

Hudsonian Godwit

Ontario Government Response Statement



Protecting and Recovering Species at Risk in Ontario

Species at risk recovery is a key part of protecting Ontario's biodiversity. The *Endangered Species Act, 2007* (ESA) is the Ontario government's legislative commitment to protecting and recovering species at risk and their habitats.

Under the ESA, the government must ensure that a recovery strategy is prepared for each species that is listed as endangered or threatened. A recovery strategy provides science-based advice to government on what is required to achieve recovery of a species.

Generally, within 9 months after a recovery strategy is prepared, the ESA requires the government to publish a statement summarizing the government's intended actions and priorities in response to the recovery strategy. The response statement is the government's policy response to the scientific advice provided in the recovery strategy. In addition to the strategy, the government response statement considers (where available) input from Indigenous communities and organizations, stakeholders, other jurisdictions, and members of the public. It reflects the best available local and scientific knowledge, including Indigenous Knowledge where it has been shared by communities and Knowledge Holders, as appropriate, and may be adapted if new information becomes available. In implementing the actions in the response statement, the ESA allows the government to determine what is feasible, taking into account social, cultural and economic factors.

The Recovery Strategy for Hudsonian Godwit (*Limosa haemastica*) in Ontario was completed on January 16, 2024.

Description of Hudsonian Godwit

Hudsonian Godwit is a large subarctic-breeding shorebird (36 to 42 cm in length) belonging to the sandpiper family. The species has grey to brown plumage, long dark legs, and a long upturned bill that is pink-orange at its base with a darkened tip.

Protecting and Recovering Hudsonian Godwit

Hudsonian Godwit is listed as a threatened species under the ESA, which protects both the animal and its habitat. The ESA prohibits harm or harassment of the species and damage or destruction of its habitat without authorization or complying with the requirements of a regulatory exemption.

Hudsonian Godwit also receives protection under the *Migratory Birds Convention Act, 1994*, which protects adults and young birds, as well as their nests and eggs in Canada.

Hudsonian Godwit has one of the longest migrations of any North American shorebird, travelling round trip from South America to subarctic North America each year. Individuals of the species spend the majority of the year in southern Chile and southern and eastern Argentina. During spring migration, birds travel north towards breeding grounds, which involves crossing through Central America and making stopovers in the Great Plains region of the United States and Canada. Migrants then continue to 1 of 3 disjunct breeding areas: (i) Alaska (ii) the Mackenzie Delta of the Northwest Territories, and (iii) the Hudson Bay Lowlands of Ontario, Manitoba and Nunavut. The species is considered to have 3 distinct subpopulations based on the 3 different breeding areas. Depending on the breeding subpopulation, southbound migration back to overwintering areas often begins with staging at lakes or wetlands in parts of Alaska, the Canadian Prairies, or coastal areas of Hudson Bay, James Bay, the Gulf of St. Lawrence and the Bay of Fundy. Significant staging or stopover sites in Ontario, which can be considered those that individually support at least 1% of the Hudson Bay Lowlands breeding subpopulation, include the Albany River Estuary and Associated Coastline Important Bird Area (IBA), including Chickney Point, and the Pei lay sheesh kow IBA.

Following staging, most birds make non-stop flights over the Atlantic Ocean before stopping over in the Amazon basin, though Alaskan breeders may fly over mainland North America. The Hudsonian Godwit migration ends with birds continuing south and arriving in their wintering grounds on the coasts of Argentina and Chile.

In Ontario, the Hudson Bay Lowlands, from approximately the Manitoba border to Cape Henrietta Maria, are an important breeding ground for the species. Individuals of the species typically remain within 50 km of Hudson Bay, but can occasionally be found as far as 100 km inland. The Hudson Bay Lowlands are also important for migration, serving as a staging area for all 3 breeding subpopulations, where birds rest and consume food and water before migrating south for the winter. Southbound migrants may also occasionally be found in parts of southern and eastern Ontario as they rest and refuel before continuing on to South America. Birds from the Hudson Bay Lowlands breeding subpopulation are generally believed to winter in the southern Patagonia region of Argentina and Chile.

