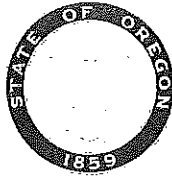


DAVID GOMBERG
STATE REPRESENTATIVE
DISTRICT 10



HOUSE OF REPRESENTATIVES

September 18, 2015

Michael Finley, Chair
Oregon Fish and Wildlife Commission
Salem Headquarters Office
4034 Fairview Industrial Drive SE
Salem, OR 97302

Re: Managing Oregon's Cougars (*Puma concolor*) in the public's trust

Dear Chairman Finley and Commissioners:

I am writing to oppose the indiscriminate killing of Oregon cougars in so-called "target zones" constituting over 11,000 square miles around the state. Such actions, under the guise of protecting mule deer and reducing conflicts with humans and livestock, constitute poor wildlife management and should be immediately repealed.

The best available science is clear that deer, elk and other unregulated herds need habitat, access to adequate nutrition and protection for adult females from overhunting and poaching. Killing native carnivores like cougars and coyotes is unlikely to increase mule deer herds. If these carnivores had been absent from ecosystems, studies show mule deer are susceptible to dying from other causes, including poor access to nutritional reserves.

The people of Oregon want cougars managed selectively and not kill en masse. In 1994, voters passed Measure 18 by a substantial majority, and an even greater majority in 1996 voted to reject an attempt to repeal Measure 18.

I continue to support the elimination of identified dangerous animals. That said, I encourage you to protect cougars as an important element a healthy natural ecosystem. In order to persist for future generations, cougars need habitat, wild prey and reasonable protection from human interference. In order to achieve that outcome, I urge you not to adopt target zone suppression schemes and ask you to update Oregon's cougar management plan, using the best available science and a peer review process.

Warm regards,

Rep. David Gomberg

CC: The Honorable Kate Brown, Governor of Oregon

Roxann B Borisch

From: Susan Gomberg <gombergsusan@gmail.com>
Sent: Wednesday, September 23, 2015 9:59 AM
To: odfw.commission@state.or.us
Subject: Cougar killings

Dear Commission:

I'm writing to you regarding the ODFW's proposal to exterminate cougars in so-called "target zones," using packs of radio-collared hounds and wire neck snares.

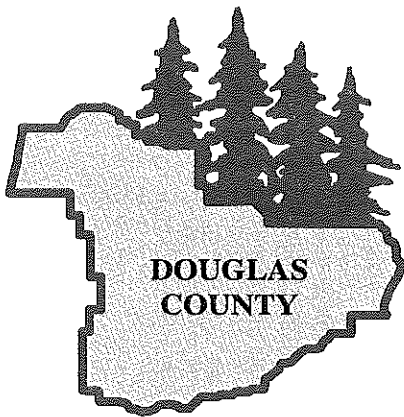
I continue to be surprised and dismayed as to why your proposals in managing cougars is always killing them when in fact they are a much needed part of our wildlife ecosystem. Further, the vast majority of Oregonians want cougars to be protected, not persecuted and subjected to broad-scale killing and unacceptable cruelty and suffering.

And ODFW's own studies have shown that Oregonians and visitors are now more interested in wildlife VIEWING instead of hunting. Thus, the need for making our wildlife management programs more about protecting the animals and the ecosystem. And focusing on extermination of one species will NOT accomplish the goals. Whether indiscriminately or purposely, outright killing can never be the answer for anything.

We can and must do better. There are dozens of groups out there who have a variety of working proposals available. I know you've already heard from many of them. And I believe that a majority of Oregonians are willing to step up and make humane programs work both administratively and financially.

Please take the time to review the options. Just killing can't be the answer. Thank you for your time and efforts on this important issue.

Susan Gomberg



**DOUGLAS COUNTY
BOARD OF COMMISSIONERS**

CHRIS BOICE SUSAN MORGAN TIM FREEMAN

1036 SE Douglas Ave., Room 217 • Roseburg, Oregon 97470

COMMENTS OF
DOUGLAS COUNTY COMMISSIONER
SUSAN MORGAN

BEFORE THE OREGON FISH AND WILDLIFE COMMISSION

COUGAR TARGET AREAS
Agenda Item
October 9, 2015

My name is Susan Morgan. I am the Chair of the Douglas County Board of Commissioners. I appreciate this opportunity to present these comments on behalf of the citizens of Douglas County on the proposed East Umpqua Cougar Target Area.

Douglas County has been struggling with proper management levels of its cougar population for some time. In 2006, your Cougar Management Plan recognized the need to address cougar/human conflicts by stabilizing the cougar population. Study objectives included collecting data around cougar/livestock/human conflicts; proactively managing cougar/human safety conflicts; and proactively managing cougar populations in a manner compatible and consistent with management objectives for other game animals.

The study identified management actions that included additional hunting or control methods in those areas where cougar/human conflicts occur, and targeting areas for more intensive cougar removal by ODFW employees or agents where cougar-human conflicts are the highest.

The Cougar Plan identified high recurring cougar related conflict regions. One of these "Target Areas" is eastern Douglas County. The action in these Target Areas was to remove sufficient cougars to lower the mean age of the adult female to 3-4 years. It was the expectation in the Cougar Plan that applying this science would decrease the cougar population in the target area resulting in decreased conflict.

In adopting the Cougar Plan the Fish & Wildlife Commission made a commitment to the citizens that it would respond when the specific adaptive management parameters were triggered. For Cougar Zone B, which includes Douglas County, the criteria for taking action for more intensive cougar management were triggered at the time the Cougar Plan was adopted. Unfortunately for my constituents, neither the Department nor the Commission followed through with these commitments. The study set a trigger point for action at 69 livestock conflict complaints per year. This threshold has been exceeded every year since 2009.

The livestock industry is important to Douglas County. The jobs that are created and sustained within our communities and the revenue that these ranchers bring into the county are important to our economic and social structure. To maintain the economic viability of ranching, Douglas County Board of Commissioners is using our increasingly scarce financial resources to maintain APHIS services. We are having great difficulty in maintaining this investment. Douglas County is one of the safety net funded counties. As timber harvest has ended on the 51% of our land mass that is owned by the federal government, as the federal safety net program has ended, and as Measure 5 & 50 have crippled our ability to fill the funding void, we have decreased cut our workforce 30% and are struggling to deal with the high poverty and unemployment rates of our area.

We need your help to maintain our vital livestock industry jobs and to deal with the conflicts between cougars and our citizens. Reducing cougar populations for our ranchers will help in other ways. Every year, we deal with cougar sightings at our schools and in our communities. These conflicts cause trauma and are frightening to our citizens.

The Douglas County Board of County Commissioners respectfully requests that the Fish and Wildlife Commission adopt the staff recommendation and implement the Cougar Management Target Area for Cougar Management Zone B – including the application of intensive harvests to meet the objective and the adaptive management parameters that accompany this objective.

I thank you for your time and the courtesy extended to me today.

Sincerely,

A handwritten signature in black ink, appearing to read "Susan Morgan", with a long horizontal flourish extending to the right.

Susan Morgan, Chair
Douglas County Board of Commissioners



October 1, 2015

Curt Melcher, Director
 Mike Finley, Chair, ODFW Commission
Oregon Department of Fish and Wildlife
 4034 Fairview Industrial Drive SE
 Salem, OR 97302
odfw.commission@state.or.us

**Re: Opposition to Cougar (*Puma concolor*) “Target Zone” Management;
 Request the ODFW update its Cougar Management Plan**

Dear Director Melcher, Chair Finley, and ODFW Commission:

On behalf of The Humane Society-of the United States (HSUS), Predator Defense, Portland Audubon, Cascadia Wildlands, Northern Oregon Ecosystems, Center for Biological Diversity, Cougar Fund, American Society for the Prevention of Cruelty to Animals, WildEarth Guardians, Animal Welfare Institute, Project Coyote, Mountain Lion Foundation and our supporters in Oregon, we submit the following comments relative to Oregon Department of Fish and Wildlife’s (ODFW’s) proposal to allow indiscriminate killing of cougars using packs of trailing hounds and/or neck snares on 6,236 square miles of Oregon’s lands in so-called “target zones”. Figure 1.

We believe this proposal is predicated on the incorrect and unsubstantiated assumption that killing cougars will create more ungulates for trophy hunters, and will make people and livestock safer. These core assumptions are not supported by the best available science, and consequently the entire foundation for ODFW’s proposal lacks credibility and should not be enacted by the ODFW Commission. ODFW’s proposal, to intensely kill cougar on more than six thousand square miles of Oregon’s lands, is more likely to exacerbate, not minimize, conflicts.

