

"Bug of the Month"

Although this series of articles is called "Bug of the Month", some, non-insect species will be discussed on occasion. This current issue is one of the those. A common, late summer visitor to gardens and yards in the Pacific Northwest is the European Garden Spider, *Araneus diadematus*. These are orb weavers and their complex, flat webs can reach up to 3 feet in diameter. To the annoyance of many home owners and gardeners, they seem to appear everywhere this time of year and especially like to build their webs between plants, paths, along window and door frames so you have to be on constant lookout in order to avoid walking into one. They are generally found outdoors, although they may find their way indoors as winter approaches.

WHAT DO THEY LOOK LIKE? The European garden spider is characterized by its large tan/gray body with mottled tan/brown markings across the back, highlighted by five or more large white dots forming a cross. The spiders are first noticed in late summer or early autumn in their adult stage. It is not that the spiders have been absent all summer; they are just bigger and more obvious. The eggs are laid in fall in silken cocoons that are dirty yellow or off white in color. These are fastened under leaves or other secluded and sheltered spot. The female dies in the winter. Around late May to early June, the cocoon releases the up to 800 tiny spiderlings. The spiderlings huddle together for a few days and then scatter, each seeking a site to spin a small, irregular web about 2 inches across. Through the summer, the females grow faster than the males and by late summer reach $\frac{3}{4}$ to an inch in size with large abdomens. Unlike many other spider species, cannibalism is rare among the European garden spider. Males often mate with several females and usually die from starvation and exhaustion because they spend little time feeding during the mating period. Most adults die with the first frost.



"ARE YOU A GOOD BUG OR A BAD BUG?" The European garden spider eats whatever bumps into its web. These spiders have poor eyesight and rely heavily on the vibrations made by the struggling insect. The prey is seized by the spider very rapidly and injected with a poison that paralyzes it and begins to liquefy the insect's contents. It is then wrapped in silk and attached to the web. Later, the spider returns to suck out the liquefied contents of the insect's body. Of course, the garden spider doesn't put much effort into determining whether an insect is beneficial or a pest, the number of pest insects usually outnumber the beneficial ones. Garden pests consumed include many moths, sawflies, whiteflies (takes a lot of these for a good meal), craneflies, mosquitoes, and as shown in the picture to the left, dampwood termites. There may be a false impression that the spiders aren't really catching much because the webs are clear of any insects. This is partially from the habit of cutting the empty shell from the web after feeding. Also, the sticky threads of the web need to be replaced daily because they lose their stickiness. The old threads are consumed to preserve protein and new threads are laid out just before sunrise each day.



MANAGEMENT. Weather is the garden spider's worst enemy. Excessive drought and excessive rain can significantly reduce populations. There are also many birds that feed on these spiders along with a number of parasitic wasps and ants. Human intervention is usually not necessary unless the spiders find their way indoors. Removing plants and other structures from around the house will help eliminate places for the garden spider to weave its web. Prevent the spiders from coming indoors by caulking cracks and crevices and make sure that all screens and doors are tight. If chemical control is necessary, pyrethrins are the best choice for quick knockdown and little residual effect. Other, longer residual pesticides are available. **Be sure to read and follow all directions on the label exactly...**

MORE QUESTIONS? Please do not hesitate to give your "Bug Docs" a call at comm.: (360) 315-4450, DSN: 322-4450 or you can e-mail us at MEI@ndvecc.navy.mil.