

Praying mantids



The praying mantis is named for its prominent front legs which are held together at an angle that suggests a praying position. The larger group of these insects should be called the praying mantids. Mantis refers to the genus *mantis*; only some mantids belong.

Mantids are formidable predators regardless of what they are called. They have triangular heads with two large compound eyes and three simple eyes located between them. The head is on an elongated thorax and can turn 180 degrees to scan the surroundings .

Typically green or brown and well camouflaged, mantids either lie in ambush or patiently stalk prey, using their front legs and faster-than-the-eye-can see reflexes to snare it. The front legs are further equipped with spikes for pinning it in place.

Moths, crickets, grasshoppers, flies, bees, and other insects are typical prey. However, the insects will also eat others of their own kind.

Females regularly lay hundreds of eggs in a small case, and nymphs hatch looking much like tiny versions of their

parents. Nymphs generally have seven or more molts before maturity.

Eggs are laid late in the season in an egg case which is first foamy, then papery after the foam sets. Eggs hatch en masse in the spring.

Except for adaptations to predatory life that make the group look peculiar, mantids are otherwise very close to roaches and termites, and can be reasonably described as predatory roaches.

SOUTH FLORIDA MANTIDS

Brunner's Mantid, *Brunneria borealis*, is a species of praying mantis native to the Southern United States. It is the only species known to reproduce solely through parthenogenesis; there are no males. It is found in tall grass habitat where it preys on grasshoppers.

Grizzled Mantids, *Gonatista grisea*, are native to the Southern United States, primarily Florida. Unlike most mantids, it has a rough outline and a mottled gray/green color pattern that make the insect almost impossible to spot as it sits on the lichen-covered trunk of a tree, *right*. It is also rather small, maybe three inches long.



Grass-like Mantids, *Thesprotia graminis*, are native to Florida and Georgia. They are a long, slender mantis often confused with Walkingsticks, especially when they move with the forearms outstretched. Males have long wings and are good fliers. Females are wingless and resemble a pine needle. Scudder's Mantid, *Oligonicella scudderi*, is among the smaller man-

tids at one to one and a third inches long. It is native to the southern U.S. The body is delicately striped length wise in brown and tan or can be solid brown.

European Mantids, *Mantis religiosa*, originated in southern Europe and were introduced to North America in 1899 on a shipment of nursery plants. The European Mantid is usually 2-3 inches in length, and has shades of bright green to tan. It can be distinguished easily by a black-ringed spot beneath the first joint of the front leg, next to the body. Despite being an introduced species, it is the official state insect of Connecticut.

Narrow-winged Mantids, *Tenodera angustipennis*, are often brown or green and have a proportionately more elongate pronotum and shorter, narrower tegmina and wing than the Chinese mantid. They have a brown, patterned streak on each of their transparent hind wings that the Chinese mantids don't have.

Chinese Mantids, *Tenodera aridifolia*, are an introduced species. Males are 2.5-3.5 inches in length

while females are 3-4.25 inches in length. They have a tan, brown, or occasionally pale green cuticle, with the exposed edge of the forewings creating a green stripe on the side of the body.

Larger Florida Mantids, *Stagmomantis floridensis*, and the Carolina Mantid are under the same genus of *Stagmomantis* due to the similarity in appearance – except for the size. *S. floridensis* has been given a common name Larger Florida Mantid compared to *S. carolina* which is visibly smaller. However, both species do share many similarities. *S. floridensis* can be observed near swampy areas which suggests it is accustomed to high humidity.

Carolina Mantids, *Stagmomantis carolina*, have a dark colored dot on each of their forewings (outer-wings) which may be partially hidden in a brown or dark color morph individual. An unusual trait is that its wings only extend three quarters of the way down the abdomen in mature females. Carolina Mantid color varies because the nymphs are able to adjust their color to match the environment they are in at the time of molting. Adults do not adjust their colors.