

COSEWIC
Rapid Review of Classification

on the

Timber Rattlesnake
Crotalus horridus

in Canada

EXTIRPATED
2023

COSEWIC
Committee on the Status
of Endangered Wildlife
in Canada



COSEPAC
Comité sur la situation
des espèces en péril
au Canada

The Rapid Review of Classification process is used by COSEWIC for wildlife species that have not changed status since the previous COSEWIC assessment. Readily available information from the previous status report or status appraisal summary, recovery documents, recovery teams, jurisdictions, conservation data centres, and species experts was initially reviewed by the relevant Species Specialist Subcommittees before being reviewed by COSEWIC. The following is a summary of the relevant information.

COSEWIC Rapid Review of Classification are working documents used in assigning the status of wildlife species suspected of being at risk in Canada. This document may be cited as follows:

COSEWIC. 2023. COSEWIC Rapid Review of Classification on the Timber Rattlesnake *Crotalus horridus* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. viii pp. (<https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html>).

Production note:

COSEWIC would like to acknowledge David Fraser, with support from Environment and Climate Change Canada, for preparing the Rapid Review of Classification on Timber Rattlesnake, *Crotalus horridus*. This report was overseen and edited by Tom Herman, Co-chair of the COSEWIC Amphibians and Reptiles Specialist Subcommittee.

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Également disponible en français sous le titre Examen rapide de la classification du COSEPAC pour le Crotale des bois (*Crotalus horridus*) au Canada.

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COSEWIC Assessment Summary

Assessment Summary – May 2023

Common name

Timber Rattlesnake

Scientific name

Crotalus horridus

Status

Extirpated

Reason for designation

This large snake once occupied much of the Niagara Escarpment and other regions of southern Ontario. Despite intensive searches and ease of recognition, there have been no confirmed sightings in Canada since 1941.

Occurrence

Ontario

Status history

Designated Extirpated in May 2001. Status re-examined and confirmed in November 2010 and May 2023.



COSEWIC Rapid Review of Classification

PREFACE

This large “sit and wait” predator was formerly distributed across the Niagara Peninsula in southern Ontario. There are several historical reports from Essex, Kent, Elgin, Halton, Manitoulin¹, and Peel counties in Ontario (COSSARO 2019). Unconfirmed records exist from extreme southwestern Quebec, but the documentation for these records is sparse and confirmation of these reports has not been possible (ECCC 2010).

The last record from Canada was in 1941 in Niagara Gorge. The species is assessed as SX (extirpated) in Ontario (CESCC 2022) and SU (unranked) in Quebec (Gautier pers. comm. 2023). Statuses in adjacent jurisdictions in the United States are SX (extirpated) in Maine, S2 (imperilled) in Minnesota, S1 (critically imperilled) in Vermont and New Hampshire, and S3 (vulnerable) in New York State (NatureServe 2021).

There are no additional data from Canada since the previous two assessments despite extensive and substantial citizen science initiatives to document herpetofauna (Ontario Nature 2021, Natural Heritage Information Centre 2023). The closest recent records are from New York State in June 2022, ~80km east of the Niagara border with Ontario (iNaturalist 2023a), and July 2022, west of Lake Champlain ~70km south of the Quebec border (iNaturalist 2023b).

Status History

Designated Extirpated in May 2001. Status re-examined and confirmed in November 2010 and May 2023.

Updated map: Required Not required

Explanation / updated map provided

Not required. See previous assessment (COSEWIC 2010).

¹ Provenance of this record (GBIF 2023) is uncertain.

TECHNICAL SUMMARY

Complete Technical Summary not required for Extirpated species assessed by Rapid Review of Classification.

Crotalus horridus

Timber Rattlesnake

Crotale des bois

Range of occurrence in Canada (province/territory/ocean: Ontario)

Status and Reasons for Designation:

Status: Extirpated	Alpha-numeric codes: Not applicable
Reasons for designation: This large snake once occupied much of the Niagara Escarpment and other regions of southern Ontario. Despite intensive searches and ease of recognition, there have been no confirmed sightings in Canada since 1941.	

