



Nature in Art

Discover local wildlife through art and photography.

Objectives

Students will observe, photograph, illustrate, and describe details about a species of wildlife and explain how wildlife inspires art and scientific inquiry.

Background

Long before the invention of the camera, scientists depended on drawings to capture details to add to written descriptions. Captain John Smith of Jamestown, John Audubon, Lewis and Clark, and other early explorers used art to record wildlife species seen on their travels. Explorers' visual documentation of new species provided much of our basic knowledge of wildlife. For example, we might not know about the now-extinct dodo bird had early scientists and explorers not documented their existence. Today's field guides frequently use drawings to emphasize the key characteristics needed for identification.

Our basic understanding of the natural world often comes from interpreting artistic visual images. Both drawings and photographs can be used to expand our knowledge of wildlife diversity, understand the form and function of species, or draw conclusions about wildlife behaviors. Images that accompany scientific writing can add more precision to our perceptions of wildlife. An illustrator might highlight small details about the structure of an animal through artistic techniques. A photographer may be able to quickly capture details of an animal's form that are difficult to observe when the animal is moving. Wildlife observation skills are as important to the poet as they are to the scientist and have provided inspiration for various kinds of artwork throughout human history. Drawings and photographs that accompany written field notes offer us several paths through which to interpret our experiences. The major purpose of this activity is for students to hone their observation skills while recognizing the value of wildlife as inspiration for both art and scientific inquiry.

Grade Level:
Upper Elementary,
Middle School

Content Areas:
Environmental Education,
Language Arts, Expressive Arts,
Social Studies

Method:

Students use photography and illustration of wildlife as techniques for observation and information collection.

Materials: Drawing materials, digital cameras, outdoor space where wildlife can be observed

Activity Time: one 45-minute session

People Power: any; individual student project

Setting: outdoors

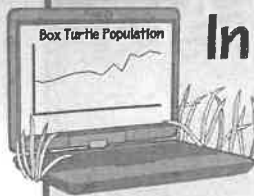
Conceptual Framework

Topic Reference:
AAIA, AAIB, WPIA2

Terms to Know:
observation, inspiration,
art, science

Appendices:
Field Ethics





In Step with STEM

■ Use digital editing software like Photoshop to enhance details of a photograph or apply special artistic effects. Explore the concepts of composition and symmetry.

- Research and experiment with the manual settings on a camera—such as focal length, aperture, and shutter speed. How do changes to these settings enhance or alter details in photo images? How might a photographer adjust these settings for artistic expression? How might these settings affect images in ways that help improve our understanding of nature?

Basic steps for sketching
Examples of shading

Try these shading strokes to sketch a bird.

Stroke 1: Vertical parallel lines. Stroke 2: Curved parallel lines. Stroke 3: Diagonal parallel lines. Stroke 4: Horizontal parallel lines. Stroke 5: Wavy parallel lines.

Sketching techniques:

Sketch the basic shapes of the subject lightly so you can erase the lines later.

3. Erase the unwanted lines. Darken remaining lines to make the outline of your subject.

4. Apply the shading examples to complete detail and shape.

Add further detail.

Procedure

1. Provide each student with drawing materials and a digital camera.
2. Determine a natural or semi-natural area where wildlife can be observed. Students may want to consider constructing an observation “blind” using a large box or a dark-colored sheet with a view hole in order to observe the animal without disturbing it. Remember that any wildlife can be observed, and “wildlife” can range from the smallest insect to large mammals.
3. Instruct students to observe and record information as follows:
 - Find an animal and watch it as closely as you can. Look at its color, form, and body shape. Practice observing these characteristics in other animals.
 - Take a photograph of an animal and study the photo in detail. Zoom in to capture details. Attempt to capture a series of photographs representing the animal’s behavior such as a spider spinning its web or a robin looking for a worm. These observations and images will help you make inferences about adaptive behaviors of the animal.
 - Using a pencil, draw the body shape of the animal. Start by making an outline of the animal on your sketch paper.
 - Now that you have the body outlined, fill in details on the animal’s body. Next, include details of the animal’s surroundings, which might be the limb of a tree or other animals nearby. Drawings can remain in pencil, or add color using crayons or chalk. You can find a link to the “Basic Steps for Sketching” graphics (see sidebar) at www.projectwild.org.

NOTE: Every student will create a unique depiction of the animal they choose to portray. Emphasize to students the value of their unique observation style and encourage them to continue observing wildlife using a journal for descriptions or images.

4. Once their artwork is complete, discuss with students what they experienced while creating the art. What did they see? How did they feel? Students may have observed behaviors that led to specific questions about wildlife behavior. Emphasize the importance of wildlife and nature as a source of inspiration for varying forms of art and science.



Extensions

1. Identify an artist in history that has helped bring knowledge of wildlife to citizens through art and photography. Bonus points if the artist is local and creates art in the local community! View and discuss the uniqueness of the artwork.
2. Organize an art show that exhibits students' work. Encourage classmates to ask questions about what the student observed and how observations are reflected in the finished product.
3. Set up a gallery in the classroom or school to display student art. Rotate art weekly or monthly with various themes—seasons, insects, plants, migrating wildlife, and the list goes on!

Aquatic Extension

Use these techniques for enhancing observations of aquatic wildlife, their habitats, and their methods of locomotion.

Assessment

During the presentations of their art, have students explain and describe details they observed about the species of wildlife they depicted. What did students learn through creating their art? What did they feel?

WILD Work

Wildlife

Photographers and

Wildlife Artists work to

capture images of wildlife, often in habitats all around the world. They can work as freelance or independent artists, and the images such artists make are provided to media, magazines, and other publications.

Scientific Illustrators use observation skills, technical skills, and knowledge of aesthetics to accurately portray subjects in nature to help advance scientific knowledge and exploration. For links to learn more about the work of Scientific Illustrators, go to www.projectwild.org.

