



## Sea Duck Information Series

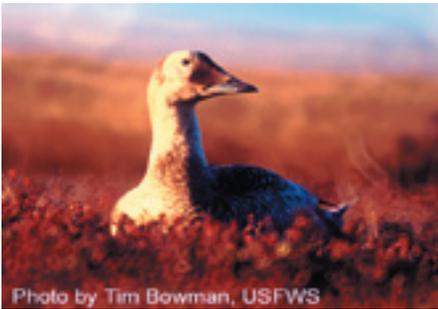
# Spectacled Eider (*Somateria fischeri*)

French: *Eider à lunettes*

### Description

Spectacled eiders are large sea ducks, 52-56 cm (20-22 in.). Males weigh about 1500 g and females 1600 g (about 3.4 lbs.) in spring before nesting, after which males outweigh females.

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 late summer and fall, males are mostly a mottled brown or grey. Females and juveniles are mottled brown year-round with pale brown eye patches.



*Female spectacled eider*

### Range

Spectacled eiders used to nest 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, however, only three primary nesting grounds remain: the central coast of the Yukon-Kuskokwim Delta, the arctic coastal plain of Alaska, and the eastern arctic coastal plain of Russia. A few pairs may nest on St. Lawrence Island as well.

Their fall and winter distribution was virtually unknown until satellite telemetry led to the discovery of spectacled eiders at sea in 1995. 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, believed to represent the entire worldwide population, have been observed in the Bering Sea



*Male Spectacled Eider*

between St. Lawrence and St. Matthew islands.

### Habitat and Habits

Spectacled eiders are diving ducks that spend most of the year in marine waters, where they feed on bottom-dwelling molluscs and crustaceans. During the breeding season they feed by dabbling in ponds and wetlands, eating aquatic insects, crustaceans, and vegetation.

As open water becomes available in spring, breeding pairs move to nesting areas on wet coastal tundra. They establish nests near shallow ponds or lakes, usually within 3 meters (10 ft) of water. Eggs are laid at a rate of one per day, with a typical clutch size of 4-5 eggs. Incubation lasts about 24 days. Females may renest if the nest is destroyed early in the nesting period. Primary egg predators are fox, mink, jaegers, and gulls (glaucous and mew). Young fledge after about 50 days.

Soon after eggs are laid, males leave the nesting grounds for offshore molting areas, usually by the end of June. Females whose nests fail leave the nesting area to molt at sea by mid-August. Breeding females and their young remain on the nesting grounds until early September.

While moving between nesting and molting areas, spectacled eiders

travel along the coast up to 50 km (31 mi) offshore. Molting flocks gather in relatively shallow coastal water, usually less than 36 m (120 ft) deep.

During the winter months of October through March, they move far offshore to waters up to 65 m (213 ft) deep, where they sometimes gather in dense flocks in openings of nearly continuous sea ice. Here they feed mostly on clams

### Population Size and Status

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. Causes of the decline of spectacled eiders remain a mystery.

Historical data for other nesting areas are scarce. Scientists don't know if populations ever declined in northern Alaska or Russia, although the population now appears stable on Alaska's Arctic Coastal Plain, where at least 3,000-4,000 pairs currently nest. The vast majority of spectacled eiders nest in arctic Russia. Winter surveys in the Bering Sea, which include non-breeding birds, indicate a worldwide population of about 360,000 spectacled eiders.

### Management and Conservation

Lead poisoning, caused by consumption of spent lead shot, has

been documented in this species on the Yukon-Kuskokwim Delta. Subsistence hunting is also a threat to spectacled eiders, although reported harvest has been fairly small.

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 winter. Spectacled eiders may also be affected by ecological effects of commercial fisheries and by environmental contaminants at sea.

Eiders are present on breeding grounds from mid-May through mid-September, but activities any time of year may affect them through habitat modification. Permits are required for certain types of activities that occur near nest sites. Guidelines and recommendations for minimizing adverse effects of projects are available from USFWS offices in Anchorage and Fairbanks, Alaska.

The U.S. Fish and Wildlife Service has designated 39,000 square miles of critical habitat for spectacled eider within federally managed lands or waters, or waters managed by the State of Alaska. Critical habitat is at four different locations: in the Bering Sea between St. Lawrence and St. Matthew islands; in Norton Sound east of Nome; in Ledyard Bay between Cape Lisburne and Icy Cape; and on the coastal fringe of the central Yukon-Kuskokwim Delta. The designation is intended to protect habitats essential for the conservation of spectacled eiders from activities that might adversely affect them or their habitats.

Recent research activities include development of a captive flock for contaminants and physiological research at the Alaska Sea Life Center, assessment of potential



*Distribution of Spectacled Eider in North America*

impacts of oil development on the Arctic Coastal Plain, monitoring lead exposure of nesting birds on the Yukon-Kuskokwim Delta, as well as monitoring reproductive success and determining age at first breeding.

Spectacled Eider Recovery Plan.  
U.S. Fish and Wildlife Service,  
Anchorage, Alaska.  
[Seaduckjv.org](http://Seaduckjv.org) – web site for the Sea Duck Joint Venture

#### References and Resources

- Alaska.fws.gov/es/te.cfm* - web site for the U.S. Fish and Wildlife Service Endangered Species office in Alaska.
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- Petersen, M. R., J. B. Grand, and C. P. Dau. 2000. Spectacled Eider (*Somateria fischeri*). In *The Birds of North America*, No. 547 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA.
- U.S. Fish and Wildlife Service. 1996.



Photo: Bill Larned, USFWS

*Spectacled eiders amassed in sea ice during winter in the Bering Sea*



*The Sea Duck Joint Venture is a conservation partnership under the North American Waterfowl Management Plan*

To learn more about the Sea Duck Joint Venture (SDJV), visit [seaduckjv.org](http://seaduckjv.org) or contact:

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