### BEFORE THE OREGON DEPARTMENT OF FISH AND WILDLIFE

Petition to Initiate Rulemaking to Amend OAR 635-050-0110 to Prohibit Marten Trapping in Portions of Western Oregon

#### I. PETITIONERS

Cascadia Wildlands is a non-profit, public interest environmental organization headquartered in Eugene, Oregon. Cascadia Wildlands educates, agitates, and inspires a movement to protect and restore Cascadia's wild ecosystems, including the species therein. We envision vast old-growth forests, rivers full of wild salmon, wolves howling in the backcountry, and vibrant communities sustained by the unique landscapes of the Cascadia bioregion. We have worked for over a decade on Pacific marten issues in the Pacific Northwest.

The **Center for Biological Diversity** is a non-profit conservation organization with more than 1 million members and supporters dedicated to the conservation of endangered species and wild places, including members throughout the Pacific Northwest. The Center has been working to protect the Pacific marten and its habitat for more than a decade.

Environmental Protection Information Center is a community based, non-profit organization that advocates for science-based protection and restoration of Northwest California's Forests. EPIC was founded in 1977 when local residents came together to successfully end aerial applications of herbicides by industrial logging companies in Humboldt County.

Klamath-Siskiyou Wildlands Center is a non-profit, public interest organization that protects and restores wild nature in the Klamath-Siskiyou region of northern California and southern Oregon. KS Wild promotes science-based land and water convervation through policy and community action.

**Oregon Wild** is a non-profit, public interest conservation organization. For more than four decades, Oregon Wild has worked to protect and restore old-growth forests in Oregon, as well as the fish and wildlife that depend on them, including Pacific marten.

#### II. INTRODUCTION

The Pacific marten (*Martes caurina*), a mid-size forest carnivore related to minks and fishers, is listed in Oregon as a sensitive species in accordance with Oregon's policy "to prevent the serious depletion of any indigenous species." An ancient species, ancestral martens likely crossed into present-day Alaska across the Bering land bridge from Siberia during the ice ages and later occupied montane and coastal coniferous forests west of the Rocky Mountain crest. Scientists now recognize two subspecies of Pacific marten in Oregon. The Humboldt marten, *Martes caurina humboldtensis*, is found in the Coast Range and is critically imperiled. The interior subspecies, *Martes caurina caurina*, is found in the Cascade, Klamath, Blue, and Wallowa mountains and is apparently secure (NatureServe 2018). In Oregon the Humboldt marten is only known to occur in the Siuslaw and Siskiyou national forests. On the Siuslaw National Forest, the marten lives primarily in the Oregon Dunes National Recreation Area because Highway 101 appears to be limiting successful dispersal east of the Dunes. For the long-term survival of the Humboldt marten in Oregon, it is desirable that populations be established east of the highway due to the risk of extirpation from a stochastic event such as a tsunami.

As a secretive forest species that is reluctant to cross areas of open canopy, the Humboldt marten is an indicator species for forest health and diversity. It prefers wet, old-growth forests but will use multi-layer conifer forests with prevalent downed trees and snags, and on the central Oregon Coast uses shore pine dune forests with dense shrub cover. Active year round, martens are long and sleek with little body fat. Therefore, availability of winter prey is critical to their

survival. A primary reason for the decline in marten habitat and prey is the loss of late successional forests from vegetation management activities, such as logging. Accordingly, suggested conservation actions include avoiding fragmentation of preferred habitat, preserving downed trees and snags, and providing connectivity between desirable forested habitats.

Pacific martens once resided throughout the coastal forests of northern California, Oregon, Washington, and British Columbia (Grinnell and others 1937; Yocom 1974). However, since the early 1900s, the range of these coastal populations has declined by greater than 95 percent (Zielinski and others 2001; Slauson and others In Prep.), and the Humboldt marten was considered extirpated until 1996 when a population in northern California was rediscovered (Zielinski and Golightly 1996). Subsequent genetic work determined that the coastal martens surviving in Oregon belong to the Humboldt marten subspecies rather than the interior subspecies found in the Cascades and eastwards to the Rocky Mountains. Currently, the Humboldt marten occurs in three small, isolated populations, a population of fewer than 100 martens in northern California and southern Oregon ("South Coast Population"), a smaller population of unknown size in California near the Oregon border, and a population of approximately 71 adult martens on the central coast of Oregon ("Central Coast Population") (Zielinski and others 2001; Slauson and others In Prep.; Linnell and others 2018).

