

STAFF SUMMARY FOR AUGUST 4-5, 2015

23. WILDLIFE RESOURCES COMMITTEE**Today's Item****Information** ☒**Action** ☒

Discuss and approve the Wildlife Resources Committee (WRC) work plan and the agenda topics for the Sep 9, 2015, WRC meeting in Fresno; provide guidance and approve the proposed approach for the predator policy review workgroup; and, receive a DFW presentation on the results of a snagging study.

Summary of Previous/Future Actions

- | | |
|--|-----------------------------|
| • Most recent WRC meeting | May 6, 2015; Los Angeles |
| • Tentative approval of recommendations | Jun 11, 2015; Mammoth Lakes |
| • Today discuss workgroup and agenda topics | Aug 5, 2015; Fortuna |
| • Next WRC meeting | Sep 9, 2015; Fresno |

Background

FGC directs committee work. This agenda item is focused on resolving the structure and function of the predator policy workgroup and approving agenda topics for the Sep WRC meeting. In addition, DFW will make a presentation reporting on results of a snagging study that was requested by FGC.

Topics that were previously referred by FGC to WRC and are outstanding tasks:

- Predator management policy review
- One year versus calendar term fishing license
- Feral pig management
- Possession of game for processing into food (Sec. 3080(e), Fish and Game Code)

With regard to the predator management policy review, FGC staff identified the growing public participation and group dynamics of the predator policy workgroup as preventing meaningful progress. At the May WRC meeting a possible solution was identified and tentatively approved by FGC at its June meeting. Today, staff presents possible structural and functional recommendations for the predator policy workgroup.

DFW's snagging presentation is the result of a study that FGC requested in response to controversies surrounding salmon and steelhead fishing methods. Concerns were raised that certain fishing methods are un-sportsman like and cause harm to fishing opportunities and fish populations.

Significant Public Comments

1. A coalition of non-governmental organizations request that WRC make specific recommendations to FGC for regulation changes related to the state's native predators, received Jul 16, 2015 (Exhibit 1)

STAFF SUMMARY FOR AUGUST 4-5, 2015

Recommendation

FGC staff: With regard to the predator policy workgroup:

1. Staff requests guidance from FGC regarding staff's suggestions for the structure and function of the predator policy workgroup as well as the identified issues (Exhibit 2).
2. Discussions have used "policy" and "regulation" interchangeably, but both policy and regulation are a means to an end. Staff requests that FGC and WRC clarify for staff and the public what is expected as an end product from this group and identify a timeline that is feasible given resource limitations.

WRC: Have FGC appoint representatives to a tiered workgroup to facilitate predator policy review and development. The tiered workgroup would consist of a drafting group (6 representatives of the key stakeholders) and a review group (no more than 10-20 to provide feedback to the drafting group). The final tier would be WRC itself that would make final recommendations to FGC. The tiered workgroup would be asked to bring a report to WRC by 2016. WRC asked that staff prepare a nomination request, to be posted on FGC's website and distributed through FGC's list server. In addition, WRC requested that DFW return to the Sep 2015 meeting to provide an update on the scientific issues surrounding predator policy.

Exhibits

1. [Joint letter to WRC regarding CCR, Title 14, sections 460, 465.5 and 472](#)
2. [FGC staff predator policy workgroup proposal](#)

Motion/Direction

Moved by _____ and seconded by _____ that the Commission approves the agenda topics _____ for the September WRC meeting.

Moved by _____ and seconded by _____ that the Commission approves the format and function of the predator policy workgroup.



Sent via electronic mail
July 16, 2015

To: Jack Baylis and Jim Kellogg, Co-Chairs,
Wildlife Resources Committee
California Fish and Game Commission
fgc@fgc.ca.gov

Sonke Mastrup, Executive Director, California Fish and Game Commission
Predator Policy Working Group
Sonke.Mastrup@fgc.ca.gov

Cc: Charles Bonham, Director
California Department of Fish and Wildlife
Chuck.Bonham@wildlife.ca.gov

Caren Woodson
California Fish and Game Commission
Caren.Woodson@fgc.ca.gov

Re: Proposed Revisions to Sections 460, 465.5 and 472, Title 14 of the California Code of Regulations

Dear President Baylis, Vice President Kellogg, and Executive Director Mastrup,

On behalf of Project Coyote, the Center for Biological Diversity, the Natural Resources Defense Council, the Humane Society of the United States, Mountain Lion Foundation, Project Bobcat, California Council for Wildlife Rehabilitators, Sonoma County Wildlife Rescue, Bird Ally X, and Humboldt Wildlife Care Center (collectively, “the Submitters”) and their over 1.6 million members and supporters in California, we are writing to express our strong support for amendments to the regulations implementing the California Fish and Game Code as related to the management of the state's native predators. Specifically, we request that the California Department of Fish and Wildlife (“the Department”) and the Wildlife

Resources Committee (“the Committee”) of the Fish and Game Commission recommend for adoption by the full Commission the following amendments to Sections 465.5 and 472 of Title 14 of the California Code of Regulations. Further, in light of the Committee’s announcement at its May 6, 2015 Los Angeles meeting to streamline the process of amending California provisions on predator management, we recommend that the proposed amendments below serve as a starting basis of discussion in the amendment process.

These suggested amendments reflect policies that would help bring California’s wildlife law into the 21st Century by espousing standards of equitable, humane, and ecologically-sound treatment of the state’s predators. Our reasoning for the amendments directly address and are informed by the discussion among multiple stakeholders at the March 12, 2015 predator work group meeting. In addition, several of our organizations have independently sent letters to the Department, Committee and Commission regarding these provisions; please see Exhibit A for these comment letters, which further elaborate on some of the points discussed below.

As a policy matter, any take of predator species for depredation purposes should be very limited in scope, authorized only where truly necessary, and, non-lethal methods should be exhausted before lethal methods are used. We believe the Commission should adopt regulations to the maximum extent allowed under existing laws to conform to these principles. However, given the mandate of the Committee and the specific directive of the predator work group related to 14 CCR §§460, 465.5 and 472, we confine our comments to these provisions.¹

With respect to proposed amendments, please note the following color key:

- **Black** = Original statutory text.
- **Blue** = Proposed added language.
- **Green** = Original statutory text moved from one section to another section.

A. 14 CCR §460: FISHER, MARTEN, RIVER OTTER, DESERT KIT FOX AND RED FOX

Current Text:

“§460. Fisher, Marten, River Otter, Desert Kit Fox and Red Fox.

Fisher, marten, river otter, desert kit fox and red fox may not be taken at any time.”

Recommendation:

This section of the regulations should be retained as is.

Discussion:

From the Commission Staff Report and as discussed at the March 12, 2015 meeting, our understanding is that the Department intends to propose that the Commission amend this section to prohibit take for fur

¹ Other outdated, unworkable and/or problematic sections of the regulations are in significant need of revision as well. Please see Exhibit B for substantive comments on regulations and policies warranting vetting by the Committee and revisions by the Commission. We note that these comments were submitted by Project Coyote to the Commission 16 months ago but none of these other sections of the regulations have been addressed to date. In stark contrast, the three sections that are the focus of this letter and the March 12, 2015 work group meeting were propositioned by a narrow set of interest groups including the Animal Pest Management Services, the California Farm Bureau Federation and the Shasta County Cattlemen’s Association.

purposes only because this was the purported “original intent” of the regulation. Such a change would open these species up to sport hunting as well as other currently prohibited forms of take.

No change should be made to the current text of 14 CCR §460. Most of these enumerated species are already or soon to be afforded take protections under both state and federal statutes. The native subspecies of red fox is listed pursuant to the California Endangered Species Act (“CESA”), and it, along with the highly imperiled Pacific fisher and Humboldt marten, have or are being considered for listing pursuant to the federal Endangered Species Act (“ESA”). Similarly, the desert kit fox—a focal species in the California Desert Renewable Energy Conservation Plan—is facing severe threats and is also on a trajectory that may lead to it being listed pursuant to CESA and/or the ESA. Any amendment made to 14 CCR §460 that would reduce protections for these species cannot be supported by sound science and would be an unwise policy decision that would put the Commission and the Department on a collision course with the mandates of CESA and the ESA, as well as require extensive review under the California Environmental Quality Act (“CEQA”).

Further, we have researched the “original intent” of this section and found no evidence that the California Legislature or the Commission had intended this section to prohibit take for fur purposes only. In challenging this interpretation, we request that the Department provide any actual evidence of the “original intent” of this section or reasoning as to why these species warrant lesser protection. Even if the supposed intent could be discerned, the rule was promulgated in 1959 and, from a policy standpoint, Californians have since developed strong support for protective wildlife measures—as evidenced through California voters’ support of public ballot measures to protect predators and to restrict take methods deemed cruel and/or indiscriminate under Proposition 4 (1998) and Proposition 117 (1990).

B. 14 CCR §465.5: USE OF TRAPS

Recommended Amended Text:

“§465.5 Use of Traps.

- (a) **Traps Defined.** Traps are defined to include padded-jaw leg-hold, steel-jawed leg-hold, and conibear-type traps, snares, dead-falls, cage traps, common rat and mouse traps and other devices designed to confine, hold, grasp, grip, clamp or crush animals’ bodies or body parts.
- (b) **Affected Mammals Defined.** For purposes of this section, furbearing mammals, game mammals, nongame mammals, and protected mammals are those mammals so defined by statute on January 1, 1997, in sections 3950, 4000, 4150 and 4700 of the Fish and Game Code.
- (c) **Prohibition on Body-Gripping Traps, ~~ping for the Purposes of Recreation or Commerce in Fur~~.** It is unlawful for any person to trap ~~for the purposes of recreation or commerce in fur~~ any ~~furbearing mammal or nongame mammal~~ animal with any body-gripping trap. A body-gripping trap is one that grips the ~~animal-mammal’s~~ body or body part, including, but not limited to all leg-hold and foothold traps (including steel-jawed, spiked-jaw, spiked-tooth, padded, laminated, off-set, and enclosed) ~~padded-jaw leg-hold traps~~, conibear-type traps, and snares. For the purposes of this section, ~~C~~ cage and box traps, nets, and suitcase-type live beaver traps, ~~and common rat and mouse traps~~ shall not be considered body-gripping traps ~~and may be used to trap for the purposes of recreation or commerce in fur any furbearing or nongame mammal~~.
(1) Exception for Extraordinary Case to Protect Human Health or Safety. The prohibition in subsection (c) does not apply to federal, state, county, or municipal government employees or their duly authorized agents in the extraordinary case where the otherwise

prohibited body-gripping trap ~~padded jaw leg hold trap~~ is the only method available to protect human health or safety. All traps used pursuant to this subsection must comply with the specific requirements in subsections (c)(1)(A)-(C) and (g) below.

(A) Leg-hold Trap Requirements. Any leg-hold traps used to implement subsection (c)(1) must be padded, commercially manufactured, and equipped as provided in subsections (A)1. through (A)5. below.

1. **Anchor Chains.** Anchor chains must be attached to the center of the padded trap, rather than the side.
2. **Chain Swivels.** Anchor chains must have a double swivel mechanism attached as follows: One swivel is required where the chain attaches to the center of the trap. The second swivel may be located at any point along the chain, but it must be functional at all times.
3. **Shock Absorbing Device.** A shock absorbing device such as a spring must be in the anchor chain.
4. **Tension Device.** Padded leg-hold traps must be equipped with a commercially manufactured pan tension adjusting device.
5. **Trap Pads.** Trap pads must be replaced with new pads when worn and maintained in good condition.

(B) Conibear-Type Trap Placement Requirements. Any conibear-type traps used to implement subsection (c)(1) must be consistent with requirements under Section 4004 of the Fish & Game Code. Traps of the conibear-type with a jaw opening larger than 6"x6" may not be used on land. Traps of the conibear-type with a jaw opening larger than 6"x6" but no larger than 10"x10" may be used in sets where the trap is wholly or partially submerged in water.

(C) Zones Prohibited to Body-Gripping Traps ~~the Use of Conibear-type Traps and Snares.~~ Conibear-type traps and snares ~~Body-Gripping Traps, except those totally submerged conibear-type traps and common rat and mouse traps, and deadfall traps are prohibited in the following zones:~~

1. Zone 1: Beginning at Interstate 5 and Highway 89. . .
2. Zone 2: Beginning in Tehama County at the intersection of Highway 36 . . .

(d) **Prohibition on Exchange of Raw Fur.** It is unlawful for any person to buy, sell, barter, possess, transport, export or otherwise exchange ~~for profit~~, or to offer to buy, sell, barter, possess, transport, export or otherwise exchange ~~for profit~~, the raw fur, as defined by Section 4005 of the Fish and Game Code, of any furbearing mammal or nongame mammal that was trapped in this state, with a body-gripping trap as described in subsection (c) above. Any furbearing mammal or nongame mammal that was lawfully trapped with a body-gripping trap pursuant to subsection (c)(1) above may only be possessed until such time as it surrendered to the department.

