Beneficial Garden Insects, Spiders and Mites

As an extension agent I get a lot of questions about insects and other "pests" in and around the home. Most of these questions revolve around how to kill the critter in question. I try to remind clients that not every bug is a bad bug, and even the "bad" bugs play an important role in our landscapes and ecosystem. The only bugs that are truly bad are those that are invasive – meaning that they are non-native (introduced purposefully or accidentally by humans), have no natural predators, actively out compete their native counterparts and alter the native ecosystem. To be clear, just because you find something annoying or overly prevalent doesn't mean it is invasive. All of our native insects (and spiders and mites) have a role to play, though some are easier to appreciate than others. Remember that insects are the base of the food chain for songbirds and other wildlife. For example, it takes around 5000 insects (mostly caterpillars) for one songbird family to raise a nest of chicks. This means without tolerating some insects and their feeding damage to our plants, we won't have songbirds in our yards -- or the butterflies and moths that the uneaten caterpillars grow into.

Another reason to tolerate some insect pressures in the landscape is to encourage their predators. We have a large number of predatory insects, spiders and mites and without a food source their populations won't develop to keep the prey in check naturally. These predators include damsel bugs, minute pirate bugs, assassin bugs, lacewings, big-eyed bugs, praying mantids, earwigs, two-spined soldier bugs, paper wasps and parasitic flies. These helpful insects naturally reduce and control pest insect populations without the use of pesticides – if you give them a chance to establish their populations. If you want to encourage beneficial insect populations, the most important thing is to avoid using pesticides – especially insecticides – in your landscape. Most insecticides are not selective and will kill the good as quick or quicker than the bad. There are studies that show that spraying can actually increase pest insect populations over time. If you have to spray pesticides, choose to spot spray instead of cover spray. If you have a few weeds, you don't really need to treat the whole lawn when you can just treat the affected area. Before applying anything, send me a picture of the issue and see what the best course of treatment actually is. I have a lot of clients that only ask for help after they've applied everything that they can find at a big box store and it hasn't worked. This is very damaging. It's important to get the issue correctly identified and use the appropriate treatment.

Other steps to encourage beneficial insects, spiders and mites in your landscape include providing water and shelter, and planting a variety of native flowering plants for multi-season nectar, pollen and alternative prey. Water can be areas that you allow to puddle, bare soil, or some rocks in one side of your birdbath. Shelter can be small piles of rocks or sticks, or just leaving the leaves. Fallen leaves are important habitat for many pollinators, predatory insects, fireflies and wildlife species to overwinter and/or complete their lifecycle. If you can't leave the leaves where they fall, gently rake them to an edge or area where they can be left undisturbed overwinter. In addition to providing habitat, they are a great source of mulch and add organic matter and nutrition back to the soil. Flowering plants that attract beneficial insects include native asters, native sunflowers, butterfly weed (a species of milkweed), native coneflowers, native rudbeckia and native yarrow. Incorporating native versions of plants in your landscape is important for a number of reasons. Native varieties have evolved with insects over centuries or longer. As such they provide the best nutrition and habitat resources, and many insect species can only raise their young on native varieties of certain plants. Many of our cultivars have been bred to emphasize traits that humans find attractive but often are not what is beneficial to nature. One of these traits is "pest resistance." In other words, plants are bred to be inhospitable to native insects

therefore disrupting the food chain. Our landscapes shouldn't be sterile and perfectly controlled environments, and we see the best results from working with nature's processes and preferences instead of against them. The next time that you see an unknown insect in the landscape I encourage you to think of them as innocent until proven guilty – or beneficial until proven otherwise. If you'd like to learn more about specific beneficials we have some good publications that I would be glad to email or mail you if you contact our office.