



INDICATOR: Changes to status of species at risk

Strategic Direction: Enhanced Resilience

Target: 10. By 2015, the status of species and ecosystems of conservation concern in Ontario is improved.

Theme: State of Ecosystems and Species – Species Diversity

Previous version: http://sobr.ca/_biosite/wp-content/uploads/Indicator-Changes-in-Status-of-Species-at-Risk_May-19-2015.pdf

Background Information

Protecting and promoting recovery of species at risk of extinction is a critical component of biodiversity conservation (Favaro et al. 2014). The Endangered Species Act, 2007 (ESA) establishes the Committee on the Status of Species at Risk in Ontario (COSSARO) as the group responsible for determining the classification species at risk in Ontario. Under the ESA, COSSARO is responsible for: maintaining criteria for assessing and classifying species; maintaining and prioritizing a list of species that should be assessed and classified, including species that should be reviewed and, if appropriate, reclassified; assessing, reviewing and classifying species; submitting a report to the Minister in accordance with the Act; and providing advice to the Minister on any matter submitted to COSSARO by the Minister.

COSSARO uses the best available scientific information, including community knowledge and Aboriginal Traditional Knowledge, to determine whether a plant or animal should be listed as at risk. If a species is deemed at risk, the committee classifies the species into one of four categories, based on the degree of risk it faces (Table 1). Species may also be categorized as extinct, data deficient or not at risk.

Table 1. Categories of Species at Risk in Ontario.

Status	Description
Extirpated	Lives somewhere in the world, and at one time lived in the wild in Ontario, but no longer lives in the wild in Ontario.
Endangered	Lives in the wild in Ontario but is facing imminent extinction or extirpation.
Threatened	Lives in the wild in Ontario, is not endangered, but is likely to become endangered if steps are not taken to address factors threatening it.
Special Concern	Lives in the wild in Ontario, is not endangered or threatened, but may become threatened or endangered due to a combination of biological characteristics and identified threats.



Species added to the Species at Risk in Ontario List as endangered, threatened or extirpated are automatically protected from being harassed or harmed. The habitat of endangered and threatened species is also protected from being damaged or destroyed automatically upon listing. The ESA requires that recovery strategies (for endangered or threatened species) and management plans (for species of special concern) be prepared. Recovery strategies and management plans provide information regarding the biology of the species and science-based recommendations on the protection and recovery or management of the species. Following the completion of a recovery strategy or management plan, a government response statement is prepared as required by the ESA. This statement outlines the government’s goal for the recovery of the species and identifies and prioritizes the actions the government intends to lead or support for the protection, recovery and management of the species. This indicator examines trends in the status of species repeatedly assessed by COSSARO to see if their status has improved.

Data Analysis

To assess trends in the status of species at risk in Ontario, changes in species’ status following re- assessment by the Committee on the Status of Species at Risk in Ontario (COSSARO) were examined. Between 1995 and 2013, 305 species were assessed by COSSARO. Species that were assessed more than once between 1996 (the year criteria were established for assessing species) and 2017 were included in the analysis (n=151). COSSARO criteria were used for all species reassessments considered in this analysis; however, it is important to note that there have been changes to the criteria throughout the years that may affect some reassessments. The numbers of species that were moved into lower risk categories, higher risk categories or experienced no change in status are presented.

Data for this indicator were collected from COSSARO annual reports (2008 – 2010), COSSARO reports to the Minister of the Environment, Conservation and Parks (2008 – 2018), and data maintained by the Ontario Ministry of Natural Resources (1996 – 2007). COSSARO annual reports and COSSARO reports to the Ministry of the Environment, Conservation and Parks are available on the Ontario Government website (How species at risk are listed | Ontario.ca).

It is important to note that the goal of many Ontario government response statements (GRS) for species at risk is to maintain the current status, and that a “no change” in the listing status may be in direct alignment with the species’ Ontario GRS recovery goal. This differs from the Ontario Biodiversity Strategy target to improve the listing status of species of conservation concern. This indicator reports on progress towards meeting the Ontario Biodiversity Strategy target.

