

The Secret Life of Praying Mantises

AGRI-VIEWS

by Chuck Otte, Geary County Extension Agent

Anyone who is a Royal's baseball fan knows all about the now famous Rally Mantis that has become quite the topic in Kansas City. For those who are not baseball fans, a praying mantis was found in the Royal's dugout one evening during a game and the Royal's started winning again. That mantis, along with the subsequent mantis(es) accompanied the team on road trips giving rise to the Rally Mantis and all the paraphernalia that it generated (and sold!)

What this also has done is create quite an interest in praying mantises. Mantises are fascinating insects but are poorly understood. Mantises, or mantids - either is the correct plural form, are in the insect order Mantodea. Worldwide there are over 2,000 species of mantids. In Kansas we have three native species and one non-native species. Two of our native species are small, a little over one inch long, and most commonly found in prairie settings.

The species that most of us are familiar with is the Carolina mantid. The Carolina mantid is about 2 inches long, it can be green to gray or brown in color, depending on its surroundings, and is commonly found around homes and gardens, even on the sides of houses, in late summer. The non-native species is the Chinese mantid and it can be pretty good sized, over four inches long. While mantids are well known as insect eaters, the Chinese mantid is large enough to capture small vertebrate animals including hummingbirds!

Mantids show an incomplete metamorphosis, in that they don't have a larval form like butterflies. Young mantid nymphs look very similar to adults, only smaller. As they grow they just keep getting bigger and bigger. For the Carolina mantid, the female never develops functional wings, and has a short broad abdomen (the furthest back body portion). Male Carolina mantids have fully developed wings and are good fliers. The abdomen of the male is long and slender.

Mantids, in general, have large eyes and a very obvious neck. Their front legs are adapted for catching and holding insect prey. These front legs are frequently held up in the air in the classic "praying" form. Occasionally, after mating, the female will bite off the male's head, but this is more the exception than the rule. Females, at this time of year, are busy laying egg cases on branches, weed stems, etc. When first laid, the egg cases look like a frothy mass which then hardens down into a protective case around the eggs. In the spring, the eggs hatch out and the small mantid nymphs have been known to cannibalize their siblings. Before long those that survive start to disperse and begin feeding on any insect that they can catch. Most food acquisition is done by running insects down, or laying in wait and ambushing their food.

Mantids are very beneficial as they eat a whole host of insect pests. While some people may be unsettled by their appearance and even their gaze, they should be left alone. Some gardeners will order egg masses from suppliers to put in their garden to provide pest control. If you do this, please make sure you are getting Carolina mantids, which are a native species, and not Chinese mantids, which aren't native. I'm all in favor of going with a native species approach!

Some people will catch mantids and keep them as pets. While they can make good pets, they need to be fed regularly with live insects and watered (misted) twice a day. Mantids can live up to a year, but generally they only live for a few months. While the Rally Mantis was and is a fun thing for Royal's fans, I'm all in favor of leaving the mantids outdoors eating insect pests!