



MOUNTAIN LION FOUNDATION

Saving America's Lion

April 14, 2017

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Assemlblymember Richard Bloom
State Capitol, P.O. Box 942849
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RE: Support for AB 8 – Options for responding to mountain lion depredation.

Dear Assemblymember Bloom,

Thank you for introducing Assembly Bill 8 to allow the California Department of Fish and Wildlife (CDFW) greater flexibility in responding to situations where mountain lions may have preyed on unprotected livestock. The Mountain Lion Foundation is pleased to sponsor AB 8.

Currently, officials are required to issue a depredation permit to domestic animal owners who experience a verified loss. CDFW may not withhold the permit to require alternative deterrent actions or to suggest changes to the circumstances which led to the depredation, even when killing the lion is not the best long-term solution for any stakeholder, including the lion, the community and the property owner. The decisions are most often made without expert scientific insight into the cause of the depredation or the value of the lion within the population.

AB 8 has the potential to assist fragile populations of lions at risk of extirpation and allow governments and citizens to find permanent solutions to conflicts.

Mountain lions are efficient and intelligent top carnivores, a critical component of healthy ecosystems. They contribute to human health and safety by helping to maintain the balance of prey species such as deer, coyotes, and smaller mammals including rodents (Ripple and Beschta 2008, Ripple and Beschta 2006), and hold priceless cultural value.

Wherever scientific research on lions is currently being conducted in California, mountain lion populations are facing challenges.

- Isolated by roads and highways and hemmed in by development, **Southern California** lions show serious loss of genetic health. Survival is surprisingly low, with nearly half of collared lions dying each year (Vickers et al. 2015). Genetic research has shown that lions in the Santa Ana Mountains have "the lowest genetic diversity of any North American population aside from the Florida panther, which has been severely impacted by inbreeding depression" (Riley et al. 2014 and Ernest et al. 2014). Researchers in the Santa Monica Mountains determined that without intervention, the population faces up to a 99% risk of extinction within 50 years (Benson et al, 2016). These populations are dependent upon mountain lions from other populations finding their way

into the isolated ranges and breeding. Young male lions are both the most likely to make this journey and the most likely to depredate along the way before settling down to a territory of their own. The issuance of depredation permits reduces the chances for survival both within the most genetically fragile populations and in the populations which might bolster their chances to survive.

- In **Coastal California**, mountain lions have fewer routes for genetic exchange than elsewhere in the state (Ernest et al. 2003). In 2015, San Luis Obispo County ranked number two for the number of lions killed on depredation permits (CDFW, 2016). In a study near Santa Cruz, eight out of eleven known adult mortalities between 2008 and 2013 resulted from retaliation for depredation (Wilmers et al. 2013).
- And in **Mendocino**, researchers were very surprised to find that the lion population density was comparable to the lowest ever recorded, that of a heavily hunted population in Utah. The reason for their surprise was that there was a high abundance of black-tailed deer in the study area and that mountain lion populations from coastal California have historically had high population densities (Allen et al. 2014).
- While we may think of the **Sierra Nevada Mountains** as a refuge for wildlife, researchers studying pumas in the western part of the range found that the local mountain lion population was suffering from surprisingly high human-caused mortality (Orlando 2008) with a rate more than double that of what science tells us can be reasonably sustained (Jalkotzy et al. 1992).

Given the impacts of roads, toxins and poaching, we have no reason to believe that unstudied populations are more robust. In fact, for the statewide population of mountain lions, research (Ernest, et al. 2003) found that California mountain lions overall had 73 percent fewer alleles than equivalent populations in South America, suggesting that isolation resulting from habitat fragmentation, development, and human-derived mortality puts California mountain lions at greater risk.

There is no statistical evidence that lethal responses to depredation incidents make livestock, pets or people any safer. In El Dorado County, very small livestock projects and ranchette acreages largely account for the 70 lions killed for depredating between 2011 and 2015. Killing lions did not help, and conflicts escalated over the years.

The record is clear: after 30 years of killing California mountain lions for depredating on livestock, and even where mountain lion numbers have diminished, the problem of depredation has not been solved, nor conflicts remediated. Common sense says to take another approach.

And increasingly, the best available science explains why killing a depredating lion does not resolve the problem. When a well-established mountain lion is killed, the vacancy may attract young lions that vie for the empty territory (Lambert et al. 2006), and such lions are more likely to prey on livestock (Peebles et al. 2013). Stable, adult mountain lions typically avoid humans (Mattson et al. 2011). The fact that this new scientific data is complex, counterintuitive, and slow to reach the public may account for the continuing calls by some stakeholders to hold fast to the individual decision to kill a lion for depredating.

The majority of Americans, by 61 percent, hold positive values towards mountain lions compared to just 13 percent who hold negative values (George et al. 2016). Californians have repeatedly expressed

their desire to see stable and healthy populations of mountain lions, through both legislation and the ballot box.

The decision of a single property owner to kill a lion may disrupt a whole population, increase risks to domestic animals living for many miles around, and take a significant member of this precious wild trust from the enjoyment and benefit of all Californians.

With more pets and livestock on the landscape and better alternatives for reducing conflicts, it's time to allow experts to use their full range of tools to respond to depredation according to the specific situation, and to protect neighborhoods, agriculture, and ecosystems using improved scientific understanding about mountain lion behavior. Giving CDFW more flexibility, as AB 8 proposes, is the path to meeting these objectives.

You have our sincere thanks for authoring this significant legislation.

In gratitude,

Lynn Cullens
Executive Director

cc: Members of the Assembly Water, Parks & Wildlife Committee
Jennifer Fearing, Fearless Advocacy

Sources

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