Results

Trend: Fair **Data Confidence:** High **Geographic Extent:** Great Lakes

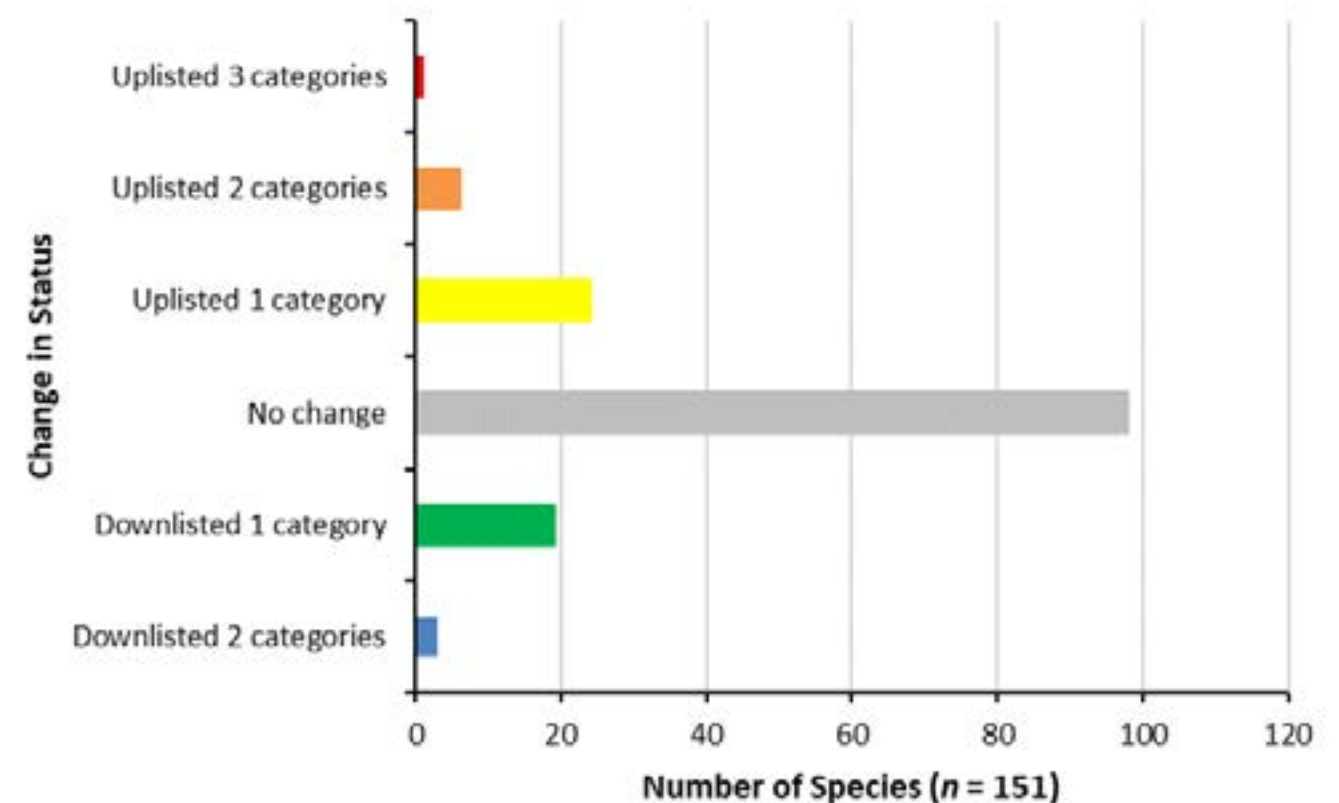


Figure 1. Changes in species status following re-assessment by the Committee on the Status of Species at Risk in Ontario 1996 – 2017 (n = 151).

Status

- As of January 2021, there were 243 species on the Species at Risk in Ontario List. This represents an increase of 19 species since the State of Ontario’s Biodiversity 2015 Report.
- Between 1996 and 2017, 151 species were assessed more than once by the Committee on the Status of Species at Risk in Ontario (COSSARO).
- Following re-assessment, most species showed no change (98 species, 65%) in status, while 31 species (20%) were moved into a higher risk category (shown in Figure as uplisted) and 22 species (14%) were moved into a lower risk category (shown in Figure as downlisted).
- Since 2004, eight species have been removed from the Species at Risk in Ontario List - Great



Grey Owl, Hooded Warbler, Red-Shouldered Hawk, Bigmouth Buffalo, Black Buffalo, Greenside Darter, Southern Flying Squirrel and Flooded Jellyskin. One species was removed since the last State of Ontario's Biodiversity 2015 Report.

Links

Related Targets: N/A

Related Themes: N/A

Web Links

Ontario Ministry of Natural Resources – Species at Risk <http://www.mnr.gov.on.ca/en/Business/Species/index.html>

Canadian Environmental Sustainability Indicator – Species at Risk Population Trends <http://www.ec.gc.ca/indicateurs-indicators/default.asp?lang=En&n=79579EFA-1>

References

Favaro, B., D.C. Claar, C.H. Fox, C. Freshwater, J.J. Holden, A. Roberts, and UVic Research Derby. 2014. Trends in extinction risk for imperiled species in Canada. PLOS One. 9: e113118.

Citation

Ontario Biodiversity Council. 2021. State of Ontario's Biodiversity [web application]. Ontario Biodiversity Council, Peterborough, Ontario. [Available at: <http://ontariobiodiversitycouncil.ca/sobr> (Updated: May 19, 2021)].