

Aphrodite's Sandal

By Susan Camp

Serendipity can be defined as the art of finding treasure in unexpected places and spring is the best time of year to discover nature's riches peeping up from the ground or just coming into leaf and blossom. A few days ago, Gloucester resident Gail Baker posted on Facebook a photograph she had taken of a lady slipper orchid on her property. Immediately, I knew what this week's Gardening Corner topic would be. I asked Gail to send me the photo and she was kind enough to oblige.

Cypripedium is the genus name of these lovely woodland dwellers. The name is a derivation of the Greek words that mean "Aphrodite's sandal", in reference to the goddess of love. About 50 species of Cypripedium are native to North America, Europe, and Asia, ranging from those that thrive in tropical climates to hardy lady slippers that live in northwest Canada and Alaska. The United States can claim twelve species of wild orchid; eleven species grow on National Forest lands, where it is illegal to pick or harvest them.

The most commonly found species in the eastern United States is Cypripedium acaule, the pink lady slipper or moccasin flower. Pink lady slipper ranges in height from 6 to 15 inches. Two opposite basal leaves grow at ground level. An erect, leafless stalk bears a single, large pink to magenta flower with petals that are fused, except for a tiny opening. Occasionally, the petals are whitish-pink with deeper pink veins. Pink lady slippers bloom in our region from April to June in mixed hardwood or coniferous forests. Gail photographed her lady slipper "at the edge of mature woods with dense leaf compost." White-tailed deer and several species of insects eat pink lady slipper.

Cypripedium seeds must endure long periods of cold weather in order to germinate. The plant engages in a symbiotic relationship with a soil fungus of the Rhizoctonia genus. The fungus sends out hyphae, thread-like filaments that open the seedcase and deliver nutrients to the lady slipper seed, since, unlike other seeds, it cannot produce its own. Once the lady slipper plant is mature and producing its own food, the fungus will obtain nutrients from the plant's roots.

Lady slipper orchids are pollinated by bumblebees that are attracted by the sweet fragrance and bright color and enter through the tiny opening between the fused petals. The bees find no food inside the flower and cannot escape back through the entryway. They find a pair of exits at the back of the flower and pick up pollen on the way out. This pollen will be deposited in the next lady slipper and more gathered from the new plant.

Besides being difficult to grow from seed, pink lady slipper orchids do not transplant easily. They can be propagated by digging up a clump and dividing the rhizomes, as you would divide irises.

Lady slipper plants are available from commercial nurseries. They need rich, moist, acidic, well-drained soil in dappled sunlight. They do not tolerate full sun or dry conditions and are easily damaged by application of too much fertilizer. One website recommends watering with distilled water or rainwater. Lady slipper orchids are fussy plants and are best left to grow in their native habitats, where they can live for more than 20 years.

Most species of *Cypripedium* have a long history of medicinal use for nervous disorders, muscle spasms, and as a non-narcotic sedative. Tiny hairs on the leaves can irritate the skin of susceptible individuals, causing dermatitis similar to a poison ivy reaction.

The USDA Forest Service articles “Meet the Ladies: The Slipper Orchids” and “Pink Lady’s Slipper (*Cypripedium acaule* Ait.)” contain information and color photos of this springtime woodland wildflower.

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