

**Pitcher Plant    Threatened    IUCN 2.3**  
***Sarracenia alata* ( Sarraceniaceae)**



If an insect approaching a pitcher plant could talk, we might hear this:

*Good smell – oh, it's that plant with a hood over it – I'm going to check it out. I'll just land on these downward-pointing hairs and follow them. Oh, great nectar but this waxy surface is a little slippery. I'll follow some more of these downward-pointing hairs. These hairs are very fine and I feel some juices around me – getting dizzy. Whoops – I've fallen into a pool of liquid. I'm stuck in some really coarse hairs. I can't fly up. I'm drowning. That's it. I am nothing but an exoskeleton now.*

*Sarracenia* is a genus comprising the nine species of North American pitcher plants. They are carnivorous plants indigenous to the eastern seaboard, Texas, the Great Lakes area and southeastern Canada, with most species occurring only in the southeastern United States (only *S. purpurea* occurs in cold-temperate regions).

*Sarracenia* are herbaceous perennial plants that grow from a subterranean rhizome, with many tubular pitcher-shaped leaves radiating out from the growing point, and then turning upwards with their trap openings facing the centre of the crown.

The plant's leaves evolved into a funnel in order to trap insects. These leaves produce enzymes to digest their prey. The insects are attracted by a nectar-like secretion on the lip of pitchers, as well as a combination of color and scent. Slippery footing at the pitchers' rim causes insects to fall inside, where they die and are digested by the plant as a nutrient source. The hoods keep flying prey from escaping and also keep rain water out so that the poisonous fluid at the bottom doesn't become diluted.

In common with many carnivorous plants, *Sarracenia* usually inhabit permanently wet regions with a low pH. Their nutrients, particularly nitrates, are continuously leached away by water or made unavailable by the low pH. *Sarracenia* gain a competitive advantage over other plants from the substances they extract from their animal prey.

Currently the threats to surviving populations are urban development, drainage of habitat for forestry, runoff of herbicides from agriculture, fire suppression, and cut pitcher trade for floristry and trade. The latter two threaten survival of *Sarracenia* not only through depletion of the population but also because of the damaging effects of repeated foot and vehicular traffic that comes with harvesting. The Fish and Service estimates that approximately 1.6 million pitchers were cut for the domestic market. *Sarracenia* losses are huge. It is estimated that since the 1930's something like 95% of all sites no longer exist.



*Sarracenia alata* in Lewis' Ocean Bay Heritage Preserve South Carolina

Sources: <http://www.nationmaster.com/encyclopedia/Sarracenia>  
<http://www.thecps.org>