



2200 N. 33rd St. • P.O. Box 30370 • Lincoln, NE 68503-0370 • Phone: 402-471-0641

## MINUTES

June 17, 2022

The Nebraska Game and Parks Commission met in the Pebble Beach Conference room at Holiday Inn Express Lexington, NE for the transaction of business, advance public notice having been given through release to news media and official public notice published in the Lincoln Journal Star on June 3, 2022.

The meeting was called to order at 8:00 A.M. Chairman Berggren advised this meeting was being held in conformance with the State Open Meeting Act and the act was available for review on the table at the back of the room. Members present: Chairman Pat Berggren, Broken Bow; Doug Zingula, Sidney; Rick Brandt, Lincoln; Ken Curry, Columbus; John Hoggatt, Kearney; Scott Cassels, Omaha; and Bob Allen, Eustis. Dan Kreitman and Donna Kush were absent.

Minutes of the business meeting held April 28, 2022 were reviewed.

Motion by Mr. Zingula and seconded by Mr. Hoggatt to approve the meeting minutes. Voting aye: Zingula, Allen, Cassels, Hoggatt, Brandt, Curry and Berggren; Kush and Kreitman absent; voting nay: None. Motion carried.

Financial vouchers for April and May were reviewed.

Motion by Mr. Brandt and seconded by Mr. Allen to approve the financial vouchers. Voting aye: Allen, Cassels, Curry, Hoggatt, Brandt, Zingula and Berggren; Kush and Kreitman absent; voting nay: None. Motion carried.

### Director's Report

Director McCoy thanked Bob and Carla Allen for hosting the group at their home on Wednesday night. Thanks to Aric Riggins and Jeff Fields for leading the field trip yesterday, Dirk Benedict and Fisheries staff for the great fish fry last night, and Chairman Berggren and family for hosting the dinner at their cabin.

Awards- A 45-year service award was presented to Bob Meduna.

Director McCoy gave an update on RAWA-Recovering America's Wildlife Act bi-partisan approval in the US House of Representatives.

**TIME OUTDOORS IS TIME WELL SPENT**

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The Director announced the next Commission meetings will be at Fort Robinson State Park on August 30 and 31.

### End Director's Report

Chairman Berggren read staff recommendations to call for a public hearing at the August Commission meeting to consider amendments to Commission Order, C14 Mountain Sheep.

Motion by Mr. Curry, seconded by Mr. Brandt to approve staff recommendations. Voting aye: Allen, Cassels, Curry, Hoggatt, Brandt, Zingula and Berggren; Kush and Kreitman absent; voting nay: None. Motion carried.

Communications Assistant Division Administrator Shawna Richter-Ryerson and Videographer Nick Sauvageau gave a presentation on the agency's audio-video communications.

Chairman Berggren opened the public hearing to consider amendments to Chapter 4, Wildlife Regulations, Section 001 General Wildlife Regulations at 8:36 AM. Wildlife Division Administrator Alicia Hardin reviewed staff recommendations. Dustin O'Hanlon of Elwood, NE was present to share his comments related to the proposed prohibition of possessing a night scope during the 9-day firearm season for deer. He has a day/night combo scope and shared how popular they are. As an avid predator hunter, he does not want to have to own a separate night and day scope. There was no other public testimony. After Hardin answered a variety of Commissioner questions, the public hearing was closed at 9:15 AM.

Motion by Mr. Allen and seconded by Mr. Cassels to approve staff recommendations. Voting aye: Cassels, Hoggatt, Brandt, Curry, Zingula, Allen and Berggren; Kush and Kreitman absent; voting nay: None. Motion carried.

Chairman Berggren opened the public hearing to consider amendments to Chapter 4, Wildlife Regulations, Section 037 Mountain Lions at 9:16AM. Furbearer and Carnivore Program Manager Sam Wilson reviewed staff recommendations which include a Pine Ridge hunting season with a four lion/two female harvest limit for 2023. There were only ten comments that were received by the deadline. Five were in general support for holding a season, but some preferred a higher harvest limit or a proposed season in the Niobrara River Valley. The other five were opposed to having a season at all. Those submitted for the record (3) include an email from Shane Forney of Lincoln, NE -requesting a higher lion harvest quota to reduce mountain sheep depredation, letters from the Humane Society of the US and Colin Croft 210087 Turkey Drive Gering, NE -opposing hunting of mountain lions. Exhibits are attached. There was no public testimony at the meeting. After answering all the Commissioners' questions, the hearing was closed at 9:52 AM.

Motion by Curry, seconded by Zingula to approve staff recommendations. Voting aye: Curry, Hoggatt, Zingula, Cassels and Allen; voting nay: Brandt and Berggren; Kush and Kreitman absent. Motion carried.