For these reasons, we recommend that this proposal be rejected. Furthermore, we request that the ODFW develop a new cougar management plan that reflects the best available science and to incorporate changes recommended by the required peer review. Our comments on the ODFW’s proposed cougar regulations follow.

Figure 1				
Cougar Zone	Location of Target Zones	Square Miles	Removals by	Purpose
B	E. Umpqua	1,508	ODFW, Trophy hunters, Wildlife Services	Livestock/Human/Pet ¹
C	Interstate	2,196	Trophy hunters, Wildlife Services	Mule deer
F	Steens Mountain	1,572	Wildlife Services	Mule deer/Bighorn sheep
F	Warner	960	Trophy hunters	Mule deer
	Total	6,236		

I. ODFW cougar targets zones do not qualify based on the Cougar Management Plan's criteria.

Three of the four ODFW proposed cougar target removal areas do not qualify, based on the criteria set out by the Cougar Management Plan's criteria.

a. The East Umpqua data show only minimal conflicts, and therefore *do not* qualify as a target zone for mass cougar killing.

The East Umpqua target area located in Cougar Zone B is comprised, we believe, of the Indigo and McKenzie WMUs. In Zone B, when 11 or more cougars are killed for conflicts, under Oregon's Cougar Management Plan, an arbitrary trigger is tripped for an area to become a target cougar removal area.

In the past decade, only the McKenzie WMU has tripped that trigger, three times and in minimal amounts: 2010 (11 cougars), 2011 (16 cougars) and 2014 (12 cougars). Figure 2. (Indigo WMU never tripped the 11-threshold trigger.) The cougars killed in McKenzie WMU were for livestock protection reasons. As we explain herein, the best available science shows that indiscriminate cougar killing exacerbates conflicts because the stable adult animals are removed and this creates social chaos in cougar societies, and then contributes to increased human-cougar conflicts. The three instances of meeting the 11-threshold trigger are not noteworthy given the scale of time and the small amount of cougar conflict.

In Zone B, ODFW also attempts to assert that complaints, that is *cougar sightings* (even

¹ The HSUS requested these conflict data records in July 2015. Despite paying the ODFW over \$500 for cougar-related records, we have yet to receive them.

third party sightings) or auditory information phoned in by the public are reason enough to justify increased persecution of cougars. Sightings are unreliable indicators of the presence of cougars, population or density trends (Cougars Management Guidelines 2005). Even the Oregon Cougar Management Plan notes they are unreliable data. It states, cougar mortality is “verified” where as complaints or sightings are “subjective” (Plan at 43-44).

	Indigo WMU	McKenzie WMU
2004	4	1
2005	2	2
2006	2	3
2007	5	2
2008	3	6
2009	1	2
2010	2	11
2011	2	16
2012	9	8
2013	9	4
2014	5	12

Additionally, there have been no cougars killed for perceived human-safety threats between 1993 and the present in either the Indigo or McKenzie WMUs. This suggests low human-cougar conflicts for these areas; the Oregon Cougar Management Plan (p 44) states, however, that administrative removals should be located in areas where cougar-human conflicts are the highest.

b. the Steens and Warner target areas no long qualify as target area designation.

The Steens and Warner target areas no longer qualify as target areas because the Department’s own data show that “administrative removals” in these WMUs has failed to benefit the deer population. The Oregon Cougar Management Plan (page 52) states that “target area harvest will cease when it is determined that intensive cougar removal cannot meet objectives.” Another document also shows those objectives failed to have been met.

In the ODFW’s (2015) Oregon Mule Deer Initiative Summary 2010–2015 states with regards to cougar target areas:

Measureable impacts were difficult to document at the end of the removal period. A more comprehensive method of counting and modeling deer populations was implemented within all MDI Units, but **as of this time we have not been able to document a significant change in (mule deer) population.** (Emphasis added, p. 42).

Despite more than four years of intensive cougar removals, mule deer have not increased in the Steens and Warner WMUs and therefore these WMUs no longer meet the Oregon Cougar Management Plan's criteria for qualifying as a target cougar removal area.

II. Cougars must be conserved for all, not just managed for a few trophy hunters.

Voters have twice opposed the use of hounds to hunt cougars. In 1994, voters passed Measure 18 by a substantial majority, and an even greater majority in 1996 voted to reject a measure to repeal Measure 18. Yet Oregon wildlife managers use local trophy hunters, so-called "volunteer agents", who use packs of radio-collared dogs to hunt down and kill large numbers of cougars in ODFW's "target zones" in a blatant end-run around Oregon voters. Each year, trophy hunters kill more than twice the amount of cougars killed in 1994. Adding target areas, with essentially unlimited killing, benefits a small minority at the expense of the majority of Oregonians who have shown they value cougars and want to see them protected, not decimated, to grow more deer or bighorn sheep for hunting.

Considering this, the ODFW must give wildlife watchers ample consideration as part of its public trust duties to manage cougars for long-term conservation. Cougars are an important component of Oregon's natural wild heritage, and deserve reasoned management so that their populations are conserved for future generations—including for all stakeholders (Jacobson et al. 2010, Nelson et al. 2011). Large-bodied carnivores such as cougars require adequate prey and freedom from the threat of human persecution in order to persist (Noss et al. 1996). But that freedom does not exist for cougars in Oregon.

III. Hounding and trapping cougars are cruel management practices that should immediately cease.

Using radio-collared trailing hounds to chase cougars ("hounding") and bay them into trees or rock ledges so the trophy hunter can shoot the cat at close range is unethical and inhumane. Hounds kill kittens, and cougars often injure or kill hounds (Lindzey et al. 1992, Logan and Sweanor 2001, Elbroch et al. 2013). Hounding is not considered "fair chase" hunting by most (Posewitz 1994, Teel et al. 2002). Additionally, hounds chase non-target wildlife and trespass onto private lands (e.g., Hristienko and McDonald 2007). The State also relies on the U.S. Department of Agriculture's Wildlife Services program to snare cougars by the neck. Neck snares are egregiously cruel because they do not kill quickly, cause the animals to suffer for several hours and can capture non-target species (Harris et al. 2005, Muth et al. 2006, Iossa et al. 2007, Proulx et al. 2015). Lemieux and Czetwertynski (2006, p. 82) write: "There is always the possibility of injuries when trapping, which is of particular concern when non-target endangered species are present in the area."

Animals in traps exert themselves tremendously to break free and thereby suffer significant, often severe injuries, if not mortalities (e.g., Harris et al. 2005, Cattet et al. 2008). Most traps cause serious injury and suffering, including broken legs, dislocated shoulders, lacerations, torn muscles, cuts to mouths and gums, broken teeth, fractures, amputation of digits, and even death. Trapped animals suffer from psychological stress and/or pain, starvation, dehydration or predation (Harris et al. 2005, Lemieux and

Czetwertynski 2006, Muth et al. 2006, Iossa et al. 2007, Proulx et al. 2015).

Adelt et al. (1999: 55) write: “Several professional wildlife biologists have emphasized the need to minimize injury and pain infliction on animals by trapping (Payne 1980, Schimit and Bruner 1981, Proulx and Barrett 1989)” because trapped animals lack water and food, and suffer pain and stress, and studies show the public generally considers them inhumane and hold negative attitudes towards traps.” In a later study, Muth et al. (2006), found the same, and even suggested that traps could harm or kill non-target species, including expensive hounding dogs.

IV. The best available science demonstrates that killing native carnivores to increase ungulate populations is unlikely to produce positive results.

While the cougar target area proposal indicates that cougars threaten the viability of native ungulates, it has missed the mark. The most current and best available science on mule deer survival reflects three key points:

- ◆ Because ecological systems are complex, heavily persecuting cougars will fail to address the underlying malnutrition problems that deer face.
- ◆ Mule deer need adequate nutrition to survive, to reproduce, and recruit new members to their population.
- ◆ Persecuting cougars will not help bighorn sheep recruitment because cougar predation upon bighorn sheep is a learned behavior conducted by only a few individuals who may not repeat their behavior.
- ◆ Predators do not increase proportionally relative to the amount of prey.

a. Killing cougars (and coyotes) will fail to grow Oregon’s mule deer herds.

