**CITIZEN-PROPOSED ISSUE PAPER**

**ISSUE:** Petition CPW to prohibit recreational and commercial trapping of bobcats in Colorado. The information in this petition references Colorado Parks and Wildlife Regulations: Chapter W-03 - Furbearers and Small Game

- #300.B “Furbearers” which currently includes bobcats
- #302.A and #302.B which includes hunting and trapping hours for bobcats
- #303.E and #17122.A which cover the manner of take of bobcats
- #324 which includes season dates and bag and possession limits for bobcats

**DISCUSSION (FACTS AND FIGURES, EXPLANATION OF ISSUE):**
1. Recreational and commercial hunting and trapping of bobcats severely threatens the safety of Canada Lynxes in Colorado. Bobcats exist and overlap in endangered Canada Lynx territory in Colorado. Both species are elusive, strikingly similar in appearance, and attracted to the same prey such as snowshoe hares, mice, and other rodents. They are medium sized cats with ear tufts, and short, bobbed tails. Their coat colors may vary from reddish brown to gray. Although lynxes are typically thought to have more gray coloration, bobcat coat color can change from brown to gray in the winter causing them to appear almost identical in appearance to lynxes, which is one of the only features a hunter can use to differentiate a bobcat from a lynx, especially when at a distance or in deep snow. Ear tufts and facial ruffs are not a reliable means of distinguishing the two species either, since heavily furred bobcats will have longer ear tufts and prominent facial ruffs similar to lynxes. Furthermore, regulation #302.A and #302.B allow hunting and trapping of bobcats during periods of limited visibility and at night, which makes distinguishing the two species virtually impossible.

2. Canada Lynxes are listed as threatened and have been protected by the federal Endangered Species Act since 2000. Indeed, it is illegal to harm or kill a Canada Lynx. The species was reintroduced into CO with radio collars starting in 1999 after they had been extirpated due to trapping and the fur trade. Trapping continues to be a significant cause of mortality of Canada lynxes: In areas where trapping of Canada lynxes is permitted, mortality rates have been noted to range from 50 to 90%, and in areas where Canada lynxes are protected, mortality rates have been noted to range from 0 to 27%, increasing when mothers with dependent young are trapped. Lynxes are attracted to bait set for bobcats, and can be harmed, injured or killed when caught in traps. Trappers are only required to check traps once every 24 hours. Lynxes can suffer from dehydration, exposure to the elements, trauma, fractures, wounds, stress, anxiety, and/or capture myopathy (severe muscle damage as a result of struggling and exertion) and harm may not be immediately apparent or may take days to weeks to manifest. In addition, after the reintroduction of lynxes in Colorado, CPW follow up monitoring revealed gunshot to be one of the leading causes of death between 1999 and 2007. Although CPW did not have any details regarding these gunshot incidents when I submitted a Colorado Open Records Act (CORA) request, it is likely that some of the shot lynxes were mistaken for bobcats since they had been federally protected since 2000.

3. Persons obtaining a small game license in order to hunt in Colorado are only required to have gun safety education but are not required to read the United States Fish & Wildlife Service’s brochure How to Avoid Incidental Take of Lynx While Trapping or Hunting Bobcats and other Furbearers or have any training regarding differentiating a lynx from a bobcat. Hunters and even trained professionals can have great difficulty differentiating bobcats from lynxes.

4. Since lynxes are commonly caught in traps set for bobcats, a district judge recently ruled in federal court that the USFWS must take action to prevent threatened Canada lynxes from being killed by trapping. The USFWS acknowledges that “incidental take of lynx will be difficult to detect because there is little likelihood that trappers would report bycatch of lynx.” Furthermore, trappers are not even remotely qualified to determine if lynxes are harmed or injured when caught in traps. Lynxes may suffer from exposure or injuries that can ultimately be life threatening and not immediately obvious. Finally, regulation #324.B allows unlimited bag and possession of bobcats, which creates more of an incentive for hunters and trappers and threatens the safety of lynxes. Similar to USFWS, Colorado Parks and Wildlife needs to be taking a proactive role in protecting Canada lynxes from injury and death that occur as a result of hunting and trapping.

