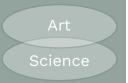


# STEAM Connections Art Activity



# **Shadow Plant Painting**

#### **Featured Artwork**

Bearberry is one of several illustrations in the Museum's collection inspired by the field notes from the Lewis and Clark Expedition of 1804 to 1806. In his journals, Meriwether Lewis describes bearberry with great detail, noting the appearance, use, and plant behavior. It's important to note that while Lewis documented the discovery, the plant was already known to Native American tribes who may have used it for spiritual ceremonies, as a food source, or as a medicine to treat urinary tract infections.

Bearberry is a short evergreen shrub native to Nebraska that produces red berries in late summer/fall. In the drawing to the right, Johnsgard and Johnson have illustrated the plant with detailed accuracy. This is known as scientific illustration, which was a common practice throughout the natural sciences to record, study, and communicate the nature of living things before cameras were invented.

## **Learning Objectives**

- Create a shadow drawing of a flower or plant.
- Observe how the plant blocks a light source and casts a shadow on the opposite side.
- Reflect on instances where drawing a plant to study its structure can be more beneficial than taking a photo.



Paul A. Johnsgard & Allison Johnson, Bearberry (Arctostaphylos uva-ursi), n.d., colored pencil and ink on paper, gift of Paul A. Johnsgard.

## **About the Artists**

Paul A. Johnsgard was a well known ornithologist (one who studies birds), author, teacher, and artist in Nebraska. In 2003, Johnsgard was giving a talk on Sandhill cranes and met Allison Johnson, a high school student who was sketching in the audience. The two connected over their shared interest in drawing animals and stayed in touch until Johnsgard passed away in 2021. Today, Johnson is an ornithologist and talented artist and credits this to her friend and mentor, Paul Johnsgard.

# **Art Activity**

### You will need...

- Plant specimen (flower, leaf, grass, etc.)
- Watercolor paper (or medium weight paper)
- Watercolor paint
- Paintbrushes
- Colored pencils
- Pencil



## **Instructions:**

Collect your plant specimen. The flower used here is a small stem of sea lavender. This is a perennial flower that grows in thick clumps and has an airy, cloudlike appearance with small purple flowers. Sea lavender is also a favorite source of nectar for pollinators such as butterflies, hummingbirds, and bees.



Next, gather a piece of paper and coloring materials. If you like, you can choose to sketch the flower first in pencil or use paint or coloring pencils from the start. Find a source of light outside or inside. Remember the plant must block the light to cast a shadow on the opposite side. Hover your plant specimen over the paper and experiment with positions until you achieve a shadow shape that you like.



Paint, draw, or color over the shadow's shapes. Be quite loose with your brushstrokes or pencil marks. The goal is not to achieve scientific accuracy like the *Bearberry* illustration, but to have fun with shadow science art.

**Tip:** You may notice your shadow moving if you're using the sun as a light source. If this happens, slightly adjust the position of your plant specimen to match the new shadow position as you go.



Once you're happy with the final shape of your artwork, add in any details such as a stem, petals, or background. Add the name of the plant specimen to record for future study.





## **Share!**

Share your new creation with family and friends. Or show us your work! Use #GreatPlainsArtMuseum.

## **Explore more!**

Experiment with other objects to draw or paint using shadows. For example, test out the shadow art of mini animal figurines or other nature specimens such as pinecones.