The urgent conservation need to learn more about marten distribution and habitat characteristics in coastal forests of Oregon catalyzed a multi-agency collaboration, which began unified survey efforts in the summer of 2014. Previously to this effort, the knowledge of population distribution in Oregon was largely based on contemporary roadkill carcasses collected from biologists and reported to the Oregon Department of Fish and Game (ODFW, Zielinski and others 2001), verified detections from non-invasive survey efforts (Zielinski and others 2001), and rec-

ords of legally-trapped animals reported to ODFW (Hiller 2011). Trapping records, however, are by county and some counties have both Humboldt martens from the Coast Range and interior martens from the Cascades.

The results of the recent comprehensive survey efforts estimate the total size of the Humboldt marten population in central coastal Oregon to be 71 martens (95% Credible Interval: 41-87), separated into two smaller populations by the Umpqua River (Linnel and others 2018)

Currently, Oregon lists the marten as a "fur-bearing mammal," including these isolated coastal marten populations. ORS 496.004(8). Therefore, Oregon still permits a limited trapping season for all martens under **OAR 635-050-0110** (**Marten Harvest Seasons**), which reads:

- (1) Open season: November 1, 2016 through January 31, 2017 and November 1, 2017 through January 31, 2018.
- (2) Open area: Entire state.

In light of this new information, the regulation urgently needs to be modified because the Humboldt marten is at risk of extinction. New models indicate that human-caused mortality greater than two martens per year presents a significant threat to the Humboldt marten's survival. "Even a small amount of sustained human-caused mortalities may increase likelihood of population extirpation" (Linnell and others 2018). This Petition proposes an amendment to the above rule that would limit the open area for marten trapping to that portion of the state lying east of the Interstate 5 corridor, thus excluding the range of the Humboldt marten from a legal trapping season. In addition, because martens are vulnerable to being caught in traps set for other animals, petitioners propose that all mammal trapping be prohibited in the Oregon Dunes National Recreation Area and that all marten and tree trapping be prohibited in the Siskiyou and Siuslaw national forests.

#### III. LEGAL GROUNDS FOR PETITION

Pursuant to ORS 183.390, "[a]n interested person may petition an agency requesting the promulgation, amendment or repeal of a rule. The Attorney General shall prescribe by rule the form for such petitions and the procedure for their submission, consideration and disposition.

Not later than 90 days after the date of submission of a petition, the agency either shall deny the petition in writing or shall initiate rulemaking proceedings in accordance with ORS 183.335 (Notice)." Pursuant to Attorney General rule:

The petition shall be legible, signed by or on behalf of the petitioner, and shall contain a detailed statement of:

- (a) The rule petitioner requests the agency to adopt, amend, or repeal. When a new rule is proposed, the petition shall set forth the proposed language in full. When an amendment of an existing rule is proposed, the rule shall be set forth in the petition in full with matter proposed to be deleted and proposed additions shown by a method that clearly indicates proposed deletions and additions;
- (b) Facts or arguments in sufficient detail to show the reasons for and effects of adoption, amendment, or repeal of the rule;
- (c) All propositions of law to be asserted by petitioner.

OAR 137-001-0070.

#### IV. PACIFIC MARTEN

# A. Biology and Ecology

The Pacific marten, *Martes caurina*, is a small, carnivorous forest-dweller in the family Mustelidae, which includes fisher, mink, and otters, among others. It is distinct from the pine marten, *Martes americana*, which is found east of the Rocky Mountains (Dawson and Cook 2012). Two subspecies of Pacific marten were historically recognized in Oregon: *M.c. vulpina* in the Blue Mountains of northeastern Oregon, and *M.c. caurina* in the Coastal and Cascade Ranges (Hall 1981). Genetic studies have now determined that the Oregon coastal population of *M.c. caurina* is part of the Humboldt marten subspecies, *M.c. humboldtensis* (Slauson and others

2009; Schwartz and others 2016). As such, the Humboldt marten is now known to exist only in three isolated populations: one located along Oregon's central coast, the "Central Coast Population," another along the combined area of the southern Oregon coast and northern California coast, which together make up the "South Coast Population," (Zielinski and others 2001) and a recently detected isolated small population in California near the Oregon border (Slauson and others In Prep.).

