

September 6, 2013

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

The California Department of Fish and Wildlife (CDFW) is preparing to issue a Scientific Collecting Permit (SCP) for live mountain lion (*Puma concolor*) research. Legislation passed in 2012 requires the CDFW to notify the public at least 30 days prior to the issuance of a SCP to qualified researchers desiring to conduct research on mountain lions.

The legislation is described in Section [4810 of the Fish and Game Code](#).

A summary of the proposed research is below. Copies of the DRAFT permit are available upon request to the Department. Please contact the California Department of Fish and Wildlife, Wildlife Branch- MOUNTAIN LION SCP at: 1812 Ninth Street, Sacramento, CA 95811.

Prospective Scientific Collecting Permit(s) Issued to:

Dr. Craig M. Thompson, Ph.D – USDA Forest Service, Principal Investigator

Dr. Kathryn L. Purcell, Ph.D – USDA Forest Service, Capture Supervisor

Dr. Mark Elbroch, Ph.D – Panthera, Capture Supervisor

Bradley C. Nichols – Utah State University

Greta M. Wengert – Integral Ecology Research Center

Project Title:

Intent to collar and monitor mountain lions in the Kings River Area of the Sierra National Forest

Proposed Effective Date:

October 7, 2013

Executive Summary:

Over the past 5 years, research on fisher (*Pekania pennanti*) ecology in the Sierra Nevada Mountains has identified mountain lion predation as a primary source of mortality for fishers, accounting for 36% of all mortality and 50% of all predation. Specifically, predation on adult female fishers during the denning season appears to be a potential limiting factor to population expansion. What is unknown is whether current lion predation rates on fishers are similar to historical rates, or

whether changes in predator densities, forest structure, fire frequency, or human activity have altered the balance between the two native species.

In the Kings River area of the Sierra National Forest, fisher monitoring, including trapping, telemetry, and scat detector dog surveys, has been ongoing since 2007, with current funding available through 2013. In 2010, the Sierra National Forest initiated a multi-stakeholder project (Dinkey Collaborative) charged with designing and implementing fuel reduction projects in the same area. Discussions are currently underway to extend the fisher monitoring program through 2018 in order to capitalize on the before-after/control-impact research opportunity: monitoring the impacts of fuel treatment activities on fisher survival, reproduction, and habitat use. We propose to capture, collar, and monitor lions within the two primary watersheds of the Kings River area, concurrent in space and time with both the fisher monitoring program and the fuel reduction program. Primary objectives would be 1) to concurrently document fisher and lion movement patterns, and to identify areas or habitats where interactions were likely, 2) to generate a 'risk-based' habitat model for fishers to quantify the likeliness of encountering a mountain lion, 3) to better understand how vegetation and fuel management by the USFS can mitigate or enhance this risk, and 4) to quantify predation rates by lions on numerous prey species including ungulates and mesocarnivores. Secondary objectives include 1) overlapping the work described above with ongoing bobcat (*Lynx rufus*) monitoring in the area led by G. Wengert to better understand carnivore community interactions and how these interactions are impacted by vegetation management, 2) evaluate the exposure of mountain lions to rodenticides, insecticides, and other toxins currently being found in fishers and presumed to come from illegal marijuana cultivation sites, and 3) conduct a concurrent camera trapping grid to validate a non-invasive approach to estimating lion abundance currently being developed in Wyoming. Sufficient funding and in-kind contribution have been secured to address the first three primary objectives. Funding is currently being sought to address the remaining objectives.