

Eastern Whip-poor-will

Ontario Government Response Statement



Photo: United States Army Corps of Engineers

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 Government of Ontario's legislative commitment to protecting and recovering species at risk and their habitats.

Under the ESA, the Government of Ontario 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 nine 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 Traditional Ecological 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 the Eastern Whip-poor-will (*Antrostomus vociferus*) in Ontario was completed on December 5, 2019.

Eastern Whip-poor-will is a well-camouflaged, medium-sized bird that is about the size of a robin. It is grey and brown in colour. The species is active at night (nocturnal) and nests on the ground. These birds are heard more often than they are seen and can be identified by the distinct "WHIP-Poor-WEEL" call for which the species is named.

Protecting and Recovering Eastern Whip-poor-will

Eastern Whip-poor-will is listed as a threatened species under the ESA, which protects both the bird and its habitat. The ESA prohibits harm or harassment of the species and damage or destruction of its habitat without authorization. Such authorization would require that conditions established by the Ontario government be met.

Eastern Whip-poor-will 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, and under the federal *Species at Risk Act* as a threatened species.

The species' breeding distribution extends from Saskatchewan to the Maritime provinces in Canada south to Oklahoma and Georgia in the United States. Its wintering range is found in the southern United States, Mexico and Central America and extends from coastal South Carolina to Honduras and Panama in the south. The size of the Canadian population has been estimated at about 120,000 birds; however, this estimate is considered to have low reliability as the surveys on which it is based are not designed for nocturnal birds. Canadian Eastern Whip-poor-will populations have been declining over the past several decades and the species' range has also been retracting, most notably in southwestern Ontario. While the species is still exhibiting signs of decline, the decline is thought to have slowed in recent years. The highest Canadian concentration of the species is thought to occur in Ontario where it breeds from southern Ontario to as far north as the southern boreal forest.

The Eastern Whip-poor-will is usually associated with areas with a mix of forest and open areas. Nesting habitats can include young forests or woodlands, rock or sand barrens with scattered trees, savannahs, areas previously burned in forest fires, and sparse plantations of coniferous trees. Nesting sites and eggs are difficult to detect and rarely located, but based on limited observations, eggs are thought to be laid directly on dead leaves or directly on the ground and placed in the shade of a small plant. Eastern Whip-poor-will is an aerial insectivore (an animal that specializes in feeding on flying insects), and its prey consists mainly of insects such as large moths and scarab beetles. The species feeds close to dawn and dusk and forages in open areas such as prairies, agricultural fields, wetlands and forest clear-cuts. The home range of the species can vary greatly in size from 20 to 500 ha. There is some evidence that the species may require a minimum forest patch size for nesting, but the size requirement has not yet been well documented in various landscapes.

Eastern Whip-poor-will lays a clutch of only two eggs (although it may rarely produce more than one clutch a year in southern Canada), and nests on the ground which may increase vulnerability to predation by small mammals.

These biological characteristics may have an impact on how quickly the species is able to recover from declines.

The causes of the decline in Eastern Whip-poor-will are not well understood, but reduced availability of insect prey and habitat loss in the species' wintering grounds are thought to be high concern threats. The impacts of climate change and activities that result in habitat loss and degradation in the species' breeding grounds are also of significant concern. Aerial insectivores, including Eastern Whip-poor-will, have been declining over several decades, suggesting changes in flying insect populations are impacting bird species that rely on them for food. Although insect populations have been undergoing significant declines worldwide, the exact reasons for the declines are not understood. It is thought that insect populations are impacted by loss of habitat or changes in habitat use (e.g., conversion of land to agricultural use, development, etc.), pesticides and other toxins, light pollution, acid precipitation, and changes in predator communities.

Climate change may impact Eastern Whip-poor-will due to increased severe weather events during migration, breeding and overwintering and through changes in forest fire frequency, intensity and duration. Changes in climate may also impact food availability by creating a mismatch between the times when the birds produce young and peak food abundance. Within Ontario, agricultural expansion and intensification have resulted in the loss of natural habitat and reductions in habitat diversity. They may also contribute to increased pollution from nutrients and pesticides used on crops. Urban expansion and energy development and mineral extraction can also result in habitat loss or reduced habitat suitability. In addition, light pollution associated with urbanization may also have impacts on the species and their insect prey. Activities associated with agriculture, urban expansion, forestry and energy development may also lead to unintentional harm to the birds, their nests, or their eggs.

