

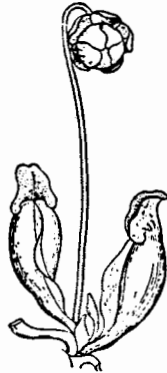
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# Natural History Notes

MIKE DOMBECK grew up in the Moose Lake area, attended Hayward Public Schools, University of Wisconsin-Stevens Point, University of Minnesota, and Iowa State University. He has a Ph. D. in Fisheries Biology. Mike has worked as an area fishing guide, taught Zoology at UW-Stevens Point, and is now a fisheries biologist with the USDA Forest Service, living in Park Falls, Wisconsin.

## THE PITCHER PLANT



Pitcher Plant

The pitcher plants are probably one of the more interesting plants found in this area. This small group of low perennial herbs has the unusual feature of leaves specialized for trapping insects and other tiny animals. Pitcher plant is a common name for an insectivorous plant with pitcher shaped leaves.

Pitcher plants are found in a wide range of places, the most common being peat and sphagnum bogs and other low moist areas. There are three genera of pitcher plants. One genus is found in South America, one in California and Oregon, and the remaining genus, *Sarracenia*, is found almost entirely in the southeastern United States. The exception to this is the species, *Sarracenia purpurea*, which is found in peat bogs across Canada from Labrador to Great Bear Lake and from the Arctic Circle southeast through central and northeast North America to as far south as Florida. It is the most widespread species of pitcher plant and is the one found in this area.

*S. purpurea* has heavily veined green to reddish jug-like leaves with maroon stripes on a greenish yellow background. It has a globular purple flower on a leafless stem.

The most unusual feature is, of course, the "pitchers" of the plant. These are hollow tubular leaves containing a liquid essential for the digestion of insects. On the upper surfaces of these leaves are nectar glands which attract insects. In *S.*

*purpurea*, the leaves are somewhat sunken in moss so terrestrial as well as flying insects are trapped. After an insect is attracted by the nectar, it lands on the brim of the leaf which is covered with a waxy substance that crumbles under the weight of the insect and it falls into the liquid in the bottom of the leaf. Downward pointing hairs on the inner surface of the leaf, combined with an extremely slick surface, make it very difficult — if not impossible — for the trapped insect to escape. Eventually the insect drowns. Glands near the bottom of the leaf secrete an enzyme that, along with certain bacteria, digest the insect.

Pitcher plants do photosynthesize and therefore manufacture their own food. It is thought that this insect catching and digesting mechanism is a way to gain nitrogen, although pitcher plants receive most of their nutrients from the soil.

The liquid in the bottom half of the leaf is clearer than the water in the surrounding bog, and people have drunk it with no problem. This is most likely from where the common name, huntsman's cup, came. However, keep in mind that the bottom of the leaf contains insects in various stages of decomposition. Also, you must be very thirsty to drink any liquid that can digest the shell and white of a hard-boiled egg!

Other common names for the pitcher plant are sidesaddle flower, Indian dipper, whip-poor-will's boots, and flytrap. Pitcher plants have relatively minor economic importance. Some are cultivated as curiosities. It was once thought that the roots had medicinal properties but it has never been proven.

Pitcher plants reproduce vegetatively by means of an underground rhizome or root system. They also produce a great number of seeds that ripen in late summer.

The pitcher plants are an interesting and unusual group. But certain myths told about these plants are simply untrue. For one thing, a pitcher plant will not trap all the flies in your house. For another thing, there are no man-eating plants. As a matter of fact, the largest animal a pitcher plant was ever known to digest was a cockroach; and that was so traumatic to the plant that it died, too.