

AQUATIC CONTROL TECHNOLOGY, INC.

POND AND LAKE MANAGEMENT SPECIALISTS

Bladderwort Species in Quaddick Lake



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TECHNOLOGY**

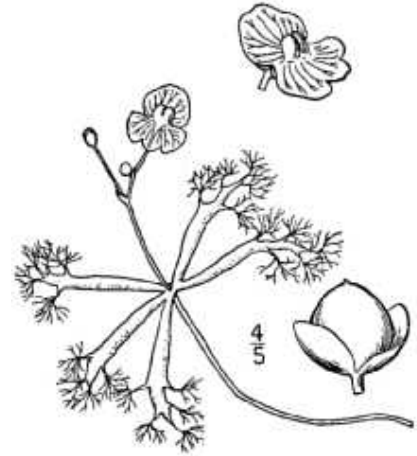
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The *Utricularia* genus (bladderwort) is one of the easiest submerged aquatic plants to recognize due to the bladders on the leaf-like branches of this carnivorous plant. Identifying the species within the genus can be just as simple, if one knows a few basic characteristics to look for. In the samples collected from Quaddick lake on July 9th 2008, two species were found, namely *Utricularia vulgaris* and *Utricularia radiata*, with the latter being dominant in the treatment areas. In a survey conducted in 1999, a third species was found, *Utricularia purpurea*.

Utricularia radiata

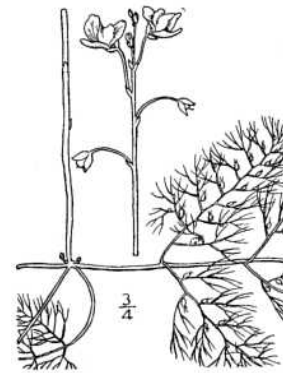
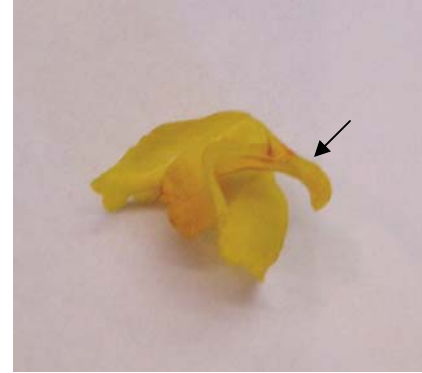


USDA-NRCS PLANTS Database /
Britton, N.L., and A. Brown. 1913.
*An illustrated flora of the northern United
States, Canada and the British Possessions.*
Vol. 3: 229

Characteristics:

When in flower *U. radiata* is most easily distinguished from other bladderwort species by the combination of inflated branches, which extend out from the base of the flower stalk, and three or four dull yellow flowers protruding from the stalk. Another species of bladderwort, *U. inflata*, also has inflated branches, however, *U. inflata* typically has between 9 and 14 bright yellow flowers. The submersed leaf-like branches of *U. radiata* are all alike and fork at the base into two equal branches. Above is a photograph of a sample collected at Quaddick lake as well as a line drawing the help with identification of the plant.

Utricularia vulgaris



USDA-NRCS PLANTS Database / Britton, N.L., and A. Brown. 1913. *An illustrated flora of the northern United States, Canada and the British Possessions*. Vol. 3: 229.

Characteristics:

Utricularia vulgaris bears no inflated branches. The plant is free floating and often found in shallow waters. The stalk or scape bears between 6 and 10 yellow flowers when mature. The portion tubular portion of the flower that extends out is called the spur (indicated in the above picture with an arrow). On *U. vulgaris* the spur extends 3mm or longer. The leaf-like branches which bear the bladders are divided at least six times and the segments of the leaves have small serrations called spicules along their margins (requires magnification to visualize). Pictured above is a sample of *U. vulgaris* collected at Quaddick lake, as well as a close up the flower from the sample and a line drawing to help with identification.

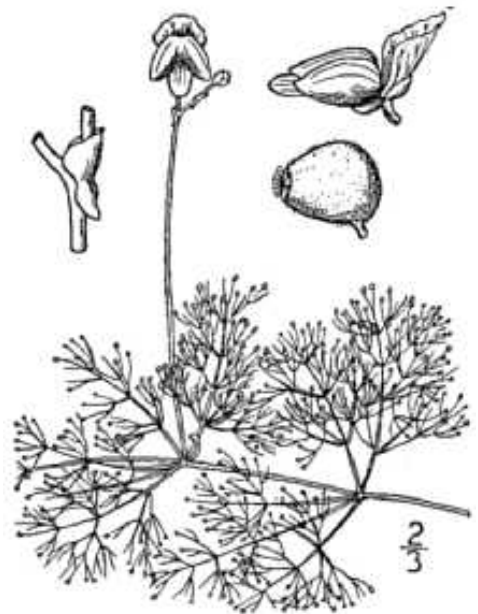
Utricularia purpurea

Characteristics:

Though as stated previously *Utricularia purpurea* was not found among the plant samples taken in 2008 it was previously recorded in Quaddick Lake in 1999 and therefore warrants a closer look for anyone attempting to identify the species of bladderwort in Quaddick Lake. *U. purpurea* bears purple flowers, just as the sound of the name suggests. It does not have inflated braches. The submersed leaf-like branches are whorled around the stem. This last characteristic sets this species apart from the previous two species in that with the other species discussed in this publication, the branches are generally arranged in an alternate pattern off of the main stalk. As with the other species a color photo and line drawing are provided to help with identification.



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Resources

- ◆ Crow, Garret and Hellquist, C.Barre Aquatic and Wetland Plants of Northeastern North America:volume1.2000.The University of Wisconsin Press,. Madison, Wisconsin.
- ◆ USDA, Natural Resource Conservation Service Plants Database <<http://plants.usda.gov/>> 07-07-08 accessed 07-11-08.