**TIME OUTDOORS IS TIME WELL SPENT**

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The Chairman called for a ten-minute recess.

Chairman Berggren opened the public hearing to consider amendments to Chapter 2, Fisheries Regulations, Section 006 Sportfishing at 1006 AM. Fisheries Division Administrator Dean Rosenthal reviewed staff recommendations. There were no public comments received by the deadline or public testimony offered at the meeting, the hearing was closed at 10:12 AM.

Motion by Mr. Allen and seconded by Mr. Hoggatt to approve staff recommendations. Hoggatt, Brandt, Curry, Zingula, Allen, Cassels and Berggren; Kush and Kreitman absent; voting nay: None. Motion carried.

Chairman Berggren opened the public hearing to consider amendments to Wildlife Commission Orders C002 Turkeys. Big Game Program Manager Luke Meduna reviewed staff recommendations. Scott Croner of Papillion, NE testified that he did not feel the reduction in harvest limits was sufficient due to the declining turkey populations in Nebraska. After many Commissioner questions and comments, the hearing was closed at 10:56 AM.

Motion by Mr. Curry and seconded by Mr. Zingula to approve staff recommendations. Voting aye: none; voting nay: Curry, Hoggatt, Zingula, Cassels, Allen; Brandt and Berggren; Kush and Kreitman absent. Motion failed.

Motion by Mr. Allen seconded by Mr. Brandt to call for a public hearing at the August Commission meeting to consider amendments to Wildlife Commission Orders C002 Turkeys. Voting aye: Hoggatt, Zingula, Cassels, Allen Brandt, Curry and Berggren; voting nay: none. Kush and Kreitman absent. Motion carried.

Chairman Berggren opened the public hearing to consider amendments to Commission Orders C005 Small Game at 11:17 AM. Wildlife Division Administrator Alicia Hardin reviewed staff recommendations. There was no public testimony, and the hearing was closed at 11:25 AM.

Motion by Mr. Allen and seconded by Mr. Brandt to approve staff recommendations. Voting aye: Brandt, Curry, Zingula, Allen, Cassels, Hoggatt and Berggren; voting nay: None. Kush and Kreitman absent. Motion carried.

Public Information Officer Julie Geiser shared what she has been doing for west-central communications and outreach.

Aquatic Habitat Program Manager Jeff Jackson gave a presentation showcasing the agency's Aquatic Habitat Program, which was the first in the country funded by the implementation of the state's Aquatic Habitat Stamp.

Commissioner Curry excused himself from the meeting at 12:00 PM.

Public Comment Period: Julie Harris of Bike Walk Nebraska was present to discuss the importance of the Cowboy Trail to local community economies and why it is important trail development and improved maintenance should be a priority. Implementation of more “counters” on the trail would help in determining how much the trail is used.

Committee reports were tabled.

#### Executive Session

Motion by Mr. Cassels and seconded by Mr. Brandt to enter executive session for the purpose of discussing personnel at 12:15 PM, asking the Director and Deputy Director to participate. Voting aye: Brandt, Zingula, Allen, Cassels, Hoggatt and Berggren; voting nay: None. Curry, Kush and Kreitman absent. Motion carried.

The Chairman called the meeting back into regular session at 1:15 PM.

#### Adjournment

Motion by Mr. Brandt and seconded by Mr. Allen to leave Executive Session and adjourn the meeting at 1:16 PM. Voting aye: Zingula, Allen, Cassels, Brandt, Hoggatt and Berggren; voting nay: None. Curry, Kush and Kreitman absent. Motion carried.

I hereby certify the foregoing is a true and correct copy of action taken by the Nebraska Game and Parks Commission at its meeting held June 17, 2022.



Timothy McCoy, Director

**NOTICE OF PUBLIC HEARINGS**

In accordance with Neb. Rev. Stat. 84-907, public hearings conducted by the Nebraska Game and Parks Commission, will be held on June 17, 2022 at the Holiday Inn Express 2605 Plum Creek Parkway Lexington, NE prior to consideration and/or enactment of the following:

