

April 7, 1989

Mr. Marvin L. Plenert
Regional Director
U.S. Fish and Wildlife Service
500 N.E. Multnomah Street
Suite 1692
Portland, Oregon 97232

Dear Mr. Plenert:

Subject: A Petition to List the Rocky Mountain Population of Trumpeter Swans (Cygnus buccinator) as a Threatened Species under the Endangered Species Act of 1973, as amended.

This is a petition to list the Rocky Mountain Population of Trumpeter Swans (Cygnus buccinator) as a Threatened Species and to afford them the protection provided by the Endangered Species Act of 1973, as amended. It is being submitted on behalf of the Idaho Chapter of the Wildlife Society and is supported by the Henry's Fork Foundation.

Prior to the settlement of North America by Europeans, the trumpeter swan was a migratory species that ranged across most of the United State and Canada. Outside Alaska, the species was extirpated from 99 percent of its historic range by 1900. Approximately 200 swans persisted in remnant flocks in western Canada and the Greater Yellowstone area. Beginning in the 20th Century, these swans provided the nucleus for efforts to restore the species in Canada and the lower 48 states.

The U.S. Fish and Wildlife Service currently recognizes three distinct Trumpeter Swan Populations. The Pacific Coast Population nests primarily in interior and south-central Alaska, and winters along the Pacific Coast from southern Alaska to Oregon. Decades of effort to restore trumpeters to their historic midwestern range have resulted in several small restoration flocks comprising the Interior Population. The Rocky Mountain Population includes all

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known breeding flocks in the Greater Yellowstone area (the Tristate Subpopulation), and all breeding flocks in Alberta, British Columbia, Northwest Territories, southeastern Yukon, and Saskatchewan (the Interior Canada Subpopulation).

The attached draft report, "The History, Ecology, and Management of the Rocky Mountain Population of Trumpeter Swans" by R. S. Gale, E. O. Garton, and I. J. Ball summarizes the Population's ecology and past management, and documents the factors that currently threaten this Population.

Although the Rocky Mountain Population faces several serious threats, to varying degrees these threats are symptoms of a much broader underlying problem. During the decline to near extinction, the damage experienced by the Population was more serious than indicated by the severe reduction in numbers above. Patterns of habitat use and learned migratory traditions were severed. As a result, the Population has lost the use of southern winter and spring habitats essential to its long term security and productivity.

During the past 20 years, the Interior Canada Subpopulation expanded in numbers and nesting distributions. As a result, in February 1989 the wintering area of the Rocky Mountain Population contained the highest number of swans (1743) censused since restoration efforts began. Despite these positive aspects of increasing size and breeding distribution, the Population is extremely vulnerable to severe declines due, in part, to its vastly diminished winter distribution.

All the known Canadian and United States breeding flocks of the Rocky Mountain Population share a common wintering area: the Greater Yellowstone region of Idaho, Montana, and Wyoming. During the winter months the Population is at risk from any common mortality factor. A single event of disease, or adverse environmental conditions at one or more of the limited number of wintering sites could result in severe Population impacts.

Such a scenario occurred at the primary wintering area, Harriman State Park located along the Henry's Fork of the Snake River in Idaho, in 1989. Hundreds of swans were

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debilitated by months of curtailed water flows from Island Park Reservoir. Severe ice conditions occurred when a blizzard and extremely cold weather struck the region in early February. Extraordinary measures were required to purchase water to pass through the reservoir to open the frozen feeding areas. Despite these measures, at least 50 to 100 birds have already died. Hundreds of weakened swans face a difficult struggle to survive the remaining winter months and subsequent spring migration. Other wintering flocks in the Greater Yellowstone region were subject to the same adverse conditions of low flows and extremely cold weather in February. It is not known how many swans died outside of the Harriman Park area. Additionally, diminished productivity within this Population will likely result because of the poor condition of many breeding pairs.

The Rocky Mountain Population faces other serious threats as well:

1. The continued restriction of useable winter habitat due to inadequate water flows. Flows in the key wintering area are controlled by a federal dam. Reduced flows result in river icing, diminished access to food supplies, and poorly conditioned individuals.
2. The loss of current and future nest sites and spring, summer, and winter habitats due to increasing human activity and loss of wetlands.
3. The extreme curtailment of its distribution, in particular the Population's limited winter and spring range distribution and poor quality of these limited available habitats.
4. The continuing high levels of human disturbance in National Parks and Forests and other breeding areas in the Greater Yellowstone region have resulted in reduced swan occupancy rates of traditional breeding territories.
5. The high potential for significant disease losses among the wintering flocks as a result of their concentration in a few limited areas.

6. The existing regulatory mechanisms have not guaranteed essential water flows, nor have they protected existing breeding and wintering habitats.
7. The Trumpeter Swan's social structure and dependence upon migratory traditions likely will prevent the necessary restoration of migrations and secure distribution without significantly increased management intervention. Existing regulatory mechanisms have not provided the necessary management emphasis, budgets, clarity of agency roles, or cohesive direction to affect a successful recovery of this Population.
8. The continued existence of 25 percent of the Population, primarily swans from the Centennial Valley flock at Red Rock Lakes in Montana, depends upon artificial feeding. These swans have not yet been restored as a viable flock capable of surviving on year-round native habitat.
9. The other primary sources of mortality include lead poisoning, powerline collisions, and accidental shooting.
10. The prefledging cygnet survival rate at Red Rock Lakes National Wildlife Refuge and Yellowstone National Park is less than 50 percent, with a downward trend in recent years.
11. The results of preliminary studies suggest that the Tristate Subpopulation may have incurred genetic damage in the past, and now contains an extremely low level of genetic heterozygosity.

Documentation of these threats to the Rocky Mountain Population of Trumpeter Swans is contained in the previously referenced report included with this Petition.

In summary, the Rocky Mountain Population of Trumpeter Swans appears to meet four of the five factors for determining endangerment, as specified in the Endangered Species Act. Meeting only one of the factors is sufficient for determining that a species is endangered.

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Thank you for considering this petition. I look forward to prompt agency response to protect the Rocky Mountain Population of Trumpeter Swans and complete the restoration effort that began decades ago.

Respectfully submitted,

Dr. Edward O. Garton
Idaho Chapter
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