

# Queen’s University Biological Station Species List: Mosses

The current list has been compiled by Dr. Ivy Schoepf, [QUBS Research Coordinator](#), in 2018 and includes data gathered by direct observation, collected by researchers at the station and/or assembled using digital distribution maps. The list has been put together using resources from [The Natural Heritage Information Centre](#) (April 2018); [The IUCN Red List of Threatened Species](#) (February 2018); [iNaturalist](#) and [GBIF](#). Contact [Ivy](#) to report any errors, omissions and/or new sightings.

Based on the aforementioned criteria we can expect to find 37 species of mosses (phylum: Bryophyta) present at QUBS. All species are considered QUBS residents. Species are reported using their full taxonomy; common name and status, based on whether the species is of global or provincial concern (see Table 1 for details).

**Table 1. Status classification reported for the mosses of QUBS.** Global status based on IUCN Red List of Threatened Species rankings. Provincial status based on Ontario Natural Heritage Information Centre SRank.



**Figure 1.** The fire moss (*Ceratodon purpureus*) is one of the most widespread species of mosses found in Canada, and is commonly seen at QUBS. Its prevalence can be traced back to its ability to tolerate highly disturbed habitat and higher pollution levels than other mosses. Research in this species has revealed that fire mosses might have a plant-pollinator relationship with springtails that may be analogous to those shown by other arthropods with flowering plants. Photo courtesy of Mark Conboy

Global Status	Provincial Status
<b>Extinct (EX)</b>	<b>Presumed Extirpated (SX)</b>
<b>Extinct in the Wild (EW)</b>	<b>Possibly Extirpated (SH)</b>
<b>Critically Endangered (CR)</b>	<b>Critically Imperiled (S1)</b>
<b>Endangered (EN)</b>	<b>Imperiled (S2)</b>
<b>Vulnerable (Vu)</b>	<b>Vulnerable (S3)</b>
Near Threatened (NT)	Apparently Secure (S4)
Least Concern (LC)	Secure (S5)
Data Deficient (DD)	Unrankable - insufficient information (SU)
Not Evaluated (NE)	Unranked - not yet assessed (SNR)
	Conservation Status Rank Not Applicable (SNA)

Class	Order	Family	Scientific Name	Common Name	Global Status	Provincial Status
Bryopsida	Bryales	Aulacomniaceae	<i>Aulacomnium palustre</i>	Ribbed Bog Moss	NE	S5
		Bartramiaceae	<i>Bartramia pomiformis</i>	Common Apple Moss	NE	S5
		Bryaceae	<i>Bryum argenteum</i>	Silvery Bryum	NE	S5
			<i>Rhodobryum ontariense</i>	Ontario Rhodobryum Moss	NE	S5
			<i>Bryum laevifilum</i>	Syed's Bryum	NE	SU
	Mniaceae	<i>Mnium thomsonii</i>	Thomson's Leafy Moss	NE	S3	
	Buxbaumiales	Buxbaumiaceae	<i>Buxbaumia aphylla</i>	Bug-on-a-Stick	NE	S2
	Dicranales	Dicranaceae	<i>Ceratodon purpureus</i>	Fire Moss	NE	S5
			<i>Dicranum flagellare</i>	Whip Fork Moss	NE	S5
			<i>Dicranum polysetum</i>	Waxyleaf Moss	NE	S5
			<i>Leucobryum glaucum</i>	Pincushion Moss	NE	S5
			<i>Dicranum fulvum</i>	Fine-leaved Broom Moss	NE	S5
	Fissidentales	Fissidentaceae	<i>Fissidens bryoides</i>	Lesser Pocket-Moss	NE	S5
			<i>Fissidens fontanus</i>	Water Pocket Moss	NE	S2
	Grimmiales	Grimmiaceae	<i>Schistidium apocarpum</i>	Common Beard Moss	NE	S5
	Hypnales	Amblystegiaceae	<i>Drepanocladus aduncus</i>	Knieff's Hook-Moss	NE	S5
			<i>Leptodictyum riparium</i>	Streamside Leptodictyum Moss	NE	S5
			<i>Campylium stellatum</i>	Yellow Star Moss	NE	S5
			<i>Drepanocladus exannulatus</i>	Ringless Hook Moss	NE	S5
			<i>Campyliadelphus chrysophyllus</i>	Bristle Star Moss	NE	S5
<i>Hygroamblystegium varium</i>			Brookside Feather Moss	NE	S5	
Brachytheciaceae			<i>Brachythecium rutabulum</i>	Rough-stalked Ragged Moss	NE	S5
		<i>Brachythecium rivulare</i>	River Ragged Moss	NE	S5	
Hylocomiaceae		<i>Hylocomium splendens</i>	Stairstep Moss	NE	S5	
		<i>Pleurozium schreberi</i>	Red-stemmed Feather Moss	NE	S5	
		<i>Rhytidiadelphus triquetrus</i>	Big Shaggy-Moss	NE	S5	
		Hypnaceae	<i>Ptilium crista-castrensis</i>	Ostrich-plume Moss	NE	S5
<i>Homomallium adnatum</i>			Adnate hairy-grey Moss	NE	S3	

Class	Order	Family	Scientific Name	Common Name	Global Status	Provincial Status
Bryopsida	Hypnales	Plagiotheciaceae	<i>Plagiothecium laetum</i>	Bright Silk Moss	NE	S5
	Leucodontales	Climaciaceae	<i>Climacium americanum</i>	American Tree Moss	NE	S3
		Hedwigiaceae	<i>Hedwigia ciliata</i>	Hedwig's Fringeleaf Moss	NE	S5
	Polytrichales	Polytrichaceae	<i>Polytrichum juniperinum</i>	Juniper Polytrichum Moss	NE	S5
	Pottiales	Pottiaceae	<i>Syntrichia ruralis</i>	Star Moss	NE	S5
			<i>Tortella tortuosa</i>	Twisted Moss	NE	S5
Sphagnopsida	Sphagnales	Sphagnaceae	<i>Sphagnum russowii</i>	Russow's Peat Moss	NE	S5
			<i>Sphagnum fimbriatum</i>	Fringed Peat Moss	NE	S5
			<i>Sphagnum capillifolium</i>	Northern Peat Moss	NE	S5