

# Great Bladderwort

*Utricularia vulgaris*

-Great Bladderwort (a.k.a. Common Bladderwort) is a carnivorous plant that has floating stems that can reach 2-3 meters in length. Along the stem are leaf-like branches that are finely divided. The divisions are filament-like, have no mid-rib, and fork 3-7 times. Scattered on these branches are the bladders that trap prey. Young bladders are transparent and green tinted, but they become dark brown to black as they age.

-Yellow, two-lipped flowers are produced on stalks that protrude above the water surface. There may be 4-20 flowers per stalk. The upper lip of the flower creates an awning over the saclike pouch and sickle-shaped spur of the lower lip. The plant is branched in several directions at the base of the flower stalk. This creates a stable base that keeps the top-heavy flower stalk from capsizing.

-Super cool science stuff: Lightning fast traps capture unsuspecting prey and slowly digest them. Prey range in size from the one-celled protozoan to creature the size of mosquito larvae. The bladder entrance is sealed with a flap-like hinged door and a smaller flap called the velum. The closure is made watertight by mucilage produced by glands on the surface of the bladder. Inside the bladder, specialized glands regulate water pressure by absorbing water and passing it through the trap walls. When set, the bladder walls are concave due to negative pressure inside. Antennae-like projections and trigger hairs surround the entrance. The antennae are thought to guide prey toward the trap door where they are attracted by sugary mucilage secreted by glands at the trap entrance. Prey brush against the trigger hairs, breaking the tension on the door seal and the prey is swept into the trap with a rush of water. The water is gradually withdrawn over 20 minutes, resetting the trap.

-I give Great Bladderwort's evolutionary traits two opposable thumbs up!

