

2023

B.C. Conservation Status Rank Review and Changes

Animals Summary

Birds

A total of 67 bird species were reviewed in 2022, with an emphasis on the Charadriiformes (shorebirds, gulls, and auks). Of these, 55 had no change in status, and 4 had a rank change which did not impact the list (e.g., a species changing from S5 [Yellow List] to S4 [Yellow List]).

The following 4 species were assessed as Accidental or Unknown:

- **Brambling:** changed from SNRM (Unknown) to SNA (Accidental) as this Eurasian species is only of casual and irregular occurrence in the province.
- **Sharp-tailed Sandpiper:** changed from S4M (Yellow) to SUM (Unknown) due to only rare and irregular transience in the province of this primarily Asian species.
- **Lesser Black-backed Gull:** changed from SNA (Accidental) to SUN (Unknown) due to its increasing and now annual occurrence in the province.
- **Scripps's Murrelet:** changed from SNA (Accidental) to SUN (Unknown) due to this species being a rare but regular species of offshore waters during the summer and fall.

The following 4 species were assessed as more at-risk since the last assessment (i.e., Yellow List to Blue List, or Blue List to Red List), or were added to a Red/Blue/Yellow list for the first time:

- **White-rumped Sandpiper:** changed from SNA (Accidental) to S3?M (Blue) due to its regular but limited spring passage occurrence in the Peace Lowlands.
- **Black Tern:** changed from S4B (Yellow) to S2S4B (Blue) due to evidence of short- and long-term declines.
- **Black-necked Stilt:** changed from SNRM (Unknown) to S1B (Red) due to being assessed for the first time using the Rank Calculator, and due to a very low number of breeding individuals in the province.
- **Short-billed Dowitcher:** changed from S2S3B (Blue) to S1S2B,S2S3M (Red) due to an extremely limited breeding range in the province and extirpation as a breeding species from Haida Gwaii, as well as significant short- and long-term declines to migrant populations.

There were no scientific or common name changes for birds based on revisions in taxonomy (Chesser et al. 2022).

Thayer's Gull (formerly *Larus thayeri*) was removed from the species list, as it is now included under Iceland Gull (*L. glaucoides*) based on a previous taxonomic change.

Mammals

A total of 33 mammals were reviewed this year, mostly marine mammals.

The following 3 species were assessed as less at-risk (i.e., Red List to Blue List, or Blue List to Yellow List) or had list changes:

- **Fin Whale:** changed from S2N (Red) to S3N (Blue) as numbers have likely been increasing since 1944 (over the past three generations). Abundance estimates from inner coastal waters between 2004-2018 suggest that the population has been stable.
- **Northern Fur Seal:** changed from S2M (Red) to S3S4N (Blue) due to being assessed for the first time using the rank calculator as well as incorporating new information from the most recent COSEWIC status assessment.
- **Humpback Whale:** changed from S3 (Blue) to S4S5 (Yellow) as numbers have increased significantly since whaling ended in 1965 and current abundance may be close to pre-whaling levels.

Grey Whale was assessed at the population level for the first time:

- Northern Pacific Migratory Population (S3S4; Blue List)
- Pacific Coast Feeding Group Population (S1; Red List)
- Western Pacific Population (S1; Red List)

Sei Whale changed from SHN (Possibly Extirpated) to S1N due to recent sightings in the province. This species remains on the Red List.

Western Spotted Skunk: changed from SU (Unknown) to S2S3; (Blue) due to the incorporation of new information which allowed for a rank assessment to be completed for the first time.

Taxonomic revision in the North American Pygmy Shrews resulted in the common name change for *Sorex eximius* from American Pygmy Shrew to **Western Pygmy Shrew**

Reptiles

Two populations were added under Common Sharp-tailed Snake (*Contia tenuis*) and will be assessed separately next year:

- Common Sharp-tailed Snake (Pacific Coast Population) (*Contia tenuis* pop. 1)
- Common Sharp-tailed Snake (Coast Mountains Population) (*Contia tenuis* pop. 2)

One turtle species (including separate populations) had common name changes, to match the taxonomic standard, Turtle Taxonomy Working Group (2021)

- Northern Painted Turtle changed to **Painted Turtle**, including **Painted Turtle – Pacific Coast Population** and **Painted Turtle – Intermountain – Rocky Mountain Population**.

Invertebrates

Bumble Bees

- McKay's Bumble Bee (*Bombus mckayi*) was assessed as S3S4 (Blue) - its first assessment since being recognized as a distinct species from *B. occidentalis*.
- Western Bumble Bee (*Bombus occidentalis*) was assessed as S4 (Yellow) - its first assessment since being recognized as a distinct species from *B. mckayi*.

Butterflies

A total of 90 butterfly subspecies were reviewed in 2022, resulting in 26 rank changes. Changes were the result of being formally assessed using the rank calculator for the first time.

One subspecies was assessed as less at-risk:

- Great Spangled Fritillary, *pseudocarpenteri* subspecies changed from S2 (Red) to S3 (Blue).

The following 5 species/subspecies were assessed as more at-risk (i.e., Yellow List to Blue List, or Blue List to Red List), were removed from a list, or were added to a list for the first time:

- Western Pine Elfin, *sheltonensis* subspecies changed from S3 (Blue) to S2 (Red).
- Juniper Hairstreak, *siva* subspecies changed from SNR (Not Reviewed) to S4 (Yellow).
- Rankin Inlet Sulphur changed from SNR (Not Reviewed) to SH (Red).
- Labrador Sulphur, *aliaska* subspecies changed from S4 (Yellow) to S3S4 (Blue).
- White-veined Arctic, *edwardsi* subspecies changed from S4 (Yellow) to S3S4 (Blue).
- Callippe Fritillary, *chilcotinensis* subspecies changed from S4 (Yellow) to S3 (Blue).

