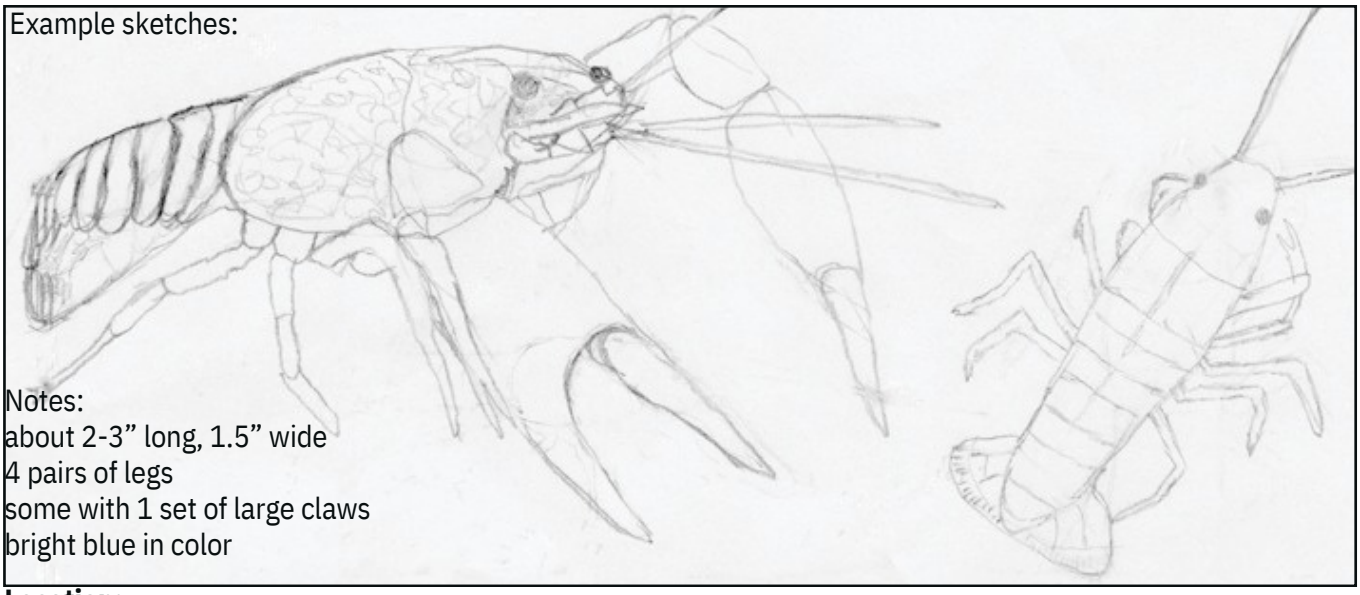
OKLAHOMA AQUARIUM

Field Journals & Scientific Illustration

Scientific illustrators strive to clearly communicate accurate, detailed information through their drawings. Good illustrations require a lot of time and research, and can be found in textbooks, journals, museums, and nature parks, among many other places. Scientific illustrators need keen observation skills, whether they are watching the behavior of a school of fish or the antics of an octopus. One way to hone your observation skills is by using a field journal to make sketches and notes of the animals that you see at the Oklahoma Aquarium. Whether you're sketching in your field journal in nature or at the Oklahoma Aquarium, you may not always have time to draw a complete scientific illustration. Making as many notes and sketches as possible can help you create a full scientific illustration later.

Example sketches:



Notes:
about 2-3" long, 1.5" wide
4 pairs of legs
some with 1 set of large claws
bright blue in color

Location: Be as specific as possible. In nature, include information like country, state, city, or county. The location is useful in figuring out the identity of a specimen. At the aquarium, the location can include exhibit information.

Date: What season or month is it? A specimen's activity levels may vary depending on the time of year.

Time: The behavior of a specimen can vary by the time of day. For example, some animals are nocturnal, and others are more active during the day.

Size/Proportion: If you have a ruler and the specimen is small, take measurements. If not, you can estimate proportion with your pencil. Extend your arm with your pencil held in front of your specimen. Line up the edge of the pencil with the edge of the specimen, and then mark out the length on your page. Turn the pencil and repeat to estimate the width.

