### HOUSTON MUSEUM OF NATURAL SCIENCE



# **Insect Study Prerequisites Work**

This class studies the wide variety of insect life in the world. Scouts will visit the Cockrell Butterfly Center.

To complete the prerequisite work, scouts will need to go outdoors for several hours and have access to the internet or field guides (from library). Their insect scrapbook will be checked off individually and must be earned.

Work on requirements 5a, 5b, 6a and 9 need be completed before the class. Scouts who do not complete this prerequisite work prior to class will need to take it to their scout master to sign off.

#### Requirement 5 a & b

Observe 20 different live species of insects in their habitat. In your observations, include at least four orders of insects.

Make a scrapbook of the 20 insects you observe in 5a. Include photographs, sketches, illustrations, and articles. Label each insect with its common and scientific names, where possible.

*Make 20 copies of the last page or create your own scrapbook*. However, you will need to include your own Insect observations section. Bring this scrapbook with you to the merit badge class.

#### **Instructions for Completing Insect Observation pages**

For identifying insects, use the website <a href="http://www.insectidentification.org/insects-by-state.asp?thisState=Texas">http://www.insectidentification.org/insects-by-state.asp?thisState=Texas</a> to help you find the common name, scientific name and the order.

<u>Common name</u> is what the species is usually called by non-entomologist, for example "monarch butterfly". Generic names such as "ant, butterfly, caterpillar, or grub" are not acceptable common names.

<u>Scientific name</u> is the (genus and species) in Latin or Greek. A monarch butterfly's scientific name is *Danaus plexippus*.

Order is the general group of insects that are similar. Ants, wasps and bees are in one order, Hymenoptera, while butterflies and moths are in another order, Lepidoptera. The order of the insects must be identified and there must be 4 different orders in your scrapbook.

<u>Observations</u> what the insect is doing, for example carrying food. Is it solitary, or with in a group of the same insects. Are there any distinguishing marks that will help identify the insect?

<u>Types of habitat</u> are grass, pond, forest etc. <u>Place</u> is city, or county and whether the insect was found at day or night.

### Where to find Insects

Under boards and rocks, around lakes, streams, ponds or ditches, under loose bark, stumps or Logs, grass, crops, trees and in the air. \*Safety note! Although many insects can be found by flipping a rock or a piece of wood over, never stick your hands where you can't see what is lurking underneath. Use a tool like a stick to assist in moving objects.

Species
Order
Scientific Name
Observations: (Carrying food, Social or Solitary, Distinguishing marks)
Type of Habitat and place:
Photographs, sketches, illustrations, and articles

# **REQUIREMENT 6**

# **PREREQUISITE**

a. From your scrapbook collection, identify three species of insects helpful to humans and five species of insects harmful to humans.

Helpful	Harmful
1.	1.
2.	2.
3.	3.
	4.
	5.

### **REQUIREMENT 9**

## **PREREQUISITE**

Raise and insect through the complete metamorphosis from its larval stage to its adult stage (e.g. raise a butterfly or moth from a caterpillar).