(e) ~~Prohibition on Use of Steel-jawed Leg-hold Traps by Individuals.~~ It is unlawful for any person to use or authorize the use of any steel-jawed leg-hold trap, padded or otherwise, to capture any game mammal, furbearing mammal, nongame mammal, protected mammal, or any dog or cat. Use of Conibear Traps, Snares, Cage and Box Traps, Nets, Suitcase-type Live Beaver Traps and Common Rat and Mouse Traps for Purposes of Property Protection Unrelated to Recreation or Commerce in Fur. Conibear traps, snares, c ~~Cage and box traps, nets, suitcase-type live beaver traps and common rat and mouse traps may be used by individuals to take authorized mammals for purposes unrelated to recreation or commerce in fur, including, but not limited to, the~~

protection of property, in accordance with subsections (g) (1) through (5) below. Except for common rat and mouse traps, all traps used pursuant to this subsection must be numbered as required by subsection (f)(1) above. The prohibitions of subsections (c) and (d) above shall apply to any furbearing or nongame mammal taken by a conibear trap or snare pursuant to this subsection (g).

- (f) **Use of Cage and Box Traps, Nets and Suitcase-type Live Beaver Traps ~~Non-Body-Gripping Traps for Purposes of Recreation or Commerce in Fur~~.** Cage and box traps, nets and suitcase-type live beaver traps may be used by individuals to take authorized mammals. Any person who utilizes non-body-gripping traps for the take of furbearing mammals and nongame mammals for purposes of recreation or commerce in fur must comply accordance with the provisions of subsections (g)(1) through (5) below.

(1) **Trap Number Requirement.** Any person who traps furbearing mammals or nongame mammals shall obtain a trap number issued by and registered with the department. All traps, before being put into use, shall bear only the current registered trap number or numbers of the person using, or in possession of those traps. This number shall be stamped clearly on the trap or on a metal tag attached to the chain of the trap or to any part of the trap.

- (g) **General Trapping Requirements.** ~~Use of Conibear Traps, Snares, Cage and Box Traps, Nets, Suitcase-type Live Beaver Traps and Common Rat and Mouse Traps for Purposes Unrelated to Recreation or Commerce in Fur.~~ Conibear traps, snares, cage and box traps, nets, suitcase type live beaver traps and common rat and mouse traps may be used by individuals to take authorized mammals for purposes unrelated to recreation or commerce in fur, including, but not limited to, the protection of property, in accordance with subsections (1) through (5) below. Except for common rat and mouse traps, all traps used pursuant to this subsection must be numbered as required by subsection (f)(1) above. The prohibitions of subsections (c) and (d) above shall apply to any furbearing or nongame mammal taken by a conibear trap or snare pursuant to this subsection (g). Use of any traps under subsections (c)(1), (e) and (f) above must comply with the following requirements:

- (1) **Immediate Dispatch or Release.** All furbearing and nongame mammals that are legal to trap must be immediately killed or released. Non-target species shall be released unharmed and may not be taken. Unless released, trapped animals shall be killed by shooting where local ordinances, landowners, and safety permit. In jurisdictions where shooting is not permitted, trapped animals shall be released. This regulation does not prohibit employees of federal, state, or local government from using chemical euthanasia to dispatch trapped animals.
- (2) **Trap Visitation Requirement.** All traps shall be visited at least once ~~daily~~ every 24 hours by the owner of the traps or his/her designee. Such designee shall carry on his/her person written authorization, as owner's representative, to check traps. In the event that an unforeseen medical emergency prevents the owner of the traps from visiting traps another person may, with written authorization from the owner, check traps as required. The designee and the person who issues the authorization to check traps shall comply with all provisions of this section Section 465.5. Each time traps are checked all trapped animals shall be removed.
- (3) **Trap Placement Requirement.** Traps may not be set within 150 yards of any structure used as a permanent or temporary residence, unless such traps are set by a person controlling such property or by a person who has and is carrying with him written consent of the landowner to so place the trap or traps.

~~(4) Placement of Conibear Traps. Traps of the conibear type with a jaw opening larger than 8" x 8" may be used only in sets where the trap is wholly or partially submerged in water or is...~~

~~(5) Zones Prohibited to the Use of Conibear-type Traps and Snares. Conibear-type traps and snares, except those totally submerged, and deadfall traps are prohibited in the following zones.~~

(4) Trap Number Requirement. Any person who traps furbearing mammals or nongame mammals shall obtain a trap number issued by and registered with the department. All traps, before being put into use, shall bear only the current registered trap number or numbers of the person using, or in possession of those traps. This number shall be stamped clearly on the trap or on a metal tag attached to the chain of the trap or to any part of the trap. The trapper shall report both the location of the trap via latitude and longitude coordinates and the dates it was set in each location to the department when filing the annual trapping report required under section 467.

(h) **Statutory Penalty for Violation of Provisions. . . .**"

Discussion:

14 CCR §465.5 contains internal inconsistencies and has had amendments proposed from other stakeholders. The above proposed amendments have been made for the following reasons:

- **14 CCR §465.5(c): General Prohibition of Body-Gripping Traps.** The proposed amendments to this provision serve to combine all rules on body-gripping traps in one subsection for clarity and ease of enforcement purposes.

As noted above, trapping of furbearing mammals for depredation purposes should be very limited in scope, authorized only where truly necessary, and, absent emergency circumstances, use non-lethal traps such that trapped animals are kept alive and can be transferred and/or released to appropriate areas or facilities. We support amending 14 CCR §465.5 and all related regulations to reflect these policies. Illinois, Colorado, Washington, Connecticut, New York, New Hampshire, Oklahoma, Rhode Island, Vermont, North Carolina and South Carolina have all adopted policies banning lethal snares. These state policies reflect the belief that lethal wildlife traps are cruel, non-selective, and ecologically unsound.

As such, we propose that the content of 14 CCR §465.5(e)(1) be moved to a new section 14 CCR §465.5(c)(1) for clarity of drafting purposes. Further, to minimize the risk to non-target animals as well as the potential for controversy, 14 CCR §465.5(g) should be amended to move the contents of subsections (g)(4) and (g)(5) to subsection (c)(1) in order to prohibit the use of body-gripping traps, absent an "extraordinary case to protect human health or safety", matching the standard for the exceptional use of leg-hold traps in the state. From the perspective of clear statutory drafting, moving subsections (g)(4) and (g)(5) to subsection (c)(1) combines the prohibition and exception on the use of leg-hold and lethal traps in one provision as opposed to two different provisions, enhancing the clarity of the rules for trappers and enforcement officials.

Separately, we have added the requirement that all traps used in the extraordinary circumstance to protect human health and safety are required to be numbered in accordance with the proposed new subsection (g)(4) (previously subsection (f)(1)) to match the standards in subsection (g) and ensure that government traps are clearly labeled for enforcement purposes.

Further, for purposes of clarity, we have also enumerated types of body-gripping traps to which this regulation applies. Also, the proposed 14 CCR §465.5(c)(1)(B) outlines the restrictions on the placement and size of conibear-type traps, consistent with Section 4004 of the Fish & Game Code. We note, though, that with respect to allowing “partially submerged” conibear-type traps, we look forward to working with the Commission and Department to concretely define the term “partial submersion” to ensure the effectiveness of this regulation and other relevant legal provisions. Moreover, we have amended the title of new subsection (c)(1)(C) to be zones prohibited to body-gripping traps generally, not just conibear-type traps and snares, to encapsulate the spirit of the original amendment which is to protect the desert kit fox from indiscriminate trapping in its protected habitat. We note that we have included here the exception for common mouse and rat traps.

- **14 CCR §465.5(g)(3): *Maintaining consent requirements.*** All animal pest control operators should continue to be required to provide notification to and receive consent from all residents who live within 150 yards of a location where a trap is placed. Given that licensed animal pest control operators are currently permitted to use lethal traps, the risk of collateral damage to pets and non-target animals is very high. Moreover, wildlife is a shared public resource and, as a matter of policy, residents living near a placed trap have the right to notice that traps are planned for use in the area, at a minimum. Thus, we support retaining the consent requirements of landowners and nearby residents in 14 CCR §465.5(g)(3).

We do, however, acknowledge the practical difficulties of enforcing this provision. In the March 12, 2015 meeting, pest control operators and USDA Wildlife Services representatives conveyed that obtaining the requisite consent is difficult and, as a result, consent is often not obtained and this provision is unenforced. Finding a solution to this problem requires understanding the vested interests of the relevant stakeholders. One key reason that consent from relevant residents is difficult to obtain is because such residents – as well as, oftentimes, the owners who are calling upon the trapping services themselves – oppose the use of lethal traps, as this would lead to the potential killing of non-target animals as well as raise ethical and legal issues of killing wildlife as a shared public resource. The clear regulatory avenue to address their concerns is to require pest control operators and USDA Wildlife Services officers to utilize non-lethal methods and have government officers resort to the use of lethal methods to capture target animals in urban areas only in the “extraordinary case to protect human health or safety.” The representatives of pest control operators and USDA Wildlife Services claimed that their practice is to exhaust non-lethal methods. Therefore, amending the provision to legally require the use of non-lethal methods should not raise opposition from the service providers and will give neighboring residents security in giving their consent.

The pest control operators and USDA Wildlife Services representatives did, however, claim that there are certain species – in particular, the coyote, muskrat, and beaver – that can only be caught using lethal methods. This is simply not accurate. Research has demonstrated that those species can be caught and addressed without using lethal means.

- ***Miscellaneous amendments.***
 - **CCR §465.5(d).** The actions of possession, transportation, and exportation have been added to the list of types of prohibitions on the exchange of raw fur to further clarify this provision. These additional actions are found in comparable regulations, such §4800 of the Fish and Game Code with respect to mountain lions.

- **CCR §465.5(e).** The proposed subsection (e) has been moved from subsection (g) in for purposes of drafting clarity. This proposed subsection encapsulates the rules for using non-body-gripping traps and common rat and mouse traps for purposes of property protection.
 - **CCR §465.5(f).** The proposed subsection (f) has been amended to clarify the rules for cage and box traps, nets and suitcase-type live beaver traps for non-depredation purposes. The term “non-body-gripping traps” is too broad, as it arguably includes common rat and mouse traps which are not subject to the same rules for purposes of non-depredation.
 - **CCR §465.5(g).** The proposed amendment clarifies general trapping requirements which apply to all trapping permitted in this section.
 - **CCR §465.5(g)(1).** The proposed amendment clarifies, for the avoidance of doubt, that in jurisdictions which do not allow firearms, trapped animals shall be immediately released.
 - **CCR §465.5(g)(2).** This is a clean-up amendment, as the text of this section should not be referencing itself.
 - **CCR §465.5(g)(4).** The proposed amendment requires that trappers report the coordinates and dates of the trap in their annual trapping report in order to ensure that trapping of furbearing and nongame mammals (particularly bobcats) has not occurred in zones prohibiting trapping.
- ***Incentive programs.*** At the March 12, 2015 meeting, incentives for predator-friendly practices were discussed. As an initial matter, we have no interest in seeing livestock harmed or ranchers and farmers suffer economically from depredation. At the same time, maintaining predator populations is critical to the ecosystem and such wildlife are shared public resources over which the ranching and farming communities do not have exclusive ownership rights. Studies show that much of the harm to livestock inflicted by predators can be avoided by the erection of protective barriers around livestock and the use of deflecting technologies which serve to protect all animal populations and economic interests at stake. We propose employing incentive programs that meet the interests of all stakeholders. Existing certification programs that incentivize non-lethal and ecologically sound approaches to address livestock-predator conflicts include “Predator Friendly,” Wildlife Friendly, and Animal Welfare Approved. Submitters would welcome the opportunity to present information about these incentive programs to the Committee, Department staff, and any other interested stakeholder groups, as was already initially done at the May 6, 2015 Committee meeting.

C. 14 CCR §472: GENERAL PROVISIONS

Recommended Amended Text:

“§472. General Provisions.

Except as otherwise provided in [this chapter](#) ~~Sections 478 and 485 and subsections (a) through (d) below~~, nongame ~~birds and~~ mammals may not be taken.

~~(a) The following nongame birds and mammals may be taken at any time of the year and in any number except as prohibited in Chapter 6: English sparrow, starling, cCoyote, weasels,~~

~~skunks, opossum, moles and rodents (excluding tree and flying squirrels, and those listed as furbearers, endangered or threatened species).~~

~~(b) Fallow, sambar, sika, and axis deer may be taken only concurrently with the general deer season.~~

~~(c) Aoudad, mouflon, tahr, and feral goats may be taken all year.~~

~~(d) American crows (*Corvus brachyrhynchos*) may be taken only under the provisions of Section 485 and by landowners or tenants, or by persons authorized in writing by such landowners or tenants,”~~

Discussion:

Overall, 14 CCR §472 currently contains several inconsistencies with respect to definitions of animal categorizations and the text of other regulatory sections. The above amendments have been made for the following reasons:

- ***Species-specific regulation; reformation of current classification system.*** As a general recommendation, in the case that the take of a specific species is permitted, it should only be done so with a species-specific regulation such as those that exists for bobcats in 14 CCR §478 and furbearers in §§461-464.² We believe that coyotes should be the highest priority for such specific regulations. Additionally, regulations for skunks should distinguish between spotted and striped skunks and explicitly prohibit take for the endemic Channel Islands spotted skunk. Similarly, any take regulations for moles and rodents should prohibit targeted take of all endemic subspecies considered species of special concern.

Moreover, the current classification of predators as “game,” “nongame,” and “furbearing” has no scientific basis and is outdated under concepts of modern conservation biology and ecological principles. We advocate for wide-scale reform of the outdated predator classification system found in the California Code of Regulations and Fish & Game Code, recognizing that the Commission itself can only change the regulations to the degree consistent with the code.

