

UTRICULARIA INTERMEDIA Hayne
Flat-leaved Bladderwort

FAMILY: Lentibulariaceae

HABIT: Herbaceous perennial by means of overwintering buds, flowering May-September; fruiting July-September.

SIMILAR SPECIES: Similar to other aquatic *Utricularia* species, but its less branched and untangled growth makes it more conspicuous than others. The bladders, borne on specialized, generally non-leafy branches, are distinctive. Bladderworts may superficially resemble many other aquatic plants such as an aquatic *Ranunculus*, *Ceratophyllum*, or various algae. However, the macroscopic bladders will always identify a *Utricularia*.

TOTAL RANGE: This is a circumboreal species. Its North American distribution is from Greenl. and Nfld. to AK, s. to N.S., N.E., L.I., n. DE, PA, OH, n. IN, n. IL, n. IA, and CA.

STATE RANGE: There are post-1980 records from Champaign, Clark, Logan, Miami, Portage, Stark, Summit and Williams counties. There are pre-1900 records from Lake and Wayne counties.

HABITAT: In full sun, in both bogs and fens; floating or rooted in mud in quiet, shallow waters.

HAZARDS: Drainage of the habitat; overgrowth by woody species through succession.

RECOVERY POTENTIAL: Unknown, possibly poor due to the limited habitat.

INVENTORY GUIDELINES: Collect complete specimens, flowering if possible. With flowering material, note the relative lengths of the upper and lower lips of the corolla, as these key characters are readily obscured by pressing.

COMMENTS: The bladderworts are highly specialized plants that have attracted much interest and study. Interpretation of various parts of a *Utricularia* plant (assigning them to roots, stems, or leaves) is difficult or impossible. Embryo or seedling development is also unique, and no standardized morphological terminology has been adopted. Such terms as "stem-like structures," "foliar units," and "cotyledonoids" have been used.

Bladders or traps are present on all members of the genus. The bladders actively capture prey, both animal and vegetable. The prey triggers hairs on a door or valve of the trap. The door opens inward only, sucking in the prey, and quickly closes to form a tight seal. Elimination of water inside the trap forms concave walls. The trap is then ready to be triggered again. The walls flex outward, sucking in new prey. The traps of a healthy plant can function again after about thirty minutes. The prey remains alive for various times in the traps, but the prey eventually decomposes and is assimilated into the *Utricularia* plant.

This species oftentimes does not flower. Vegetative reproduction is by means of overwintering buds or turions. These turions are formed late in the year from reduced leaves produced on stems with highly compressed internodes, forming a firm ball that becomes covered with mucilage. The turions resume growth in the spring.

Although rather more conspicuous than other Ohio bladderworts, it is easily overlooked except when in flower. It should be sought in suitable habitats throughout glaciated Ohio.

SELECTED REFERENCES:

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