5. Regulation #324.A which allows bobcat hunting annually from December 1st until the end of February threatens pregnant bobcats, bobcats with dependent young, and lynxes with dependent young. Bobcat breeding season occurs in early winter, may occur as early as December and extends until April or later. After a gestation period of approximately 63 days, female bobcats give birth to an average of two to three kittens, producing only one litter per year. The young
are weaned at two months, but stay with their mothers until they are one year old learning how to survive.\textsuperscript{15} Bobcats have low reproductive rates, are not sexually mature until one to two years of age, and provide extended parental care for their young, thus making their population extremely vulnerable to the effects of hunting and trapping. Canada lynxes breed in March or April, giving birth to only 1 or 2 kittens in May, June, or July. Lynx kittens also remain with their mothers for extended periods, at least 9 to 10 months, learning crucial survival skills such as where and how to find shelter and food. Mother lynxes who are injured or killed during bobcat hunting and trapping season would cause orphaned, dependent lynx kittens to die of starvation or exposure to the elements.\textsuperscript{16}

6. The current regulations that CPW has in place to protect lynxes are inadequate because lynxes have large home ranges, do not stay within artificial boundaries, and a complete assessment of lynx habitat is largely unknown in Colorado. The habitats known to be used by the reintroduced lynxes in Southwest Colorado have been studied by CPW, but the ability to monitor dispersal and habitat use of offspring and future generations of lynxes is limited.\textsuperscript{17} Although CPW has a designated “Canada Lynx Recovery Area” in the San Juan and Rio Grande National Forests and associated lands in this area above 9,000 feet, lynxes can migrate long distances, juveniles disperse and migrate through various habitats before establishing home ranges, and habitat use can vary based on prey availability. Regulation #302.B.2.a which prohibits the use of certain lures to attract felids within the lynx core recovery area and areas known to be occupied by Canada lynxes is insufficient since lynxes migrate and exist outside of these areas. Furthermore, there is no plausible method in which to enforce this regulation, and lynxes can be attracted to any bait that is used to attract bobcats. In addition, although CPW has regulations that restrict bobcat hunting at night in/around the lynx core recovery area in the event a hunter takes a lynx, as mentioned above—and acknowledged by the USFWS—incidental takes of lynxes likely go unreported. This regulation does nothing to protect lynxes from the dangers of bobcat hunting and trapping that occur during daylight hours. As habitats change in Colorado, physiological and behavioral adaptations of Canada lynxes will alter their habit ranges and diet. The lynx core recovery area that has been established would change with the plasticity of the species. CPW can greatly increase protections for Canada lynxes in Colorado by prohibiting recreational and commercial bobcat hunting and trapping throughout the state.

7. Hunting and trapping of bobcats is threatening the genetic diversity, demographics, and long term survival of the bobcat population. In fact, bobcat numbers have historically declined dramatically in several areas of the United States due to poor management and unlimited hunting and trapping.\textsuperscript{18, 19} The population status of bobcats in Colorado is unknown and CPW does not currently have a reliable method for evaluating bobcat demographics and population trends within the state. The only recent research done on bobcats is a non-invasive genetic sampling study that was conducted mostly in Boulder County in which data is still being analyzed.\textsuperscript{20} There are no recent studies in other areas of the state, such as the southeast or southwest regions, which have been experiencing higher 3-year average mortality densities than the northeast region. Evaluating bobcat abundance by Harvest per unit effort (HPUE) is unreliable due to variability of data and reporting errors. Since 2002 there has been a significant increase in annual bobcat mortality in Colorado, which is mostly due to harvesting by hunters and trappers. During the 2002-03 season 562 bobcats were harvested, and during the 2016-17 season 1811 bobcats were harvested. The most recent data regarding Bobcat Mortality Density in Colorado indicates that the 3-year average mortality density has increased statewide and within all four geographic regions (NE, NW, SE, SW) from the preceding 3-year average.\textsuperscript{21} The current management of bobcats by CPW appears to be based largely on bobcat population data that was collected from 2009 to 2011\textsuperscript{22} and is not taking into account the increased pressure that bobcats are facing due to high harvest levels in recent years. Bobcat hunters and trappers are also preferentially selecting larger animals, specifically older males. The most recent data indicates that there is indeed a higher percentage of males being harvested in Colorado. Bobcats are slow reproducers, and male bobcats don’t reach sexual maturity until they are 18 months of age,\textsuperscript{23} which makes their selective removal a severe threat to the overall stability of the population.
Scientific evidence shows that the selective removal of large, older, breeding males from the population prevents valuable genes from being passed on to future generations, is known to alter social dynamics, sex ratios, age structure, and negatively affects population growth. The bobcat gene pool is being artificially altered and reduced which severely threatens and destabilizes the long term viability of the species. In addition, the negative impacts of human development, habitat loss, and fragmentation need to be considered in long term planning in Colorado since wide ranging carnivores such as bobcats are significantly impacted by these factors.

