

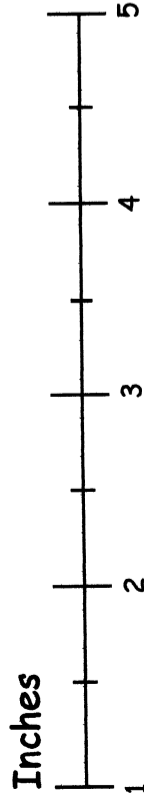
My Notes:

Wings of Wonder Field Journal

an inquiry-based journal
to be used in preparation for and during an
ecology study trip to a

Meadow Habitat

This Journal Belongs To:

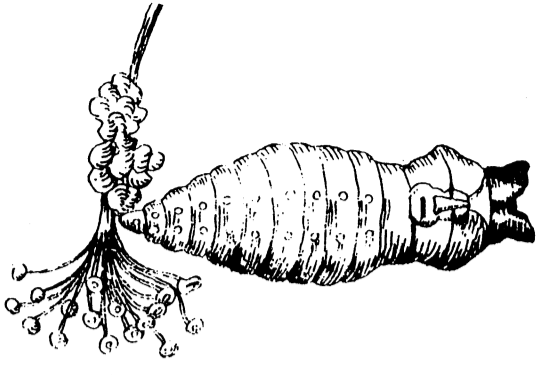


(Scientist's Name)

An Investigation of My Own...

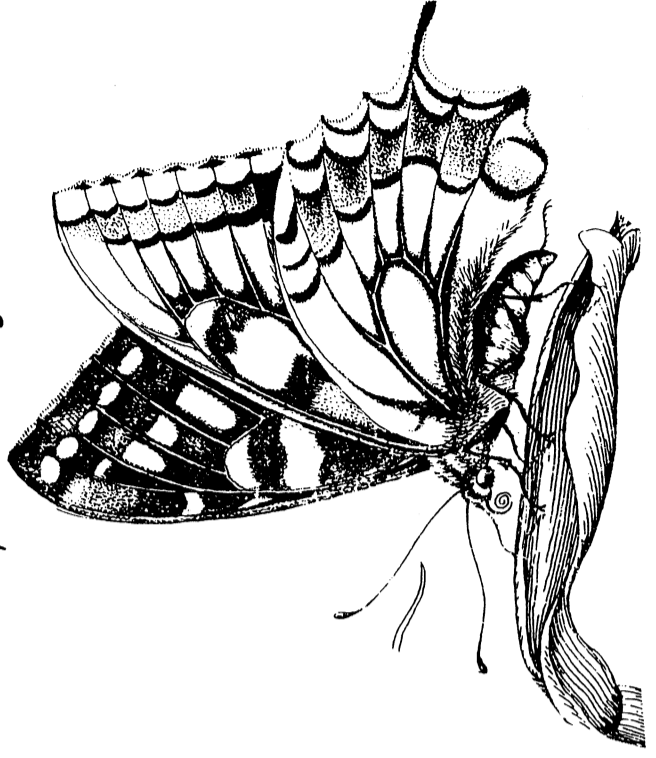
Share your "I wonder..." questions with your classmates? Did any of your classmates ask the same question as you? Are there any questions that you'd like to investigate further?

Let's list some ways in which we could further investigate our questions....