Applicability of Criteria

Criterion A (Decline in Total Number of Mature Individuals): Not applicable
Criterion B (Small Distribution Range and Decline or Fluctuation): Not applicable
Criterion C (Small and Declining Number of Mature Individuals): Not applicable
Criterion D (Very Small or Restricted Population): Not applicable
Criterion E (Quantitative Analysis): Not applicable

AUTHORITIES CONTACTED

Not Applicable

INFORMATION SOURCES

- CESSC (Canadian Endangered Species Conservation Council). 2022. Wild Species 2020: The General Status of Species in Canada. National General Status Working Group: 172 pp. National General Status Working Group. Database downloaded May 2023.
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- Gautier, I., pers. comm. 2023. *Direct communication to T. Herman*. May 2023. Biologiste | Coordonnatrice provinciale des espèces fauniques menacées et vulnérables. Direction générale de la gestion de la faune et des habitats, Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs, Québec (Québec)
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RAMAS results graphic output

RAMAS text output

RAMAS not required for Extirpated species

Writer of Rapid Review of Classification

- David F. Fraser, 2021.



COSEWIC HISTORY

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) was created in 1977 as a result of a recommendation at the Federal-Provincial Wildlife Conference held in 1976. It arose from the need for a single, official, scientifically sound, national listing of wildlife species at risk. In 1978, COSEWIC designated its first species and produced its first list of Canadian species at risk. Species designated at meetings of the full committee are added to the list. On June 5, 2003, the *Species at Risk Act* (SARA) was proclaimed. SARA establishes COSEWIC as an advisory body ensuring that species will continue to be assessed under a rigorous and independent scientific process.

COSEWIC MANDATE

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) assesses the national status of wild species, subspecies, varieties, or other designatable units that are considered to be at risk in Canada. Designations are made on native species for the following taxonomic groups: mammals, birds, reptiles, amphibians, fishes, arthropods, molluscs, vascular plants, mosses, and lichens.

COSEWIC MEMBERSHIP

COSEWIC comprises members from each provincial and territorial government wildlife agency, four federal entities (Canadian Wildlife Service, Parks Canada Agency, Department of Fisheries and Oceans, and the Federal Biodiversity Information Partnership, chaired by the Canadian Museum of Nature), three non-government science members and the co-chairs of the species specialist subcommittees and the Aboriginal Traditional Knowledge subcommittee. The Committee meets to consider status reports on candidate species.

DEFINITIONS (2023)

Wildlife Species	A species, subspecies, variety, or geographically or genetically distinct population of animal, plant or other organism, other than a bacterium or virus, that is wild by nature and is either native to Canada or has extended its range into Canada without human intervention and has been present in Canada for at least 50 years.
Extinct (X)	A wildlife species that no longer exists.
Extirpated (XT)	A wildlife species no longer existing in the wild in Canada, but occurring elsewhere.
Endangered (E)	A wildlife species facing imminent extirpation or extinction.
Threatened (T)	A wildlife species likely to become endangered if limiting factors are not reversed.
Special Concern (SC)*	A wildlife species that may become a threatened or an endangered species because of a combination of biological characteristics and identified threats.
Not at Risk (NAR)**	A wildlife species that has been evaluated and found to be not at risk of extinction given the current circumstances.
Data Deficient (DD)***	A category that applies when the available information is insufficient (a) to resolve a species' eligibility for assessment or (b) to permit an assessment of the species' risk of extinction.

* Formerly described as "Vulnerable" from 1990 to 1999, or "Rare" prior to 1990.

** Formerly described as "Not In Any Category", or "No Designation Required."

*** Formerly described as "Indeterminate" from 1994 to 1999 or "ISIBD" (insufficient scientific information on which to base a designation) prior to 1994. Definition of the (DD) category revised in 2006.



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Canada

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