



MOUNTAIN LION FOUNDATION

Saving America's Lion

May 6, 2019

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Montana Fish, Wildlife and Parks Commission
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RE: 2019 Mountain Lion Quotas

Dear Fish and Wildlife Commission members,

The Mountain Lion Foundation asks that you consider the following concerns raised by the proposed 2019 Mountain Lion Quotas put forth by Montana Fish, Wildlife, and Parks for mountain lion (*Puma concolor*) hunting in Montana.

The views expressed are the official position of the Mountain Lion Foundation and the 7000 supporters of the organization.

Trophy hunting is the greatest source of mortality for mountain lions throughout the majority of their range in the United States.ⁱ Conservation biologists have established that the practice of trophy hunting is destructive and unnecessary, as it profoundly disrupts a population's social structure.ⁱⁱ Hunting mountain lions results in additive mortality – rates that far exceed what would happen in natureⁱⁱⁱ – and can lead to population instability and decline, as well as an increase in conflicts with humans and domestic animals.^{iv}

Additionally, one of the established rationales behind hunting mountain lions is to increase populations of prey animals like deer. While researchers have known for decades that mountain lions have minimal influence on deer populations, a recent study suggests that heavily hunted mountain lion populations may inadvertently put more pressure on deer populations than anticipated.^v For these reasons, we would politely request that the Commission consider ending hunting of mountain lions entirely.

The Foundation, which is strongly opposed to the hunting of mountain lions, respectfully requests that the Commission, at the minimum, reduce the current unsustainable quotas to below the sustainable limit established by researchers: 12-14% of the adult population. The Foundation asks that the limit be reduced to 10% or less than that of the known population to account for additional human-caused mortality including vehicle strike, incidental snaring or trapping, poaching, public safety removal and so on. Additionally, we request that the use of hounds to pursue mountain lions no longer be permitted as this practice is unethical and is not considered to be fair chase. We are also asking that the start of all of the mountain lion hunting seasons be delayed until December 1 to protect dependent young from being orphaned by hunters. Lastly, we want to emphasize that over-hunting mountain lions may not have the

desired impact of increasing mule deer populations. In fact, hunting of these apex predators may have the opposite effect.

The Foundation respectfully requests these actions for the reasons outlined below:

The quota should be reduced to 10% of the known population to account for any additional human-caused mortality.

In order to sustain viable populations of mountain lions, prevent human-wildlife conflict and avoid compromising the long-term viability by failing to account for all human-caused sources of mortality, hunting of adult lion populations should not exceed the intrinsic growth rate of the population of interest.^{vi} The intrinsic growth rate for mountain lion populations is established by researchers to be between 15-17%.^{vii} Setting human-caused mortality limits at 10% or less of the adult population facilitates the maintenance of home ranges and social stability, reducing the likelihood of increased conflict with humans and population decline.^{viii}

Additionally, trophy hunting of mountain lions leads to an increase in kitten mortality in heavily hunted populations.^{ix} Killing an adult female with kittens results in the death of her dependent young by dehydration, malnutrition, predation and exposure; even those who are at least six months to a year old^x. This impacts a population's ability to recruit new members if too many adult females are removed, making the population less resilient to hunting and other causes of mortality^{xi}; both human-caused and natural.

As such, we ask that, when making quota decisions in the future, the Commission votes to reduce the number of mountain lions that can be killed by hunters to 10% or less of the total adult population to account for additional human-caused mortality to maintain healthy, stable lion populations.

Killing mountain lions is unnecessary and results in an increase in conflicts with humans and domestic animals.

For Hunt Districts 530/590 and 560, the proposal presented by FWP suggests increasing the harvest quota from 10 to 15 for any legal lion and from 7 legal lions (with a sub-quota of 3 females) to 8 legal lions (with a sub-quota of 4 females) respectively with the goal of lowering the number of landowner complaints about mountain lions. However, studies have shown that mountain lion populations are self-regulating and that killing established adult lions may actually lead to increased conflict with humans as a result of the disruption of mountain lion social structure and increased immigration of dispersing individuals.^{xii}

Mountain lions occur at low densities relative to their primary prey.^{xiii} In order to survive, they regulate their own numbers by staying at a smaller population size relative to their prey's biomass or they risk starvation.^{xiv} In other words, when prey populations decline, so do mountain lion populations. Because of these predator-prey dynamics, mountain lion populations do not need to be managed by humans.

In general, hunters target older and larger mountain lions. However, doing so results in a younger overall age structure, which increases the likelihood of conflict with humans.^{xv} As it stands, conflicts with mountain lions are exceedingly rare. Overhunting will disrupt resident populations, eventually leading to an increase in conflicts with people, pets and livestock.

