

SOME UNUSUAL PLANT FINDS FROM JACKSON COUNTY, ILLINOIS

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ABSTRACT

During a two-year study of Cedar Lake Reservoir in southeastern Jackson County, Illinois, a number of rare and unusual plants were discovered. Seven plant taxa were recorded that had not been previously reported from the state of Illinois, and fifty-one plants were documented which were new for the county. In addition, four proposed federally threatened species (Azensu and DeFilipps, 1978) and five species of concern within the state of Illinois (Illinois Department of Conservation, 1980) are listed.

INTRODUCTION

The study was conducted on approximately 3,200 acres of rugged, mostly wooded hills surrounding Cedar Lake Reservoir in southern Jackson County. It was begun in September, 1975, and concluded in April, 1977. Sources for identification were as follows: Mohlenbrock (1975), Gleason (1963), Jones (1963), Steyermark (1963), Fernald (1950), and Bailey (1949). Nomenclature follows Kartesz and Kartesz (1980) except where noted. State and county record plants were determined through distributional data (Mohlenbrock, 1975). All specimens are on deposit at the Southern Illinois University Herbarium (SIU).

Seven plant records, including five species and two varieties, were documented for the state. These taxa are detailed below:

Solidago arguta Ait. Inhabiting the edge of an upland wooded slope, this collection was the first authentic one of this species in Illinois. Even though Fernald (1950) considers Illinois to be within the distribution of this species, neither Jones *et. al.* (1955) nor Mohlenbrock (personal communication) know of any prior collection of this taxon in the state. Mohlenbrock (1975) records *S. arguta*, but this report is based on a collection of *S. strigosa*, a taxon considered by Mohlenbrock at that time to be equivalent to *S. arguta*.

Solidago hispida Muhl. var. *lanata* (Hook.) Fern. This record variety, found growing in a narrow crevice on a sandstone blufftop, had previously been collected in Illinois but those collections had been assigned to the typical variety. Fernald (1950) gives this variety a very northern distribution, including Maine and parts of southern Canada. The conspicuously lanate stems and pilose leaf-surfaces strongly distinguish this taxon from the typical variety.

Diarrhena americana Beauv. var. *americana*. Herbarium searches have shown that this typical variety has been collected before in the state, but erroneously placed in the genus *Bromus*. Several small colonies of this unusual grass

were found in mesic woods at Cedar Lake. The variety *obovata* is a more plentiful plant.

**Polygonum hydropiperoides* Michx. var. *bushmanum* Stanford. Known from only one site in the study area, the edge of a rocky stream in rich, moist woods, this variety was reported previously from "Kentucky to Kansas and Oklahoma" (Fernald, 1950).

Castanea mollissima Blume. A number of Chinese Chestnuts were found growing in and around old homesites at Cedar Lake. Several appear to have propagated spontaneously in a roadside ditch near the lake's northern end.

Rosa rubrifolia Vill. Its red-tinged foliage makes this native of the mountains of central Europe (Bailey, 1949) an attractive and frequently cultivated shrub. A large example of this species occupies a roadside near an abandoned homesite.

Tamarix gallica L. This species is introduced and naturalized from southern Europe. Until this collection, its easternmost point of distribution had been Missouri (Steyermark, 1963). A long-abandoned farmyard provides habitat for this taxon.

A total of fifty-one taxa not previously reported for Jackson County were collected during this study, the most noteworthy of which are the following:

Bromus nottawayanus Fern. Known before from the counties of Cook, Peoria, Stark, and Woodford, *B. nottawayanus* was found growing in three localities in mesic woods at Cedar Lake.

Poa autumnalis Muhl. A small number of plants of this species were discovered in moist woods at the southern end of the study area. The only previous report of this species in the state was from Pope County.

Poa pratensis L. ssp. *angustifolia* (L.) Gaudin. A rather large population of this taxon grows in open soil, adjacent to the margin of a wooded slope. This makes the second authentic locality for this plant in Illinois. It was found first in moist woods in Union County.

Muhlenbergia x curtisetosa (Scribn.) Pohl. One of the rarest of the Illinois Muhly grasses, this hybrid grows abundantly in a moist field.

Carex laxiflora Lam. This species was known before from only Pope County. It was found on a moist, wooded slope.

Carex striatula Michx. Also inhabiting mesic woods, this rare plant was previously restricted to Pope and Union Counties.

Tipularia discolor (Pursh) Nutt. The rare Crane-fly Orchid, with distribution in extreme southern Illinois was found growing in several small colonies in a rich, mesic, wooded tract at the southwestern end of the study area.

Cimicifuga rubifolia Kearney. A small clump of Black Cohosh was observed in only one locality during the study. Prior Illinois material had come from Pope, Hardin, and Massac Counties in extreme southeastern Illinois.

Rubus roribaccus (Bailey) Rydb. Pope County had been the only reported site for this taxon in Illinois. The velvety lower leaf-surfaces help distinguish this species from the common Dewberry, *R. flagellaris*.

Other taxa representing county vouchers are:

Cystopteris fragilis (L.) Bernh.

Pinus echinata P. Mill (introduced)

Pinus sylvestris L. (introduced)

*Treatment according to Fernald (1950)

Avena fatua L.
Digitaria filiformis (L.) Koel.
Agrostis scabra Willd.
Panicum philadelphicum Bernh.
 **Panicum perlongum* Nash
Setaria viridis (L.) Beauv. var.
 major (Gaudin) Pospichal
Muhlenbergia bushii Pohl.
Eleocharis erythropoda Steud.
Carex gracillima Schwein.
Carex austrina (Small) Mackenz.

Carex socialis Mohlenbr. & Schwegm.
Carex careyana Torr.
Lemna obscura (Austin) Daubs
Hybcys marginatus Rostk.
Hemerocallis lilio-asphodelus L. (introduced)
Iris x germanica L. (introduced)
Spiranthes magnicamporum Sheviak
Alnus glutinosa (L.) Gaertn. (introduced)
Ulmus pumila L. (introduced)
Polygonum buxiforme Small
Chenopodium pallescens Standl.
Ranunculus carolinianus DC.
 **Delphinium ajacis* L. (introduced)
Rorippa truncata (Jepson) Stuckey
Sedum sarmentosum Bunge (introduced)

Prunus cerasus L. (introduced)
Prunus avium (L.) L. (introduced)
Rosa canina L. (introduced)
Wisteria macrostachya Nutt.
Vitis rupestris Scheele
Voila affinis LeConte
Ludwigia leptocarpa (Nutt.) Hara
Oenothera fruticosa L. ssp. *fruticosa*
Cuscuta corylii Engelm.
Viburnum opulus L. (introduced)
Rudbeckia fulgida Ait.
Aster dumosus L.
Artemesia absinthium L.
Bidens tripartita L.

The following is a list of endangered (E) or threatened (T) plants observed at the Cedar Lake study area. A double asterisk (**) identifies the proposed federally

*Treatment according to Fernald (1950)

listed species (Azensu and DeFilipps, 1978); the remaining taxa are of concern within the state of Illinois (Illinois Department of Conservation, 1980).

**T *Dodecatheon frenchii* (Vasey) Rydb.

E *Poa autumnalis* Muhl.

E *Solidago arguta* Ait.

E *Carex austrina* (Small) Mack.

E *Carex striatula* Michx.

**T *Carex socialis* Mohlenbr. & Schwegm.

E *Rorippa truncata* (Jepson) Stuckey

**T *Hydrastis canadensis* L.

**T *Panax quinquefolium* L.

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