



## Sea Duck Information Series

# Red-breasted Merganser

(*Mergus serrator*)

French: *Harle huppé*

### Description

The red-breasted merganser is a medium-sized “saw-bill” sea duck. An adult weighs 800–1,350 grams (1.7–3.0 lbs) and is 51–64 cm (20.0–25.1 in.) long. Males are larger than females. Both sexes have a long narrow red bill with a black tip, red-orange feet, and black wings with white patches across the inner wing. Their serrated bill is highly specialized for grasping small fish securely.

Adult males have a head that is dark metallic green in the face with black elsewhere. Elongated feathers at the rear of the head form a long, shaggy, and double-pointed crest. Males have a white neck ring with varied body colors that include speckled brown chest, and gray sides and flanks. In late summer during molt, males resemble breeding females, except white on inner forewing is more extensive in male.

Adult females are largely gray-brown with white on chin, throat, breast, and belly; they retain this plumage year-round.

### Range

Red-breasted mergansers occur in arctic and subarctic regions throughout the northern hemisphere. In North America, they breed across the continent from the Aleutian Islands and Alaska, east across the Canadian arctic to the Atlantic provinces, Great Lakes region, and northeastern states.

Red-breasted mergansers winter along the entire coastline of North America, in the Pacific from the Aleutian Islands of Alaska to Baja California and in the Atlantic from Nova Scotia to northern Mexico. They are found mostly on coastal bays, large calm, open-water areas, estuaries, and harbors. They also winter on large interior lakes, such as the Great Lakes and the Great Salt Lake in Utah.

Red-breasted mergansers are more frequently found in salt water than common mergansers, which winter more on fresh water. The large distance between arctic breeding areas and wintering areas as far south as coastal Mexico suggests a strong migratory tendency



*A pair of Red-breasted Mergansers*

and dispersal ability. However, nothing is known about migration patterns or connectivity between nesting and wintering grounds.

### Habitat and Habits

Red-breasted mergansers are thought to establish pair bonds in winter. They are late spring migrants, flying in pairs or flocks of 5–15 individuals along major rivers, lake chains, and coastlines during day and overland by night. They also breed later than most ducks, beginning nesting in mid-June in Alaska, and from late May to early July in Atlantic Canada.

They breed at higher latitudes where tundra and boreal forest predominate. On tundra, they prefer larger, deeper lakes rather than small ponds. Most individuals breeding in the interior of North America migrate to and along the Pacific or Atlantic coasts before reaching final winter destinations.

Females return to the same nesting area each year. They nest on the ground, primarily near the coast, rivers, or large bodies of water. Crevices in coastal rocky cliffs and islets are also used for nesting. They often nest in loose colonies, sometimes

in association with terns, gulls, or eiders.

The nest is a shallow bowl, often with a roof of standing vegetation, lined with increasing amounts of grass and downy feathers from the female as incubation progresses. Females lay an average of 9–10 eggs, but clutch size can range between 5–24 eggs. It is not uncommon for more than one female to lay eggs in another's nest. Eggs are incubated approximately 30 days, and females may renest if the first nest is lost to predators.

Young from several broods may join to form large aggregations called crèches, which are typically attended by only one female. Young are often abandoned by the female before they can fly, often within the first week after hatching. Time required to reach fledging is poorly known, but assumed to be 60–65 days.

Males remain near the nest site until females begin incubating, then depart for molting locations, where they become flightless for 3–4 weeks while they grow new wing feathers. It is unknown where specific populations go to molt. Females molt with or near their broods on nesting areas.

An opportunistic feeder, the diet of red-breasted mergansers varies with habitat and geographic location. They forage primarily by diving for small fish and crustaceans (e.g., shrimp and crayfish), but also eat worms, insects, and amphibians. Primary fish eaten include young salmon, sculpin, herring, sticklebacks, and minnows. They also eat salmon eggs when available. This species may nest late as an adaptation to better coincide with the upstream migration of forage fish. Downy young eat mostly aquatic invertebrates, fish, and seeds, mainly of sedges.

Although generally silent, male red-breasted mergansers may make grunting calls or a cat-like *yeow-yeow* during courtship displays. Females utter a raspy *krrrr-krrrr* during displays and croak while flying to and from nests.

### Population Size and Status

A rough estimate of the breeding population in North America is 250,000. Size and trends of merganser populations in North America are difficult to interpret because aerial surveys of breeding birds do not differentiate common and red-breasted mergansers; they are lumped together in counts. The North American Waterfowl Breeding Survey indicates increasing numbers of all merganser species combined from 1957 to 2002. Nothing is known about factors that potentially regulate populations of red-breasted mergansers.

### Management and Conservation

Red-breasted mergansers are harvested throughout their ranges, but total sport and subsistence harvest is low. The number of birds taken by hunters in Canada and the United States averages 30,000 per year for both countries. Subsistence harvest in Alaska was estimated at 200–300 birds per year between 1985 and 2000.

Many gaps remain in our knowledge about the habits and



*Distribution of Red-breasted Merganser in North America*

biology of red-breasted mergansers, as well as factors that influence population size and composition. Nesting habits and biology are known primarily from studies in Eastern Canada, and remain basically unknown elsewhere. Levels of male breeding philopatry (i.e., return to same breeding area each year) are lacking, as are estimates of adult and juvenile survival.

Aspects of migration and wintering ecology and the connectivity of breeding and wintering areas remain poorly understood. No genetic studies have been conducted to examine associations among breeding and wintering populations or the validity of proposed subspecies across North America and Eurasia.

Current studies in Alaska are looking at nesting ecology and movement patterns using banding, radio-telemetry, and genetic methods. In New Brunswick, studies are examining breeding and post-breeding ecology.

### References and Resources

Titman, R. D. 1999. Red-breasted

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[Seaduckjv.org](http://Seaduckjv.org) – website for the Sea Duck Joint Venture.



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

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