Pursuant to Neb. Rev. Stat. Sections §§ Neb. Rev. Stat. §§ 37-301 through 37-316, 37-353, 37-401, 37-403 through 37-406, 37-411, 37-412, 37-413, 37-414, 37-418, 37-426 through 37-429, 37-447 through 37-453, 37-457, 37-527, 37-455 through 37-461, 37-463, 37-464, 37-477 through 37-479, 37-482.01, 37-497, 37-498, 37-501 through 37-503, 37-508, 37-509, 37-512, 37-514, 37-520, 37-525, 37-527, 37-529, 37-532, 37-534, 37-537, 37-540, 37-547, 37-560, 37-563, 37-701, 37-708, 37-802 through 37-811; a public hearing will be held at 8:30 AM to consider amendments to Title 163, Nebraska Administrative Code Chapter 4, entitled Wildlife Regulations, Section 001 - General Regulations Governing Wildlife Species to add options for landowners to identify the land they own or lease after January 2023. Proposed amendments would make it unlawful to possess night vision scopes while hunting game animals and game birds. Clarify language to allow elk hunters to hunt with a centerfire rifle during the November firearm deer season. Add language to make it illegal to create a baited area on lands owned or controlled by the Nebraska Game and Parks Commission. Make it mandatory to check all turkeys after February 1, 2023. Allow antelope taken during the October firearm season to be checked in using the telephone or internet check station process. Clarify language that animals trapped must be removed when checking traps. Adding the U.S. Forest Service to federal lands where it is unlawful to set body-gripping traps with a jaw spread larger than five inches with exceptions. Changing the novice hunter education program for upland game birds to be open to all ages and extend the dates. Clarify language in the Hunters Helping the Hungry program on record keeping and reimbursement processes.

Pursuant to Neb. Rev. Stat. Sections §§37-301, 37-304, 37-308, 37-308.01, 37-314, 37-228, 37-404, 37-405, 37-411, 37-426, 37-452, 37-473, 37-613, a public hearing will be held at 8:45 AM to consider amendments to Title 163, Nebraska Administrative Code Chapter 4, entitled Wildlife Regulations, Section 037 Mountain Lions to make changes to season and auxiliary dates and adjust the number of permits issued during the lottery.

Pursuant to Neb. Rev. Stat. Sections §§37-301, 37-304, 37-305, 37-308, 37-314, 37-315, 37-344, 37-411, 37-426, 37-4,104, 37-4,107, 37-4,109, 37-4,111, 37-501 through 37-504, 37-508 and 37-543 through 37-545 a public hearing will be held at 9:00 AM to consider amendments to Title 163, Nebraska Administrative Code Chapter 2, entitled Fisheries Regulations, Sport Fishing Section 006 Rules relating to Sport Fish definitions, bag, possession and length limits, snapping turtles, mussels, transport and possession, archery fishing, paddlefish, underwater spearfishing, set lines, limb lines, ice fishing, snagging, refuge lakes, border waters, legal nets, and special areas.

Pursuant to Neb. Rev. Stat. Sections §§37-314, 37-404, 37-414, 37-447, 37-457, 37-502, 37-508, 37-527, 37-534, 37-701, a public hearing will be held at 9:15 AM to consider amendments to Wildlife Commission Orders C02, Wild Turkey regarding changes to personal permit limits for the spring season, and changes to fall bag limits and season dates.

Pursuant to Neb. Rev. Stat. Sections §§37-314, 37-404, 37-414, 37-447, 37-457, 37-502, 37-508, 37-527, 37-534, 37-701, a public hearing will be held at 9:30 AM to consider amendments to Wildlife Commission Orders C05, Game Birds (not including turkey, coots and migratory waterfowl), furbear-

**\*\*\* Proof of Publication \*\*\***

ers, cottontail rabbit and squirrels regarding increasing the river otter season-closing trigger number. Copies of the proposed regulations and the Fiscal Impact Statement shall be available for public inspection at the Game and Parks Commission office and the Office of the Secretary of State. Copies of the proposed Commission Order changes shall be available for public inspection at the Game and Parks Commission website at [www.outdoornebraska.gov](http://www.outdoornebraska.gov). All interested persons may attend and testify orally or by written submission at the public hearing. Interested persons or organizations may submit written comments prior to the hearing, which will be entered into the hearing record if they: 1) include a request to be included as part of the hearing record; 2) include the name and address of the person or organization submitting the comments; and 3) are received by 1:00 p.m. CT June 15, 2022 by Sheri Henderson at the Lincoln office, 2200 North 33rd Street, Lincoln, NE 68503-0370.  
Timothy McCoy, Director  
1075136 11 May 13 ZNEZ

Exhibit 2

From: Shane Forney <[sforney09@gmail.com](mailto:sforney09@gmail.com)>  
Date: June 9, 2022 at 17:04:07 CDT  
To: [henryrick@brandtexcavating.com](mailto:henryrick@brandtexcavating.com)  
Subject: Mountain lion population as it relates to Bighorn Sheep

Rick,

My name is Shane Forney, I am a resident and landowner in the state of Nebraska. My address is 1814 SW 38th Street, Lincoln, NE 68522. I strongly support increasing the mountain lion quota to reduce lion numbers in Bighorn sheep areas to help establish Bighorn populations in Nebraska. Please take this letter to be included in the hearing record for the meeting next Friday (6/19/2022).

