



Aquatic



COSEWIC Ranking: Special Concern



NL Designation: Vulnerable



Waterfowl



Female (left) and male (right) Barrow's Goldeneyes.

Barrow's Goldeneye (BAGO)

Bucephala islandica

Description

Barrow's Goldeneyes are medium-sized (males: ~48 cm; females: ~43 cm) diving ducks with showy plumage that differs between males and females. Male Barrow's Goldeneyes have an iridescent black head and back that can appear purple in the sun, and prominent, crescent-shaped white spots on both sides of their heads at the base of their bills. Their bellies and flanks are white, and their rumps are black. Female Barrow's Goldeneyes have gray-brown bodies, brown heads, and yellow eyes. Male Barrow's Goldeneyes can be distinguished from Common Goldeneyes by the shape of the white face patch and the amount of white showing when the wing is folded. Female Common Goldeneyes have larger, mostly black bills with a yellow tip, while the female Barrow's Goldeneyes have a smaller, mostly yellow bill.

Known and potential breeding habitat

Barrow's Goldeneye breeding habitats include hollow trees or, in treeless areas, crevices among rocks. Breeding Barrow's Goldeneyes have been rarely observed on lakes in treeless areas where females nest in holes of the surrounding cliffs. In Newfoundland, breeding evidence has been observed from 22 April to 14 August and birds are most likely to nest in hollow trees.

Detection Tips

Habitat

The Barrow's Goldeneye nests in cavities found in mature trees. In the summer, they prefer wetlands with open water, little emergent vegetation, abundant invertebrate populations, and an absence of fish. During migration they use large inland lakes and rivers. They most commonly winter in sheltered coastal areas, but occasionally winter on inland ice-free lakes and rivers.

Vocalization

Barrow's Goldeneyes are usually silent but make soft grunts and croaks during courtship. Most vocalizations are given while they are on water; females call when scared from the nest or while approaching a lake, and





in-flight while she searches for a nest.

Behaviour

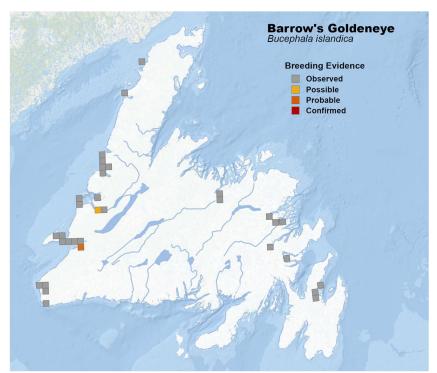
Barrow's Goldeneyes are strong swimmers and divers, so spend most of their life on the water, and dive to the bottom of ponds searching for food. These ducks form monogamous pairs while they are on the wintering grounds, and often return to the same breeding and wintering areas each year. Males defend a territory on lakes where they breed, and females later defend a territory where she raises the young.

Nesting

Barrow's Goldeneyes are cavity-nesters, using live or dead trees, but they will occasionally nest in other sites, such as rock crevices or under tree stumps. Nests can be in shallow water, at shorelines, or up to 2 km away from water. Females with breeding experience exhibit high fidelity to previous nest sites.

Breeding Evidence

Breeding evidence for Barrow's Goldeneyes includes an individual (H) or a pair (P) in a suitable nesting habitat in nesting season, nest containing eggs (NE), adults entering or leaving a nest site (AE), agitated behaviour (A), and a female with downy young (FY). Note that pair-formation displays and copulation are done before these birds arrive in their breeding territory, so courtship or displays (D) is not a valid code and pair (P) should be used with caution.



Barrow's Goldeneyes (*Bucephala islandica*) were detected in 33 squares in Newfoundland during the past ten years (2011–2021). Breeding was probable in 1 square.

