



2021

# IMPLEMENTATION REPORT:

## MULTI-SPECIES ACTION PLAN

for Georgian Bay Islands  
National Park of Canada  
(2016-2021)



Parks  
Canada

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Canada

Canada



## Recommended Citation

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For copies of the report, or for additional information on species at risk, including the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) Status Reports, residence descriptions, recovery strategies, action plans and other related recovery documents, please visit the [Species at Risk \(SAR\) Public Registry](https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html)<sup>1</sup>.

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Cover illustrations, clockwise from top left: Beausoleil Island; Massasauga; Monarch; Five-lined Skink; Midland Painted Turtle; Water Marigold. This page: Beausoleil Island Shoreline. Page i: Beausoleil Island Shoreline. Page ii: Eastern Foxsnake. Page iii: Forked Three-awned Grass. Page 1, left to right: Massasauga; Parks Canada Agency (PCA) employees; Common Milkweed; Northern Map Turtle in a medicine garden; Midland Painted Turtles; Northern Map Turtle laying nest in restoration area; Five-lined Skink; Monarch Butterfly; Forked Three-awned Grass; PCA employee holding Northern Map Turtle. Page 4, left to right: PCA employee monitoring Forked Three-awned Grass, close-up of Forked Three-awned Grass; Distribution map of Forked Three-awned Grass within the park. Page 7: PCA employees monitoring. Page 8: PCA employees and participants engaging in Bioblitz. Page 9, Left to right: PCA employee identifying plant species; Monarch.

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<sup>1</sup> [http://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html](https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html)

# Preface

The federal, provincial, and territorial government signatories under the [Accord for the Protection of Species at Risk \(1996\)](#)<sup>2</sup> agreed to establish complementary legislation and programs that provide for effective protection of species at risk throughout Canada. Under the Species at Risk Act (S.C. 2002, c.29) (SARA), action plans outline measures that will be taken to implement recovery strategies for SARA-listed Extirpated, Endangered and Threatened species. Parks Canada's multi-species action plans address a suite of species of conservation concern within one or more Parks Canada managed areas, including species that require an action plan under SARA.

The Minister responsible for the Parks Canada Agency (the Minister of the Environment and Climate Change) is the competent minister under SARA for species found in Georgian Bay Islands National Park of Canada, and in 2016 published the Multi-species Action Plan for Georgian Bay Islands National Park of Canada.

Under section 55 of SARA, the competent minister must monitor the implementation of an action plan and the progress towards meeting its objectives, and assess and report on its implementation and its ecological and socio-economic impacts five years after the action plan comes into effect. A copy of the report must be included in the Species at Risk Public Registry. The Minister responsible for the Parks Canada Agency has prepared this Implementation Report: Multi-species Action Plan for Georgian Bay Islands National Park of Canada (2016-2021).

The achievement of population and distribution objectives identified within the recovery strategy or management plan for a species may require a long time frame. In these cases, a five-year reporting window may not be sufficient to show demonstrable progress towards meeting site-based population and distribution objectives identified for that species within a Parks Canada site-based action plan. Parks Canada monitors, evaluates and, as necessary, adapts measures taken to achieve species survival or recovery, and will report on progress towards meeting site-based population and distribution objectives every five years.

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<sup>2</sup><https://www.canada.ca/en/environment-climate-change/services/species-risk-act-accord-funding/protection-federal-provincial-territorial-accord.html>



# Acknowledgments

Parks Canada would also like to acknowledge those who have contributed to implementation of the Multi-species Action Plan for Georgian Bay Islands National Park of Canada.

First, Georgian Bay Islands National Park/Beausoleil Island National Historic Site acknowledges that these lands are within the traditional territory of the Haudenosaunee, Wendat, Anishinaabe and Métis peoples.

Georgian Bay Islands National Park and Beausoleil Island National Historic Site have been an important gathering place for thousands of years to Indigenous people. With its landscape as a teacher and water for its life. We acknowledge these traditional lands were used and are continued to be used for ceremony and traditional teachings.

There were a number of key partners who have contributed to implementation of the multi-species action plan and our improved understanding of these Species at Risk. The Georgian Bay Biosphere, Georgian Bay Forever, and the Georgian Bay Land Trust have continually supported the park and added value to our objectives. We have valued the experience of the various Recovery Teams, including the Eastern Massasauga, Foxsnake/Hognosed Snake, and the Forked Three-Awned Grass.