Five recent studies demonstrate that predator removal, actions “generally had no effect” in the long term on ungulate populations (Forrester and Wittmer 2013, p. 300). Authors found that “both coyote and mountain lion predation was compensatory rather than additive” (Forrester and Wittmer 2013, p. 300). In other words, if predators had been absent from those ecosystems, the deer would have died from some other cause anyway. In Idaho, study areas where cougars and coyotes endured heavy-killing regimens, the massive amounts of native carnivore killing failed to change the population trends for mule deer. Hurley et al. (2011) conclude that the benefits of predator killing are marginal and short term in nature, and more important, the killing failed to change the long-term dynamics of mule deer population.

Bishop et al. (2009), in their long-term, Colorado-based study found that food limited the deer population, but especially the quality of winter-range habitats. They determined that if deer had access to adequate nutrition that neither cougars nor coyotes negatively affected the deer population. They also suggest that cougars selected for deer that had poor body condition (Bishop et al. 2009). In a follow up, Colorado-based study, Bergman et al. (2014) found that managing winter range for deer, weed control and reseeding, benefitted deer greatly. While predators are limited by the number of prey (e.g.,

Peckarsky et al. 2008), new studies reveal an increase in the number of prey does not bring a proportional increase predators, and that predator populations stay at a lower size relative to prey biomass (Hatton et al. 2015).

b. Access to adequate nutrition is the key factor in mule deer dynamics. Each year, some mule deer are “doomed surplus”.

Mule deer populations in the western United States have experienced population declines over the latter part of the last century because of myriad factors including habitat loss or fragmentation, changes in forage quality, competition with other ungulates, predation, disease, increased hunting, poaching, stochastic weather events, fire suppression, noxious weeds, overgrazing by livestock, energy development, and changes in hydrology caused by global warming—including changes in snow pack and temperature (e.g., Forrester and Wittmer 2013, Monteith et al. 2014).

In their review article that surveyed 48 predation studies involving mule deer, Forrester and Wittmer determined that while predation was the “primary proximate cause of mortality for all age classes” of deer, all of the predator removal studies indicate that “predation is compensatory, particularly at high deer densities, and that nutrition and weather shape population dynamics” (2013: 292). In other words, each year, some deer are “doomed surplus”; that is, they die no matter what (Monteith et al. 2014, citing Errington 1946). The question is whether deer die from predation or some other cause, especially malnutrition.

If native carnivores such as cougars and coyotes kill more deer beyond what would otherwise happen from all the other causes of death, that extra mortality is called “additive mortality.” But if native carnivores kill deer that would die even if there was no predation, that mortality is generally considered to be “compensatory mortality.” Teasing out the two modes of mortality, additive or compensatory, on deer population dynamics is what many mule deer researchers focus upon. As part of a new, comprehensive study, biologists Monteith et al. (2014) caution against assuming mortalities are purely compensatory or additive. Monteith et al. (2014) found that both additive and compensatory mortality can occur in a single year in the same systems and “should be viewed as a continuum rather than as a dichotomy” (p. 41).

In a California study, cougar predation on mule deer was likely additive during one time period of an increasing deer population, but it did not stop the growth of the population, which indicates that resource availability (food) is more important to mule deer (Pierce et al. 2012). The condition of the deer were strongly correlated with the availability of nutrition, and thus cougar predation during a deer decline was not an additive source of mortality (Pierce et al. 2012). The deer were in poor physical condition and reproductive rates were low, indicating that nutrition, not predation caused the decline (Pierce et al. 2012).

If Oregon wants to grow its ungulate population, then the ODFW must foster survival of adult female mule deer to stem declines; and it must increase nutritional conditions for

mule deer as these factors are the most important for mule deer survival (e.g., Forrester and Wittmer 2013, Monteith et al. 2014, Robinson et al. 2014b).

The scientific literature is clear that large herbivores are limited by their food resources (e.g., Monteith et al. 2014). Young animals that have access to fewer nutritional reserves are less likely to survive – a theory that has been well tested in the West (Watkins et al. 2002, Pojar and Bowden 2004, Bishop et al. 2009, Monteith et al. 2014). Mule deer survival is absolutely reliant on their ability to gain access to adequate nutrition – but that nutrition can be hindered by weather, habitat loss, oil and gas development, fire suppression, and other causes. To underscore, the underpinnings of ungulate population density is their access to nutrition, or what biologist call their “nutritional carrying capacity” (Monteith et al. 2014).

c. Killing cougars will not enhance bighorn sheep populations.

The ODFW’s proposal is not informed by the best available science concerning the causes of bighorn sheep decline and predation. It is clear from the literature that bighorn sheep populations are in decline in the U.S. because of unregulated market hunting, trophy hunting, disease from domestic sheep,² resource competition by livestock, and loss of habitat (Warren 1997, Logan and Sweanor 2001, Lomax 2008, Murphy and Ruth 2010, Monteith et al. 2013). The Payette National Forest’s Update to the Draft Supplemental Environmental Impact Statement (January 2010), provides an excellent literature review on sheep die offs attributed to domestic livestock and recommend that wild and domestic sheep and goats be separated.³

² “Severe pneumonia outbreak kills bighorn sheep: Lamb survival to be closely monitored for several years”
<http://www.avma.org/onlnews/javna/may10/100501c.asp>

³ http://www.fs.fcd.us/r4/payette/publications/big_horn/indx.shtml. It states: Bighorn sheep are a New World species and are closely related to domestic sheep, which are an Old World species. Domestication and intense artificial selection have probably helped domestic sheep develop a resistance to important diseases (Jessup 1985). However, bighorn sheep can be highly susceptible to diseases carried by domestic sheep.

A long history of large-scale, sudden, all-age die-offs in bighorn sheep exists across Canada and the United States, many associated with domestic animal contact (Shackleton 1999). Although limited knowledge of transmission dynamics exists (Garde et al. 2005), extensive scientific literature supports the relationship between disease in bighorn sheep populations and contact with domestic sheep, including both circumstantial evidence linking bighorn die-offs in the wild to contact with domestic animals and controlled experiments where healthy bighorn sheep exposed to domestic sheep displayed subsequently high mortality rates (Foreyt 1989, 1990, 1992; Foreyt et al. 1994; Onderka et al. 1988; Onderka and Wishart 1988; Garde et al. 2005).

In a summary of risk to wild sheep from *Pasteurella* and *Mannheimia* spp., Garde et al. (2005) makes the following conclusions:

1. These bacteria can cause pneumonia in bighorn sheep, but there are benign commensal strains in the upper respiratory tract
2. Domestic sheep, goats, and llamas have been reported with these bacteria species
3. Wild sheep and mountain goats have been reported with these bacteria species
4. Transmission is by direct contact and aerosolization
5. These bacteria species do not persist in the environment
6. Acute-to-chronic die-offs in bighorn sheep can result in low to 100 percent mortality, although they can be present in healthy sheep
7. These bacteria are considered opportunistic and can result in pneumonia outbreaks
8. These bacteria can cause clinical disease in domestic sheep and goats, but are rarely primary pathogens.

Management Recommendations

The separation, either spatially, temporally, or both of bighorn sheep from domestic sheep has been recommended by leading bighorn sheep disease experts (Schommer and Woolever 2001, Garde 2005, Singer 2001). Experts also recommend developing site-specific solutions for each bighorn sheep population and domestic sheep allotment, and to

Sawyer and Lindzey (2002) surveyed over 60 peer-reviewed articles concerning predator-prey relationships involving bighorn sheep and cougars, and they concluded that while predator control is often politically expedient, it often does not address underlying environmental issues including habitat loss, loss of migration corridors, and inadequate nutrition. In total, the best available science suggests that persecuting cougar populations is not a solution toward enhancing bighorn sheep numbers. That is because cougar predation upon bighorn sheep is a learned behavior conducted by only a few individuals who may not repeat their behavior (Logan and Sweanor 2001, McKinney et al. 2006b, Ruth and Murphy 2010).

Cougars cache their prey under vegetative cover to prevent detection by scavengers, to cool, and to impede spoiling (Murphy and Ruth 2010). Cougars remain close to their kills and feed generally on the kill for two to five nights (McKinney et al. 2006b, Murphy and Ruth 2010). This behavior affords researchers the opportunity to avoid targeting a subpopulation and remove only individuals who feed on bighorn sheep.

