



Sea Duck Information Series

Common Eider (*Somateria mollissima*)

French: *Eider à duvet*

Description

The common eider is the largest duck in the northern hemisphere; an adult weighs 1300–2660 grams (2.8–5.9 lbs) and is 50–71 cm (20–28 in.) long. Males are somewhat larger than females; size varies among races. The eider is a heavy-bodied sea duck with a relatively short, stout neck and a distinctive long, triangular (wedge-shaped) bill.

The adult male's plumage in fall through early summer is mostly white on the upper parts, except for a black crown, which is divided by a narrow whitish line. The overall plumage for mid-summer into early fall, when birds are replacing their wing and body feathers, is dark-brown to blackish with a pale-brown median stripe through the eye. The adult female's plumage is mostly dark to rusty-brown with fine black barring on its sides. In mid-summer to early fall, the female's plumage is more muted.

Male eiders do not attain full adult plumage until three years old, females at two years, thus eiders of many different plumages may be seen in any flock, particularly in winter.

Range

Four races of the common eider are recognized in North America: Pacific (*S. m. v-nigra*), Hudson Bay (*S. m. sedentaria*), American (*S. m. dresseri*), and northern (*S. m. borealis*). They are largely separated geographically throughout the year and vary slightly in body size, bill size and feathering, and minor color markings. In North America, the Pacific race breeds primarily from Queen Maud Gulf, Nunavut, westward along the coast to the Bering Sea and into the Aleutian Islands. They winter in ice-free regions of the Bering Sea and Gulf of Alaska, with highest concentrations off Russia's Chukotka Peninsula. The Hudson Bay race breeds and winters within the confines of Hudson and James bays of Canada. In winter, it is mainly restricted to open water west of the Belcher Islands and along the west coast of Quebec in Hudson Bay. The American race breeds on islands from the southcentral coast of Labrador to Massachusetts



Pacific race of common eider

and winters from Newfoundland to New York, with greatest numbers in Maine. The northern race breeds throughout coastal areas of the eastern Canadian arctic, from southcentral Labrador north to Ellesmere Island; it also breeds in parts of west Greenland. It winters in the Gulf of St. Lawrence and on the coasts of Labrador, Newfoundland, and southwest Greenland.

Habitat and Habits

Common eiders are closely tied to marine habitats. They often breed and nest in colonies along marine coasts, mostly on islands and islets and occasionally on islands in freshwater. They overwinter and undergo molt in open water leads in pack ice (polynyas) and along leeward sides of islands in arctic and subarctic waters across their range as well as ice-free waters in New England and the Maritimes. During spring migration (March to mid-June), large aggregations may occur immediately south of heavy Arctic ice and in open leads.

In summer, many adult males, immatures, and nonbreeders migrate to molting sites. Adult female breeders migrate to molt sites in late August and September. During the molt, when ducks shed and regrow new flight feathers, they are unable to fly for three to four weeks.

Common eiders form pairs during winter and in some populations show

long-term pair bonds. Some females may breed in their second year of life, but males do not breed until they are three years old. Courtship is very intense in spring, with males making a cooing courtship call, not unlike that of domestic pigeons.

They frequently nest in dense colonies starting in May or June (dates are progressively later as one proceeds north). Females typically return to their natal areas and often reuse the same nest sites. Nests are built on the ground and are lined with a thick layer of down plucked from the female's breast. The female lays an average of 4 eggs and begins incubation after laying the second or third egg. Incubation lasts 24–26 days. The female eider feeds very little during incubation and lives on fat reserves, losing up to 40% of her body weight.

Ducklings leave the nest shortly after hatching and are able to fly at 60–65 days. Most are lost, however, to predators, exposure, or starvation during their first two weeks of life. Common eiders often form crèches (large aggregations of ducklings and hens), which may improve survival of ducklings. Although annual reproductive success is often quite low, this is generally compensated for by high adult survival. Adult common eiders may live 20 years, and have high annual survival rates (80–95%).

Common eiders are well adapted for life in frigid waters. Their large

body mass means less surface area per pound and thus less heat loss, and beneath their outer feathers is a dense coat of insulating down. Under extreme cold during winter, they minimize their energy expenditure by becoming inactive, stopping feeding, and—presumably to insulate themselves—gathering in groups so dense that individual ducks cannot be counted.

