

SOME BRYOPHYTES OF COLES AND CLARK COUNTIES

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INTRODUCTION

The following list of Bryophytes was compiled over a period of two and one half years. The sandstone outcrops on the banks of the Embarrass River, Fox Ridge State Park, and the hanging bogs east of Charleston have been the chief collecting grounds in Coles County. These areas provide various types of habitat—the bog-inhabiting *Riccardia pinguis* and *Campylium stellatum* may be found only a few steps from the xeric species of *Grimmia*. Many collections were taken from the mesophytic ravines and woods which are widespread in this area. It was interesting to find that the campus of the Eastern Illinois State Teacher's College contributed 51 species of *Musci* and four Hepatics, making a total of 55 species collected. Two of the mosses collected here are newly reported for the state.

Most of my collecting in Clark County was confined to the Rocky Branch area in the southeastern part of the county. This region is especially rich in Hepatics, and the sandstone banks provide 40 of the 42 liverworts reported. Three species of *Sphagna*, *Jungermannia*, *Tricholea*, and a great number of *Musci* flourish here. The East-Central Illinois Bryophytes are probably best represented in this area.

At the 1934 Academy meeting, Miss Hague and Miss Stella Holmes (Barrick) presented a "List of the Bryophytes of Coles and Crawford Counties." Of the 31 mosses given

in this list, I have not been able to collect *Climacium kindbergii* and *Amblystegiella confervoides*. I was unable to obtain packets of these. The *Brachythecium acutum* was incorrectly identified, and turned out to be *Leptodictyum riparium*; the *Mnium rostratum* (Schrad.) reported is *Mnium affine*. No species name was given for the *Polytrichum* in this check-list; however, the most common species in Coles County is *P. ohioense*.

R. H. Vaughan reported 72 mosses and 14 liverworts at the 1941 Academy meeting. This list appeared in the "Bryophytes of the Rocky Branch Region of Clark County, Illinois." I have been unable to collect *Hookeria acutifolia*, *Plectocolea crenuliformis*, *Mnium spinulosum*, *Brachythecium acutum*, *Fissidens viridulus*, and *Fissidens osmundioides*, which appeared in this list.

Of the 172 Bryophytes collected from Coles and Clark counties, 19 are newly reported for the state in this list. All the available literature on Illinois Bryophytes was referred to. Packets of these are deposited in the herbarium of the Eastern Illinois State Teacher's College, and in the author's personal collection. All the specimens have been checked by H. S. Conard, except the *Sphagna* which were checked by H. L. Blomquist.

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Vaughan, E. Meadows, and the many other friends who helped me collect and packet material.

Names thus starred (*) are newly reported for Illinois in this list.

MUSCI

SPHAGNACEAE

**Sphagnum palustre* L. (Clark). Very common on moist sandstone banks beside stream.

**Sphagnum tenerum* Sull. & Lesq. (Clark). Common on the wet sandstone banks.

Sphagnum squarrosum Crome (Clark). Rare, and growing intermingled with *S. tenerum*. Reported collected in 1889 in the "Report of the Department of Natural History of Northwestern University." The only data given was that it was collected near Canton, Illinois.

TETRAPHIDACEAE

Tetraphis pellucida Hedw. (Coles, Clark).

POLYTRICHACEAE

Atrichum angustatum (Brid.) Bry. Eur. (Coles, Clark).

Atrichum undulatum (Hedw.) Beauv. (Coles, Clark).

Pogonatum pensilvanicum (Hedw.) Paris. (Coles, Clark).

Polytrichum commune Hedw. (Coles, Clark). Rare on hillsides in woods.

Polytrichum juniperinum Hedw. (Clark, Coles). Not common, on dry soil.

Polytrichum ohioense Ren. & Card. (Coles, Clark). Very common.

Polytrichum piliferum Hedw. (Clark). Rare and sterile; dry soil.

FISSIDENTACEAE

Fissidens cristatus Wils. (Clark, Coles).

Fissidens exiguus Sull. (Coles, Clark).

Fissidens minutulus Sull. (Coles, Clark).