The ODFW can better plan for bighorn sheep management by selecting relocation sites for bighorn sheep that have little stalking cover (McKinney et al. 2006b, Murphy and Ruth 2010). Escape terrain that contains cliffs, rocks, and foliage makes excellent ambush cover for a cougar (McKinney et al. 2006a) and should be avoided. Also, the amount of cougar predation is generally greater on small-sized bighorn sheep populations (those that are under 100 individuals) than on other larger bighorn sheep populations (Sawyer and Lindzey 2002, McKinney et al. 2006b, Ruth and Murphy 2010). In their first year, newly transplanted bighorn sheep travel long distances from the release site, which makes them vulnerable to predation (McKinney et al. 2006a).

A host of authors reviewed by McKinney et al. (2006) and Ruth and Murphy (2010) recommend only limited cougar removals to benefit bighorn sheep populations. Authors suggest:

- ◆ Predation is greatest where mule deer and bighorn sheep are sympatric and that predation on bighorn increases when mule deer herds decline (Ruth and Murphy 2010).
- ◆ Group size of released bighorns, habitat quality and quantity, alternative prey such as mule deer, escape terrain at relocation sites can effect translocation efforts (McKinney et al. 2006b, Ruth and Murphy 2010).
- ◆ Logan and Sweanor (2001) found the desert bighorn sheep population in their study area to be negatively effected by drought, disease, and lack of connectivity to other subpopulations and that predation was not additive.

Removal of cougars from a population can result in unintended consequences such as an increase in migration from subadults particularly when a dominant male is removed; this could increase the cougar density into an area (Lambert et al. 2006, Stoner et al. 2006, Robinson et al. 2008, Ruth and Murphy 2010). To emphasize, a host of authors recommend only targeted removals to benefit bighorn sheep populations because most

develop a management strategy appropriate for the complexity of the management situation (Schommer and Woolever 2001).

cougars do not prey on bighorn sheep. The literature is clear: the problems sheep face are trophy hunters, livestock – because they are important disease vectors and because they compete with wild sheep for limited resources, habitat loss, and lack of adequate nutrition.

V. The ODFW permits high levels of persecution, rather than a “conservative management approach” recommended by cougar biologists.

Cougars occur at low densities relative to their primary prey making them sensitive to both bottom-up (prey declines) and top-down (human persecution) influences (Stoner et al. 2006). Trophy hunting cougars is their major source of mortality in Oregon (Logan and Sweanor 2001, Cougar Management Guidelines 2005, Stoner et al. 2006, Robinson and Desimone 2011, Stoner et al. 2013b, Wolfe et al. 2015).

Humans are unsustainable “super predators” of rare carnivore species (Dairmont et al. 2015). It seems that the only thing that ensures cougar continuity in Oregon are *de facto* refugia and suboptimal habitats (e.g., Stoner et al. 2006, Stoner et al. 2013a, Stoner et al. 2013b). That is because Oregon cougars are managed using a “sledgehammer approach” (Logan and Sweanor 2001, Robinson and Desimone 2011). That is, heavy hunting regimes designed to suppress Oregon’s cougar population.

Changes in Oregon’s cougar management in the last 20 years include an expansion to a yearlong season, doubling the bag limit per hunter, and raising quotas. Oregon’s tag sales went from 500 to 56,000 in this period. Far from a conservation-minded approach (Wolfe et al. 2015), Oregon officials permit the over persecution of our State’s iconic cougars.

Cougar biologists, Wolfe et al. (2015) and Laundré and Clark (2003), recommend that wildlife decision makers manage cougars at a metapopulation level rather than at the single population level. Wolfe et al. (2015) warn: “We recommend a conservative management approach be adopted to preclude potential over-harvest . . .” (Wolfe et al. 2015, p. 195).

Yet, in many areas of Oregon, cougars experience *additive* levels of mortality (e.g., Robinson et al. 2014a, Wolfe et al. 2015). To compensate for individuals lost, cougar biologists recommend that other cougars be allowed to “replenish” the heavily exploited areas, which means that Oregon must reduce hunting levels, secure *refugia* and ensure connectivity between populations (Wolfe et al. 2015).

VI. Trophy hunting cougars causes additional mortalities in a population, particularly to mothers and their kittens.

Contrary to popular perception, the killing of male cougars does not increase the survival of females or increase productivity of a population (Stoner et al. 2013a, Wielgus et al. 2014). Study results showed that hunting males caused an overall decline in the population through the loss of fecundity, the indirect loss of kittens and juveniles (through infanticide), and on females themselves (because they too have greater chance of being hunted too) (Stoner et al. 2006, Wielgus et al. 2014, Wolfe et al. 2015). The best

available science also indicates that after a hunting regime, cougars experience social chaos from the disruption of both their social structure and land tenure systems.

When trophy hunters remove the stable adult cougars from a population, it encourages subadult males to immigrate, leading to greater aggression between cats and mortalities to adult females and subsequent infanticide (Lambert et al. 2006, Cooley et al. 2009b, Robinson and Desimone 2011, Wielgus et al. 2013, Robinson et al. 2014a).

In heavily hunted populations, female cougars experience higher levels of intraspecific aggression (fights with other cats) resulting in predation on themselves and their kittens (Stoner et al. 2013a, Wielgus et al. 2013).

Over-hunting a cougar population can change the demographics of a population to one with more male subadults (Lambert et al. 2006, Stoner et al. 2006, Robinson et al. 2008, Cooley et al. 2009a, Cooley et al. 2009b, Beausoleil et al. 2013, Peebles et al. 2013). Over-hunting harms a population's ability to recruit new members if too many adult females are removed (Anderson and Lindzey 2005). Trophy hunting adult females ensures the death by dehydration and malnutrition for orphaned kittens, even those who are at least six months old (Stoner et al. 2006).

Hunting cougars results not only in the direct mortality but has an additive effect of causing kitten orphaning and their subsequent starvation and population reduction (Stoner et al. 2006, Stoner et al. 2013a, Robinson et al. 2014a). Also, studies show where there is heavy hunting pressures, hunter mortality exacerbates other causes of cougar mortality including intraspecific strife; prey-pursuit injuries; vehicle collisions; predator control actions; poaching; starvation and disease (see: Beausoleil et al. 2013).

VII. ODFW must revise and improve its methods of estimating cougar populations.

While Washington Department of Fish and Wildlife biologists suggest a harvest of no more than 14% of the resident *adults* to avoid overkill of cougars (Beausoleil et al. 2013), a ten-year study of hunting cougars on the Uncompahgre Plateau Colorado by the Colorado Parks and Wildlife found that a sustainable offtake rate amounted 11 to 12% (Logan 2014).

The most reliable method to derive lion populations is from radio-telemetry studies (Cougar Management Guidelines 2005, p. 44).

- The Cougar Management Guidelines (2005) provide this caution: *Density estimates from one study area can only be extrapolated cautiously to larger areas including regions or entire states because most researchers study cats where they are the most abundant (areas that are atypical), and in the best available cougar habitats.* Extrapolation to larger areas fails to accommodate changes in vegetation, land use, topography, and management history (p. 47-8).
- Population trends must be determined using reliable methodologies; however, *sightings, depredation events, and kill levels are not reliable means to indexing a population* (Cougar Management Guidelines 2005, p. 48-50).

- Beausoleil et al. (2013) suggest that wildlife managers use a density of 1.7 cougars/100 km² if managers cannot afford to conduct a marked, recapture study.

In 2006, several peer reviewers criticized ODFW's population cougar model. ODFW has failed to implement or update it; the agency has a duty to write a new cougar management plan that better estimates Oregon's cougar population based upon the best available science.

VIII. Trophy hunting cougars increases complaints and livestock losses; killing cougars does not make people safer.

A Washington state study shows that as cougar complaints increased, wildlife officials lengthened seasons and increased bag limits to respond to what they believed was a rapidly growing cougar population. However, the public's perception of an increasing population and greater numbers of livestock depredations was actually a result of a declining female and increasing male population (Peebles et al. 2013, citing Lambert et al. 2006 and Robinson et al. 2008). Heavy hunting of cougars skewed ratio of young males in the population by causing compensatory immigration and emigration by young male cougars, even though it resulted in no net change in the population (Ibid.).