8. Other states prohibit hunting and/or trapping of bobcats for valid reasons and Colorado should do the same. New Hampshire has protected bobcats since 1980 due to declining populations and recently rejected a proposal to allow bobcat trapping and hunting due to fierce public opposition and since the proposal would endanger federally protected Canada lynxes. In 2015, California banned recreational and commercial bobcat trapping after residents were angered when learning that the industry was still alive when a bobcat trap was found near Joshua Tree National Park.

9. Very few people are hunting and trapping bobcats in Colorado. Based on information I received during a recent Colorado Open Records Act (CORA) request, only 751 hunters/trappers harvested bobcats during the 2017 season. Of these, 730 were Colorado residents. In the 2016 season, only 728 hunters/trappers harvested bobcats, the 2015 season had 531, the 2014 had 552, and the 2013 had 632. In 2017, the population of Colorado was estimated to be 5.5 million, therefore an extremely small percentage of the population (0.01%) is hunting/trapping bobcats. However, this minority of the population are killing a very large number of bobcats each year. In the 2013 season, 1945 bobcats were killed; in the 2014 season, 1634 bobcats were killed; in the 2015 season, 1352 bobcats were killed; and in the 2016 season, 1811 bobcats were killed by hunters and trappers. Anyone with a small game or fur bearer license (which are $21 for residents and $56 for nonresidents) and a $10 Habitat Stamp can kill an unlimited number of bobcats. This equates to very little revenue generated specifically for bobcat hunting and trapping.

10. Bobcats should not be killed by the minority for fun or profit. Colorado’s natural resources are a public trust to be preserved for present and future generations, instead of being exploited by a few. This is one of the concepts of The North American Model of Wildlife Conservation, a model that most wildlife agencies, including CPW, purport to follow. The Model also states: “The concept of a sportsman can be summarized as one who, when hunting game: • does so primarily for the pursuit or chase; • affords game a “sporting” chance (fair chase); • seeks knowledge of nature and the habits of animals; • derives no financial profit from game killed; • will inflict no unnecessary pain or suffering on game; and • will not waste any game that is killed.” The current management system of bobcats in Colorado is not compatible with this Model.

11. Bobcats in Colorado are worth more alive than dead. Colorado generates far more revenue in wildlife viewing than in hunting. Colorado is a popular tourist destination. A 2016 census by USFWS, revealed that 86 million U.S. residents 16 years old and older participated in wildlife watching, as opposed to 11.5 million participating in hunting. A 2011 Survey by USFWS of fishing, hunting, and wildlife watching in Colorado revealed that of those who participated in the survey, 1.8 million participated in wildlife watching, while only 259 thousand participated in hunting. Another study published in 2013 by Southwick Associates revealed that wildlife watching contributed $2.2 billion to the local economy and supported about 19,000 jobs, while hunting contributed $919 million and supported about 10,000 jobs. A recent study in Yellowstone estimated a bobcat frequently seen by tourists near the Madison River had an economic value of over $300,000 due to tourism and visitor activity. This is 1000 times the value had the bobcat been killed and the pelt sold for approximately $185.

12. Public attitudes are shifting regarding hunting and trapping, especially with respect to trophy hunting and killing animals for their fur. Hunters usually kill bobcats in order to sell the fur on
the foreign market or keep for themselves as trophies. Bobcats killed for their fur are typically skinned and the rest of the carcass is discarded. The vast majority of Americans vehemently oppose trophy hunting, trapping, and killing animals for their fur, and recent battles over whether to allow bobcat hunting in various states show that many Americans are extremely concerned about the species and oppose bobcat hunting and trapping. Some cities such as San Francisco and Los Angeles have even banned the sale of fur. CPW regulations need to reflect the current views of most Americans and Coloradans.

