Serendipity in the Oak-Pine Woods

By Susan Camp

Merriam-Webster defines serendipity as “the faculty or phenomenon of finding valuable or agreeable things not sought for.” This statement describes the phenomenon, but sounds rather soulless. I read a definition a long time ago describing serendipity as “the art of finding treasure in unexpected places.” I think the second definition more closely describes the experience a few weeks ago of Gloucester Master Gardener Nancy Choquette. Nancy had seen a cranefly orchid in a friend’s yard, and didn’t expect to find the dainty member of the orchid family on her own property, but one day, she saw one cranefly orchid (Tipularia discolor), and soon discovered a patch of the delicate plants in her woods.

Of the three species of Tipularia, T. discolor, the cranefly or crippled cranefly orchid, is the only species found in North America. Of the other two species, one grows in Japan and one in the Himalayas. The perennial cranefly orchid is found primarily in humus-rich, acidic oak and pine forests along slopes and stream banks in the eastern United States from New York to Florida and west to Michigan, Indiana, Illinois, Oklahoma, and Texas. Cranefly orchid is listed as threatened, endangered, or rare in New York, Pennsylvania, and Michigan, but grows prolifically in other states. In Virginia, it is most often found in the Coastal Plain and Piedmont and at lower elevations in the mountains.

The growth habit of T. discolor is unusual, and may be a reason why it is often overlooked, even though it is easy to recognize once you find your first one in the woods. In September or October, the cranefly orchid produces a single, oval, green or purplish-green leaf, purple on the underside, which remains on the plant until late spring, then reappears in the fall. The leaf allows the orchid to produce chlorophyll for nutrition from sunlight during the winter months, when the deciduous trees are bare.

Each 15 to 20-inch flower stem, which grows from a small corm in the spring, remains leafless. The flowers extend asymmetrically the length of the stem, twisting to either the left or right. The tiny, summer-blooming orchid flowers are yellow, green, or bronze-purple and not very showy. A long spur extends from the back of each flower, leading to its resemblance to the cranefly, a long, skinny, flying insect that doesn’t bite, but often is mistaken for a mosquito.

Cranefly orchid flowers produce a nectar that entices hungry insects, especially owlet moths, which are the primary pollinators of cranefly orchids. When an owlet moth lands on a cranefly orchid flower, it thrusts its mouthparts into the flower to reach the nectar stored in the spur. A packet of pollen can attach itself to one of the moth’s compound eyes. The pollen packet then will be deposited on the next cranefly flower the moth encounters.

Cranefly orchids can be purchased from reputable nurseries that specialize in native plants. Make sure that purchased orchids have been grown from seed or tissue culture and not collected from the wild. As with all native plants, refrain from digging them up and moving them to your yard. It is likely they will not survive being transplanted.
The USDA Forest Service Plant of the Week entry “Crane-fly Orchid (Tipularia discolor)” and Georgia Gwinnett College publication “Tipularia discolor” provide information on this interesting native orchid.

The Middle Peninsula abounds in forested areas; many of us have our own patches of woods on our property. Early fall is a terrific time to explore the woods, looking for unusual plants like T. discolor and Indian pipe (Monotropa uniflora) which remains a ghostly white, due to its lack of chlorophyll. Interesting formations of mushrooms and colorful lichens make unique subjects for nature photographs. Join local nature walks led by experts on forest plants, insects, animals, and birds. Your serendipity may be waiting under the next tree or in a hollow log.

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