SARRACENIAS

Grow Your Own Little Shop of Horrors!

By Ciscoe Morris

Known collectively as trumpet pitchers or American pitcher plants, sarracenias are perhaps the most popular carnivorous plants to grow at home. They belong to the Sarraceniaceae, a family of carnivorous perennials that also includes *Darlingtonia* (a single species native to California and Oregon) and *Heliamphora* (24

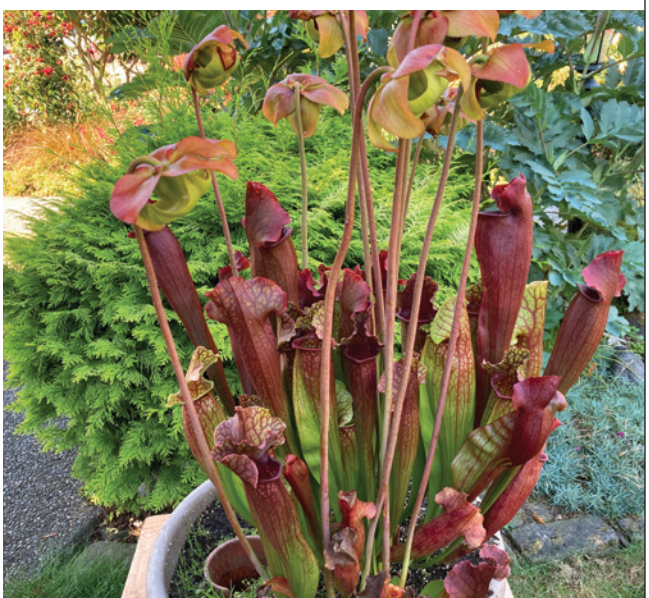
species native to South America). The plants in this family are called pitcher plants because they all evolved to capture and consume insects using specialized, vase-shaped leaves filled with digestive enzymes.

Sarracenias are beautiful as well as fascinating! A fun and interesting way to enjoy them is to create a carnivorous bog pot. Invite kids to help you with this project, and they will definitely become excited about gardening. I'll discuss how to make a carnivorous bog pot later in this article, but first a bit more about the plants themselves.

HARDY WETLAND PLANTS

All eight species in the genus *Sarracenia* are native to boggy areas of the east coast of North America. Seven of them are confined to the southeastern U.S. coastal plain, while one species, the purple pitcher plant, *Sarracenia purpurea*, has a very wide range stretching from the Northeast west across much of Canada. Extensive breeding programs have produced hundreds of sarracenia cultivars and hybrids with leaves that come in an ever-broadening variety of colors, and in sizes that vary from six inches to more than three feet tall.

All sarracenias are hardy to at least USDA Zone 8, which means they can tolerate extreme winter minimum temperatures of 10 to 15 degrees Fahrenheit. (As of 2023, Seattle is in USDA Zone 9, with average extreme lows of 20 to 25 degrees.) Even if you live in a colder climate, you can probably still grow *Sarracenia purpurea* subsp. *purpurea*, the northern subspecies of the purple pitcher plants, which is hardy down to Zone 3 (minus 40 to 35 degrees Fahrenheit).



HOW PITCHERS TRAP THEIR PREY

Sarracenias attract insect prey such as flies, yellow jackets and ants using a combination of bright leaf colors, sweet perfumes, and nectar rewards. The vase-shaped leaves, or pitchers, come in a wide array of colors—greens, yellow and purples, often with dark venation and elaborate patterning—that can lure potential prey, similar to how flower petals attract pollinators.

Nectaries on the lips of the pitchers emit sweet-smelling and sweet-tasting secretions that many insects find hard to resist. The nectar entices unsuspecting victims to lick their way upward over the top of the pitcher. If the insects venture to the edge, they encounter a very slippery, waxy, vertical surface that can cause them to lose control and tumble downward into the pitcher, where sharp, downward-facing hairs make escape extremely difficult. The exhausted victims eventually fall to the bottom, where they end up in a cauldron of digestive juices and become a gourmet treat for the plant.

