Ministry of Natural Resources

Natural. Valued. Protected.

# Gray Ratsnake – Carolinian and Frontenac Axis Populations

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 life 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 (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 the 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 Gray Ratsnake was completed on September 10, 2010

(http://www.mnr.gov.on.ca/en/Business/Species/2ColumnSubPage/STDPROD\_066840.html).

The response statement is the government's policy response to the scientific advice provided in the recovery strategy. 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 modified 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. The Gray Ratsnake (also known as "Black Ratsnake") is non-venomous. It is Ontario's largest snake and can grow up to 2 metres long. Gray Ratsnakes are constrictors and feed mostly on rodents or birds.



## MOVING FORWARD TO PROTECT AND RECOVER GRAY RATSNAKE

The Gray Ratsnake (Carolinian population) and the Gray Ratsnake (Frontenac Axis population) (together "Gray Ratsnake") are listed as endangered and threatened respectively under the ESA, which protects both the animal and its habitat. The ESA prohibits harm to or harassment of the species and damage to or destruction of its habitat without authorization. Such authorization would require that conditions established by the Ministry be met.

In Ontario, Gray Ratsnakes are found only in the Carolinian forest region along the north shore of Lake Erie and in the Frontenac Axis region in southeastern Ontario. The Carolinian population is made up of sub-populations that are highly isolated and appear to be quite small. Major threats to the Gray Ratsnake include habitat loss and fragmentation, road mortality and human persecution.

The government's goal for the recovery of the Gray Ratsnake is to maintain a viable self-sustaining Frontenac Axis population and to halt the decline of the Carolinian population. The government supports investigating the feasibility of increasing the distribution and size of the Carolinian population.

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 intergovernmental 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's conservation partners to undertake with government support.

### **GOVERNMENT-LED ACTIONS**

To help protect and recover the Gray Ratsnake, the government will directly undertake the following actions:

- Develop a protocol to protect hibernating Gray Ratsnakes (or other snake species at risk) if they are accidentally unearthed.
- Develop a survey protocol to be used by proponents and partners to detect the presence or absence of Gray Ratsnakes.
- Conduct a monitoring program for Gray Ratsnake at priority Ontario Parks locations to determine species presence, distribution and habitat use.
- Educate other agencies and authorities involved in planning and environmental assessment processes on the protection requirements under the ESA.

- Encourage the submission of Gray Ratsnake data to the Ministry's central repository at the Natural Heritage Information Centre or to the Ontario Reptile and Amphibian Atlas. Ensure appropriate data sensitivity guidelines are put in place.
- Undertake communications and outreach to increase public awareness of species at risk in Ontario.
- Protect the Gray Ratsnake and its habitat through the ESA. Develop and enforce a regulation prescribing the habitat of the species.
- Support conservation, agency, municipal and industry partners in undertaking activities to protect and recover the Gray Ratsnake. Support will be provided through funding, agreements, permits (including conditions) and advisory services.
- Establish and communicate annual priority actions for government support in order to encourage collaboration and reduce duplication of efforts.

## **GOVERNMENT-SUPPORTED ACTIONS**

The government endorses the following actions for the protection and recovery of the Gray Ratsnake. Actions identified as "high" will be given priority consideration for funding or for authorizations under the ESA. The government will focus its support on these high-priority actions over the next five years.

Focus Area: <i>Objective:</i>	<b>Protection and Management</b> Protect and manage the habitat of the species and mitigate priority threats.
	<ol> <li>Actions:</li> <li>(HIGH) Research and implement methods for reducing significant threats, including road mortality and human persecution, and evaluate their effectiveness.</li> <li>(HIGH) Refine and promote best management practices for landowners and land managers.</li> <li>Assess the tolerance of habitat features to disturbance.</li> <li>As opportunities arise, support the securement of lands that contain Gray Ratsnake sub-populations through existing land securement and stewardship programs.</li> </ol>
Focus Area: <i>Objective:</i>	<b>Monitoring</b> Develop and implement a co-ordinated monitoring program focused on population indices and distribution, habitat stresses and the effectiveness of recovery actions.
	<ul> <li>Actions:</li> <li>5. (HIGH) Identify locations of hibernacula, other habitat features and the extent of the species' distribution.</li> </ul>

	<ol> <li>(HIGH) Maintain current monitoring activities (e.g., of hibernacula) and develop and implement a plan to extend monitoring activities, including establishing additional monitoring stations in the Carolinian region.</li> <li>Develop a process for analyzing monitoring data to determine the effectiveness of recovery actions and to inform future management activities.</li> </ol>
Focus Area: Objective:	Awareness Reduce human persecution of Gray Ratsnakes and promote stewardship.
	<ul> <li>Actions:</li> <li>8. Evaluate existing communications and outreach approaches and develop new strategies that will have a positive impact on people's behaviour.</li> <li>9. Deliver effective communications and outreach to key stakeholders, including landowners, cottage associations and schools within the range of Gray Ratsnake.</li> </ul>
Focus Area: Objective:	<b>Research</b> Address knowledge gaps, including ecological studies of habitat and genetic connectivity.
	<ul> <li>Actions:</li> <li>10. Undertake a population and habitat viability assessment (PHVA): determine data needs and use of PHVA, conduct research required for the PHVA and carry out the assessment once the information is available.</li> <li>11. Research and collate data on habitat restoration practices, and evaluate their potential for widespread use.</li> <li>12. Determine how genetic connectivity among sub-populations is maintained, including the relative importance of different mechanisms, such as juvenile dispersal, adult dispersal and multiple paternity.</li> <li>13. Conduct additional studies into the habitat use and movement patterns of the Gray Ratsnake Carolinian population.</li> <li>14. Investigate potential approaches to augmenting the Gray Ratsnake Carolinian population.</li> </ul>

## IMPLEMENTING ACTIONS

Financial support for the implementation of actions may be available through the Species at Risk Stewardship Fund, Species at Risk Farm Incentive Program or Community Fisheries and Wildlife Involvement 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 may be required to undertake the project.

Implementation of the actions may be subject to changes in priorities across the multitude of species at risk, availability of 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 determine whether adjustments are needed to achieve the protection and recovery of the Gray Ratsnake.

## ACKNOWLEDGEMENT

We would like to thank all those who participated in the development of the "Recovery Strategy for Gray Ratsnake – Carolinian and Frontenac Axis Populations 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