



### SPRING 2004 CONTENTS

BUGS at the Louisville Science Center Summer Workshops Critter of the Month: Orb-Weaver Spiders Books Upcoming Events Wee Beasties Mailing List Contact Information



### BUGS AT THE LOUISVILLE SCIENCE CENTER

This summer, the Louisville Science Center is presenting BACKYARD MONSTERS, an exhibit devoted to insects and their relatives. Featuring giant robotic arthropods and a large collection of mounted insects, this exhibit will be THE place to introduce Kentucky students to entomology.



**EDUCATION OPORTUNITIES:** Backyard Monsters is designed with teachers in mind. At the Louisville

Science Center's web site, you can download an activity guide that complements the exhibit. The activity guide is divided by grade and also includes information that explains the exhibit in detail. If you take your students, be sure to bring the activity guide!

#### Download the activity guide at:

http://www.louisvillescience.org/pdf/bymonsters\_edguide.pdf



**MAXIMUM INSECTS:** In conjunction with the Backyard Monsters exhibit, the IMAX Theater at the Louisville Science Center will be showing *A Rainforest Adventure - BUGS*!, a movie that shows (in giant detail!) the lifecycles of two tropical insect species, the Green Mantid (above) and the Great Mormon Butterfly (left).

If you've never seen an IMAX movie, you will be in for a surprise. IMAX movies are shown on huge screens that take advantage of your "eyes" to the "max." Can you imagine insects that are 30-feet high, coming at you from all angles? To learn more about *A Rainforest Adventure - Bugs!*, visit the web site at: http://www.giantscreenbugs.com

For more information about Backyard Monsters or A Rainforest Adventure:

**Louisville Science Center:** http://www.louisvillescience.org/

#### **Backyard Monsters info page:**

http://www.louisvillescience.org/happening.php3?page=tempexhib.ext#backyard

If you are planning to bring a group of students, visit the Louisville Science Center **Tour Groups** page to learn about group discounts: http://www.louisvillescience.org/tour.php3?page=tourgroups.ext

#### SUMMER WORKSHOPS

There will be two training opportunities in Summer, 2004 for Kentucky teachers who want to learn more about insects and how to use them in the classroom.



# July 6-7 – Entomology: Down On The Farm Princeton Experiment Station, Princeton, Kentucky

Rural habitats in Kentucky are some of the best places in the world to study insects. Butterflies, praying mantids, beetles, grasshoppers, and a huge variety of other insects can be found by the thousands in the fields that cover western Kentucky. Join Kentucky 4H agents and teachers in Princeton, Kentucky, for our Summer, 2004 workshop, Entomology: Down on the Farm, where we will collect and identify insects and learn how to study them in a classroom

setting. Registration is \$40, which covers lunches and take-home materials, including insect field guides and collecting equipment. To register for this workshop, and for more information, contact Blake Newton at **blaken@uky.edu**, or call at (859)257-5955.

# July 26-30 – Watersheds of the Salt River Basin Bernheim Forest, Kentucky

During this week-long training opportunity, teachers will learn about natural resources associated with the Salt River Watershed of north-central Kentucky. Experts from the University of Kentucky, the University of Louisville, the Kentucky Water Research Institute, and the Tracy Farmer Center For The Environment will show Kentucky teachers how to introduce their students to the study of hydrology, flora, fauna, land-use, and other aspects of a watershed.

Entomology Connection: All animals depend on a healthy watershed. Insects are no exception. During this workshop, teachers will sample and identify aquatic insects and learn how they depend on clean water. Enrollment is limited to 30 participants, and a stipend is included. For more information, contact Stephanie Jenkins at the Tracy Farmer Center for The Environment at swjenk2@uky.edu, or call (859) 257-4974.