13. Trappers often kill bobcats by illegal and cruel methods that cause the animals to experience unnecessary, prolonged suffering, and pain. Trappers report strangling bobcats to death using a “choke stick” which is a pole with a snare on the end. Trappers state the fur is worth more. One trapper’s father stated to me in a phone conversation on March 26, 2017 that his son strangled a bobcat. He reported that it was “gruesome” and “it takes 3 minutes” and “that’s how trappers do it around here.” Amendment 14 of the Colorado Constitution states: “It shall be unlawful to take wildlife with any leghold trap, any instant kill body-gripping design trap, or by poison or snare in the state of Colorado.” Strangulation, or any other method that deprives an animal of oxygen (such as drowning), causes extreme suffering, distress, and pain. As carbon dioxide (which is normally exhaled) accumulates in the brain, it triggers a feeling of “air hunger” and fear, which is extremely painful and intensifies as the condition progresses. CPW officials do not appear to have the capacity or resources necessary to regulate the manner in which trappers are killing or taking bobcats. Furthermore, regulation #324.B.2.a requires bobcat pelts to be presented for inspection. In order to be issued the legal possession seal, the regulation requires bobcats to be taken legally in Colorado. Currently, trappers are being issued seals on bobcats taken illegally and there is no way to enforce this without the use of extensive resources.

14. Bobcats naturally reduce rodent populations which is beneficial for the majority of Colorado residents. This helps eliminate the need for toxic rodenticides that recent literature shows are significantly and indiscriminately poisoning non-target species such as domestic pets and wildlife.

References:

1. COLORADO PARKS & WILDLIFE. Retrieved from http://cpw.state.co.us/learn/Pages/SOC-LynxSighting.aspx
3. USFWS & CPW. How to Avoid Incidental Take of Lynx While Trapping or Hunting Bobcats and Other Fur Boreurs. Retrieved from http://cpw.state.co.us/Documents/Hunting/SmallGame/AvoidLynxTake.pdf


12. USFWS & CPW. How to Avoid Incidental Take of Lynx While Trapping or Hunting Bobcats and Other Furbearers. Retrieved from http://cpw.state.co.us/Documents/Hunting/SmallGame/AvoidLynxTake.pdf


detection probability of wild felids. Ecological Applications, 25(7), 1880-1895. doi:10.1890/14-1664.1
37. Colorado Constitution, § Article XVIII Section 12b.
WHO MIGHT BE INTERESTED IN THIS ISSUE? HAVE YOU COMMUNICATED WITH ANY OTHER INTERESTED PARTIES? WHAT INPUT HAVE YOU RECEIVED?

Colorado residents, visitors to Colorado, and animal welfare groups are interested in this issue. I have communicated with hundreds of citizens in the past year and a half (CO residents and nonresidents) who are interested in this issue. Almost all of the parties I have spoken to had no idea that bobcats were legally allowed to be hunted or trapped in the state of Colorado. These parties were appalled that recreational and commercial bobcat hunting was permitted in Colorado and eagerly support a ban. In addition, I have spoken to dozens of people in southwestern Colorado—where there is habitat suitable for lynxes—who are extremely concerned with protecting the species from the detrimental effects of recreational and commercial bobcat hunting and trapping. These parties also support a ban on recreational and commercial bobcat hunting in Colorado.

ALTERNATIVES: PLEASE INDICATE THE PROBABLE OUTCOME IF THIS PETITION IS ACCEPTED, AS WELL AS THE IMPACT OF ALTERNATIVES TO THIS PETITION:

1. Bobcat populations will likely stabilize and become more genetically diverse in Colorado if the petition is accepted. According to the CPW Furbearer Management Report 2016-2017 Harvest Year bobcat populations appeared to be increasing in some regions of Colorado, while decreasing in others between 2012 to 2016, but this is not based on scientific data and the overall status and demographics of the population is unknown. Scientific evidence shows that wild animal populations self-regulate based on food availability and carrying capacity of the environment.41 42

2. Preferential selection of bobcat harvests by hunters and trappers negatively impacts the population and is unsustainable.

3. Lynx populations would likely increase in Colorado if the petition is accepted. CPW estimates there are currently only as few as 150 to 250 Canada lynxes in the state. If the petition is not accepted, lynxes will likely continue to be harmed or killed in violation of federal law.

4. CPW will be able to eliminate the resources currently required for issuing seals for bobcat pelts and monitoring illegal methods of take if the petition is accepted.

5. The current management system is not consistent with the North American Model of Wildlife Conservation. Bobcats are being killed by methods that inflict prolonged, unnecessary pain and suffering. They are also being commercialized for their pelts so hunters and trappers can derive financial profit.

References:


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