Finally, we would like to acknowledge the people who share our ecosystem, from those landowners who protect critical habitat, to those who pull over their car to help the turtle cross the road. The reality is that this park is too small to influence the status of these species on its own. If we are to succeed in maintaining biodiversity, we have to have the support from our neighbours and their neighbours, etc. Working together will be instrumental if we want to forever see this place as a place of refuge, a place of peace.

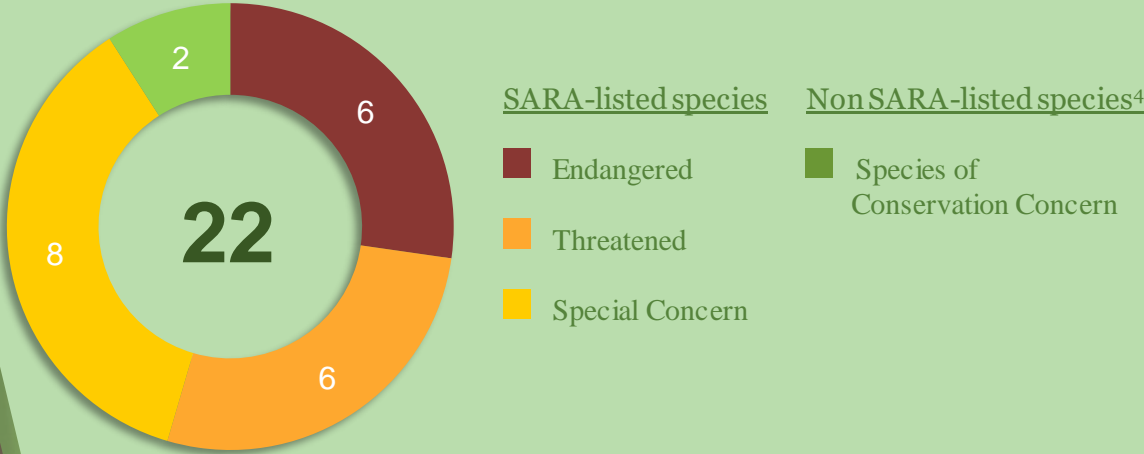
Miigwetch, Maarsii, Merci, Thank you

# EXECUTIVE SUMMARY

This document reports on implementation of the Multi-species Action Plan for Georgian Bay Islands National Park of Canada between 2016 and 2021. It reports on implementation of measures identified in the plan, assesses progress towards meeting site-based population and distribution objectives, and evaluates socio-economic impacts.

## Species Addressed<sup>3</sup>

The action plan addressed 20 SARA-listed species and 2 species of conservation concern. Measures and site-based population and distribution objectives identified within the action plan were focused on 4 species, for which management actions within Georgian Bay Islands National Park could have a substantive impact on species survival or recovery: Eastern Foxsnake (Great Lakes / St. Lawrence population), Forked Three-awned Grass, Monarch and Stiff Yellow Flax.

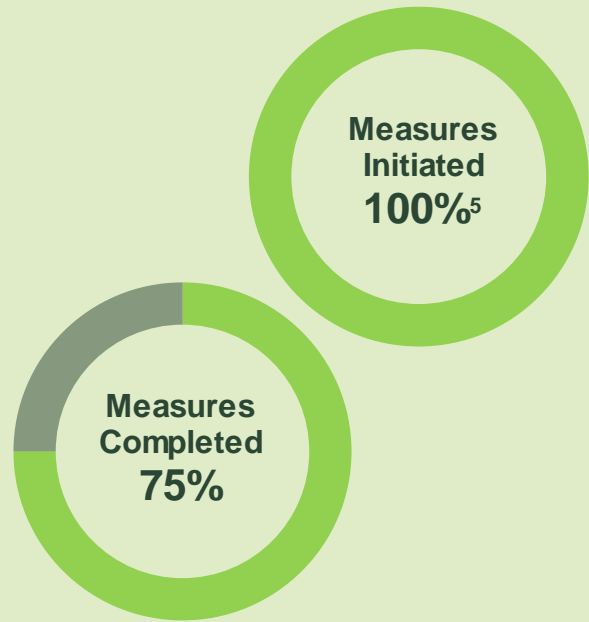


<sup>3</sup> The SARA-listing classifications for the species in this report may differ from the Multi-species Action Plan due to changes made to Schedule 1 of the Species at Risk Act since the action plan was published.

<sup>4</sup> Including non SARA-listed species of conservation concern (COSEWIC assessed, provincially listed, culturally significant species) in addition to SARA listed species provides the Parks Canada Agency with a comprehensive plan for species conservation and recovery at the site.

