

Habitat Restoration To do <u>after</u> the field trip in class

1. **Students will read a paragraph to expand on topics introduced during their recent field trip.** The reading is available on the next page and online at <u>oceanconnectors.org/resources</u>.

The reading contains new vocabulary, indicated by *italics*, so it is best if teachers read the material in advance and prepare to work through it with the children.

- 2. After reading, make copies of the handout or give students chart paper and have them work in groups to complete an informational table (see next page).
- 3. Please review the answers together in class.
- 4. This lesson covers 6th grade Common Core State Standards in ELA/Literacy, and Next Generation Science Standards MS-LS2-1, MS-LS2-2, MS-LS2-4, and MS-LS2-5.
- 5. Project Based Extension: Have students design interpretive signage to inform the public about the habitats, wildlife, and plant life of San Diego Bay.

Display their signs to mimic a "gallery" and have students walk around and offer written feedback using Post-It Notes. Feedback should be constructive and useful, such as the following:

- "I like...because..."
- "I wonder..."
- "I suggest..."

FIELD TRIP FOLLOW-UP ACTIVITY

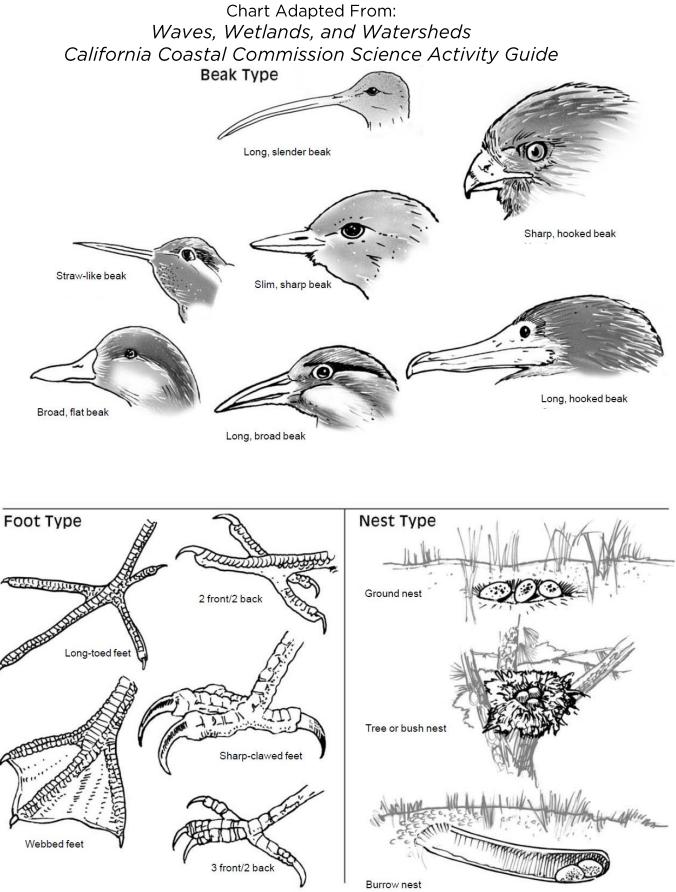
Habitat Restoration

As the city expanded, 90% of *wetlands* around San Diego Bay were filled in or drained. In order to conserve and restore our remaining wetlands, the U.S. Fish & Wildlife Service established a series of National Wildlife Refuges, including the Tijuana Slough, Sweetwater Marsh, and South San Diego Bay. These Refuges conserve some of the last remaining coastal wetlands in Southern California. The mission of the Refuge system is to manage a national network of lands and waters for the conservation and restoration of plants, fish, wildlife, and their habitats. The South San Diego Bay Refuge protects thousands of migratory birds traveling along the Pacific Flyway, as well as *resident* species. With rare eelgrass beds – a key food source for green sea turtles and an important nursery habitat for fish – and the largest *contiguous* mudflat in Southern California, the Refuge is a key habitat for thousands of waterfowl, sea birds, and shorebirds, as well as other species. California least terns, western snowy plovers, and Ridgway's rails are some of the protected bird species that can be found in this ecosystem. It is important to conserve and protect coastal wetlands for wildlife, and so that people can enjoy these beautiful scenic landscapes and rich *biodiversity*.

