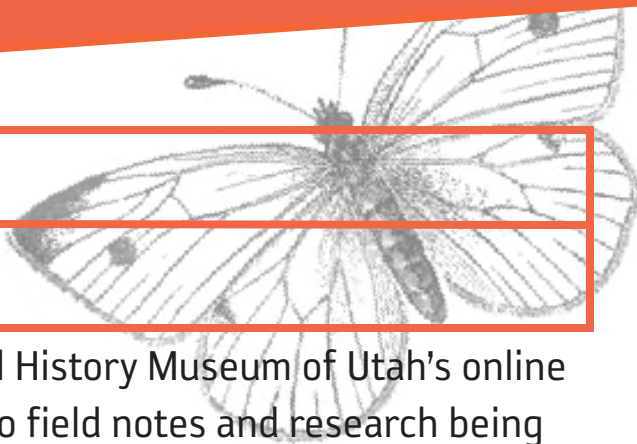


Habitat Detectives

Online Collections Investigation



Grade Level	3rd-5th Grade
Activity Length	30-45 Minutes

Soar into the world of butterflies through the Natural History Museum of Utah's online collections. These collections provide unique access to field notes and research being done by NHMU scientists. Students will review and compare specimens to discover how the butterfly's unique structures help them survive in their habitat.

Using this lesson for Distance Learning Options:

1. Print off the packets either at school or at home.
2. Have students answer questions on another sheet of paper or in a notebook.
3. Have students fill in the PDF on a computer and use SketchPad for online drawings. Note: PDF will often open in browser where regular save function will not work. To save answers students will need to select the Print button and choose the "Save as PDF" option.

Using this lesson in the Classroom:

1. Use classroom computers or tablets for students to complete activity either individually or in small groups.
2. Project the specimen record and images for all students to study together.
3. Print off the specimen record and some pictures for students to study without technology.

Disciplinary Core Idea:

(LS2) Ecosystems

SEEd Standards:

Standard 3.2.5 Engage in argument from evidence that in a particular habitat (system) some organisms can survive well, some survive less well, and some cannot survive at all. Emphasize that organisms and habitats form systems in which the parts depend upon each other.

Standard 4.1.1 Construct an explanation from evidence that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction. Emphasize how structures support an organism's survival in its environment and how internal and external structures of plants and animals vary within the same and across multiple Utah environments.

Questions? Contact us at fieldtrips@nhmu.utah.edu

Habitat Detectives

Online Collections Investigation

Student Name: _____

The Natural History Museum of Utah provides information about our collections online for researchers all over the world to study. Today, you are one of those researchers!

Answer the questions on the following pages to discover the secrets of Lepidoptera – butterflies!

Visit the websites below by clicking on the links or copying and pasting the links into your internet browser.

Butterfly #1 - Ruddy Copper

<https://bit.ly/NH MULycaena>

Butterfly #2 - California Tortoiseshell

<https://bit.ly/NH MUNymphalis>



Butterfly #1 - Ruddy Copper

Scientific Name of Butterfly (Taxon): _____

Date Found: _____

Habitat: Sagebrush, scrub, dry fields

Use the space below to make some observations about this butterfly. What inferences can you make based on your observations?

<div>Observations</div> <div>What do you notice about this butterfly? What colors, structures, or textures do you notice?</div>	<div>Inferences</div> <div>An inference is your best guess. What can you guess about this butterfly using your observations?</div>

Field Journal - Ruddy Copper

Researchers keep detailed field journals about the specimens they collect. Use the space below to sketch the butterfly in its habitat. Remember, pay attention to details! **Label at least two structures of the butterfly and how they function to help it survive in this habitat.**

Butterfly #1 - California Tortoiseshell

Scientific Name of Butterfly (Taxon): _____

Date Found: _____

Habitat: Woodland, forest clearings and edges

Use the space below to make some observations about this butterfly. What inferences can you make based on your observations?

Observations	Inferences
What do you notice about this butterfly? What colors, structures, or textures do you notice?	An inference is your best guess. What can you guess about this butterfly using your observations?

Field Journal - California Tortoiseshell

Researchers keep detailed field journals about the specimens they collect. Use the space below to sketch the butterfly in its habitat. Remember, pay attention to details! **Label at least two structures of the butterfly and how they function to help it survive in this habitat.**

Compare and Contrast

Both the Ruddy Copper and the California Tortoiseshell butterfly have different colors on either side of their wings. Why would that be helpful? What would the different colors help them do?

Although these two butterflies look similar they live in different habitats. Would these butterflies be able to survive in each other's habitat? Why or why not? What structure helps them live in their particular habitat?
