



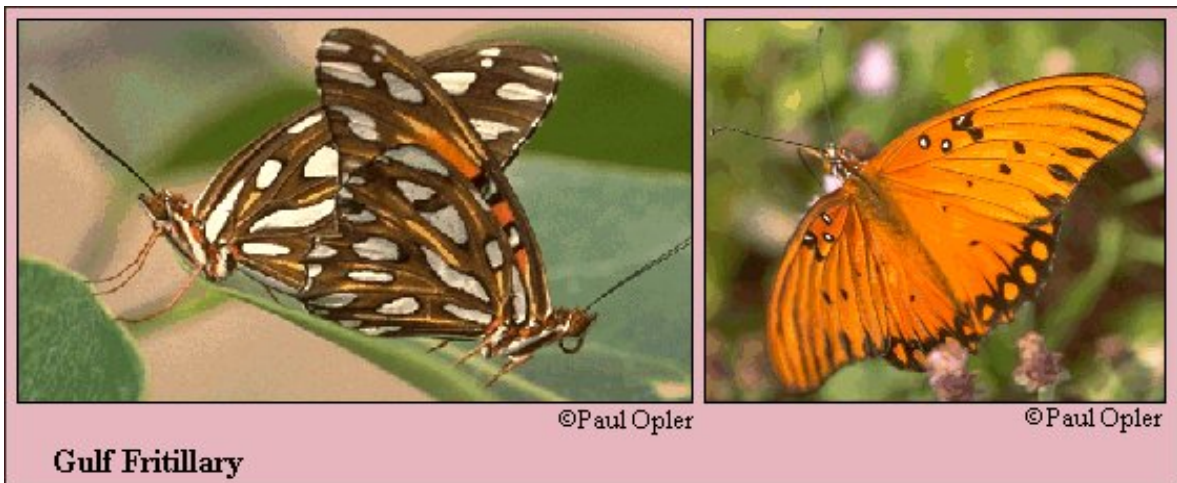
## The glowworm

Mississippi State  
UNIVERSITY  
**Extension**  
SERVICE

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Butterflies are flying, bees are buzzing and the crane flies and other early spring critters have come back in force. I seem to enjoy getting into the bug chasing mode at this time of year more than at any other. Maybe it's because we've been cooped up in the house all winter, but I for one am happy to see the flowers appear and the trees turn green. It's time, let's go!



One of the most intriguing butterflies I have ever encountered is the Gulf Fritillary. This small brush footed butterfly (wingspan 2 ½ to 3 ¾ inches) appears in north Mississippi in early July every year. The upper wings are bright orange with black markings and three black-encircled white dots on the leading edge of the forewing. The underside is brownish orange with elongated iridescent silver spots.



The adults will nectar on almost any flowering plant, but they prefer lantana, zinnias and full sun flowering plants. The female searches for maypop (*Passiflora sp*) or passion vine. They will lay their eggs on the maypop vine and the caterpillars will completely strip the vines of all their leaves, then pupate nearby and during that resting period the vines will recuperate and grow new leaves. The adults emerge mate and lay eggs on the new leaves, the new caterpillars will again strip the vines. I've seen this happen at least 3 times between July and frost. So if you'd like to watch Fritillaries, find some maypop and get it going. It is a deep rooted perennial so is not easily eliminated once it is established in a garden. It grows wild in most of the south along abandoned roadways and ditch banks.



The caterpillars are a shiny orange covered with soft dark spines. They grow to about 2 inches long and will feed on the maypop vine for about 10-12 days. The pupae is irregularly shaped ranging in color from brown to gray. The orientation of the pupae as it hangs on the



plant is very important. If disturbed they often do not emerge. This unique medium sized butterfly lives year around in south Florida, Texas, and in areas further south, but ventures northward into most of the Gulf states in the spring. It is has been reported as far north as Wisconsin, but it certainly doesn't make it that far north every summer. There is little evidence that the late summer generations move back southward, so those who make it into the cooler areas will die out and new generations will come to repopulate next year.



Pictures and information on gulf fritillaries were gleaned from the USGS Butterflies of North America and from other sites on the web. Simply type Gulf Fritillary into the search engine.