Study authors found that the sport hunting of cougars to reduce complaints and livestock depredations had the opposite effect. Killing cougars disrupts their social structure and increases both complaints and livestock depredations (Peebles et al. 2013). Peebles et al. (2013, p. 6) write:

... each additional cougar on the landscape increased the odds of a complaint of livestock depredation by about 5%. However, contrary to expectations, each additional cougar killed on the landscape increased the odds by about 50%, or an order of magnitude higher. By far, hunting of cougars had the greatest effects, but not as expected. Very heavy hunting (100% removal of resident adults in 1 year) increased the odds of complaints and depredations in year 2 by 150% to 340%.

Hunting disrupts cougars' sex-age structure and tilts a population to one that is comprised of younger males, who are more likely to engage in livestock depredations than animals in stable, older population (Peebles et al. 2013).

To emphasize: sport hunting changes the demographics (sex and age) and density of a cougar population (Lambert et al. 2006, Stoner et al. 2006, Robinson et al. 2008, Cooley et al. 2009a, Cooley et al. 2009b). If the cougar in a home range is removed or killed, the vacancy likely will attract a younger, dispersing animal (e.g., Lambert et al. 2006).

Therefore, both Oregon's dramatic sport hunting mortality increases coupled with indiscriminate predator-control target area programs can very likely be destabilizing the cougar population, and leading to increased conflicts with humans and livestock (Lambert et al. 2006, Peebles et al. 2013).

ODFW operates under the misconception that killing cougars will make people safer. In fact, the opposite is true: According to a host of cougar biologists, “no scientific evidence” exists that suggests that sport hunting reduces the risk of cougar attacks on humans (Cougar Management Guidelines 2005). Cougars typically avoid people (Sweaner et al. 2008), and so hunting them to prevent future attacks is a notion unsupported in the scientific literature (Cougar Management Guidelines 2005). Furthermore, killing cougars, a rare native carnivore, for “pet safety” is a terrible policy. Other states emphasize teaching people to take responsibility for their pets.

IX. Cougars are vital to their ecosystems, and indirectly improve human health through predation.

In Zion National Park, researchers found that by modulating deer populations, cougars prevented overgrazing near fragile riparian systems. The result: more cottonwoods, rushes, cattails, wildflowers, amphibians, lizards, and butterflies, and deeper, but narrower stream channels (Ripple and Beschta 2006). In other words, cougars enhance biological diversity, including other imperiled species. Maehr et al. (2003: 849) further assert the importance of cougars on the landscape:

One aspect of cougar ecology that is becoming less debatable is its role in biotic communities *P. concolor* has the potential to structure the distribution and demography of prey (Logan and Sweaner 2001, Maehr et al. 2001). Browse lines, highway collisions, Lyme disease (Wilson and Childs 1997), loss of biodiversity (Alverson et al. 1988, Waller and Alverson 1997), and other problems associated with overabundant white-tailed deer (*Odocoileus virginianus*) hint at the benefits of returning such a predator . . .

Cougars serve an important ecological role, including the ecosystem services (e.g., Weaver et al. 1996, Ripple and Beschta 2006, Estes et al. 2011) they provide.

X. Conclusion:

The ODFW Commission must conserve all wildlife populations, including cougars. Yet, the proposed rule to kill cougars indiscriminately in “target zones” on over 6,000 square miles of Oregon lands is clearly not meant to encourage sustainable, conservation-minded cougar management. Instead, this equates to a “sledgehammer” approach to cougar management, which fails to make people, pets or livestock safer.

Oregon must develop an updated and credible cougar management plan based upon the best available and sound science to determine its cougar population size, emphasizing a metapopulation approach, establishing refugia with connecting corridors to other populations, conserving breeding females and their kittens, and preventing social chaos on cougar populations from over-hunting.

....

Cougars are an iconic symbol of the wild, much valued by Oregonians and should be managed as such. Thank you for this opportunity to comment.

Sincerely,

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Bibliography:

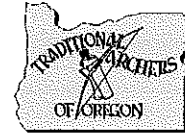
- Andelt, W. F., R. L. Phillips, R. H. Schmidt, and R. B. Gill. 1999. Trapping furbearers: an overview of the biological and social issues surrounding a public policy controversy. *Wildlife Society Bulletin* **27**:53-64.
- Beausoleil, R. A., G. M. Koehler, B. T. Maletzke, B. N. Kertson, and R. G. Wielgus. 2013. Research to Regulation: Cougar Social Behavior as a Guide for Management. *Wildlife Society Bulletin* **37**:680-688.
- Bergman, E. J., C. J. Bishop, D. J. Freddy, G. C. White, and P. F. Doherty. 2014. Habitat Management Influences Overwinter Survival of Mule Deer Fawns in Colorado. *Journal of Wildlife Management* **78**:448-455.
- Bishop, C. J., G. C. White, D. J. Freddy, B. E. Watkins, and T. R. Stephenson. 2009. Effect of Enhanced Nutrition on Mule Deer Population Rate of Change. *Wildlife Monographs*:1-28.
- Cattet, M., J. Boulanger, G. Stenhouse, R. A. Powell, and M. L. Reynolds-Hogland. 2008. An evaluation of long-term capture effects in ursids: Implications for wildlife welfare and research. *Journal of Mammalogy* **89**:973-990.
- Cooley, H. S., R. B. Wielgus, G. Koehler, and B. Maletzke. 2009a. Source populations in carnivore management: cougar demography and emigration in a lightly hunted population. *Animal Conservation* **12**:321-328.
- Cooley, H. S., R. B. Wielgus, G. M. Koehler, H. S. Robinson, and B. T. Maletzke. 2009b. Does hunting regulate cougar populations? A test of the compensatory mortality hypothesis. *Ecology* **90**:2913-2921.
- Cougar Management Guidelines. 2005. Cougar Management Guidelines. WildFutures, Bainbridge Island, WA.
- Dairmont, C. T., C. H. Fox, H. M. Bryan, and T. E. Reimchen. 2015. The unique ecology of human predators. *Science* **349**:858-860.
- Elbroch, L. M., B. D. Jansen, M. M. Grigione, R. J. Sarno, and H. U. Wittmer. 2013. Trailing hounds vs foot snares: comparing injuries to pumas Puma concolor captured in Chilean Patagonia. *Wildlife Biology* **19**:210-216.
- Estes, J. A., J. Terborgh, J. S. Brashares, M. E. Power, J. Berger, W. J. Bond, S. R. Carpenter, T. E. Essington, R. D. Holt, J. B. C. Jackson, R. J. Marquis, L. Oksanen, T. Oksanen, R. T. Paine, E. K. Pikitch, W. J. Ripple, S. A. Sandin, M. Scheffer, T. W. Schoener, J. B. Shurin, A. R. E. Sinclair, M. E. Soule, R. Virtanen, and D. A. Wardle. 2011. Trophic Downgrading of Planet Earth. *Science* **333**:301-306.
- Forrester, T. D. and H. U. Wittmer. 2013. A review of the population dynamics of mule deer and black-tailed deer *Odocoileus hemionus* in North America. *Mammal Review* **43**:292-308.
- Harris, S., C. D. Soulsbury, and G. Iossa. 2005. Trapped by bad science: The Myths behind the International Humane Trapping Standards: A Scientific Review. International Fund for Animal Welfare,.
- Hatton, I. A., K. S. McCann, J. M. Fryxell, T. J. Davies, M. Smerlak, A. R. E. Sinclair, and M. Loreau. 2015. The predator-prey power law: Biomass scaling across terrestrial and aquatic biomes. *Science* **349**:doi:[http://0-dx.doi.org/libraries.colorado.edu/10.1126/science.aac6284](http://dx.doi.org/libraries.colorado.edu/10.1126/science.aac6284)

