

ADDITIONS TO THE FLORA OF COLES COUNTY, ILLINOIS

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ABSTRACT. — A floristic study of a series of hillside marshes resulted in 56 plant species not previously recorded for Coles County, Illinois. Some of the species are extremely common but have been previously overlooked; others, however, are extremely rare, having been reported sporadically or not at all from East-central Illinois.

During the summers of 1967 and 1968 the authors undertook a study of a series of marshes located about five miles east of Charleston, Coles County, Illinois (NE $\frac{1}{4}$, SW $\frac{1}{4}$, Section 4, T12N, R10E). These marshes are located in a small valley which enters the Embarrass River just to the south of where Illinois Route 16 crosses the Embarrass River. Situated at an elevation of about 595 feet above sea level, these marshes will be flooded when the proposed Lincoln Reservoir is built.

All of the marshes are located in an area of about six acres and the marshes vary from about 200 to 4,000 square feet in size. Though not extensive, these marshes are composed of various ecological situations; and as a result, the flora of the area is relatively diverse. Some of this variation was discussed by Phipps and Speer (1958) who undertook a floristic study of the largest marsh in the area.

Most of the marshes are located on the northwest-facing hillside of the valley and slope to the west from a seep line about 10 feet above the valley floor. This seep line results

from a gravelly deposit which overlies an impervious clay layer. At the southern edge of the marsh area are three small marshes (spot marshes), each about 200 square feet in size, that are fenced and have not been grazed for about 10 years. One hundred feet to the north is a more extensive, relatively flat marsh which is heavily grazed. Ten feet farther north is the largest of the marshes. This marsh is the one studied by Phipps and Speer (1958) and is extremely diverse. It consists of a steep hillside section, a low section in a depression at the base of the hill, and a high section which slopes about 10 degrees to the west from the seep line. No part of this marsh has been grazed since 1967, and the northern part was ungrazed when Phipps and Speer conducted their study. To the northeast of this large marsh are four small marshes, similar to the spot marshes to the south.

As a result of the present study, a number of plant species were found in and surrounding the marshes that have not been reported for Coles County, Illinois, by Jones and Fuller (1955) or Winterringer and Evers (1960). Of these, some are relatively common; others are extremely rare, having been reported sporadically or not at all from East-central Illinois. Included in this latter group are *Aster lucidulus*, *Carex*

sterilis, *Eupatorium fistulosum*, *Pilea fontana*, *Rudbeckia sullivantii*, *Solidago patula* and *Spiranthes gracilis*.

In the following list, the species followed by an asterisk were previously reported as occurring in Coles County by Phipps and Speer (1958) but were not incorporated into the checklist of Winterringer and Evers (1960). The monocots listed by Phipps and Speer were discussed by Ebinger (1967); and a reevaluation of the dicots in their list revealed that, of the new records they reported, three were identified incorrectly. Their *Epilobium adenocaulon* is *E. coloratum*, which is a new record for Coles County; their specimen labeled *Phlox glaberrima* is *P. divaricata*, while their *Helianthus annuus* should be referred to as the already reported *Rudbeckia hirta*. Phipps and Speer also listed *Viola cucullata* as a new record, but their specimen of this species could not be found.

The checklist which follows contains 56 vascular plants found at the hillside marsh that have not been recorded previously for Coles County, Illinois. The nomenclature of this list follows that of Jones (1963). Each species is followed by a brief note concerning the habitat in which it was collected, the collector's name and field number. All specimens are deposited in the herbarium of Eastern Illinois University.

CYPERACEAE

Carex festuacea Schk. In low marsh and moist lowland woods; Mueller 705.

Carex sterilis Willd. In high marsh and ungrazed pasture; Mueller 820.

Carex stipata Muhl. In all areas of the marsh; Parker 44.

Eleocharis erythropoda Steud. In grazed marsh; Mueller 819.

GRAMINEAE

Muhlenbergia mexicana (L.) Trin. In open pasture below marsh areas; Mueller 896.

LILIACEAE

Allium tricoccum Ait. Woods at edge of ungrazed spot marshes; Parker 75.

ORCHIDACEAE

Spiranthes gracilis (Bigel.) Beck Dry, grazed hillside above marsh area; Mueller 884.

BORAGINACEAE

Cynoglossum virginianum L. Wooded pasture below marshes; Mueller 832.

Lithospermum canescens (Michx.) Lehm. Dry eroded hillside above marsh; Ebinger 4296.

CAPRIFOLIACEAE

Lonicera prolifera (Kirchn.) Rehd. Vine on tree in shaded spot marsh; Parker 127.

Sambucus canadensis L. At edge of ungrazed spot marsh; Parker 123.