Regards,

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Shane Forney

(402) 429-0051

[SForney09@gmail.com](mailto:SForney09@gmail.com)

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Exhibit 3

Colin Croft 210087 Turkey Drive Gering, NE 69341 RE: Public comment requested to be included as part of the hearing record, Nebraska Game and Parks Commission hearing June 2022 on 2023 mountain lion hunting/management plan Commissioners, I'm a lifelong Nebraskan and Nebraska Master Naturalist. I've enjoyed many of Nebraska's public natural resources during my life. I appreciate the work of the Nebraska Game and Parks Commission (NGPC) in administering these resources, and recognize the complicated nature of doing so—particularly regarding controversial issues like mountain lion management. For many years now, I've had the privilege of coexisting with mountain lions (MLs) on land I own in central Sioux County north of the Niobrara River, as well as near my home in the Wildcat Hills south of Gering. Proof of this coexistence comes from the extensive trail camera footage from both of these locations. I also hike and bike on much of the public land available in/near the Wildcats and the northern Pine Ridge, where I regularly encounter ML sign (tracks, scat and scrapes). So I write these comments from the perspective of someone directly in/on the "front lines" of ML recovery and activity here in Nebraska. True to their secretive/reclusive nature, I've only seen MLs in the form of trail camera images/video. Whether or not I actually see one directly, I greatly appreciate that they are there, fulfilling their ecological role as they had for tens of thousands of years before being killed/driven off as part of "predator control" in Nebraska and many other places. As you know, this is NGPC's ML management goal: The Commission's management goal is to maintain resilient, healthy, and socially acceptable mountain lion populations that are in balance with available habitat and other wildlife

species over the long term. A resilient and healthy mountain lion population is one that: 1) maintains a reasonable proportion of older age animals, 2) maintains a sufficient number of breeding females to recover from mortality events, 3) has healthy individuals with minimal burden from disease or malnutrition, 4) is in balance with available prey, and 5) maintains genetic variability and connectivity to other populations. (emphasis mine) Bottom line: I find sport hunting of MLs unacceptable. NGPC has procedures in place for specific "problem" MLs, which is sufficient to handle ML-related incidents, depredations, etc. Beyond these, MLs should be left to live as they will, coexisting with us, without being hunted as a "game" animal. My view is based on my values/view of the world, as is the view of those who support ML hunting. My view is no more "emotional" than those who support sport hunting of MLs. "Emotion" has little to do with my views/values regarding MLs. My view is no less "scientific" than those who support sport hunting of MLs, since "science"—by definition— never tells us what we "should" do (although it can certainly inform our decisions). Just like ML hunting advocates, I can cite plenty of science suggesting that ML sport hunting fails to achieve the "management" objective frequently offered in support of it. I see no good reason to allow sport hunting of MLs in Nebraska, and I would request that the Commission either eliminate or minimize the proposed harvest quotas for the 2023 season. Respectfully submitted, /s/ Colin Croft, June 13, 2022

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Exhibit 4

**From:** [Hstewart@humanesociety.org](mailto:Hstewart@humanesociety.org) <[Hstewart@humanesociety.org](mailto:Hstewart@humanesociety.org)>

**Sent:** Wednesday, June 15, 2022 10:29 AM

**To:** Henderson, Sheri <[sheri.henderson@nebraska.gov](mailto:sheri.henderson@nebraska.gov)>

**Subject:** Online Comment on Proposed Regulation

Comments From:

Name: Haley Stewart <[Hstewart@humanesociety.org](mailto:Hstewart@humanesociety.org)>

Address: 700 Professional Drive  
Gaithersburg, MD 20879

Phone: 2406600427

Proposed NAC Changes Being Commented on: Title: 163 Chapter(s): 004 Section(s): 037

Hearing Information Hearing Date: 00-00-0000

Hearing Time:

Comments:

I request that the following comments on behalf of the Humane Society of the United States and our supporters in Nebraska be included in the hearing record. I am also emailing a copy of these comments with citations



to Sheri Henderson.

Dear Director McCoy and Members of the Commission:

On behalf of the Humane Society of the United States and our Nebraska supporters, we thank you for the opportunity to submit the following comments regarding the 2023 mountain lion hunting season proposal (Chapter 4, Wildlife Regulations, Section 037, Mountain Lions). While we support Nebraska Game and Parks' proposed reduction in mountain lion hunting permits, we are strongly opposed to the hunting of mountain lions in Nebraska. Given the most recent population estimate of just 23 adult and subadult mountain lions in the Pine Ridge, another hunting season on these rare, native carnivores is unnecessary and will likely have devastating impacts on the sustainability of the population. Therefore, we ask this Commission to oppose the proposal and, instead, prohibit the trophy hunting of mountain lions in the state.

