

2021

BC Conservation Status Rank Review and Changes

Vascular Plants

Additions: Sixteen vascular plants were added to the BC flora. Eleven were Exotic species, including some escaped garden plants such as cultivated garlic and Chilean rhubarb which have recently become established in BC.

Western polemonium, *Polemonium occidentale* was a noteworthy discovery this year. This species was removed from the BC flora several years ago because all BC herbarium specimens under that name were incorrectly identified. However, a collection taken in 1902 by James Macoun at Remac near the Salmo River deposited at the Steere Herbarium (NY) in New York confirmed the presence of this species in BC.

Excluded: Eleven vascular plant taxa were removed from the flora due to an absence of reliably verified specimens. Five Exotic species are no longer considered part of the flora due to the duration of time that has elapsed since the last observation. For example, it has been 50 years since bearded ryegrass, *Lolium temulentum* was documented in BC.

Taxonomic/Name Changes: 24 changes in taxonomic classification or nomenclature were made this year. The majority of these changes better align BC taxonomy and nomenclature with the Canada-wide database VASCAN and recent treatments in the Flora of North Americana and the revised Flora of the Pacific Northwest, 2nd Edition (Hitchcock and Cronquist, 2018).

The most significant change may be the reversion of *Berberis* to *Mahonia*. Recent molecular work [Taxon 66(6): 1371-1392, 2017] advocates resurrecting Mahonia as a distinct genus from Berberis. Therefore, all native BC species have been transferred back to Mahonia as Mahonia aquifolium, Mahonia nervosa, and Mahonia repens.

Status Assessment: 37 taxa had changes to their provincial conservation status ranks this year. Eight plants of hybrid origin were re-ranked as Hybrids without conservation value (SNA) representing a move to treat free-forming hybrids of common and secure species in a consistent way following Natureserve guidelines. Other rank changes represent minor refinements that have been made possible through recent surveys or new information.

Bryophytes

Additions: 30 mosses and liverworts were added to the BC flora. Many of these (17 moss taxa, 10 of which are Exotic from Greater Victoria or Greater Vancouver) are the result of a publication by McIntosh, Joya and Lee (2019). Seven liverwort taxa were added based on the work by Karen Golinski to support the General Status of Wildlife in Canada, following taxonomy and nomenclature of Stotler & Crandall-Stotler (2017), Bakalin's 2018 draft treatment of Lepidoziaceae for the Bryo-FNA, and Wagner (2016).

Excluded: Three mosses and one liverwort were removed from the BC flora because they could not be confirmed.

Taxonomic/Name Changes: 101 taxonomic changes were made this year based on the General Status of Wildlife in Canada, which should facilitate tracking their distribution and rarity across multiple jurisdictions where these concepts are already in use. The majority of these changes were for mosses following the bryo-FNA

(Vol. 27 and 28); 80 of them are generic reassignments. For example: *Bryum* species to *Gemmabryum*, *Imbribryum*, *Rosulabryum*, or *Ptychostomum*.

Status Assessment: 150 ranks were amended this year based on the General Status of Wildlife in Canada review. 84 were initial rank assessments for liverworts. The majority of rank changes resulted from new information and did not represent a genuine change (uptrend or downtrend).

Fungi: Macrofungi and Lichens

Additions: Eight macrofungi and three macrolichens were added based on records at collaborative web sites such as Mushroom Observer (MO), Fungal Diversity Survey (FunDiS) and recent scientific literature. The majority of these species were overlooked or unconfirmed during last year's larger update.

Excluded: Five macrofungi were removed from the BC myco-flora, due to re-identification of specimens, lack of specimens or taxonomic revision.

Taxonomic/Name Changes: 29 taxonomic changes were made to macrofungi and lichens this year. Most of these involved a generic reassignment in lichens from *Leptogium* to *Scytinium* to match widely accepted contemporary treatments.

Status Assessment: Following a review of the General Status of Wildlife in Canada's BC macrofungi ranks, 3,239 initial macrofungi ranks were completed for BC. Most species are currently unrankable due to a lack of information (SU), 23 are Exotic, 17 are CDC Red-listed, 220 are Blue-listed, and 767 are Yellow-listed. There were no changes this year to provincial conservation status ranks for lichens.

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