One butterfly name, Arctic Blue, *lacustris* subspecies changed to Arctic Blue, *rustica* subspecies due to taxonomic revisions.

The following butterflies were added to the CDC species list:

- *Anthocharis julia sulfuris*
- *Argynnis edwardsii*
- *Callophrys augustinus augustinus*
- *Coenonympha tullia*
- *Coenonympha tullia yukonensis*
- *Colias rankinensis*
- *Euphilotes glaucon*
- *Hesperia comma manitoba*

The following butterflies were removed from the CDC species list due to changes in taxonomy or distribution errors:

- *Agriades glandon lacustris*
- *Callophrys gryneus nelson*
- *Callophrys polios maritima*
- *Colias pelidne*

Moths

A total of 2,616 moths were reviewed during the General Status assessment and accepted by the CDC. General Status uses the same assessment methods as BC CDC/NatureServe (Canadian Endangered Species Conservation Council 2022). A total of 34 species were added to the BC species list and 19 species were removed due to unconfirmed occurrences or taxonomic revisions. The scientific name for Black-headed Birch Leafroller Moth, *Acleris logiana*, changed to *Acleris placidana* due to taxonomic revisions.

Odonates

A total of 84 dragonfly and damselfly ranks were reviewed in 2022. This resulted in rank changes for 25 species.

The following six species were assessed as less at-risk (i.e., Red List to Blue List, or Blue List to Yellow List):

- Western Pondhawk changed from S3S4 (Blue) to S4 (Yellow) due to increasing short-term population trends.
- Plains Forktail changed from S1S3 (Red) to S3 (Blue) due to the results of a formal threats assessment.
- Grappletail changed from S2 (Red) to S2S3 (Blue) due to the results of a formal threats assessment.
- Blue Dasher changed from S3S4 (Blue) to S4S5 (Yellow) due to increasing trends and a lower threats score.
- Olive Clubtail changed from S2 (Red) to S3S4 (Blue) due to an increase in the known range as a result of new detections.
- Black Saddlebags changed from S2 (Red) to S3 (Blue) due to an increase in range and number of occurrences.

The following four species were assessed as more at-risk (i.e., Yellow List to Blue List, or Blue List to Red List), were removed from a list, or were added to a list for the first time:

- Common Green Darner changed from S4 (Yellow) to S3 (Blue) due to a decreasing range extent owing to a previously erroneous report.
- California Spreadwing changed from SNR (Not Reviewed) to S3? (Blue) due to being assessed using the rank calculator for the first time.
- Boreal Snaketail changed from S4 (Yellow) to S3S4 (Blue) due to a refined number of occurrences and area of occupancy.
- Muskeg Emerald changed from S4 (Yellow) to S3 (Blue) due to a limited number of occurrences and a revised threats score.

Molluscs:

- Warty Jumping Slug (*Hemphillia glandulosa*) is now considered Keeled Jumping slug (*H. burringtoni*)
- Threaded Vertigo changed from *Nearctula sp. 1* to *Vertigo rowellii*.

Other Invertebrates

- Three species were added to the BC list of exotic invertebrates - the water mite, *Neumania vernalis*, Virile Crayfish (*Faxonius virilis*) and European Mantid (*Mantis religiosa*)
- The Robber Fly (*Lasiopogon puyallupi*) was added as SNR (Not Reviewed) and *L. willametti* was deleted due to a taxonomic revision in that complex.
- Pennsylvania Firefly (*Photuris pennsylvanica*) and a mite, *Piona guatemalensis*, were removed due to evidence that the species never existed in the province.

The federal General Status of Species in Canada program (<https://www.wildspecies.ca/>) steadily provides new lists of invertebrates that occur within B.C. These have provisional conservation status ranks that were assigned by experts working in the field. The CDC zoologists review these ranks as they are able and export them to B.C. Species and Ecosystems Explorer.

Often, the number of species within these groups is significant, and the CDC zoology unit does not have the capacity to review them all. In these cases, a rank of SNR (“not yet assessed”) is applied to each species.

This year two invertebrate groups were added:

- **Tardigrades:** 56 species were added but not reviewed (SNR).
- **Leeches (Annelids):** 21 species were added but not reviewed (SNR).

References

- Canadian Endangered Species Conservation Council. 2022. *Wild Species 2020: The General Status of Species in Canada*. National General Status Working Group: 172 pp.
<https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/general-status/wild-species-2020.html>
- R. T. Chesser, S. M. Billerman, K. J. Burns, C. Cicero, J. L. Dunn, B. E. Hernández-Baños, R. A. Jiménez, A. W. Kratter, N. A. Mason, P. C. Rasmussen, J. V. Remsen, Jr., D. F. Stotz, K. Winker. 2022. Sixty-third Supplement to the American Ornithological Society's *Check-list of North American Birds*. *Ornithology* 139, ukac020, <https://doi.org/10.1093/ornithology/ukac020>
- Turtle Taxonomy Working Group [Rhodin, A. G. J., J. B. Iverson, R. Bour, U. Fritz, A. Georges, H. B. Shaffer, and P. P. van Dijk]. 2021. *Turtles of the World: Annotated Checklist and Atlas of Taxonomy, Synonymy, Distribution, and Conservation Status* (9th Ed.). In: Rhodin, A. G. J., J. B. Iverson, P. P. van Dijk, C. B. Stanford, E. V. Goode, K. A. Buhlmann, and R. A. Mittermeier (Eds.). *Conservation Biology of Freshwater Turtles and Tortoises: A Compilation Project of the IUCN/SSC Tortoise and Freshwater Turtle Specialist Group*. Chelonian Research Monographs 8:1–472.