

A lot of information about specimens gets lost after it is collected. For some specimens, colors and textures change after they die. Drawing in field books can help collectors remember what the specimen looked like when it was collected. Drawings can be of the whole specimen or of part of the specimen.

The field drawing activity is designed to show your students how illustrations and text in a field book help describe a specimen at the time it was collected. Students study examples of field drawings and identify types of text that describe the image. They then get the chance to draw their own example of a specimen drawing.

**Note:** For a bonus, students can circle and identify additional information listed on field drawings. Several images include information about size, artist, or specimen number.

## **Background on drawings**

Field drawings were selected from illustrations created during the United States Exploring Expedition (1838 -1842) and are part of the Record Unit 007186 at the Smithsonian Institution Archives. The expedition was headed by Lieutenant Charles Wilkes of the US Navy, and explored regions of the world that were rapidly becoming of interest to American traders and whalers. It included a group of scientists and two illustrators, one of which was Joseph Drayton, whose works were chosen for this activity. The expedition sailed from Norfolk, Virginia, and explored Madeira, both coasts of South America, the South Pacific islands, Australia, New Zealand, Antarctica, the Hawaiian Islands, Washington and Oregon territories, California, the Philippine Islands, Singapore, the Cape of Good Hope, and St. Helen. Wilkes's voyage along the Antarctic coast during the expedition established the existence of that continent.

Information above was taken from Smithsonian Institution Archives finding aid: "SIA RU007186, United States Exploring Expedition (1838-1842), United States Exploring Expedition Collection, 1838-1885," retrieved August 23, 2012 from http://siarchives.si.edu/collections/siris arc 217343.

## Additional information on field drawings and photograph

1st field drawing: *Ophisurus* (a genus of eel). It was collected in November 1839 off the coast of Upolu, an island in Samoa. Image#: SIA2011-1234

2nd field drawing: genus *Balistes*. The common name is Triggerfish. The specimen was collected in August 1839 off the coast of Clermont de Tonnere Island (spelled Tonnier in the drawing). The island is now known as Atoll Reao and is part of French Polynesia. Image #: SIA2011-1230

3rd field drawing: *Mylocheilus lateralis* (also known as *Mylocheilus caurinus*). The common name is Peamouth. It was collected May 31, 1841 in the Columbia River in the vicinity of Fort Vancouver. This is in Clark County, Washington. Image #: SIA2011-1233

Specimen photographed is *Pseudocheilinus hexataenia*, also known as Sixstripe Wrasse. It was collected in May 29, 2000 off the coast of Mindoro island in the Philippines. Specimen is part of the collection of the Division of Fishes, National Museum of Natural History. USNM catalog number: 379431

Note: For clarity, some portions of the field drawings have been altered and text transcribed.

## **Related Vocabulary**

**Specimen (biology)**: A part or whole plant or animal collected for testing, examination, or study.

**Description**: Words or other tools used to tell about an object or event. The goal of description is to help a person who did not see the object or event to imagine what it was like.

Location: A place where something is or something is happening.

**Texture:** Characteristics of a surface that could be determined by touch (e.g. rough, smooth).

#### **Related topics**

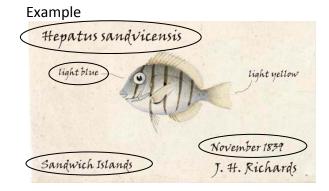
Scientific names versus common names of plants and animals What are specimen numbers?
What is an expedition?
Why were artists a part of an expedition?

# What can you learn from a field drawing?

## **Directions:**

For each drawing, find the kinds of information from the list below.

- Name of fish
- Date
- Location
- Colors



Match the type to the information circled.