- ***Birds.*** References to birds have been struck as they are clearly not “nongame mammals.” Any regulation of their take should be addressed elsewhere in the regulations. We are happy to work with the Commission to amend the relevant regulations accordingly.
- ***Non-nongame mammals.*** The mammals currently listed in 14 CCR §472(b)-(c) are not nongame mammals as defined in F&G Code §4150 because they are not “naturally occurring” in California. Therefore, they should be excluded from 14 CCR §472 and addressed, if at all, in separate regulations.
- ***Bobcats and American crows.*** We note that of the two regulations cited in 14 CCR §472, §478 relates to bobcats and is undergoing revision, while §485 addresses American crows, which are obviously not mammals. Consequently, any references in §472 to other nongame mammal regulations are best made more generically as “in this chapter.”

² We note that we have significant disagreement with the *content* of these species-specific regulations, but still believe that the *structure* of these regulations is preferable to that in §472

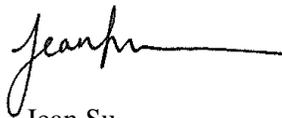
Thank you for your consideration of these recommended amendments. We look forward to continuing to work with the Department, Committee, Commission and other stakeholders to modernize California's predator management policy.

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Sincerely,



Camilla H. Fox
Founder & Executive Director
Project Coyote



Jean Su
Staff Attorney
Center for Biological Diversity



Rick Hopkins, PhD
Science Advisory Board, Project Coyote
Principal and Senior Conservation Biologist, Live
Oak Associates



Brendan Cummings
Senior Counsel
Center for Biological Diversity



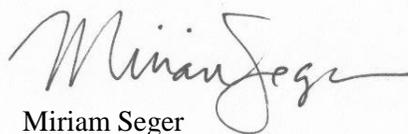
John Hadidian, PhD
Senior Scientist, Wildlife
The Humane Society of the United States



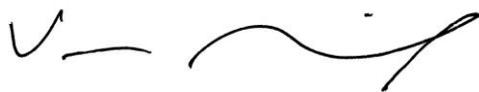
Damon Nagami
Senior Attorney
Director, Southern California Ecosystems Project
Natural Resources Defense Council



Tim Dunbar
Executive Director
Mountain Lion Foundation



Miriam Seger
Citizen Advocate
Project Bobcat



Vann Masvidal
President
California Council for Wildlife Rehabilitators



Doris Duncan
Executive Director
Sonoma County Wildlife Rescue



Sharon Ponsford
Board Member
California Council for Wildlife Rehabilitators



Monte Merrick
Bird Ally X and Humboldt Wildlife Care Center

Exhibit A



Sent via electronic mail
March 2, 2015

To: Jack Baylis and Jim Kellogg, Co-Chairs
Wildlife Resources Committee
California Fish and Game Commission
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cc: Caren Woodson
Caren.Woodson@fgc.ca.gov

Re: Predator Policy Work Group, March 12, 2015 Meeting – Sections 465.5 and 472, Title 14 of the California Code of Regulations

Dear President Baylis and Vice President Kellogg:

On behalf of the Center for Biological Diversity (“the Center”) and its over 100,000 members and supporters in California, I am writing to express our strong support for the Wildlife Resources Committee (“the Committee”) and the Fish & Game Commission (“the Commission”) to adopt predator policies that bring California’s wildlife law into the 21st Century by espousing standards of equitable, humane, and ecologically-sound treatment of the state’s predators. Specifically, our comments below focus on the discussion questions circulated by Commission staff for the March 12th work group meeting and suggest corresponding amendments to 14 CCR §§465.5 and 472. We will provide additional comments on these and other related regulations throughout this policy reform process, which we are grateful for the opportunity to participate in.

A. 14 CCR §465.5: Use of Traps

As an initial matter, the Center is opposed to all sport and commercial trapping. Trapping of furbearing mammals for depredation purposes should be limited in scope, authorized only where truly necessary, and, absent emergency circumstances, use non-lethal traps such that trapped animals are kept alive and can be transferred and/or released to appropriate areas or facilities. We support amending 14 CCR §465.5 and all related regulations to reflect these policies.

- 1. Mixing rules for sport, commerce, and depredation:** *Should different rules govern sport, commercial, and depredation trapping for furbearing mammals? If so, establish separate subsections for the three types.*

Yes, the Commission should adopt separate trapping rules for sport, commercial and depredation purposes. This could be done via changes to licensing requirements and regulations, as well as to 14 CCR §465.5 and other relevant provisions. The provisions of 14 CCR §465.5 could be substantially improved for both clarity and conservation purposes. One measure of this regulation that should be retained, however, is the overall structure in which sport and commercial trapping (*i.e.* trapping animals for their fur, whether for personal use or sale) is treated separately from

trapping for depredation and pest-control purposes (*i.e.* trapping for the purpose of removing a problem animal). We therefore support how the current text of 14 CCR §465.5 combines trapping rules for sport and commercial purposes together in 14 CCR §465.5(c) and §465.5(f) and separately addresses depredation trapping in 14 CCR §465.5(g). We look forward to discussing the specific content of the rules so that they are updated to reflect the modern predator policy discussed above.

2. **Depredation in urban settings:** *Should licensed commercial animal pest control operators under a contract for pest control services be authorized to place traps within 150 yards of a structure used as a permanent or temporary residence without notification of residents?*

No, all animal pest control operators should be required to provide notification to and receive consent from all residents who live within 150 yards of a structure on or nearby which a trap is placed. Given that licensed animal pest control operators are still permitted to use lethal traps, the risk of collateral damage to pets and non-target animals is very high. Moreover, wildlife is a shared public resource and, as a matter of policy, residents living near a placed trap have the right to, at a minimum, be given notice that traps are planned for use in the area. Thus, we support retaining the consent requirements of landowners and nearby residents in the text of 14 CCR §465.5(g)(3). Separately, to minimize the risk to non-target animals as well as the potential for controversy, we propose amending 14 CCR §465.5(g) to eliminate the use of all lethal traps for depredation purposes, absent an “extraordinary case to protect human health or safety” as defined in 14 CCR §465.5(e)(1).

3. **Zones (kit fox range) prohibition on some trap gear:** *Are gear restriction zones still necessary? Technological advances in gear design may avoid kit fox concerns.*

Yes, gear restriction zones are necessary. Even if certain technological advances in gear design may partially mitigate San Joaquin kit fox taking concerns—a proposition for which we have seen no compelling evidence—allowing the lethal gear to be used in such protective zones is unlawful because there still exists a risk that the trap could exact a kit fox taking in violation of the Endangered Species Act (“ESA”) (*See Animal Welfare Institute v. Martin*, 588 F. Supp. 2d 110 (A state trapping regulation violates the ESA if “it is not possible for a [licensed trapper] to use [his traps] in the manner permitted by the [state of Maine] without *risk* of violating the ESA by exacting a taking” (emphasis added))).

Moreover, 14 CCR §465.5(g)(5) should be amended to include zone prohibitions on trap gear for the marten and fisher, both of which are on track to be listed pursuant to the Endangered Species Act. Similarly, given growing conservation concern for the desert kit fox, as well as the fact that this animal is a focal species in the Desert Renewable Energy Conservation Plan, such trapping restrictions should be considered within the range of the desert kit fox as well.

B. 14 CCR §472: General Provisions

Overall, 14 CCR §472 currently contains several inconsistencies with respect to definitions of animal categorizations and the text of other regulatory sections. Accordingly, we recommend the following amendments to 14 CCR §472:

“§472. General Provisions.

Except as otherwise provided in this chapter ~~Sections 478 and 485 and subsections (a) through (d) below~~, nongame ~~birds and~~ mammals may not be taken.

~~(a) The following nongame birds and mammals may be taken at any time of the year and in any number except as prohibited in Chapter 6: English sparrow, starling, coyote, weasels, skunks, opossum, moles and rodents (excluding tree and flying squirrels, and those listed as furbearers, endangered or threatened species).~~

~~(b) Fallow, sambar, sika, and axis deer may be taken only concurrently with the general deer season.~~

~~(c) Aoudad, mouflon, tahr, and feral goats may be taken all year.~~

~~(d) American crows (*Corvus brachyrhynchos*) may be taken only under the provisions of Section 485 and by landowners or tenants, or by persons authorized in writing by such landowners or tenants,”~~

The reasoning for the suggested amendments are as follows:

- References to birds have been struck as they are clearly not “nongame mammals.” Any regulation of their take should be addressed elsewhere in the regulations.
- The mammals currently listed in 14 CCR §472(b)-(c) are not nongame mammals as defined in F&G Code §4150 because they are not “naturally occurring” in California. Therefore, they should be excluded from 14 CCR §472.
- As a general recommendation, in the case that the take of a specific species is permitted, it should only be done so with a species-specific regulation such as that that exists for bobcats in 14 CCR §478 and furbearers in §§461-464. We believe that coyotes should be the highest priority for such specific regulations. Additionally, regulations for skunks should distinguish between spotted and striped skunks and explicitly prohibit take for the endemic Channel Islands spotted skunk. Similarly, any take regulations for moles and rodents should prohibit targeted take of all endemic subspecies considered species of special concern.
- We note that of the two regulations cited in 14 CCR §472, §478 relates to bobcats and is undergoing revision, while §485 addresses American crows, which are obviously not mammals. Consequently, any references in §472 to other nongame mammal regulations are best made more generically as “in this chapter.”

Thank you for your consideration of these comments. We look forward to discussing these items with the Committee at the March 12, 2015 meeting.

Sincerely,



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PROJECT COYOTE

F O S T E R I N G C O E X I S T E N C E



To: Wildlife Resources Committee & Predator Policy Working Group
From: Camilla Fox & Rick Hopkins
Re: Comments re: “Proposed options for addressing Structural Issues in Title 14”
Date: March 5, 2015
cc: CA Fish & Game Commission; Department of Fish and Wildlife Director Chuck Bonham

On behalf of our California supporters, Project Coyote submits the following initial comments regarding the “Proposed options for addressing Structural Issues in Title 14” put forth by Commission staff at the WRC meeting on January 14, 2015.

Regarding the stated goal for this phase of “reviewing the state of predator management in California” and more specifically addressing “structural concerns” in Title 14, we have the following concerns:

The proposed review of “identifying and addressing inconsistencies” in existing policies and regulations is inadequate in scope, inconsistent, and incomplete in the regulations and policies addressed.

- 1- The proposed changes to the sections of Title 14 have not been fully vetted; they contravene sound science, modern, ethical wildlife management. The proposed changes violate the National Environmental Policy Act (NEPA), the California Environmental Quality Act (CEQA) and both the State and Federal Endangered Species Acts (CESA & FESA).

Our concerns are detailed below.

While we agree that inconsistencies in Title 14 need to be addressed, only some regulations within Title 14 are now being vetted and considered for amendments. Other sections need to be addressed, and Project Coyote’s letter (11/11/13 see Attachment 1) submitted substantive comments on regulations and policies we believe warranted vetting and revisions. Not one of those inconsistencies that we pointed out a year and four months ago have been addressed to date. Why have these regulations and policies been ferreted out for consideration? It appears from the published documents and timeline provided by Commission staff that these are the only structural inconsistencies in Title 14 that Commission and Department staff consider warrant vetting and revisions. If this is not the case, Commission staff needs to make this clear in public documents and inform the public when other inconsistencies will be addressed in this process of reforming California’s policies and regulations pertaining to predator management.

Project Coyote asks that Commission staff clarify this at the upcoming March 12th meeting and

in writing so that all interested stakeholders are made aware of this (and for those who cannot attend on March 12th). We also ask that Commission staff revisit the documents submitted by Project Coyote, the Humane Society of the United States and others who took the time to reply to the Wildlife Resource Committee and Commission staff's request for input on the subject of necessary revisions to California's policies and regulations related to predator management with the stated goal of modernizing predator management in California and ensuring all policies, regulations and statutes are consistent and reflect best and current science.

It must also be pointed out that the proposed amendments to select regulations were lobbied for by narrow interest groups including the Animal Pest Management Services, the California Farm Bureau Federation and the Shasta County Cattlemen's Association as reflected in the documents associated with this Predator Policy Working Group meeting agenda.

Comments re: "possible solutions to structural inconsistencies":

1- Section 460 Fisher, Marten, River Otter, Desert Kit Fox and Red Fox – functionally fully protected species

FROM COMMISSION STAFF REPORT: "Proposed 'possible solutions': Insert language exempting certain permitted activities (depredation, scientific collecting, incidental take permits, etc.) Clarify that 460 only prohibits take for fur (original intent).

Neither CDFW, nor any stakeholder (e.g., California Farm Bureau Federation) has made a cogent argument as to why these five species of predators should be subject to increased human mortality. No evidence has been presented to document substantial levels of damage or cost from these species. Therefore, we find this change unwarranted based on the lack of evidence and the fact that lethal control methods are generally ineffective in appreciably reducing conflicts.

