

March 2022 GARDENER'S CORNER

By Cate White, SJ County UCCE Master Gardener

Insect Decline

As gardeners, we encounter many wild creatures while working in our yards, including birds, gophers, slugs, snails, and insects. While we consider most of these except birds to be pests, we know some insects can be beneficial, such as bees and ladybugs. But did you know that recent scientific studies have found that insect diversity and numbers are both in a steep decline, and have raised this finding as a cause for concern? Some scientists are even labeling this the “Insect Apocalypse”, although most agree that more studies are needed before using such a dire term.

We complain about the damage some insects do to our plants, but we tend to overlook the benefits we get from numerous others. Pollination by many types of bees, wasps, butterflies, moths, and even certain flies is at the top of the list, but there are many other less obvious services performed by insects. These include assisting decomposition of animal and vegetable matter, thereby contributing to nutrient recycling, healthy soil formation and water purification; biological control of weeds and insect pests; and serving as an important food source for other species, particularly birds, amphibians, and reptiles. In fact, it's estimated that the combined value of services provided by insects equals billions of dollars in the U.S. alone.



Photo from Xerces Society Web Site

California's Central Valley is home to many species of wild bees and is one of the top areas in the world where decline is accelerating. In our valley, over 20 species of native bees are seriously threatened. This is important, since even with the use of commercial honeybee hives, a significant proportion of agricultural crops depend on native bees for pollination. Many species of native butterflies and moths, along with other insects, are also threatened. In my own garden, I've noticed that I have seen fewer and fewer praying mantises. Over the years, I have tried to encourage them in my yard, making sure I leave their egg cases undisturbed over the winter so that I will have a new generation in the spring. Last year, I found no egg cases, and saw no praying mantises the entire summer for the first time in many years.



Photo from Xerces Society Web Site



Photo by Cate White

So, what are the causes of these declines, and what can we as gardeners do about it? Climate change, habitat loss, pollution, and pesticide and herbicide use are among the top stressors leading to insect decline. We can commit to using fewer pesticides and avoid those that are long-acting such as systemics, as a first step. Always start with the least toxic pesticide. The UCIPM web site is a great resource for recommending environmentally friendly ways of managing pests. Learn to recognize beneficial insects and those that prey on insect pests in your garden. Grow a diverse selection of plants, especially flowering plants to create an insect and pollinator friendly garden. Plant so that there is always something blooming throughout the year. Consider expanding insect habitat by replacing all or a portion of your lawn with flowering plants and shrubs. Do some research by going to websites that promote insect friendly gardening. The Xerces society is a great place to start. University of Pennsylvania professor Douglas Tallamy has a web site and several books that are also rich with information. We as gardeners have direct interaction with the web of life, giving us the opportunity to foster healthy habitats that enrich the environment around us.

March Garden Checklist

- Early March is still time to plant lettuce, parsley and chard seedlings. Flowering Spring annuals, such as pansies, sweet peas and ranunculus can also be planted now. Peas, carrots, beets and radishes can be planted from seed.
- Plant summer bulbs such as gladiolas and dahlias.
- Most plants, including lawns, will appreciate an application of an all-purpose fertilizer now.
- Continue to control ants, slugs and snails using baits. Iron based snail and slug baits are the most environmentally sound and safest for use around pets.
- Adjust watering according to rainfall, remembering not to water within 48 hours of measurable rain.
- Cultivate or pull weeds.