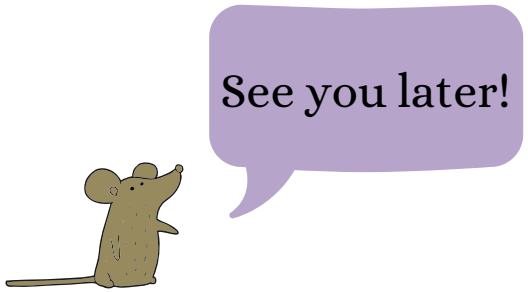
A Home For Salty

Activity Packet



You have now reached the conclusion of the Story Walk. We hope that you had fun learning about Salty, local habitats, and ways that you can contribute to making the environment a safer and healthier place for all.

Let us know what you observed during your Story Walk, share your stories and photos by emailing us at summercamp@sfbayws.org

About the Wildlife Society and Refuge

The San Francisco Bay Wildlife Society seeks to nurture in the public a sense of understanding, appreciation, and stewardship of the San Francisco Bay National Wildlife Refuges. Through education, interpretation, and research activities, SFBWS works to conserve, preserve, and restore bay lands as essential wildlife habitat.

The Don Edwards San Francisco Bay National Wildlife Refuge is the nation's first, and largest, urban national wildlife refuge. Located on the southern end of San Francisco Bay, it provides a home for millions of migratory birds and endangered species. It was established in 1972 as a result of grassroots efforts by the local community to protect the San Francisco Bay ecosystem and was renamed to honor former Congressman Don Edwards in 1995.

San Francisco Bay Wildlife Society

NATIONAL WILDLIFE REFUGE SYSTEM

Cargill™

Welcome!

Welcome to the "A Home For Salty" Story Walk! As you walk along the trail, you will come across a series of stops that are numbered from 1-13. At some of these stops, you will have the opportunity to complete additional activities. Use this activity packet to complete the 5 activities along your journey. Have fun!

List of Activities

- Activity 1: Un-Nature Trail (Stop 3)
- Activity 2: Native Plants Observation (Stop 6)
- Activity 3: Habitat Bingo (Stop 8)
- Activity 4: Salty Pledge (Stop 10)
- Activity 5: Take a Different Trail! (Stop 13)

These signs correspond to the Activity Number

These signs correspond to the Stop Number

Usual Suspects

The Don Edwards SF Bay National Wildlife Refuge is home to many species of plants and animals. You'll learn more about the native plants that grow in the area in Activity 3. Below are some animals that can be found around the refuge. Perhaps you'll spot some on your journey! If you do, feel free to draw or write about them in the Nature Journal pages at the end of this packet.

Western Sandpiper
Diet: Insects and small aquatic (water) life such as shrimp and worms
Size: 6 to 7 inches in length
How big is that? I am about as wide as you can spread your hand.
Did you know? I can change colors with the seasons - rust colored in the summer, but gray in the fall (just like humans lose their tans). I travel in large flocks and fly as far as Alaska.

Snowy Egret
Diet: Small fish, shrimp, insects, and snails
Size: 24 inches in length and 41-inch wingspan
How big is that? I am as tall as a small dog. When my wings are spread, they are as long as a first grade student is tall!
Did you know? I am a white, skinny bird with a long, think neck, beak, and legs. I shuffle my bright yellow feet in shallow water to stir up food so I can pluck it with my long, black beak.

Peregrine Falcon
Diet: Other birds such as ducks, sandpipers, kites, and pigeons
Size: 16 inches in length, 42-inch wingspan
How big is that? I am about the size of a crow.
Did you know?I am one of the fastest animals in the world. I can dive over speeds of 200 miles per hour (as fast as a race car) when attacking large birds in mid-air.

Extra Notes Page

Nature Journal Page

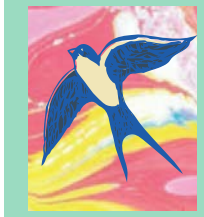
Did you observe anything that you found particularly interesting during your time on the trails? If so, you can draw and write about it below!

Usual Suspects

Harbor Seal
Diet: Various fish, octopus, and squid
Size: Up to 6 feet in length and up to 350 pounds
How big is that? I am about the same height and two times the weight of an average man.
Did you know? I do not have external ears. Sometimes I sleep in the water and can stay under for 40 minutes, about the length of a kid's TV cartoon program.

Black-Tailed Jackrabbit
Diet: Plants and shrubs
Size: 20 inches long
How big is that? I am about the size of a small dog.
Did you know? I can run up to 35 miles per hour, faster than you can go on your bike! When I run away, I dodge back and forth (like a football player) so you can't catch me.

California Ridgeway's Rail
Diet: Shrimp, water insects, worms, small fish, crabs, and seeds
Size: 14 inches in length
How big is that? I am about the size of a hen.
Did you know? I have a very distinctive call that is a series of ten or more "kek kek kek" notes that start off fast, then slow down. You can hear me call at dusk (evening) and dawn (morning).



