

SILPHIUM TRIFOLIATUM IN ILLINOIS

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ABSTRACT

The first record of occurrence of *Silphium trifoliatum* in Illinois is reported.

RESULTS AND DISCUSSION

While at the candidate Barker Bluff Research Natural Area, Hardin County, Illinois, a small population of *Silphium trifoliatum* L. was found by staff members of the Natural Land Institute. This represents the first record of occurrence of this species in Illinois.

Four stems of *Silphium trifoliatum* were observed near the edge of dry upland forest in a somewhat shaded site, but open limestone glade habitat was less than 10m away. Tentative identification of the plants was made in the field based on the authors familiarity with the species in southern Indiana. Identification was confirmed by using keys to *Silphium* in Fernald (1950) and Gleason (1952). The range of this species is given in these volumes as Pennsylvania and Indiana south to South Carolina, Georgia, and Alabama. Habitats given include woods, openings, and prairies.

Barker Bluff has remnants of what was probably the largest limestone glade system in Illinois. Parts of the bluff to either end have been destroyed by quarrying. The research natural area candidate is on land managed by the Shawnee National Forest. Barker Bluff was first recognized as a significant natural area during the Illinois Natural Areas Inventory. Communities identified at this site were limestone glade and dry upland forest. Because the forest is open and the glades are brushy, distinguishing between these was, and is, nearly impossible in much of the area. Forest trees are typical of dry limestone slopes in the Lesser Shawnee Hills: *Quercus prinoides*, *Q. stellata*, and *Juniperus virginiana*. This is also one of the few native sites for *Robinia pseudoacacia* in the state. The forest is open with an uneven canopy of limby trees. Limestone glades are dominated by *Andropogon scoparius* and *Sorghastrum nutans*. Common forbs include *Euphorbia corollata*, *Petalos-*

temon candidum, *Lithospermum canescens*, and *Physostegia virginiana*. These grasses and forbs are scattered throughout the forested part of the site.

Barker Bluff is part of the scarp face of the Spar Mountain Escarpment, a cuesta overlooking the Ohio River. The glades appear on the Shetlerville Limestone of the Mississippian System. These communities are similar to the limestone glades of Kentucky, Tennessee, and southern Indiana. The discovery of *Silphium trifoliatum* indicates the possibility that other southeastern glade species may be present.

The specimen (S. Olson; 25Sep86; #444) is deposited in the herbarium of the Illinois Natural History Survey, Champaign, Illinois (ILLS).

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LITERATURE CITED

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- Gleason, H.A. 1952. The new Britton and Brown illustrated flora of the northeastern United States and adjacent Canada, in three volumes. Hafner Press, New York.