# Implementation of the Action Plan

8 measures (recovery actions) were identified in the multi-species action plan. Implementation of the action plan is assessed by determining progress towards completing each measure, and is outlined in Section 2 of this report. During the five-year period, all 8 measures were initiated<sup>5</sup> and 6 were completed.

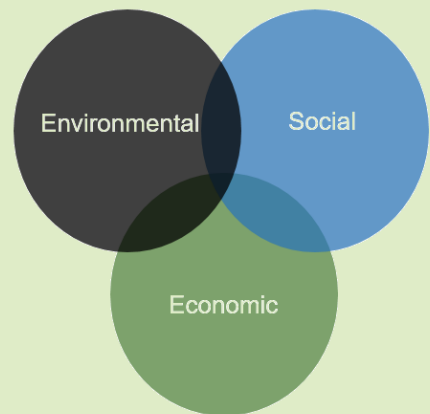


## Ecological Impacts

4 site-based, population and distribution objectives (PDOs) were developed in the action plan. Ecological impacts are assessed by measuring progress towards achieving each of the site-based population and distribution objectives and are outlined in section 4. All four objectives were fully achieved.

## Socio-Economic Impacts

Direct costs of implementing this action plan were borne by Parks Canada. No major socio-economic costs to partners, stakeholders or Indigenous groups resulted from this action plan. Benefits included positive impacts on park ecological integrity, greater awareness of species and enhanced opportunities for engagement.



<sup>5</sup> Includes measures that are 100% completed

<sup>6</sup> Includes PDOs that are fully achieved

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# 1. CONTEXT

This document reports on implementation of the [Multi-species Action Plan for Georgian Bay Islands National Park of Canada](#)<sup>7</sup> between 2016 and 2021, assesses progress towards meeting its population and distribution objectives, and evaluates its socio-economic impacts. It addresses 22 species, including 12 SARA-listed Extirpated, Endangered, and Threatened species (for which an action plan is required) as well as 8 SARA-listed Special Concern species<sup>8</sup>.

Site-based population and distribution objectives were developed for 4 species for which implementation measures within Georgian Bay Islands National Park could have a substantive impact on recovery: Eastern Foxsnake (Great Lakes / St. Lawrence population), Forked Three-awned Grass, Monarch and Stiff Yellow Flax.

# 2. IMPLEMENTATION OF THE ACTION PLAN

Implementation of the Multi-species Action Plan for Georgian Bay Islands National Park of Canada is assessed by measuring progress towards completing the recovery measures identified in the action plan (Table 1). Refer to the original action plan for a description of each measure, the desired outcomes, and the threats that each measure addresses.

Being an Island-based park lends itself to some natural weather-based restrictions for measures that require access to the park in early spring. Late ice thawing prevented boats from safely accessing the Island monitoring sites for some of the early spring measures (e.g. Chorus Frog Monitoring).

In 2020 there were several restrictions put in place at Georgian Bay Islands National Park to combat the spread of COVID-19, including temporary restriction of park management activities. This impacted the ability of the park to complete the implementation of some parts of the action plan.

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<sup>7</sup> Parks Canada Agency. 2016. [Multi-species Action Plan for Georgian Bay Islands National Park of Canada](#). Species at Risk Act Action Plan Series. Parks Canada Agency, Ottawa. iv + 14

<sup>8</sup> The status of these species may have changed over the reporting period.



**Table 1. Progress towards completing recovery measures committed to by Georgian Bay Islands National Park (\* indicates an ongoing measure that may continue into a future multi-species action plan).**

Species and measure	Desired outcome	Progress towards outcome	Progress (% complete)
<p><b>1) All reptiles:</b> Continue to work with other agencies to educate visitors and local audiences about reptiles.</p>	<p>Continue to work with other agencies to educate visitors and local audiences about reptiles.</p>	<p>Over the 5-year period, 479 staff-led programs and/or presentations pertaining to Species at Risk (reptiles) were delivered. 2020 saw a notable reduction in programs and presentations due to the Covid-19 pandemic limiting the Park's visitor offer.</p>	<p>100%</p>
<p><b>2) All Reptiles:</b> Support research, surveys and other projects that help fill knowledge gaps and address key recovery actions.</p>	<p>Continue to support projects conducted within the park.</p>	<p>10 research projects were conducted at Georgian Bay Islands National Park.</p>	<p>100%*</p>
<p><b>3) Cerulean Warbler, Eastern Wood-pewee:</b> Continue to conduct the Forest Bird Monitoring Program.</p>	<p>Updated knowledge of the presence of species in the Park.</p>	<p>The Forest Bird Monitoring program was conducted annually for 4 of the years in the plan. Monitoring was cancelled in 2020 due to the restrictions on park management activities related to the Covid-19 pandemic.</p>	<p>80%*</p>
<p><b>4) Western Chorus Frog:</b> Survey for Chorus Frogs in the Park.</p>	<p>Determine if Western Chorus Frog occur in the Park.</p>	<p>One of the desired two surveys were completed. Song meters were deployed at 4 locations in spring of 2019. Data was analyzed and results recorded.</p>	<p>50%</p>