Federal land management agencies consider Pacific martens to be a "management indicator species" for intact, late-seral (old-growth) forest function due to its habitat specialization on structurally complex forests (USFWS 2015; Zielinski 2013). The Humboldt marten subspecies is an old-growth specialist, and fares poorly in fragmented and early-seral forest habitat (Moriarty and others 2016; USFWS 2015).

Martens are one of the most habitat-specific mammals in North America and are thus highly vulnerable to habitat loss and degradation (Slauson 2003). Martens are strongly associated with closed-canopy, old-growth forests with complex structure. Martens are known to avoid younger forests and open areas such as clear-cuts; they avoid fragmented areas and will not cross large areas with low canopy closure (USFWS 2015). Therefore, the growing decline in old-growth forests in the marten's range serves as a severe limitation to recovery.

Recovery from decline is also difficult for the marten population as a result of certain life history traits, including late reproduction and low reproductive capacity. Additionally, during periods of ecological stress, martens may have reduced or nonexistent reproduction (Thompson and Colgan 1987). Martens in captivity can live up to 15 years, but numerous adult mortality threats—including predation, disease, trapping, and road-kills—tend to limit this lifespan to less than five years in the wild (USFWS 2015).

## B. *Population Status*

Despite intensive surveys, the South Coast Population of Humboldt martens have been found in only five percent of their historic range. The Central Coast Population occupies a similarly limited remaining habitat area, confined largely to the Oregon Dunes. The subspecies is currently under status review for listing pursuant to the federal Endangered Species Act (Center for Biological Diversity 2010 and 2018).

Prior to 2014, only 26 verified contemporary records of coastal marten existed (1989-2012). A 2014-15 multiagency team surveyed 25,330 square kilometers of the Oregon coast, from the California border north 325 kilometers through the Coastal Range. Researchers surveyed 348 sample units in coastal Oregon using a total of 72 track plate and 908 remote camera stations. Martens were detected at 72/348 sample units. Surveys were conducted within 5 km and within 50 km of prior detections to confirm the persistence of historical subpopulations and to determine the current geographical limits of martens. The surveys covered more than 70 percent of the marten's predicted historical range in coastal Oregon (Moriarty and others 2016).

Accounting for multiple sightings of the same individual martens, the multiagency team detected at least 28 individual martens. The researchers did not detect any new populations despite an extensive effort to survey new areas. They conclude that "marten populations in coastal Oregon and California are currently vulnerable to local extirpation" (Moriarty and others 2016).

Linnell and others (2018) used multiple survey techniques to estimate population size and density of Humboldt martens in just the Central Coast Population and estimated the total population size to be around 71 adult martens (95% Credible Interval: 41-87), geographically divided into two subpopulations by the Umpqua River. They estimated the extinction risk for a subpopu-

lation of 30 martens (the approximate size of each Central Coast subpopulation) to range from 32 percent to 99 percent within 30 years with only two or three annual human-caused mortalities.

# C. Known and Potential Effects of Trapping in Coastal Habitat

Recent studies identify trapping as a significant risk that could cause the extirpation of the Humboldt marten in Oregon (Linnell and others 2018; Moriarty and others 2016). "[R]estricting lethal trapping of martens in the Coast Range could reduce anthropogenic pressure on small populations" (Moriarty and others 2016). Linnell and others (2018) estimate "two or more annual human-caused mortalities on martens (e.g. trapping and road-kills) would lead to a substantial risk of extirpation." For a subpopulation of 30 individuals (which approximates their estimates for each subpopulation of the Central Coast Population), they estimate a 32 percent risk of extirpation from just *two* annual human-caused mortalities, and a 99 percent risk of extirpation from *three* annual human-caused mortalities. The Central Coastal population already incurs human-caused mortalities from vehicle strikes, further escalating the risk to the populations' survival from even a single trapping mortality.

Due to a variety of factors including resource limits and geographic barriers, researchers concluded that juvenile Humboldt marten survival rates are unlikely to increase. Accordingly, they recommended a species management focus on reduction of adult mortality, which "may be the most beneficial opportunity to maintain or increase population size." According to the scientists: "Absent broad-scale restoration of forest to conditions which support marten populations, limiting human-caused mortalities would likely have the greatest conservation impact" (Linnell and others 2018).

