

Watch Out! Little Green Monsters Lurk in Okefenokee

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Little green monsters in the swamp? When people think of Okefenokee National Wildlife Refuge (NWR), they often think of large predators such as alligators and black bears. But also within the refuge live much smaller but more devious predators. Carnivorous, or flesh-eating, plants that use deception to prey on, capture, and consume the unwary for their own survival.

The Okefenokee NWR is a world of mystery and intrigue, where mini-dramas between predator and prey play out every day. A collection of swamp woods, sandy islands, marshes and lakes surrounded by pine forest, the Okefenokee Swamp is one of the largest freshwater wetlands in the United States. Here in its waterlogged soils and darkened waters, carnivorous plants have survived for thousands of years. They are able to survive and thrive by doing what most other plants are incapable of doing, consuming animal flesh. These masters of deception require inorganic nutrients from insects, spiders or aquatic invertebrates to supplement their diet. Without these additional nutrients, carnivorous plants won't reproduce and will soon die.

To attract their prey, carnivorous plants use scent and color, similar to how humans use fragrances and fashion to enhance their attractiveness. The plants also have specialized structures and sensory hairs designed to entice and trap their quarry. These modifications, while very strange in appearance, allow them to lure, trap, and consume their prey. In this world of fierce competition, four types of carnivorous plants struggle for survival in the Okefenokee NWR; their names are apt descriptions of their otherworldly-appearance: pitcher plant, bladderwort, butterwort, and sundew. Pitcher plants, sexy sirens of seduction, use sweet smelling nectar and bright colors on their hoods to attract ants. Once becoming trapped into its

pitcher-shaped stem, a captured ant will, after many failed attempts to escape, finally succumb to the plant's enzymes and microbes. Sundews, on the other hand, reach out their gland-covered leaves to grab their prey. Their bright red-colored glands have a glistening drop of a sweet sticky secretion that can capture flies, and secure them for a later meal. Often neighbors of sundews, butterworts have overlapping leaves, which are covered with glands. These specialized leaves are able to roll up prey, creating a sarcophagus-like tomb. When a spider is caught in this sweet but deadly embrace, the plant will secrete oily liquids and enzymes that will quickly digest it. Unlike their more terrestrial cousins, bladderworts find their prey underwater. Their bladder-like leaves have trap doors to snare tiny unsuspecting aquatic creatures for a quick meal. When you examine these plants closely, you can usually find the remains of their latest victim.

While deadly to their prey, carnivorous plants are helpful to humans. They reduce the number of mosquitoes, yellow flies, and other insect pests. Even the death of these plants will improve the soil as their bodies decompose back into the earth. While not possessing showy flowers like tulips or rose bushes, carnivorous plants of the swamp possess a special beauty that makes them stand out to the watchful eye. They are just one of many fascinating components that make the Okefenokee NWR a special place to visit. They are survivors in the truest sense of the word, doing what they can to live in difficult conditions. Do not flee in terror, but take a closer look at... these amazing little green monsters that call Okefenokee NWR home.