

## Sea Duck Information Series

# **Common Goldeneye** (Bucephala clangula)

French: Garrot à oeil d'or

#### Description

Common goldeneyes are chunky, medium sized sea ducks. Males are 45-50 cm (17 in.) long and weigh about 1000 g (2.2 lbs.) and females are 40-50 cm (15 in.) and 800 g (1.8 lbs.). Both sexes have a bright yellow iris, hence the name "goldeneye".

Males in breeding plumage (October to June) have an iridescent greenish-black head and a bright oval white patch behind the bill. Their white belly, breast, flanks, and neck contasts greatly with the otherwise black feathering of their back and tail. It can be distinguished readily from Barrow's goldeneye by the oval patch behind bill versus the crescent shape of Barrow's. The bill is slightly longer and more wedge-shaped and the forehead rises more gradually than Barrow's.

Females have a chocolate-brown head, dark gray back and tail, and white belly, breast, and flanks. Their bill is black and tipped with yellow. Female common goldeneyes are difficult to tell apart from Barrow's females. Immature males are difficult to distinguish from females.

In flight, the inner wings of both males and females have a white patch that contrasts with the black outer wing feathers. Their wingbeat is rapid and wings make a distinctive whistling sound, thus they are also called "whistlers". Other than the whistling of their wings, common goldeneyes are usually silent.

#### Range

Common goldeneyes breed in forested regions of Canada and Alaska, and northern parts of the lower U.S. (northern New England, Great Lake states, and Montana). They winter throughout North America as far north as water remains ice-free, with highest densities in coastal bays from New England to Chesapeake Bay and from southeast Alaska to British Columbia. They are also common in the St. Lawrence estuary, Great Lakes, Mississippi River during winter.



Photo: Tim Bowman

Common Goldeneye pair

#### Habitat and Habits

Common goldeneyes are often the last waterfowl to move south in the fall and one of the first species to migrate north in spring, arriving as soon as the first open water is available. They arrive on breeding grounds in April and May, depending on latitude. Males and females are paired when they arrive. It is not known if the pair reunites in successive years. Females do not breed until their second year; in British Columbia the average age at first breeding was 3 years. They usually return to the same nest site year after year.

Common goldeneyes nest in tree cavities and are found in forested areas where large dead and dying trees provide suitable nesting sites. They will also readily nest in artificial nest boxes. Nest sites are typically in wetlands or waterways bordered by trees large enough to have nest cavities. Goldeneyes prefer lakes that are fish-free, which ensures less competition for their aquatic invertebrate prey.

Females lay one egg every other day until 8-10 eggs are laid. They then begin incubation, which lasts about 30 days. Ducklings can swim and feed immediately after hatching. Females with broods are territorial and do not tolerate other waterfowl nearby. The female often abandons the brood before they can fly at about 60 days.

Mortality of ducklings is highest during the first two weeks of life; causes of death include adverse weather, and predation by mammals (mink, weasel) and pike.

Common goldeneye commonly lay their eggs in the nests of other common goldeneye as well as other cavity-nesting ducks. They are territorial during the breeding season and males defend breeding territories using a threat display and by chasing intruders both above and below the surface of the water.

Males leave the females 1-2 weeks after incubation begins and make a molt migration. Both males and females undergo a complete wing molt that renders them flightless for 3-4 weeks. Molting areas that have been identified are in the Great Lakes region and interior lakes of Canada, as well as the area around James and Hudson Bays. Others surely exist but have not been well documented.

Their diet during the breeding season is mostly aquatic insects and during the winter their diet is more diverse, including fish, crustaceans (shrimp, amphipods), and mollusks (clams and mussels). Both adults and young feed by diving, whereby they capture prey on the bottom or on subsurface vegetation.

#### **Population Size and Status**

A crude estimate of population size in North America is about 1 million birds. Continentally, their populations appear to be stable, but there are indications of declines in the Atlantic coast based on winter counts and on numbers of harvested birds.

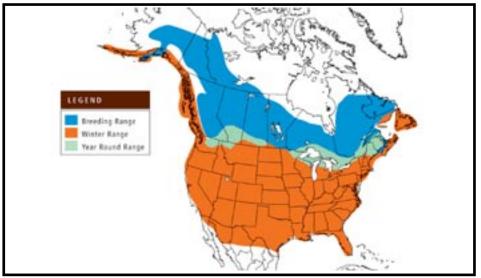
They are hunted for sport and are more notable in hunter bags late in the season because they migrate later than most waterfowl. In Canada, most harvest occurs in Ontario and Quebec. In the U.S., most harvest occurs in Mississippi Flyway followed by Atlantic and Pacific Flyways. The role of hunting in regulation populations of common goldeneye is unknown.



#### Management and Conservation

The availability of nest cavities is thought to be the most important factor limiting populations of common goldeneyes. Because they rely on tree cavities for nesting, they are at risk from deforestation by logging, particularly near riparian areas. Loss of mature forests is one of the most important factors affecting common goldeneyes.

Nest box programs can increase the density of breeding common goldeneye locally, but probably only up to a point at which territoriality and dumpnesting (laying eggs in other nests) inhibit further growth.



Distribution of Common Goldeneye in North America

Common goldeneyes are particularly sensitive to changes in food quality. Consequently, they may be a good bio-indicator to monitor changes in environmental quality, including subtle long term changes associated with climate change or pollution.

Recent research on common goldeneyes includes breeding ecology and the use of nest boxes in Alaska and Quebec, as well as wintering ecology studies in Quebec and the St. Lawrence estuary.

#### **References and Resources**

- Eadie, J. M., M. L. Mallory, and H. G. Lumsden. 1995. Common Goldeneye (Bucephala clangula) *In* The Birds of North America, No. 170. (A. Poole an F. Gill, eds.). The Academy of Natural Sciences, Piladephia, and the American Ornithologists' Union, Washington, D.C.
- 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 the Sea Duck Joint Venture (SDJV), visit *seaduckjv.org* or contact:

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