<p><b>5) Forked Three-awned Grass</b> Monitor and mitigate any threats to the park population.</p>	<p>Note any encroachment by invasive species and respond quickly if needed.</p>	<p>The Forked Three-awned critical habitat area was monitored annually for potential invasive species encroachment. No encroachment has been identified, therefore no mitigation has been necessary.</p>	<p>100%</p>
<p><b>6) Eastern Massasauga Rattlesnake</b> Relocate snakes when required in high visitor-use areas of the park.</p>	<p>Continue to minimize negative human/snake encounters.</p>	<p>Staff responded to 360 observations and relocated a total of 329 Eastern Massasauga Rattlesnakes.</p>	<p>100%</p>
<p><b>7) Eastern Massasauga Rattlesnake</b> Work with recovery team to develop best management practices and provide advice, e.g. Municipal Planning.</p>	<p>Continue to provide advice to allow Canadians to co-exist with snakes and impact snakes as little as possible.</p>	<p>Park staff met with the recovery team twice and maintains on-going communications with various members of the recovery team throughout the year.</p>	<p>100%*</p>
<p><b>8) Monarch</b> Work with volunteers to restore Monarch habitat.</p>	<p>Increase abundance of native milkweed and nectaring species in the Park.</p>	<p>A total of 19 staff/volunteer days were recorded for planting and maintenance of butterfly gardens.</p>	<p>100%</p>



### 3. ACTION PLAN HIGHLIGHT: Tufts of Ice-Age continue to be found on Beausoleil Island



Beausoleil Island is home to a thriving population of an ice-age grass. Forked Three-awned Grass is a native annual grass that was listed as Endangered and added to the federal Species at Risk Act in 2005. There is a national recovery objective to maintain a self-sustaining population at all of the sites where the species is of native origin (Jones, 2007).

To support this objective, park staff monitor and map populations of Forked Three-awned Grass every two years to estimate population density. Critical habitat is also monitored for threats, like encroachment of invasive species or habitat degradation.

This species is known to benefit from some disturbance whether it be human or natural (fire or drought). The distribution of this species has expanded outside of the critical habitat range on Beausoleil Island. This is likely the result of slight human disturbance, which expanded the species area of occupation from 2.2 ha in 2016 to 3.5 ha in 2020.

Through monitoring efforts, the estimated population of stems has also seen an increase from 15,782 in 2016 to 38,604 in 2020. That is an increase of 144% in 5 years!

## 4. ECOLOGICAL IMPACTS

Ecological impacts of the action plan are assessed by measuring progress towards meeting the site-based population and distribution objectives described in the action plan (Table 3). See the original action plan for national Population and Distribution Objectives (where available) and General Information and Broad Park Approach for each species.

**Table 3. Progress towards achieving site-based population and distribution objectives for species at risk in Georgian Bay Islands National Park of Canada**

<b>Species</b>	<b>Site-based population &amp; distribution objectives</b>	<b>Population monitoring</b>	<b>Progress towards site-based population and distribution objectives</b>	<b>Progress (% achieved)</b>
Eastern Fox Snake (Great Lakes / St. Lawrence population)	Work with private land owners of hibernaculum to maintain occupancy and site integrity.	Visit hibernaculum every 3 years and record incidental sightings in the Park.	The hibernaculum was visited by staff annually between 2016 and 2019, the site was stable. Incidental sightings of Eastern Fox Snake are being recorded on an on-going basis.	100%
Forked Three-awned Grass	The current area of occupancy is maintained.	Map area of occupancy every 2 years using GPS and estimate population density.	The current area of occupancy was mapped in 2016, 2018 and 2020. The population density in the area of occupancy has increased.	100%