# **Example:**

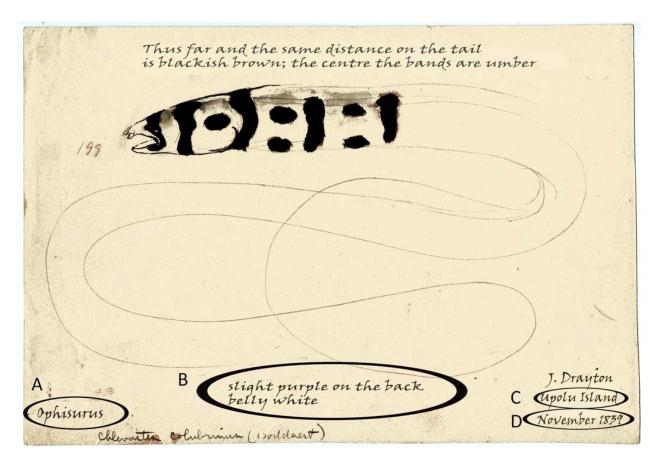
Name of Fish	Hepatus sandvicensis
Color	light blue
Date	November 1839
Location	Sandwich Islands

Bonus: watch for other types of information the drawings like:

- how was the specimen collected
- shapes or patterns
- textures

Match the letter to the type of information in the list below.

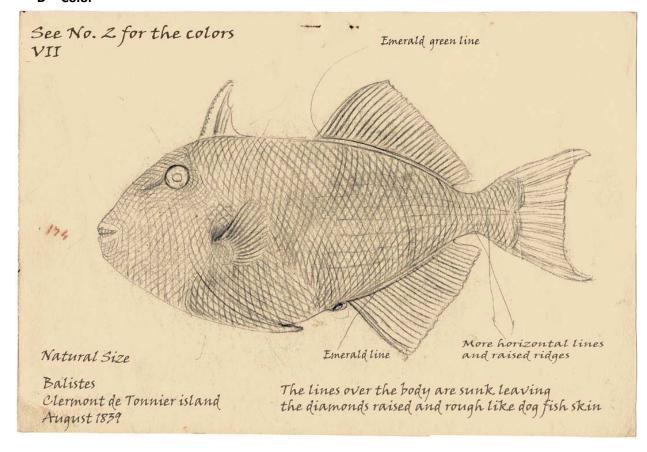
Name of Fish	
Location	
Color	
Date	



In the picture below find and circle the **name of fish**, **location**, **date**, and 1 description of **color**).

Next to your circles, write down the letter for the type of information.

- A Name of fish
- **B** Location
- C Date
- D Color



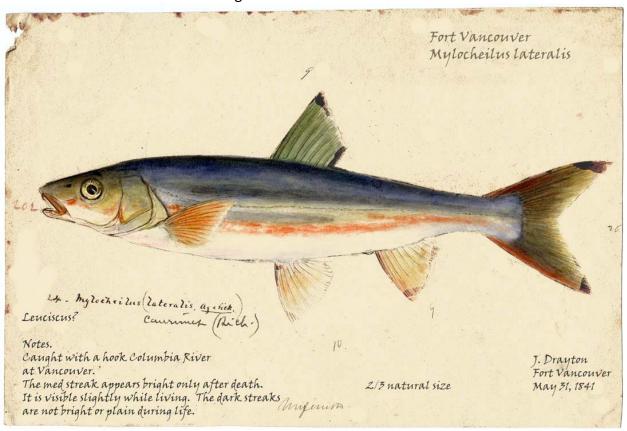
# 3<sup>rd</sup> fielding drawing

In the picture below find and circle the name of fish, location, and date).

Next to your circles, write down the letter for the type of information.

- A Name of fish
- **B** Location
- C Date
- D Color

Find and circle how the scientist caught the fish.



Can you find any other types of information written in the picture? Look for information about: *colors, shapes or patterns, size, or textures*.

# Try it yourself!

Now that you know what to write down when you draw in your field notes, you can make your own drawing in the box below. As a class or on your own, look at this picture of the fish caught in the Philippines in 2000. Below, draw and take notes on what you see.

Remember to consider notes about: colors, shapes or patterns, and textures.



our drawing		