Instructions: Think about your recent visit to a Wildlife Refuge and fill in the table below. Look at the chart on the next page for guidance. Possible prey items include: rodents, seeds, insects, nectar, plants, fish, and invertebrates.

Bird Species Anna's Hummingbird	Did you see it?	Describe its feet	Describe its beak	What does it eat?
Anna's Hummingbird				
A CONTRACTOR				
Snowy Egret				
A.				
Killdeer				
OF T				
Black Brant				
S.				
Red-Tailed Hawk				
R				
Ring-Billed Gull				
A C				
Savannah Sparrow				
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www.oceanconnectors.org Some material from Wetland Neighbors activity guide



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FIELD TRIP FOLLOW-UP ACTIVITY

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Answer Key

As the city expanded, 90% of *wetlands* around San Diego Bay were filled in or drained. In order to conserve and restore our remaining wetlands, the U.S. Fish & Wildlife Service established a series of National Wildlife Refuges, including the Tijuana Slough, Sweetwater Marsh, and South San Diego Bay. These Refuges conserve some of the last remaining coastal wetlands in Southern California. The mission of the Refuge system is to manage a national network of lands and waters for the conservation and restoration of plants, fish, wildlife, and their habitats. The South San Diego Bay Refuge protects thousands of migratory birds traveling along the Pacific Flyway, as well as *resident* species. With rare eelgrass beds – a key food source for green sea turtles and an important nursery habitat for fish – and the largest *contiguous* mudflat in Southern California, the Refuge is a key habitat for thousands of waterfowl, sea birds, and shorebirds, as well as other species. California least terns, western snowy plovers, and Ridgway's rails are some of the protected bird species that can be found in this ecosystem. It is important to conserve and protect coastal wetlands for wildlife, and so that people can enjoy these beautiful scenic landscapes and rich *biodiversity*.

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Bird Species	Did you see it?	Describe its feet	Describe its beak	What does it eat?
Anna's Hummingbird	Y/N	Hummingbirds have such tiny legs and feet that they cannot walk. Feet are used only to perch on branches.	Hummingbirds have long, narrow, and tapered beaks for reaching into flowers.	Nectar (herbivore)
Snowy Egret	Y/N	Snowy egrets have flat, bright yellow feet that are used to wade into the water and attract fish like a lure.	Snowy egrets have sharp, pointed beaks to stab and grab their prey from shallow water.	Small fish (carnivore)
Killdeer	Y/N	Killdeers have small feet and talons that are used to walk and scrape out a nest on the ground.	Killdeers have small, pointy beaks that are used to capture prey from off the ground or the surface of water.	Insects and invertebrates (carnivore)
Black Brant	Y/N	Black brants have large, webbed feet that are used for walking and paddling.	Black brants have dark, wide beaks that are used to filter plants out of the water.	Plants (herbivore)
Red-Tailed Hawk	Y/N	Red-tailed hawks have large feet with sharp, strong talons for grasping prey.	Red-tailed hawks have sharp, hooked beaks that are used for tearing flesh.	Rodents (carnivore)
Ring-Billed Gull	Y/N	Ring-billed gulls have webbed feet that are used to uncover or skim prey from shallow water.	Ring-billed gulls have a black band encircling the tip of their short yellow beaks.	Fish, invertebrates, and insects (carnivore)
Savannah Sparrow	Y/N	Savannah sparrows have small feet and talons that are used for perching and nesting.	Savannah sparrows have short, wide beaks that are used to quickly snatch up small prey items.	Insects and seeds (omnivore)