**Winter Mind Wanderings**

Everybody is preparing for winter, and so are the insects and their arthropod relatives. I am seeing preying mantises flying around, looking for a good place to deposit their oöthecas (that's the name of the egg case that mantises produce). It is a wonderful structure made of a material that resembles the insulation foam that comes in a can (the kind that you spray where you want it and it hardens into a water-impervious mass). Inside the oötheca, about 100 eggs spend the winter in their little insulated foam nest. Several of these egg masses are usually brought in by clients each year for identification. Encourage clients to keep these structures and place them in their garden area for next year!

Moth caterpillars are spinning cocoons and butterfly larvae are turning into chrysalis (or pupae). One butterfly that has a little twist on this theme is the Lorquin's admiral. The last generation (they have several throughout the year) is too late to finish feeding before the cold comes and the leaves of its food-plant drop. As a little quarter inch larva, it eats away the base of a leaf of its food-plant down to the petiole, and then spins a tiny tube (hibernaculum) at the tip of the leaf by rolling up the remaining leaf parts and securing with silk. It also spins silk down the petiole and around the stem to keep the leaf from falling off during the winter. Then, it climbs into the tube and hibernates through the cold season. In spring, when the new leaves begin to emerge, it resumes feeding and finally matures into a butterfly. We have examples of the Lorquin's admiral, its chrysalis and the little hibernaculum" in the MG office insect collection. Next time you are in the office, take a look! They are in the LEPIDOPTERA drawer.

This is also the time of year for the standard pests, ladybird beetles and boxelder bugs. All they want to do is find a suitable place to spend the winter! But, because they like so much company, they are not too welcome in most folks' houses. Hibernating ladybird beetles, unfortunately, give off a defensive bad odor when disturbed. Scooping them up "en mass" can be a stinky proposition. People need to make sure their houses have no cracks in the siding or loose fittings around the windows if they do not want ladybird guests for the winter! Somehow, they seem to get in anyway!

Boxelder bugs, the yearly nemesis, is the number one concern of clients in the fall. "Leave them alone, and they will go home" is good advice to those having a problem.

We could go on and on, but, as we prepare our gardens and homes for winter, let's think a little about all our "buggy" friends and foes out there preparing for the winter too!