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Nebraska Game and Parks 2200 North 33rd Street P.O. Box 30370 Lincoln NE 68503-0370

Nebraska Game and Parks Commission c/o Sheri Henderson, 2200 North 33rd Street, P.O. Box 30370 Lincoln NE 68503-0370 sheri.henderson@nebraska.gov

Emailed To: <a href="mailed-to:sheri.henderson@nebraska.gov">sheri.henderson@nebraska.gov</a>

**RE:** Nebraska Administrative Code Chapter 4, entitled Wildlife Regulations, Section 037 Mountain Lions, to hold a harvest season in 2025

**Dear Commission:** 

PINE RIDGE MT. LION UNIT

Because we want Pine Ridge to be a source or at least a stable population and so as to not experience the adverse issues associated with aggressive harvest rates, we request a "harvest" limit of not more than 5-7 adult/sub-adult lions, which we believe to be harvest caps that are within the possible range of intrinsic growth (11%-17% of adult/sub-adult population). Also, another factor to consider, when offsetting the intrinsic growth rate, is that we are supposed to count all human caused mortalities, not just hunter harvest – this would drop the harvest cap further down.

Nebraska Game and Parks (NEGP) did a new inventory in the Pine Ridge in 2023 and came up with 70 mt. lions (all ages). At least 3 were killed in the 2024 hunt, which reduces the numbers to 67 lions. NEGP staff's population theory estimates kittens as 34% of total population. Thus, we theoretically have 23 kittens and 44 adults/sub-adults. It is recommended that the harvest (and all human caused cougar death) stay within the intrinsic growth rate. Assuming a 17% intrinsic growth rate, you would have no more than 7.48 lions added to the population per year.

# Strange leap in Nebraska Game and Parks (NEGP) cougar population estimates

We question the jump in population estimate from 33 mt. lions of all ages in 2021 to 70 mt. lions of all ages in 2023. It seems Nebraska only does population estimates every several years and in the interim years, it speculates on the population. It appears the previous actual inventory was in May-June 2021 resulting in a count of 33 mt lions with 23 adults/sub-adults. Thus, the population is estimated to have more than doubled in 2 years, which is well beyond an intrinsic growth rate of 17%, the highest intrinsic growth rate found by scientists. We question the accuracy of both the 2021 and 2023 population estimates and the methods used by Nebraska to calculate them. We thus suggest being more conservative with the harvest caps chosen, as your population estimates may be inaccurate and may not be based in reliable methods.

## **Past Estimates**

In 2021 the Nebraska Game and Parks (when setting the season) estimated the cougar population as 34 lions, with 22 as adults or subadults. This was tiered to 2019 estimated population. In 2022 the Nebraska Game and Parks (when setting the season) estimated the cougar population as 33 with 23 adults/sub adults and 10 kittens. This was tiered to data from May-June of 2021. In 2023 the Nebraska Game and Parks (when setting the season) estimated population was 23 adults/sub-adults and 10 kittens. This was tiered to data from May-June of 2021.

NIOBRARA MT. LION UNIT

Because we want Niobrara to be a source or at least a stable population

and so as to not experience the adverse issues associated with aggressive harvest rates, we request a "harvest" limit not greater than 2-3 adult/sub-adult mt. lions, which we believe to be harvest caps that might be within the possible range of intrinsic growth (11%-17% of adult/sub-adult population).

It appears that Nebraska Game and Parks (NEGP) is proposing doubling the harvest cap at the Niobrara unit, without population surveys being done -- at least not since 2014, which year produced no population estimate. A new survey is scheduled for later this year. Thus, NEGP is using more speculative data to justify its' season. We question this choice.

In 2024 it is relying on counts of 27 unique individuals found in the past year (2023) from analyzing DNA found through various methods. This does not differentiate kittens from adults/sub adults. It would count transient mt. lions passing through, sub-adults that may have been evicted or killed by the adult male mt. lions and kittens that died or were killed during the course of the year. Thus, its' estimates may be grossly inflated. There are 4 mortalities in 2024 to reduce that to 23 lions. However, if we use this flawed data set (23 lions), theoretically that is 8 kittens and 15 adults/sub-adults. The 11%-17% interval is 2-3 lions, which reflects your current harvest cap. We believe the proposed cap of 4 mt. lions either sex, 2 female mt. lion sub-harvest cap is too high. We oppose this harvest as premature, until actual surveys confirm the theoretical population. Also to consider, when offsetting the intrinsic growth rate, is that we are supposed to count all human caused mortalities, not just hunter harvest.