Human-caused mortality, primarily from recreational hunting, has cut Nebraska's Pine Ridge mountain lion population nearly in half in recent years, as previous estimates show. Nebraska Game and Parks' ("NGP") most recent estimate for the population was just 33 total mountain lions, and only 23 of these cats are old enough to be hunted. Since 2021, 10 female lions have died primarily from hunting and poaching (i.e. "incidental trapping"). Five of these females were adults, accounting for half of the region's entire adult female population. NGP acknowledges that this high level of mortality harms the population's resiliency. We are teetering on population levels so low that we are in danger of losing this self-sustaining population altogether if hunting is allowed to continue. Allowing the hunting of Nebraska's mountain lions to continue is irresponsible wildlife management, and not in the best interest of the state's wildlife or residents.

Extensive research on mountain lion populations in other states reveals that such small populations can lead to a genetic bottleneck, which can lead to deformities and sterile male lions, and the subsequent loss of a breeding population. NGP must not rely on transient mountain lions from other states to prop up the Pine Ridge population and prevent potential inbreeding. If this Commission authorizes another hunt on these animals, it could result in the loss of a self-sustaining population from the Pine Ridge for the second time in history.

Furthermore, the agency does not currently have an accurate, up-to-date population estimate for mountain lions in the Pine Ridge because NGP's most recent population estimate was conducted in 2021. Therefore, the current hunting season proposal is not compatible with the Commission's statutory obligation to perform "due investigation" and give "due regard" to the "distribution, abundance...breeding habits...causes of depletion...and other conditions affecting the protection, preservation, and propagation" of Nebraska's mountain lions prior to issuing any order. We accordingly request that the Commission not approve the proposal and protect mountain lions from hunting now and in perpetuity. At the very least, the Commission must not approve a 2023 hunt so that NGP may evaluate the effects of mortality on the Pine Ridge mountain lion population and produce an updated

estimate.

In addition to concerns about the small population size, the Commission must not approve the 2023 hunting season on mountain lions because doing so is harmful to other wildlife and to Nebraskans. Conflicts with mountain lions are practically nonexistent in Nebraska, and polling conducted by Remington Research Group in 2021 shows that the majority of Nebraskans would prefer increased education about coexisting with mountain lions rather than recreational hunting of them.

Additionally, hunting of mountain lions is not only useless in preventing conflicts with these cats, because it is indiscriminate and does not remove problem cats, but can actually lead to increased conflicts with humans, pets, and livestock. For example, if a mother mountain lion is killed, her dependent kittens will be orphaned and lack the necessary skills they need to survive. If they do somehow manage to survive, they are likely inexperienced at hunting natural prey and will seek out easier targets such as livestock. Nebraskans may already kill any lion involved in a conflict, and effective, non-lethal strategies and tools are readily available to prevent conflicts from happening in the first place.

Mountain lions are also critical to supporting the health of other wildlife and Nebraska's wild spaces. Of particular note is the benefit mountain lions provide in efforts to combat chronic wasting disease ("CWD") in wild ungulate herds. Research shows that robust populations of mountain lions can help reduce CWD in deer and elk herds, because they are able to target the sick individuals before clinical symptoms even present. Research found that adult deer preyed upon by mountain lions were more likely to have CWD than deer shot by hunters. Maintaining a robust mountain lion population will help the state reduce CWD and allow hunters to acquire disease-free meat. The U.S. Centers for Disease Control and Prevention recommend hunters not consume meat from CWD-infected deer.

Mountain lions also reduce vehicle collisions with deer, saving drivers \$1.1 million in collision costs annually in South Dakota alone. Meanwhile, the \$5,000 NGP expects to generate from the 2023 hunt likely does not even cover the cost of administering the hunt.

Nebraska's Pine Ridge mountain lion population is an important component of our natural wild heritage and deserves protection against unnecessary killing. In addition to the information provided above, we are including the attached appendix that further details the harm a 2023 hunt on mountain lions could cause. Rather than recreational hunting of mountain lions, we encourage NGP to prioritize non-lethal strategies for managing this population of native carnivores. We urge the Commission not to approve the proposal, and to prohibit a hunting season on mountain lions in 2023 and future years. Thank you for your consideration.

Sincerely,

Haley Stewart  
Program Manager, Wildlife Protection  
The Humane Society of the United States

## Appendix

I. NGP's proposed hunt threatens the survival of the Pine Ridge mountain lion population.

In Nebraska, mountain lions were once extirpated as a result of heavy hunting and poaching. In 2007, NGP documented a mountain lion kitten in the Pine Ridge, effectively showing that a breeding population had once again established itself in the region. Today, NGP estimates that only 23 adult and subadult mountain lions reside in the Pine Ridge, or nearly half the 2017 population estimate of 59 mountain lions. This dramatic decrease in population size is the result of human-caused mortality, primarily from recreational hunting.