Hudsonian Godwit breeds in subarctic and boreal region wetlands, often near coastal mudflats or major river systems. The species shows a preference for transition areas between coastal tundra and the tree line. These regions are dominated by herbaceous plants, with scattered trees and shrubs, which provide cover for nests. Members of the species likely begin breeding at 2 years of age, with breeding pair formation occurring soon after spring arrival. Nests are built in shallow depressions in soil or vegetation on dry hummocks near water, usually 200 to 500 m away from other nests.

A single clutch of approximately 4 eggs is laid within 2 weeks and incubated for 3 to 4 weeks before hatching. Hatching success is upwards of 80%, but eggs and chicks may be lost due to predation by Red Fox (*Vulpes vulpes*) and various bird species including Northern Harriers (*Circus hudsonius*), Common Raven (*Corvus corax*) and Parasitic Jaeger (*Stercorarius parasiticus*). Both parents protect chicks until they fledge, which usually occurs within 3 weeks. The generation time of Hudsonian Godwit is estimated to be 7 to 8 years. The species primarily feeds on invertebrates throughout its range (insects and gastropods on breeding grounds, and worms, bivalves and crustaceans elsewhere), but will also feed on plants during migration. Migratory stopover and winter habitat includes a variety of salt and freshwater wetlands that provide abundant terrestrial and aquatic prey.

Monitoring over recent decades has shown a global decline of over 90% since 1980. Surveys on wintering grounds suggest the Hudson Bay Lowlands breeding subpopulation may be decreasing upwards of 4% year, though the rate of decline has not been quantified specifically for Ontario breeders. Due to its dependence on various habitats throughout North, Central and South America, Hudsonian Godwit is exposed to both local and global threats. Habitat alteration and severe weather events due to climate change threaten the species throughout its range due to storms, drought, flooding and sea level rise. Changes in food availability, increased predation and reduced nesting habitat are also likely to impact Hudsonian Godwit due to the effects of changing climate on other species. Breeding habitat is threatened by hyperabundant Snow Geese (*Anser caerulescens*) and Canada Geese (*Branta canadensis*), which reduce plant cover required for nesting by overgrazing. Migratory stopover sites in South America are threatened by hydropower dams, which alter habitat, and stopover habitat throughout the Americas is being degraded by pollution and sedimentation from land use changes, agriculture, shipping and other industries. Hunting may pose a threat to Hudsonian Godwit in some parts of its global range.

Much of what is known about Hudsonian Godwit is based on research conducted outside of Ontario, and many knowledge gaps must be addressed to effectively protect and recover the species. Due to its broad geographic range and high mobility, systematic surveys are required to better understand the species' distribution during the breeding period, and to identify key migratory staging and stopover sites in the province. Standardized monitoring is also required to better understand the species' ecology, habitat use, population size and viability in Ontario. Research to determine home range size is necessary to effectively protect habitat, and threat assessments are needed to inform recovery approaches.

Hudsonian Godwit is a migratory species that relies on habitat and experiences numerous threats outside the province. It is recognized that recovery will require collaboration and recovery efforts at a variety of scales. Maintaining important breeding, staging and stopover habitats within Ontario and supporting inter-jurisdictional efforts to protect and conserve shorebirds will be key to the recovery of the species in Ontario and globally.

Government's Recovery Goal

The government's goal for the recovery of Hudsonian Godwit is to achieve a stable or increasing number of breeding pairs in Ontario and to maintain significant staging and stopover sites in Ontario.

Actions

Protecting and recovering species at risk is a shared responsibility. No single agency or organization has the knowledge, authority or financial resources to protect and recover all of Ontario's species at risk. Successful recovery requires inter-governmental co-operation and the involvement of many individuals, organizations and communities. In developing the government response statement, the government considered what actions are feasible for the government to lead directly and what actions are feasible for the government to support its conservation partners to undertake.