Fissidens obtusifolius Wils. (Coles, Clark). Common on partly submerged rocks in Embarrass River. As far as I know, the only other report for this moss in the state was by Wolf in Fulton county.

Fissidens osmundioides Hedw. (Clark). Reported by R. H. Vaughan in Clark county. I have not collected it.

Fissidens subbasilaris Hedw. (Coles, Clark).

Fissidens taxifolius Hedw. (Coles, Clark).

Fissidens viridulus (Web. & Mohr) Wahlenb. Reported for Clark county by R. H. Vaughan.

DITRICHACEAE

Ceratodon purpureus (Hedw.) Brid. (Coles, Clark).

Ditrichum pallidum (Hedw.) Hampe (Coles, Clark).

Ditrichum pusillum (Hedw.) E. G. Britton (Coles, Clark).

Pleuroidium subulatum (Hedw.) Lindb. (Coles, Clark).

DICRANACEAE

Brothera Leana (Sull.) C. Mull. (Coles). Reported previously by Wolf & Hall in Fulton and Menard counties, and by Drexler in Champaign county.

Dicranella heteromalla (Hedw.) Schimp. (Coles, Clark).

Dicranella rufescens (Smith) Schimp. (Coles, Clark).

Dicranella varia (Hedw.) Schimp. (Coles, Clark).

Dicranum flagellare Hedw. (Clark). Very rare on moist soil along stream bank at Rocky Branch.

Dicranum scoparium Hedw. (Coles, Clark).

Dicranum rugosum (Hoffm.) Brid. This is *D. undulatum* (Ehrh.) Sturm. Very rare in Clark county.

LEUCOBRYACEAE

Leucobryum glaucum (Hedw.) Schimp. (Coles, Clark).

BUXBAUMIACEAE

Diphyscium foliosum (Hedw.) Mohr. (Coles, Clark).

POTTIACEAE

Barbula fallax Hedw. (Coles, Clark).

Barbula unguiculata Hedw. (Coles, Clark).

Desmatodon obtusifolius (Schwaegr.) Jur. (Coles, Clark).

Desmatodon Porteri James (Coles, Clark). Not common, on dry sandstone rocks.

Didymodon recurvirostris (Hedw.) Jennings (Coles, Clark).

Gymnostomum calcareum Nees & Hornsch. (Clark).

Tortella humilis (Hedw.) (Coles, Clark).

Tortula mucronifolia Schwaegr. (Coles, Clark).

Weisia viridula Hedw. (Coles, Clark).

GRIMMIACEAE

- Grimmia apocarpa* Hedw. (Coles, Clark).
 **Grimmia laevigata* (Brid.) Brid. (Clark). Rare on dry sandstone banks at Rocky Branch.
Hedwigia ciliata Hedw. (Coles, Clark).

EPHEMERACEAE

- Ephemerum crassinervinum* (Schwaegr.) C. Mull. (Coles, Clark). Common among the cattails at the edge of ponds.
 **Ephemerum spinulosum* Schimp. (Coles, Clark). Common on moist soil in fields and at the edge of streams.
 **Ephemerum spinulosum* var. *hystrix* (Lindb.) Grout (Coles). Not common, and growing intermingled with the previous plants.
 **Ephemerum spinulosum* var. *Texanum* Grout (Coles). Rare and growing with *E. spinulosum*. Fruiting material taken from the wet mud around the campus lake, Eastern Illinois State Teacher's College.

FUNARIACEAE

- Aphanorhagma serratum* (Hook. & Wils.) Sull. (Coles, Clark).
Funaria hygrometrica Hedw. (Coles, Clark).
Physcomitrium turbinatum (Mx.) Brid. (Coles, Clark).

ORTHOTRICHACEAE

- Drummondia prorepens* (Hedw.) Jennings (Coles, Clark). On the bark of maples—not common.
Orthotrichum ohioense Sull. & Lesq. (Coles). Not common on the bark of white oak.
Orthotrichum pumilum Dicks. (Coles, Clark). Very common in both counties.
Orthotrichum strangulatum Schwaegr. (Coles, Clark). Not common on dry rocks.

