

ISOETES ENGELMANNII A. Br.
Appalachian Quillwort

FAMILY: Isoetaceae

SYNONYM: *Isoetes engelmanni* A. Br.

HABIT: Submersed or emerged tufted perennial to 6 dm.; sporulating throughout the growing season.

SIMILAR SPECIES: The onion-like tufts of quillwort are easily confused with numerous types of aquatic monocots, bur-reeds, rushes, bulrushes, etc., from which they can be distinguished by the hollow leaf bases which contain sporangia. Most species of quillworts are similar to one another. Species identification requires high magnification of the spores.

TOTAL RANGE: NH to FL, w. to IN, IL, se. MO, and MS.

STATE RANGE (as of 2008): Post-1980 records are from Scioto and Trumbull counties. Pre-1980 records are from Champaign, Clark, Mahoning, and Portage counties.

HABITAT: In open sun in shallow bodies of water; pond margins, ditches.

HAZARDS: Sudden changes in water level; overgrowth by other aquatic species.

RECOVERY POTENTIAL: Unknown, but possibly good; it has been found in newly created ponds.

INVENTORY GUIDELINES: Collect complete, mature specimens.

COMMENTS: Quillworts as a group are poorly known and rarely collected. The obscure appearance and difficulties in identification discourage most botanists. These species should be sought throughout the state. Some authors recognize more than one variety in *I. engelmannii*. Using this concept, the Ohio plants would be the typical variety.

SELECTED REFERENCES:

Boom, B.M. 1982. Synopsis of *Isoetes* in the southeastern United States. *Castanea* 47: 38-59.

Cranfill, R. 1980. Ferns and fern allies of Kentucky. Kentucky Nature Preserves Commission Scientific and Technical Series No. 1. 284 p.

Taylor, W.C. 1979. Lessons in pteridology No. 8. Quillworts. *Fiddlehead Forum* 6(3): 2.



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