



The glowworm



2 February 2005

Volume XIII No. 2

The few spring days followed by the coldest days of winter followed by spring days again have really got me mixed up and I can imagine it's also playing games with plants and insects as well. We'll have to see if the 'ground hog' is any good this year at predicting an early spring. I really hope we get one, because I'm ready to chase a bug or two. There are a lot of things going on now, so get your calendar and mark down some dates.

1. The Bee Essays are all in and being judged.... Turnout was light this year, so most folks will be in the money!
2. Linnaean Games Questions are due for the 2005 contests. Teams should submit questions before March 1st to get them in the OFFICIAL Linnaean Question Book. We have added the **Practical Entomologist**, by Rick Imes as an additional resource for questions. We'll also still use the 4-H Entomology Manual. Anybody may submit questions and it is to the advantage of Linnaean Teams to send in more than the 25 minimum.
3. There are some winter insects moving. We've seen some stoneflies in the last week or so, so it is always important to stay alert and on the lookout for new adventures in collecting.
4. Camp dates are already set and we have registrations in for camp, already. The camp form is on the WEB page and also included in this letter.
5. The new WEB pages for 2004 Entomology participants are up and you are invited to check them out at http://msucares.com/4h_Youth/4hentomology/index.html. Please note there are opportunities, for a number of contests were uncontested in 2004. if you're scratching for an idea for a visual presentation, contact me and I'll help you with an idea.

What do I eat?



How long does it take for a stag beetle to go through it's life cycle?

Dr. Glen Hughes provides some south Mississippi 4-Hers with a unique opportunity. I hope some of you will take advantage of the proposal given below:

Southern Pine Beetle Monitoring Opportunity

Southern Pine Beetles (SPB) are one of the greatest insect threats to pines. Every year a survey of SPB populations is conducted across the South. This year 4-H Clubs, Bug Campers and others have the opportunity to participate in this effort. All materials will be furnished and training will be conducted to make sure everyone knows how to manage the traps and monitoring activities.

The trapping involves placing insect traps baited with a bark beetle lure, (pheromone), in forested areas in mid-March. At weekly intervals, 4-H'ers will visit their traps, collect the insects from them, rebait the trap with lure, and take the insects back to the 4-H office. They will identify and count the insects collected. This trapping lasts four to five weeks. At the end, we will send the data to Texas, where it will be combined with data from other areas. A south wide prediction for southern pine beetle populations in 2005 will be developed from the data. To get involved email ghughes@ext.msstate.edu or phone Dr. Glenn Hughes at 601-794-0671. Monitoring will be restricted to the pine belt, which is predominantly the SE Extension District in Mississippi. A number of other states are participating in this project, so here's an opportunity to get involved in a regional project.



Southern Pine Beetles



The Stag Beetle

Each year one of the most sought after prizes collectors seek is the Stag Beetle and since we are talking about `critters' found in the woods, I thought it might be good to talk a little about one which is a little larger than the SPB. Stag Beetles are a national treasure in England where they are endangered. By paying attention to their habitat and knowing a little about their life cycle one can usually find one during the season.

Habitat: Broad-leaved woodlands, especially oak, but also parks and gardens where there are tree stumps and logs. The larvae live in dead and decaying wood and roots. The larva takes 3-5 years to complete a life cycle. Adults live only between the months of May and August. It is thought that the adult either eats tree sap or nothing at all.



Breeding: Adult male stag beetles emerge in May or June, depending on the weather, followed shortly after by the females. The male has strong wings and usually flies at dusk in search of females. The flight can be rather erratic and the beetle sometimes flies indoors through open windows or doors, attracted by the light - they often bump into things and crash land.

When the male has found a female, he lifts his head, opens his antlers wide and walks around her, showing off. If two males are interested in the same female, they will fight each other, using their antlers like male deer. The stronger of the two turns the other onto his back and the loser retreats. Injuries are rare as the encounter is more a display of aggression than a dangerous fight.

After mating, the male dies. The female finds moist decaying wood in which to lay her eggs. She prefers oak woodlands but where these are scarce she will seek out logs and old tree stumps in parks, gardens and hedgerows. When she has laid her eggs, she too dies.

Each egg hatches into a creamy colored larva, looking like a fat, wrinkly grub with an orangey-brown head and six stubby legs. It has tough jaws for tearing up and chewing decaying wood. It takes three to five years before the larva is ready to turn into a pupa. The adult beetle develops inside this pupal case, which remains hidden inside a decaying tree stump through the winter. The fully-formed adult beetle will not emerge until the weather becomes warmer in May or June of the following year. The cycle then starts over again, as the males fly off in search of a mate. The flight season lasts only until August.

Happy Buggin'

Michael R. Williams, PhD
Extension Entomologist

**ATTENTION: YOUNG PEOPLE –
TEACHERS – PARENTS ALL WHO ARE INTERESTED IN ENTOMOLOGY!!!!**
THE MISSISSIPPI STATE ENTOMOLOGY DEPARTMENT PRESENTS:

**Entomology Camp #1 on June 19-23 – Wood Institute - Mathiston
Entomology Camp #2 – July 17-21 - Kings Arrow Ranch –Lumberton**

This camp is for **adults and youth** (over age 10) 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!

**Adults are encouraged to enroll for the camp!!! Out of state campers are also welcome!!!!
Enrollment is limited and will be on a first come basis.**

Mail individual applications along with **\$50.00 deposit** to reserve your place to:

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

5 day Entomology Camp costs : \$150.00

Charges include room/board, t-shirt and miscellaneous supplies - deposit is not refundable after May 1, 2005 for camp #1 and June 15, 2005 for camp #2, deposit is applied to camp costs.

I will be attending CAMP Session #_____. Indicate 1 or 2, please!

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: _____ Age: _____ 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** - be sure to indicate the session the camper will be attending.

Certification of health is required - so camp physicals are in order

