

Washington Natural Heritage Program List of Mosses

This list was originally developed in 1996 by Dr. Judith A. Harpel from a review of the literature and specimens from local herbaria and personal collections (Dr. Fred M. Rhoades, John Davis, Dr. Judith A. Harpel). Additional input was sought from Dr. Wilf B. Schofield and John A. Christy.

Nomenclature follows that of: Anderson, L.E., H.A. Crum and W.R. Buck. 1990. List of the Mosses of North America North of Mexico. The Bryologist 93:448-499. Anderson, L.E. 1990. A checklist of sphagnum in North America North of Mexico. The Bryologist 93:500-501.

Endangered, Threatened and Sensitive

Species name	Family Name	Global Rank	State Rank	Status	
				WA	FWS
Bartramiopsis lescurii	Polytrichaceae	G3G5	S1	Е	
Brotherella roellii	Sematophyllaceae	G3	SH	Т	
Encalypta brevicollis	Encalyptaceae	G4T1	S1	Е	
Iwatsukiella leucotricha	Pterigynandraceae	G4G5	S1	Е	
Orthotrichum praemorsum	Orthotrichaceae	G2	S1	Е	
Scouleria marginata	Scouleriaceae	G3	S2	Т	

Review Group 1: Information is insufficient to evaluate conservation status

Species name	Family Name	Global Rank	State Rank	Sta	atus
				WA	FWS
Andreaea rothii	Andreaeaceae	G5	S1	R1	
Barbula eustegia	Pottiaceae	G3?	S1	R1	
Brachydontium olympicum	Seligeriaceae	G2G3	S1	R1	
Brachydontium trichodes	Seligeriaceae	G2G4	S1	R1	
Bryoerythrophyllum columbianum	Pottiaceae	G3G4	S2	R1	
Bryoxiphium norvegicum	Bryoxiphiaceae	G5?	S1	R1	
Bryum calobryoides	Bryaceae	G3	S1	R1	
Bryum violaceum	Bryaceae	G5?	S1	R1	
Buxbaumia aphylla	Buxbaumiaceae	G4G5	S3	R1	
Buxbaumia viridis	Buxbaumiaceae	G4G5	SU	R1	
Calliergon trifarium	Amblystegiaceae	G4	SNR	R1	
Campylium stellatum	Amblystegiaceae	G5	SNR	R1	
Campylopus atrovirens	Dicranaceae	G4G5	S1	R1	
Campylopus fragilis	Dicranaceae	G5?	S1	R1	
Campylostelium saxicola	Ptychomitriaceae	G3G5	S1	R1	
Conostomum tetragonum	Bartramiaceae	G5	S1	R1	
Crumia latifolia	Pottiaceae	G3	S1	R1	
Dicranodontium denudatum	Dicranaceae	G4G5	S1	R1	
Dicranum muehlenbeckii	Dicranaceae	G3G5	S1	R1	
Discelium nudum	Disceliaceae	G3G4	S1	R1	
Ditrichum schimperi	Ditrichaceae	G3G5	S1	R1	
Ditrichum zonatum var. scabrifolium	Ditrichaceae	G3G5T2T3	S1	R1	

Species name	Family Name	Global Rank	State Rank	Status	
				WA	FWS
Drepanocladus crassicostatus	Amblystegiaceae	G3G5	S1	R1	
Entosthodon fascicularis	Funariaceae	G4G5	S1	R1	
Fissidens fontanus	Fissidentaceae	G5	S1	R1	
Fissidens grandifrons	Fissidentaceae	G4	S2	R1	
Fissidens osmundioides	Fissidentaceae	G5	S1	R1	
Fissidens pauperculus	Fissidentaceae	G3?	S1	R1	
Fissidens ventricosus	Fissidentaceae	GU	S3	R1	
Funaria muhlenbergii	Funariaceae	G4	S1	R1	
Grimmia incurva	Grimmiaceae	G4G5	S1	R1	
Hedwigia ciliata	Hedwigiaceae	G5	SNR	R1	
Helodium blandowii	Helodiaceae	G5	S1	R1	
Herzogiella seligeri	Hypnaceae	G3G4	S1	R1	
Homalia trichomanoides	Neckeraceae	G5	S1	R1	
Hookeria acutifolia	Hookeriaceae	G4G5	S1	R1	
Hygrohypnum norvegicum	Amblystegiaceae	G2	S1	R1	
Meesia triquetra	Meesiaceae	G5	S1	R1	
Meesia uliginosa	Meesiaceae	G4	S1	R1	
Mnium arizonicum	Mniaceae	G5?	S1	R1	
Myurella julacea	Pterigynandraceae	G5	S1	R1	
Neckera pennata	Neckeraceae	G5	S1	R1	
Oncophorus wahlenbergii	Dicranaceae	G5	S1	R1	
Orthothecium chryseum	Hypnaceae	G5?	S1	R1	
Orthotrichum bolanderi	Orthotrichaceae	G2G4	S1	R1	
Orthotrichum hallii	Orthotrichaceae	G4	S1	R1	
Orthotrichum pylaisii	Orthotrichaceae	G4G5	S1	R1	
Orthotrichum sordidum	Orthotrichaceae	G5	SNR	R1	
Plagiopus oederiana	Bartramiaceae	G5?	S2	R1	
Platyhypnidium riparioides	Brachytheciaceae	G4	S1	R1	
Pleuroziopsis ruthenica	Pleuroziopsidaceae	G3	SNR	R1	
Pohlia cardotii	Bryaceae	G2G3	S1	R1	
Pohlia columbica	Bryaceae	G3G5	S1	R1	
Pohlia erecta	Bryaceae	G3G5	S1	R1	
Pohlia sphagnicola	Bryaceae	G3?	S1	R1	
Polytrichum strictum	Polytrichaceae	G4	S2	R1	
Ptilium crista-castrensis	Hypnaceae	G5	SU	R1	
Racomitrium aquaticum	Grimmiaceae	G3G5Q	S3	R1	
Racomitrium lawtonae	Grimmiaceae	G3G4	SU	R1	
Racomitrium microcarpon	Grimmiaceae	GNRQ	S1	R1	
Rhytidium rugosum	Rhytidiaceae	G5	S1	R1	
Schistostega pennata	Schistostegaceae	G3G4	S2	R1	

