UTRICULARIA MINOR L. Lesser Bladderwort

- FAMILY: Lentibulariaceae
- HABIT: Herbaceous perennial by means of overwintering buds; flowering May- August; fruiting July-September.
- SIMILAR SPECIES: Very similar to *Utricularia gibba*, and difficult to distinguish from that species in vegetative condition. The ultimate "leaves" of *U. minor* are flat. *U. gibba* has terete ultimate leaves. This character is often difficult to see, especially with pressed material. Bladderworts may superficially resemble many other aquatic plants such as an aquatic *Ranunculus* (especially *R. longirostris*), *Ceratophyllum*, or various algae. However, the macroscopic bladders will always identify the genus *Utricularia*.
- TOTAL RANGE: Circumboreal; in the western hemisphere from Greenl. and s. Lab. to B.C., s. to Nfld., N.S., N.E., L.I., n. NJ, PA, n. and cent. OH, n. IN, n. IL, IA, ND, CO, and CA.
- STATE RANGE: There are post-1980 records from Geauga, Hardin, Summit and Williams counties. There are pre-1980 records from Champaign, Columbiana, Licking and Portage 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 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 and seedling development are 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 the water inside the trap forms concave walls. The trap is then ready to be triggered again. The walls flex outward sucking in the 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.

This species is obvious only when in flower. It should be sought throughout glaciated Ohio.

SELECTED REFERENCES:

Cooperrider, T.S. 1995. The Dicotyledoneae of Ohio. Part 2. Linaceae through Campanulaceae. Ohio State Univ. Press, Columbus, OH. 656 pp.

Lloyd, F.E. 1942. The carnivorous plants. The Chronica Botanica Co., Waltham, MA. 352 p.

Rossbach, G.B. 1939. Aquatic Utricularias. Rhodora 41: 113-128.

Sculthorpe, C.D. 1967. The biology of aquatic plants. Edward Arnold Ltd., London. 610 pp.



Ohio Department of Natural Resources Division of Natural Areas and Preserves

Created: 3/1981 David Spooner