

Threatened and Endangered Species

Spectacled eider (Somateria fischeri)

Status

Threatened throughout its range (Federal Register, May 10, 1993)

Description

Spectacled eiders are large sea ducks, 52-56 centimeters long (20-22 inches). In the winter and spring, adult males are in breeding plumage with a black chest, white back, and pale green head with a long, sloping forehead and white spectacle-like patches around the eyes. During the late summer and fall, males are entirely mottled brown. Females and juveniles are mottled brown year-round with pale brown eye patches.

Range and Population Level

Historically, spectacled eiders nested along much of the coast of Alaska, from the Nushagak Peninsula in the southwest, north to Barrow, and east nearly to the Canadian border. They also nested along much of the arctic coast of Russia. Today, three primary nesting grounds remain; the central coast of the Yukon-Kuskokwim Delta, the arctic coastal plain of Alaska, and the arctic coastal plain of Russia. A few pairs nest on St. Lawrence Island as well. Their fall and winter distribution was virtually unknown until satellite telemetry lead to the discovery of spectacled eiders at sea in 1993. Important late summer and fall molting areas have been identified in eastern Norton Sound and Ledyard Bay in Alaska, and in Mechigmenskiy Bay and an area offshore between the Kolyma and Indigirka river deltas in Russia. Wintering flocks of spectacled eiders have been observed in the Bering Sea between St. Lawrence and St. Matthew islands.

Between the 1970's and the 1990's, the breeding population on the Yukon-Kuskokwim Delta declined by over 96%, and only about 4,000 pairs nest there today. Historical data for other nesting



As their name suggests, male spectacled eiders in breeding plumage have distinctive patches around the eve which resemble eyeglasses, or spectacles. Female spectacled eiders, like the bird on the *left, are mottled* brown with faint eve patches. Reprinted with permission from an original painting by Joseph Hautman.

areas are scarce, but recent data and observations by native elders suggest populations may have also declined on the arctic coastal plain of Alaska. Biologists estimate that about 9,000 pairs currently nest on Alaska's arctic coastal plain, and at least 40,000 pairs nest in arctic Russia. The current worldwide population estimate is 360,000 birds, which is derived from winter surveys in the Bering Sea and includes non-breeding birds.

Habitat and Habits

Spectacled eiders are diving ducks that spend most of the year in marine waters where they probably feed on bottomdwelling molluscs and crustaceans. Around the time of spring break-up, breeding pairs move to nesting areas on wet coastal tundra. They establish nests near shallow ponds or lakes, usually within 3 meters(10 feet) of water. During this season they feed by diving and dabbling in ponds and wetlands, eating aquatic insects, crustaceans, and vegetation. Soon after eggs are laid, males leave the nesting grounds for offshore molting areas, usually by the end of June. Females whose nests failed

leave the nesting area to molt at sea by mid-August. Breeding females and their young remain on the nesting grounds until early September. Molting flocks congregate in relatively shallow coastal water, usually less than 36 meters (120 Feet) deep. While moving between nesting and molting areas, spectacled eiders travel along the coast up to 50 kilometers (31 miles) offshore. During the winter months of October through March, they move far offshore to waters up to 65 meters (213 feet) deep, where they sometimes gather in dense flocks in openings of nearly continuous sea ice.

Reasons for Current Status

Causes of the decline of spectacled eiders are not well understood. Lead poisoning, caused by eiders ingesting spent lead shot as they feed, has been documented in spectacled eiders on the Yukon-Kuskokwim Delta. Hunting also poses a threat to spectacled eiders.

Predation by foxes, large gulls, and ravens on the breeding grounds may be increasing in areas where populations of these predators are enhanced by the year-round food and shelter provided by human activities and garbage dumps.

Complex changes in fish and invertebrate populations in the Bering Sea may be affecting food availability for spectacled eiders during the 8 to 10 month nonbreeding season. Disturbance of marine benthic feeding areas by commercial bottom-trawl fisheries, environmental contaminants at sea, and competition with bottom-feeding walruses and gray whales for food may also affect spectacled eider populations.

Management and Protection

To protect spectacled eiders and their breeding, molting, and wintering habitat, the U.S. Fish & Wildlife Service recommends the guidelines below for projects and activities within the range of spectacled eiders. Adherence to these guidelines will help avoid the illegal take of spectacled eiders, and reduce the potential for adverse effects to the species. If these guidelines cannot be followed, consultation with the U.S. Fish & Wildlife Service is required. Under federal law, all federal agencies must consult with the U.S. Fish & Wildlife Service on any project they authorize, fund, or carry out that may affect spectacled eiders or other listed species.

For projects within the breeding range of spectacled eiders:

Assess whether spectacled eiders are likely to use the project area for nesting or brood-rearing. Contact the U.S. Fish & Wildlife Service for assistance. For projects conducted during the breeding season, a Service-approved survey for spectacled eiders should be conducted in the year of construction, prior to initiation of activities.

If spectacled eider nests are in the project area, the following activities require special permits within 200 meters (656 feet) of nest sites:

Vehicle and foot traffic from May 20 through

For more information on this and other threatened and endangered species, contact the U.S. Fish & Wildlife Service, Ecological Services Field Office near you.

Spectacled Eider Somateria fischeri Historical breeding range **Current breeding range** Molting areas (July - October) Wintering area (October - March),

August 1, except on existing roads.

Construction of permanent facilities, placement of fill, or alteration of habitat.

Introduction of high noise levels from May 20 through August 1, including but not limited to noise from airports, blasting, and compressor stations.

Eiders are present on breeding grounds from mid-May through mid-September, but activities any time of year may affect them through habitat modification.

For projects in the marine waters of eastern Norton Sound, Ledyard Bay, and between St. Lawrence and St. Matthew islands, contact the U.S. Fish & Wildlife Service, Ecological Services Anchorage Field Office for guidelines and recommendations.

Hunting of eiders is regulated under the Migratory Bird Treaty Act. Sport and subsistence hunting of spectacled eiders has been closed in Alaska since 1991. However, reported subsistence harvest on the Yukon-Kuskokwim Delta has averaged 255 spectacled eiders per year over the past ten years. Non-toxic shot must be used for all waterfowl hunting. Use of lead shot for waterfowl hunting has been prohibited throughout the United

States since 1991.

References

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Phone (907)271-2888

Ecological Services Anchorage Field Office Phone (907)456-0203 Lead office for Aleutian Canada goose, spectacled eider, short-tailed albatross, and Aleutian shieldfern. Project review for western and southcentral

Ecological Services Fairbanks Field Office

Lead office for Steller's eider, American peregrine falcon, and Eskimo curlew Project review for northern Alaska

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