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July 25, 2023

## Public Notice of Intent to Issue a Permit for Mountain Lion Research in California

Legislation passed in 2012 requires the Department of Fish and Wildlife (CDFW) to notify the public at least 30 days prior to the issuance of a Scientific Collecting Permit (SCP) to qualified researchers desiring to conduct research on mountain lions.

The legislation is described in Section 4810 of the Fish and Game Code, and Title 14, Section 650(e)(3)(C) of the California Code of Regulations.

A summary of the proposed research is below. Copies of the DRAFT permit are available upon request to CDFW. Please contact the California Department of Fish and Wildlife, Wildlife Branch- MOUNTAIN LION SCP at 1701 Nimbus Road, Rancho Cordova, CA 95670.

## Prospective Scientific Collecting Permit Issued to:

Dr. Veronica Yovovich – Panthera

## **Executive Summary:**

Deer salvaging for livestock predation deterrent device testing:

As human populations grow, livestock and carnivores are forced to share ever shrinking habitat. At the same time, carnivores such as coyotes and mountain lions are recovering from culling by humans and recolonizing recently unoccupied or lightly occupied habitat. This combination of factors means that conflict between carnivores and livestock is on the rise, which has been felt acutely by livestock producers in California's Central Coast and beyond. This research project is addressing this rise in conflict by testing non-invasive predation deterrents on lands administered by the Midpeninsula Regional Open District (District). Lethal control has long been the standard method for combating livestock losses, threatening carnivore persistence (Treves and Karanth 2003; Vickers et al. 2015). As a "protection" strategy, lethal removal falls short on two fronts: it can exacerbate conflict by temporarily increasing local carnivore densities as new individuals disperse into fill empty territories; and animal husbandry practices remain unchanged, leaving livestock vulnerable to further depredations (Peebles et al. 2013; Wielgus and Peebles 2014; Treves et al. 2016). In addition, in 2020 pumas became a candidate species for listing in the Central Coast. As a result, the possibility of using lethal removal as an option for depredation incidents is not practical in most circumstances. Instead, the District is pursuing an approach

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employing tools that prevent livestock losses. However, there is a significant gap in research addressing carnivore-livestock conflict, and experimental studies evaluating tool efficacy are rare (Miller et al. 2016; Eklund et al. 2017; van Eeden et al. 2018). To address these needs, the proposed 5-year research project is designed to noninvasively test existing depredation prevention tools (e.g., Foxlights, turbo fladry, Gadflies) using a treatment-control experimental design, and give technical assistance in strategy deployment to local livestock producers. The proposed research will use salvaged roadkill deer to serve as bait for experimentally testing depredation prevention tools. Carnivore responses to protected and unprotected salvaged deer will be non-invasively measured using camera traps. The Panthera-led research team is working directly with land managers and livestock producers to ensure that the results are effective, attractive to ranchers, economically viable, and feasible to implement. This work will take place on lands managed by the Midpeninsula Regional Open Space District, and all proposed activities have been approved by the appropriate staff therein. The long-term goal of this work is to develop tools that provide effective depredation prevention techniques that are attractive to livestock operators within the District and beyond. Over half of California and much of the West is rangeland; finding successful conflict avoidance tools will help secure this habitat for carnivores for generations to come.