Eiders feed mostly during the day, diving 3–20 m (10–65 ft) to take mussels, clams, scallops, sea urchins, starfish, and crabs, which are swallowed whole and crushed in their large and muscular gizzards

Population Size and Status

Population estimates of common eiders are highly variable and, in most instances, based on counts of individual breeding colonies rather than of entire populations. Additionally, winter populations are difficult to survey and portions of at least two races (*v-nigra* and *borealis*) spend the winter off Russia and Greenland, respectively, where they mix with other eiders.

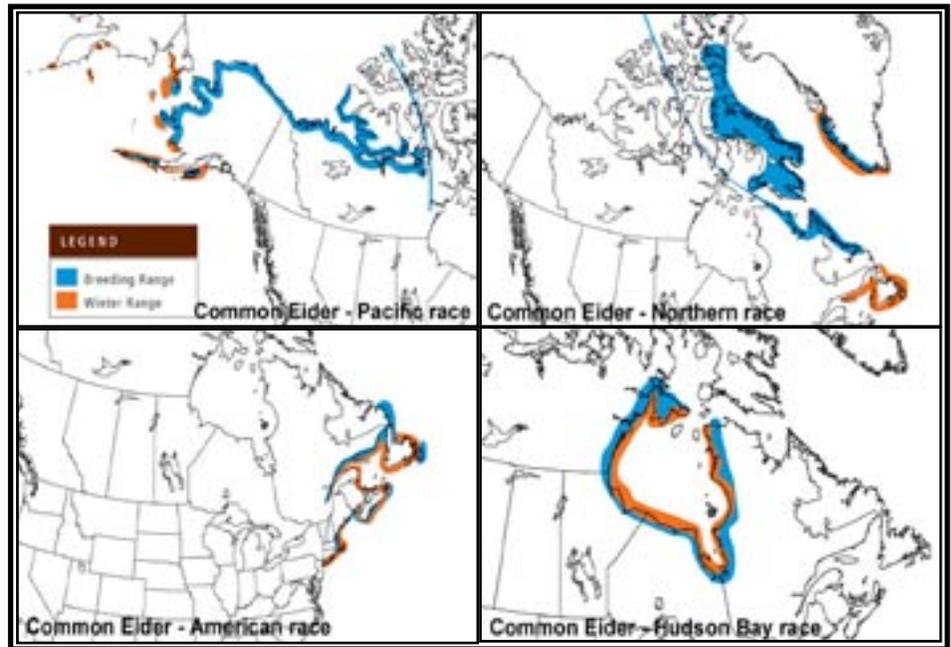
The Pacific race is estimated to be around 100,000 birds, with sharp declines (50-90% over the past 25 years) on the western Alaska and Canadian breeding grounds. The Hudson Bay race is currently estimated at about 200,000, and seems to be recovering from a large winter die-off in 1991–92.

Estimates of Northern race eiders wintering in eastern Canada and Greenland are approximately 400,000–500,000, with little information about population status.

The American race is estimated at about 280,000 birds in eastern Canada with another 57,000 in the northeastern United States and populations generally appear stable or increasing.

Management and Protection

Because common eiders are often colonial and aggregate in dense flocks



Distribution of the four North American races of Common Eider

throughout the year, they can be particularly susceptible to harvest pressures, as well as environmental threats and disease outbreaks. Within North America, most sport harvest occurs along the Atlantic coast; with about 15,000 birds taken in Canada and about 23,000 in the New England states. They continue to be harvested commercially (80,000+ birds/yr) in Greenland, and this may not be sustainable

Eggs, adult birds, and down of common eiders are a significant part of subsistence harvests in the United States and Canada. Subsistence harvest in North America and Russia is unknown.

Their down is highly valued as one of the lightest and most effective insulators known, which commands high prices for use in parkas, sleeping bags, comforters, etc., and which can be collected without damaging the ducks or their eggs and nests.

Currently, studies are underway using satellite telemetry to identify migration routes and links between breeding and wintering areas.

Ongoing research is also monitoring trends in size of nesting colonies, reproductive success, and survival.

References

Goudie, R.I., G.J. Robertson, and A. Reed. 2000. Common Eider (*Somateria mollissima*). In *The Birds of North America*, No 177 (A.F. Poole and F.B. Gill, eds). Philadelphia, Penn: The Academy of Natural Sciences; Washington, D.C.: The American Ornithologists' Union.

Seaduckjv.org – website for the Sea Duck Joint Venture.



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

To learn more about sea ducks and the Sea Duck Joint Venture (SDJV), visit seaduckjv.org or contact:

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