



INDICATOR: CHANGES IN STATUS OF SPECIES AT RISK

STRATEGIC DIRECTION: Enhance Resilience

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

THEME: State of Ontario’s Biodiversity – Species Diversity

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 2007) legally recognizes 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. Before the ESA, 2007 came into force, COSSARO existed as a committee that made policy recommendations to the Ministry of Natural Resources and Forestry. However, the law gave the group legal recognition and specific responsibilities including maintaining criteria for assessing and classifying species, developing the list of species to be assessed; assessing and classifying species; and providing advice to the Minister of Natural Resources and Forestry.

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. Species may also be categorized as extinct, data deficient or not at risk (Table 1).

Table 1. Categories of Species at Risk in Ontario.

Status	Definition
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. Recovery strategies (for endangered or threatened species) and management plans (for species of special concern) are also prepared. Recovery strategies provide science-based protection and recovery recommendations, while management plans provide information regarding the biology of the species and advice on the approaches for reducing threats. Following the completion of a recovery strategy or management plan, a government response statement is prepared. This statement outlines the government’s goal for the recovery of the species and summarizes the prioritized actions the government intends to take 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 Species at Risk in Ontario (COSSARO) were examined. Between 1995 and 2013, 275 species were assessed by COSSARO. Species that were assessed more than once between 1996 (the year criteria were established for assessing species) and 2013 were included in the analysis (n=117). COSSARO criteria were used for all species reassessments considered in this analysis; however, it is important to note that there have been minor 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 – 2014) and data maintained by the Ontario Ministry of Natural Resources (1996-2007). COSSARO annual reports are available on the Ontario Ministry of Natural Resources and Forestry Species at Risk website (<https://www.ontario.ca/environment-and-energy/classifying-species-risk>).

It is important to note that the goal of many Ontario government recovery strategies for species at risk is to maintain the current status. This differs from the Ontario Biodiversity Strategy target to improve the status of species of conservation concern. This indicator reports on progress towards meeting the Ontario Biodiversity Strategy target.

Results:

Trend: Mixed **Data Confidence:** High **Geographic Extent:** Provincial

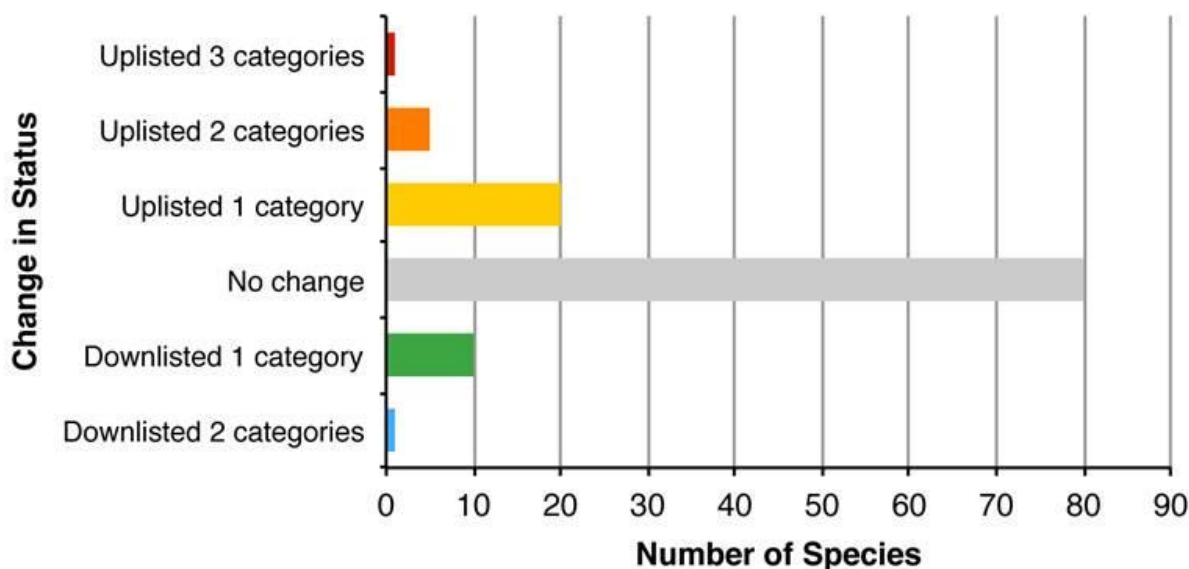


Figure 1. Changes in species status following re-assessment by the Committee on the Status of Species at Risk in Ontario 1996-2013 (n = 117).



Status:

- As of January 2015, there were 224 species on the Species at Risk in Ontario List. This represents an increase of 25 species since the State of Ontario's Biodiversity 2010 Report.
- Between 1996 and 2013, 117 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 (80 species, 68%) in status, while 26 species (22%) were moved into a higher risk category (shown in Figure as uplisted) and 11 species (9%) were moved into a lower risk category (shown in Figure as downlisted).
- Since 2004, seven 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 and Southern Flying Squirrel.

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. 2015. State of Ontario's Biodiversity [web application]. Ontario Biodiversity Council, Peterborough, Ontario. [Available at: <http://ontariobiodiversitycouncil.ca/sobr> (Date Accessed: May 19, 2015)].