CARYOPHYLLACEAE

Cerastium vulgatum L. Open grazed pasture below marshes; Mueller 675.

Stellaria media (L.) Vill. Open, grazed pasture below marshes; Mueller 633.

CELASTRACEAE

Euonymus obovatus Nutt. Ungrazed, wooded hillside above marshes; Mueller 637.

COMPOSITAE

- Aster lateriflorus* (L.) Britt. In all marsh areas; Mueller 940.
Aster lucidulus (A. Gray) Wieg. In high, ungrazed marsh; Mueller 938.
Aster simplex Willd. Open, grazed pasture below marsh; Mueller 931.
Bidens frondosa L. Edge of low marsh; Mueller 904.
Cirsium vulgare (Savi) Tenore Open, grazed pasture below marshes; Mueller 794.
Eupatorium fistulosum Barratt Scattered throughout the ungrazed marsh areas; Mueller 898.
Helenium autumnale L. Edge of low marsh; Mueller 886.
Helianthus tomentosus Michx. Edge of stream below marshes; Mueller 944.
Krigia biflora (Walt.) Blake Dry, grazed hillside above marsh areas; Mueller 677.
Prenanthes alba L. Wooded, ungrazed hillside above marshes; Parker 115.
Prenanthes altissima L. Edge of stream below marshes in woods; Mueller 946.
Rudbeckia sullivantii Boynt. & Beadle. Edge of low marsh and in moist pasture; Parker 111.
Solidago patula Muhl. Scattered throughout the ungrazed marsh areas; Mueller 902.
Solidago riddellii Frank. Edge of stream in pasture below marsh areas; Mueller 885.
- CONVOLVULACEAE
- Cuscuta gronovii* Willd. Parasite on *Impatiens* and *Solidago* in marsh areas; Parker 116.

CRUCIFERAE

- Sisymbrium officinale* (L.) Scop. Edge of stream in pasture below marsh areas; Mueller 679.

JUGLANDACEAE

- Carya glabra* (Mill.) Sweet. Woods above marsh; Mueller 848.

LABIATAE

- Agastache nepetoides* (L.) Ktze.* Drier part of spot marshes and pasture just below marsh; Ebinger 6494.

LEGUMINOSAE

- Amphicarpa comosa* (L.) G. Don.* Wooded, ungrazed hillside above marshes; Mueller 777.
Apios americana Medic.* Vine on *Salix discolor* in ungrazed high marsh; Mueller 775.
Desmodium cuspidatum (Muhl.) Loud. Open woods above marshes; Phipps and Speer 396.
Desmodium longifolium (T. & G.) Smyth. Lowland woods and pasture below marshes; Parker 118.

MORACEAE

- Morus tatarica* L. Open woods below marshes; Mueller 849.

ONAGRACEAE

- Circaea latifolia* Hill. Ungrazed woods below marshes; Parker 51.
Epilobium coloratum Muhl. In low marsh and hillside marsh; Mueller 782.

POLYGONACEAE

- Polygonum punctatum* Ell. In grazed marsh and low marsh; Mueller 905.
Rumex acetosella L. In grazed pasture below marshes; Mueller 811.

RANUNCULACEAE

Anemone virginiana L. Wooded, ungrazed hillside above marshes; Parker 37.

Clematis virginiana L. Edge of stream in open pasture; Mueller 774.

Thalictrum revolutum DC. Ungrazed open area at edge of stream below marshes; Mueller 665.

ROSACEAE

Agrimonia gryposepala Wallr. Ungrazed woods surrounding marshes; Mueller 743.

Fragaria virginiana Duch. In and just above hillside marsh; Parker 144.

RUTACEAE

Ptelea trifoliata L. Ungrazed woods below marsh; Mueller 662.

SCROPHULARIACEAE

Chelone glabra L.* Throughout the marsh areas; Mueller 906.

Dasistoma macrophylla (Nutt.) Raf. Edge of low marsh; Parker 42.

Lindernia anagallidea (Michx.) Pennell* In low marsh; Phipps and Speer 422.

Mimulus ringens L.* Scattered throughout most of the marsh areas; Mueller 763.

Veronica catenata Pennell* Standing water in marsh; Phipps and Speer 369.

SOLANACEAE

Physalis heterophylla Nees In open pasture below marsh; Ebinger 6495.

UMBELLIFERAE

Oxypolis rigidior (L.) Raf. Scattered throughout most marsh areas; Ebinger 6497.

Torilis japonica (Houtt.) DC. In moist pasture just below marshes; Parker 89.

URTICACEAE

Pilea fontana (Lunell) Rydb. Throughout all marsh areas; Mueller 876.

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