



U.S. Fish & Wildlife Service

Threatened and Endangered Species

Spectacled Eider

(Somateria fischeri)

Status

Listed as threatened throughout its range (Federal Register; May 10, 1993).

Description

Spectacled eiders are medium-sized sea ducks. Males in breeding plumage have a white back, black breast, and pale green head with large white “spectacles” around the eyes. In late summer and fall adult males molt into a mottled brown plumage that lasts until late fall, when they re-acquire breeding plumage. Females are mottled brown year round, with pale tan spectacles. Juveniles attain breeding plumage in their second (female) or third (male) year. Both males and females have sloped foreheads and bills, giving them a characteristic profile.

Range and Population Level

In North America, spectacled eiders historically nested along much of the coast of Alaska, from Bristol Bay to the Arctic Coastal Plain (ACP). Today, they nest discontinuously, primarily within the central coast of the Yukon-Kuskokwim Delta (YKD) in western Alaska and along the ACP of northern Alaska. Another nesting population occurs within the ACP of northern Russia. The fall and winter distribution of spectacled eiders was virtually unknown until 1995 when satellite telemetry led to the discovery of their molting and wintering grounds at sea. Large flocks of spectacled eiders congregate during winter in the Bering Sea between St. Lawrence and St. Matthew islands. Important late summer and fall molting areas have been identified in eastern Norton Sound and Ledyard Bay in Alaska, and in Russia; Mechigmenskiy Bay and an area offshore between the Kolyma and Indigirka River Deltas.

The YKD breeding population of



Male spectacled eiders (right) in breeding plumage have distinctive patches around the eye resembling eyeglasses. Female spectacled eiders (left) are mottled brown with faint eye patches. This image was reprinted with permission by an original painting by Joseph Hautman.

spectacled eiders declined 96% from estimates in the 1970s. No population estimates for the arctic coastal nesting populations in Alaska or Russia were available in 1993. The current trend for the YKD population is increasing, but we do not know if this trend will be sustained through time. Based on limited data, the number of spectacled eiders nesting on the arctic coast of Alaska is declining slightly. Scientists do not know if populations ever declined in northern Russia. Winter surveys in the Bering Sea indicate a worldwide population of more than 300,000 spectacled eiders.

Habitat and Habits

Spectacled eiders are diving ducks that spend most of the year in marine waters, where they feed on benthic invertebrates, primarily clams. From November through April, they remain in open sea or in polynyas (areas of open water within sea ice covered regions), or open leads (breaks in the sea ice, often along coastlines) in the sea ice of the northern Bering Sea. During spring, breeding pairs of spectacled eiders move to nesting areas

on the wet coastal tundra where they nest near shallow ponds or lakes. At the end of June, soon after eggs are laid, males leave the nesting grounds for offshore molting areas. Hens and broods feed by diving and dabbling in freshwater ponds and wetlands, eating aquatic insects, crustaceans, and vegetation. Breeding females and their young remain on the nesting grounds until early September, when they move to the molting areas. While moving between nesting and molting areas spectacled eiders travel along the coast up to 50 kilometers (31 miles) offshore; molting flocks gather in relatively shallow coastal waters.

Past, Present, and Future Threats

Lead poisoning caused by consumption of spent lead shot has been documented in spectacled eiders nesting on the YKD. Although state regulations prohibit the use of lead shot for upland game bird hunting on the arctic coast of Alaska and all bird and small game hunting on the YKD, spent lead shot remains in sediments and is

available to birds for years, and is still sold and used in rural communities near eider habitat. Spectacled eiders are still harvested from all three breeding populations, despite regulations prohibiting take in Alaska; tens to hundreds of spectacled eiders are likely harvested each year. In Russia, a significant number (10,000–14,000) of spectacled eiders are shot annually.

Collisions with on-land and off-shore structures, towers and wires are known to occur. Collision risk is a function of proximity of structures to habitats used by eiders, including migratory routes. Spectacled eiders are particularly susceptible to collisions during periods of low visibility.

Accelerated climate warming (i.e., global climate change) potentially threatens spectacled eiders and their habitat. Ocean warming and acidification may result in changes to fish and invertebrate populations in the Bering Sea, thereby affecting food availability for spectacled eiders during the 8-to-10 month non-breeding season. The Arctic Ocean could be ice-free for a short period in summer perhaps as early as 2015, thus opening access to marine navigation for a period of time. The anticipated increased number and duration of ships navigating in the Arctic marine environment will result in an increase in the probability of oil spills. Alteration of habitats through coastal erosion, flooding and salinization from storm surges, and other habitat changes from thawing permafrost and sedimentation could change the value of current nesting areas. Pond salinity or changes in food availability could be important factors affecting juvenile survival and subsequent productivity of female spectacled eiders ducklings.