Another hunt on this very small population could devastate the Pine Ridge mountain lion population. If NGP continue with a hunt in 2023, an additional four mountain lions will be gone from the Pine Ridge, or nearly 20% of the mature population, further limiting their ability to breed and sustain the population. This quota continues to exceed sustainable levels, which experts believe is approximately 12-14% of the adult and subadult mountain lion population.

Without a self-sustaining mountain lion population with breeding females, the Pine Ridge population will be killed off from the state for the second time in history. We know from examples in California and Florida that such low population numbers typically lead to inbreeding, causing genetic deformities in the population and sterility in male mountain lions, which results in an even smaller population that can no longer sustain itself. While the Pine Ridge population benefits from its proximity to populations in neighboring states, we must not rely on dispersing individuals to maintain Nebraska's mountain lion population as it cannot be considered self-sustaining.

Additionally, NGP is unnecessarily and arbitrarily limiting the Pine Ridge population. Habitat analysis shows that Nebraska's wild spaces, away from human communities, could provide sufficient habitat for hundreds of mountain lions, most notably in the Pine Ridge region. NGP's modeling likely underestimates available habitat and overestimates mountain lion densities as it only accounts for individuals living at the heart of the Pine Ridge in the most optimal habitat and largest densities. Because of the abundance of available habitat and enormous prey base, including deer who are responsible for far more damage than mountain lions, the Pine Ridge mountain lion population must be allowed to grow and stabilize to healthy, sustainable numbers without the needless suppression from a hunt. Moreover, NGP's population and density estimates must be updated to reflect adult and subadult numbers, as these are the only animals that may be legally hunted in Nebraska. Kitten numbers, which are not actually measured, inflates population and density estimates and should not be included when considering hunting quotas.

Mountain lions have just barely started to return to Nebraska, but hunting may once again lead to the localized extinction of this iconic species. Ongoing recovery in the Pine Ridge and additional small pockets of the state is predicated

on their protection from legalized hunting. Another hunting season on the Pine Ridge population will result in mortality levels that exceed a sustainable threshold, threatening the species' long-term survival as well as inhibiting their ability to recolonize parts of their historic range in states south and east of Nebraska.

II. NGP must not authorize a hunting season on mountain lions as the practice is harmful to the mountain lions themselves as well as other wildlife.

Recreational hunting is the greatest source of mortality for mountain lions throughout the majority of their range where they are legally hunted, including in Nebraska. These rare, native carnivores are primarily killed as trophies for hunters, not for subsistence. The practice is harmful to more than just the wild cats who are killed. Conservation biologists have derided this practice as unnecessary and wasteful. Batavia et al. (2018) write: Compelling evidence shows that the animals hunted as trophies have sophisticated levels of "intelligence, emotion and sociality" which is "profoundly disrupted" by hunting. For these reasons, NGP must not allow hunting of mountain lions in our state:

1) Hunting increases complaints and livestock depredations: Mountain lion conflicts with livestock in Nebraska have been extremely few to non-existent, according to NGP mortality data. Recreational hunting, which is indiscriminate, is not an effective tool to prevent livestock depredations as numerous studies in the U.S. have shown. In other words, the practice simply kills mountain lions randomly for sport but does not actually target the individuals who are involved in livestock depredations.

In fact, as we detail below, if hunters do select for specific mountain lions, it is for the large, territorial males, which can have harmful effects on human communities. Moreover, NGP already allows any mountain lion that poses an immediate threat or is found in an urban area or farmstead to be killed. Therefore, a hunting season is entirely unnecessary to reduce potential threats to humans and livestock and may, in fact, exacerbate conflicts.

Hunting of mountain lions can result in increased conflicts as the practice is disruptive to the sensitive social structure that ensures stability in their population.

The biggest killers of livestock in Nebraska, such as weather, illness and birthing problems, cause massive losses in Nebraska (97.08% all unwanted cattle losses), while all mammalian carnivores together caused 0.09% all unwanted cattle losses.

Killing off the established, territorial mountain lions in Nebraska's Pine Ridge will only create more conflicts for human communities and livestock operations in and around the Pine Ridge. Killing these lions opens up their territory and invites young mountain lions to come in. These young lions are less experienced at hunting natural prey and more likely to be involved in conflicts.

A Washington state study shows that as mountain lion complaints increased, wildlife officials lengthened seasons and increased

bag limits to respond to what they believed was a rapidly growing lion population. However, the public's perception of an increasing population and greater numbers of livestock depredations was actually a result of a declining female and increasing male population. Heavy hunting of lions skewed the ratio of young males in the population by causing compensatory immigration and emigration by young male lions, even though it resulted in no net change in the population.

