Butterflies Feed at White-Topped Pitcher Plants

by Marc C. Minno and Jeffrey R. Slotten

White-topped pitcher plant (Sarracenia leucophylla) is one of six species of pitcher plants that occur naturally in Florida. The trumpet-shaped leaves are held erect and range to about three feet in height. The upper portion of the leaf is white with green and red veins. The lid is crinkled along the margins. The mouth of the pitcher is very wide and bears large hairs on the lid and throat. The flowers are dark red. Unlike most of the other species, S. leucophylla not only produces new pitchers with the flowers in spring, but also another more abundant set in late summer. White-topped pitcher plant often grows in dense stands on seepage slopes and bogs in the western Florida Panhandle, where the showy pitchers form a spectacular display.

During a survey for rare butterflies at Eglin Air Force Base, Carl Petrick, Natural Resources Manager, showed us an area thick with white-topped pitcher plants. An intriguing characteristic of the site was a rich floral aroma, similar to honey. At first, we judged the source of the fragrance to be the great number of wildflowers blooming among the pitcher plants. However, further investigation proved us wrong.

Just before dusk on October 3, 1997, we observed two Monarchs (Danaus plexippus) perching on the lids or lips of S. leucophylla. The butterflies' probosci were extended and could be seen gently probing the underside of the lid and throat. These areas of the plant are covered with hairs as well as glands that produce droplets of nectar attractive to insects. We smelled the mouth of the pitchers and confirmed that the honey-like fragrance was coming not from other flowers, but from the throats of white-topped pitcher plants. The nectar had a rich, sweet taste. In addition to the monarchs, we saw at least eight Mournful Sphinx moths (Enyo lugbris) hovering over the throats of the pitcher plants and feeding at the nectar.

The next morning we found one Common Buckeye (Junonia coenia), two Long-Tailed Skippers (Urbanus proteus), two Gulf Fritillaries (Agraulis vanillae), and an Ocola Skipper (Panoquina ocola) landing on the pitchers and feeding on the nectar. Donald Schnell (1976, Carnivorous Plants of the United States and Canada, John F. Blair, Publisher, Winston-Salem, North Carolina) notes that S. leucophylla pitchers generally contain more trapped insects than those of other species. The butterflies and moths that we observed were robbing nectar — and did not getting caught.

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