# Proposed Management Plan for the Barrow's Goldeneye (*Bucephala islandica*), Eastern Population, in Canada

# SUMMARY

This is a summary of the information provided in the proposed management plan for the Barrow's Goldeneye, eastern population. The Barrow's Goldeneye was listed as a species of special concern under the *Species at Risk Act* in 2000. It was re-assessed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) in 2011 and its status as a species of special concern was confirmed.



Date of Assessment: May 2011

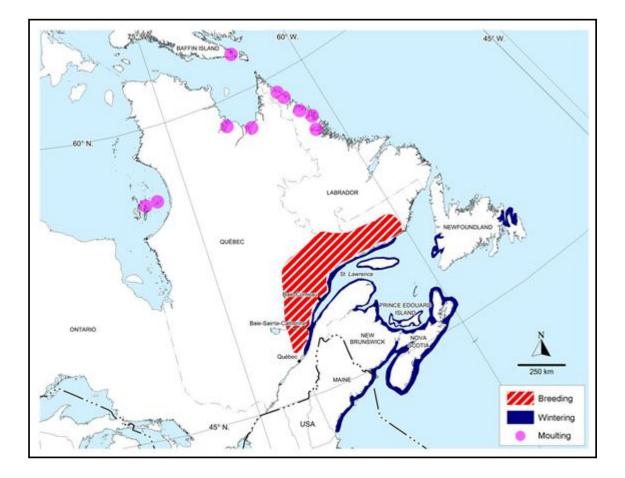
Common Name (population): Barrow's Goldeneye, Eastern Population

Scientific Name: Bucephala islandica

**Reason for Designation:** Numbers of individuals in this eastern population are limited. Although threats such as limited habitat availability and oil spill potential have been identified, none is currently at a scale that would impact negatively on the population.

**Canadian Occurrence:** Quebec, New Brunswick, Prince Edward Island, Nova Scotia, Newfoundland and Labrador

**COSEWIC Status History:** Designated Special Concern in November 2000. Status re-examined and confirmed in May 2011.



This is Figure 2 from the proposed management plan. It shows breeding, wintering and moulting locations for the eastern population of Barrow's Goldeneye in Canada. The solid shading indicates wintering areas, the striped shading represents breeding areas and the dots indicate moulting areas.

There are three populations of Barrow's Goldeneye in the world: western North America, eastern North America and Iceland. This proposed management plan is for the eastern North American population only.

The proposed management plan is a plan that sets the goals and objectives for maintaining sustainable population levels for Barrow's Goldeneye, a species that is sensitive to environmental changes but is not in danger of becoming extinct. This summary is based on the information in the full English version of the Barrow's Goldeneye management plan.

The original English copy of the proposed management plan has been provided to the Nunavut Wildlife Management Board for reference.

## Information about Barrow's Goldeneye (pages 2-5)

This section of the proposed management plan for Barrow's Goldeneye provides some information about Barrow's Goldeneye such as what they look like, their population and distribution in Canada, nesting and wintering biology, and things that may limit their breeding densities.

- Barrow's Goldeneye is a sea duck. Adult males are black and white with a shiny purple head and a crescent-shaped white patch at the base of the bill. Females are brown and white and during winter and spring they have a bright orange bill.
- There are an estimated 6800 individuals in the eastern North American population.
- Barrow's Goldeneye nest in tree cavities.
- They breed north of the St. Lawrence Estuary and Gulf in the boreal forest of eastern North America, and winter in the St. Lawrence Estuary and Gulf.
- Barrow's Goldeneye do not nest or winter in Nunavut, but based on satellite telemetry, some adult males have been found to moult in the Arctic along the shores of eastern Hudson Bay and Ungava Bay and along the north coast of Labrador and the south coast of Baffin Island. Very little is known about the moulting grounds of females.
- They use small fishless lakes at high altitudes for mating and raising their young. Fishless lakes have more invertebrate species than lakes with fish, providing more food for Barrow's Goldeneye.

### Threats to Barrow's Goldeneye (pages 6-8)

This section of the proposed management plan describes the things that might cause Barrow's Goldeneye populations to drop. In order of highest concern, there are five main threats to Barrow's Goldeneye:

- Logging Loss of available trees for nesting in and poor quality habitat resulting from increased access to previously undisturbed (by humans) lakes that are now easy to access.
- **Fish stocking** Introduction of fish in lakes that are normally fishfree reduces the amount of food available for Barrow's Goldeneye.
- **Oil spills** Oil could get onto the sea ducks feathers and affect its ability to stay warm or cool and interfere with its ability to fly.
- Hunting There are federal regulations for hunting Barrow's Goldeneye (i.e. bag limits and possession limits), however, on the breeding grounds and during the October hunting season in the St. Lawrence Estuary and Gulf, there is concern that because they look similar Barrow's Goldeneye may be accidentally shot by hunters of Common Goldeneye. There is no concern about harvest on their moulting grounds (i.e. in Nunavut).
- Sediment contamination Barrow's Goldeneye are known to gather in areas where the sediment is contaminated. How this could affect Barrow's Goldeneye is not known.

### Management Actions (pages 8-11)

The long-term objective of this management plan is to maintain and, if possible, increase the population size and range of the Barrow's Goldeneye, Eastern population, in Canada. In order to achieve this objective, the size of the population must be maintained for the next ten years at not less than 6800 individuals across the Canadian range of the population.

A number of actions have already been completed or are underway in an effort to meet the management objective, including: land management, protection of some fishless lakes, federal migratory bird hunting regulations, surveys of breeding and wintering birds, habitat surveys, articles written to create awareness for the general public, pamphlets and posters, etc.

Further actions are scheduled to be taken between 2011 and 2015:

- Management, conservation and stewardship of the species and its habitat – developing better forest management practices, prohibiting stocking of fishless lakes, introducing sustainable hunting practices, protecting important wintering, breeding and moulting grounds.
- Research and monitoring breeding population monitoring, developing winter survey protocols, providing nesting boxes to increase nesting sites.
- Outreach and communication develop materials to educate hunters, land managers and enforcement officers about Barrow's Goldeneye, conduct annual patrols to make sure bag and possession limits are being followed, involve key interest groups in efforts to reduce threats.

Success of the management objective will be evaluated every five years to determine if:

- In the long-term, the Canadian population and range of the Barrow's Goldeneye, Eastern population, are maintained and, if possible, increased.
- Over the next 10 years, the size of the population is maintained at not less than 6800 individuals throughout its Canadian range.