Barn Swallow
Diet: Insects
Size: 6 inches long
How big is that? I am about as wide as you can spread your hand.
Did you know? I catch insects in flight, often low to the ground, and I am the most abundant and widely distributed swallow species in the world.

Western Tiger Swallowtail Butterfly
Diet: Nectar from flowers
Size: Wingspan of 3-4 inches
How big is that? My wingspan is about as long as the length of your finger.
Did you know? Among all of the large butterfly species, I am one of the most common to live around urban areas.

Un-nature Trail

1

Activity Description

8 non-natural objects have been placed near Story Walk Stop #3. The objects are partially hidden or camouflaged. Go to the marked section of the trail and observe. In order to really get to know this world, you must use all of your senses and be very observant, for much in nature is silent, shy, or hidden. Look for things that don't belong. Try to spot the objects, but not remove the objects.

Record your findings in your journals.

- How many of the 8 objects did you find?
- Were the objects easy or difficult to find?

Did you notice how some of the objects blended in to their surroundings? With animals, this is called camouflage.

- How do animals use camouflage?
- Can you find a camouflaged animal?
- Write down your observations in your nature journal.

Take a different trail!

5

The best way to learn more about the refuge and see the many plants and animals that live here is to head out and explore another trail! Find a map in the Visitor Center and pick a route. Need a suggestion? The LaRiviere Marsh trail is a great place to see birds and other wildlife. And finally, remember to leave no trace!

Which trail did you take?

Draw or write about something you saw on the trail:

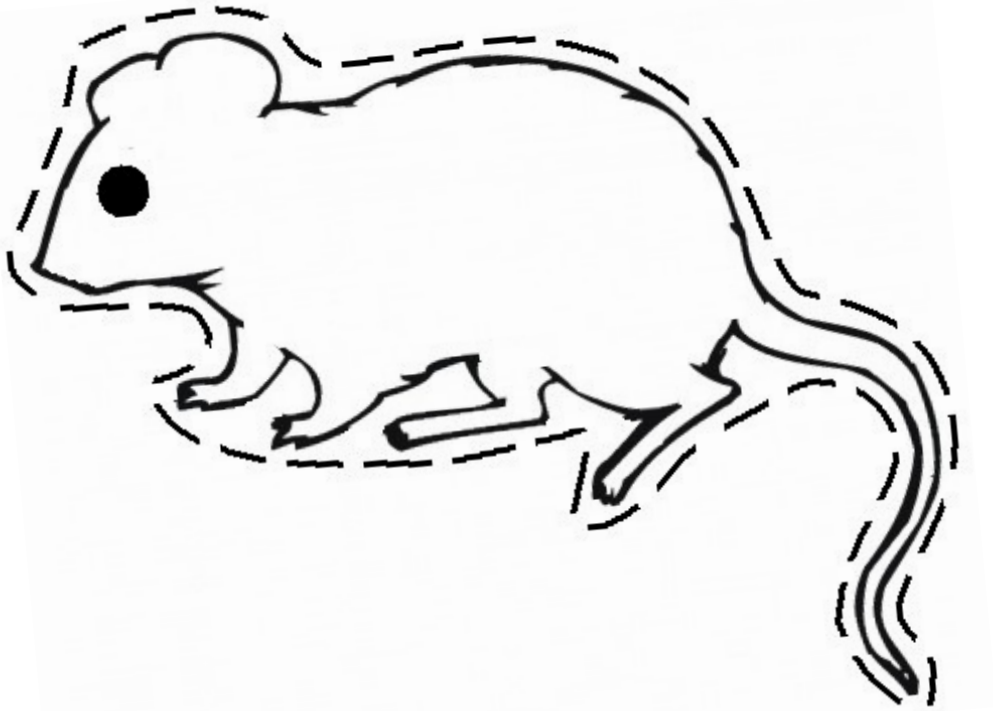
Create Your Salty Pledge

4

Activity Description

Now, it's your turn to make a personal pledge to protect Salty. What action can you take at home that will keep the Bay healthy and clean? On the Salty mouse template below, write down one or two actions you plan to take to help protect Salty. If you need some more ideas, think back to what you learned about in the Un-nature Trail matching activity. Feel free to decorate your Salty pledge, as well!

You can also share your pledge with others so they will see exactly how much you care! By sharing the pledges, we can inspire others to make positive changes, too!



Un-nature Trail

1

Now, let's think about the connections the objects have to the environment. They are not natural and do not belong here, but we can change our behaviors to limit the use of these items. For this next activity, draw lines to match each non-natural object to its conservation action.

