

NAME: _____

TEACHER: _____

GRADE : _____

DATE: _____

Wetland Habitat Activity



Learn about habitats and create a wetland habitat diorama



What is a habitat?

A habitat is a home; it is where a plant or animals live

What do animals and plants need in their habitats?

They need food, water, shelter, and space. For example, a bird needs a tree for shelter, insects for food, a stream or pond for water, and space to find materials to build their nest and food to raise their babies.

What is your habitat?

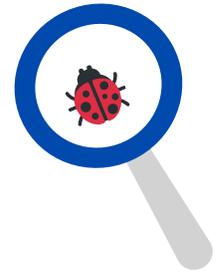
Use the space below to draw or describe your own habitat. Answer these questions: **What do you need to survive? Where do the things (food, clothes, bed, room) you need to survive come from?**



Santa Clara Valley
Urban Runoff
Pollution Prevention Program

Observe a nearby habitat

Investigate nearby habitats! Go outside to your backyard, front yard, patio, porch or look outside your window and observe a plant or animal for at least 10 minutes. Use the space below to draw and describe the habitat of the plant or animal you find. Answer these questions: **What is the plant or animal's habitat? Where does the plant or animal find food, water, and shelter?**



What are the differences and similarities between your habitat and the habitat of the plant or animal you observed?

What is a wetland?

Wetlands are areas that are permanently or seasonally flooded with water. The combination of wet and dry creates an area where many plants and animals can live. There are different types of wetlands, such as marsh, swamp, bog and fen. The wetlands that line the San Francisco Bay are called salt marshes because ocean tides bring salt water into the Bay.

Marshes provide food, water, shelter and space for many plants and animals including those that are threatened or endangered. There are two endangered species that live in the salt marshes of San Francisco Bay, the California Ridgway's Rail and the Salt Marsh Harvest Mouse.



Overlook of salt marsh at the Environmental Education Center
Photo credit: Chris Benton



Ridgway's Rail
Photo credit: Morris Finkelstein

Wetlands help keep the Bay clean by filtering pollutants. A pollutant is something that dirties or harms the environment such as trash. Pollutants can reach wetlands through urban runoff. **Urban runoff** happens when rain washes pollutants in cities and neighborhoods into storm drains. Pollutants that enter storm drains empty into our watersheds that lead to wetlands and the Bay. It is important to keep our habitats healthy for wildlife and humans.



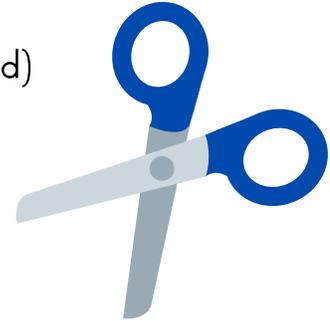
Salt Marsh Harvest Mouse
Photo credit: Rachel Tertes, USFWS

What can you do to keep wetlands healthy?

Create a wetland habitat

Materials

Pencil	Paper
Crayons or markers	Box (any cardboard box you can find)
Scissors	Wetland habitat (provided)
Glue	Wetland Plants and Animals (provided)
	String



Instructions

1. Find a box for your diorama. Use any small box you can find. In the example, a shoe box was used. If you do not have a box you can use the wetland habitat page.
2. Color in and cut out wetland plants and animals.
3. Assemble wetland habitat. Use markers or crayons, paper, glue, and other materials you have at home to make a wetland habitat
4. Glue wetland plants and animals where you think they live or find food
5. Use string to connect each plant or animal to what it needs to survive.



Not sure what some plants and animals need to survive? Here are some examples:

Pickleweed needs: sunlight and air to produce food, water from the bay, and space to grow.

Salt Marsh Harvest Mouse needs: pickleweed to eat, water from the pickleweed, shelter in the pickleweed to hide and nest, space to search for food and build a nest, and air to breath.

Phytoplankton (tiny floating plants) needs: sunlight to produce food, water from the bay to live in.

Great Egret needs: snails, crabs, and fish for food, water to fish in, space to feed in, and air to breath.

