



The glowworm



1 August 2005

Volume XIII No. 8

WOW! July was really filled with fun things for chasing bugs! We had the Linnaean Superbowl in Jackson on the 16th and began Camp on the 17th. We'll review some of the things we did in future *glowworms* because there's a lot to talk about. There are still some things we need to get done yet this year and foremost is getting collections ready for FAIR season. Many of our counties have fairs beginning in August and September and it is important that we put our best foot forward to show off the hard work done during the year. Insect collections are a unique way to demonstrate the hard work young people can do. So get your collection spruced up, add those new catches and get it submitted. The fair going public will appreciate it.

We will push the BEE ESSAY really hard this year, so get your writing pens out and get started now at the beginning of the school year on writing a Bee Essay for entry in the 2006 contest. Only one Mississippi 4-Her is not eligible to enter the Bee Essay Contest. Daniel Snyder won it in 2005, so he will help judge the Mississippi entries in 2006 rather than write an essay. The subject for the 2006 contest is - **Honey Bees in Art and Culture**. Go to http://msucares.com/4h_Youth/4hentomology/index.html or to American Bee Federation (ABFnet.org) for contest rules.

We have scheduled another camp for this year! This one is for adults and is a training session to prepare adults for helping kids with 4-H entomology projects. It will begin at 4:00 PM on August 26 and end at 4:30 PM on August 27. The camp will be held at Wood Institute in Mathiston and should be fun and educational. Registration forms and more are included in this *glowworm*. Teachers, adult leaders and agents are encouraged to take advantage of this learning opportunity.

The 4-H Linnaean Super bowl was hotly contested. Six prepared teams appeared in Jackson for the 'buzz-out' and when the smoke cleared, the Desoto County Juniors were the victors by a narrow margin. Marshall County's team placed second and Tishomingo County was third. All three teams will represent Mississippi 4-H Juniors at the Regional Contest at the MidSouth Fair on September 24. Senior teams from Mississippi will be Covington, Lee and Copiah Counties.

TOAD BUGS

We collected some of these skittish critters at camp and discovered that a number of 4-Hers had never seen or even heard of them.

The odd and ugly little insects of this group have been appropriately termed the "toad-shaped bugs". The short, broad body and the projecting eyes, as well as the dull mottled colors, are toad-like. They are not true water bugs, but live in moist places along the banks of streams and ponds. They hop much like small toads. Unlike the true water bugs, they have no ocelli, and are in other ways quite different structurally. It is not a large family, and only twenty species are known, of which three inhabit the United States. These predators belong to the Order Hemiptera and Family Gelastacoridae. Both juveniles and adults hop actively and pounce on their prey, and even winged adults have not been seen to fly.



Velvet ants

Another critter which we saw in abundance were the 'cow killer ants.' These critters are not ants at all but are wingless wasps (Hymenoptera) from the family: Mutalidae. The female is wingless, mostly red with some black, the male is half red and half black with dark wings. Females seek out bumble bee nests and lay eggs inside the wax cups. After bees or wasps have



formed cocoons, adult female velvet ants enter the host nest by digging through the soil or breaking through nest walls. The cow killer larvae feed on the bumble bee larvae and pupae and will pupate inside the bumble bee nest. This bumble bee is ultimately killed.

Happy Buggin'

Michael R. Williams, PhD
Extension Entomologist

4-H Entomology Adult mini-Camp Information Form

Name of program, or activity: **Adult Mini-Camp – 4-H Entomology**

Description of camp, program, or activity, including its intended purpose and benefits:
Campers learn about the habitat and habits of insects. They spend a weekend collecting and studying arthropods accompanied by experts from MSU. A camper will learn how to pin, identify and display collected specimens. Campers will learn layout of insect collections and principles which they can pass on to 4-Hers. Club projects and teaching ideas will be discussed and demonstrated.

Dates of camp, program, or activity:

Adult -Mini Entomology Camp - 26-27 August 2005 – Wood Institute - Mathiston

Who is eligible to attend: Any adult who is interested in learning to teach young people about nature and insects. We would like to have extension agents, teachers and parents. This would be an ideal workshop for home school parents who want to augment science curriculum.

Special restrictions, if any: **Must** be interested in insects and in learning about them.

Is the camp or program residential (overnight) or commuter (day camp):

Definitely overnight - There will be activities on Friday night to include lectures and black light collecting. Campers should expect to come prepared to hike and to stay up late for discussions and black light excursions.

Cost of attending: \$60 - reservations for camp must be in by August 10th

Sponsoring unit or organization: MSU Entomology Department and 4-H

Contact (name, address, telephone, email):

Michael R. Williams, PhD

Box 9775

Mississippi State, MS 39762

662-325-2986

mwilliams@entomology.msstate.edu

World Wide Web address for information about the camp or program, if available:

<http://www.msstate.edu/Entomology/4-H/camp.html>

Other information (e.g., is financial assistance or college credit available):

Agent training credits and CEUs are offered for teachers.

Some county 4-H programs will give scholarships to adult volunteers.

Thank you for your assistance.

**ATTENTION:
TEACHERS – PARENTS ALL WHO ARE INTERESTED IN
ENTOMOLOGY!!!!**

THE MISSISSIPPI STATE ENTOMOLOGY DEPARTMENT PRESENTS:

Adult Entomology Camp - 26 -27 August 2005 – Wood Institute – Mathiston

This camp is for **adults** who want to learn about insects from experts. The camp will be taught by professors from the Entomology Department at Mississippi State, and will be educational and fun!!!!

- _ Learn how to collect, identify, and preserve insects!
- _ Learn about unique critters you've never seen, yet they live all around you!
- _ Make an insect collection with help from the experts!

This is an adult camp designed to help agents, teachers and volunteer leaders learn how to help kids with their Entomology projects. Out of state campers are also welcome!!!!

Mail individual applications along with **\$60.00** to reserve your place to:

**Adult Entomology Camp
MSU Entomology Department
Box 9775
Mississippi State, MS 39762**

2 day Entomology Camp cost: \$60

Charges include room/board and supplies

Indicate t-shirt size: Small _____ Medium _____ Large _____ XL _____ Other _____

All shirt sizes are measured in adult sizes, the vendor does not handle children's sizes

Name: _____

Address: _____ City: _____

State: _____ Zip: _____ County: _____ Gender: _____

Telephone _____ email _____

email address is very helpful in quick communication

4-H rules and guidelines apply.

Please submit a **separate copy of this form for each camper**