Paper Bag	Going Paperless/ Unsubscribe List
Toy Car	Donating/Thrifting
Astroturf	Exploring/Sharing Your Knowledge
Clothing	Recycling/Upcycling
Plastic Bottle	Renewable Energy
Battery	Carpooling/Public Transportation
Hand Lens	Using Reusable Items
Junk Mail	Planting Native Species

Native Plant Observations 2

Saltgrass

Distichlis spicata

ID tips

- It grows in the mid-high zone of the salt marsh and forms thick, low-growing mats of spiky-looking grass
- Its leaf blades are short, pointed, and line up close together

Did you know?
Saltgrass can absorb salty water and "sweat" out the salts, leaving tiny salt crystals on their leaves. It also forms extensive mats of thick, low-growing grass, providing excellent cover for waterfowl and smaller marsh wildlife.

Alkali Heath

Frankenia salina

ID tips

- It can be found in the mid-high zone of the salt marsh. It grows up to 1 foot tall and forms clumps that can spread to over 6 feet wide.
- Its leaves are small, grayish-green, and slightly rolled, and it has small pink flowers with 4-5 petals.

Did you know?
Alkali heath is a halophyte—it is adapted to living in salty soils. This plant can be used to make a tea to treat skin infection, rashes, and burns. It also provides food and shelter of the larvae of the Inchworm moth.

Salty Pledge 4

Learn more about Salty, the salt marsh harvest mouse, and create a pledge of something you will do to help protect Salty's habitat.

Why do we protect Salty?

The loss of salt marsh habitat to development has made it very difficult for the salt marsh harvest mouse to survive and has resulted in it being listed as an endangered species.

One reason the Don Edwards San Francisco Bay National Wildlife Refuge and the San Pablo Bay National Wildlife Refuge exist is to protect endangered species. In order for the salt marsh harvest mouse to survive, salt marsh habitat must be restored and protected. Over the years, the Refuge with the help of its partners have restored thousands of acres of salt marsh habitat. As a direct result, Salty is again living and breeding in areas that they have not lived in over 100 years. In 2015, we found a salt marsh harvest mouse in a newly restored marsh in the South Bay!

Salt Marsh Harvest Mouse
Photo credit: Rachel Tertes, USFWS

Salt Marsh Harvest Mouse
Photo credit: Dr. Katie Smith

What can you do to protect Salty?

In order for the plants and animals of the San Francisco Bay watershed to have healthy habitats, everyone must do their part. There are many things you can do to help!

For example, there are many threats to the health of the salt marsh from increasing amounts of trash that enters the bay from local creeks and rivers. Picking up trash in our neighborhood is one thing that we all can do to ensure that trash does not end up in the storm drains, the creeks, and ultimately the bay. It is also important that we keep pollution, such as oil and soap, out of the water. Encouraging your family members to use a car wash instead of washing your car at home on the street is one way to keep soap out of the creeks and bay.

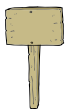
Habitat Bingo

3

Activity Description

Look at your surroundings to locate the objects that are named below. When you find an object, place an "X" in its square. Complete a diagonal, vertical, or horizontal row to be a winner!

You can complete this activity as you walk along the rest of the trail.

Deciduous tree 	Nest materials 	Snag (dead tree) 	Insect on the ground 	Hear a bird 
A sign about habitat 	Hazard to a bird 	Shelter on the ground 	See a bird preening 	A person excited about birds 
See a bird flying 	Flying insect 	**Wild Card** Write in your own sighting!	Litter [Carry it out, mark one extra box] 	Bird food 
Water source 	Two kinds of leaves 	See two different kinds of birds at once 	Seed or seed pod 	Flower 
Plant on the ground 	Shelter above the ground 	Nest 	See a bird eating 	Predator 

Native Plant Observations

2

Pickleweed

Salicornia pacifica

ID tips

- It grows in the low zone of the salt marsh and tends to blanket the shoreline.
- It is a succulent plant, holding water in its leaves and stems. The stems are typically green (but they can also be red or brown, depending on the season).

Did you know?
Pickleweed absorbs salty water from the Bay and pushes salts into the tips of the plant. It is also known as Glasswort, because it has been used to make glass! When burned, the plants leave behind soda ash, which is an important ingredient in glass-making.

Marsh Gumplant

Grindelia stricta var. angustifolia

ID tips

- It can be found in the mid-high zone of the salt marsh and can grow up to 3 feet tall and 3 feet wide.
- It has fleshy, strap-like leaves and yellow, daisy-like flowers that bloom from August to October.

Did you know?
Gumplants provide a good nesting and hiding places for birds when the tide is high. They also produce a sticky white "gum" on their buds to help protect the buds from insects. The Ohlone people have used this gum as a medicine to heal skin irritations.

Native Plant Observations 2

Now, it's time for you to look around and find these plants in the wild! Once you find each plant, write about the following in your journal:

- What does the plant look like?
- How do you know that this is the plant? Think about what clues helped you to identify the plant.

*Hint: These "clues" could be the plant's size or its unique features, such as flowers or bulbs.

Plant 1: _____

_____

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Plant 2: _____

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Plant 3: _____

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_____

Native Plant Observations 2

Plant 4: _____

_____

_____

_____

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Choose one of the plants you identified, and draw it in the box below! Be sure to include and describe special features, such as flowers, leaves, or color, in your sketch.