EBAR Hotspot Mapping Documentation

In this document, you will find information pertaining to the development of the EBAR Hotspot map from EBAR range maps of SARA listed (Endangered, Special Concern, Threatened, or Extirpated) and/or COSEWIC assessed (Endangered, Special Concern, Threatened, Extirpated, Extinct or Data Deficient) species.

The Hotspot Map summarizes the number of EBAR species ranges (from a total of 477 published ranges included in the analysis) that intersect each Ecoshape. A total of 477 published (including high and low star rating) range maps of SARA listed (Endangered, Special Concern, Threatened, or Extirpated) and/or COSEWIC assessed (Endangered, Special Concern, Threatened, Extirpated, Extinct or Data Deficient) species were included in the analysis. Ecoshapes with a darker red coloration indicate areas with a higher count of EBAR ranges that intersect the Ecoshape (i.e., higher count of species known to be present, historically present, or expected to be present within the Ecoshape).

To access an image of the Hotspot Map and the underlying spatial data, visit the EBAR webpage at https://www.natureserve.org/canada/ebar.

Disclaimer: Please review our methods document before using EBAR. EBAR range data are relatively coarse scale and appropriate for screening and education purposes but are not intended for all types of applications and analysis. The absence of data in any geographic areas does not necessarily mean that a species is not present. An Ecoshape with a presence value does not necessarily mean that a species is present throughout the entire geographic area.

Within the zipped data package, you will find a File Geodatabase containing:

1) A File Geodatabase Feature Class ("EBARHotspot_PublishedSAR_final")

   For the File GDB Feature Class, the following fields are included:

   - EcoshapeID = EBAR Ecoshape unique identifier
   - JurisdictionID = EBAR unique identifier
   - EcoshapeSourceID = EBAR unique identifier
   - EcoshapeName = the name of the Ecoshape
   - ParentEcoregion = the name of the parent Ecoregion
   - ParentEcoregionFR = the French name of the parent Ecoregion
   - Ecozone = the name of the Ecozone
   - EcozoneFR = the French name of the Ecozone

- MosaicVersion = version of the Ecoshape mosaic used
- TotalArea = area in square metres of land+water in the Ecoshape
- TerrestrialProportion = fraction of the Ecoshape area that is land
- count_of_EBAR* = count of EBAR maps that intersect with the particular Ecoshape

*Note: the count of EBAR ranges within an Ecoshape not directly equivalent to the number of species, as COSEWIC populations and/or parent species can occur in the same Ecoshape.

2) A File Geodatabase Table ("RangeMapEcoshape_Summary_HotspotExportTable")

For the Geodatabase Table, the following fields are included:

- EcoshapeID = EBAR Ecoshape unique identifier
- RangeMapID = EBAR unique identifier
- Presence = presence value ("P" = Present; "H" =Historical; "X" =Presence Expected)
- RangeMapEcoshapeNotes = additional notes, including input records and published reviewer names and/or comments
- UsageType = the breeding status if a range map has had usagetype differentiated
- MinDate = the minimum observation/occurrence date
- MaxDate = the maximum observation/occurrence date
- JurisdictionID = EBAR unique identifier
- SpeciesID = EBAR unique identifier
- SpeciesName = the name of the primary species for which the range map was developed
- RangeMapNotes = details on the species name(s)
- RangeDate = the date the range map was generated
- RangeStage = the expert review stage of the range map

Hotspot map Citation:

NatureServe Canada. 2025. Ecosystem-based Automated Range (EBAR) Hotspot for Species at Risk in Canada. Ottawa, Canada. Version: April 2025. Accessed via: https://www.natureserve.org/canada/ebar

Species List: Please see the full list of species used in the analysis linked here: SpeciesList_SARHotspot_April2025.xlsx. Additional species information can be found within the GIS download.