TIMMIACEAE

- Timmia megapolitana* Hedw. (Clark). Not common.

AULACOMNIACEAE

- Aulacomnium heterostichum* (Hedw.) Bry. Eur. (Coles, Clark).
Aulacomnium palustre (Web. & Mohr) Schwaegr. (Clark). Rare along shaded stream banks.

BARTRAMIACEAE

- Bartramia pomiformis* Hedw. (Coles, Clark).

BRYACEAE

- Bryum argentum* (L.) Hedw. (Coles, Clark).
Bryum caespiticium (L.) Hedw. (Coles, Clark).
Bryum pendulum (Hornsch.) Schimp. (Clark). Not common on sandstone rocks.
Bryum pseudotriquetrum (Hedw.) Schwaegr. (Coles, Clark).
Leptobryum pyriforme (Hedw.) Schimp. (Coles, Clark).
Pohlia nutans (Hedw.) Lindb. (Coles, Clark).
Pohlia Wahlbergii (Web. & Mohr) Andrews (Coles, Clark). Plants collected in Coles county producing antheridial heads.
Rhodobryum roseum (Bry. Eur.) Limpr. (Coles, Clark).

MNIACEAE

- Mnium affine* Bland. (Coles, Clark).
Mnium affine var. *rugicum* B & S (Coles, Clark).
Mnium cuspidatum Hedw. (Coles, Clark).
Mnium punctatum Hedw. (Coles, Clark).
Mnium serratum Brid. (Coles, Clark).
Mnium spinulosum Bry. Eur. Reported at Rocky Branch, Clark county by R. H. Vaughan. I have not collected it.

HYPNACEAE

- Amblystegiella confervoides* (Brid.) Loeske. Reported for Coles county by Miss Hague and Miss S. Holmes (Barrick).
Amblystegium compactum (C. Mull.) Aust. (Clark). Not common in stream bed.
Amblystegium Juratzkanum Schimp. (Clark).
Amblystegium serpens (Hedw.) Bry. Eur. (Coles, Clark).
Amblystegium varium (Hedw.) Lindb. (Coles, Clark).
Brachythecium acutum (Mitt.) Sull. Reported in Clark county by R. H. Vaughan.
Brachythecium flagellare (Hedw.) Jennings (Coles, Clark). Common on shaded banks.
Brachythecium oxycladon (Brid.) Jaeger & Sauerb. (Coles, Clark).
Brachythecium oxycladon var. *dentatum* (Lesq. & James) Grout (Clark). Common on moist soil; preferring stream banks.
Brachythecium rivulare Bry. Eur. (Clark).