Monarch	Maintain reproducing individuals in GBINP.	Record incidental observations of caterpillars and/or eggs.	The Park started a Mission Monarch program in 2017. Milkweed gardens were monitored annually for 4 years. Each year was successful in finding Monarch eggs and/or caterpillars.	100%
Stiff Yellow Flax	Maintain current distribution in GBINP.	Map distribution of the species using shoreline surveys every 5 years.	Shorelines were surveyed in 2019 and the results exceeded the objective occupancy rate of 57%.	100%



## 5. SOCIO-ECONOMIC IMPACTS

The *Species at Risk Act* requires the responsible federal minister to report on the socio-economic costs of the multi-species action plan and the benefits derived from its implementation. The multi-species action plan only applies to protected lands and waters under the authority of the Parks Canada Agency, which are often subject to fewer threats (e.g., industrial activities) compared to other areas as the lands are managed to preserve ecological and commemorative integrity. This section does not include socio-economic impacts of existing permitted activities that may be occurring in Parks Canada places as those have been addressed through other processes (e.g., impact assessments). This socio-economic assessment is narrow in scope, as it is focused on the measures implemented within the action plan, and primarily focuses on Indigenous partners, leaseholders, licensees, residents and visitors. The overall socio-economic impacts of the multi-species action plan for Georgian Bay Islands National Park, described as costs and benefits, are outlined below.

### Costs

All of the costs to implement this action plan were borne by Parks Canada out of existing salaries and goods and services dollars. This includes incremental salary costs, materials and equipment. No major socio-economic costs to partners, stakeholders or Indigenous groups were incurred as a result of this action plan.

Action plan measures were integrated into the operational management of the Georgian Bay Islands National Park. These costs to the Parks Canada Agency were covered by





prioritization of existing funds and salary dollars and did not result in additional costs to society.

The action plan applies only to lands and waters in Georgian Bay Islands National Park, and did not bring any restrictions to land use outside the national park. As such, this action plan placed no extraneous socio-economic costs on the public.

## Benefits

Measures presented in this action plan for Georgian Bay Islands National Park contributed to meeting recovery / population and distribution objectives for Threatened and Endangered species, and also contributed to meeting management objectives for species of Special Concern.

These measures had an overall positive impact on ecological integrity and enhanced opportunities for appreciation of the sites and the species by visitors and the general public and likely resulted in benefits to Canadians, such as positive impacts on biodiversity and the value individuals place on preserving biodiversity.

The measures sought a balanced approach to reducing or eliminating threats to at-risk populations and habitats, and included protection of individuals and their habitat, to reducing or eliminating threats to species at risk populations and habitats, and include protection of individuals and their habitat, potential species re-establishment, and increasing public awareness and stewardship. For example, the area of occupancy for Forked Three-awned Grass was monitored bi-annually to ensure habitat for this endangered grass was free of encroachment by invasive species. The area formerly known as the 'Cruiser Dock' was transformed into a haven for species at risk. Milkweed





and other pollinator friendly plants were planted in ‘butterfly gardens’ in this area by staff and volunteer groups to help ensure Monarchs and other pollinators had a place thrive. Several interpretive programs were designed and implemented to raise public awareness related to Species at Risk within Georgian Bay Islands National Park, including a citizen science Mission Monarch program with staff and visitors counting and recording Monarch eggs and caterpillars. Close to 500 presentations and programs were delivered by Park staff on the importance of Species at Risk reptiles both within the Park and within the broader community.

Potential economic benefits of the recovery of the species at risk found in Georgian Bay Islands National Park cannot be easily quantified, as many of the values derived from wildlife are non-market commodities that are difficult to appraise in financial terms. Wildlife, in all its forms, has value in and of itself, and is valued by Canadians for aesthetic, cultural, spiritual, recreational, educational, historical, economic, medical, ecological and scientific reasons.

Implementing this action plan had positive benefits for park visitors, local residents, and Indigenous groups. Through interpretive programming over 10,000 visitors, youth and community members received messaging related to the ecological and cultural importance of the Species at Risk found within Georgian Bay Islands National Park. Over 320 Eastern Massasauga Rattlesnakes were relocated to safeguard for species and visitor safety. A partnership was maintained with a local landowner to ensure the site integrity of the Eastern Fox Snake hibernaculum. Research was supported on Beausoleil Island, where multiple important herpetofauna surveys were completed and park staff, in collaboration with academics from Lakehead University, conducted 3 separate Bioblitz inventories.



## Summary

Direct costs of implementing this action plan were borne by Parks Canada. No major socio-economic costs to partners, stakeholders or Indigenous groups resulted from this action plan. Benefits included positive impacts on park ecological integrity, greater awareness of species and enhanced opportunities for engagement.