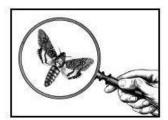
WEE BEASTIES



Entomology Newsletter for Educators

FALL 2001



CONTENTS

2001 KSTA Conference Classroom Projects Did You Know? Recommended Books Upcoming Events



2001 KSTA Conference

The 2001 Kentucky Science Teachers Association Conference is coming up on November 1-3, 2001 at the Hyatt Regency in Lexington! Representatives from the University of Kentucky Department of Entomology will be manning a booth all three days, and we'll have information and materials designed to help teachers who are interested in introducing their students to Entomology. We will also be presenting a workshop on "Bugs In The Classroom." We hope to see you there!

www.uky.edu/Agriculture/Entomology/ythfacts/entyouth.htm

Classroom Project: MEAT-A-Bug



If you and your students are brave enough, this exercise can be a great way to BEEF up your entomology skills!

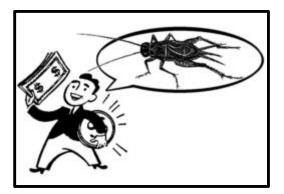
Setting a piece of meat outside for a few days is a great way to attract and observe insects, especially certain types of flies and beetles that lay eggs in carrion. Have students construct a small cage designed to allow insects, but not larger animals, to get inside. Perhaps a soda can with multiple holes poked in the side, hung from a string on a tree limb? Give students a few ounces of raw meat (any kind will do). Or, have students use a piece of meat from home, and have them record what kind of meat it was, and how much they used. Be sure that the students know to clean their hands after handling the raw meat. Have them place

the cage with meat outdoors somewhere for a few days, either at school or at home. For a few minutes everyday, the students can check the cages and describe (by writing and/or drawing) what kinds of creatures they see visiting the meat.

Is meat a little too gross? Or are there vegetarians in the group? Rotten fruits and vegetables work too, and attract a whole different group of insects!

Classroom Project: Cricket\$ for Dollar\$

It's hard to imagine that people can make money by raising insects. Who would want to pay somebody to *raise* insects? Don't people pay to *kill* insects? Okay, honeybees are raised for profit, but no other insects, right? But there *is* an easy way to make money from raising insects. Fish bait! Crickets make great live bait for certain kinds of fish and they are sold all over the country at sporting goods shops and department stores in areas where fishing is



popular. Crickets they are easy and inexpensive to raise. How easy? How inexpensive? Why not raise some with your students as a classroom project to find out!

First, get a cricket-raising set-up going in the classroom. Check out our **factsheet** (<u>http://www.uky.edu/Agriculture/Entomology/entfacts/misc/ef007.htm</u>) on cricket rearing for the materials needed. Note that this same project would also work with **mealworms** (<u>http://www.uky.edu/Agriculture/Entomology/entfacts/misc/ef002.htm</u>)</u>, which are just as easy to raise.

Next, assign various duties to the students. Students could rotate between feeding, cleaning, and counting insects, for instance. Have the students keep track of how much

food is used and how many adult crickets are produced. Then students could contact local stores and determine the selling price of bait crickets to estimate "profits." Students could even try to sell the crickets at a school function at the end of the year for actual profits, bake-sale style!

By keeping track of how much it costs to raise crickets and researching how much crickets could potentially be sold for, students can learn some basic economics while observing an insect life cycle. This long-term exercise allows children to become familiar and comfortable with insects, while the maintenance of a living insect colony gives students a lesson in responsibility.

Did You Know?

Not all flies like garbage. Some flies are ferocious predators! "Robber Flies" are ace pilots, able to catch their prey in the air. Some of them look an awful lot like bumble bees, but you can tell they are flies because they only have two wings (bees and wasps have four wings). Watch out, because even though robber flies can't sting, they can bite if you bother them!





COMMON ROBBER FLIES

"Lightningbugs," also called "fireflies" are actually kinds of beetles. There are lots of different species of lightningbugs. Each kind has a unique flashing pattern that helps male and female fireflies of the same species find each other in the dark. In fact, some female fireflies mimic flashing patterns so that they can attract males of different species- and eat them!

Although most moths tend to have gray or brown wings, several of the larger moths in Kentucky have very bright colors. The orange and purple critter at the beginning of this newsletter is a Royal Walnut Moth. With a wingspan of over five inches, this is one of the largest moths that you'll ever see. At nearly six inches long, this moth's distinctive caterpillar (called "Hickory Horned Devils") is also very large. There are other big and colorful moths related to the Royal Walnut Moth. Read more about them at:

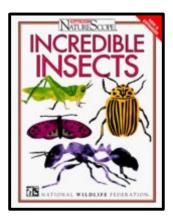
http://www.uky.edu/Agriculture/Entomology/entfacts/misc/ef008.htm

Recommended Books

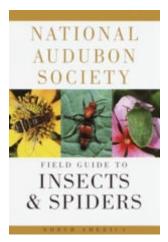
Incredible Insects (from Ranger Rick's NatureScope Series)

Edited by the National Wildlife Federation

This collection of activities and information is a good choice for teachers interested in introducing their students to insects and science in general. Teachers familiar with these types of activity books should know what to expect, but this is one of the few books of its kind that focuses exclusively on insects. Activities include classroom lesson plans, outdoor projects, crafts, puzzles, and games. The book also includes many ready-to-use handouts that are suitable for copying. The



projects are designed for grades K-8, but are probably most suitable for younger students. As with many books of this sort, Kentucky teachers may need to "KERA customize" some of the activities.



National Audubon Society Field Guide to North American Insects and Spiders By Lorus and Margery Milne

This popular field guide covers about 700 species of common North American insects and spiders with excellent photographs and fairly detailed biological information. Although this is a good book for beginners, the insects are arranged by shape and color rather than by taxonomic relationship, which can sometimes be confusing. Keep in mind that a book of this sort cannot possibly contain pictures of all the insects that you are likely to run into. Also, information presented in field guides tends to be anecdotal, so take all "facts" with a grain of salt.

Upcoming Events:

The Entomology Department will be present with displays, insects, and information at the following events and locations:

DATE	TIME	PLACE
SEPTEMBER 5-8	various	AG ROUNDUP, UNIVERSITY OF KENTUCKY
SEPTEMBER 8	10am – 2pm	COMMONWEALTH CREDIT UNION (Louisville Rd. Branch), FRANKFORT
SEPTEMBER 29	11am – 4pm	MUSEUM-GO-ROUND at WOODLAND PARK
SEPTEMBER 29	11am – 4pm	WILDLIFE FESTIVAL at RAVEN RUN NATURE SANCTUARY
OCTOBER 6	5 – 7pm	TREES, TRAILS, and CREATURES at the LEXINGTON ARBORETUM
OCTOBER 30	9am – 5pm	PUMPKIN FESTIVAL at the CLARK CO. FAIRGROUNDS
APRIL 6	10am – 3pm	"BUGZ-ALL-DAY" at the LEXINGTON CHILDREN'S MUSEUM

Tell your students about these upcoming dates! And be sure to come to "Bugz-All-Day," our annual spring event at the Lexington Children's Museum!

www.uky.edu/Agriculture/Entomology/ythfacts/entyouth.htm

A Note from the Editor

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-225 Agriculture Science Center - North University of Kentucky Lexington, KY 40546-0091 859-257-5107 Email: blnewt00@pop.uky.edu

Black and White images used with permission from www.arttoday.com.

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.