#### CRITTER OF THE MONTH: ORB-WEAVER SPIDERS

Orb-weavers are among the most common and frequently encountered spiders in the world. They are known for building intricate, circular webs. Kentucky is home to many colorful orb-weaver species, including the **Marbled Spider**, *Araneus marmoreus*, pictured on the right. It is a large spider (1") and is common around buildings. The spider at the top of this newsletter is the orb-weaver *Acacesia hamata*. It is about 1/4" long and was photographed



on the wildflower Queen-Anne's Lace at the Raven Run Nature Sanctuary in Lexington, Ky.

Like all spiders, orb-weavers have eight legs and two body parts (cephalothorax and abdomen). Orb-weavers have large, spherical abdomens and look very much like cobweb spiders, but cobweb spiders do not build orb webs. In fact, most web-building spiders do not build orb webs. Orb-weaver spiders and long-jawed orb-weavers are the only common Kentucky spiders that build orb-webs. Read more about Orb-Weavers in the Critter Case Files:

http://www.uky.edu/Agriculture/CritterFiles/casefile/spiders/orbweavers/orb.htm

Each month, we will feature one of the critters from the **Critter Case Files**, University of Kentucky's on-line field guide to insects, spiders, and related critters. Visit the Case Files at: www.uky.edu/Agriculture/CritterFiles/casefile/casefile.htm

#### **BOOKS**



**Spi ders and Their Kin** by H. Levi and L. Levi

Spiders and Their Kin has been available for many years (it was first printed in 1968), but since Orb-Weaver spiders are the Critter of The Month, it is a good time to mention this classic field guide. Along with the Golden Guide Butterflies and Moths (by Mitchell and Zim), Spiders and Their Kin is one of the best field-guide bargains available.

Although marketed to young people through the "Golden Guide" series, this guide has enough detail to make it useful for people of all ages (including "full-grown" entomologists!). It is one of the only commonly available books that contains pictures of all of the different spider families that are common in this part of the United States. And, although not every spider species is pictured, most of the common ones are. The pictures are not photographs, but they are highly detailed color drawings, and are just as useful

as photographs. The book also has information about spider anatomy, webbuilding, and spider collecting.

Spiders and Their Kin also has pictures of a few other non-insect arthropods, including centipedes, scorpions, millipedes, and ticks. Although these creatures are not covered as thoroughly as the spiders, this book is one of the only field guides that discusses these creatures at all.

Currently available for less than \$7, there is no reason not to have this book. Grab a copy, and keep it in the classroom library next to your favorite insect field guide, and you'll be ready for just about any creepy-crawly that your students bring in.

#### UPCOMING EVENTS

The Entomology Department will be present with displays, insects, and information at the following events and locations during the upcoming months in 2004:

DATE	TIME	EVENT/LOCATION
Sept 21	1 pm - 2 pm	Insect Walk, Henry Clay Estate (859-266-858), Lexington, Ky
Sept 30	8:30 pm - 10:30 pm	Raven Run Night Insect Walk (859-272-6105), Lexington, Ky
Sept. 18	All Morning	Ag Roundup, University of Kentucky Campus, Lexington, Ky

#### WEEBEASTIES MAILING LIST

Would you like to receive a PDF copy of each fall and spring *Wee Beasties* issue via email as soon as it is printed? If so, send us some email at **blaken@uky.edu** and we will put you on the list! If you don't like PDF, we will also send you a link to the HTML version of the issue when it is published.

#### Contact Information:

If you have ideas, experiences, or information that you would like to share or would like information about educational resources available through the University of Kentucky, Department of Entomology, write, phone, or email:

Blake Newton S-207 Agriculture Science Center - North University of Kentucky Lexington, KY 40546-0091 (859) 257-7453 Email: blaken@uky.edu

Educational Programs of the Cooperative Extension Service serve all people regardless of race, color, age, sex, religion, disability, or national origin.

## UNIVERSITY OF KENTUCKY, KENTUCKY STATE UNIVERSITY, DEPARTMENT OF AGRICULTURE AND KENTUCKY COUNTIES COOPERATING.

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