## WHATS BUGGING YOU?

by Maggie Gordon

As a new Master Gardener, this was my least favorite subject. I thought I could be a successful gardener without learning about insects. I used a non-descriptive insecticide for any and all related insect problems. Consequently, I was not successful and caused myself much frustration.

My first assignment, as a Master Gardener, was to be a presenter for the Green Thumb lectures. I drew the subject of INSECTS for my presentation. Now I had a reason to read, research and learn from the University of California, Davis, Extension Service and then practice in my own garden. I was amazed at how interesting insects can be and how easy it is to be in control of your garden with a little knowledge.

I learned that there are more good insects than bad insects. There is one or more predator for every bad insect making it very important, that once identified, the treatment only affects the bad insect and does not wipe out the predators. Specific plants attract specific bad insects making plant identification important. Use this web site, <a href="www.ipm.ucdavis.edu">www.ipm.ucdavis.edu</a>, where you can look up your specific plant that has been attacked by an insect and it will give you descriptions of problems related to that plant to help you identify the insect that is chewing or sucking on your plant. It will outline solutions to the problem. Once you identify your plant and identify the insect now you can choose a treatment.

Knowledge of pest biology is important before implementing treatment. There are some insects that go through 4 stages of development in two days and only one stage is the chewing or sucking stage that damages your plant. Often the treatment will be to cut out the damaged parts of the plant or spray with water to knock off the insects or spray with an insecticidal soap or a Neem oil. You could do nothing and the insects will move on. Integrated pest management promotes using a variety of methods to minimize the impact on human health, the environment and non-targeted insects.

Some of the most common insects pest in Lake Tahoe gardens are ants, aphids, bark beetles, cabbage worms, earwigs, thrips, and mealybugs.

ANTS: There are beneficial ants and some are common pests making it very important to identify which ant you are concerned with. The bad ants often are

protecting aphids and eating their honeydew or boring into wood. Early detection by checking your garden weekly to control aphids as well as proper pruning and care of your plants is a good prevention.

APHIDS: If you have aphids you will see yellowing of leaves and curling and dropping of leaves. If you look close you will see dense groups of fat little insects on the stems, 1/8 inch or less. They are difficult to disturb. They can be different colors. They have many natural enemies. Try to knock them off with a forceful stream of water several days in a row. They cannot climb back on the plant. You could also prune out the affected leaves and stems. You could do nothing and they could move on. As a last resort, you could spray with a Neem oil or insecticidal soap. Here in the Tahoe basin you just need to expect to see some aphids. I have learned to be tolerant and allow a few in my garden.

BARK BEETLES: You will suspect bark beetles if your conifer needles begin to turn yellow, or you see mines between the bark and sapwood or on twigs, branches or the trunks. You might see tree pitch or saw dust around the tree. You could see tiny holes or tunnels under the bark. There is little that can be done once the bark beetle invades your tree. Early detection with insecticide or pruning could save the tree. You would need to remove and destroy the infected tree. Prevention is to keep your trees healthy with proper irrigation and avoid compacted soil around roots or injury to roots due to construction.

CABBAGE WORMS: For the vegetable gardener this could be a problem that you will recognize by greenish brown fecal pellets next to the cabbage or cabbage butterflies flying around the plants. They have natural enemies but you may want to use an organic spray. It is important to check your cabbage regularly. EARWIGS: This insect is not harmful to people but is a predator of aphids. They are chewers. They do damage to seedlings, chew holes in flowers and gnaw on plastic irrigation parts. If you have earwigs it is best to trap daily by rolling up a wet newspaper and laying it on the ground near your problem area. Using drip irrigation and removing debris in and around your yard to reduce hiding places and moisture is a form of prevention.

MEALYBUGS: These insects are .02-.05 inch long. You will see cottony masses on your plant, premature leaf drop, twig dieback, honeydew or black sooty mold if you have mealybugs. You can use a forceful stream of water to knock them off your plants and also destroy the ants around eating the honeydew. Maintaining a healthy garden is the best prevention for the mealybug.

THRIPS: Thrips are less than 1/20 inch long and they feed while hiding. If you see scabby discoloration on leaves and petals, stunted growth, dark specks of excrements, distorted, curled, galled or dead shoots tips and leaves, you might

have thrips. You can identify thrips by shaking the foliage or flowers over white paper to dislodge them. Trap them by hanging a bright yellow sticky trap nearby. Cover healthy plants until the problem has cleared up.

The most important thing to remember about insects is prevention. Buy healthy plants, plant in a proper place in good soil, use effective water management, inspect your watering system and your plants weekly, use a good compost and protect the good insects by educating yourself on best pest management practices.

HAPPY GARDENING! MAKE FRIENDS WITH THE GOOD INSECTS.

For more information: <a href="https://www.ipm.ucdavis.edu">www.ipm.ucdavis.edu</a>