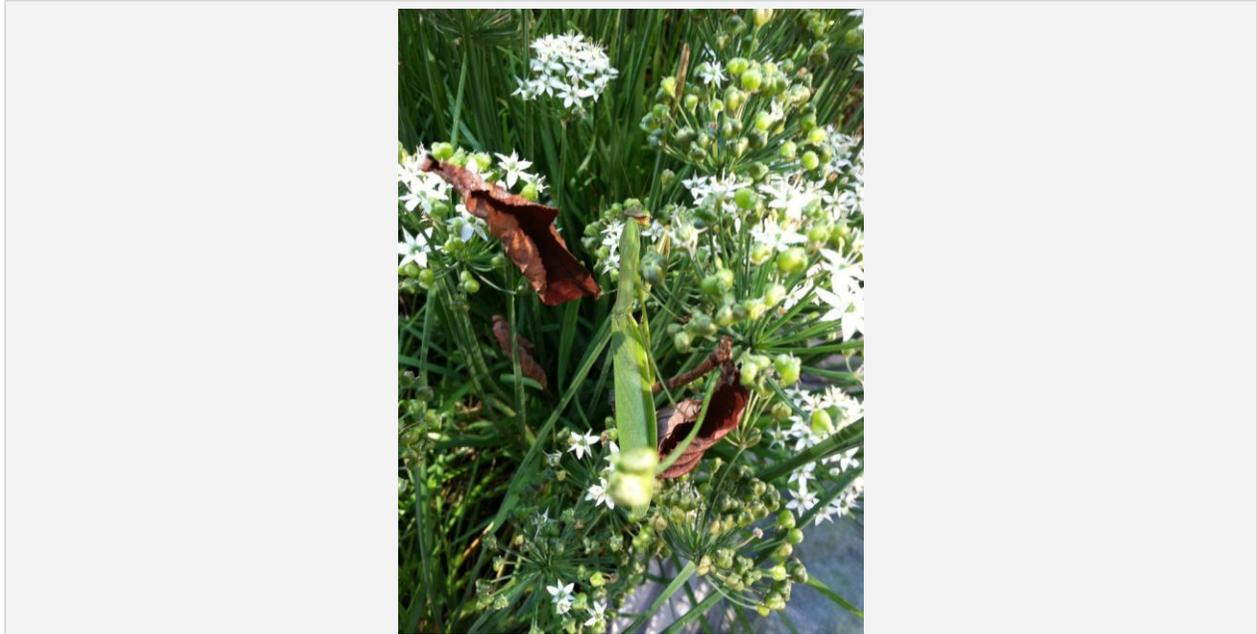




Beneficial Insect: Praying Mantis

Large and well-camouflaged, a praying mantis can be a startling discovery in the garden! These large green or brown insects can grow up to 6 inches long. They will eat any insect smaller than them, including other praying mantises! For this reason, the praying mantis is often found alone. “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 mantis. The Carolina is the only native mantis – the others were introduced to control pests in gardens.



A praying mantis on garlic chive flowers at the Frick Kitchen Garden.

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

These hungry insects eat just about anything that comes across their path! Their diets consist 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’re 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 to the praying mantis’s appetite, the female tends to consume the male after mating!



Praying mantis egg case. Photo from theprayingmantis.org.

Attracting these Beauts

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

- Goldenrod
- Raspberries and other brambles
- Lavender
- Coneflower
- Garlic chives
- Ornamental grasses

To introduce praying mantises into a greenhouse or hoophouse, commercial praying mantises are available. Or, find an egg case and carefully clip the branch where it is secured. Place the case in a protected area in the greenhouse or hoophouse, and make sure there are plenty of insects and a good source of water.