



The Good, the Bad, and the Bugly  
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Our assignment, as Master Gardener trainees, was to go out to the garden and collect some “pests.” First, I went to the big Butterfly Bush (*Buddleia davidii*) and Aha! Found a white spider with three orangish patches on its round back. So far so good. I caught it in my jar and carried it into the house to do an internet search. Aha! Uh-oh! It turned out to be a crab spider (member of the Thomisidae family), a top-of-the-line gardener’s friend. So I gently put Mr. Crab Spider back on the Butterfly Bush so it could go back to work. Sorry sorry!

OK, let’s give it another try. I walked over to a California Wild Lilac bush (*Ceanothus thyrsiflorus*). These are the large native bushes that have small, stiff dark green leaves and put out bunches of blue-lavender flowers early in the spring. Aha! I found an insect! It had a dark orange head and long dark grey back. Looked pretty scary to me! I got it into my jar and went back to the house for another internet search. This turned out to be a soldier beetle, also a major friend to gardeners. Uh-oh! Better put it back so it can go on eating aphids.

So here is what I got out of this assignment: If we learn to recognize the Friends of the Garden we can just leave them in peace to do their job of keeping caterpillars, aphids, mealybugs and many other garden pests under control. That way we can most likely skip the spraying of chemicals in our yards and gardens and we -- not the pests -- get to eat what we planted.

These Friends of the Garden are often referred to as “natural enemies” or “native predators” or “parasitoids.” Supporting and protecting them is an approach to pest control that is called “biological control.” It is fundamental to Integrated Pest Management or IPM. I like to think of it as looking out for our Garden Friends.

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The IPM strategy is based on a very simple principal: First, Do No Harm. It consists of three main parts.

The first part of the strategy is to start by using the least invasive (and often most effective) types of pest control. These include: (1) prevention by good plant selection and correct irrigation and use of fertilizers, (2) using mechanical controls such as fencing and netting, and (3) supporting and protecting the naturally occurring biological controls.

The second part is to consider using non-native (insect) predators. These would be “natural enemies” identified and imported from somewhere outside your area. Non-native predators can do as much harm as good because they may kill the Garden Friends as well as the target pests.

The third part of the strategy is to use chemical controls sparingly, and as a last resort. These control agents could include naturally occurring chemicals or chemicals made by plants (known as biologics) that are toxic to pests or plant diseases. These agents could also be non-biologic pesticides, that is, manufactured insecticides, fungicides, and miticides.

For more information on this topic, check out the excellent Pest Note developed by the University of California called “Biological Control and Natural Enemies of Invertebrates”. It is available to download at <http://ipm.ucanr.edu/PMG/PESTNOTES/>. Also, you can come to the free Master Gardeners class called The Good, the Bad, and the Bugly, scheduled for January 14, 9:00 to noon, at the Government Center Hearing Room, Building C, 2850 Fairlane Court in Placerville.

Visit the Sherwood Demonstration Garden, 6699 Campus Drive in Placerville, between 10:00 a.m. and noon this Saturday, for “Saturdays with Barry.” Master Gardener Barry Wold will discuss what’s happening in the winter garden, and answer all your gardening questions.

Master Gardeners of El Dorado County are available to answer home gardening questions Tuesday through Friday, 9:00 a.m. to noon, by calling (530) 621-5512. Walk-ins are welcome at our office, located at 311 Fair Lane in Placerville. For more information about our public education classes and activities, go to our UCCE Master Gardeners of El Dorado County website at <http://mgeldorado.ucanr.edu>. Sign up to receive our online notices and e-newsletter at [http://ucanr.edu/master\\_gardener\\_e-news](http://ucanr.edu/master_gardener_e-news). You can also find us on Facebook.