	Released	Dead	Released	Dead	Released	Dead	Released	Dead	Released	Dead	Released	Dead	Released	Dead	Released
Beaver											1		1	0	<1	0
Black Bear							2					1	0	3	0	<1
Bobcat	7		4	1	1		2		2		5		21	1	4	<1
Canada Goose							1						1	0	<1	0
Deer	1		1						1		3	1	6	1	1	<1
Domestic Dog	3	37		30	1	27	1	16	2	19		12	7	141	1	24
Domestic Cat													0	1	0	<1
Elk				1									0	1	0	<1
Fisher	1				1						1		3	0	<1	0
Grizzly Bear				3									0	3	0	<1
Gray Wolf	1		1						1		2		5	0	<1	<1
Heron											1		1	0	<1	0
Lynx				1		1				1			0	3	0	<1
Mountain Lion	14	12	17	9	12	3	14	2	6	4	4	2	67	32	11	5
Otter	9		10		2		13		1				35	0	6	0
Raptor		1		3	2		1					1	3	5	<1	<1
Swift Fox	1				1						1		3	0	<1	0
Wolverine			1	1	2			1					3	2	<1	<1
<b>Total by Year</b>	<b>37</b>	<b>50</b>	<b>34</b>	<b>49</b>	<b>22</b>	<b>32</b>	<b>32</b>	<b>21</b>	<b>13</b>	<b>24</b>	<b>18</b>	<b>17</b>	<b>156</b>	<b>193</b>		