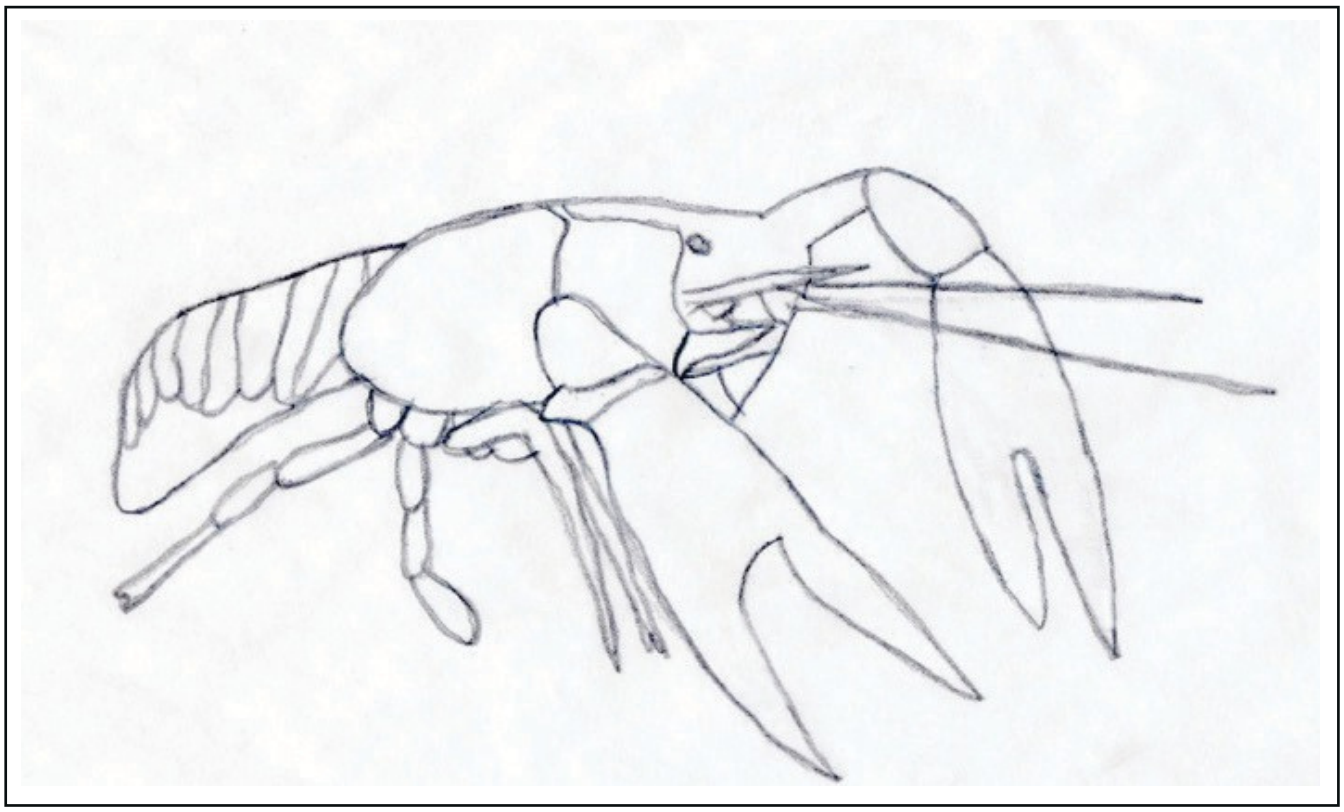
Color: Sometimes scientists will bring colored pencils or a pan of watercolors. You can label your sketches with color descriptions to help you approximate colors later if you wish to do a complete illustration.

Habitat: Is the specimen in water, or near water, and is it salty or freshwater? Is the water moving or still? Brackish or clear? What body of water is it found in? What is the temperature of the habitat? If it's on land, is it grassy, wooded, rocky, or sandy?