Government-led Actions

To help protect and recover Hudsonian Godwit, the government will directly undertake the following actions:

- Continue to protect Hudsonian Godwit and its habitat through the ESA.
- Continue to collaborate with partners and other jurisdictions to fill knowledge gaps and implement conservation actions for subarctic shorebirds through initiatives such as the Ontario Shorebird Survey, James Bay Shorebird Project and Burntpoint Creek Research Station shorebird ecology studies.
- Continue to hold spillers accountable through the enforcement of the *Environmental Protection Act* and implement the Ministry of the Environment and Climate Change Emergency Response Plan (2017) as necessary to respond to environmental spills within Ontario.
- Undertake communications and outreach to increase public awareness of species at risk in Ontario (e.g., through Ontario Parks Discovery Program, where appropriate).
- Continue to monitor populations and mitigate threats to the species and its habitat in provincially protected areas, where feasible and appropriate.
- Educate other agencies and authorities involved in planning and environmental assessment processes on the protection requirements under the ESA.
- Encourage the submission of Hudsonian Godwit data to Ontario's central repository through the NHIC (Rare species of Ontario) project in iNaturalist or directly through the Natural Heritage Information Centre.
- Continue to support conservation, agency, municipal and industry partners, and Indigenous communities and organizations to undertake activities to protect and recover Hudsonian Godwit. Support will be provided where appropriate through funding, agreements, permits and/or advisory services.
- Work with all levels of government, communities and sectors to take action on climate change, and to report on progress in reducing greenhouse gas emissions.
- Conduct a review of progress toward the protection and recovery of Hudsonian Godwit within 5 years of the publication of this document.

Government-supported Actions

The government endorses the following actions as being necessary for the protection and recovery of Hudsonian Godwit. Actions identified as "high" may be given priority consideration for funding under the Species at Risk Stewardship Program. Where reasonable, the government will also consider the priority assigned to these actions when reviewing and issuing

authorizations under the ESA. Other organizations are encouraged to consider these priorities when developing projects or mitigation plans related to species at risk.

Focus Area: Monitoring and Research

Objective: Address knowledge gaps related to Hudsonian Godwit distribution, habitat, biology and threats.

In order to better focus actions to support the protection and recovery of Hudsonian Godwit, it is important to understand which parts of the province the species uses throughout its life cycle. Standardized survey methods will improve knowledge of the species' distribution during breeding, staging, and migration, and allow for Ontario-specific population estimates. Identification of key habitat areas used by the species is essential to understanding threats and prioritizing management activities. Targeted research relating to threats across the species' range will help clarify factors driving declines and appropriate mitigating actions. This knowledge, combined with information on current population status and demographic rates, is necessary to develop population viability models that will allow for the development of quantitative recovery targets and better-informed recovery approaches.

Actions:

1. **(High)** Continue to implement existing standardized surveys (e.g., Ontario Breeding Bird Atlas, Ontario Shorebird Survey) and, where necessary, develop or promote the systematic application of standardized inventory and monitoring protocols to:
 - i. determine Hudsonian Godwit breeding distribution and population trends in Ontario, and, where necessary and appropriate, on the wintering grounds of Ontario breeders
 - ii. locate, identify and describe Hudsonian Godwit habitat used for breeding, staging and migratory stopovers in Ontario, including through the use of radio telemetry or GPS tracking, where appropriate
 - iii. identify key habitat areas used by 1% or more of the Hudson Bay Lowlands breeding subpopulation
2. **(High)** Conduct research to improve knowledge on Hudsonian Godwit biology and ecology, such as diet, home range size in breeding areas, demographic parameters (e.g., nest success, juvenile survival, adult survival), and minimum viable population size.
3. Investigate the impacts and potential mitigation measures of known and potential threats to Hudsonian Godwit in breeding, staging and migration habitat. Targeted areas of research may include:
 - i. **(High)** climate change and severe weather
 - ii. **(High)** overgrazing by Snow Geese and Canada Geese in the Hudson Bay Lowlands
 - iii. dams and other natural system modifications
 - iv. pollution and sedimentation
 - v. hunting

4. As appropriate, encourage the recording, sharing and transfer of Traditional Ecological Knowledge on Hudsonian Godwit, where it has been shared by communities, to increase knowledge of the species and support future recovery efforts.

Focus Area: Management

Objective: Maintain or improve Hudsonian Godwit habitat and mitigate threats to Ontario breeders and migrants.

