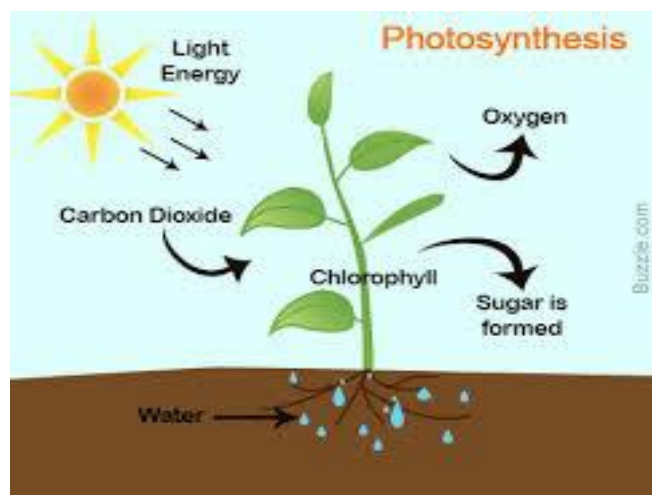


## Plants with Unique Adaptations

Plants have structures and behaviors that help them to survive in their environment. The plant roots, stem, leaves, and flowers all work together to carry out daily activities for survival. Each plant structure does a specific job like soaking up nutrients, giving support, making food or attracting pollinators for seed production. Plants use these structures and behaviors to adjust or adapt to the conditions in their environment.

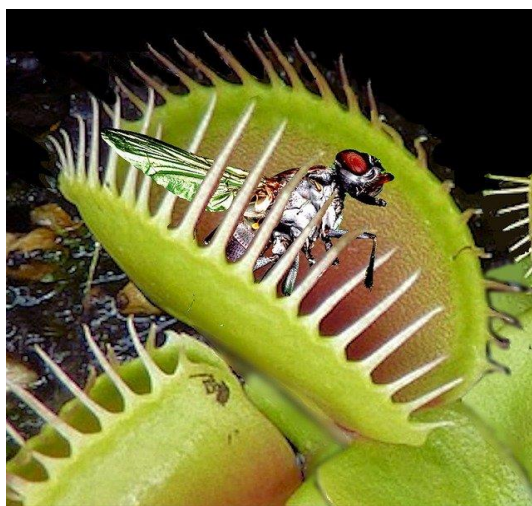
### How Plants Eat

Plants use light energy to make sugar from water, air, and nutrients. This process is called photosynthesis. The leaves of green plants contain a pigment called chlorophyll. The chlorophyll captures energy from the sun to make the food that a plant needs to grow. The water and nutrients necessary to carry on photosynthesis are pulled up from the soil by the plant roots. The sweet sugars you taste in a piece of fruit are made through the photosynthesis process.



*The plant uses structures to collect what it needs to make sugars to grow.*

### Plants That Bite Back



Carnivorous plants are unique from other plants because of what they eat and how they eat it. Like green plants, carnivorous plants carry out photosynthesis for energy. But in addition, they have adapted a special way of improving their nutrition. Carnivorous plants fill their nutrition needs by trapping and eating insects and other small creatures. We do not usually think about plants having behaviors. However, the flytraps snapping shut is a unique plant movement we can see. This awesome adaptation allows carnivorous plants to survive in environments that have very poor soil.

*Insect trapped inside the plant leaf.*

## Do They Eat Their Pollinators?

All these carnivorous plants are also flowering plants. So how do they attract both pollinators and prey? The most common pollinator for flowering carnivorous plants is bees and hoverflies. The most common prey of the carnivorous plants are gnats, flies, moths, beetles, and ants. Venus flytraps have adapted ways to help them separate the prey from the pollinator.



*A pollinator getting some nectar.*



*Flowers are high up on the plant stem.*

First, the flowers grow up high while the trap is lower to the ground. Second, the white color of the flower and nectar attracts certain pollinators, but the trap's red colors and smell attracts insects as prey. It is in the Venus flytrap's best interest to tell the difference between the pollinator and prey.

## Conservation: Why You Should Care?

The endangerment of carnivorous plants is a problem in our environment. Carnivorous plant species are endangered because of overcollection and habitat loss. People are poaching or taking too many plants from the wild. When humans develop natural habitat into places



*Rangers and citizens counting Venus Flytraps.*

like neighborhoods, farms, and roads these wild plants do not have what they need to survive. We as citizens have a responsibility to protect these unique and special plants.



*Longleaf Pine Forest*