

A Sensory Beach Walk



Use your senses to experience and learn about the Delaware Bay habitat in this beach walk!

Introduction:

The Delaware Bay is a place where freshwater from the Delaware River meets saltwater from the Atlantic Ocean. The mixing of fresh and saltwater is called brackish water.

The Bay as a Nursery

The bay makes a great nursery for aquatic organisms. Many fish species (known as anadromous fish) will travel from the ocean into the Delaware Bay to spawn and their offspring will spend the first part of their lives in the bay. The bay provides habitat for more than 130 species of finfish as well as clams, oysters and crabs, and the largest population of spawning horseshoe crabs in the world.

The Importance of Salt Marshes

Much of the bay is surrounded by salt marshes which are environmentally important as buffers for pollution and run-off, wildlife and aquatic habitat, and flood control.

Where to Find Things

A lot of what we find along Delaware Bay beaches washes ashore and can be found along the wrack line (which is where organic material and other debris is deposited along the beach at high tide). While you are on the beach, consider walking along the water and also checking the wrack line to discover some of the things that have washed ashore.

Instructions: Locate a bay beach you would like to explore. Check the materials list for recommended items to bring along. Once you arrive at the beach, choose a direction to walk and explore for at least 15 minutes. You'll be using four of your five senses today (we do not encourage tasting items you find at the beach). Follow the steps in the activity below as you explore.

Activity: Each of the steps below will guide you through using your senses as you explore and experience the habitat along the Delaware Bay.

- 1. Smell** - The Delaware Bayshore habitats are often different than coastal ocean beaches. There may be different plants, soils, or sand, etc. Stop for 10 seconds and take some deep breaths. What do you smell?

Write it down here! _____

Common smells of the bay may be:

- Salty air - The Delaware Bay has brackish water. Brackish water is where fresh water from a river meets the salty water of the ocean and mixes.
- Marshy soils – Salt marshes line many shorelines of the Delaware Bay. The hydrophytic (or very wet) soils may sometimes have a sulphury smell.
- Musty or dead/organic materials - The bay is home to many aquatic organisms that may wash ashore (including horseshoe crabs, fish, other crab species, etc.)

Materials to Bring:

- sunscreen
- trash bag
- bug spray
- pencil
- sunglasses
- towel

Optional: clipboard, sand toys, snacks, and drinks.



2. Hear - Find a nice dry spot to sit, lay out a towel if necessary. Close your eyes and listen for 15-30 seconds. What can you hear? Circle what you heard.



Wind - You may hear the wind blowing or rustling the beach grass.



Birds - Some examples of birds you may hear are gulls, shorebirds, and osprey.



People - Many beaches are public access areas, and you may come across other beachgoers on your walk.



Waves - The Delaware Bay has tide cycles just like ocean beaches and you may hear waves moving in and out with the tide.

If you heard other things, write them here: _____

3. Touch - While sitting, put your hands in the sand. Consider inserting your hands at various depths. What do you notice?

Describe what you felt _____

Here are some examples of what you may be feeling.

- Dry - The upper layer of the sand may be dried-out from the sun.
- Cool - Sand tends to be cooler when you dig deeper because it is further from the sun's heat.
- Wet - The upper layer of the sand may be wet if you are at the tide line. Also, the lower layer of the sand may be wet as you dig deeper.
- Rocky - Sand has all different kinds of material in it. From shells and rocks to pieces of other organisms.
- Warm - The upper layer of sand may be warm from the sun.

4. Sight – Take a walk. Find a nice place to stop and stand. Now slowly turn your body the whole way around. What do you observe? Draw it on the next page.

Below are some common things you might observe:



Beach Grass - Provides wildlife habitat and helps prevent shoreline erosion.



Shells - This is the shell of a marine snail called a channeled whelk. You can find others like it along the beach.



Horseshoe Crabs – The Delaware Bay provides the world's largest spawning grounds for horseshoe crabs.



Sand – Sandy beaches can be found along many of the Bay's coastal areas.



Shorebirds - The Delaware Bay is a great stopover for migratory shorebirds to feed and rest.



Draw your answers from Number 4 here!



5. **Do** - Now that you have used your senses to explore the beach, put them to action and choose one or more of the activities below (or come up with some fun ones of your own!). Check off each one you have done!
- Pick up trash- Help keep the bay a clean place for people and beach inhabitants alike!
 - Flip a horseshoe crab– They can dry out if stuck on their back. Horseshoe crabs can't hurt you, but please be careful how you handle them. Always pick them up by the side of their shell (never by the tail).
 - Have a picnic- Make sure to take any litter with you and resist from feeding birds.
 - Go Fishing- Fishing can be a great family activity!
 - Build a sandcastle- Be sure to fill in any holes you made before you leave.
 - Draw a picture of your favorite thing you observed today!

For more information about the Delaware Bay or if you would like more information about the programs and activities offered by the DuPont Nature Center, stop by the nature center or visit our website: <http://de.gov/dnc>