Species name	Family Name	Global Rank	State Rank	Status	
				WA	FWS
Sphagnum austinii	Sphagnaceae	G4	S1	R1	
Sphagnum centrale	Sphagnaceae	G5	S1	R1	
Sphagnum contortum	Sphagnaceae	G5	S1	R1	
Sphagnum jensenii	Sphagnaceae	GU	S1	R1	
Sphagnum riparium	Sphagnaceae	G5	S1	R1	
Tayloria serrata	Splachnaceae	G4	S1	R1	
Tetraphis geniculata	Tetraphidaceae	G3G5	S2	R1	
Tetraplodon mnioides	Splachnaceae	G4	S1	R1	
Tetrodontium brownianum	Tetraphidaceae	G3G4	S1	R1	
Thamnobryum neckeroides	Thamnobryaceae	G4	S2	R1	
Tomentypnum nitens	Brachytheciaceae	G5	SNR	R1	
Tortula laevipila var. meridionalis	Pottiaceae	G3G4TNR	SNR	R1	
Tortula papillosa	Pottiaceae	G5	S1	R1	
Trichostomopsis australasiae	Pottiaceae	G5?	S2	R1	
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Washington Status of plant species is determined by the Washington Natural Heritage Program. Factors considered include abundance, occurrence patterns, vulnerability, threats, existing protection, and taxonomic distinctness. Values include:

- E = Endangered. In danger of becoming extinct or extirpated from Washington.
- T = Threatened. Likely to become Endangered in Washington.
- S = Sensitive. Vulnerable or declining and could become Endangered or Threatened in the state.
- X = Possibly extinct or extirpated from Washington.
- R1 = Review Group 1. Of potential concern, but needs more field work to assign another rank.
- R2 = Review Group 2. Of potential concern, but with unresolved taxonomic questions.

W = Watch. Species that are more abundant and/or less threatened in Washington than previously thought. These species are no longer maintained in the program database; the program does not request sighting information, and these species are no longer a focus of conservation efforts.

Federal Status of plants under the U.S. Endangered Species Act is determined by the U.S. Fish and Wildlife Service:

- E = Listed as Endangered. In danger of extinction.
- T = Listed as Threatened. Likely to become endangered.
- C = Candidate species. Sufficient information exists to support listing as Endangered or Threatened.

Global Rank characterizes the relative rarity or endangerment of the element world-wide.

- G1 = Critically Imperiled At very high risk of extinction or elimination due to very restricted range, very few populations or occurrences, very steep declines, very severe threats, or other factors.
- G2 = Imperiled At high risk of extinction or elimination due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.
- G3 = Vulnerable At moderate risk of extinction or elimination due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.
- G4 = Apparently Secure At fairly low risk of extinction or elimination due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.
- G5 = Secure At very low risk or extinction or elimination due to a very extensive range, abundant populations or occurrences, and little to no concern from declines or threats.
- GH = Possibly Extinct Known from only historical occurrences but still some hope of rediscovery.
- GU = Unrankable Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
- GX = Presumed Extinct Not located despite intensive searches and virtually no likelihood of rediscovery.
- GNR = Unranked Global rank not yet assessed.
- G#G# = Range Rank A numeric range rank (e.g., G2G3, G1G3) is used to indicate uncertainty about the exact status of a taxon or ecosystem type.

State Rank characterizes the relative rarity or endangerment within the state of Washington.

- S1 = Critically Imperiled At very high risk of extirpation in the state due to very restricted range, very few populations or occurrences, very steep declines, severe threats, or other factors.
- S2 = Imperiled At high risk of extirpation in the state due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.
- S3 = Vulnerable At moderate risk of extirpation in the state due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.
- S4 = Apparently Secure At a fairly low risk of extirpation in the state due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.
- S5 = Secure At very low or no risk of extirpation in the state due to a very extensive range, abundant populations or occurrences, with little to no concern from declines or threats.
- SH = Possibly Extirpated Known from only historical records but still some hope of rediscovery.
- SX = Presumed Extirpated Species is believed to be extirpated from the state. Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered.
- SU = Unrankable Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
- SNR = Unranked Subnational conservation status not yet assessed
- SNA = Not Applicable A conservation status rank is not applicable because the species or ecosystem is not a suitable target for conservation activities.