A significant portion of the world's Hudsonian Godwit population breed in or migrate through Ontario. Efforts to maintain or increase habitat quality and manage local threats will support birds relying on these areas. Focus should be placed on key habitat areas (i.e., those breeding grounds and staging or stopover sites that support at least 1% of the Hudson Bay Lowlands breeding subpopulation). Recovery efforts that benefit multiple species at risk should be considered whenever possible. A collaborative approach will be essential in the ongoing management of the species.

Actions:

5. **(High)** In collaboration with landowners, land managers, conservation organizations and Indigenous communities, identify and mitigate site-specific threats to Hudsonian Godwit at breeding, staging and stopover habitat, and restore or rehabilitate habitat in Ontario where necessary and appropriate.
6. Collaborate with partners and other jurisdictions on initiatives to conserve key habitats within and outside of Ontario, such as efforts being undertaken through the Western Hemisphere Shorebird Reserve Network.

Focus Area: Stewardship and Awareness

Objective: Increase the level of public awareness and engagement in protecting and recovery Hudsonian Godwit throughout its global range.

Hudsonian Godwit is a highly mobile species that uses habitat across North, Central and South America, and is impacted by global and local threats throughout its range. It is important to promote awareness and collaborate with the international community to ensure protection and stewardship activities reduce threats to the species in migration and wintering habitat. When possible, information should be shared with other jurisdictions to enhance understanding of the species and coordinate efforts. Within Ontario, partnerships with interested Indigenous communities and organizations will improve knowledge sharing and stewardship opportunities.

Actions:

7. **(High)** Collaborate with other jurisdictions, organizations and communities throughout the global range of Hudsonian Godwit to:
 - i. promote awareness of the species and its threats
 - ii. encourage consistent monitoring and data sharing
 - iii. identify, protect and manage habitat
 - iv. research, increase awareness of, and mitigate the impacts of climate

- change on the species
- v. encourage rapid response to spills and other discharges to surface water
- 8. Maintain or develop partnerships with Indigenous communities and organizations to share knowledge and obtain input on recovery actions.
- 9. Implement initiatives in human-populated parts of the species' range to reduce human disturbance in key habitat areas where necessary, such as:
 - i. posting educational signage about the species and its threats
 - ii. implementing requirements for dogs to be leashed
 - iii. restricting access to portions of shorelines if negative impacts are observed

Implementing Actions

Financial support for the implementation of actions may be available through the Species at Risk Stewardship Program. Conservation partners are encouraged to discuss project proposals related to the actions in this response statement with Ministry of the Environment, Conservation and Parks staff.

The Ontario government can also provide guidance about the requirements of the ESA, whether an authorization or regulatory exemption may be required for the project and, if so, the authorization types and/or conditional exemptions for which the activity may be eligible.

Implementation of the actions may be subject to changing priorities across the multitude of species at risk, available resources and the capacity of partners to undertake recovery activities. Where appropriate, the implementation of actions for multiple species will be coordinated across government response statements.

Performance Measures

Progress towards achieving the government's goal for the recovery of Hudsonian Godwit will be measured against the following performance measures:

- by 2034, significant Ontario staging or stopover sites, each of which supports at least 1% of the Hudson Bay Lowlands breeding subpopulation, are identified
- by 2039, the number of breeding pairs in Ontario is stable or increasing
- by 2044, the quantity and quality of significant staging or stopover sites is maintained or increased from 2034
- by 2054, the Hudson Bay Lowlands breeding subpopulation is stable and self-sustaining

Reviewing Progress

The ESA requires the Ontario government to conduct a review of progress towards protecting and recovering a species no later than the time specified in the species' government response statement, which has been identified as 5 years. The review will help identify if adjustments are needed to achieve the protection and recovery of Hudsonian Godwit.

Acknowledgement

We would like to thank all those who participated in the development of the Recovery Strategy and Government Response Statement for the Hudsonian Godwit (*Limosa haemastica*) in Ontario for their dedication to protecting and recovering species at risk.

For Additional Information:

Visit the species at risk website at ontario.ca/speciesatrisk

Contact the Ministry of the Environment, Conservation and Parks

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ontario.ca/environment