

# **SELF GUIDED FIELD TRIP**

## **Wetland Habitat Walk for Alviso Trails**

### **Don Edwards San Francisco Bay National Wildlife Refuge Environmental Education Center**

1751 Grand Blvd., Alviso CA 95002

Refuge Phone number (in case you get lost): (408) 262-5513

**OBJECTIVE:** This field trip will give the students an opportunity to learn about:

- Endangered plants & animals & their native habitats
- Effect of urbanization on salt marsh habitat
- Impact of salt ponds on wetland ecosystems
- Impact of wastewater treatment on salt marshes
- Importance of preserving habitats that are important to migratory birds

### **INTRODUCTION:**

The Don Edwards San Francisco Bay National Wildlife Refuge is the first urban National Wildlife Refuge in the United States and was established in 1974. It is dedicated to preserving and enhancing wildlife habitat, protecting migratory birds, protecting threatened and endangered species, and providing opportunities for wildlife-oriented recreation and nature study for the surrounding communities.

The refuge spans 30,000 acres of open bay, salt pond, salt marsh, mudflat, upland and vernal pool habitats located throughout south San Francisco Bay. It is located along the Pacific Flyway and it hosts over 280 species of birds each year. Millions of shorebirds and waterfowl stop to refuel at the refuge during the spring and fall migration. In addition to its seasonal visitors, the refuge provides critical habitat to resident species like the endangered California Ridgway's Rail and Salt Marsh Harvest Mouse. Today, hundreds of thousands of people visit the refuge each year to enjoy its diverse wildlife and habitats.

The Don Edwards San Francisco Bay National Wildlife Refuge is part of a refuge complex made up of six other national wildlife refuges in the San Francisco Bay and Monterey Bay Areas and is administered by the U.S. Fish and Wildlife Service. It was renamed Don Edwards San Francisco Bay National Wildlife Refuge in 1995 in recognition of Congressman Don Edwards' efforts create a national wildlife refuge in south San Francisco Bay.

**Answer the following questions as you walk around and observe the different habitats:**

1. What is the mission of the Don Edwards San Francisco Bay National Wildlife Refuge? Why was it established?
2. Define Wetlands. Why are wetlands important? What important functions do they serve?
3. Describe how the amount of wetlands in California has changed over time.
4. Name two things you know about threatened and endangered species.

**New Chicago Marsh Trail:**

5. What endangered species reside in the refuge?
6. What are the two dominant indicator plants of this salt marsh? Describe some adaptive features of these plants.
7. Observe the many species of birds in and around the salt marsh. Name some examples of the birds you observe.

**Former Salt Pond:**

8. What impact did the construction of the levees around the former salt pond have on the New Chicago Salt Marsh?

9. How has the opening up of the former salt ponds to tidal flow affected salinity levels?

**Artesian/Mallard Tidal Slough:**

10. What is the main source of water entering into the Artesian Slough (also known as Mallard Slough)?
11. What is the primary impact of the Wastewater Treatment Plant on the salt marsh? How many gallons of fresh water are released into the slough each day? How many gallons get recycled?

**Mud Flats:**

12. What types of birds prefer this habitat? Can you point out two differences in the mud flats & slough habitats?

**Upland Habitat:**

13. Look around and write a few sentences about the upland habitat.
14. Walk towards the parking lot where you will see the bioswale. How are bioswales useful in landscaping?