WETLAND PLANTS AND ANIMALS



Pickleweed



Salt Grass



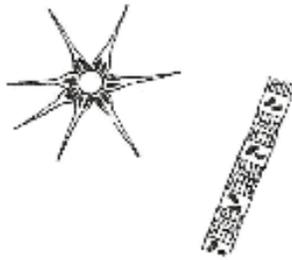
Peregrine Falcon
(delisted 8/26/1999)



Salt Marsh Harvest Mouse
(endangered)



California Clapper Rail
(endangered)



Phytoplankton
(tiny, drifting plants)



Snail



Great Egret



Northern Harrier



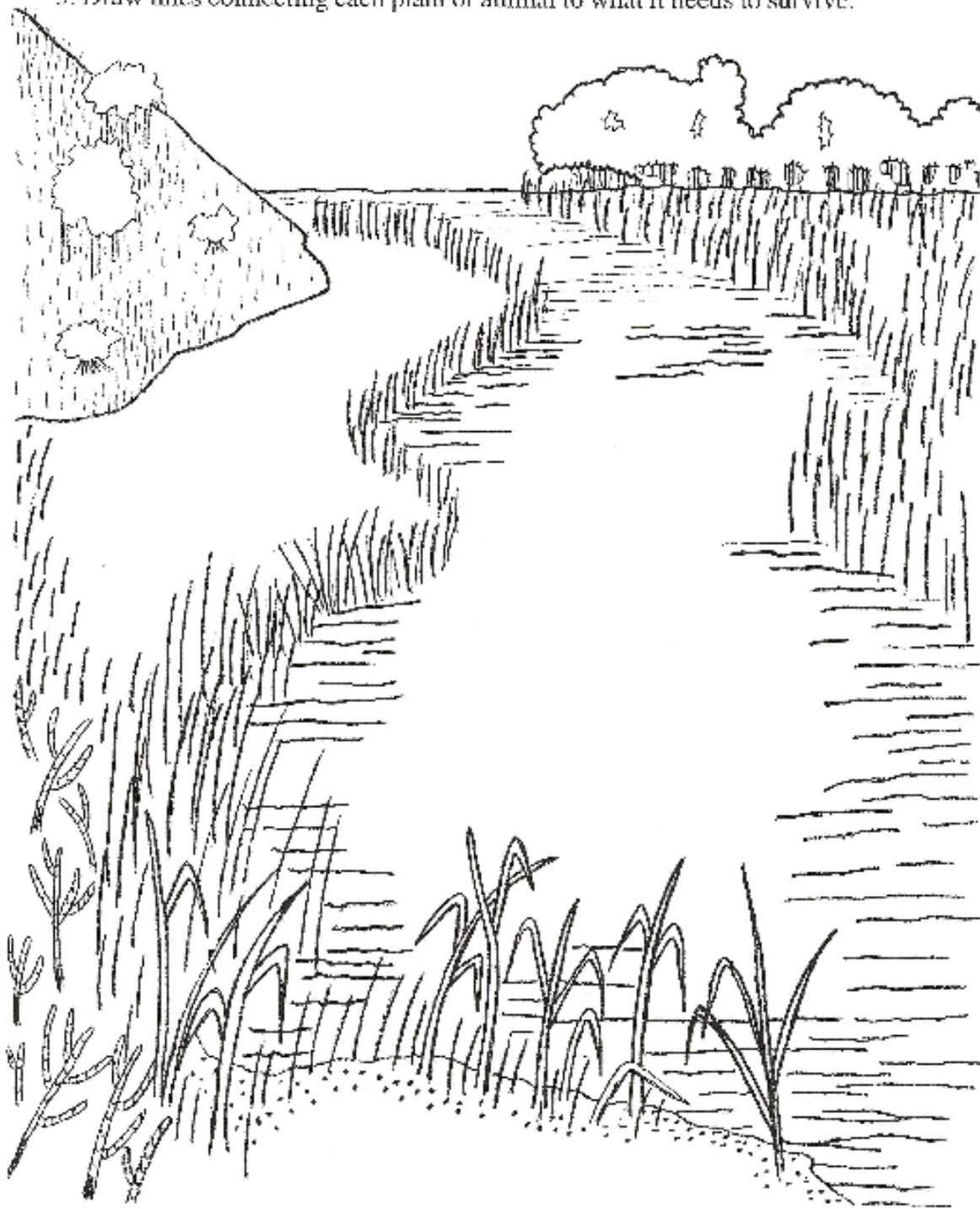
Crab



Fish

A WETLAND HABITAT

1. Cut out the plants and animals on the other page.
2. Glue them in the wetland, in a place they might live.
3. Draw lines connecting each plant or animal to what it needs to survive.