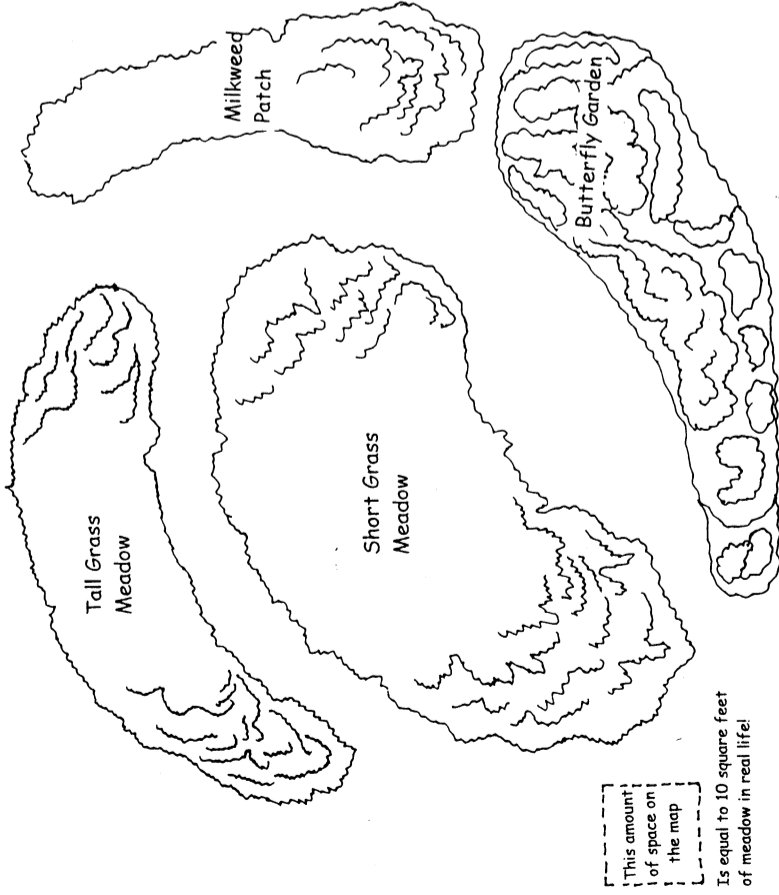
After several instars, the caterpillar emerges in a form called a **pupa**, which has an exoskeleton that hardens into a **chrysalis**. Inside the chrysalis, the insect changes from a caterpillar to an **adult butterfly** through a process scientists call **metamorphosis**. The root word "meta" means *change*, and the root word "morph" means *shape*.

The adult butterfly looks different than it did when it was a caterpillar. It now has two sets of **wings**, two **antennae** and six **legs**. It also has a long feeding tube, or **proboscis**, that allows it to sip nectar from flowers. After several days as an adult, the butterfly is mature enough to mate and lay eggs to begin the cycle again. Can you label the parts of a butterfly on the drawing below?



The illustrations on this page were drawn by Maria Sibylla Merian, a 16th Century artist and naturalist born in Germany.

Below is a map of the PPG Meadow Habitat Study Area



I wonder

I wonder

I wonder...

A **habitat** is a science word for a place that provides for all the needs of a living creature, or organism. All organisms need to have certain things to live. Can you think of a list of things that you need in order to survive? Then, compare your list with your classmates. Can you find several things that everyone needs in order to survive?

When you visit the Habitat Study Area, you will look for butterflies. What do you think a butterfly would need to survive? (write below) What else would you expect to see in this Meadow Habitat?

My Wonder Journal

My Wonder Journal

I wonder

I wonder

I wonder...

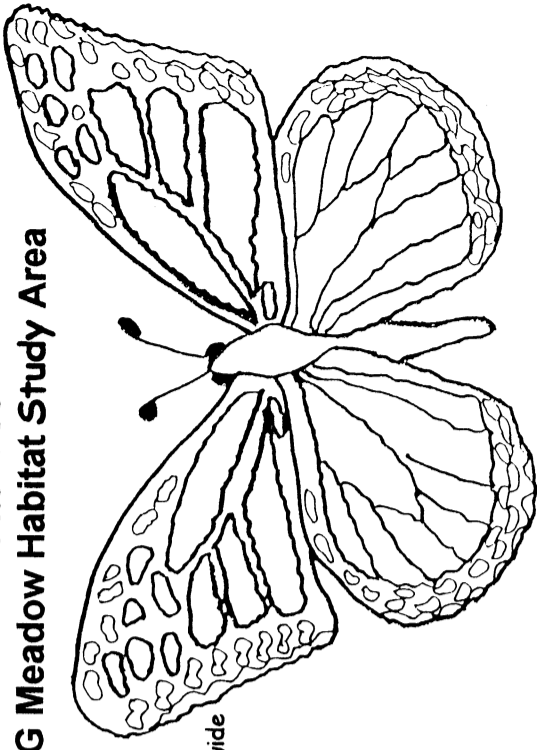
I wonder how.....I wonder why...I wonder when...I wonder where...I wonder who