2- Title 14, Ch. 5: Furbearing Mammals Section 465.5. Use of Traps

We are concerned that the proposal to possibly allow "animal pest control operators under a contract for pest control services be authorized to place traps within 150 yards of a structure used as a permanent or temporary residence without notification of residents" could place non-target animals- both domestic (dogs and cats) and wildlife- in danger. Animal pest control operators frequently use snares to capture and kill coyotes, foxes and other species deemed a "nuisance" by some. This regulation was specifically put in place to protect non-target animals and to protect the rights of private property owners. Animal Pest Management Services and other private pest control firms would prefer to not be restricted by the requirement of obtaining landowner permission of residences within 150 yards of a structure. However, doing away with landowner permission completely contravenes the basic premise of why this regulation was put in place to protect non-target animals and property owners.

The proposal to amend the regulations put in place that restrict body-gripping traps (snares and Conibear kill traps) in the San Joaquin kit Fox (SJKF) zones could violate NEPA, CEQA CESA, and FESA requirements governing the protection of listed species.

The SJKF is listed by both the state and federal Endangered Species Acts, and any action that

may result in harassment, harm, injury, or death of a SJKF requires “take” authorization from both CDFW (an Incidental Take Permit) and the U.S. Fish and Wildlife Service (Biological Opinion). The SJKF populations remain at risk with limited reproductive capacity and we find no credible argument to subject this species at risk to additional potential “take”. CDFW and the USFWS have appropriately given great scrutiny to authorizing project related actions that may result in “take”. As with our comments noted above for modifications to Section 460, we find that no credible argument has been made to warrant any change or revisions in Section 465.5.

The stated rationale for amending this regulation is that the current trap restrictions within the SJKF range is “problematic for depredation control.” However, the very traps that some private pest control firms would like to use including snares and kill traps are inherently non-selective. So not only are SJKF and other imperiled (and non-imperiled) species put at risk but even non-offending targeted species may be removed because of the non-selective nature of such traps.

2- Title 14, Ch. 6: Nongame Mammals Section 472. General Provisions

We concur that it is problematic that this regulation is “inconsistent with all other provisions of law where take is limited or authorized only under specified circumstances. Allows unlimited take by hunters.”

We believe that this issue of unlimited take of certain species (for which there is no clear rationale) must be fully vetted. We also believe that recreational/sport hunting and trapping of predators (differentiating from depredation removal) must be fully examined by Department and Commission staff with regard to ethics and modern science and best management practices (see Attachment 2).

Thank you for your consideration.

Respectfully submitted,



Camilla H. Fox
Founder & Executive Director



Rick Hopkins, PhD
Science Advisory Board, Project Coyote

Exhibit B

PROJECT COYOTE

F O S T E R I N G C O E X I S T E N C E



To: Wildlife Resources Committee Predator Task Force

Re: Initial comments and proposed amendments to the California Fish and Game Code sections and Regulations regarding the State's responsibilities pertaining to predator management, conservation, and stewardship

Date: November 11, 2013

On behalf of our California supporters, Project Coyote submits the following initial comments and proposed amendments to the California Fish and Game Code sections and Regulations regarding the State's responsibilities pertaining to predator management, conservation, and stewardship.

As discussed in detail below, the rationale for our proposed amendments is fourfold:

(1) to ensure that the California Department of Fish and Wildlife (hereinafter "the Department") and the California Fish and Game Commission (hereinafter "the Commission") abide by their common law and statutory duties to protect and preserve the State's wildlife resources pursuant to the public trust doctrine;

(2) to ensure that Department regulations are consistent with its existing predator policy which applies to *all* species of wildlife and only authorizes the application of depredation methods towards individual animals which have caused injury or damage to private property, and consistent with sections of the California Fish and Game Code which authorize the same;

(3) to incorporate ethical standards and economic considerations that reflect the valuable role predators play in maintaining ecosystem functioning, resilience, and health as well as public values/appreciation for wildlife/predators;

(4) to modernize predator conservation and stewardship throughout the state to reflect current science, conservation biology, and ecological principles utilizing an adaptive management approach.

I. The Department and the Commission have both common law and statutory duties to protect and preserve all of the State's wildlife resources pursuant to the public trust doctrine.

All wildlife in the State of California that is not held by private ownership or legally acquired is the property of the people. Pursuant to the public trust doctrine, the State has a common law duty to act as the Trustee to preserve and protect wildlife resources for present and future

generations of Californians. Indeed, the State's duty along these lines has been codified in the California Fish and Game Code §711.7, subdivision (a), which appoints the Department as a trustee over State wildlife resources. Moreover, Fish and Game Code §1801 provides that all wildlife resources under the jurisdiction and influence of the State should be conserved for the benefit of all citizens of California, as well as to maintain their intrinsic and ecological value. The Commission has been granted regulatory and permitting authority to institute changes in the Fish and Game Code and issue permits pursuant to the Code necessary to protect wildlife (CA Fish and Game Code §§ 200 et seq.) **We request that both the Commission and Department abide by their respective duties to protect and conserve all California wildlife species for the benefit of California residents.**

Public surveys indicate that the majority of Californians support protective measures for wildlife – including predators – regardless of how the predator species classified. These protectionist values are evident through California voters' support of public ballot measures to protect predators and restrict take methods deemed cruel and/or indiscriminate Prop. 4 passed in 1998 and Prop. 117 passed in 1990 are examples of citizen desire to preserve and respect wildlife. As shown below, the Department's stated position on predators expressly applies to "all" species of wildlife. In proposing amendments to the Department's predator regulation and code sections, Project Coyote requests that the Commission and Department abide by their duties under the public trust doctrine and conform their existing regulations to the Department's stated predator policy – which applies to all wildlife species, regardless of how the predator species are classified (e.g., nongame, furbearing or game species) – as well as existing Code sections.

II. The Department's stated predator policy expressly applies to *all* wildlife species, and permits that depredation control methods may be directed only towards those individual animals that have been found to have caused damage to private property or to have presented an immediate threat thereto.

The Department's existing predator policy states:

All wildlife *shall* be maintained in harmony with existing habitat whenever possible. In the event that *some* birds or mammals may cause injury or damage to private property, depredation control methods directed towards the *offending animals* may be implemented.

Under the Department's existing predator policy, the Department has a mandatory duty to maintain *all* species of predators in harmony with existing habitat whenever possible – regardless of how the predator is classified, whether it be a game, nongame or furbearing species. Moreover, depredation efforts may only be applied towards those individual animals that have been found to have caused damage to private property or presented an imminent threat thereto. Project Coyote takes issue with the Department's current stance – as expressed in the current form of its regulations and code that treat predators that are classified as "nongame" or "furbearing" differently than those that are classified as game.

While we applaud many of the recent amendments to the depredation regulations, as codified in §401, Title 14, which went into effect November 1st and require issuance of a permit to take elk,

bear, beaver, bobcat, wild pigs, deer, wild turkeys and gray squirrels that are damaging or destroying or immediately threatening to damage or destroy land or property, we have serious concerns regarding the lack of similar measures for other predators based solely on their classification as “nongame” or “furbearing.” As addressed in greater detail in the following section, the current classification of predators as “game,” “nongame,” and “furbearing” has no scientific basis and is outdated under concepts of modern conservation biology and ecological principles. Our proposed amendments address the lack of consistency currently apparent in the Department regulations for predator species, we believe in a reasonable manner, and will help to bring the Department’s regulations in compliance with its obligations under both the public trust doctrine and its stated predator policy. In addition, our proposed amendments will also help to eliminate inconsistencies in the regulations for the existing classifications of predator species. For example, under the current form of the regulations and code, California Fish and Game Regulation § 472(a) authorizes unlimited takes of nongame mammals, while § 4152 of the Code only authorizes the taking of nongame mammals found to be injuring growing crops or other private property. Clearly, the regulation for nongame mammals should be brought in line with the current form of the Code.

III. The Commission and Department should incorporate ethical standards and economic considerations in the California Fish and Game regulations and code that reflect the valuable role predators play in maintaining ecosystem functioning, resilience, and health as well as the public’s appreciation of predators

Over the last fifty years, humankind’s understanding of wildlife and ecosystems has expanded and societal attitudes about our relationship with the natural world have shifted. Our scientific understanding of animals – their ecology, physiology, behavior, cognition, sentience, and psychology – is broadening, and we are recognizing that animals have intrinsic value apart from their perceived economic value to humans (Messmer et al. 2001). This evolution in societal beliefs challenges old notions in how we relate to non-human animals. Americans today value the welfare of all beings and believe that the human species has a moral obligation to be compassionate and humane toward the other species and animals which have a right to live their lives on Earth, undisturbed by people, in their natural environments, without abuse or cruelty or the unraveling of their social relationships (Treves et al. 2013). Old fairy tales and fables that demonize certain animals such as wolves and coyotes are being deconstructed. With the ominous consequences of our choices and activities increasingly apparent, humankind is finally coming to understand that our economic and political systems simply cannot operate to keep human societies and civilization disconnected from the Earth’s natural systems and continue to survive.

With this as a backdrop, we believe the Department and the Commission have an opportunity – and an obligation – to modernize predator stewardship and to bring the state’s regulations, policies and codes in line with current science – both biological and social – while incorporating ethical protocols, standards, and criteria in how predators are managed statewide. We strongly encourage the Department and the Commission to undertake scientific review and survey of the people towards predators, current predator management and conservation, and economic value and perception, especially in a state with rapidly changing perception and recreational trends

where fewer than 1% of Californians hunt and a growing number are engaged in a wide range of non-consumptive wildlife uses. Again, there is an extant scientific literature and basis to quantify these issues (USDOJ et al. 2011; <http://www.census.gov/prod/2013pubs/fhw11-ca.pdf>).

IV. The Commission and Department should modernize its Predator Conservation and Stewardship Regulations, Policies and Code to Reflect Current Science, Conservation Biology, and Ecological Principles in an Adaptive Management Framework.

The Department and the Commission acknowledge that the State's regulations, policies and codes pertaining to predator management are outdated, fail to incorporate the best available science, are often inconsistent, and create confusion for wildlife managers, enforcement personnel and the general public. We commend the Commission for tasking the newly formed Wildlife Resources Committee (WRC) with a comprehensive review of the State's policies and practices regarding predator management – or more appropriately predator conservation and stewardship. We believe that the Commission has an opportunity to set a trend and to demonstrate that California is a leader in how it manages its predators, and that its policies and practices are based in science, ethics, and economics.

We believe that the attached Carnivore Conservation Act presents a model template for carnivore conservation nationwide and one that can be adapted to the specific conditions in California. We encourage the WRC and the Department to consider the provisions in this Act for California, as the Act represents the best available science regarding the role of predators in maintaining ecosystem functioning and health and shifting public values that reflect an appreciation for predators both for their ecological benefits and intrinsic worth.

In addition, we recommend that the Department's current adaptive management program be augmented to include information on current populations and known anthropogenic and non-anthropogenic impacts on their population and the habitats that sustain them. We further recommend that the Commission sanction an independent, scientific review of the State's predator management policies that includes any and all recommendations made by the WRC.

With the aim of modernizing California's predator conservation and stewardship program, Project Coyote recommends the following changes to the State's predator regulations, policies, and code. Not only will our proposed changes help to bring the State in line with current science and societal beliefs, but they will help to ensure compliance with the Department's obligations under the public trust doctrine and consistency with its stated predator policy. Because of the complexity of the State's predator regulations, policies, and code we also strongly suggest that the Department sanction its own internal review to ensure that inconsistencies are addressed that WRC predator policy task force members may have missed.

1. The Department's duty to limit take of predators & implement consistent protocols and regulations with regard to mitigating predator conflicts and damage

Allowing the unlimited take of species such as bobcats, coyotes, and gray fox is counter to current science and ecological thinking. It fails to incorporate any assessment of the ecological

value these animals provide to the ecosystems they inhabit (see Bergstrom et al. 2013 for a partial overview of an extant scientific literature on this subject). Thus, modern science tells us that altering predator prey populations through indiscriminate killing can have cascading and long-term negative impacts to the ecology of a given bioregion (see Crooks and Soule, 2009 for a state example of the extant scientific literature on this subject). We also now know that large carnivores are critical to ecosystem health and resilience (Weaver et al. 2002). Given this knowledge, we believe it is incumbent upon the Department to remove unlimited take provisions in its regulations for all native carnivores in California (see attached proposed Massachusetts Carnivore Conservation Act, hereinafter “Carnivore Conservation Act”). We strongly encourage the Department to rethink its current classifications of predator species that appear to have no scientific basis for separate classifications (e.g. game mammal, nongame, furbearing, etc.) and consider a new classification of “native carnivore” for all predator species that would provide certain provisions and protections for all such species and would only allow takes under narrowly defined terms and conditions. Classifying predators in this manner would ensure that the Department and Commission are meeting their duties to manage all species of wildlife pursuant to its existing predator policy as well as the public trust doctrine.

We also contend that it is the Department’s responsibility to strictly regulate the taking of predators when very little (if any) baseline population data exists for these species in California. In the absence of such critical population data the State should be implementing the Precautionary Principle and limiting the takes of predator species, particularly when they are known to be affected by anthropogenic impacts (e.g., trapping/hunting, habitat restoration, changing land-use activities) and non-anthropogenic impacts (climate change and disturbance events such as drought, fires, and floods).

