The gloworm

Mississippi State University Extension Service

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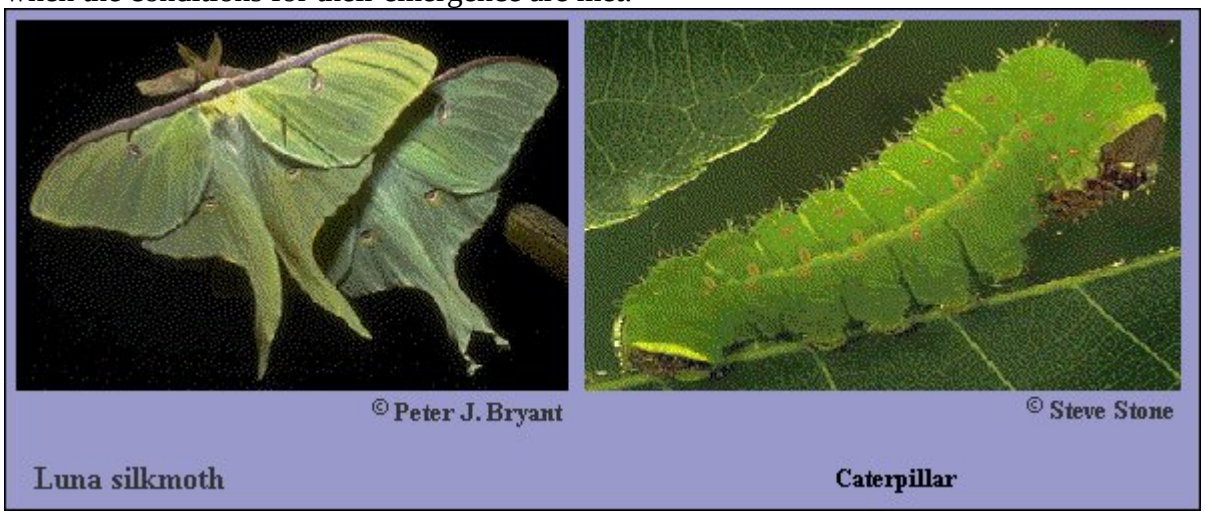
It's really quite common to see the same kinds of insects at the same time and place each year. These rhythms occur with all living things, just not as often in some as in others. Because of this, we can predict the appearance of periodic cicadas every 13 years or even perhaps luna and cercopia moths in our back yard. The secret is to learn about the life cycle of the critter in which you are interested. Some insects are triggered to emerge from over-wintering habitat by day length, others by temperature and still others by moisture or a combination of all of these. As it warms in the spring and `triggers' are reached, the insects appear. So if you'd like to be an entomological prognosticator and be assured that your predictions will come about, study the life cycles and over-wintering habits of some of the common insects in your area and watch for them when the conditions for their emergence are met.



Luna moths are emerging in many areas in Mississippi at this time. There is generally one brood from May-July in the north, two to three broods from March-September in the south. The adults of this group do not feed but they are very strong fliers and are attracted to lights. Mating takes place after midnight, and egg-laying begins that evening. Females lay eggs in small groups or singly on both surfaces of the leaves of white birch, persimmon, sweet gum, hickories, walnuts or sumac. The eggs hatch in about one week and the caterpillars are sedentary and solitary feeders. Leaves and silk are used to spin papery brown cocoons in litter under the host plant. Lunas can be found in most deciduous hardwood forests throughout the US. If you've seen some around your home, most likely you have a `host tree' nearby. If you'd like some, plant a host tree. This information comes from the USGS web site Moths of Mississippi.

Another moth which we see in the spring and summer is the **Polyphemus**. This one too is often

seen early in the spring. There are usually 2 broods during the year in our area, with the first in April or May and a second in July or August. Adults emerge from their cocoons in the late afternoon, and mating occurs the same day from late evening to early morning. Females lay eggs that evening, singly or in groups of 2 or 3 on leaves of oak. willow, maple or birch. Newly-hatched caterpillars eat their eggshells, and caterpillars of all ages are solitary. Older caterpillars eat an entire leaf and then cut the leaf petiole at the base so it falls to the ground, perhaps a defensive measure to eliminate signs of feeding. Adults do not feed.

Common Backswimmer – about 3/8-1/2" (10-13 mm) long. Black underneath; white to dark green on back. Fore wings ivory-white with red markings and dark overlapping tips. Compound eyes large, black. Legs brown; fore and middle legs used for grasping, much longer hind legs flattened, fringed with hair, used for rowing. Backswimmers are predators on Insects and other small aquatic animals.

These critters are usually found in shallow streams and ponds throughout the US. The elongated white eggs are attached to plant stems underwater, where they hatch in a few weeks. Nymphs are active predators. Adults of 1st generation appear in July and over-winter. 1 or 2 generations a year.

Occasionally, a backswimmer will attack a person's bare hand or leg in the water, earning its reputation as a water bee or water wasp. Source: www.enature.com
Study the life cycles of critters to understand when, where, why and how they act in nature.

Happy Buggin'

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I've not requested a mail list upgrade on the ***Gloworm*** in quite some time but would really appreciate having any upgrades in addresses. I try to mail this to anybody who wants it, but some of the young people who received itin the past may have a new address – college. If that situation exists for your household, we'll keep sending it to you, but upgrade the new address, as well. We'll send it to both places. Just return this page with the new address:

Name:_____

Address: _____

City _____ State _____ ZIP _____

You can email your address to me at MikeW@ext.msstate.edu

Projects Available in 4-H Entomology

Bee Essay Contest – the new contest subject will be announced in May! Essays are due on January 20, 2005.

Insect Collection – 4-Hers may make and display a general and a speciality collection. The general collect must have a minimum of 50 specimens and 10 orders (1st year collections). Insects must be pinned, and labeled correctly. Speciality collections are made in addition to the general collections. They must have a theme. A collection of only beetles or only Lepidoptera should also be identified to family. Boxes and pins are available through the Entomology Department at MSU. To order - email mikew@ext.msstate.edu or call Sherry at 662-325-2085.

Collection Record - There are often unique stories about the insects in a collection. An anecdotal record of selected insects, how they were captured and something about their life cycle or habitat in a bound folder accompanying the collection is a good secondary project for 4-Hers to have. A minimum of 20 insects should be studied and addressed.

Butterfly garden – This project combines horticulture and entomology. Lists of plants and the insects observed on them are a basis for this project. Pictures and written records showing activity during the season will make up the body of this project.

State Contest Winners

For all the 4-H Entomology winners from 2003 check the 4-H Entomology WEB page – http://www.msstate.edu/Entomology/4-H/2003winners.html

Linnaean Games

Linnaean teams need to get organized and started really soon. We will have a book of Linnaean Questions available by mid-March. Teams will still be required to submit 25 questions from the study material, but all contests will be derived from the Official Linnaean Questions booklet. Submitted questions will be incorporated into the official booklet for next year! **We have a commitment from Bayer CropScience for supporting the Games for 2004.**

4-H Entomology Camp

CAMP SESSIONS are finally set for 2004. Camp session 1 is set for June 20-24 at Plymouth Bluff, near Columbus, MS. The second camp is set for Tombigbee State Park, near Tupelo July 18-22. We've already gotten reservations for both camps for 2004! Get yours in early!