### D. Inadequacy of Current Regulatory Regime

The coastal marten is listed as a "sensitive species" in Oregon. OAR 635-100-0040. State-listed "sensitive species" are "wildlife species, subspecies, or populations that are facing one or more threats to their populations, habitat quantity or habitat quality or that are subject to a decline in number of sufficient magnitude such that they may become eligible for listing on the state Threatened and Endangered Species List." OAR 635-100-0001. The marten is also listed as a "strategy species" in the Oregon Conservation Strategy. Oregon Conservation Strategy 2016.

The U.S. Fish and Wildlife Service, on remand from federal district court, is in the process of re-evaluating a 2010 petition to list the Humboldt marten under the federal Endangered Species Act (Center for Biological Diversity 2010 and 2018). The California Department of Fish and Wildlife currently lists the Humboldt marten as a "species of special concern" and as a "candidate" for protection under the California Endangered Species Act. In 1946, California indefinitely suspended marten trapping in the range of the Humboldt marten due to sharp population declines (Zielinski and others 2001).

Nevertheless, Oregon wildlife regulations continue to list the marten as a furbearer with an annual trapping season. The state allows trapping of martens statewide, with an open season that typically encompasses two months each winter. OAR 635-050-0110. Scientists agree that the Humboldt marten populations in Oregon are "highly sensitive to even a few annual human-caused mortalities," and trapping is one factor that "may cause these populations to be extirpated in the future" (Linnell and others 2018). Moriarty and others (2016) call for the elimination of kill-trapping in coastal Oregon because "any reduction of individuals may negatively affect populations."

Because the Oregon and California populations of Humboldt marten are so small, population models show that the survival of every individual, including both juveniles and adults, is

important for population persistence (Slauson and others In Prep.) Therefore, a regulatory scheme that allows intentional human-caused mortality fails to ensure that "wildlife shall be managed to prevent serious depletion of any indigenous species and to provide the optimum recreational and aesthetic benefits for present and future generations of the citizens of this state." ORS 496.012. In sum, we request the state ban marten trapping west of the I-5 corridor, ban all mammal trapping in the Oregon Dunes National Recreation Area where most of the state's Humboldt martens occur, and ban all marten and tree trapping in the Siskiyou and Siuslaw national forests.

### V. RULEMAKING REQUEST

Petitioners request the Department initiate rulemaking to amend the Marten Harvest Season regulation (OAR 635-050-0050) to prohibit trapping martens west of the Interstate 5 corridor. According to Department regulations, "Western Oregon" is defined as that portion of Oregon west of the summit of the Cascade Range, except the counties of Klamath and Hood River; "Eastern Oregon" is defined as that portion of the state east of the summit and including Klamath and Hood River counties. OAR 635-050-0050. Thus, the trapping area for martens would remain open in the defined Western Oregon area located east of Interstate 5, and in the Eastern Oregon region. In addition petitioners request that all mammal trapping be eliminated in the Oregon Dunes National Recreation area and that all marten and tree trapping be eliminated in the Siskiyou and Siuslaw national forests.

*Proposed Rule Language* (Proposed new language is underlined and italicized, deleted language is struck through)

OAR 635-050-0110 (Marten Harvest Seasons)

- (1) Open season: November 1, 2016 through January 31, 2017 and November 1, 2017 through January 31, 2018.
- (2) Open area: Entire State Eastern Oregon and that portion of Western Oregon east of the Interstate 5 corridor.

## OAR 635-050-0210 (Areas Closed to Hunting or Trapping)

It is unlawful to hunt or trap furbearing mammals or unprotected mammals on the following areas except as authorized by permit or as provided in sections (24) and (25) of this section:

(25) Oregon Dunes National Recreation Area is open to hunting as permitted by the Department but closed to trapping furbearing and unprotected mammals.

# OAR 635-050-0045 (General Furbearer Regulations)

(18) It is unlawful for any person to use traps or snares suspended in trees in the Siskiyou and Siuslaw National Forests.

#### VI. CONCLUSION

Given the high risk of extinction facing the Humboldt marten, pursuant to ORS 183.390 and OAR 137-001-0070, Petitioners formally request that the Oregon Department of Fish and Wildlife adopt the above suggested rule to reduce the real extirpation risk posed by the current Oregon marten trapping regulation. Petitioners believe this an ideal time for the Commission to consider such measures given the recent conclusion of the marten trapping season. Petitioners look forward to the Department's written response within 90 days of receipt of this petition concerning whether the Petition presents substantial information to warrant the action requested, and whether the agency will initiate the requested rulemaking by issuing public notice. ORS 183.335.

