San Diego Zoo

Botanical Tours

Carnivorous Plants

The Bog Garden

Collections List

All carnivorous plants have one thing in common: an extremely poor, almost sterile environment where many plants would never survive, let alone thrive. Carnivorous plant habitats vary from acid bogs to alkaline pine barrens, from frigid streams of melting snow to steamy tropical rainforests.

The leaves of carnivorous plants are uniquely adapted to trap insects and other prey. Color and nectar attract prey, while amazing obstacles keep it from easily escaping. They use nutrients from the bodies of their prey to power flower, seed, and offshoot production.

To survive the harshest times of their extreme environments, many of the more than 645 species of carnivorous plants go dormant either in winter or summer. Some dormancy is triggered by drought or snow. In other cases, it is the length of daylight that sets the process in motion.

Venus Flytrap

Dionaea muscipula

Flytraps are one of a kind! They are part of a monotypic genus, which means it is the only species in the genus *Dionaea*. Flytraps use an active gesture to capture prey. An insect brushing against sensitive hairs on the inside surface triggers the trap to close. Acids and enzymes digest the prey for 7 to 10 days, then the leaves open again—ready for the next meal.

Fun Fact

Although widely available in cultivation, flytraps are vulnerable to overcollection and habitat loss in their native range. Wild populations grow only in the coastal plains of North and South Carolina and are protected by CITES.

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horticulture@sdzwa.org

Sundew

Drosera spp.

Sundews are one of the most widely distributed of all carnivorous plants. Australia, South America, and southern Africa have the most, but some of the more than 170 species are found in North America, New Zealand, and across Eurasia.

Fun Fact

Sundews come in many shapes, sizes, and colors, but all of them have sticky nectar-tipped tentacles on their leaves, which trap insects that stop for a taste. The tentacles also produce digestive acids and enzymes that dissolve the prey, so the plant can absorb the nutrients.

American Pitcher Plant

Sarracenia spp.

Species in this genus may be found growing east of the Mississippi into Canada, then west to Alaska. Their curled leaves form "tubes of death." Lured by color and a narcotic nectar, insects fall into digestive acids at the bottom of the pitcher. Slippery scales and downward-pointing hairs on the inside of the tube prevent escape.

Fun Fact

Not all insects become prey. Brightly colored flowers are the first part of the plant to appear in spring—the leaf traps form later. Early insect visitors pollinate the flowers, helping the plants reproduce.

Tropical Pitcher Plant

Nepenthes spp.

In addition to insects, members of this group sometimes eat frogs and small reptiles. There are more than 100 species of tropical pitcher plants, and most are found in Southeast Asia. Despite their tropical look, this group of carnivorous plants is one of the easiest to grow.

Fun Fact

Unsuspecting prey use the "wings" of the pitcher like a ladder to reach the edge of the tube. Slippery surfaces just inside the pitcher prevent escape. The plant-produced fluid inside the trap is quite effective at drowning prey—even when it has been diluted by rainfall.

California Pitcher Plant

Darlingtonia californica

This species is the only one within the genus *Darlingtonia*. It is found in northern California and Oregon, growing in bogs and seeps fed by cold water. The roots of this species are sensitive and require consistently cool temperatures to thrive.

Fun Fact

This species is often called the cobra lily due to its swollen, curled over hood with fang-like wings. The translucent windows on the top of the hood act as false exits to confuse prey.

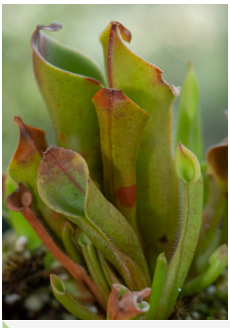
Australian Pitcher Plant

Cephalotus follicularis

This small species grows only in southwestern Australia. It grows as a small rosette in damp, sandy soils. In addition to prey-trapping pitchers, this species produces typical-looking photosynthesizing leaves. It is listed as Vulnerable by IUCN Red List of Threatened Species due to habitat loss and overcollection.

Fun Fact

This species is not closely related to any other carnivorous plant species, and is the only species in the family *Cephalotaceae*.



Marsh Pitcher Plant

Heliamphora spp.

Found on the table mountains of Venezuela, Brazil and Guyana, these plants form traps of rolled leaves with fused edges. Unlike other pitcher plants, these don't contain digestive enzymes. Instead, symbiotic bacteria living in the pitchers digest the prey and the plant absorbs the nutrients.

Fun Fact

Most species of *Heliamphora* grow as stemless rosettes, but a few such as *Heliamphora tatei* will grow into small shrubs.