Sea Duck Information Series

Long-tailed Duck *(Clangula hyemalis)*

French: Harelde kakawi

Male Long-tailed Duck in breeding plumage

Description

Long-tailed ducks are mid-sized sea ducks; they have a more tapered body than do most sea ducks and a short neck and short bill. Males are 40–53 cm (16–21 in.) long, not counting the long tail; females are 38–43 cm (15–17 in.). An adult weighs 715–1000 grams (1.6–2.2 lbs).

Long-tailed ducks have the most complex molt of any species of waterfowl with three different plumages during the year. Both the male and female have distinctly different breeding and winter plumages, but only the male has, as its name implies, two slim and elongated central tail feathers. From October through March, the male's basic plumage is about equally black and white. It has a pink band around its dark bill that is more prominent in winter.

By April, the breeding plumage emerges and the male becomes mostly black-brown with a large white/gray cheek patch and white flanks and belly. As summer progresses, its head and neck become whiter and its flanks a darker gray. Plumage of females, like males although less pronounced, is predominantly white in the fall and winter and brown in the spring and early summer. Light areas on the head and neck are more extensive during the winter months. Both males and females have unpatterned dark wings.

Long-tailed ducks are the most vocal sea duck, with a melodious yodeling by males that resembles *ow ow owoolett.* Until recently, this sea duck was known as the Oldsquaw in North America. Its name was officially changed to be consistent with the European common name.

Range

In North America, long-tailed ducks breed in arctic and subarctic wetlands from the west coast of Alaska across most of northern Canada to the east coast of Labrador. The ducks migrate relatively late in fall and early in spring. Actual migration routes are largely unknown, but are presumably coastal. Each May and June, perhaps as many as one million long-tailed ducks migrate into the Beaufort Sea region from the west (including Russia) on their way to breeding areas in northern Alaska and Canada.

Long-tailed ducks winter along the Pacific coast from the Bering Sea to as far south as California. Some birds from Alaska may winter far out at sea in open-water ice leads in the northern Bering Sea and across to Russia. In eastern North America, most long-tailed ducks winter along coastal areas from Labrador south to North Carolina, and on Hudson Bay and the Great Lakes.

Habitat and Habits

Long-tailed ducks spend most of the year (approximately nine months) primarily in coastal marine waters. Only during the breeding season does it frequent shallow wetlands of low-lying tundra, ranging southward to the northern edge of the boreal forest. Non-breeding and molting birds tend to use deeper ponds and lakes and nearshore marine areas.

Their winter diet is varied but chiefly animal matter, including bottom-dwelling crustaceans, clams, mussels, small fish, and snails. On breeding grounds, they eat larval insects, worms, and crustaceans such as amphipods and brine or fairy shrimp. They forage by diving and swimming underwater, with wings partly opened, but propelled mainly by its feet. Most feeding is in water <9 m (30 ft) deep, but the long-tailed duck has been documented to dive more than 60 m (200 ft), deeper than any other duck.

Long-tailed ducks fly in bunched, irregular flocks in constantly changing formations close to the water's surface, often twisting and turning in flight, alternately showing the white belly versus the dark back.

Long-tailed ducks, like most sea ducks, presumably have long life spans, and do not reach sexual maturity until they are two or three years old. Courtship display begins by early winter, and most pair formation occurs during winter or early spring.

Nests are built along the Arctic coasts and inland tundra on dry ground close to water, often partly hidden under low growth or among rocks but near lakes or ponds. The nest is a depression lined with plant material and large amounts of down, added after some eggs are laid.

The typical clutch is six to eight eggs, and incubation is 24–29 days; only one brood is raised each year. Ducklings leave the nest shortly after hatching and can swim and dive when quite small. They are tended by the female, but feed themselves. Ducklings can fly when 35–40 days old.

The annual wing molt, during which both sexes change plumage, occurs after breeding, and ducks are unable to fly for about a month while they regrow new wing feathers. Long-tailed ducks molt on inland lakes of northern Alaska and Canada or on lagoons and inlets along the coasts of the Atlantic, Pacific, and Arctic oceans and Hudson Bay and the Great Lakes.

Population Size and Status

Because long-tailed ducks breed over a vast range and at low densities, there have been no comprehensive surveys of their abundance. Because they, like other sea ducks, inhabit offshore areas more than other waterfowl during winter, long-tailed ducks are also poorly monitored by mid-winter surveys for waterfowl. A crude estimate of the North American population is at least one million birds. Roughly 200,000 of those breed in Alaska; the rest breed in Canada.

The Breeding Population and Habitat Survey, conducted by the Canadian Wildlife Service and the U.S. Fish & Wildlife Service, shows that breeding populations of long-tailed ducks have declined about 80% since the survey was begun in 1957. However, that survey covers only a small portion of Alaska and northwestern Canada, a tiny part of their overall breeding range. Causes for declines are unknown. Despite indications of long term declines, the long-tailed duck is the most abundant Arctic sea duck and, as such, is not considered a threatened or endangered species. Furthermore, the population seems to have stablilized since the early 1990's.

Management and Conservation

Long-tailed ducks are vulnerable to oil spills and pollution by shipping vessels in northern seas. Large numbers of these ducks are sometimes caught and killed in fishing nets. Other potential threats include extensive habitat alterations, increased industrialization and development of traditional wintering grounds. Contaminants such as lead, mercury, cadmium, and organochlorines (from pesticides) have been found at high levels in long-tailed ducks in eastern Canada and Alaska.

Distribution of Long-tailed Duck in North America

The magnitude of harvest and the role of hunting in regulating populations of long-tailed ducks is largely unknown. Long-tailed ducks are a small component of the sport harvest of waterfowl. They are generally considered poor table fare because of their strong taste. However, they are a significant species in the subsistence harvest in some northern communities, and co-management of migratory birds with First Nation and Alaska Native groups should help ensure a sustainable use of long-tailed ducks.

Reliable techniques for monitoring population size and trends of long-tailed ducks across its range need to be developed and implemented. Satellite telemetry studies are currently underway that will help identify where birds from a particular breeding area spend the winter (and vice versa) as well as their migratory behavior and pathways.

References and Resources

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Seaduckjv.org - web site 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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