- Hristienko, H. and J. McDonald, John E. 2007. Going in the 21st century: a perspective on trends and controversies in the management of the black bear *Ursus* **18**:72-88.
- Hurley, M. A., J. W. Unsworth, P. Zager, M. Hebblewhite, E. O. Garton, D. M. Montgomery, J. R. Skalski, and C. L. Maycock. 2011. Demographic Response of Mule Deer to Experimental Reduction of Coyotes and Mountain Lions in Southeastern Idaho. *Wildlife Monographs*:1-33.
- Iossa, G., C. D. Soulsbury, and S. Harris. 2007. Mammal trapping: a review of animal welfare standards of killing and restraining traps. *Animal Welfare* **16**:335-352.
- Jacobson, C., J. F. Organ, D. Decker, G. R. Batcheller, and L. Carpenter. 2010. A Conservation Institution for the 21st Century: Implications for State Wildlife Agencies. *Journal of Wildlife Management* **74**:203-209.
- Lambert, C. M. S., R. B. Wielgus, H. S. Robinson, D. D. Katnik, H. S. Cruickshank, R. Clarke, and J. Almack. 2006. Cougar Population Dynamics and Viability in the Pacific Northwest. *Journal of Wildlife Management* **70**:246-254.
- Laundré, J. and T. W. Clark. 2003. Managing puma hunting in the western United States: through a metapopulation approach. *Animal Conservation* **6**:159-170.
- Lemieux, R. and S. Czetwertynski. 2006. Tube traps and rubber padded snares for capturing American black bears. *Ursus* **17**:81-91.
- Lindzey, F. G., W. D. Vansickle, S. P. Laing, and C. S. Mecham. 1992. Cougar Population Response to Manipulation in Southern Utah. *Wildlife Society Bulletin* **20**:224-227.
- Logan, K. A. 2014. Puma population responses to sport hunting on the Uncompahgre Plateau, Colorado. Pages 1-3 *in* Colorado Parks and Wildlife, editor., Unpublished letter of 12/10/14.
- Logan, K. A. and L. L. Sweanor. 2001. Desert puma: evolutionary ecology and conservation of an enduring carnivore. Island Press, Washington, DC.
- Lomax, B. 2008. Tracking the Bighorns. *Smithsonianian* **38**:21-24.
- Maehr, D. S., M. J. Kelly, C. Bolgiano, T. Lester, and H. McGinnis. 2003. Eastern cougar recovery is linked to the Florida panther: Cardoza and Langlois revisited. *Wildlife Society Bulletin* **31**:849-853.
- McKinney, T., J. C. deVOS, W. B. Ballard, and S. R. Boe. 2006a. Mountain Lion Predation of Translocated Desert Bighorn Sheep in Arizona. *Wildlife Society Bulletin* **34**:1255-1263.
- McKinney, T., T. W. Smith, and J. C. deVOS. 2006b. Evaluation of Factors Potentially Influencing a Desert Bighorn Sheep Population. *Wildlife Monographs* **164**:1-36.
- Monteith, K. L., V. C. Bleich, T. R. Stephenson, B. M. Pierce, M. M. Conner, J. G. Kie, and R. T. Bowyer. 2014. Life-history characteristics of mule deer: Effects of nutrition in a variable environment. *Wildlife Monographs* **186**:1-62.
- Monteith, K. L., R. A. Long, V. C. Bleich, J. R. Heffelfinger, P. R. Krausman, and R. T. Bowyer. 2013. Effects of harvest, culture, and climate on trends in size of horn-like structures in trophy ungulates. *Wildlife Monographs* **183**:1-28.
- Murphy, K. and T. Ruth. 2010. Diet and Prey Selection of a Perfect Predator. Pages 118-137 *in* M. Hornocker and S. Negri, editors. *Cougar: Ecology & Conservation*. University of Chicago Press, Chicago and London.
- Muth, R. M., R. R. Zwick, M. E. Mather, J. F. Organ, J. J. Daigle, and S. A. Jonker. 2006. Unnecessary source of pain and suffering or necessary management tool:

- Attitudes of conservation professionals toward outlawing leghold traps. *Wildlife Society Bulletin* **34**:706-715.
- Nelson, M. P., J. A. Vucetich, P. C. Paquet, and J. Bump. 2011. An Inadequate Construct? North American Model: What's Missing, What's Needed. *The Wildlife Professional*:58-60.
- Noss, R. F., H. B. Quigley, M. G. Hornocker, T. Merrill, and P. C. Paquet. 1996. Conservation biology and carnivore conservation in the Rocky Mountains. *Conservation Biology* **10**:949-963.
- Peckarsky, B. L., P. A. Abrams, D. I. Bolnick, L. M. Dill, J. H. Grabowski, B. Luttbeg, J. L. Orrock, S. D. Peacor, E. L. Preisser, O. J. Schmitz, and G. C. Trussell. 2008. Revisiting the Classics: Considering Nonconsumptive Effects in Textbook Examples of Predator-Prey Reactions. *Ecological Society of America* **89**:2416-2425.
- Peebles, K. A., R. B. Wielgus, B. T. Maletzke, and M. E. Swanson. 2013. Effects of Remedial Sport Hunting on Cougar Complaints and Livestock Depredations. *Plos One* **8**.
- Pierce, B. M., V. C. Bleich, K. L. Monteith, and R. T. Bowyer. 2012. Top-down versus bottom-up forcing: evidence from mountain lions and mule deer. *Journal of Mammalogy* **93**:977-988.
- Pojar, T. M. and D. C. Bowden. 2004. Neonatal mule deer fawn survival in west-central Colorado. *Journal of Wildlife Management* **68**:550-560.
- Posewitz, J. 1994. *Beyond Fair Chase: The Ethic and Tradition of Hunting*. Falcon Press, Helena, Montana.
- Proulx, G., D. Rodtka, M. W. Barrett, M. Cattet, D. Dekker, E. Moffatt, and R. A. Powell. 2015. Humaneness and selectivity of killing neck snares used to capture canids in Canada: A review. *Canadian Wildlife Biology and Management* **4**:55-65.
- Ripple, W. J. and R. L. Beschta. 2006. Linking a cougar decline, trophic cascade, and catastrophic regime shift in Zion National Park. *Biological Conservation* **133**:397-408.
- Robinson, H. S. and R. Desimone. 2011. *The Garnet Range Mountain Lion Study: Characteristics of a Hunted Population in West-Central Montana: Final Report*. Montana Fish, Wildlife & Parks:102pp.
- Robinson, H. S., R. Desimone, C. Hartway, J. A. Gude, M. J. Thompson, M. S. Mitchell, and M. Hebblewhite. 2014a. A test of the compensatory mortality hypothesis in mountain lions : A management experiment in West-Central Montana. *Journal of Wildlife Management* **78**:791-807.
- Robinson, H. S., R. B. Wielgus, H. S. Cooley, and S. W. Cooley. 2008. Sink Populations in Carnivore Management: Cougar Demography and Immigration in a Hunted Population. *Ecological Applications* **18**:1028-1037.
- Robinson, K. F., D. R. Diefenbach, A. K. Fuller, J. E. Hurst, and C. S. Rosenberry. 2014b. Can Managers Compensate for Coyote Predation of White-Tailed Deer? *Journal of Wildlife Management* **78**:571-579.
- Ruth, T. and K. Murphy. 2010. Cougar-Prey Relationships. Pages 138-162 in M. Hornocker and S. Negri, editors. *Cougar: Ecology and Conservation*. University of Chicago Press, Chicago and London.

- Sawyer, H. and F. Lindzey. 2002. Review of Predation on Bighorn Sheep (*Ovis canadensis*). Prepared for Wyoming Animal Damage Management Board, Wyoming Domestic Sheep and Bighorn Sheep Interaction Working Group, Wyoming Game and Fish Department.
- Stoner, D., M. L. Wolfe, and D. Choate. 2006. Cougar Exploitation Levels in Utah: Implications for Demographic Structure, Population Recovery, and Metapopulation Dynamics. *Journal of Wildlife Management* **70**:1588-1600.
- Stoner, D. C., M. L. Wolfe, C. Mecham, M. B. Mecham, S. L. Durham, and D. M. Choate. 2013a. Dispersal behaviour of a polygynous carnivore: do cougars *Puma concolor* follow source-sink predictions? *Wildlife Biology* **19**:289-301.
- Stoner, D. C., M. L. Wolfe, W. R. Rieth, K. D. Bunnell, S. L. Durham, and L. L. Stoner. 2013b. De facto refugia, ecological traps and the biogeography of anthropogenic cougar mortality in Utah. *Diversity and Distributions* **19**:1114-1124.
- Teel, T. L., R. S. Krannich, and R. H. Schmidt. 2002. Utah stakeholders' attitudes toward selected cougar and black bear management practices. *Wildlife Society Bulletin* **30**:2-15.
- Warren, L. S. 1997. *The Hunter's Game: Poachers and Conservationists in Twentieth-Century America* Yale University Press, New Haven.
- Watkins, B., J. Olterman, and T. Pojar. 2002. Mule Deer Survival Studies on the Uncompahgre Plateau, Colorado 1997-2001. Colorado Division of Wildlife.
- Weaver, J. L., P. C. Paquet, and L. F. Ruggiero. 1996. Resilience and conservation of large carnivores in the Rocky Mountains. *Conservation Biology* **10**:964-976.
- Wielgus, R. B., D. E. Morrison, H. S. Cooley, and B. Maletzke. 2013. Effects of male trophy hunting on female carnivore population growth and persistence. *Biological Conservation* **167**:69-75.
- Wielgus, R. B., D. E. Morrison, H. S. Cooley, and B. T. Maletzke. 2014. Effects of male trophy hunting on female carnivore population growth and persistence. *Biological Conservation* **167**:69-75.
- Wolfe, M. L., D. N. Koons, D. C. Stoner, P. Terletzky, E. M. Gese, D. M. Choate, and L. M. Aubry. 2015. Is anthropogenic cougar mortality compensated by changes in natural mortality in Utah? Insight from long-term studies. *Biological Conservation* **182**:187-196.

