

Beneficial Insects Sheet 1 ¹

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- **Lady beetles** (Plate 1 and Plate 2). These are among Florida's most beneficial insects. About 475 species occur in North America. Both adults and larvae prey on aphids, scale insects, mealybugs, mites and other soft-bodied insect pests. Adults are oval and most are orange or reddish with black markings, or black with yellow or red markings. Most species are about 1/4" long but range from 1/16 to 1/2". The larvae (Plate 3) are elongate, somewhat flattened and covered with small spines. They are usually dark or black with brightly colored spots or bands. Some larvae are white and resemble mealybugs (Plate 4). Both adults and larvae are frequently found feeding among aphid populations.
- **Preying mantids** (Plate 5). These are large insects. Adults are usually more than 2" in length. Some are brown and others are green. There are only 20 species in the United States and Canada, but more than 1,500 worldwide. The front legs are modified for grasping and holding their prey. They wait among the foliage, legs in an upraised position, for unsuspecting insects. This characteristic has given rise to the common name "praying mantid."
- **Lacewings** (Plate 6). These are common insects, found on grass, weeds, cultivated row crops and shrubs. Most are greenish with copper-colored eyes and are about 3/4" in length. The adults may be predaceous or may feed on pollen. The white eggs are attached to foliage by thin stalks that are about 1/4" tall to prevent the larvae from preying on each other. The larvae are elongate and have large, sickle-shaped mandibles (Plate 7). They are predaceous and feed primarily on aphids, thus the common name "aphidlion."
- **Stink bugs** (Plate 8 and Plate 9). Many stink bugs are harmful, but some species are predaceous. There are more than 2,000 species worldwide. Stink bugs are usually oval or shield-shaped and brown, green or gray, but many are brightly colored. A common predaceous species in Florida is midnight-blue and orange. As a general rule, beneficial species can be identified by spines projecting from their thoraxes; plant feeders have round "shoulders." Predaceous forms have short stout beaks while plant-feeding forms have long thin mouthparts.

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They prey on many insects, especially caterpillars.

- **Robber flies** (Plate 10). These are relatively large insects-- 1/4" to 1-1/4" in length. Some are robust and some are very long and slender. They have long, strong legs and the top of the head is hollowed out between the eyes. The face is usually very hairy. Nearly 1,000 species of robber flies occur in North America. They attack a wide variety of insects, including wasps, bees, grasshoppers and other flies, usually capturing their prey on the wing.



Plate 1 .



Plate 2 .



Plate 3 .



Plate 4 .



Plate 5 .



Plate 6 .



Plate 7 .



(Plate 8 .



Plate 9 .



Plate 10) .