

# **Food Chain Hunt**

## 3rd-5th Grade Program

**Description:** Kick-start your ecology knowledge with a fun exploration of the Sweetwater Marsh Refuge. What better way to study ecology, than become an ecologist yourself? Students will study important aspects of ecology such as adaptations, predator-prey relations, and the recycling of organic matter. Then, students will apply their new knowledge by looking for evidence of different animal species while hiking the trails around the refuge.

### **Objectives:**

- Know the definition of a refuge and what habitats exist in Sweetwater Refuge.
- Know that plants and animals have structures to help them survive through various functions such as eating, protection, reproduction, and movement.
- Be able to describe a food chain and how different producers and consumers are interconnected in an ecosystem.
- Know that a healthy ecosystem is one in which multiple species are able to meet their needs in a stable food web.

## Birdwatching Station:

1 pair of binoculars per student.

Mark the behavior of birds in the ethogram on worksheet. Use the field guides to identify at least one species – students may not get a close/clear enough look to ID all the birds, and that's ok!

At the end of time, ensure all binoculars are collected and returned to the box.

### Binocular Instructions:

Always keep string around your neck, so the binoculars don't get lost. Never walk while using binoculars! Look through the small holes so that birds look bigger. Have a staring contest with the bird, slowly raise your binoculars until they just touch your eyelashes, and use the focus to make the bird clear.

### Talking Points:

- What is that bird doing? (looking for food, flying, calling, etc.)
- Do you notice any unusual body parts on that bird? (ex. Long legs/neck/beak, bright colors) - How do you think that body part might help them survive?
- If we're having trouble seeing a bird, can we find any evidence that birds were here before? (ex. Feathers, footprints, scat, birdsong)

## Food Chain Hunt - Wetland Station:

Students will record the plants and animals they see in the wetland habitat for this section.

Explain the different columns and examples of animals that might go in them:

- **Plants** – producers, grow in energy from the sun, e.g.: bushes and algae
- **Mammals** – consumers, warm-blooded, fur, live birth, breathe air, e.g.: humans and rabbits
- **Birds** – consumers, fly, warm-blooded, feathers, lay eggs, breathe air, e.g.: osprey, seagulls
- **Invertebrates** – consumers, “no vertebrate” (explain what a vertebra is, and ask if kids know the prefix “in” which means “none”), animals with no spine/backbone, e.g.: bugs and crabs
- **Fish** – consumers, swim, cold-blooded, scales, lay eggs or live birth, breathe in water, e.g.: sardines and sharks (on the second page in wetland)

Students are looking for evidence of animals: Actual animal, tracks, scat, fur/feathers, nests, burrows, webs, bones or skeletons

At the end of the section, have students try to make a food chain on their page by connecting 3 or 4 species they found.

### Talking Point:

**Producer:** plant or animal that produces their own food or energy from the sun

- **Consumer:** animal that eats a plant or another animal to get energy

- **Food chain:** how energy moves through a system