- Brachythecium salebrosum* (Web. & Mohr) Bry. Eur. (Coles, Clark).
 **Brotherella recurvans* (Mx.) Fleisch. (Coles, Clark). Not common on rotten logs at Fox Ridge State Park.
Bryhnia graminicolor (Brid.) Grout (Clark, Coles).
Calliergonella cuspidata (Brid.) Loeske (Clark, Coles). Rare in hanging bogs.
Calliergonella Schreberi (Bry. Eur.) Grout (Coles, Clark).
Campylium chrysophyllum (Brid.) Bryhn (Coles, Clark).
 **Campylium chrysophyllum* var. *brevifolium* (Ren. & Card.) Grout. (Clark). Common on moist banks. Leaves all swept to one side.
Campylium hispidulum (Brid.) Mitt. (Coles, Clark).
Campylium stellatum (Hedw.) Lange & C. Jens. (Coles). Rare in hanging bogs at "Foltz's".
Chamberlainia acuminata (Hedw.) Grout (Coles, Clark).
Cirriphyllum Boscii (Schwaegr.) Grout (Coles, Clark).
Climacium americanum Brid. (Coles, Clark).
Climacium Kindbergii (Ren. & Card.) Grout. Reported by Miss S. Hague and Miss S. Holmes (Barrick) for Coles county.
Cratoneuron flicinum (Hedw.) Roth (Coles, Clark). Not common on old logs and in bogs. Bog plants without paraphyllia!
Entodon cladorrhizans (Hedw.) C. Muell. (Coles, Clark).
Endodon compressus (Hedw.) C. Muell. (Coles, Clark).
Eontodon seductrix (Hedw.) C. Muell. (Coles, Clark).
Eurhynchium hians (Hedw.) Jaeger & Sauerb. (Coles, Clark).
Eurhynchium serrulatum (Hedw.) Kindb. (Coles, Clark).
Heterophyllum Haldanianum (Grev.) Kindb. (Coles, Clark).
Homomallium adnatum (Hedw.) Broth (Coles, Clark).
Hygroamblystegium fluviatile (Hedw.) Loeske (Clark).
Hygroamblystegium irriguum (Wils.) Loeske (Coles, Clark).
Hygroamblystegium orthocladon (Beauv.) Grout (Coles, Clark).
Hypnum curvifolium Hedw. (Coles, Clark). Common at Rocky Branch.
Hypnum imponens Hedw. (Clark). Rare on moist soil.
Hypnum Patientiae Lindb. (Coles, Clark). Very common everywhere.
 **Hypnum reptile* Mx. (Clark). Rare on rotten logs.
Leptodictyum riparium (Heaw.) Warnst. (Coles, Clark).
Leptodictyum riparium forma *flaccidum* (L & J) (Coles). Growing submerged; capsules taken in January.
Leptodictyum trichopodium (Schultz) Warnst. (Coles, Clark).
Plagiothecium denticulatum (Hedw.) Bry. Eur. (Clark).
Plagiothecium geophilum (Aust.) Grout (Clark). Not common on the moist soil along stream.
Plagiothecium Roeseanum (Hampe) Bry. Eur. (Clark). Rare at Rocky Branch.
Plagiothecium deplanatum (Sull.) Grout (Coles, Clark). Not common in crevices in the sandstone banks.
Platygyrium repens (Brid.) Bry. Eur. (Coles, Clark).
Sematophyllum carolinianum (C. Muell.) E. G. Britton (Coles, Clark). As far as I know, this is the second report for this moss in Illinois.
- #### LESKEACEAE
- Anomodon attenuatus* (Hedw.) Huben. (Coles, Clark).
Anomodon minor (Beauv.) Lindb. (Coles, Clark).
Anomodon rostratus (Hedw.) Schimp. (Coles, Clark).
Leskea obscura Hedw. (Coles, Clark).
Leskea polycarpa Hedw. (Coles, Clark).
Leskea gracilescens Hedw. (Coles, Clark).
Lindbergia brachyptera var. *Austini* (Sull.) Grout (Coles, Clark).
Thelia asprella Sull. (Coles, Clark).
 **Thuidium abietinum* (Brid.) Bry. Eur. (Clark). Rare on dry soil.
Thuidium delicatulum (Hedw.) Mitt. (Coles, Clark).
Thuidium pygmaeum Bry. Eur. (Clark).
Thuidium recognitum (Hedw.) Lindb. (Coles, Clark).
Thuidium virginianum (Brid.) Lindb. (Coles, Clark).
- #### HOOKERIAACEAE
- Hookeria acutifolia* Hook. Reported at Rocky Branch by R. H. Vaughan.
- #### LEUCODONTACEAE
- Leptodon trichomitrium* (Hedw.) Mohr (Coles, Clark).
Leucodon fulaceus (Hedw.) Sull. (Coles, Clark).
 **Leucodon brachypus* Brid. (Coles). Rare on bark of trees.

FABRONIACEAE

- **Fabronia Ravenelli* Sull. (Coles). Not common on the bark of white oak in moist woods.

HEPATICAE

PTILIDIACEAE

- Ptilidium pulcherrimum* (Web.) Hampe (Coles, Clark). Not common on rotten logs along sides of ravines.
Blepharostoma trichophyllum (L.) Dumort. (Coles, Clark). Very abundant at Rocky Branch on sandstone.
 **Tricholea tomentella* (Ehrh.) Dum. (Clark). Common on the moist banks along stream.