Forest management activities may have short-term negative effects on nesting birds or their breeding activities by disturbing feeding, mating, and nesting activities or decreasing the amount of available suitable habitat during the nesting season. However, forest management can also improve habitat conditions for the species when undertaken in a compatible manner that creates open foraging areas, while minimizing disturbance of birds and maintaining sufficient cover for their nests. In some circumstances, the abandonment of agricultural land or the suppression of forest fire activity can lead to the development of more mature forests that are less suitable for the species. Outside of Ontario and Canada, forest harvesting and conversion of forest to agricultural and urban areas, may impact the species' wintering grounds and migratory routes.

Due to the nature and scale of the threats impacting the species, protecting and recovering Eastern Whip-poor-will will require collaboration and cooperation between partners and jurisdictions. Although actions to maintain or enhance habitat and to address local threats are important to begin recovery efforts for the species, they should be completed in combination with broader inter-jurisdictional efforts. Mitigating threats such as reduced insect prey populations and climate change will be especially challenging and cannot be achieved by provincial actions alone; efforts must also be undertaken in wintering habitats and along migration routes in order for the recovery of the species to be successful. Given this, the province will focus on first slowing the population decline, and then on supporting natural increases in the species' population and distribution over a longer time period.

Government's Recovery Goal

The government's short-term goal for the recovery of Eastern Whip-poor-will is to slow the population decline by mitigating threats and promoting suitable habitat conditions over the next 10 years. The long-term goal is to support natural increases in the species' abundance and distribution.

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 Eastern Whip-poor-will, the government will directly undertake the following actions:

- Continue to protect Eastern Whip-poor-will and its habitat through the ESA. Continue to implement the species-specific habitat description for Eastern Whip-poor-will.
- Undertake communications and outreach to increase public awareness of species at risk in Ontario.
- Educate other agencies and authorities involved in planning and environmental assessment processes on the protection requirements under the ESA, including appropriate survey techniques.

- Encourage the submission of Eastern Whip-poor-will data to Ontario's central repository (Natural Heritage Information Centre, NHIC) through the NHIC (Rare species of Ontario) project in iNaturalist or directly through the NHIC.
- Continue to support conservation, agency, municipal and industry partners, and Indigenous communities and organizations to undertake activities to protect and recover Eastern Whip-poor-will. Support will be provided where appropriate through funding, agreements, permits (including conditions) and/or advisory services
- Continue to monitor populations and mitigate threats to Eastern Whip-poor-will and its habitat in provincially protected areas, where feasible and appropriate.
- Work with partners and stakeholders to support beneficial insects in Ontario through actions such as education and promoting integrated pest management and best management practices.
- Continue to apply provincial direction for Crown forestry practices in areas occupied by Eastern Whip-poor-will.
- As indicated in Ontario's Made-in-Ontario Environment Plan, commit to lowering greenhouse gas emissions to 30 per cent below 2005 levels by 2030 and regularly report on progress.
- Conduct a review of progress toward the protection and recovery of Eastern Whip-poor-will within five 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 Eastern Whip-poor-will. 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: Research and Monitoring

Objective: Increase understanding of the threats impacting Eastern Whip-poor-will as well as its ecology, habitat characteristics, and population and habitat trends.

A comprehensive understanding of the threats impacting Eastern Whip-poor-will, both within and outside of Ontario and at multiple scales, is needed to better focus protection and recovery efforts. Similarly, it is important to understand the species' ecology and habitat characteristics to ensure efforts are directed in a manner that provides the greatest benefit to the species. Monitoring Eastern Whip-poor-will, its habitat, and trends in its insect prey

will help track progress and determine whether efforts to maintain or enhance habitat are successful. As monitoring of Eastern Whip-poor-will is complicated by its large range and nocturnal habits, use of alternative survey approaches and citizen-based efforts may assist with understanding the species' distribution and population trends in Ontario, particularly in remote areas of province where less monitoring coverage exists.

