

A Publication of Alpha Omega
 Institute, Fall 2004
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THE VENUS FLYTRAP

In the wet, sunny swamps of North and South Carolina, a hunter patiently waits for its victim. Unaware of danger, a cricket stops on a leaf to taste some sweet-smelling sap. Quickly snapping shut, the jaws of the hunter close around the cricket. The harder the cricket fights, the tighter the jaws close. Soon the struggle is over and the hunter begins to digest its yummy meal.

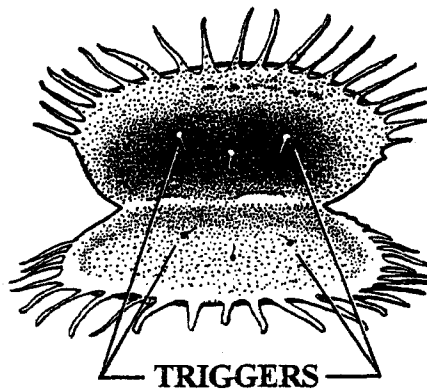
Who is this cunning hunter? Is it an animal? Is it an insect or a spider? No, this hunter is the Venus Flytrap, a carnivorous (meat-eating) plant!

How is a plant able to attract an insect, capture it, figure out if it is food or not, and digest it? Plants do not have a brain or nervous system like we do to tell them that they are hungry and need to go to McDonalds® for a burger. Nor do they have muscles and tendons to grab food, chew it, and swallow it. However, God has created the Venus Flytrap with a clever way to get food quite differently from any other plant.

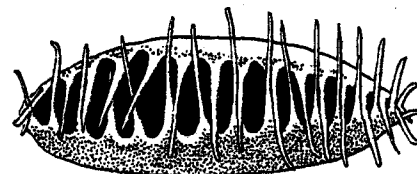
The Venus Flytrap usually lives in bogs where the soil is lacking in minerals and other nutrients. The Venus Flytrap catches living things

like spiders, flies, caterpillars, slugs and crickets to get the nutrients it needs for survival.

The Venus Flytrap has been designed with special leaves that act as a trap, a mouth, and a stomach all in one. The leaves forming the trap make a sweet nectar that attracts insects looking for food. On the inside of the leaves are short, stiff hairs called **trigger hairs**. If an insect or spider enters the trap and bends two or



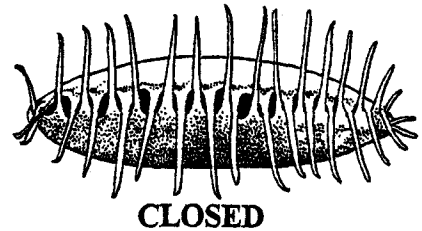
more of the tiny trigger hairs, an **electric signal** is sent to cells on the outside of the trap. This signal makes the outer cells immediately ooze an acid which **eats away** at the cell wall. This causes the cells to swell, snapping the leaves shut. Within a **half second**, it traps whatever is inside!



SNAPPING SHUT

The trap does not close all of the way at first. It stays open slightly for

a few seconds, allowing very small insects to escape. These would not be worth the effort since they don't provide much food. However, finger-like projections keep larger insects inside. You can fold your hands together lacing your fingers to see what the trap looks like. The more the insect fights, the tighter the trap closes. In a few minutes the trap



will shut tightly and make an airtight seal. This keeps the digestive juices inside and things like bacteria and mold out. If an insect is too large, it will stick out of the trap letting bacteria and mold inside. This will eat away at the trap. The leaves will then rot, turn black, and fall off.

If something other than food falls into the trap like a pebble, twig, or nut, the leaves will not close all the way. The trap will reopen in about 12 hours and "spit" it out.

Once the trap is closed around an insect, special **digestive juices**, similar to the ones in your stomach, begin to eat away at the soft parts of the insect. In 5 to 12 days, the insect is fully consumed. The Venus Flytrap receives a **chemical signal** that opens the trap back up to wait for its next meal. Any remaining parts of the insect are blown away in the wind or washed away by rain.

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