Again, consistent with its Trustee obligations under the public trust doctrine and its stated predator policy, the Department must limit the take of predator species, regardless of whether the predators are classified as game species, nongame species, or furbearing mammals. As referenced above, the Department’s stated predator policy expressly applies to *all* wildlife species, and authorizes that depredation control methods may be directed only towards those *individual* animals that have been found to have caused damage to private property or to have presented an immediate threat thereto.

Currently, California Fish and Game Code § 4152 allows the taking of nongame mammals and black-tailed jackrabbits, muskrats, subspecies of red fox that are not the native Sierra Nevada red fox and red fox squirrels that are “found to be injuring growing crops or other property.” While this section of the regulations is consistent with the Department’s stated predator policy, reportedly, it is not regularly enforced. Moreover, it is inconsistent with § 472(a) of the California Fish and Game regulations which allows “the following nongame birds and mammals to be taken *at any time of year and in any number... coyotes...*”

Just as the State has recently modernized its protocols with regard to how conflicts with mountain lions are handled, we believe the same detailed protocols, policies and regulations should be applied to other California predator species. As with the new mountain lion protocol, the use of lethal control should be employed against predator species only after nonlethal methods have been fully exhausted and only in response to localized, verified injurious wildlife

problems in which an animal has caused or immediately threatened to cause injury or damage to private property. In general, we strongly recommend that any and all lethal control of any predatory species be justified *a priori* on an ecological, economic, and ethical basis and must use the best science, techniques, and survey methods available. Then, this assessment needs to be fully compared to the increasing development of successful non-lethal methods and programs including those successful in the State (Fox 2008, Fimrite 2012). If justified, any taking methods employed should be target-specific to remove only the offending animal(s). Assuming the Department abides by such criteria and ethical standards, current taking methods and practices directed towards predator species that are arguably inhumane and indiscriminate and/or ecologically unsound would be prohibited. These include but are not limited to: predator/wildlife killing contests, snares, and hounding (for take).

In order for the Department to uphold its responsibilities to protect all wildlife species under the public trust doctrine and its existing predator policy, as well as to maintain consistency with the existing Code section for the taking of nongame mammals, Project Coyote proposes amendments to §§ 472 and 401 of the Fish and Game Regulations and §4152 of the California Fish and Game Code (please see attached).

1. Prohibiting wildlife killing contests in California

In California predators including coyotes and gray fox have been subject to unjustified mass and indiscriminate killings—whether or not private property damage had occurred or even been threatened. These organized killing contests are sometimes organized and conducted under the inducement of prizes or monetary rewards and violate the concept of “fair chase.” Project Coyote believes that by allowing such killing contests to continue, the Department and the Commission are abrogating their duties to California citizens to protect wildlife under both the public trust doctrine and the Department’s stated predator policy—which is expressly applicable to *all* species.

Predator species are generally not taken for consumption. Allowing organized, mass indiscriminate killing of predators is not only cruel to the species involved, but disruptive to California’s native ecosystems by unnaturally altering the balance of predator and prey species. This can result in an overabundance of prey and pest species, which, in turn can damage crops and other types of private property. For example, we know conclusively from studies in Yellowstone and elsewhere (see Estes et al. 2011, Ripple and Beschta 2012, and Ordiz et al. 2013) that large carnivores are vital to maintaining healthy ecosystems and species diversity. Their presence helps to maintain native plant communities by keeping large herbivore populations in check, contributing to the health of forests, streams, fisheries and other wildlife. Their absence leads to ecosystem simplification and a loss of biodiversity. As previously cited above, the effects of lethal control on apex carnivores has been shown to affect numerous species including reduction or increase of smaller carnivores—reverse or standard meso-predator release. Moreover, indiscriminate killing of predators is not only ineffective but is often counterproductive and at odds with the principles of conservation biology, ecosystem based management theory, and population ecology (see attached scientific opinion letter by Crabtree, 2013 which is based on numerous studies, many of which are reviewed in Crabtree and Sheldon,

1999). There is extant scientific literature on these issues and we strongly urge the Commission to support independent scientific evaluation of predator killing and removal.

The coyote-killing contest that took place in Modoc County last February generated tremendous public outcry and national media attention. Project Coyote submitted a letter on behalf of 25 organizations representing more than one million Californians asking that this contest hunt be stopped based on ecological and ethical concerns. In addition, more than 20,000 letters, emails and petition signatures were submitted to the Commission and the Department protesting the contest. The Commission and the Department have yet to respond to the public on this issue.

Project Coyote submits that consistent with its Trustee obligations under the public trust doctrine, the Department's stated predator policy, and § 4152 of the Code, which only authorizes the taking of nongame mammals found to be injuring growing crops or other private property, the Commission and Department must make it unlawful to offer any prize, inducement, or monetary reward for the taking of any gamebirds, mammals—including all species of predators—fish, reptiles or amphibians in an individual contest, tournament or derby pursuant to § 2003 of the California Fish and Game Code. Exceptions may be made for game fish and frog jumping contests pursuant to subsections (b) and (c) of the code. To institute a ban on wildlife killing contests, Project Coyote recommends amending § 2003 of the Code by deleting subsection (d) in its entirety, which currently authorizes wildlife taking contests valued at \$500.00 or less. We believe subsection (d) provides a loophole under which mass, indiscriminate wildlife killing contests for predators and other species are conducted. This loophole should be eliminated.

3. Wildlife Trapping

Through the passage of Proposition 4 (passed in 1998) and AB 789 (signed into law this year) restrictions were made to wildlife trapping and killing practices as reflected in California Fish and Game Code § 3003.1, § 3003.2 and § 12005.5 in 1998 (also known as "Proposition 4") and Code§ 4004, earlier this year. The Commission and Department should update sections of the Fish and Game Code relating to trapping and all sections of its rules and regulations adopted under those Codes to reflect these legislative changes and ensure consistency.

California Fish and Game Code § 3003.1 provides a gaping loophole through which snares may be used to take fur-bearing and non-game mammals to protect private property. Public surveys indicate that Californians do not support wildlife-killing methods deemed inhumane and indiscriminate. Moreover, increased media coverage of animals caught and suffering in snares and local efforts to prohibit the use of snares- including a proposal to ban their use in Los Angeles - the use of snares has led to heightened public concerns about their use in California (see attached article - and video link).

Both the code and regulations are presently riddled with inconsistencies regarding trapping, which must be eliminated in order to provide consistent guidance to both enforcement personnel and to the public. For example, Fish and Game Code§ 4004, which fails to provide a complete ban on the use of steel-jawed traps must be made consistent with Code§ 3003.1-- which clearly provides: "[i]t is unlawful for any person, including an employee of the federal, state, county, or

municipal government, to use or authorize the use of *any* steel-jawed leghold trap, padded or otherwise to capture any game mammal, fur-bearing mammal, nongame mammal, protected mammal, or any dog or cat.” In addition, § 465.5 of the regulations relating to the use of traps-- which was not provided by the Department in its compilation of current policies, code sections and regulations regarding predator management and depredation-- continues to allow certain body-gripping traps and snares to trap furbearing and nongame mammals in situations unrelated to commerce or recreation.

Project Coyote’s Executive Director Camilla Fox and Science Advisory Board member Dr. Paul Paquet served on a national advisory committee to assist the Sierra Club in developing a national policy on the use of traps. The Sierra Club’s national board adopted this policy in 2012:

Policy on Trapping of Wildlife

Use of body-gripping devices* – including leghold traps, snares, and Conibear® traps – are indiscriminate to age, sex and species and typically result in injury, pain, suffering, and/or death of target and non-target animals.

The Sierra Club considers body-gripping, restraining and killing traps and snares to be ecologically indiscriminate and unnecessarily inhumane and therefore opposes their use. The Sierra Club promotes and supports humane, practical and effective methods of mitigating human-wildlife conflicts and actively discourages the use of inhumane and indiscriminate methods.

Sierra Club recognizes the rights of indigenous peoples under federal laws and treaties granting rights of self-determination and rights to pursue subsistence taking of wildlife.

*Body gripping device – includes, but is not limited to, any snare (neck, body, or leg), kill-type trap (such as the Conibear®), leghold trap (including steel-jaw, padded, offs et), and any other device designed to grip a body or body part. This definition includes any device that may result in injury or death because of the mechanism of entrapment. Live cage and box traps, and common rat and mousetraps shall not be considered body-gripping devices.

Board of Directors, May 19, 2012.¹

Project Coyote believes that this policy reflects national and international trends toward banning wildlife traps deemed cruel, non-selective, and ecologically unsound. We encourage the Department and the Commission to consider adopting this policy and banning snares by amending § 465.5 of the regulations and § 3003.1 of the Code. In so doing, California would be joining numerous other states that have outlawed snares including Illinois, Colorado, Washington, Connecticut, New York, New Hampshire, Oklahoma, Rhode Island, Vermont, North Carolina and South Carolina.

¹ See: <http://www.sierraclub.org/policy/conservation/Trapping-Wildlife.pdf>

4. Use of hounds for taking wildlife

The use of dogs to hunt mammals, also known as “hounding” often involves the use of high-tech radio collars and GPS devices that allow the hunter to monitor the dogs’ activity from a distance. A pack of technologically outfitted dogs is released to chase a stressed wild animal for long distance, across all types of terrain, even sometimes including private property — with no direct oversight from the hunter. The dogs pursue the animal to the point of exhaustion then the dogs either attack and maul the animal—which may cause a lingering, traumatic and painful death, even resulting in injury to the dogs—or, the animal climbs a tree to escape the chase. Because the hunter is unable to keep up with the dogs and monitor their activity, the use of dogs can result in injury and death of non-target animals, including other wildlife species, pets, and farm animals. It can also result in damage to private property. Hound hunting violates the rules of “fair chase”.

Current law allows the use of hounds for both pursuing and taking a variety of predators and other mammals classified as furbearers and nongame. Under § 1-89.1 of the California Fish and Game Code, the term “take” means to “hunt, pursue, catch, capture or kill, or attempt to hunt, pursue, catch, capture or kill” a species of wildlife. Public opinion polls do not support the use of dogs to “capture” or “kill” wildlife species. Last year the California legislature passed SB 1221, prohibiting the use of hounds for pursuing and taking bears and bobcats and provided limited exemptions now reflected in Section 401. Such a prohibition should be applied equally to all species.

Project Coyote understands that the use of dogs may be justified in limited circumstances for scientific research purposes or to track and tree predators causing injury or damage to private property under a depredation permit issued by the Department. However, allowing the taking/killing of predators/mammals with hounds is ecologically unsound, ethically unjustifiable and counter to public sentiment. Moreover, allowing hounding for some species and not others creates myriad enforcement challenges. Project Coyote urges a ban on the taking of mammals with dogs to ensure consistency in the law and ease of enforcement in the field.

Initial Concluding Remarks

In closing, Project Coyote has been working to increase the acceptance and tolerance of native carnivores throughout California and is working directly with communities to implement effective strategies that promote coexistence and mitigate conflicts between people, wildlife and domestic animals. A prime example of these coexistence strategies is the Marin County Livestock and Wildlife Protection Program described in the attached summary. It has been our experience that when Californians come to understand 1) the important role native carnivores play in maintaining healthy ecosystems, 2) their intrinsic value, and 3) the inefficiency of lethal control, that they will support predator stewardship and conservation including non-lethal control measures. At the opposite end of this understanding lies unlimited and indiscriminate takings as exemplified by predator killing contests that appear to have no justifiable basis in ecology, ethics, or economics.

Enclosed, please find our initial proposed amendments to the Department's regulations and Code. We stand poised to work with the State to bring California to the forefront of predator stewardship and conservation, as supported by the majority of public opinion polls.

We urge you – as stewards of California's wildlife – to abide by your duty to preserve and protect all wildlife species for the citizens of the State.

Thank you for your consideration.

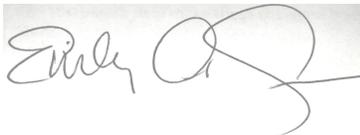
Respectfully submitted,



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PROJECT COYOTE

F O S T E R I N G C O E X I S T E N C E



February 12, 2015

California Fish and Game Commission
P.O. Box 944209
Sacramento, CA 94244-2090
fgc@fgc.ca.gov

Re: Support for a ban on bobcat trapping in California and prohibitions on trapping and hunting of mammalian carnivores for commercial or recreational purposes

Dear Commissioners,

On behalf of Project Coyote's Science Advisory Board we express our support for a ban on bobcat trapping in California and prohibitions on trapping and hunting of mammalian carnivores (predators) for commercial or recreational purposes.¹

The most general reason for such prohibition is that wildlife managers and sportsmen alike believe, as a community, that killing an animal without an adequate reason is unjustified and unsportsmanlike.² Predators are not trapped or hunted for their meat. They are often trapped and hunted merely for recreation or for their pelts, which are then kept as a trophy or sold on the international fur market. This market merely serves those with a desire to purchase luxury items.

Sociological surveys show that most Americans believe hunting for meat represents an adequate reason to hunt.³ However, those same studies indicate that only small minorities of Americans believe hunting animals for the purpose of supplementing one's income or to gain a trophy are adequate reasons to hunt.⁴ Likewise, research indicates that most

¹ This would include, but is not limited to, fur trapping, bounties, sport and trophy hunting, and killing contests, derbies, tournaments, or drives.

² This principle is formally and explicitly acknowledged by the North American Model of Wildlife Conservation.