Study authors found that the hunting of mountain lions to reduce complaints and livestock depredations had the opposite effect. Killing lions disrupts their social structure and increases both complaints and predation on livestock. Peebles et al. (2013, p. 6) write:

. . . each additional cougar on the landscape increased the odds of a complaint of livestock depredation by about 50. However, contrary to expectations, each additional cougar killed on the landscape increased the odds by about 50 or an order of magnitude higher. By far, hunting of cougars had the greatest effects, but not as expected. Very heavy hunting (100% removal of resident adults in 1 year) increased the odds of complaints and depredations in year 2 by 150% (340).

Hunting disrupts mountain lions' sex-age structure and tilts a population to one that is composed of younger males, who are more likely to engage in livestock depredations than animals in stable, older population.

Furthermore, few Nebraska livestock owners use non-lethal methods to protect their cattle and sheep.

Across the western U.S., ranchers and livestock operators are making significant strides with non-lethal methods, including tools and changes to husbandry practices, that prevent the loss of livestock from native carnivores. These tools are effective, inexpensive, and avoid losses from occurring in the first place, rather than dealing with conflicts after livestock have already been killed.

2) Hunting is unsustainable and cruel: Large-bodied carnivores are sparsely populated across vast areas, invest in few offspring, provide extended parental care to their young, have a tendency towards infanticide, females limit reproduction and social stability promotes their resiliency. Human persecution affects their social structure, and harms their persistence.

Research shows that hunting results in additive mortality—hunters increase the total mortality to levels that far exceed what would occur in nature. In fact, the effect of human persecution is "super additive," meaning that hunter kill rates on large carnivores has a multiplier effect on the ultimate increase in total mortality over what would occur in nature due to breeder loss, social disruption and its indirect effects including increased infanticide and decreased recruitment of their young. When hunters remove the stable adult mountain lions from a population, it encourages subadult males to immigrate, leading to greater aggression between cats and mortalities to adult females and subsequent infanticide.

3) Hunting is particularly harmful to kittens and their mothers: Biologists maintain that females are the most important demographic of a lion population; they ensure the continuation of the species. Unfortunately, female mountain lions are frequent victims of hunting, both directly from the hunter, and indirectly from social chaos. In heavily hunted populations such as in the Pine Ridge, female mountain lions experience higher levels of intraspecific aggression (fights with other cats) resulting in predation on themselves and their kittens. Over-hunting harms a population's ability to recruit new members, especially if too many adult females are removed. The loss of adult females ensures the death of orphaned kittens by starvation, dehydration, predation or exposure. Kittens up to 12 months of age are likely incapable of dispatching prey animals on their own. Thus, a hunter or trapper kills more than just the animal in the crosshairs: hunting causes a sudden disruption in mountain lion social structures that leads to additional mortalities that are never counted in states' hunting quotas.

4) Hunting harms entire mountain lion communities: A recent, seminal study of mountain lions shows that they are quite social and live in "communities," with females sharing kills with other females and territorial males, while males may help protect the kittens they've fathered from incoming, competing males. Disrupting these communities can cause negative effects and increase conflicts by causing social chaos within their populations. Hunting can easily destabilize mountain lion populations, causing increased conflicts with humans, pets and livestock.

5) Hunting is unnecessary, as mountain lions are a self-regulating species: Mountain lions occur at low densities relative to their primary prey, making them sensitive to bottom-up (prey declines) and top-down (human persecution) influences. In order to survive, their populations must stay at a smaller size relative to their prey's biomass or risk starvation. They do this by regulating their own numbers. When prey populations decline, so do mountain lion populations. Mountain lion populations also require expansive habitat, with individual cats maintaining large home ranges, or territories, that overlap with one another. Because of their dependence on prey numbers and territorial nature, recreational hunting is not necessary to limit mountain lion densities to sustainable levels.

6) Killing large numbers of mountain lions halts their ability to create trophic cascades in their Nebraska ecosystems, which benefits a wide range of flora, fauna and people: Mountain lions serve important ecological roles, including providing a variety of ecosystem services. As such, conserving these large cats on the landscape creates a socio-ecological benefit that far offsets any societal costs. Their protection and conservation has ripple effects throughout their natural communities. Researchers have found that by modulating deer populations, mountain lions prevented overgrazing near fragile riparian systems, resulting in greater biodiversity. Additionally, carrion left from lion kills feeds scavengers, beetles, foxes, bears and other wildlife species, further enhancing biodiversity.

Mountain lions, as with most large carnivores, are also considered a keystone species because they help drive the ecosystems in which they live. As a large predator, mountain lions regulate many of the other species in their communities, including herbivores, who then regulate the plant community. Wildlife managers and biologists also consider mountain lions to be an 'umbrella' species - by protecting lions and their large habitat, a wide array of additional plants and animals in this habitat will also be protected.

