

Background and Q&A about the Substantial 90-day Finding on a Petition to List the Humboldt Marten as Endangered or Threatened

The Humboldt marten (*Martes americana humboldtensis*) is a subspecies of the American marten, and was first described in 1926. The Humboldt marten is a mammal classified in the order Carnivora, family Mustelidae (weasels, otters, badgers), and subfamily Mustelinae (martens, fisher, wolverine, weasels). The only other North American member of the genus *Martes* is the fisher (*Martes pennanti*). The six remaining members of the genus *Martes* occur in Europe and Asia (e.g., the sable, yellow-throated marten, European pine marten).

Humboldt marten are about the size of a common house cat and have a long, slender body with relatively large rounded ears, triangular face, short limbs, and bushy tail (about one-third of the total body length). Their fur ranges in color from pale yellowish buff to tawny brown to almost black. The color of the head is usually lighter than the body, and the legs and tail are darker.

In California, the historical range of the Humboldt marten included the coast redwood (*Sequoia sempervirens*) zone from the Oregon border south to Sonoma County. The Humboldt marten appears to have been extirpated from greater than 95 percent of the range it occupied in California in the early 1900s, with the single known population occupying an estimated area of only 170,000 acres (68,797 hectares), mainly in northern Humboldt County and southern Del Norte County. The entire Humboldt marten population in California likely consists of fewer than 100 individuals and is believed to be declining.

In Oregon, the Humboldt marten is known from two disjunct populations; one in coastal central Oregon and one in coastal southern Oregon, separated by about 40 miles (64 kilometers). Both populations are believed to be in decline; based mainly on a reduction in the number of martens trapped and anecdotal observations over time. However, no systematic grid-based surveys have been conducted on, nor population estimates made for, the two populations of martens in coastal Oregon. Concerns about the viability of the two known marten populations in coastal Oregon have been expressed by species experts. The California population is over 50 miles (80 kilometers) from the coastal southern Oregon population.

Questions and Answers

Q. Who submitted the petition to list the Humboldt marten?

A. The petitioning organizations were the Center for Biological Diversity and the Environmental Protection Information Center.

Q. What does the petition seek?

A. The petition asks the U. S. Fish and Wildlife Service (Service) to list the Humboldt marten as endangered or threatened under the Endangered Species Act (Act) and to designate critical habitat concurrent with listing. Recent genetics research indicates that the currently recognized species, American marten (*Martes americana*), should be divided into two species: *M. americana* and *M. caurina* (the Western marten). The currently recognized Humboldt marten subspecies would likely be designated a subspecies of the newly designated species, *M. caurina*, and thus would likely be renamed *M. caurina humboldtensis*. Because the taxonomic split had not yet occurred when the petition was submitted to the Service, the petitioners requested that the Service list either: (1) the currently recognized subspecies, *Martes americana humboldtensis*; (2) the Humboldt marten subspecies of the Western marten (*Martes caurina humboldtensis*); or (3) a Humboldt Marten Distinct Population Segment of the western marten.

Q: Where can Humboldt marten be found?

A: In Oregon, the Humboldt marten is known from two disjunct populations; one in coastal central Oregon and one in coastal southern Oregon, separated by about 40 miles (64 kilometers). Although no formal population size estimates have been made, the two coastal Oregon populations are believed to be in decline, and the viability of the two known marten populations in coastal Oregon may be of concern.

The California population is over 50 miles (80 kilometers) from the coastal southern Oregon population. The three Humboldt marten populations are effectively isolated from one another because the distance between adjacent populations far exceeds the average dispersal distances reported for juvenile American martens.

Q. What are the threats facing the Humboldt marten?

A. The petition states that the primary cause of population decline and extirpation of martens in coastal northern California and coastal Oregon is loss of old-growth coniferous forest habitat due to logging. According to the petition, logging reduces the amount of available habitat and key Humboldt marten habitat structural elements, such as large standing and dead conifers, down woody debris, and the dense understory of shade-tolerant shrubs. Humboldt marten researchers believe that timber harvest was the most plausible reason for the continued absence of Humboldt martens from most of their historical range in coastal northern California.

The petition also states that because the Humboldt marten's habitat has been so severely reduced by logging, wildfires are now a threat to the subspecies, by further reducing habitat quality and increasing fragmentation of suitable habitat.

The petition states that the Humboldt marten is potentially threatened by disease, given the subspecies' extremely small population size. Mustelids (weasel family) are highly susceptible to carnivore diseases, such as the canine distemper virus, which is highly lethal. The canine distemper virus has recently been detected in a fisher (*Martes pennanti*) population only 6 miles (10 km) from the Humboldt marten population in coastal northern California.

Finally, the petition states that current Humboldt marten populations in coastal northern California and coastal Oregon are vulnerable to extinction because remaining populations are small and isolated.

Q. What is a 90-day finding on a petition to list?

A. Section 4 of the Act requires that the Service make a finding on whether a petition to list, delist, or reclassify a species contains substantial information to indicate that the requested action may be warranted. The Service must make that finding within 90 days, to the maximum extent practicable, after receipt of the petition and publish the finding in the *Federal Register*. Findings are based on information contained in the petition, supporting information submitted with the petition, and other information available to the Service when the petition was received.

Q. What is meant by substantial information?

A. When the Service evaluates a petition for substantiality, it considers the adequacy and reliability of the information supporting the action advocated by the petition. A “substantial” finding indicates the Service has determined that adequate and reliable information has been presented or is available that would lead a reasonable person to believe the petitioned action may be warranted.

Q. What types of information are considered reliable?

A. Among the most reliable and credible sources are papers published in peer-reviewed scientific journals. Information provided by individuals with demonstrated expertise in the relevant subject area is also generally considered reliable. Anecdotal information or information from sources without established records of subject matter experience and expertise must be strongly corroborated to be considered substantial.

Q. What happens next?

A. Once a substantial 90-day finding is made; the Service conducts a comprehensive status review of the species to determine whether listing the Humboldt marten as endangered or threatened under the Act is warranted.

More questions?

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