#### **Announcements:**

1. Linnaean Games Questions for the 2005 contests are available on the 4-H Entomology WEBSITE: <http://www.msstate.edu/Entomology/4-H/LINNAEAN.html> or via email upon request to [mikew@ext.msstate.edu](mailto:mikew@ext.msstate.edu). In order to qualify for 2005 competition, each team should submit a minimum of 25 questions prior to each contest. Questions may be taken from the **Practical Entomologist**, by Rick Imes or 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. These questions will be held and used for the 2006 question booklet.
2. The new WEB pages for 2004 Entomology participants are up and you are invited to check them out at [http://msucare.com/4h\\_Youth/4hentomology/index.html](http://msucare.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.
3. Camp dates have been set and a form is attached to this letter. It's not too early to get your registration in. A number of folks have, already. Note to teachers: we will give Continuing Education Units for camp!

Happy Buggin'  
Michael R. Williams, PhD  
Extension Entomologist

## Selected Larval Plants for Mississippi Butterfly Gardens

**Anise Hyssop** – *Agastache foeniculum*  
**Black Cherry** – *Prunus serotina*  
**Common Mallow** – *Malva neglecta*  
**Dill Weed** – *Anethum graveolens*  
**Dogwood** – *Cornus florida*  
**Dutchman's pipe** – *Aristolochia durior*  
**Fennel** – *Foeniculum vulgare*  
**Frikart Aster** – *Aster x Frikartii*  
**Hollyhock** – *Alcea rosea*  
**Hollyhock Mallow** – *Malva alcea*  
**Milkweed** – *Asclepias spp.*  
**Mullein** – *Verbascum spp.*  
**Nasturtium** – *Nasturtium spp.*

**New England Asters** – *Aster novae-angliae*  
**Parsley** – *Petroselinum crispum*  
**Passion Flower** – *Passiflora incarnata*  
**Pawpaw** – *Asimina triloba*  
**Queen-Anne's-Lace** – *Daucus carota*  
**Rue** – *Ruta graveolus*  
**Sassafras** – *Sassafras albidum*  
**Spicebush** – *Lindera benzoin*  
**Sweet Bay** – *Magnolia virginiana*  
**Verbena** – *Verbena spp.*  
**Willow** – *Salix spp.*

Host plants insure food sources for butterfly species. When the plants are available for both larva and adults, they will come. Feeders, water, and mineral sources can provide additional incentives for butterflies to visit and remain in the garden area.

## Common Butterflies Found in Mississippi

**American Painted Lady** – *Vanessa virginiensis*  
**Buckeye** – *Junonia coenia*  
**Comma** – *Polygonia comma*  
**Gulf Fritillary** – *Agraulis vanillae*  
**Hackberry** – *Asterocampa celtis*  
**Mourning Cloak** – *Nymphalis antiopa*  
**Painted Lady** – *Vanessa cardui*  
**Pearly Crescentspot** – *Phyciodes tharos*  
**Question Mark** – *Polygonia interrogationis*  
**Red Admiral** – *Vanessa atalanta*  
**Red-spotted Purple** – *Basilarchia astyanax*  
**Viceroy** – *Basilarchia archippus*  
**Brown Elfin** – *Insicalia augustinus*  
**Eastern Pygmy Blue** – *Brephidium isophthalma*  
**Gray Hairstreak** – *Strymon melinus*  
**Silvery Blue** – *Glaucopsyche lygdamus*  
**Spring Azure** – *Celastrina ladon*  
**Monarch** – *Danaus plexippus*  
**Queen** – *Danaus gilippus*

**Large Wood Nymph** – *Ceryonis pegala*  
**Common Checkered Skipper** – *Pyrgus communis*  
**Silver-spotted Skipper** – *Epargyreus clarus*  
**Tawney-edged skipper** – *Polites themistocles*  
**Eastern Black Swallowtail** – *Papilio polyxenes*  
**Giant Swallowtail** – *Papilio cresphontes*  
**Pipevine Swallowtail** – *Battus philenor*  
**Spicebush Swallowtail** – *Papilio troilus*  
**Tiger Swallowtail** – *Papilio glaucus*  
**Zebra Swallowtail** – *Eurytides marcellus*  
**Cabbage White** – *Pieris rapae*  
**Checkered White** – *Pontia protodice*  
**Cloudless Giant Sulphur** – *Phoebis sennae*  
**Common Sulphur** – *Colias philodice*  
**Dogface butterfly** – *Zerene cesonia*  
**Falcate Orangetip** – *Anthocharis midea*  
**Orange Sulphur** – *Colias eurytheme*  
**Sleepy Orange** – *Eurema nicippe*

**For more information on butterflies, visit these web sites:**

**USGS Butterflies of North America**

<http://www.npwrc.usgs.gov/resource/distr/lepid/bflyusa/bflyusa.htm>

**North American Butterfly Association** <http://www.naba.org/>

<http://www.naba.org/pubs/bg.html>

**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.

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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**