#### WILDCAT HILLS MT. LION UNIT

We object to harvesting being allowed at Wildcat Hills until actual population estimates are completed this year. However, you may ignore our request. Because we want Wildcat Hills to be a source or at least a stable population and so as to not experience the adverse issues associated with aggressive harvest rates, if you must have a harvest, we request a "harvest" limit of 1-2 adult/sub-adult lions, which we believe to be harvest caps that are within the possible range of intrinsic growth (11%-17% of adult/sub-adult population).

It appears that Nebraska Game and Parks (NEGP) is proposing a new

hunting unit at the Wildcat Hills without population surveys being completed. 24 individual mountain lions were documented in Wildcat Hills during 2023. This does not differentiate kittens from adults/sub adults and it would count transient mt. lions passing through and sub-adults that may have been evicted or killed by the adult male lions. and kittens that died or were killed during the course of the year. Thus, its' estimates may be grossly inflated. Six lions have been killed since 2024 which gives us 18 lions. If we use this flawed data set (18 lions), theoretically that is 6 kittens and 12 adults/sub-adults. We oppose a harvest as pre-mature until actual surveys confirm the theoretical population, but 11%-17% of the theoretical population interval is 1-2 lions, not 3 lions. Also to consider, when offsetting the intrinsic growth rate, is that we are supposed to count all human caused mortalities, not just hunter harvest.

### SOUTH DAKOTA RESERVATION COUGAR POPULATIONS

The Pine Ridge Ecosystem extends from Nebraska into South Dakota and Wyoming. South Dakota now has a cougar breeding population and a hunting season on the Oglala Sioux Tribe lands (Pine Ridge Reservation). The Oglala Sioux Tribe has a year-long season with a harvest limit of 20 lions either sex or 10 female lions. It allows hound hunting. In 2023 seven mt. lions were taken. Rosebud Sioux Tribe also has breeding and resident lions and the Tribal Council last year adopted a hunting season of 5 mt lions either sex or 3 females.

We expect that the reservation and northern Nebraska populations are related to each other and changes to either effect the others.

## UNINTENDED CONSEQUENCES OF COUGAR HUNTING

We believe that mountain lions regulate their own population sizes. The older, adult males evict or kill the extra sub-adult males. Human management is not needed to provide for healthy and resilient mountain lion populations.

We believe that scientific research has shown that excessive sport hunting of mountain lion results in the unintended consequence of shifting the sex/age structure towards younger males. This shift results in increased male lion densities when young males immigrate in, thus ironically not reducing the male population. It also results in increased conflicts between

humans, livestock and pets with lions, as younger males are more densely distributed and less experienced. It can also redistribute females with young kittens, who move away from young males to protect kittens from infanticide. Females can use different prey than males, and moving females can change what wildlife they eat, at least when their kittens are young. A 2012 video by Mr. Wielgus on these issues can be found at <a href="https://www.youtube.com/watch?v=2\_ZD-PAKhSo">https://www.youtube.com/watch?v=2\_ZD-PAKhSo</a>

You also have some recent research in Nebraska that shows that coyotes killing of mule deer fawns lessens in the Pine Ridge, when compared to coyote fawn killing in areas of Nebraska without lions. This is because they scavenge mountain lion kills. So, the presence of mountain lions causes better fawn survival and the mule deer populations grow faster.

Mountain lions kill ungulates with chronic wasting disease and research in Wyoming shows they absorb a large percent of prions in their bodies without excreting the prions.

So, your desire to reduce conflicts with lions by recreational hunting, doesn't work if you kill too many of them. Your desire to increase prey species for hunters to kill by killing lions, may not work as you envision, in some instances.

#### PHAS POSITIONS

We object to hound hunting as cruelty to cougars and dogs. We object to it as not "fair chase" and a trespassing issue.

We want cougar populations in SD and NE managed as source populations so our states' smaller & disjunct populations can grow. We want new populations to be established in new states by immigration to the east, south and north.

Thanks

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Nancy Hilding President Prairie Hills Audubon Society