09 October, 2015
ODFW Commission meeting October 09, 2015
RE: Public Testimony, 2015 Big Game Regulations
Exceptions for Archery Hunting Tackle



Chair Finley, Members of the Commission, Director Melcher, for the record,
Kevin Thompson, President, TRADITIONAL ARCHERS OF OREGON (TAO).

I am here today to communicate Traditional Archers of Oregon's (TAO) core values in relation to technology advancement in Oregon Archery seasons. Many of you have witnessed TAO members past efforts in communicating our strong belief that Oregon should **NOT ALLOW EXCEPTIONS** for further technology adoption in Oregon archery seasons. To reiterate, the reasons we continue to promote this belief are concerns that any technology which increases hunting success could result in reduced archery hunting opportunity and set the precedence for additional items being allowed in the future.

With recent divergence among hunter organizations relative to requests for the lighted nock exception, TAO requests ODFW Commission direct Staff to add archery tackle details to the MANDATORY HUNTER REPORTING SYSTEM supporting the question:

DO YOU USE: COMPOUND BOW or RECURVE/LONG BOW?

TAO would value the opportunity to work closely with ODFW Staff in developing the specifics in support of this request, with the goal of developing valid user group data.

Sincerely,

Kevin Thompson
Salem, Oregon
President, Traditional Archers of Oregon

Visit our website at www.taoregon.com

Good morning Chair Findley and Commision,

My name is Linda Farmer, and while I live in Eugene my heart belongs to the wilder eastern part of our state. I am speaking today against delisting Oregon's wolves at this time.

As a non-consumptive user camping, hiking and exploring the areas around Elgin, Enterprise, Pendleton, Joseph and the greater Burns area I have enjoyed so much of Oregon's abundant wildlife. Searching and wishing to see a wild wolf for years, I was rewarded one night by hearing a wolf's howl. This was in Sept. 2011 when OR-7 dispersed and I believe it was him. I sighted a black wolf at Zumwalt Prairie the following year. This spring I heard two howlings, first adults, then adults joined by pups in the Joseph area. Generations of people from the 1940's on didn't have the opportunity to experience this when the wolves were hunted to extinction. I will never ever forget those extraordinary sights and sounds and I look forward to sharing them with my upcoming grandchild. I want more people in the future to evidence this noble member of our historic landscape.

To me the recent poaching of the two Sled Springs wolves and the more than likely demise of their pups shows exactly how quickly a whole pack can disappear. With the approximately 80 wolves occupying only 12% of the habitat that ODFW has identified as suitable for wolves and the barrier that I-84 is to dispersals it seems to me that the wolves are trapped in such a hostile area that removing their protection puts them in extreme jeopardy.

Non lethal methods introduced in the 2013 lawsuit brought by Oregon Wild and Cascadia that are in use by some ranchers have been proven effective against loss. My tax dollars are being used to reimburse the ranchers when wolf predations are confirmed and I believe protections for the wolves go hand in hand with that payment.

Please complete the wolf plan review before considering delisting the wolves. I have a lot of respect for the ODFW employees I have worked with and it is my hope that you will assist ODFW in making the right decision to protect our wolves.

Thank you for your attention. Do you have any questions of me? Thank you.

Linda Farmer
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541 686-8748

Roxann B Borisch

From: alvin elkins <alvinelkins@yahoo.com>
Sent: Saturday, October 03, 2015 9:01 AM
To: odfw.commission@state.or.us
Cc: alvin elkins
Subject: Oregon Hunters Association Positions on Agenda Items for Florence meeting
Attachments: OHA Cougar Zone Comments for ODFW Commission Send 10 15.docx; OHA Lighted Nocks Letter of Support 10 15.docx; OHA RockyMtnGoatTag ltr Send 10 15.pdf; OHA Wolf Statement Final Send 10 15.docx

Dear Commissioner,

The Oregon Hunters Association has taken positions on a number of items that will be discussed under the Big Game Regulations portion of the forthcoming ODFW Commission meeting in Florence, Oregon. I have attached those position statements to this email. OHA has also taken a position on the subject of delisting of wolves which I have attached as well.

You will find in this email the following attachments:

Positions related to Big Game Regulation Items:

1. Cougar Target Zones
2. Lighted Nocks
3. Support for Additional Goat Tag

Position on Wolf Delisting

If you have any questions regarding the content of any of the attachments please contact Al Elkins at 503. 780. 6824 or alvinelkins@yahoo.com

I will try and contact each of you next week to see if you have any questions.

Thank you,
Al Elkins
OHA, Lobbyist



OREGON HUNTERS ASSOCIATION

WILDLIFE • HABITAT • HUNTERS' RIGHTS

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November 5, 2014

Subject: Lighted Nocks for Archery Hunting

Oregon Fish and Wildlife Commission odfw.commission@state.or.us

Commission members:

Historically Oregon Hunters Association (OHA) has opposed the introduction of technology and electronic devices that enhance and increase the effective range of archery equipment. We have opposed the introduction of many proposed devices that would advance archery hunting from its current status of a primitive weapons season.

With the recent survey of our membership and the ruling by Pope and Young to accept "Lighted Nocks" as an accepted tool for the fair chase of wild game, the OHA State Board of Directors has revisited OHA's position on this device. Pope and Young is accepted in the hunting community as the national authority on bow hunting and fair chase.

Pope & Young describes "Fair Chase" as not including the taking of animals under the following conditions: "By the use of electronic devices for attracting, location or pursuing game or guiding the hunter to such game, or by the use of bow or arrow to which any electronic device is attached, with the exception of lighted nocks..."

We do not see where lighted nocks will have any impact on range of the current bows approved for use in Oregon. It may in fact assist archery hunters in the recovery of game hit by an arrow. All hunters are concerned about the wounding of an animal and then not being able to recover it whether using archery equipment or firearms. The lighted nock will assist the archery hunter in identifying the point of impact on an animal and assist in the recovery of animals.

Oregon is one of only five states that do not allow lighted nocks during archery season.

Oregon Hunters Association asks that the Fish and Wildlife Commission approve the use of lighted nocks for the 2016 archery seasons.

We appreciate your consideration of this request.

Sincerely, Fred Craig, President

Cc: ODFW Interim Director Curt Melcher



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OHA Comments regarding 2016 Cougar Season Summaries and Recommendations:

1) Cougar Target Area – Zone B

The cougar population in Zone B is stable (Table 14); the trigger for Zone B becoming a target area is the number of cougar being killed due to human and pet safety and livestock conflicts. From 2011 to 2014 (Table 5) an average of 63 cougar are being removed per year in this zone as a result of conflict. Cougar harvest in that same time period has averaged 70% of quota.

OHA Position: OHA supports the proposal to **proactively** remove 30 cougar per year in an effort to reduce these conflicts is reasonable and appropriate given the existing cougar mortality rate.

2) Cougar Target Area – Zone C

In Zone C from 2006 to 2014 the cougar population has increased 99%, from 487 to 970 (Table 14). Cougar mortality during the period 2006-2014 (Table 16) averages 21 cougar per year. For the last 10 years the Interstate WMU has been below mule deer population management object; for the last 4 years the unit percentage of mule deer population of management object has actually been lower than two of the units that have been actively worked as part of the Mule Deer Initiative.

OHA Position: OHA supports the objective of removing 50 cougar per year to improve mule deer populations in the Interstate WMU. We believe this is appropriate given the increase in cougar population and the low cougar mortality in this zone.

3) Cougar Target Area – Zone F

The cougar population in Zone F is stable (Table 14); the trigger for Zone F becoming a target area is the continuing low percentage of mule deer population management objective in the Steens Mountains and Warner WMUs. Cougar harvest in the period 2006-2014 (Table 16) has averaged 50% of quota.

