

SOME UNUSUAL LOWER PLANTS FROM LUSK CREEK CANYON, POPE COUNTY, ILLINOIS

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ABSTRACT.—Sixteen lichens, three mosses, one fern, and five fern allies are reported. Thirteen lichens and one moss are new to the known flora of Illinois.

Lusk Creek Canyon, northeast of Ed-
 dyville in Pope County, is more than a
 beautiful and remote area of Illinois; it
 is an area of botanical interest. We
 have visited the area many times in
 conjunction with our survey of southern
 Illinois bryophytes and lichens, and it is
 our considered opinion that the diversity
 and richness of the Lusk Creek flora
 are unrivaled in southern Illinois and
 quite possibly in the state. No other
 area supports three species of *Lycopo-*
dium; apparently no other area sets as
 many continental distribution limits,
 and no other area can match the growth
 of *Sphagnum* that drapes over and cov-
 ers extensive areas of certain canyon
 walls.

The species listed are what we con-
 sider to be rare or otherwise interesting
 elements of the southern Illinois flora;
 they are not intended as a comprehen-
 sive list for the area. We know many
 of these plants only from Lusk Creek,
 and attempts at finding them in appro-
 priate habitats in other areas have met
 with little success. Specimens are in
 the Southern Illinois University Her-
 barium. Names preceded by an asterisk
 are new to Illinois.

Species that are at northern limits
 of their distribution include: *Parmelia*
caroliniana, *P. dilatata*, *P. madagasca-*
riacea, and *P. tinctorum*. Species that
 are at southern distribution limits are:
Leptogium minutissimum and *Lycopo-*
dium flabelliforme. References for de-
 tails concerning the distribution of these
 genera are Sierk, 1964 for *Leptogium*,
 Wilce, 1965 for *Lycopodium*, and Hale,
 1965 for *Parmelia*.

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Dodge, Mason E. Hale, Jr., Paul L.
 Redfearn, Jr., Herbert A. Sierk, and
 John W. Thomson.

Lichens

Anzia colpodes (Ach.) Stizenb. At the
 base of *Quercus* sp. in closed woods.
Skorepa 2091.

**Baeomyces absolutus* Tuck. Dots
 shaded sandstone and clay with pink
 apothecia. Unusually abundant. *Sko-*
repa 729.

**Candelaria fibrosa* (Fr.) Müll.-Arg. On
Quercus sp. in dry woods. *Hatcher*
1347s.

**Cetraria juniperina* (L.) Ach. A spe-
 cies with southern affinities (Hale,
 1961). Rare on the branches of
Quercus marilandica and *Vaccinium*
arboreum in dry woods. *Skorepa 627.*

**Cladonia atlantica* Evans. On mostly
 shaded sandstone ledges. *Hatcher*
1350s (Det. A. W. Evans).

**Coccocarpia cronia* (Tuck.) Vain. A
 species with southern affinities (Hale,
 1961). At the base of *Quercus alba*
 in closed woods. *Skorepa 518.*

**Lecanora hypoptoides* Nyl. On *Dio-*
spyros virginiana. *Skorepa 507.*

**Lecanora minutella* Nyl. On *Diospyros*
virginiana. *Skorepa 1607.*

Leptogium minutissimum (Flörke) Fr.
 With *Collema subfurvum* on *Quercus*
alba in dry woods. *Skorepa 1814.*

**Parmelia caroliniana* Nyl. At the base
 of *Juniperus virginiana* on a dry
 bluff top. *Skorepa 571.*

**Parmelia dilatata* Vain. On *Quercus* sp.
 in dry woods. *Skorepa 931.*

**Parmelia madagascariacea* (Hue) Abb.
 Forms large rosettes on sandstone in
 dry woods. *Skorepa 520.*

**Parmelia tinctorum* Nyl. With *P. mada-*
gascariacea on sandstone in dry
 woods. *Skorepa 524.*

Ramalina fastigiata (Pers.) Ach. Rare and poorly developed on twigs of *Ulmus alata* with *Usnea mutabilis* in dry woods inside the hairpin curve. *Skorepa* 621.

**Ramalina intermedia* Del. ex Nyl. On sandstone near the creek—full sun to light shade, rarely inundated, and on dry but fully shaded sandstone high above the creek. *Skorepa* 2092.

**Usnea mutabilis* Stirt. Rare on bluff top trees, mostly *Juniperus virginiana*. *Skorepa* 621.

Mosses

**Dicranum spurium* Hedw. A species with northern affinities (Redfearn, Pers. Comm.). Rare on moist, shaded sandstone ledges. *Hatcher* 831.

Sphagnum compactum Lam. & DC. Abundant on shaded sandstone walls above the creek; occasional on dry bluff tops in full sun. Many fruiting specimens found in May and June. *Snider* 121.

Sphagnum tenerum Sull. & Lesq. Also reported from Clark County in Illinois (Arzeni, 1947). Abundant on north-facing canyon walls; also forming reddish to deep red patches in mesic hill-woods above the creek. Not found in fruit. *Snider* 113.

Ferns and Fern Allies

Dennstaedtia punctilobula (Michx.) Moore. A rare fern also known from Wabash County in Illinois (Mohlen-

brock, Pers. Comm.). On north-facing sandstone ledge. *Bailey & Swayne* 2759.

Lycopodium flabelliforme (Fern.) Blanchard. Also known from Ogle County in Illinois (Mohlenbrock, Pers. Comm.). Rare on moist sandstone ledges above the creek. *Voigt & Swayne* 1170.

Lycopodium lucidulum Michx. Rare in deep woods. *Hopkins* 27.

Lycopodium porophyllum Lloyd & Underw. Rather abundant on moss-covered sandstone in deep shade. *Skorepa* 1707.

Isoetes butleri Engelm. In depressions of sandstone bluff tops. *Hopkins* 59.

Selaginella apoda (L.) Spreng. On a moist stream bank. *Hopkins* 121.

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