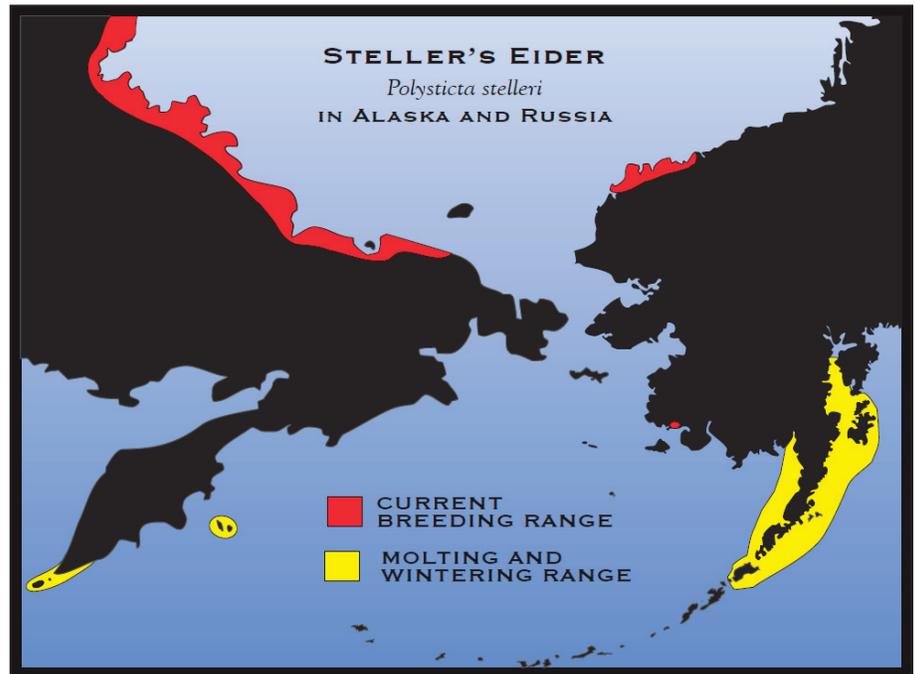
Management and Protection

Hunting of spectacled eiders is prohibited under the Migratory Bird Treaty Act. Use of lead shot for waterfowl hunting has been prohibited throughout the United States since 1991. In 2006 and 2007, the State of Alaska Board of Game passed regulations prohibiting the use of lead shot for upland game bird hunting on the ACP and all bird and small game hunting on the YKD.

All federal agencies must consult with the Service on any project they authorize, fund, or carry out that may affect spectacled eiders or their critical habitat. To protect spectacled eiders and habitat, we recommend the following:

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. For projects conducted during



Distribution of spectacled eiders in Alaska and Russia. Detailed maps of spectacled eider critical habitat available upon request at the contact below.

the breeding season, a nesting survey for spectacled eiders should be conducted in the year of construction, prior to initiation of construction.

- If spectacled eiders are nesting in the project area, and activities will occur within 200 meters (656 feet) of nest sites, the following activities require special permits: (1) Vehicle and foot traffic from May 20 through August 1, except on existing roads; (2) Construction of permanent facilities, placement of fill, or alteration of habitat; (3) Introduction of high noise levels from May 20 through August 1.

To reduce the probability of collisions:

- Avoid using steady-state red lights on structures. Generally minimize lighting, but when it is necessary, directly light downward rather than allowing it to radiate up and outward.
- Use bird flight diverters on power lines and guy wires.
- Locate overhead structures such as powerlines and wind turbines at least ½ mile inland from the coast.

To reduce the probability of disturbance at sea:

- Avoid boating through flocks of spectacled eiders.
- Do not boat through spectacled

eiders molting areas during late summer months.

To protect water quality:

- Maintain vessels in good working order, look for leaky fuel lines and faulty seals, and make repairs immediately.
- Develop a plan for preventing and responding to spills.
- Dispose of waste oil appropriately.
- Avoid fueling on the water and use fuel collars during fueling.
- Use an in-line bilge water filter for removing contamination from bilge water.

For more information on Steller's eider, contact the U.S. Fish & Wildlife Service.

*Anchorage Fish & Wildlife Field Office
605 W. 4th Avenue
Anchorage, Alaska 99501
Tel: (907) 271-1467
Fax: (907) 271-2786*

U.S. Fish & Wildlife Service
1 800/344 WILD
<http://www.fws.gov>

August 2011