7) Mountain lions remove deer infected with chronic wasting disease: Mountain

lions can help maintain the health and viability of ungulate populations by preying on sick individuals, reducing the spread of disease. For example, a study in Rocky Mountain National Park, researchers found lions preyed on mule deer infected with chronic wasting disease (CWD).

The study concluded that adult deer preyed upon by lions were more likely to have CWD than deer shot by hunters. According to the study, "The subtle behaviour changes in prion-infected deer may be better signals of vulnerability than body condition, and these cues may occur well before body condition noticeably declines." This suggests that mountain lions select for infected prey and may be more effective at culling animals with CWD than hunters who rely on more obvious signs of emaciation that occur in later stages of the disease. Moreover, the lions consumed over 85 percent of carcasses, including brains, thereby removing a significant amount of contamination from the environment.

This ecosystem benefit is increasingly important as CWD infection continues to infiltrate ungulate herds in Nebraska and neighboring states. A reduction in the lion population could eliminate one of the best defenses against the spread of this deadly disease. Mountain lions also reduce vehicle collisions with deer, saving drivers \$1.1 million in collision costs annually in South Dakota alone.

8) Killing mountain lions is not economically sound or supported by the majority of Americans who want to see wildlife protected: Killing mountain lions deprives citizens of their ability to view or photograph wild mountain lions. Nonconsumptive users are a rapidly growing stakeholder group who provide immense economic contributions to the communities in which they visit.

The public values mountain lions and views them as an indicator of healthy environments while posing little risk to people living near them. Americans highly value wildlife and are concerned about their welfare and conservation. Surveys also show that the majority of Americans, including 62% of Midwesterners, do not support trophy hunting. Allowing a hunting season on mountain lions to appease a handful of hunters is not in the best interest of Nebraskans who would prefer these large cats remain on the landscape, without threat of persecution. It further abdicates the Commission's statutory obligation to give "due regard" to the "economic value" of mountain lions - not only to hunters, but to all Nebraskans. Neb. Rev. Stat. Ann. § 37-314.

III. NGP must prohibit recreational hunting of lions with hounds as the

practice is particularly unsporting and harmful to both the mountain lion and the hounds, as well as to kittens and non-target wildlife.

NGP must prohibit the use of hounds to hunt mountain lions in Nebraska. Using radio-collared trailing hounds to chase mountain lions and bay them into trees or rock ledges so a hunter can shoot these cats at close range is unsporting, unethical and inhumane. Hounds kill kittens, and mountain lions often injure or kill hounds. The practice is exceedingly stressful and energetically taxing to mountain lions.

To escape from the hounds, lions use evasive maneuvers such as running in figure eights, scrambling up trees or steep hillsides and using quick turns to evade the pursuing pack of barking hounds. As a result, lions could exceed their aerobic budgets causing their muscles to go anaerobic (while hounds are capable of running a steady pace with little ill effect). For every one minute the hounds chased a mountain lion, it cost the cat approximately five times what would have been expended if the cat had been hunting. A 3.5-minute chase, according to Bryce et al. (2017), likely equaled 18 minutes of energy the mountain lion would have expended on hunting activities necessary to find prey.

Hunting mountain lions with hounds is not considered "fair chase" hunting by most. Fair chase hunting is predicated upon giving the animal an equal opportunity to escape from the hunter. The use of hounds provides an unfair advantage to hunters who rely on hounds to do the bulk of the work in finding and baying a lion. Additionally, hounds chase and stress non-target wildlife, such as deer and porcupines, and trespass onto private lands.

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Batavia et al. (2018) write: "...nonhuman animals are not only physically, socially, and emotionally disrupted [by trophy hunters], but also debased by the act of trophy hunting. Commoditized, killed, and dismembered, these individuals are relegated to the sphere of mere things when they are turned into souvenirs, oddities, and collectibles. We argue this is morally indefensible. Nonhuman animals are not mere objects but living beings with interests of their own, to whom we owe at least some basic modicum of respect (Regan, 1983). To transform them into trophies of human conquest is a violation of duty and common decency; and to accept, affirm, and even institutionalize trophy hunting, as the international conservation community seems to have done, is to aid and abet an immoral practice." Authors then argue that trophy hunting cannot be "presumed [to be] integral to conservation success."

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While rarely seen in the wild by the general public, wildlife photographers have brought mountain lions closer

to us than ever before. Photographers such as Steve Winter

(<https://www.stevewinterphoto.com/>)

and Tom Mangelsen (<http://mangelsen.com/>) are

helping people understand just how magnificent these iconic wild cats truly are.

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