

The Glowworm

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If he had lived in Mississippi, Punxsutawney Phil – the king groundhog from Punxsutawney, Pa, would definitely NOT have seen his shadow on February 2, because it was cloudy all day, but the folks in Pennsylvania said he saw it and forecasted 6 more weeks of winter. We haven't had much winter this year, anyway, so it probably won't matter to the insects. It does get a little more difficult to collect between November and March, but avid 'bug chasers' can still find a few by digging around in likely hibernation sites. Bugs (Hemiptera) and beetles (Coleoptera) often hibernate under bark of trees (both dead and alive) or even in manmade structures. Critters can often be found in dry areas underneath loose shingles or clapboards on old houses. Dr. Blake Layton recently took pictures of box elder bugs in hibernation near the Oktibbeha county courthouse on the base of a Chinese Lantern tree. Some 'bug chasers' even find bugs when



they have jury duty. These critters were fairly active on a cool day according to Dr. Layton. If you are looking for a particular insect to add to your collection, it's always good to know something about the life cycle, but when you take what comes, you can often be pleasantly surprised.

Different insects spend the winter in different stages of their lives. Many spend the winter dormant, or in "diapause." Diapause is like hibernation. It is a time when growth and development stop. The insect's heartbeat, breathing and temperature drop. Examples of overwintering can be cited with every stage of development. Many adult insects die after laying eggs in the fall. The eggs hatch into new insects in the spring and everything begins all over again. Others may lay eggs which hatch into larval form and then become dormant and emerge to complete the cycle in the spring.

Insects also migrate. Some butterflies and moths fly very long distances. For example, Monarch butterflies spend the summer in Canada and the Northern U.S. They migrate as far south as Mexico for the winter. Most migrating insects go much shorter distances. Many, like termites and Japanese beetles, move downward into the soil. Some may move as far as 5 to 6 feet below the surface. Fire ants in Mississippi are often active on warm days in winter, but will move down in the nest as cooler temperatures arrive.



Certain spiders and insects may stay active if they live in frost-free areas and can find food to eat. There are a few insects, like the winter stone fly, crane fly, and snow fleas, that are normally active in winter. I recently had a call from a gentleman in south Mississippi who reported seeing large numbers of insects emerging from the surface of his lake this week. His description indicated that probably he had a group of winter stoneflies completing their cycle and emerging as adults. He reported the fish were also very happy to feed on them!



Some of the preceding information was taken from –
SCIENCE MADE SIMPLE, INC. & Tree of Life WEB project

Mr. Gary Dunn, Young Entomologist's Society has some suggestions for Winter collecting:

1. With the leaves gone from the trees it is often easy to look for egg masses on twigs, stems, and tree bark.
2. One neat way to collect winter insects from soil, compost, leaf litter, and rotten wood is to use a Berlese (burr-lay-SEE) funnel as a "critter extractor". Instructions for making a Berlese funnel may be found at <http://members.aol.com/yesclub2/tip011.html>.

The insects you capture by this method may be very small, but it's almost guaranteed that you will catch some you have never captured by any other method.

Happy Buggin'

Michael R. Williams, PhD
Extension Entomologist

It's time to begin thinking about spring activities and to plan for summer. I usually dedicate an early *Gloworm* to butterfly gardens and will probably do that again this spring but wanted to review some buggy activities and look to coming events.

Bee Essay Contest

We have just completed the Bee Essay Contest in January. Judging is in process at this time. There were 27 entries in the contest this year. Thanks to all of you who entered! Everybody who didn't get around to it will have another chance to enter next year. We'll announce the topic of the essay in June. I'll even enclose 'aroundtoit' in the letter of announcement so that excuse can be eliminated!

State Contest Winners

As the spring arrives, entomology projects need to be worked on. Insect collections should be brought to district and state contests for judging. The judging and critiques always help 4-H Entomology students to improve their collections. The fall round of fairs and shows saw more than 30 insect collections displayed at the Mississippi State Fair. 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

Mississippi's Senior Linnaean Team was the MidSouth Champion, too. Arkansas' Juniors won the title for their state. 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. A number of emails and calls have come in since Christmas inquiring about camp. We always try to set a camp session in North Mississippi and another in South Mississippi. We've not been too successful getting a good site for the south camp, so we went ahead and set both camps for the north end in 2004. Maybe we can do better next year. Camp session 1 is set for June 20-24 at Plymouth Bluff, near Columbus, MS. This is a new site for us and we are really looking forward to interacting with the staff at Plymouth Bluff. This site is only about 20 miles East of MSU and also very near the MUW campus. The second camp is set for Tombigbee State Park, near Tupelo. We've been to Tombigbee before and really enjoyed the accommodations and the staff there. Many of the same folks will assist us in the camps for 2004, so if you 'wanna bug out' for a week, or even 2, get your reservation in early!

