

Explorations at the Fort Worth Botanic Garden

Observations on Interdependence and Interaction in the Trial Garden



High School Biology 112.43

12(B) Interpret interactions among organisms exhibiting predation, parasitism, commensalism, and mutualism

Hundreds of perennials are growing in the Trial Garden. Observe several beds for insect-plant interactions.

Dragonflies, praying mantises, and spiders are predators of insects. Many insects are found on stems, leaves, or flowers. Draw or describe a scene of **predation**.

Tiny wasps parasitize caterpillars. The completion of the wasp life cycle kills the caterpillar. You may see an afflicted caterpillar with tiny white cocoons on its back. Thrips, a tiny insect harmful to plants, feed in the buds and developing leaves of plants; stunting or discoloring leaves and leaving tiny dark droppings. Look carefully for evidence of **parasitism**. What did you find?



Butterflies exhibit **commensalism**- when benefits occur for one without harming the other. A butterfly may take nectar without harming or helping the flower. Draw or describe a butterfly feeding on a flower.

Ants and aphids mutually benefit from each other's presence. The ants feed on aphid honeydew, and ants protect the aphids from ladybug predators. Look closely for clusters of small yellow aphids on plant stems. Do you see ants nearby? Observe their behavior and describe their **mutualism**.