LEPIDOZIACEAE

- **Bazzania trilobata* (L.) S. F. Gray (Clark). Very rare on the sandstone banks.
 **Lepidozia reptans* (L.) Dumort. (Clark). Rare on rotten logs.

CALYPOGEIACEAE

- Calypogeia Trichomanis* (L.) Corda (Coles, Clark).

CEPHALOZIACEAE

- Cephalozia connivens* (Dicks.) Lindb. (Coles, Clark). Common on moist, rotten logs.
Cephalozia media Lindb. (Clark). Common on shaded sandstone.
Nowellia curvifolia (Dicks.) Mitt. Rare on rotten wood at Rocky Branch.

HARPANTHACEAE

- Lophocolea heterophylla* (Schrad.) Dumort. (Coles, Clark).
Lophocolea minor (Lehm.) Nees (Clark). Rare on soil and old wood.
Harpanthus scutatus (Web. & Mohr) Spruce (Clark). Not common, and growing intermingled with *Cephalozia media* and *Blepharostoma trichophyllum*.

JUNGERMANNIACEAE

- **Lophozia incisa* (Schrad.) Dum. D'Obs. (Clark). Common on the moist sandstone banks, and growing with *Plectocolea*.
Jungermannia lanceolata L. (Coles, Clark). Not common, and growing among the *Sphagna*.
 **Plectocolea crenulata* (Smith) Evans (Clark). Not common on the moist soil on sandstone banks.
 **Plectocolea crenuliformis* (Aust.) Mitt. Reported at Rocky Branch by R. H. Vaughan.

Plectocolea hyalina (Lyell) Mitt. (Clark). Not common.

- Plectocolea fossombronioides* (Aust.) Mitt. As far as I know, this is the second report for the state. Not common at Rocky Branch.

PLAGIOCHILACEAE

- Plagiochila asplenioides* (L.) Dumort. (Clark, Coles).

SCAPANIACEAE

- Scapania nemorosa* (L.) Dumort. (Clark, Coles).

PORELLACEAE

- Porella platyphylloidea* (Schwein.) Lindb. (Clark, Coles).

RADULACEAE

- Radula complanata* (L.) Dumort. (Coles, Clark). Not common at the base of trees.

FRULLANIACEAE

- Frullania Asagrayana* Mont. (Coles). Rare on the bark of white oak.
Frullania eboracensis Gottsche. (Coles, Clark).
Frullania inflata Gottsche. (Coles, Clark).
Frullania riparia Hampe (Coles, Clark). Common on moist sandstone.
Frullania squarrosa (R. Bl. & N.) Dumort. (Clark). On shaded banks; preferring moist sandstone. Common.

LEJEUNEACEAE

- **Lejeunea cavifolia* (Ehrh.) Lindb. (Clark). Rare on rotten wood.

PELLIACEAE

- Pellia epiphylla* (L.) Corda (Coles, Clark). Very common on moist soil and rocks.

BLASIACEAE

- Blasia pusilla* L. (Clark). Very common on sandy soil.

RICCARDIACEAE

- Riccardia pinguis* (L.) S. F. Gray (Coles). Not common among the cattails in hanging bogs.

MARCHANTIACEAE

- Marchantia polymorpha* L. (Coles, Clark).
Preissia quadrata (Scop.) Nees (Clark). Not common on sandstone rocks.
Conocephalum conicum (L.) Dumort. (Coles, Clark).

REBOULIACEAE

Reboulia hemisphaerica (L.) Raddi
(Coles, Clark).

Mannia fragrans (Balb.) Frye & Clark
(Clark). Common at Rocky Branch.

Asterella tenella (L.) Beauv. (Coles,
Clark). Common on dry soil.

RICCIACEAE

Riccia fluitans L. (Coles, Clark). Not
common on moist soil along river
bank.

Ricciocarpus natans (L.) Corda (Coles,
Clark). Not common on moist soil.

ANTHOCEROTACEAE

Anthoceros laevis L. (Coles, Clark).
Common on clayey soil.

**Anthoceros crispulus* (Mont.) Douin
(Clark). Common on wet rocks.

Notothylas orbicularis (Schwein.)
(Coles, Clark). Common on moist
soil.