

Bird's Foot Violet and Virginia Goat's-Rue

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. Biodiversity – the variety of living organisms on Earth – provides us with clean air and water, food, fibre, medicine and other resources that we need to survive.

The *Endangered Species Act, 2007* (ESA) is the Government of Ontario's legislative commitment to protecting and recovering species at risk and their habitats. As soon as a species is listed as extirpated, endangered or threatened under the ESA, it is automatically protected from harm or harassment. Also, immediately upon listing, the habitats of endangered and threatened species are protected from damage or destruction.

Under the ESA, the Ministry of Natural Resources and Forestry (the Ministry) 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.

GOVERNMENT RESPONSE STATEMENTS

Within nine months after a recovery strategy is prepared, the ESA requires the Ministry to publish a statement summarizing the government's intended actions and priorities in response to the recovery strategy. The recovery strategy for the Bird's-foot Violet (*Viola pedata*) and the recovery strategy for the Virginia Goat's-rue (*Tephrosia virginiana*) in Ontario were completed on November 22, 2013 (http://files.ontario.ca/environment-and-energy/species-at-risk/mnr_sar_rs_brds_ft_en.pdf), and (http://files.ontario.ca/environment-and-energy/species-at-risk/mnr_sar_rs_vrgn_gtsr_en.pdf).

The response statement is the government's policy response to the scientific advice provided in the recovery strategy. All recommendations provided in the recovery strategy were considered and this response statement identifies those that are considered to be appropriate and necessary for the protection and recovery of the species. In addition to the strategy, the response statement is based on input from stakeholders, other jurisdictions, Aboriginal communities and members of the public. It reflects the best available traditional, local and scientific knowledge at this time and may be adapted if new information becomes available. In implementing the actions in the response statement, the ESA allows the Ministry to determine what is feasible, taking into account social and economic factors.

Bird's-foot Violet is a stemless violet with five lilac to purple coloured petals. The leaflets of its thin, finely divided leaves resemble the splayed toes of a bird.

Virginia Goat's-rue is a perennial herb in the Pea Family that grows up to 70 cm tall. It produces yellow and pink bi-coloured flowers, and there are typically dense, fine hairs on its stem, branches, leaves, flowers, and fruit that give the plant a silvery appearance.

Given their similar habitat types and threats, the recovery efforts for Bird's-foot Violet and Virginia Goat's-rue are addressed collectively in a single government response statement.

MOVING FORWARD TO PROTECT AND RECOVER BIRD'S-FOOT VIOLET AND VIRGINIA GOAT'S-RUE

Bird's-foot Violet and Virginia Goat's-rue are both listed as endangered species under the ESA, which protects both the plants and their habitats. The ESA prohibits harm or harassment of the species and damage or destruction of their habitat without authorization. Such authorization would require that conditions established by the Ministry be met.

Bird's-foot Violet occurs in eastern North America, and its distribution ranges from Ontario and New York, south to Georgia and west to Minnesota and Texas. Fourteen populations have been observed in southwestern Ontario, only five of which are believed to still exist today. The largest population, which consists of at least 6,500 plants, is located within Turkey Point Natural Area, which includes Turkey Point Provincial Park and St. Williams Conservation Reserve. This population is considered stable or increasing due to ongoing habitat protection and management, including prescribed burns. Most plants within Turkey Point Provincial Park occur along a hydro corridor. The four remaining populations are located on private lands, and three of those populations have fewer than 10 plants.

Like Bird's-foot Violet, Virginia Goat's-rue occurs in eastern North America. Its distribution ranges from Ontario and Minnesota, south to Florida and west to Texas. Less than one percent of the total distribution of the species is in Canada, where six populations of the species have been observed, all within Norfolk County, Ontario. Only two of these populations continue to exist today; the largest of these, with an estimated 566 individual plants, occurs within the Turkey Point Natural Area. The other population is located on private land; recent population estimates at this site are lacking, as the site has not been accessed since 2001. Historically, the species was documented from four additional locations in Norfolk County; however the species has not been observed at any of these locations in more than 20 years, despite considerable targeted effort.

Bird's-foot Violet and Virginia Goat's-rue can both be found in dry, open, sandy habitats and are commonly associated with oaks or pines. In Ontario, both species occur in oak savanna habitats, dominated by Black Oak (*Quercus velutina*), White Oak (*Quercus alba*) or Red Oak (*Quercus rubra*). Virginia Goat's-rue also occurs in woodland habitats dominated by oaks and pines.

The predominant threats to Bird's-foot Violet and Virginia Goat's-rue in Ontario are habitat loss due to alteration of the natural disturbance regime (i.e., fire suppression), as well as conversion to agricultural lands and housing developments. Other threats include management and recreational pressures, invasive species, and erosion at specific sites.

Bird's-foot Violet and Virginia Goat's-rue are both endemic to rare and fragmented ecosystems in Ontario. Ever since plant inventories were first conducted in the province, neither species has been found to be common. The distribution and abundance of Bird's-foot Violet and Virginia Goat's-rue prior to this period are unknown. For both these species, recovery is focused on protecting and enhancing remaining habitat, and enabling increases to existing populations. Because only a few, small, isolated populations remain, and approaches to protect and improve the habitat of these species are generally well understood, recovery is also focused on investigating the feasibility of re-establishing the species at historically occupied sites.

The government's goal for the recovery of Bird's-foot Violet and Virginia Goat's-rue in Ontario is to maintain the provincial population of each species at, or enable natural increases to, sustainable levels, and re-establish the species at sites they have historically occupied if feasible and appropriate.

