



FOCUS: PRAYING MANTISES

☐ Pest☐ Disease☒ Beneficial☐ Weed☐ Crop

ABOUT PRAYING MANTISES

Large and well-camouflaged, a praying mantis can be a startling discovery in the garden! These green or brown insects can grow up to 6 inches long. They will eat any insect smaller than they are, including other praying mantises! For this reason, the praying mantis is often found alone. We consider praying mantises to be generally good for the garden, as they are part of a balanced ecosystem. However, they do eat beneficial insects as well as pests.

“Mantis” is a common name for all of the insects within the “Mantid” family, which includes primarily tropical species. The most common mantids in America are the European, the Chinese, and the Carolina. The Carolina is the only mantis native to the United States; the others were introduced to control pests in gardens.

APPEARANCE AND LIFE STAGES

Praying mantises have a heart shaped head that turns to help the insect locate prey or assess its environment. Their bodies are long and thin, with raptor-like front legs that snatch and hold prey and also give the mantises their “praying” look. These front legs move so quickly, it is almost impossible to see them as they capture the mantis’s next meal.

Male and female mantises look similar to each other, though females can be slightly larger and tend to have a larger abdomen. Mantises lay eggs in hard, brown, foamy-looking masses, attached to woody plant stems. These egg masses provide shelter for the eggs until the spring, when the baby mantises emerge. Up to 200 babies can emerge from one mass! Baby mantises look similar to adult mantises, though they are much smaller and may be a different color than adults. These tiny mantises grow throughout the season, mate, and lay eggs in the fall. Their average lifespan is 10-12 months.

APPETITE

Mantises eat just about anything that comes across their path! Their diet consists primarily of insects but large mantises have been known to eat small animals like frogs, salamanders, and fish. Praying mantises are harmless to humans but do tend to eat each other if they are in close proximity. For this reason, shortly after hatching, young mantises head out to find their own territory. As a unique and somewhat horrifying aspect of the praying mantis’s appetite, the female tends to consume the male after mating!



YOUNG PRAYING MANTIS IN THE FRICK GREENHOUSE



ADULT PRAYING MANTIS



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ATTRACTING THESE BENEFICIAL INSECTS

Unlike many other beneficial insects, praying mantises do not eat nectar or pollen in their adult stages. They are strictly carnivorous. The best way to attract them to your garden is to allow woody plants or perennials to overwinter, un-pruned, in the garden, as these types of plants provide excellent habitat for the mantis to lay its eggs. Here are some specific plants that make great egg-laying places for mantises:

- GOLDENROD
- RASPBERRIES AND OTHER BRAMBLES
- LAVENDER
- CONEFLOWER
- CHIVES
- ORNAMENTAL GRASSES

Although praying mantis egg cases are commercially available, we don't recommend purchasing these beneficials to release in the garden or greenhouse. Most praying mantises available for purchase are non-native species. These larger species may upset the balance of insects in the garden, or eat native praying mantises. However, if you find an egg case outdoors, you can carefully clip the branch where it is attached and move it to your garden or greenhouse. Place it in a protected area and make sure a source of water is available in the early spring when the young mantises hatch.



PRAYING MANTIS EGG SACK