A study in Washington state showed that, as wildlife officials increased quotas and lengthened hunting season, mountain lion complaints increased rather than decreased. The heavy hunting pressure resulted in a higher ratio of younger males in the population as a result of immigration and emigration.^{xvi}

Contrary to popular belief, killing mountain lions results in an increase in complaints and livestock depredation due to disruption of their social structure.^{xvii}

To ensure healthy social structures and territorial behavior, mountain lion populations should not be hunted for trophies or recreation. This will also help to reduce conflicts with people, pets, and livestock.

Using hounds to pursue mountain lions is unethical and is not considered to be fair chase.

Hounding is an inhumane and outdated sport that has been banned in two-thirds of the United States. Hounding poses significant risk to the hounds as well as to young wildlife, including dependent kittens and cubs, who may be attacked and killed by hounds.^{xviii} Hounds also disturb or kill non-target wildlife and trespass onto private lands.^{xix} This practice is not fair chase and is highly controversial, even among hunters.^{xx}

Fair chase hunting is based upon the premise of giving the animal an equal opportunity to escape from the hunter.^{xxi} Using hounds, especially those equipped with GPS collars, provides an unfair advantage to hunters.

Many proponents of hound hunting claim that hunters can be more selective using this technique. Since hunters can get so close to a treed animal, hound hunting advocates assert that hunters can determine the sex, size, and general age of an animal before determining whether or not they are permitted to harvest that individual. Knowing the sex and other demographic status of the individual being hunted could be helpful in maintaining a viable population. However, a review of 30 years of records from game managers throughout the western United States found that, although technically feasible, most hunters could not tell the size and sex of an animal up a tree. Hunters had roughly 50% accuracy when determining sex; the same as if they had determined the sex with a coin toss.

For the reasons outlined above, we ask that the use of hounds to pursue mountain lions be no longer permitted. If the Commission decides to continue to allow the use of dogs then, at the very least, GPS collars should be prohibited as the practice does not align with fair chase values.

Delay the start of the mountain lion hunting seasons until December 1 to protect dependent young.

While it is not permitted in Montana to kill any females accompanied by spotted kittens, dependent young may not always be in the presence of their mother. Without kittens in her presence, a hunter may not be aware that a female has offspring and may kill her. As mountain lions offspring are dependent on their mothers for survival up to around 18 months of age, the loss of their mother prior to reaching adulthood would likely result in the death of her young, even if they are around a year old.

A recent study has shown that delaying the start of hunting seasons until December 1 would protect about 91 percent of kittens from perishing as a result of being orphaned by hunters.^{xxii} By better aligning hunting seasons with denning periods, hunters will have the best opportunity to identify females with kittens. This, ultimately, will benefit both mountain lions and hunters that want to ensure that their populations remain healthy into the future.

Targeting mountain lions to boost mule deer may have the opposite effect.

Hunting mountain lions has long been thought to bolster populations of game species like mule deer, while reducing competition for this shared resource. However, a recent study evaluated the impacts that heavy hunting of mountain lion has on mule deer and elk. The study found that heavy hunting pressure on these apex predators had the opposite effect on mule deer.^{xxiii} As trophy hunters often target the large, dominant male, they inadvertently reduce the age structure of mountain lions in the area, leaving younger, less experienced lions on the landscape. According to the study, these younger predators typically selected for mule deer instead of larger prey species like elk. As a result, the researchers noted

that, despite increased survival of fawns and females, the removal of mountain lions did not yield a growth in the mule deer population. Instead, they suggested that hunting may actually be increasing the number of mountain lions that specialize in targeting deer.

To summarize, we are asking the Commission to establish quotas in the future that are more in line with the best available science. Specifically, we request that the limit be reduced to 10% or less of the total adult and sub-adult population. We are also asking that hounds are not permitted at any time to aid trophy hunters in their pursuit of mountain lions. The use of hounds is inhumane, does not constitute as fair chase and offers hunters an unfair advantage. If hounds are permitted, we ask that GPS collars to track their movements are prohibited to better align with fair chase principals. We are also asking that the start of the mountain lion season in Montana be delayed until December 1. Doing so could prevent the death of a female with dependent young and could ultimately prevent the orphaning and deaths of approximately 91 percent of kittens. Lastly, we politely ask that the Commission factor in the recent findings about the impacts of high hunting quotas on both mountain lion and deer populations and include this information when setting limits now and in the future.

Thank you for your consideration. Please make this comment letter a part of the official record regarding this decision.

Respectfully,



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