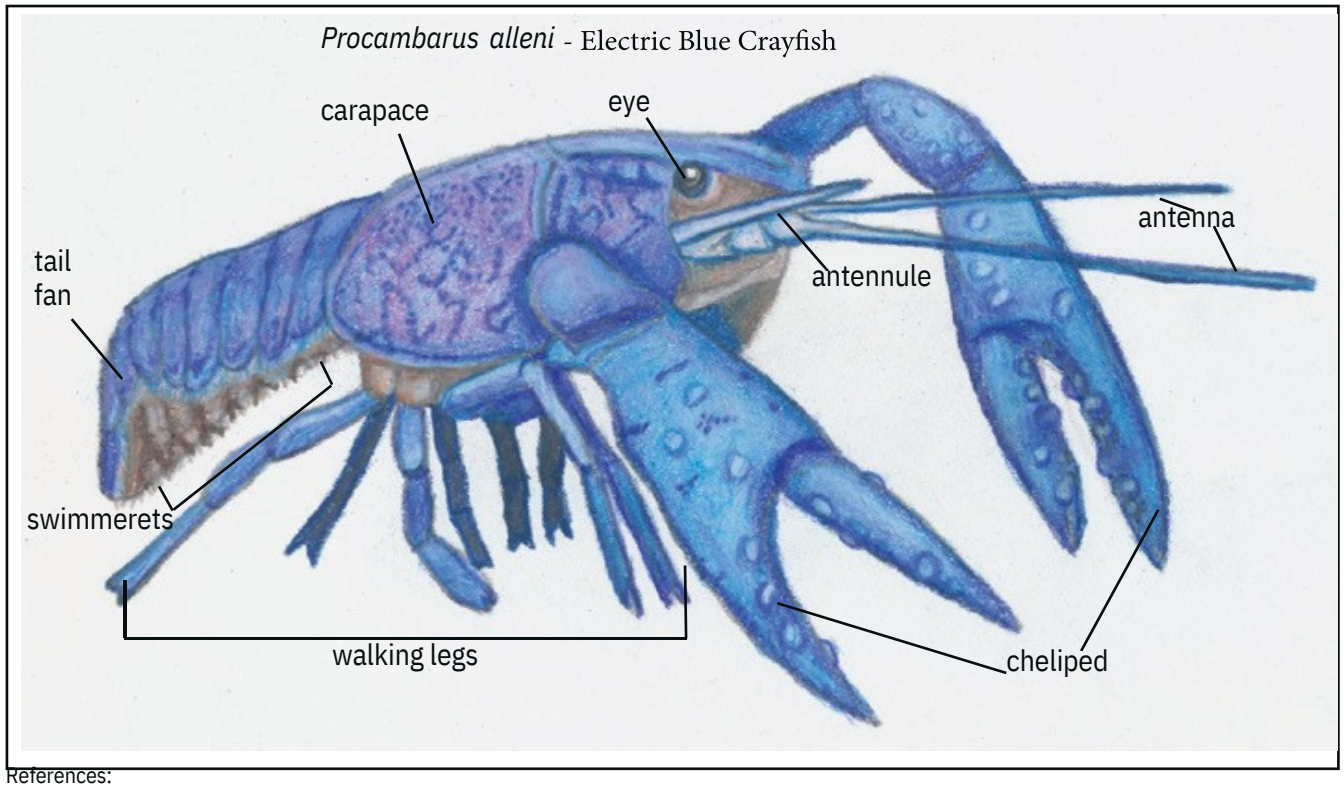
Behavior: What is the specimen doing? Is it walking, swimming, sleeping, eating, or engaging in courtship displays? Is it looking for food or displaying aggression?

Species: In nature, this may not be obvious. Use your noted observations as clues to help you figure out the genus and species, or perhaps the order or family.

Here is an example of a scientific illustration done from the sketches. A line drawing in preparation for the final drawing is below.



Once you have an outline that you are satisfied with, you can add the details, such as shading and color. Below is a finished sketchbook illustration done in colored pencil.



References:
1. The Guild Handbook of Scientific Illustration
2. https://www.amnh.org/learn-teach/curriculum-collections/biodiversity-counts/what-is-biodiversity/keeping-a-field-journal-1-eleanor-sterling

This project was completed in fulfillment of certificate requirements from the Scientific Illustration Distance Program.
www.gretchenhalpert-distanceprogram.com.

OKLAHOMA AQUARIUM

Field Journal

Name:_____

Location:

Date:

Time:

Size/Proportion: (use drawing space) Color:

Habitat:

Behavior:

Species: