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12-7-2021

## Annotated Checklist of the Bryophytes Observed at the Gordon Natural Area West Chester University, PA) 2007-2021. Version II

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# Annotated Checklist of the Bryophytes Observed at the Gordon Natural Area West Chester University, PA) 2007-2021. Version II

## Summary Data

**Number of Taxa:** 38 Species, in 31 Genera, 24 Families, and 13 Orders.

## Description

The bryophytes are an informal group that is composed of three divisions of non-vascular plants: the liverworts, hornworts, and mosses. Of these, the mosses are the most familiar to most people, but the three groups are similar in appearance, and differ only in their reproductive structures. All bryophytes lack specialized tissues for transporting resources (i.e., vascular tissue); hence, they are characteristically small in stature. Additionally, bryophytes do not produce flowers or seeds; rather, reproduction is through spores.

Bryophytes have received relatively little investigation at the GNA. In 2007, WCU undergraduate Spencer Ruston, under the supervision of Dr. Sharon Began, conducted a site-wide survey of bryophytes at the GNA, in which he noted 17 species. In 2009, undergrad Cindy Law, also under the supervision of Dr. Began, began another site-wide study of the GNA's bryophytes. Although she didn't finish this work, she did compile a photographic record of the eight species of bryophytes that she encountered.

No additional work was done on bryophytes from that time until 2019, at which point GNA staff began photographing and collecting bryophytes with an aim towards creating a more complete account of this biotic group at the GNA. The principal staff associated with this work are GNA Stewardship Manager Nur Ritter and GNA Student Intern Noah Long. These data have been augmented by observations posted on iNaturalist ([www.inaturalist.org](http://www.inaturalist.org)).

## Status/Threats

IUCN Status: Only nine species of bryophytes on the IUCN Red List of Threatened Species (IUCN 2020) have been evaluated for their status in North America. None of these species are known for the Gordon.

The GNA checklist was compared with the Pennsylvania Natural Heritage Species and Natural Features List (PNHP 2020). Of the 306 bryophyte species on the list, three are known to occur in the GNA. The state rankings from the PNHP list have been incorporated into the checklist.

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## Liverworts

### Aneuraceae

#### *Aneura pinguis* (Small Greasewort)

**Identified By:** S. Schuette (iNaturalist); **First Noted By:** N. Ritter

**Years Observed:** 2020; 2021

Status

**IUCN:** Redlist Global Status: Least Concern (Europe); Global Population: Stable

### Geocalycaceae

#### *Lophocolea heterophylla* (Variable-leaved Crestwort)

**Identified and First Noted By:** S. Ruston; **Also Noted By:** C. Law; N. Ritter; P. Vermeulen

**Years Observed:** 2007; 2009; 2019; 2020; 2021

Status

**IUCN:** Redlist Global Status: Least Concern (Europe); Global Population: Stable

### Jubulaceae

#### *Frullania eboracensis* (New York Scalewort)

**Identified and First Noted By:** N. Ritter; **Also Noted By:** N. Long; M. Dowd

**Years Observed:** 2017; 2019; 2020; 2021

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## Pallaviciniaceae

### *Pallavicinia lyellii* (Veilwort)

Identified and First Noted By: N. Ritter

Year Observed: 2021

Status

IUCN: Redlist Global Status: Vulnerable (Europe); Global Population: Decreasing

## Radulaceae

### *Radula cf. complanata* (Flatleaf Scalewort)

Identified and First Noted By: N. Ritter

Year Observed: 2020

Status

IUCN: Redlist Global Status: Least Concern (Europe); Global Population: Stable

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## Mosses

### Amblystegiaceae

#### *Amblystegiaceae* Indet. #1. (No Common Name)

Identified By: C.J. Pasiche Lisboa (iNaturalist); First Noted By: N. Ritter

Year Observed: 2020

### Anomodontaceae

#### *Anomodon attenuatus* (Poodle Moss)

Identified and First Noted By: N. Ritter

Years Observed: 2019; 2020

Status

IUCN: Redlist Global Status: Least Concern (Europe); Global Population: Stable

### Brachytheciaceae

#### *Brachytheciaceae* Indet. #1. (No Common Name)

Identified By: C.J. Pasiche Lisboa (iNaturalist); First Noted By: N. Ritter

Year Observed: 2019

#### *Bryoandersonia illecebra* (Spoon-leaved Moss)

Identified and First Noted By: S. Ruston; Also Noted By: N. Ritter; kojo1019 (iNaturalist)

Years Observed: 2007; 2019; 2020

## Climaciaceae

### *Climacium dendroides* (Northern Tree Moss)

Identified and First Noted By: N. Ritter; Also Noted By: A. Rivellini; N. Long

Years Observed: 2019; 2020; 2021

Status

IUCN: Redlist Global Status: Least Concern (Europe); Global Population: Stable

## Dicranaceae

### *Dicranella heteromalla* (Fine Hair Moss)

Identified and First Noted By: S. Ruston; Also Noted By: N. Ritter

Years Observed: 2007; 2020

Status

IUCN: Redlist Global Status: Least Concern (Europe); Global Population: Stable

### *Dicranum scoparium* (Broom Moss)

Identified and First Noted By: N. Ritter

Year Observed: 2021

Status

IUCN: Redlist Global Status: Least Concern (Europe); Global Population: Stable

## Entodontaceae

### *Entodon seductrix* (Seductive Entodon Moss)

Identified and First Noted By: N. Ritter

Year Observed: 2020

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## Fissidentaceae

### *Fissidens adianthoides* (Maidenhair Pocket Moss)

Identified and First Noted By: C. Law; Also Noted By: N. Ritter; A. Rivellini

Years Observed: 2009; 2019; 2020

Status

IUCN: Redlist Global Status: Least Concern (Europe); Global Population: Stable

PNHC State Status: Vulnerable

### *Fissidens osmundoides* (Fern Pocket Moss)

Identified and First Noted By: N. Ritter

Years Observed: 2019; 2020

Status

IUCN: Redlist Global Status: Least Concern (Europe); Global Population: Unknown

## Funariaceae

### *Funaria* Indet. #1. (No Common Name)

Identified and First Noted By: S. Ruston

Year Observed: 2007

### *Physcomitrium pyriforme* (Goblet Moss)

Identified and First Noted By: N. Ritter

Years Observed: 2020; 2021

Status

IUCN: Redlist Global Status: Least Concern (Europe); Global Population: Stable

## Grimmiaceae

### *Grimmia* Indet. #1. (No Common Name)

Identified and First Noted By: S. Ruston

Year Observed: 2007

### *Schistidium apocarpum* Group (Schistidium Moss)

Identified and First Noted By: N. Ritter

Years Observed: 2019; 2020

#### Status

IUCN: Redlist Global Status: Least Concern (Europe); Global Population: Stable

## Hedwigiaceae

### *Hedwigia ciliata* (White-tipped Moss)

Identified and First Noted By: S. Ruston; Also Noted By: N. Ritter

Years Observed: 2007; 2020

#### Status

IUCN: Redlist Global Status: Least Concern (Europe); Global Population: Stable

## Hypnaceae

### *Hypnum imponens* (Brocade Moss)

Identified and First Noted By: S. Ruston; Also Noted By: N. Ritter

Years Observed: 2007; 2019; 2020

#### Status

IUCN: Redlist Global Status: Near Threatened (Europe); Global Population: Unknown



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***Platygyrium repens* (Oil Spill Moss)**

**Identified and First Noted By:** S. Ruston; **Also Noted By:** C. Law; G. Hertel; N. Ritter

**Years Observed:** 2007; 2009; 2010; 2019

**Status**

**IUCN:** Redlist Global Status: Least Concern (Europe); Global Population: Increasing

**Leucobryaceae**

***Leucobryum albidum* (White Moss)**

**Identified and First Noted By:** S. Ruston

**Year Observed:** 2007

**Status**

**IUCN:** Redlist Global Status: Data Deficient (Europe); Global Population: Unknown

***Leucobryum glaucum* (Pincushion Moss)**

**Identified and First Noted By:** N. Ritter

**Year Observed:** 2019

**Status**

**IUCN:** Redlist Global Status: Least Concern (Europe); Global Population: Stable

**Mniaceae**

***Plagiomnium ciliare* (Saber Tooth Moss)**

**Identified and First Noted By:** S. Ruston; **Also Noted By:** C. Law; N. Ritter; N. Long

**Years Observed:** 2007; 2009; 2019; 2020; 2021

***Plagiomnium cuspidatum* (Baby Tooth Moss)**

**Identified and First Noted By:** S. Ruston; **Also Noted By:** N. Ritter; P. Vermeulen

**Years Observed:** 2007; 2019; 2020

**Status**

**IUCN:** Redlist Global Status: Least Concern (Europe); Global Population: Stable

***Rhizomnium punctatum* (Dotted Thyme Moss)**

**Identified and First Noted By:** N. Ritter

**Years Observed:** 2019; 2020

**Status**

**IUCN:** Redlist Global Status: Least Concern (Europe); Global Population: Stable

**Orthotrichaceae**

***Orthotrichum cf. stellatum* (Stellate Orthotrichum Moss)**

**Identified and First Noted By:** N. Ritter

**Years Observed:** 2019; 2021

**Status**

**IUCN:** Redlist Global Status: Vulnerable (Europe); Global Population: Unknown

**PNHC State Status:** Imperiled/Apparently Secure

***Orthotrichum strangulatum* (Drummond Moss)**

**Identified and First Noted By:** N. Ritter

**Years Observed:** 2019; 2020

**Polytrichaceae**

***Atrichum altecristatum* (Wavy Starburst Moss)**

**Identified and First Noted By:** N. Ritter

**Year Observed:** 2019

***Atrichum angustatum* (Lesser Smoothcap Moss)**

**Identified and First Noted By:** S. Ruston; **Also Noted By:** C. Law; N. Ritter

**Years Observed:** 2007; 2009; 2019

**Status**

**IUCN:** Redlist Global Status: Vulnerable (Europe); Global Population: Decreasing

***Atrichum undulatum* (Wavy Catharinea)**

**Identified and First Noted By:** S. Ruston; **Also Noted By:** N. Ritter

**Years Observed:** 2007; 2019

**Status**

**IUCN:** Redlist Global Status: Least Concern (Europe); Global Population: Stable

***Polytrichum ohioense* (Ohio Haircap Moss)**

**Identified and First Noted By:** S. Ruston; **Also Noted By:** N. Ritter

**Years Observed:** 2007; 2020

**Status**

**IUCN:** Redlist Global Status: Near Threatened (Europe); Global Population: Stable

**Pottiaceae**

***Pottiaceae* Indet. #1. (No Common Name)**

**Identified and First Noted By:** N. Ritter

**Years Observed:** 2018; 2019

## Ptychomitriaceae

### *Ptychomitrium incurvum* (Gnome's Hood Moss)

Identified By: C.J. Pasiche Lisboa (iNaturalist); First Noted By: N. Ritter

Year Observed: 2019

#### Status

IUCN: Redlist Global Status: Critically Endangered (Europe); Global Population: Decreasing

PNHC State Status: Imperiled/Apparently Secure

## Sphagnaceae

### *Sphagnum* Indet. #1. (Sphagnum)

Identified and First Noted By: N. Ritter

Year Observed: 2020

## Thuidiaceae

### *Thuidium allenii* (Fernmoss)

Identified and First Noted By: S. Ruston

Year Observed: 2007

### *Thuidium delicatulum* (Delicate Fern Moss)

Identified and First Noted By: C. Law; Also Noted By: N. Ritter

Years Observed: 2009; 2019; 2021

#### Status

IUCN: Redlist Global Status: Least Concern (Europe); Global Population: Stable

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## References

[IUCN] International Union for the Conservation of Species. 2020. The IUCN Red List of Threatened Species. Version 2020-2. <https://www.iucnredlist.org>. Date Accessed: 6/30/2020.

[PNHP] Pennsylvania Natural Heritage Program. 2020. Pennsylvania Natural Heritage Species and Natural Features List (<http://www.naturalheritage.state.pa.us/SpeciesFeatures.aspx>); Date accessed: 3/27/2020.

## Metadata

This document was generated from the GNA Database. Database created and data maintained by Nur Ritter, Stewardship Manager, Gordon Natural Area.

**Recommended Citation:** Ritter, N. 2021. Annotated checklist of the bryophytes observed at the Gordon Natural Area (West Chester University, PA) 2007-2021. Version II. 12 pp. Database queried and document created: 12/6/2021.