PROJECT COYOTE

FOSTERING COEXISTENCE

27 Jan 2022

To: California Fish & Game Commission
715 P Street, 16th floor
Sacramento, CA 95814
via: fgc@fgc.ca.gov

Re: Second bear tag proposed rule change (petition 2021-017) and bear hunting moratorium (petition 2021/2022-027)

Dear California FGC members:

On behalf of Project Coyote's 12,640 California members and supporters, and as wildlife experts and advocates with expertise in large carnivore ecology, conservation and nature ethics, we express our strong opposition to petition 2021-017's proposed change that allows for the purchase of a second bear tag to successful bear hunters and support for petition 2021/2022-027 to enact a moratorium on bear hunting. To that end, we ask that the FGC and the DFW consider these comments and attached literature expressing the scientific and ethical case against petition 2021-017 (second bear tag) and in support of petition 2021/2022-027. In short, the lack of scientific evidence supporting the viability and health of the state's black bear population, along with the grave ethical concerns over this practice shared by most Californians, suggest a precautionary approach to black bear management that should strive to mitigate anthropogenic mortality instead of focusing on hunter demand.

Scientific concerns
We consider petition 2021/2022-027 establishing a moratorium on black bear hunting as indispensable for appropriate management given the multitude of scientific concerns over the state's black bear population. The CFGC and the CDFW must implement policy informed by "credible science" (CA Fish & Game Code § 703.3 (2019)). Below, we provide several reasons for why the science underlying black bear policy is no longer credible.

First, agency data provide no clear evidence that the state's black bear population is either viable or healthy. There is no clarity from the agency regarding black bear population size. While the CDFW's Black Bear website states that the population is "conservatively estimated" at 30,000-40,000 bears,[1] the Black Bear Take Report for 2020 estimates the population at 15,934 (±6,163) and potentially as low as 9,771, or 47%-76% lower than communicated to the public.[2] Indeed, the model used by the department has reported consistently lower population estimates since 2013,[2] suggesting the population is in decline

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even without considering model assumption violations that may overestimate bear population size (detailed below).

Second, the current method the CDFW uses to estimate the state's black bear population, based on age-at-harvest models, is outdated and provides unreliable indexes of the state's population as we explain next. The black bear population and its management no longer comply with the model assumptions that allow for accurate estimation of killing quotas and population sizes using the Fraser model, namely: (1) that hunting effort remain constant, and (2) that non-hunting mortality for both sexes is similar.[3,4] Rather, (1) the hunting effort has not remained constant since hounding was banned in 2012-2013, and (2) there is no evidence to support the assertion that non-hunting mortality affects both sexes similarly. Indeed, as we explain below, the scientific literature suggests that both non-hunting human-caused mortality and more frequent and extreme climate events may be affecting sexes differently, further violating model assumptions and undermining confidence in state population estimates. Until a model without weak or failed assumptions is used and estimates of the bear population are improved, any increase in permits would be risky.

Third, bear populations are limited by food supply and therefore, when kept from anthropogenic food sources, do not need hunting to regulate their populations and achieve densities seen in unexploited populations.[5] Human killing of bears is often "super-additive", which means kill rates both exceed naturally occurring mortalities and increase bear mortality further (as a side-effect). As an example, scientific evidence details how increased hunting pressure increases the likelihood of intraspecific conflicts, such as the infanticide of cubs by unknown, incoming males or bear mother's movement to suboptimal habitat (to avoid infanticide), which lowers recruitment and may increase human-bear conflicts (and more killing in response).[6–9] Hence, the targeting of breeding adults undoubtedly disrupts bears' social structure and further slows reproduction. These relationships have not been considered within management or within the second bear tag petition, despite evidence of substantial negative effects on population growth in the scientific literature. Additionally, the methods used by the department neither estimate bear poaching nor consider the impact of such poaching on the bear population. Previously, the department has suggested that between 400-500 bears are killed illegally each year.[10] Furthermore, increased lethal management has been linked to increases in poaching for other large carnivore populations.[11–13]

Fourth, more frequent and intense climate events, catalyzed by climate change, such as record-level wildfires in 2021, late season frosts, and droughts, have negative impacts on bear reproduction and survival through habitat destruction and reductions in food sources.[14,15] Such events and their associated mortality are not considered by the current CDFW population estimation methods. As an example, the combination of extreme climate events and anthropogenic factors can exacerbate "super-additive" mortality further, as evidenced by the recent surges in bear deaths by vehicle strikes affecting mostly females,[16] some of them with cubs. Here, too, an assumption of the CDFW model may be violated regarding equivalent mortality between males and females.