My Field Guide: Common Butterflies of the PPG Meadow Habitat Study Area

Monarch

Danaus plexippus

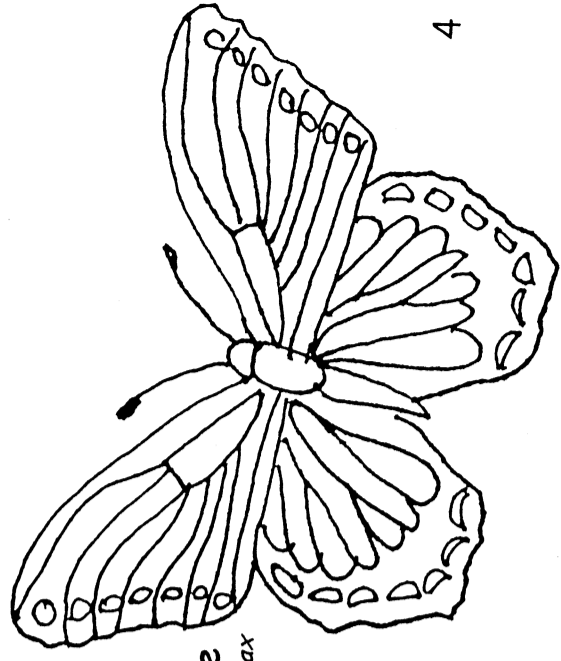
3 1/2 to 4 inches wide



Viceroy

Limenitis archippus

2 1/2 to 3 inches wide



Red-spotted Purple

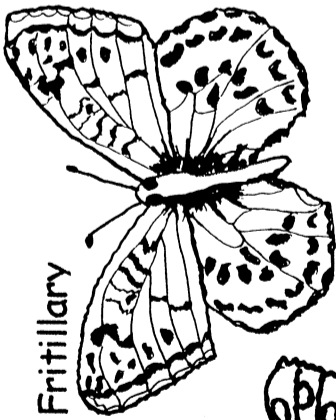
Limenitis arthemis astyanax

2 1/2 to 3 1/2 inches wide

My Field Guide:
Common Butterflies
of the PPG Meadow Habitat Study Area

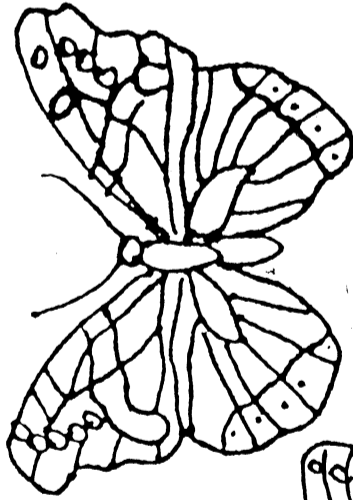
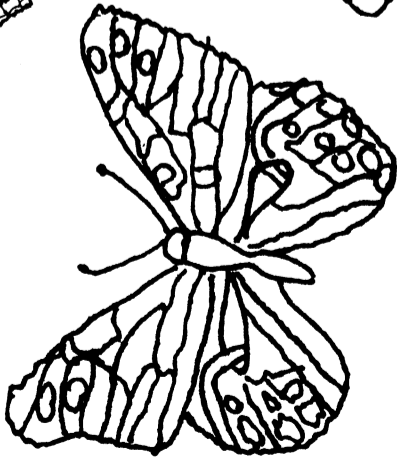
Great Sappedled Fritillary

Speyeria plexippus
2 to 3 inches wide



Painted Lady

Vanessa virginensis or
V. cardui
1 3/4 to 2 1/4 inches wide

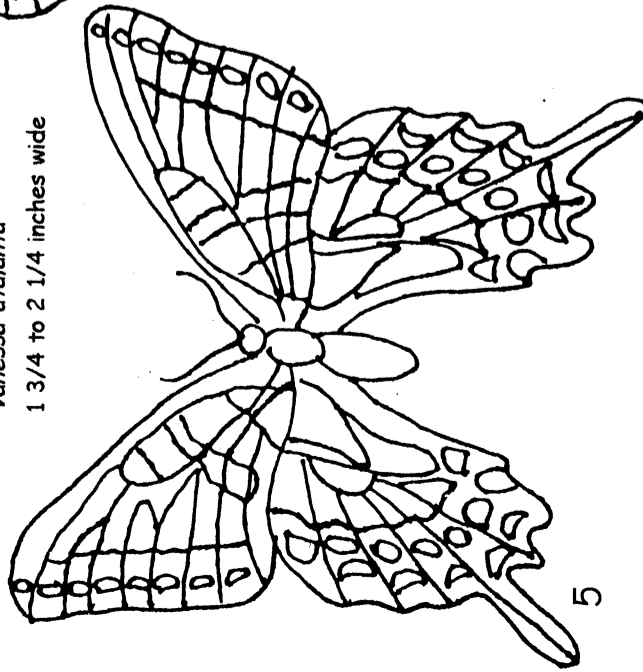


Tiger Swallowtail

Pterourus glaucus
3-5 1/2 inches wide

Red Admiral

Vanessa atalanta
1 3/4 to 2 1/4 inches wide



Naming an Organism

Using the field guides, are you able to find out the name of your plant? If you can find your plant's name, write it below.