NAME: _____

TEACHER: _____

GRADE : _____

DATE: _____

Wetland Food Chains

Create wetland food chains that show what animals and plants need to survive



What is a food chain?

A food chain shows the order in which plants and animals feed on each other.

What are producers?

All food chains begin with producers, usually plants. Plants make their own food (energy) by using sunlight. Through photosynthesis, plants absorb energy from sunlight and convert carbon dioxide and water into food.

What are consumers?

Animals are consumers, they cannot produce food on their own.



What are first level consumers?

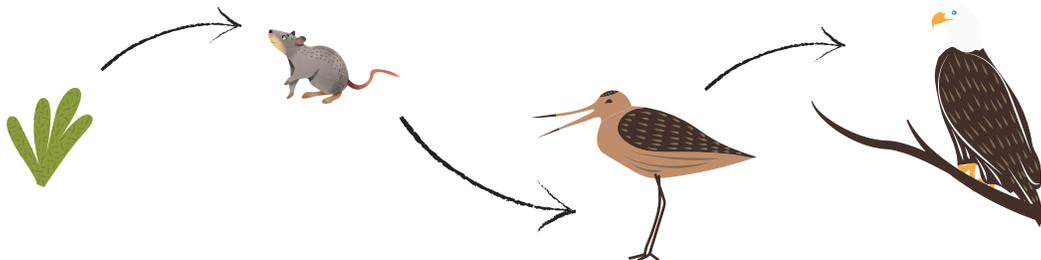
Animals that eat plants are known as herbivores and they are first level consumers on a food chain.

What are second, third, and fourth level consumers?

Animals that are second, third, and fourth level consumers in a food chain are insectivores (insect-eating), carnivorous (flesh-eating), or omnivorous (flesh-and-plant-eating).

Wetland Food Chain Example

Pickleweed is eaten by salt marsh harvest mice, which are eaten by Ridgway's rails, which are eaten by birds of prey.



What would happen if one plant or consumer disappeared from the food chain?

Create a wetland food chain

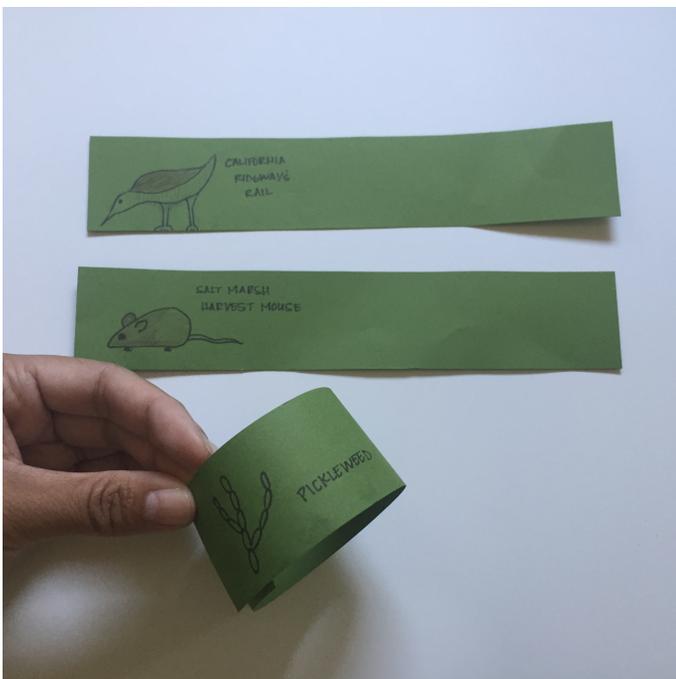
Instructions

You are going to make your own wetland food chains. First choose which food chain you are going to make; remember your food chain must start with a producer.

Cut long strips of paper that are at least 1.5 inches wide and 9 inches long. Draw or write down one member (plant or animal) on each strip of paper. Loop and glue the strips into a chain that shows the order of the food chain.

Materials

Paper
Scissors
Glue
Pencil or pen
Coloring markers, pencils, or crayons



Santa Clara Valley
Urban Runoff
Pollution Prevention Program