Please contact Petitioners with any questions concerning this Petition. To contact Petitioners please address:

Nick Cady, Legal Director Cascadia Wildlands PO Box 10455 Eugene, Oregon 97440 nick@cascwild.org (541) 434-1463

### VII. LITERATURE CITED

Center for Biological Diversity and Environmental Protection Information Center. 2010. Petition to List the Humboldt Marten as Threatened or Endangered under the Endangered Species Act.

Center for Biological Diversity. 2018. Comment Letter to USFWS Regarding 2010 Petition to List the Humboldt Marten as Threatened or Endangered under the Endangered Species Act.

Dawson, N.G. and J.A. Cook. 2012. Behind the genes: Diversification of North American martens (*Martes americana* and *M. caurina*): A New Synthesis.

Grinnell, J., J.S. Dixon, and J.M. Linsdale. 1937. Fur-bearing mammals of California. Vol. 1. University of California Press, Berkeley, CA, USA.

Hiller, T.L. 2011. Oregon furbearer program report, 2010–2011. Oregon Department of Fish and Wildlife. Salem, OR, USA.

Linnell, M A., K. Moriarty, D.S. Green, and T. Levi. 2018. Density and population viability of coastal marten: a rare and geographically isolated small carnivore. PeerJ 6:e4530 <a href="https://doi.org/10.7717/peerj.4530">https://doi.org/10.7717/peerj.4530</a>

Moriarty, K.M., *et al.* 2016. Distribution of Pacific Marten in Coastal Oregon. Northwestern Naturalist 97:71-81.

NatureServe. 2018. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Available http://explorer.natureserve.org. (Accessed: March 21, 2018).

Schwartz, M.K., *et al.* 2016. Genomic evidence showing the California Coast / Oregon Coast Population of Pacific Marten Representing a Single Conservation Unit. U. S. Forest Service, Rocky Mountain Research Station, Missoula, MT. Unpublished report, 38 p.

Slauson, K.M. 2003. Habitat selection by American martens (Martes americana) in coastal northwestern California. M.S. thesis. Oregon State University, Corvallis, OR, USA.

Slauson, K.M., W.J. Zielinski, and K.D. Stone. 2009. Characterizing the molecular variation between American marten (*Martes americana*) subspecies from Oregon and California. Conservation Genetics. 10: 1337–1341.

Slauson, K.M.; Schmidt, G.A.; Zielinski, W.J.; Detrich, P.J.; Callas. R.L.; Thrailkill, J.; Devlin-Craig, B.; Early, D.A.; Hamm, K.A.; Schmidt, K.N.; Transou, A.; West, C.J. 2017. A Conservation Assessment and Strategy for the Humboldt marten (*Martes caurina humboldtensis*) in California and Oregon. Gen. Tech. Rep. PSW-GTR-XXX. U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station, Arcata, CA. 180 p. In preparation.

Thompson, I.D. and P.W. Colgan. 1987. Numerical responses of martens to a food shortage in northcentral Ontario. The Journal of Wildlife Management: 824-835.

USFWS. 2015. Coastal Oregon and Northern Coastal California Populations of the Pacific Marten (*Martes caurina*) Species Report.

Yocom, C.F., 1974. Status of marten in northern California, Oregon and Washington. California Fish and Game, 60(1): 54-57.

Zielinski, W.J., *et al.* 2001. Status of American marten populations in the coastal forests of the Pacific States. Journal of Mammalogy. 82: 478–490.

Zielinski, W.J., and R.T. Golightly. 1996. The status of marten in redwoods: is the Humboldt marten extinct? Pages 115–119 in J. LeBlanc (editor), Conference on coast redwood forest ecology and management, June 18–20, 1996. Humboldt State University, Arcata, CA. University of California Cooperative Extension, Forestry. Berkeley, CA, USA.

Zielinski, W.J. 2013. The forest carnivores: marten and fisher. Pages 393–435 in J.W. Long, L.N. Quinn-Davidson, and C.N. Skinner (editors), Science synthesis to promote resilience of social-ecological resilience in Sierra Nevada and southern Cascade range. General Technical Report PSW-GTR-247. U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station, Albany, CA. USA.