Plants are used by many different creatures within a habitat. Animals use plants for food and sometimes for shelter. Humans use plants for food and shelter, too. Sometimes, people use plants for medicine, arts and business, too. Can you make up a story as to how your plant got its name? (If you can't find the name of your plant using the field guide—make up a name that suits your plant and helps other people to remember what it is. Then write your story about that how your plant got its name!)

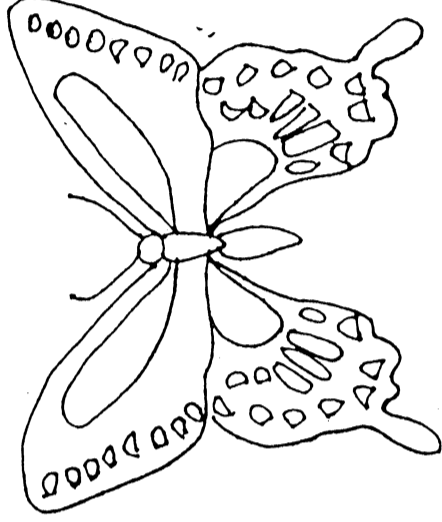
Studying an Organism

There are many organisms living in this habitat. Take a look at the many types of plants growing in the Meadow Habitat Study Area. Select a plant growing in the meadow to carefully study. Please do not pick the plant. Your job, as a scientist, is to record everything you can about this plant. In your field journal, you need to record a journal entry so descriptive that another person would be able to read your journal and then use your descriptions to find the plant where it is growing. Use your best descriptive language. Use science words when you are able. Describe what your plant looks like and even draw a picture of it. And while you are looking closely, record any organisms that visit the organism (plant) that you are studying!

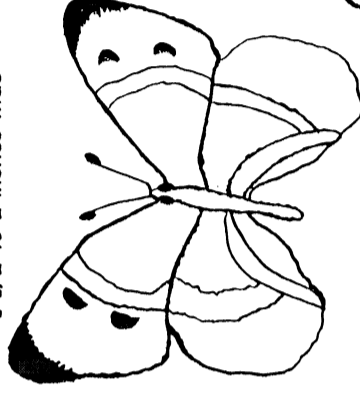
Does it move? Is it alive? Can I touch it? Does it look like anything I know already? Is it one or many? Why does it do that?

My Field Guide: Common Butterflies of the PPG Meadow Habitat Study Area

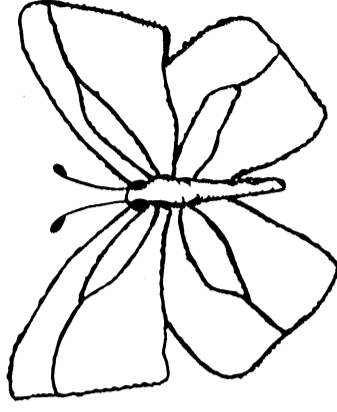
Spicebush Swallowtail
Pterourus troilus
3 1/2 to 4 1/2 inches wide



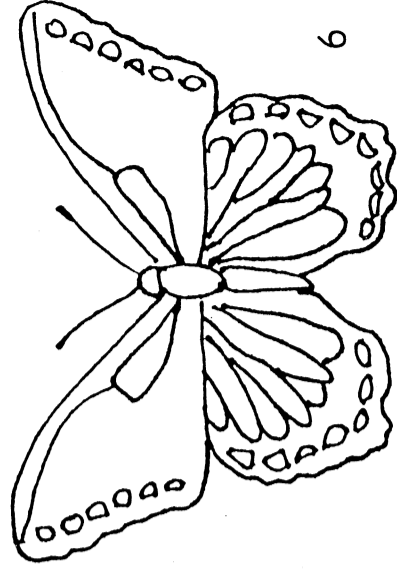
Common Sulphur
1 1/2 to 2 inches wide



Cabbage White
Siris rapae
1 1/2 to 2 inches wide



Mourning Cloak
Nymphalis antiopa
3 to 3 1/2 inches wide



6

Is it tall? How tall is it? Is it fuzzy or smooth? Does it have legs? How many? Does it have teeth? Where does it go in winter?

Date?	Butterfly / Description of Organism?	Where?	Conditions?	Behavior Observed?
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