³ Duda, M. D., and M. Jones. 2014. The North American Model of Wildlife Conservation: Affirming the role, strength, and relevance of hunting in the 21st century. [URL: http://www.responsivemanagement.com/download/reports/NAMWC_Public_Opinion_Hunting.pdf]

⁴ *ibid.*

Americans consider the use of foothold traps to be inhumane⁵, and “a majority of the [U.S.] population disapproves of trapping to make money...and trapping for recreation or sport.”⁶ Beyond being widespread, those beliefs are well justified. That is, gaining a trophy and serving a luxury industry are trivial reasons to kill a living creature.⁷ These perspectives are reason enough to prohibit killing predators for commercial or recreational purposes.

Furthermore, wildlife professionals understand that wildlife populations are public trust assets.⁸ In a judicious democracy all citizens have a stake in the treatment of public trusts. That means, when most citizens have good reason to treat a public trust, such as a predator population, in a particular manner, then the trust should be managed in that way.

What most citizens believe to be adequate and inadequate reasons for killing wildlife is important because participation in hunting has been on the decline for decades, and that decline is worrying to members of the hunting community. Reversing that trend and maintaining the support of the non-hunting community almost certainly requires the hunting community to be sensitive to what most Americans consider to be adequate reasons to kill a living creature.⁹

Some advocates might argue that trapping and hunting predators should be allowed because it is a traditional form of recreation. The shortcoming with this rationale is that “tradition” cannot ever by itself be an adequate justification for any activity. Many traditional activities, once condoned, are now widely acknowledged to be unjustified.¹⁰

Some proponents might argue that trapping and hunting predators is necessary because without trapping or hunting these species would become overabundant and subsequently reduce the abundance of prey species – prey species that some believe should be managed for maximum abundance for the purpose of maximizing hunter success. A great deal of science indicates that killing predators is not a reliable means of increasing ungulate abundance. The circumstances most likely to result in increased ungulate abundance are also the circumstances most likely to impair important ecosystem benefits and services that predators provide. Even when predators are killed to the point of impairing the ecosystem services, there is still no assurance that ungulate abundance will increase. The

⁵ According to Reiter et al. (1999), 80% of the U.S. public found foothold traps to be inhumane capture devices. Reiter D., Brunson M., Schmidt R.H. 1999 Public attitudes toward wildlife damage management and policy. *Wildlife Society Bulletin* 27, 746-758. This finding was recently replicated by Bruskotter and colleagues (unpublished data).

⁶ According Duda and Young (1998) 59% of Americans disapproved of trapping generally. Duda M.D., Young K. (1998) American attitudes toward scientific wildlife management and human use of fish and wildlife: Implications for effective public relations and communications strategies. pp. 589-603. *Transactions of the North American Wildlife and Natural Resources Conference*.

⁷ While earning an adequate income is vitally important, fewer than 100 Californians trap bobcat as a means of supplementing their incomes. Trapping predators is unimportant to the economic health of California.

⁸ This principle is also formally and explicitly acknowledged by the North American Model of Wildlife Conservation.

⁹ This reasoning highlights the imprudence of fear mongers who believe that prohibiting unjustified forms of hunting and trapping is a slippery slope to the prohibition of all forms of hunting.

¹⁰ This includes many forms of sexism and racism.

reason being is that ungulate abundance is frequently limited by factors other than predators – factors such as habitat and climate.

Proponents might also argue that killing predators is an important means for decreasing the loss of livestock to depredation. A great deal of science has been developed on how to effectively manage depredations. Lessons from that science include: In a population of predators, typically only a few individuals are responsible for depredating livestock.¹¹ For this reason, indiscriminate killing of predators is an ineffective means of reducing depredations because it does not target the offending predator or the time or place where depredation has occurred.¹² Moreover, indiscriminate killing can lead to the disruption of predators' social and foraging ecology in ways that plausibly, and perhaps likely, increase the risk of depredation. Reducing the loss of livestock is a common goal for all stakeholders. The concern is that recreational and commercial killing of predators does not contribute to this goal and may work against it because this kind of killing tends to be indiscriminate with respect to depredating predators.

Some proponents of predator trapping and hunting might highlight that opponents of predator killing are free to refrain from doing so; but being opposed does not justify prohibiting others from doing so. These proponents might further argue for being allowed to hunt and trap predators because – in their view – a sufficiently robust reason to oppose predator killing has not been offered. This laissez faire perspective misconstrues the circumstance. To kill a living creature without an adequate reason violates a fundamental principle of wildlife management and sportsmanship. By that principle particular instances of killing should be prohibited until good reason is offered for why doing so would be justified. To our knowledge, no such reason has been forthcoming. If some purported reason were presented, we would be very interested to evaluate such a reason.

Beyond these points and counterpoints, lies a need to better recognize and celebrate predators' valuable contribution to the health and vitality of our ecosystems. For example, predators serve human interests through rodent control, disease prevention, positive and indirect effects on plant communities, soil fertility, and physical processes (e.g., erosion and stream geomorphology). Trapping and hunting predators is antithetical to those valuable contributions.

¹¹ For example, see F. F. Knowlton, E. M. Gese, M. M. Jaeger, Coyote depredation control: An interface between biology and management. *Journal of Range Management* 52, 398-412. (1999).

¹² For examples, see M. M. Conner, M. M. Jaeger, T. J. Weller, D. R. McCullough, Effect of coyote removal on sheep depredation in northern California. *J. Wildl. Manage.* 62, 690-699 (1998); B. N. Sacks, M. M. J. K. M. Blejwas, Relative vulnerability of coyotes to removal methods on a northern California ranch. *J. Wildl. Manage.* 63, 939-949. (1999); B. N. Sacks, M. M. Jaeger, J. C. C. Neale, D. R. McCullough, Territoriality and breeding status of coyotes relative to sheep predation. *J. Wildl. Manage.* 63, 593-605. (1999).

Thank you for considering these concerns on this important issue. If the Commission were interested to know about any of the claims or rationale in this letter, we would be honored to share that insight with the Commission.

Respectfully submitted,

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PROJECT COYOTE

F O S T E R I N G C O E X I S T E N C E



Dear Interested Person or Party:

The following is a scientific opinion letter requested by Camilla Fox, Executive Director of Project Coyote. This letter outlines a response to the general question "What effect does reduction of coyotes (older than 6 months) have on the remaining population?" This question is central to the repeated claim that reduction (mortality) of adult coyotes from human control practices lessens predation on domestic sheep or game animals such as mule deer or antelope. Before I cover the three basic biological responses by coyote populations to reduction (described below), it is important to understand the type of "predator reduction" or "coyote control" in question. Most reduction programs, often referred to as control practices, are indiscriminate in nature, meaning the individuals removed (coyotes are killed not relocated) are probably not the offending individuals. Research (mostly funded and conducted by USDA Wildlife Services) has shown that offending individuals are most often breeding adults provisioning their pups. Breeding adult coyotes are very difficult to target and can be rapidly replaced (another pack member takes over their role). Even if some offending individuals are removed, there is great likelihood that the responses described below will take place anyway. Although removal of offending individuals may temporarily alleviate predation rates on the protected species, the alleviation is usually short-term and has long-term side-effects that can result in increased predation rates and increasingly ineffective control activities.

It cannot be over-emphasized how powerfully coyote populations compensate for population reductions. Such density dependent responses to exploitation (human-caused mortality) are common in mammals and present in all territorial populations at or near habitat saturation. Both evolutionary biology and the results of research (e.g., recently completed 20 year study in Yellowstone National Park before and after gray wolf reintroduction) indicate that the basis of their *demographic and behavioral* resiliency is embedded in their evolutionary history. Coyotes evolved, and learned to coexist, in the presence of gray wolves—a dominant competitor and natural enemy that overlapped the historic range of coyotes in North America. Prior to widespread human persecution starting in the mid-nineteenth century, wolves have provided a constant selection factor inflicting mortality, competition, and numerous other sub-lethal effects.

Collectively, these intense selective pressures by wolves resulted in a species that exists in a relatively constant state of colonization with many specialized adaptations. These demographic and behavioral adaptations are numerous and diverse and allow coyote populations to easily overcome the relatively mild effects of human control practices which are short-term and intermittent compared to sustained presence of wolves, from every month to many thousands of years.

Demographic compensation

The following demographic responses are based on published research, results of preliminary analysis of coyote study populations subjected to various levels of reduction or exploitation, and the work I have conducted with coyote populations in three study areas over the past 28 years in Washington (an unexploited population, not subject to human control or mortality), California (exploited), and Wyoming (unexploited then wolf mortality after reintroduction).

There is little, if any, scientific basis to justify control (reduction) programs that indiscriminately target adult coyotes. Wildlife Services often points out the lack of academic research demonstrating effectiveness. However, as with any federal action, the burden of proof is upon them to demonstrate both the biological and economical effectiveness of their proposed control activities. In fact, the mechanisms described below suggest that widespread control (even selective control) increases immigration, reproduction, and survival of remaining coyotes. It has been reported that sustained reduction of coyote numbers can only be accomplished if over 70% of the individuals are removed (exploited) on a sustained basis. Review of field research and modeling exercises (including my own) indicates that even with intensive control efforts, this level is rarely, if ever, achieved. A thorough review and synthesis of coyote ecology and demography can be found in a recent book chapter (see Crabtree and Sheldon 1999).

(1) Actual reduction in the density (and number of coyotes) does occur and is primarily a function of lower pack size for one year (betas, yearlings, and 6 month old pups are killed more often than reproducing adults or alphas). However, this reduction is compensated for in a wide variety of ways. First off, immediate immigration occurs in the reduction area by lone animals or from spatial shifts by surrounding social groups. At exploitation rates below 70%, the reproducing alpha males and females are replaced (seldom in the same year but always in the succeeding year). This is the expected response by most territorial species with surplus (non-breeding) adults. Their primary objective is to find a temporal opening, defend and exploit the food resources in that social group, pair-bond and breed.

(2) Human control resulting in density reduction results in a smaller social group size which increases the food per coyote ratio within the territory. The food or prey surplus is biologically transformed into somewhat larger litter sizes and almost always much higher litter survival rates (which are low in unexploited populations). Review of literature indicates that the increase in litter size at birth is not as great as was previously reported by Knowlton (1972). In addition to increased food availability for fast-growing pups, the surplus food improves the nutritional condition of breeding and associate adults, which translates in higher pup birth weights and higher pup survival. Alpha male coyotes and associate adults in the pack help feed the pups.

(3) Density reduction allows the pups that normally die during the summer months in populations with low to no mortality, to survive. Exploitation causing higher pup survival is fundamentally a function of the general mammalian reproductive strategy that delays the majority of reproductive energetic investment beyond the gestation period, the post-partum and neonate state (e.g., young pups). The caloric demand of offspring reaches an apex in May, June, and July when coyote pups grow very fast. Thus, the normal litter of six pups has a good chance of (a) surviving the typically high summer mortality period and, (b) being recruited into the pack

the following winter as adults thereby returning the previously exploited population to normal densities. By contrast, in the two unexploited populations I investigated, the average litter size at birth was 5 or 6, but due to high summer mortality, only an average of 1.5 to 2.5 pups survive. In populations subjected to less than 70% removal annually, there appears to be an ample number of breeding pairs to occupy all available territory openings and litter sizes of 6 to 8 enjoy high survival rates (most pups born survive to adulthood). This results in a doubling or tripling of the number of hungry pups that need to be fed. "Large packages" of prey, (such as sheep, as opposed to the more natural and common prey species of voles, mice, or rabbits) make for more efficient sources of nutrition because hunting adults have to invest less energy per unit of food obtained. Research funded by Wildlife Services clearly indicates that the primary motivation to kill domestic sheep is to provide food for fast-growing pups.

(4) Reductions in coyotes capable of breeding (at 10 months of age) result in smaller pack size which leaves fewer adults to feed pups. This may further add incentive for the remaining adults to kill larger prey as well as putting pressure on the adults to select for the most vulnerable prey and venture close to areas of human activity. Because predators like coyotes also learn what is appropriate food when they are pups, and are reluctant to try 'new' food sources unless under stress (such as having to feed a large litter of pups), reduction programs, in effect, may be forcing coyotes to try new behaviors (eating domestic livestock) which they would otherwise avoid. Research has clearly shown that higher numbers of adult pack members provide more den-guarding time and more food brought to pups. Without pressure to "maximize" efficiency in hunting for food for pups, packs may be able to subsist on larger numbers of smaller prey (e.g., rabbits and small rodents) rather than going for livestock or other, larger prey like antelope and mule deer fawns. Although, coyotes are exposed to significant risk of injury when hunting and killing larger prey, larger litter sizes might 'tip the balance' in favor of selecting larger prey and livestock.

(5) Reductions (non-selective, indiscriminate killing of adults) cause an increase in the percentage of females breeding. Coyote populations are distinctly structured in non-overlapping but contiguous territorial packs. About 95% of the time, only one female (the dominant or alpha) in a pack breeds. Other females, physiologically capable of breeding, are "behaviorally sterile". Exploitation rates of 70% or higher are needed to decrease the number of females breeding in a given area. Either a subordinate female pack member, or an outside, lone female can be quickly recruited to become an alpha or breeding female. My research has shown that light to moderate levels of reduction can cause a slight increase in the number of territories, and hence the number of females breeding.