OHA Position: The administrative removal of 12.5% of the cougar quota to achieve the goal of an increase in mule deer populations is warranted given that the 2014 cougar population in this zone is at 310% of the minimum population described in the 2006 Cougar Management Plan (Table 15).

If you have any questions regarding our positions on these three “cougar target areas contact Al Elkins at 503.780.6824 or at alvinelkins@yahoo.com



OREGON HUNTERS ASSOCIATION

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September 15, 2015

Oregon Fish and Wildlife Commission
Oregon Department of Fish and Wildlife
4034 Fairview Industrial Drive SE
Salem, OR 97302

Dear Commission members:

The Oregon Hunters Association (OHA) and the Oregon Chapter of the Foundation for North American Wild Sheep (OR FNAWS) request that the Oregon Fish and Wildlife Commission approve an auction tag for mountain goats for the 2016 season, in addition to the current lottery tag.

According to ORS 497.112, both an auction and raffle tag are authorized by law, pending approval by the Fish and Wildlife Commission. ORS 496.303 requires money received from the two special tags be placed in a mountain goat subaccount to be used exclusively for mountain goat management.

Both OHA and OR FNAWS believe Oregon mountain goat herds have increased in numbers to the point that the additional tag is warranted. The 2014 Oregon population is estimated at 900 animals. In 2015, twenty-one tags were authorized for mountain goats in Oregon (a record high number).

ODFW has done an excellent job of restoring this native species to historic habitat, especially since the season was closed due to low numbers in the 1970s and 80s. As recently as 2000, only three tags were authorized.

We suggest that the facts indicate that an auction tag should be authorized.

Respectfully,

Fred Craig, OHA President

George Houston, OR FNAWS President



October 8, 2015

Oregon Fish and Wildlife Commission

The Oregon Chapter of the Foundation for North American Wild Sheep (OR FNAWS) and Oregon Hunter's Association both request that the Oregon Department of Fish and Wildlife Commission approve an auction tag for mountain goats for the 2016 season, in addition to the current lottery tag.

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We suggest that the facts indicate that an auction tag should be authorized.

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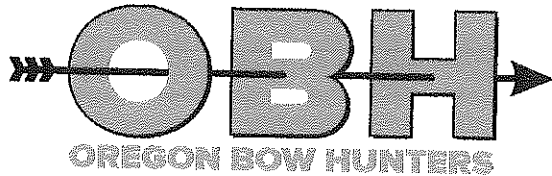
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"Putting Wild Sheep
on the Mountain"

Respectfully,

George Houston
President
Oregon Chapter
Foundation for North American Wild Sheep

Fred Craig
President
Oregon Hunters Association



October 9, 2015

Oregon Fish and Wildlife Commission
Florence OR

My name is Craig Starr and I live at 2105 Desiree Place in Lebanon, Oregon. I am an officer on the Board of Oregon Bow Hunters (OBH) and am speaking on their behalf.

OBH has supported legalizing lighted nocks for archery hunting in Oregon for several years. We are gratified that the ODFW staff has proposed a regulation change to legalize lighted nocks in a manner that only deals with that single issue.

Lighted nocks only function after a shot is taken when they allow the shooter to clearly see the flight of the arrow. In the event of a miss, a lighted nock may allow the bowhunter to recover the spent arrow so it isn't left in the field. More importantly, in the event of a hit, a lighted nock will provide important visual information regarding the location of the hit which may improve the likelihood of recovery of the animal.

OBH strongly believes in minimizing wounding loss and believes that legalizing use of lighted nocks for hunting in Oregon is the one (1) thing that ODFW should do to try to address that interest! OBH urges you to adopt the ODFW staff proposal to legalize use of light nocks for archery hunting in Oregon.

Thank you for providing the opportunity to make these comments.

Sincerely,

Craig Starr
2nd VP Bowhunting and Legislation
Oregon Bow Hunters

We fight hard so you can hunt hard!

61535 S. Highway 97, Suite 5-307 Bend OR 97702 / www.oregonbowhunters.com

My name is Kelly Forney and I reside at 15151 N. Umpqua Hwy, Roseburg, OR 97471. As a board member of the Oregon Hunters Association, Umpqua Chapter I am here to testify in support of Cougar Target Areas, specifically Zone B.

I worked on the Calapooyia, Jackson Creek and North Umpqua cougar studies done by ODFW in southwestern Oregon in the 1970's, 1990's and early 2000's. As a volunteer I currently provide cougar control with hounds for agricultural interests in Douglas County .

The ODFW cougar studies demonstrated that one of the most important things to a cougar is territory. When a juvenile cougar reaches maturity it must leave the home range to find unclaimed territory or kill another resident cougar to survive. As a result of this genetic behavior, young cougars are constantly dispersing to find new territory (as much as 100 miles). After hound hunting was eliminated in 1995 and cougar populations tripled, the major cause of cougar mortality became cat on cat.

The national forest lands and private timberland of Southwestern Oregon are currently saturated with cougars, leaving no room for maturing offspring to find territory there. These cats often disperse into the adjacent private agricultural lands, residential properties and even cities.

Since 2006, the cougar mortality due to Human/Pet Safety or Livestock threshold criteria for the East Umpqua target area (Zone B) has averaged 320% above the established criteria trigger level. This is a clear indication that current management methods are not effective and further action should be taken to reduce Human/Pet Safety or Livestock conflicts.

The proposed action in Zone B to remove up to 30 cougars per year for 3 years is a step in the right direction. This will provide a "sink" to absorb dispersing cougars and reduce the conflicts currently occurring as cougars seek unclaimed territory in agricultural and residential areas. This work could be accomplished at a minimum cost to the department using volunteer agents under the control of ODFW personnel.

I urge you to approve the Cougar Target Area proposals before you today.

Thank you,

Kelly Forney

9 October 2015

Chair Finley and members of the Commission:

I work with raptors and am well versed in predator-prey dynamics, as well as the importance of keystone predators, such as cougar, in a healthy and vibrant ecosystem.

In three of your four 2016 target areas, the reason for killing of cougars is to improve mule deer and bighorn populations. This conflicts with what is stated on page 42 of your own Mule Deer Initiative Survey where you state that "Measurable impacts were difficult to document at the end of the removal period. as of this time we have not been able to document a significant change in (mule deer) population".

Numerous scientific studies confirm this and show that killing cougars is not a guarantee to recovery of mule deer populations. Predator-prey relationships are a delicate and intricately complex system that demands a more thoughtful and scientifically based response than simply going out and killing cougars.

In terms of the science, please refer to other detailed scientific studies such as C.J. Bishop, et. al., "Demographic Response of Mule Deer to Experimental Reduction of Coyotes and Mountain Lions in Southeastern Idaho," Wildlife Monographs, No. 178 (2011)

I also refer you to this scientific monograph:

H.S. Cooley et. al., "Does Hunting Regulate Cougar Populations? A Test of the Compensatory Mortality Hypothesis," Ecology 90, No. 10 (2009).

It is also scientifically documented that removal of cougars from the landscape actually increased complaints and conflict sharply increased due to the resultant upset of cougar social dynamics.

See Peebles, K. A., R. B. Wielgus, B. T. Maletzke, and M. E. Swanson. 2013. Effects of Remedial Sport Hunting on Cougar Complaints and Livestock Depredations. PLoS One; 8(2013).

As a tax payer, I completely object to the state of Oregon contracting with "Wildlife Services", which is an incredible misnomer as they are in no way of service to wildlife, but instead use cruel and inhumane methods to kill wildlife. They are the only federal agency that operates under no regulations and with no oversight. I also object to the use of "volunteer agents", another misnomer for trophy hunters, who use the same techniques. Both the use of snares and dogs are inhumane, unethical and barbaric. These inhumane practices should be halted immediately as a wildlife agency whose mission it is to care for the wildlife of the state of Oregon.

I know that ODFW is funded in part by the sale of hunting tags, so can only wonder if this decision to 'administratively remove' cougars is politically based, or if it is science-based. I sincerely hope it is the latter.

I task you with developing an updated, science-based cougar management plan which reflects an understanding of predator-prey relationships and one that is not formed by politics, but by

science. Your current plan will not improve matters, and will likely exacerbate the very 'problems' you are trying to address.

Respectfully,
Karen Olch
PO Box 128
Eugene, OR 97440