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 Ministry 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 Bird's-foot Violet and Virginia Goat's-rue, the government will directly undertake the following actions:

- Continue to undertake periodic monitoring of Bird's-foot Violet and Virginia Goat's-rue populations, habitat conditions, and threats to the species and their habitat within Turkey Point Provincial Park.
- Continue to undertake ecosystem enhancement activities such as prescribed burning and invasive species control within Turkey Point Provincial Park, as resources permit.
- Continue to work with partners to undertake monitoring, habitat management, research to address significant knowledge gaps, and to increase awareness and promote stewardship of species at risk including Bird's-foot Violet and Virginia Goat's-rue in St. Williams Conservation reserve.
- Continue to implement the Ontario Invasive Species Strategic Plan to address the invasive species (e.g., Multiflora Rose (*Rosa multiflora*), Autumn Olive (*Elaeagnus umbellata*), Garlic Mustard (*Alliaria petiolata*)) that threaten Bird's-foot Violet and Virginia Goat's-rue.
- Educate other agencies and authorities involved in planning and environmental assessment processes on the protection requirements under the ESA.
- Encourage the submission of Bird's-foot Violet and Virginia Goat's-rue data to the Ministry's central repository at the Natural Heritage Information Centre.
- Undertake communications and outreach to increase public awareness of species at risk in Ontario.
- Protect the Bird's-foot Violet and Virginia Goat's-rue and their habitat through the ESA.
- Support conservation, agency, municipal and industry partners, and Aboriginal communities and organizations to undertake activities to protect and recover the Bird's-foot Violet and Virginia Goat's-rue. Support will be provided where appropriate through funding, agreements, permits with appropriate conditions, and/or advisory services.
- Encourage collaboration, and establish and communicate annual priority actions for government support in order to reduce duplication of efforts.

GOVERNMENT-SUPPORTED ACTIONS

The government endorses the following actions as being necessary for the protection and recovery of Bird's-foot Violet and Virginia Goat's-rue. Actions identified as "high" will be given priority consideration for funding under the ESA. Where reasonable, the government will also consider the priority assigned to these actions when reviewing and issuing authorizations under the Endangered Species Act. Other organizations are encouraged to consider these priorities when developing projects or mitigation plans related to species at risk. The government will focus its support on these high-priority actions over the next five years.

Focus Area: Protection and Management

Objective: Improve habitat conditions and promote increases in the distribution and abundance of Bird's-foot Violet and Virginia Goat's-rue.

Actions:

1. **(HIGH)** Develop and implement site-specific management strategies to manage and improve habitat where these species occur, with consideration for other rare species and invasive species present on site. Monitor the effectiveness of actions taken and revise strategies, as appropriate, based on the best available information. Strategies may include, but are not limited to:
 - prescribed burns to prevent woody succession;
 - woody vegetation removal (e.g., where burns are not feasible); and
 - invasive species control.
2. Investigate whether it is feasible and appropriate to re-establish Bird's-foot Violet or Virginia Goat's-rue at sites historically occupied by the species, and where it is deemed feasible and appropriate, undertake actions to do so.

Focus Area: Research

Objective: Increase knowledge about habitat management for Bird's-foot Violet and Virginia Goat's-rue, as well as factors influencing reproductive success and propagation.

Actions:

3. **(HIGH)** Undertake research to determine optimal conditions at which habitat management techniques should be conducted (e.g., optimal temperature and frequency for prescribed burns).
4. Undertake research to:
 - determine factors influencing reproductive success of Bird's-foot Violet and Virginia Goat's-rue (e.g., conditions under which pollination, germination, and recruitment are optimal; seed bank characteristics and longevity); and
 - identify the best practices for propagation (including assisted dispersal, cultivation, or transplantation) of these species.

Focus Area: Inventory and Monitoring

Objective: Confirm where the species remain and improve understanding of the species and their habitat at these sites.

Actions:

5. Survey the sites where Bird's-foot Violet and Virginia Goat's-rue occur on private land to confirm whether the species remain at these sites and, where they are found to remain, determine population sizes. Surveys should be conducted using a consistent, standardized methodology.
6. Undertake regular monitoring of the species demographics, health, habitat conditions, and threats at all sites where they occur.

Focus Area: Awareness

Objective: Increase awareness and stewardship of the species and their habitat.

Actions:

7. Increase awareness among land owners and the public about Bird's-foot Violet and Virginia Goat's-rue, including:
 - identification of the species;
 - the species' habitat requirements;
 - protection afforded to the species and their habitat under the ESA; and,
 - actions they can take to minimize threats, including habitat loss, invasive species, trampling, and erosion.

IMPLEMENTING ACTIONS

Financial support for the implementation of actions may be available through the Species at Risk Stewardship Fund, Species at Risk Research Fund for Ontario, or the Species at Risk Farm Incentive Program. Conservation partners are encouraged to discuss project proposals related to the actions in this response statement with the Ministry. The Ministry 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 Ministry to conduct a review of progress towards protecting and recovering a species not later than five years from the publication of this response statement. The review will help identify if adjustments are needed to achieve the protection and recovery of Bird's-foot Violet and Virginia Goat's-rue.

ACKNOWLEDGEMENT

We would like to thank all those who participated in the development of the Recovery Strategy for the Bird's-foot Violet (*Viola pedata*) in Ontario and the Recovery Strategy for the Virginia Goat's-rue (*Tephrosia virginiana*) 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 your MNR district office

Contact the Natural Resources Information Centre

1-800-667-1940

TTY 1-866-686-6072

mnr.nric.mnr@ontario.ca

ontario.ca/mnr