(6) Reduction or removal of coyotes causes the coyote population structure to be maintained in a colonizing state. For example, the average age of a breeding adult in an unexploited population is 4 years old. By age 6, reproduction begins to decline whereby older, alpha pairs maintain territories but fail to reproduce. This may eliminate the need to kill sheep or fawns in the early summer in order to feed pups. Exploiting or consistently reducing coyote populations keeps the age structure skewed to the younger more productive adults (average age of an alpha is 1 or 2 years). Therefore, the natural limitations seen in older-aged, unexploited populations are absent and the territorial, younger populations produce more pups.

(7) Reductions in adult density of coyotes also cause young adults (otherwise prone to dispersing) to stay and secure breeding positions in the exploited area. This phenomenon is well-

documented by research conducted by Wildlife Services and other researchers. Research also indicates that this is the age class most frequently involved in conflicts.

Alternate prey

An aspect of coyote predation on livestock that is often overlooked is the availability, or dearth of alternate prey. Wildlife Services' research has demonstrated that coyotes will avoid novel prey, such as domestic livestock. In addition, it is risky for coyotes to predate upon domestic livestock because of human control actions associated with this behavior. Related research indicates that predators switch to alternative prey when a preferred prey item is absent or in low numbers. Voles and other rodents like jackrabbits are a preferred major staple of coyotes in the West. These prey species require cover and ample supplies of forage (grass and forbs). On many western rangelands grasses, forbs, and protective cover have been greatly reduced by domestic livestock grazing, leaving predators with fewer preferred prey to utilize. Present or historic grazing impacts should be assessed as a likely means of predicting overall predation rates on other prey species, especially prey like domestic sheep, which are already vulnerable to predators due to their lack of anti-predator behaviors.

Accelerated selection pressures and learned behaviors

A relatively unexplored, but promising avenue of research is the long-term genetic and behavioral changes in coyote populations subjected to decades of exploitation. It seems obvious that the type of selection pressures and selection rates have been greatly changed for coyote populations, after a century of exploitation at 20% to 70% per year. More nocturnal, more wary, more productive, more resilient individuals have probably been intensively selected for. This in turn may cause coyote populations to resist control practices that previously were effective. In addition, the possibility of social facilitation and learning may be altered or reduced. Coyotes, like many mammals, learn to habitually use certain prey or habitats from other individuals in the population, especially from older adults in their social group (if they have one). Coyotes, already a highly social and adaptable species, are held in a younger colonizing state when they are exploited, and learned or traditional behaviors may be lost. Individuals are therefore more susceptible to learning novel prey sources or trying out novel habitat types, and are frequently associated with conflicts such as livestock predation.

There are many questions to be answered such as, "How will coyote populations respond once predator reduction or control programs are terminated?" or "Are there other management alternatives, both lethal and non-lethal, that may be effective in reducing predation on domestic livestock?" "How do economics figure into management options"? This letter and scientific opinion only addresses the narrow, but important topic of the impacts of human-caused reduction or 'control' on coyote demographic parameters. We see little, if any, evidence to justify control practices on an ecological basis. This letter also addresses a long-held belief that human control of coyote populations are 'necessary', similar to 'mowing a lawn' to keep it from growing out of control. This belief has no scientific basis whatsoever. Even research conducted by Wildlife Services reports a variety of factors that keeps the lawn from growing. Their research repeatedly concludes that the primary means of population limitation is territoriality itself, which imposes an upper limit on density (or lawn height). Paradoxically the prevalent use of lethal control by Wildlife Services opens up a 'Pandora's box' of behavioral and demographic responses that negate any long-term effectiveness of control. The predominant responses of coyote populations to lethal control efforts are to: (1) increase the number of pups produced (recruitment), (2)

increase immigration into the conflict area, and (3) increase behaviors that further exacerbate the conflict. Collectively, this results in higher predation rates on domestic livestock and wild ungulates.

Coyotes are still products of their evolutionary past. Biological, economical, and ecological evaluation of control practices should be a requirement undertaken before any public or private effort to reduce losses due to coyotes or any other predator. In conclusion, it is my opinion based on decades of field research that the common practice of reducing adult coyote populations on western rangelands is most likely ineffective and likely causes an increase the number of lambs, fawns, and calves killed by coyotes.

A Summary of the Effects of Exploitation on Predator Populations

The 20 responses listed below are divided into four general categories: (1) demographic compensation, (2) behavioral response, (3) changes in culture/society, and (4) ecosystem impacts. How many of these occur—and their individual magnitudes—will vary by species, the severity and type of control action taken, habitat, season, prey availability, and presence of competing carnivores in the target area. Interactions between the 20 responses listed below can be unpredictable; however, scientific findings and biological common sense both indicate that they ‘amplify’ in a manner that renders indiscriminate killing ineffective and results in a multitude of detrimental effects on individuals, species populations, and the entire predator-prey ecosystem.

Demographic Compensation: (this is a particularly strong response for coyote populations because the primary reason they kill ungulate neonates, both domestic and wild, is to feed fast-growing pups)

- Breeding adults produce more pups when there is direct reduction in territorial pack size. There is a weak to negligible effect on litter size at birth; however, the compensatory response of litter survival is remarkable. For example, prior to wolf restoration, adult coyote mortality averaged only 9%, pack size was 6, and litter survival was 28%. After wolf restoration, adult coyote mortality increased to 30% to 50%, pack size fell to 3, and coyote pup survival abruptly rose to 78%—a nearly three-fold increase. Analysis from 20+ field studies indicated a similar response to human exploitation.
- Immigration of breeding adults into the exploited area to fill vacant territories and find available mates. This response can be immediate. I have documented successful coyote litters in territories where the pregnant female was killed one month earlier (ascension by

a pregnant beta female—Wildlife Service’s own research documents this phenomenon—nearly all non-alpha females are pregnant on an annual basis).

- A higher percentage of females breed and produce pups. Two litters per territory can also occur with abundant/available prey.
- The average age of reproductive females is lowered, eliminating older, less productive alpha females. First-time breeders (young alphas) have higher pup survival than older breeding pairs.
- Increased natal philopatry—yearlings and young betas tend to forego dispersal and continue to reside in the exploited area.
- Regardless of the level of exploitation, the number of breeding pairs in a target area is consistent from year to year unless 70% or more of the coyote population is removed annually. This level of control is extremely difficult and costly to achieve let alone document.

Behavioral Responses:

- Lower pack size results in selection of larger prey items (e.g., ungulate neonates) over more numerous small prey items (e.g., rodents). This is particularly detrimental to livestock when alternate prey abundance is low which is often due to overgrazing practices.
- Adjust vocal communications—less vocal around humans.
- Activity cycles—more nocturnal and less diurnal.
- Denning behavior (guarding and location)—less susceptible to enemies.
- Avoidance of novel stimuli including control techniques. Perceived avoidance of sustained control activities.

Changes in the Culture/Society:

- Increases in information sharing within and between new territorial pack members; this leads to increased exposure to novel prey (livestock).
- Because there is a strong shift to fewer subordinates—betas are immediately recruited to alpha breeding status—livestock-killing alpha adults are predominant in the population structure.
- Killing the alpha male results in immediate replacement or the remaining pack breaks apart and disperses to form breeding pairs elsewhere.
- Indiscriminate control methods have accelerated and amplified selection pressures to perpetuate a ‘dispersal genotype’ adapted to rapidly colonize and successfully reproduce. Remember that during the predator eradication era (approximately 1860’s to 1960’s), large carnivore populations declined substantially (with regional extirpation) while coyotes tripled their abundance and distribution across North America.
- Their cultural evolution likely interacts with their biological evolution to further accelerate and amplify selection pressures.

Ecological Impacts:

- Mesopredator release: Decrease in apex predator populations reduces the competition and/or intraspecific killing rates with other predators or mesopredators (e.g., foxes, raccoons, skunks, feral cats, etc.). This causes an increase in their abundance (i.e., release), which in turn, can have detrimental effects on other species (e.g., ground-nesters, songbirds, amphibians, and rodents) and other unintended ‘ripple’ effects or trophic cascades.
- Loss of ecosystem services: alleviation of control pressures on prey populations (e.g., rodents, large herbivores) can lead to vegetation changes.
- Loss of ecosystem services: Disruption and increase of disease spread.
- Loss of ecosystem services: Loss of subsidies to scavengers (e.g., wolves provides food for many other species).

Written by Dr. Robert (Bob) L. Crabtree

Science Advisory Board, Project Coyote
President and Founder Yellowstone Ecological Research Center, Bozeman, MT
Research Associate Professor, University of Montana, Missoula, MT
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LIVE OAK ASSOCIATES, INC.

an Ecological Consulting Firm

Predator Management in the 21st Century: Framework for Modernizing Predator Management in California

Rick A. Hopkins, Ph.D.

Proposed for April 9, 2015 F&G Commission Hearing

Our relationship with predators, particularly large predators, is driven by a fascination and curiosity that is primal. We fear not those risks that are common and every day occurrences (such as heart disease and automobile accidents), but obsess on events such as attacks by large predators on humans, to the point of advocating remarkable efforts to preemptively eliminate a risk that is barely measurable. While we define human/predator interactions as dramatic, they are nonetheless extremely rare. Some stakeholders also express considerable angst on other types of conflicts such as effects on ungulates (e.g., game species) or depredation of livestock. These conflicts are the major driver for advocating management strategies for predators that focuses almost entirely on reducing conflicts with humans by reducing populations through sport-take or prophylactic control methods – the kill strategy. Nationwide, while conservation is often mentioned or inferred within a statewide program to traditionally manage some predators such as cougars or black bears (others are treated as varmints with no consideration of limit of kill or seasons), explicit strategies to achieve long-term conservation goals for the species are simply not discussed. There appears to be an overly simplistic presumption that as long as sport-take (or other control) efforts are sustainable, then conservation has been achieved. I argue that these “traditional kill strategies” not only do little to reduce conflict, but more importantly do little to conserve the species.

During the last century we have moved from a society that has advocated the eradication of predators to one that has greater tolerance for native carnivores with some segments of society wishing to live in harmony with them. The problem is that we are not completely clear on the concept. For example, as Teddy Roosevelt noted over a century ago, the cougar has long been the subject of “...loose writing or of such wild fables...” and unfortunately, myths about this species and other predators abound. As part of this exercise, I will shift the discussion from untested word or narrative models (We kill predators – there must be less – conflicts must have declined concomitantly) and will review the scientific literature, exploding notions that there is any support in the literature that killing predators accomplishes any long-term goals in reducing conflicts between humans and predators (i.e., attacks on humans, change in prey populations and change in depredations).

The conservation of wide-ranging taxa depends critically on planning efforts that consider both habitat and connectivity needs of the target species – not on the number of individuals killed for recreation or control. Therefore, in an effort to shift the management paradigm toward a

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contemporary set of tools for the management and conservation of predators, I will explore where we have been, learn from the failures of the past, and discuss a framework for modernizing predator management in California.

To that end, I will discuss four myths (or wild fables) that have permeated the public discussion of the cougar throughout its range as a case study that can illustrate the past, present and future of predator management. These are: 1) cougars were near extinction (or declined to very low numbers) throughout much of the western U.S. in the 1960's and 1970's; 2) sport-hunting has been an effective tool for managing the cougar; 3) cougars have been or are increasing over large portions of their range over the last 20 to 30 years; and 4) cougars are losing their fear of humans posing greater risk to us than in previous decades. In the end, we believe that cougars are abundant in the west today, not because of insightful management over the last 30 years, but due more to the fact we failed in our mission to eradicate them in the early to mid-1900s.

We will also expand this discussion to point out there is never a management need to engage in sport-take or control of predators – it is largely a matter of recreation (sport-take) or tradition (e.g., control efforts). Wildlife professionals (Leopold in 1932, Giles 1969, etc.) have long advocated that wildlife management integrates science (informs) and values (direction) in reaching an ultimate management or conservation program. There is absolutely, no such thing as science only management, as science can only address questions related to evidence and ramifications of actions, and is ill equipped to address questions such as should an activity be allowed or not (e.g., recreational sport-take of predators) – the latter is driven by the values integral to the stakeholders. This is the framework by which we hope to advocate for modern predator management in the State of California.



LIVE OAK ASSOCIATES, INC.

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February 12, 2015

Michael Sutton
President of the Commission
California Fish and Game Commission

Subject: Banning the trapping of bobcat and Predator Management Reform in California.

Dear Mr. Sutton:

I write as an expert on the ecology and biology of large mammals (particularly large predators) and as co-founder and Principal of Live Oak Associates, Inc., (LOA), an ecological consulting firm based in California. During the last 35 years, I have conducted a number of studies on cougars and have participated in numerous public policy debates as a carnivore expert in several western states. I am experienced and versed in management options and conservation strategies for a variety of carnivores, including coyotes, bobcat, cougar, black bear and the federal and state listed San Joaquin kit fox. Most recently I have been using statistically robust spatial tools as a framework for predicting the effects that large perturbations or modifications of landscapes (e.g., several thousand to tens of thousands of acres) have on the suitable habitats and regional landscape connectivity for a suite of carnivore species.