Actions:

1. **(High)** Undertake collaborative research to investigate causes of provincial declines and threats impacting Eastern Whip-poor-will in Ontario. This may include evaluating:
 - declines in insect prey populations and associated causes (e.g., effect of insect control programs and pesticides);
 - links between changes in insect prey availability and Eastern Whip-poor-will declines;
 - mismatches in the timing of peak insect prey abundance and Eastern Whip-poor-will migration or production of young, particularly in the context of climate change; and
 - how specific activities may impact Eastern Whip-poor-will or its insect prey (e.g., development, forest management approaches).
2. **(High)** Further refine understanding of the species' ecology and habitat characteristics. Actions may include:
 - investigating factors influencing spatial aggregation of individuals and associated population dynamics;
 - determining dispersal distances and migratory paths;
 - studying habitat attributes (e.g., composition and configuration, spatial scale) and their influence on the selection and quality of habitat;
 - developing, validating or improving habitat models for the species; and,
 - determining whether important migratory stopover sites exist for the species and, if they exist, describing these locations.
3. Monitor the species' distribution, population and habitat trends in Ontario through actions such as:
 - exploring the use of alternative survey approaches such as electronic acoustic monitoring and citizen-based databases (e.g., eBird, Breeding Bird Atlas) in more remote parts of the species' range **(High)**;
 - developing and implementing standardized monitoring protocols;
 - surveying historical occurrences at regular intervals; and,
 - tracking trends in species abundance, provincial distribution, habitat conditions and insect prey populations.

4. Investigate the impact of threats occurring outside of Ontario (e.g., in wintering areas and along migration routes) on Eastern Whip-poor-will.

Focus Area: Stewardship and Management

Objective: Implement actions to mitigate threats to Eastern Whip-poor-will and promote availability of suitable habitat for the species and its insect prey.

The recovery of Eastern Whip-poor-will will require stewardship and management action on a variety of scales, both within and outside of Ontario. Within Ontario, efforts can be undertaken to mitigate threats and improve the availability of breeding and foraging habitat for the species and its insect prey. Best management practices can help to maintain or enhance the availability of habitat and are particularly important in areas where habitat has been lost or is likely to be lost or degraded in future. Given the scale of the threats impacting the species, including climate change and declines in insect prey, implementation of efforts must be undertaken at various scales and by a variety of individuals, including governments, industry, Indigenous communities, and individual citizens, in order to achieve success. It is important that collaborative efforts to support the recovery of Eastern Whip-poor-will, and aerial insectivores in general, be undertaken wherever possible to achieve efficiency, prevent duplication of efforts and ensure action is taken in a timely manner.

Actions:

5. **(High)** Develop and implement best management practices (BMPs) that support the maintenance or enhancement of habitat for Eastern Whip-poor-will, other aerial insectivores and their insect prey at both local and landscape levels.
6. Promote the implementation of policies and programs that promote beneficial insects and reduce light pollution and the pollutants that contribute to climate change.
7. Encourage collaborative efforts to support the recovery of Eastern Whip-poor-will and other aerial insectivores. Actions may include undertaking cooperative, coordinated efforts to better understand and mitigate threats impacting the species, share information, or improve habitat availability/suitability.

Focus Area: Education and Awareness

Objective: Increase level of public awareness of and engagement in protecting and recovering Eastern Whip-poor-will in Ontario.

Eastern Whip-poor-will has a broad range in Ontario and the species occurs in a variety of habitats including agricultural, forested, and wetland areas. Furthermore, the threats impacting the species also occur at a variety of

scales. As a result, the involvement of several groups and organizations will be necessary to implement recovery actions and promote awareness of the species and its threats. Increased promotion and volunteer participation in established survey and monitoring programs will further awareness of the species, as well as contribute to filling knowledge gaps.

Actions:

8. Collaborate with conservation partners, industry and Indigenous communities and organizations to promote awareness of Eastern Whip-poor-will among people engaged in stewardship activities, forest management, and urban and agricultural development by sharing information on:
 - how to identify the species;
 - the species' habitat requirements;
 - the protection afforded to the species and its habitat under the ESA; and,
 - actions that can be taken to avoid or minimize impacts to the species and its habitat.
9. Promote awareness and volunteer participation in established surveys and monitoring programs, such as eBird, or the Atlas of the Breeding Birds of Ontario.

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 advise if any authorizations under the ESA or other legislation may be required to undertake the project.

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 co-ordinated across government response statements.

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, or not later than five years after the government response statement. The review will help identify if adjustments are needed to achieve the protection and recovery of Eastern Whip-poor-will.

Acknowledgement

We would like to thank all those who participated in the development of Ontario's Recovery Strategy and the Government Response Statement for the Eastern Whip-poor-will (*Antrostomus vociferus*) 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

1-800-565-4923

TTY 1-855-515-2759

www.ontario.ca/environment