GASP! At Home

Week 5: Wildlife

Hello all!

While our Girls Advancing Scientific Progress (GASP!) program is canceled, the Environmental Learning Center would still like to provide families with environmentally themed activities they can do at home! Below are a variety of activities ranging from quick, 10-minute activities to more in-depth, 45-minute activities that all explore the topic of **wildlife**!

At the Environmental Learning Center, our mission is to connect people to nature. We want to encourage families to get outside, here's some tips to do it safely:

Please visit this website for the most up to date information on COVID-19 (coronavirus) in Larimer County. Larimer County is currently under a Safer at Home order; read more about the order here. This order currently allows outdoor recreation, as long as physical distance guidelines are adhered to.

- When you go outside, always **maintain at least 6 feet of physical distance** with people who do not live in your household.
- **Be mindful of signs** posted in outdoor areas you visit. In most parks the playgrounds, picnic areas and bathrooms are closed.
- **Stay home** if you or your child feel sick.

Please practice everyday actions to prevent the spread of disease:

- **Frequently and thoroughly wash your hands** with soap and water for at least 20 seconds, especially after coming in from outside.
- If soap and water are not available, **use hand sanitizer** with at least 60% alcohol.
- **Avoid touching your eyes, nose, and mouth** with unwashed hands.

Scientist of the Week!

Did you know when scientists study gorillas for long periods of time, they have to befriend the gorillas and become one of them? Curious how they do that? Check out the video below to learn how Dian Fossey became the first person to befriend wild gorillas!
https://www.youtube.com/watch?v=4C619eN-cI0

Pre-Discussion Questions

Scientists must observe and track wildlife to monitor for changes, watch this video to learn different ways wildlife biologists track animals:
https://www.youtube.com/watch?v=igYkfBEa1Yc

- Why do you think scientists track animals?
    - *For research, to know where they're moving, to find out how many are in a location*
- In the video they track deer and elk, what other animals do you think are collared?
    - *Bears, squirrels on the CSU campus, bobcats*
- How else do wildlife biologists monitor and track animals?
    - *Use scat, prints in mud or snow, watching them with binoculars*
- You will now become a biologist! Choose an activity below to test your animal observation skills!

Activity 1: Birding

10 minutes

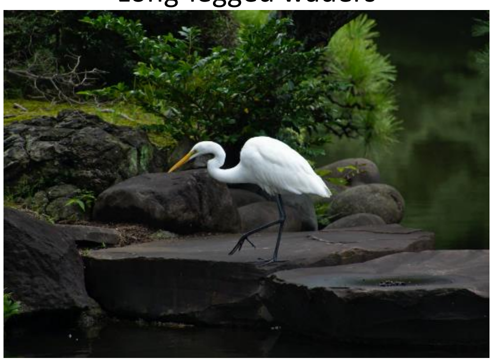
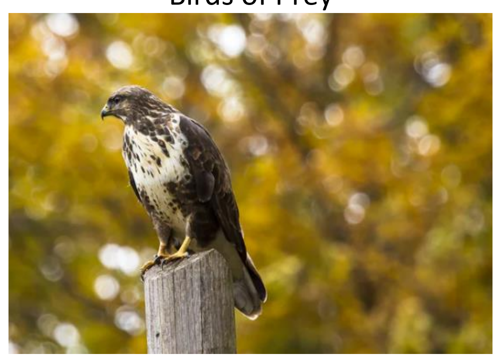
Materials: old notebook or pieces of paper, pencil

Objectives:

- Observe different birds.
- Use the features of a bird to categorize it.

Introduction

1. Create a field journal using a piece of paper or old notebook! This will be where you keep track of your observations.
2. Choose a spot around your home where you think you may see birds, this could be near a tree, water, or a bird feeder.
3. In your journal sketch and color all the birds you see and either draw or write some of the bird's behaviors. Was it eating, building a nest, cleaning itself?
    a. In your picture be sure to include some details of its location, was it in a tree, on the ground, walking up the side of a tree?
    b. Observe the silhouette of the bird, and the shape of its body, beak, tail, wings, and legs. Do they have short or long legs? Are their wings rounded or pointed? Is their beak short or long?
4. Listen to some of the sounds the birds are making and try to mimic them. Different species of birds have different calls and sounds they make, which can make it easier to identify the bird!
5. Using the chart below, try to identify what category the bird would fit in. If it doesn't seem to fit in any of the categories, what category would you add? Write this down in your journal!

Ducks and duck-like-birds  Source: Robert Thiemann	Gulls and terns  Source: Rutvik Solanki
Long-legged waders  Source: James Bowen	Shorebirds and small waders  Source: Michelle Cintron
Fowl-like birds  Source: Randy Fath	Birds of Prey  Source: Alessandro La Becca
Flycatchers  Source: Bankim Desai	Warblers  Source: Ray Hennessy

Activity 2: Insect Habitat Hotel

25 minutes

Materials: a small box or container

Objectives:

- Identify different habitats and homes for insects.
- Create a model of insect habitats.

Create an insect hotel!

1. First find a box or container, about the size of a shoe box. This is going to be your insect hotel!
2. Next go outside with your box and divide the hotel into different sections using sticks or other stick like materials.
3. Now you're going to imagine you have a bunch of different insects that want to stay at your hotel, but they all have different types of homes. You may have ants, bees, rolly pollys, and many other insects that want to stay at your hotel.
4. Explore some of the areas around your house and observe where you find insects and what their homes are like.
    a. Do they require a lot of space?
    b. Do they burrow in the dirt?
    c. Do they make their home (like wasps or ants)?
    d. Do they like the bark of trees?
    e. Do they like leaves?
5. Now using materials found outside, create a room dedicated to each type of habitat you found.
    a. You may have a dirt room, a rock room, or you may even create a wasp home.

Source: Tania Malréchauffé

6. You're the new owner of an insect hotel! Give it a name and invite some insects in!

Activity 3: Ant Hunt!

45 minutes

Materials: paper plate or piece of paper, 4 different food items (cheese, fruit, bread, grass, etc.), old notebook or piece of paper

Objectives:

- Observe ant behavior.
- Use the scientific method to conduct an experiment.

Feed some ants!

1. Create a field journal using a piece of paper or old notebook! This will be where you keep track of your observations.
2. Take a paper plate or piece of paper and use a pen to divide it into 4 even sections, then find 4 different food items around your home that you think ants might eat (could be bread, fruit, grass, cheese). Put a small piece of one type of food into each section of the paper plate or piece of paper.
    a. Make a hypothesis or guess about what type of food you think the ants will like the best. Write down your hypothesis in your journal.
3. Now go outside and find some ants, it could be an anthill or just a bunch of ants on a sidewalk. Place your plate or piece of paper with food on the ground near the ants.
4. Once the ants begin to locate the food, in your journal make a tally for each food item and count how many ants eat or approach that food item.
    a. While you're waiting for the ants to locate the food, in your journal make observations about the ants.
        i. Do they all look the same?
        ii. What do they seem to be doing?
        iii. Observe some of their behaviors, maybe follow an ant for a minute and find out what they do.
        iv. Draw a picture of one of the ants and its different body parts.
5. In your journal, count how many ants interacted with each food. Which food did the ants seem to like the best?
    a. Why do you think that is? Do you think it could be because it has a lot of sugar or a lot of salt?
    b. Write down your findings in your journal!