I really think any discussion regarding predator control programs or killing of predators for sport or commercial venture needs to be framed within the ecological context of “need”. The famous and brilliant population ecologist Graeme Caughley once noted that the term overabundance is not an ecological term, but really a human expression embedded within a values framework. A sheep rancher will likely have a very different perspective (values) regarding the abundance of coyotes in and around his/her ranch than a resource ecologist would have that is in charge of maintaining ecosystem function within a large preserve or National Park. The evidence (or science of population dynamics) is not what is really in question, but instead the values of the individual that is considering the presence, distribution and abundance of the predator. Collecting more empirical evidence on the population dynamics of the coyote is not likely to satisfy rancher. The mere presence of coyote (regardless of its abundance) and the potential or real loss of sheep is all that matters in the rancher’s world.

Thus, in this case, it really boils down to a very simple question, is there a management need to trap or kill bobcats for recreational or commercial ventures in California? While sport hunting or killing of predators is often touted as a management tool, it rarely is; in essence we manage for the sport hunt, not by it. CDFW has what I believe an enlightened view on this matter, as they have noted in the past for example, that sport hunting of black bears is for recreational purposes only and the sport hunt does not in fact function in any measureable way to reduce human-bear conflicts.

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We kill medium and large carnivores through sport take and control efforts (e.g., wildlife services) *not* because hunting has been shown to be an important management tool, but because it is tradition. To argue that hunting is needed for population management is an overly simplistic argument about natural systems - one that is in conflict with both predation theory and evidence.

Wildlife managers typically manage single species of wild animals to establish sustainable yield and a condition of stasis (that is, stability) -- a goal that is neither achievable nor desirable. This concept -- treating wild animals as a harvestable crop -- is inconsistent with modern understanding of population conservation and ecosystem integrity concepts. This is why over the last decade, conservation biologists have tended to shun the North American Conservation Model (the sport hunting paradigm) for predators, in favor of implementing broad conservation measures that preserve and manage functionally intact, interconnected ecosystems (Nelson et al. 2011). Conservation strategies can have as explicit goals the preservation of predators within a functioning ecosystem while simultaneously reducing conflicts with humans. Many conflicts, particularly conflicts with black bears have more to do with human behavior than changes in bear populations (e.g., poor storing of trash, feeding of wildlife, feeding pets outside, bee hives operators not using electric fences to protect hives, etc.). Predator populations are usually limited by the availability of food resources and the spatial extent and connectedness of the landscape (Roemer et al. 2008); that is, their growth rates are determined by the availability of land and food. Given suitable land, as the extent and distribution of food resources decline so do their growth rates.

The notion that predator populations will grow unabated without human intervention (mortality through sport hunting or culling) is simply unfounded and lacks evidentiary support. In 1972 a blue-ribbon panel of experts produced a report on the state of predator control in North America (Cain et al. 1972). This report assailed the industry of predator control, and pointed out the faulty reasoning behind most (if not all) predator control operations, the lack of science supporting the industry and the failure to actually solve or reduce predator conflicts with humans. They concluded:

Our recommendations would change the present federal-state cooperative program drastically by concentrating on animals which cause damage, specifically by using non-chemical methods of control which would curtail the attrition against non-target species of ecological and social value. This remarkable program continues unabated in the face of criticism, largely on a basis of unvalidated assumptions (Cain et al. 1972).

This finding notwithstanding, the traditional predator control approaches championed by the those that mistakenly believe predators “must be controlled” and advocated by many wildlife agencies, including MIFW, still fail to heed this sage advice offered – actually, demanded – by these expert scientists. The traditional approach that relies on management of predators by prophylactic control measures or sport hunting is inconsistent with predation theory or the scientific literature.

Many game agencies and wildlife services engage in management schemes that were assailed by the Cain Report (and more recent analyses) as too costly and ineffective. Furthermore, the attitudes expressed by these agencies fail to recognize that predation is an important and critical ecological process, without which, many systems become unstable. Berger (2006) reported that the massive and expensive control programs (about \$1.6 billion in real dollars

from 1939 to 1998) aimed at reducing predator populations in and around domestic sheep herds have had little effect on the declining trends in the sheep industry. In fact, Berger found that the decline of the sheep industry was more closely associated with unfavorable market conditions rather than predator losses.

Intact predator populations serve an important role in maintaining full ecosystem function. For example, researchers in Southern California and elsewhere have found that coyotes serve an important function of maintaining the natural bird diversity (Crooks and Soule 1999). Their research demonstrated that coyotes were effective in reducing predation on native populations of birds by small carnivores thereby resulting in a healthier ecosystem (as defined by higher natural biodiversity). In turn, research in Yellowstone on the reintroduction of the wolf has found that restoring wolves has increased the growth rates of pronghorn populations, since wolves suppress their major predator, the coyote (Berger et al. 2001, Berger et al. 2008).

Taylor (1984) provides clarity in how wildlife management agencies tend to oversimplify the ramifications of predation theory. He argues that the wildlife profession largely relies on relatively short-term predator control studies and that while short-term predator removal may change the stability of the prey population, the average equilibrium density remains relatively unchanged. As of 1985, he was unmoved that the literature provided any evidence that predator removal studies demonstrated any long-term benefit.

A similar conclusion was reached a number of years later by the National Research Council (NRC 1997) for the on-going Alaska predator control and sport hunting effort where they reported “...there is no factual basis for the assumption that a period of intensive control for a few years can result in long-term changes in ungulate population densities.”

One of the consistent conclusions of the scientific literature over the last forty years is that efforts to lower carnivore populations to increase ungulate populations or reduce conflicts is not supported by the evidence (Taylor 1984, NRC 1999, Cougar Management Guidelines Working Group 2005). Hurley et al. (2011) provides another recent example as they unequivocally and succinctly conclude:

In conclusion, benefits of predator removal appear to be marginal and short term in southeastern Idaho and likely will not appreciably change long-term dynamics of mule deer populations in the intermountain west.

Their findings were based on an experimental control study that removed a significant number of coyote and cougar between 1997-2003 from large areas in Southeastern Idaho.

A good example of how sport hunting is an ineffective tool to reduce conflict with predators is found with black bears. Garshelis and Noyce (2008) argue that diversity in food resources is an important contributor to stability in bear populations. They caution that poor food years can increase sightings and conflict with bears, giving people the *perception* that bear numbers have increased, when in fact growth rates may have declined. In addition, some nuisance bears (e.g., breaking into cars or homes) are not as vulnerable to hunting as non-nuisance bears – thereby minimizing the effectiveness of hunting in reducing conflicts.

Conflicts with bears are more likely influenced by poor food years and the availability of human foods in or near human habitation. Thus, it is again an unsupported assertion that sport hunting will likely reduce conflicts with bears or as MIFW argues that the need to increase the

sport kill of bears is critical to maintain conflicts as low levels – an assertion in search of evidence.

California: a living laboratory

Francis Bacon, the father of modern science noted over 300 years ago, “...that the quilt of the senses is either two sorts, it destitutes us or deceives us.” In other words, our ability to understand natural systems is a constant struggle as we are confronted with biases and perceptions that color our ability to make robust inferences regarding the natural world.

A great example that highlights the failure of perception and bias as the foundation of analysis can be found in California with the cougar. Reliance on evidence dispels the notion that sport hunting is a critical management tool for predators as I will so aptly demonstrate using the cougar in California. Cougars have not been hunted in California since 1971 and California supports the largest amount of high quality cougar habitat in the North America and the greatest number of humans. About 110 to 120 cougars are killed annually in California mostly due to depredation on livestock or pets – a fraction of the kill total for most other smaller Western States (sport take in several of these states exceed 400 to 500 annually). If the assertions that sport hunting were an important “tool” one would assume that California would have substantially greater human-cougar conflict when compared with other western states that support aggressive sport hunt programs. Yet when normalized for the size of the cougar and human population in each state and western Canadian provinces, California does not rank 1st, but actually ranks 11th. In other words, the risk of an attack by a cougar is greater in ten other Canadian provinces and western states with aggressive sport hunting programs, and fewer humans and cougars.

Additionally, California supports about five million cattle and nearly a million sheep (more than all of western states except Texas), and yet the absolute number of depredation incidences places it about in the middle. If we consider depredation rate, California would rank near the bottom, as it does with attacks on humans. This completely contradicts the argument that sport hunting or predator control is a valuable and necessary management tool. This extensive analysis of attack statistics across North America has caused me to conclude that the intensity of sport-hunting cougars is not at all correlated with a concomitant change in the risk to humans or livestock. Nor has the lack of sport hunting resulting in a constantly increasing cougar population. In fact, by all measures the population of cougars has changed relatively little over the last 20 or so years. If anything, the population continues to loose habitat and its populations are becoming increasingly fragmented, as has been so aptly demonstrated in Southern California and the San Francisco Bay Area.

An interesting piece of research from Northeastern Washington has found that increased killing of cougars, while it has resulted in a short-term decline in the cougar population, also resulted in increasing conflicts with humans, as younger male cougars, which become more prevalent in hunted populations, are more prone to prey on livestock than older male and female cougars (Lambert et al. 2006, Robinson et al. 2008).

Conclusion on the importance and need of killing predators to “manage” them

While sport-hunting or trapping of predators is often touted as a management tool, it simply has not shown to be. In essence we manage for the sport hunt, not by it. Black bear or cougar hunting programs across North America, indiscriminate killing or aggressive control programs

for coyotes and other predators do not provide effective means to reduce conflicts between these predators and human interest.

It appears to me, that many state and federal game managers expend considerable energy ignoring the best available science that clearly demonstrates efforts to “manage” predators by broad lethal efforts fails. We have failed to heed the sound evidence- based recommendations of the scientific literature, as was part of the Cain Report and have not shifted our focus away from costly and ineffective programs aimed at killing predators to meet some ill defined objective. Traditionally across North America, policymakers find themselves unwilling to move from severely failed management schemes to more cost-effective and ecologically relevant ones. I believe California is better poised to integrate ecologically sound management of predators and move away from programs like trapping of bobcats that is not supported by the residents of California, nor by the majority of conservation scientists.

Thank you for the opportunity of addressing the Fish and Game Commission.

Sincerely,

A handwritten signature in black ink, appearing to read 'A. Hopkins', with a long horizontal line extending to the right.

Rick A. Hopkins, Ph.D.,
Principal and Senior Conservation Biologist

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California Fish and Game Commission

Staff Proposal for Predator Policy Workgroup

July 26, 2015

Background

The response by the public to the Wildlife Resources Committee's (WRC) predator policy workgroup (PWG) meeting in March 2015 was overwhelming, and outstripped staff capacity to host all the interest. Staff presented WRC with a preliminary report and recommendations at the meeting on May 6, 2015, and Co-Chair Baylis proposed appointing a balanced group of stakeholders to draft and vet policy and/or regulatory options for consideration and discussion at future WRC meetings. The proposal was discussed and tentatively approved at the June 11, 2015, Commission meeting with requests by Commissioners Kellogg and Hostler-Carmesin for additional information.

Proposal

The proposal requires the Commission to appoint representatives to one of two workgroups to support predator policy review and development. The first group, consisting of six representatives, is responsible for refining ideas and drafting language for review by the WRC. The second group, consisting of 10-15 representatives, is responsible for receiving input to inform the drafting group.

The workgroups are tasked with presenting draft recommendations in a report to the WRC in 2016, at which point the WRC will discuss and make final recommendations for consideration by the Commission in 2017.

Tier 1: Drafting Group (drafters)

The Commission would appoint six volunteers that can demonstrate their commitment to helping draft policy.

- Consists of six seats
- Meet often with each other and the review group
- Goal: To draft new predator policy and regulatory concepts for WRC consideration
- Objectives
 - Receive input from review group
 - Receive expert input
 - Review existing policy/regulatory concepts
 - Draft policy, best management guidelines and regulatory proposals

Tier 2: Review Group (reviewers)

The Commission would appoint no more than 15 volunteers that can demonstrate their commitment to providing constructive input to the drafters.

- Consists of 12-15 seats
- Meet frequently with each other, the drafting group, and key stakeholders

- Goal: To provide input, guidance, and support for the drafting group
- Objectives
 - Review draft from drafting group
 - Provide recommendations to drafting group based on input from stakeholders
 - Negotiate compromises, identify key issues and conceptual changes
 - Debate proposed policies and regulatory concepts
 - Identify best management practices

Appointment Process

Solicitation – Commission staff will distribute a notice of interest for persons willing to volunteer for either tier on the webpage and through the listserv. The notice will include the list of desired qualifications and will outline the task and anticipated term. There will be a 30-day period to apply.

Selection - The applicants will be screened by Commission staff for those meeting the minimum qualifications. The successful applicants will be presented to the Commission at the next available meeting for final selection to fill both tiers.

Minimum Qualifications

- Both drafters and reviewers must demonstrate ability and willingness to work with others of diverse opinions and views and show a commitment and ability to represent key stakeholders.
- Drafters: must demonstrate writing skills and ability to evaluate policy and regulations.
- Reviewers: must demonstrate ability to evaluate policy and regulations. Experience working collaboratively.

Workgroup Input Needs

1. Clear and specific objectives from the Commission and WRC
2. Commission staff support of effort
3. DFW expertise on science, management practices, law, and administration
4. Public attitudes, expectations, needs (depredation, anthropomorphic, property rights)
5. Webpage platform for announcements, key documents, etc.
6. Independent scientific input and/or review
7. Rules of conduct, expectations, roles and responsibilities of participants
8. Discussion starter (draft list of issues/concerns)