Having watched quite a number of flies and yellow jackets fall prey, I strongly suspect there is a narcotic in the sweet-flavored secretions. You can almost see the disoriented-looking bugs flash peace signs as they topple into the entrance of the trap. It doesn't pay to have bad habits, and once the intoxicated victim enters the trap, there's little or no chance they'll ever show up at rehab.

The pitcher can perform all the regular functions of a leaf, such as photosynthesis (making sugar from sunlight), but it also has specialized adaptations for digesting insects and absorbing the nutrients. A special outgrowth (the operculum) at the top of each pitcher acts as a lid preventing the pitcher from filling up with rainwater and also camouflaging the opening, making it harder for trapped insects to find their way out.

UNUSUAL FLOWERS

Sarracenias have highly unusual flowers that are just as fascinating as the pitcher-shaped leaves. They look like a cross between an upside-down

umbrella and an UFO. Held on tall stems high above the pitcher traps, they are frequented by bumble bees and honey bees, but these pollinators are not attracted to the sweet secretions on the leaves. Momma nature is too smart to allow these carnivorous plants to catch their own pollinators.

Flower color varies according to species and cultivar—as well as across populations of the same species—but in general ranges from cream to yellow to reddish-orange to purple. Flowering time is typically early spring. Most species bear fragrant blooms.

MAKING A CARNIVOROUS BOG POT

Sarracenias are generally hardy enough to thrive outside year round in the Pacific Northwest, if planted in a container that is at least 20 inches tall and wide; however, if temperatures are forecasted to dip into the teens, I recommend temporarily moving the pot into an unheated garage.

Since pitcher plants live in bogs, the key to success is to simulate the conditions of a bog in your container. Begin by choosing a good-sized plastic or frost-proof ceramic pot that lacks a drainage hole at the bottom. Drill four holes in the sides about a quarter of the way down from the top, or ask the nursery folks to do it for you.

Various growing mediums are recommended, but the one that has worked best for me is a 50-50 mix of peat moss and perlite. (Renewable coconut coir fiber can be substituted for peat moss but may need to be soaked in water for hours, first, in order to remove salts that can damage the pitcher plants.) Using a tub or wheelbarrow, thoroughly mix the perlite into the peat moss and moisten the mixture before using it to fill the pot right up to the top.

Once the pot is full, plant your *Sarracenia* at the same depth as it came out of the nursery pot. The last step is to sink a small, four-inch houseplant pot (with a drainage hole in the bottom) into the planting mix. The top of the smaller pot should be level with the surface of the growing medium. Constantly wetting the leaves of pitcher plants can lead to fungus problems, so this smaller pot is where you add water to the container.

WATERING AND GROWING TIPS

Add water to the small pot until it comes out of the holes near the top of the big pot. This mimics how a bog works in nature. The soil in the sub level remains saturated, while the top four inches of soil remains only moist due to constant evaporation from the drenched subsoil below. It's best to add water to your *Sarracenia* pot every day. Some experts recommend watering with only distilled water, but I've been using Seattle tap water for years and have never had a problem.

Sarracenias are generally pest free, and little care is needed (other than daily watering) once your bog pot is planted up. Place your bog container where it will receive full sun, and never fertilize it. Bogs are naturally low in nutrients, and these carnivorous plants have evolved to derive nitrogen and other nutrients solely from the insects they digest—and they digest a lot of them!

For extra fun, at the end of summer, invite the neighborhood kids over and cut open one of the bigger pitcher-shaped leaves. You'll be amazed to see how crammed full the leaf is with the exoskeletons of flies, yellow jackets, and ants, and even partially-digested slugs and snails. One last note: Don't be tempted to show off for the kids and stick your finger in one of the vase-shaped leaves. Life just isn't the same with only nine fingers!

Ciscoe Morris is a Seattle-based gardening expert, TV and radio personality, educator and author. His radio show "Gardening with Ciscoe" airs every Saturday morning at 9 a.m. on KSQM FM 91.5. Find out more at www.ciscoe.com.