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Fifth, because hunters generally use the same hunting areas, issuing two bear tags to already successful hunters may exacerbate local human-caused mortality in certain areas, with harmful effects to bear social structure which may increase mortality further (i.e., super-additive). Female bears may face a disproportionately increased risk of local human-caused mortality, given that they frequently remain close to their natal ranges.[17–19] Increased local hunting pressure on the same landscape may not only increase the risk of killing local females; it may also increase the risk of intraspecific conflicts (including infanticide of cubs by unknown, incoming males), which increases mother's movements to suboptimal habitat (as an avoidance strategy), with negative impacts on cub survival through lower habitat quality and higher risk of conflicts with humans.[20–22] Young male bears are also more often involved in property damage [33]. These impacts have not been considered within the second bear tag petition (2021-017).

Ethical concerns

Current scientific understanding acknowledges bears as feeling, thinking, self-aware beings who undoubtedly value their lives and wellbeing. Evolutionarily, bears and humans share most of the chemical, biological, anatomical and, to some extent, cognitive and emotional structures allowing for the sharing of basic emotions and interests. [23,24] Moreover, black bears contribute community benefits through their top-down regulatory effects on ecosystems.[25–28] These are scientific facts with ethical implications: given both the value bears place in their lives and wellbeing, as well as their contributions to environment and society, ethical coexistence with bears demands their respect and consideration in relevant policies and regulations. [see 29 for wolves, 30]

Moreover, according to a poll conducted by Remington Research Group for the Humane Society of the US, over two-thirds of Californians (70%) already oppose black bear hunting, and a majority support the outright banning of black bear hunting.[31] Increasing opportunities to kill more bears not only explicitly dismisses relevant scientific concerns but also promotes views that run contrary to ethical coexistence, holistic scientific understanding, and the values of most Californians toward cherished wildlife. Additionally, past black bear management documents note that bear hunting (the season comprises a third of the year) monopolizes public lands and excludes from public lands conservationists and more sustainable activities, such as wildlife watching.[32] The moratorium codified in Petition 2021/2022-027 would actively promote respect for bears, the views of most Californians and tourists alike, and their enjoyment of public lands.

Conclusion

The grave ethical concerns with black bear hunting given bears' intrinsic value and contributions to the environment, shared by most Californians, along with the lack of scientific evidence supporting the viability and health of the state's black bear population suggest a precautionary approach that should mitigate anthropogenic mortality through a ban on black bear hunting, as the moratorium petition (2021/2022-027) urges. Increasing hunter demand should never be prioritized over the lives and wellbeing of bears and the wishes of the broad public.

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Thank you for your consideration of our comments.

Respectfully submitted,

Francisco Santiago-Ávila, PhD
Big River Connectivity Science and Conservation Manager
Project Coyote

Michelle L. Lute, PhD
National Carnivore Conservation Manager
Project Coyote

David Parsons, MS
Wildlife Biologist
Science Advisor
Project Coyote

Adrian Treves, PhD
Carnivore Coexistence Lab, Director and Professor of Environmental Studies
University of Wisconsin-Madison

Rick Hopkins, P.D
Senior Conservation Biologist and Predator Ecologist
Live Oak Associates, Inc.

Bradley J. Bergstrom, PhD
Professor of Biology
Valdosta State University, Georgia

John Hadidian, PhD
Professor of Practice
Virginia Tech, Virginia

Jennifer Wolch, PhD
Distinguished Professor of the Graduate School
University of California, Berkeley

Christopher B. Mowry, PhD
Professor of Biology
Berry College/Atlanta Coyote Project

Joanna E. Lambert, PhD
Professor, University of Colorado - Boulder

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