



Second Nature - *Fresh Water & Estuaries*

Today we learned

Biodiverse ecosystems are ecosystems that have a wide range of living and nonliving things. Water ecosystems fall into two categories, salt water (the ocean) and freshwater (lakes, rivers, and streams). An **estuary** is where these two water ecosystems converge. Estuaries are a combination of saltwater and freshwater called **brackish water**. Water ecosystems are important for humans and animals!

Has your family visited a body of freshwater or an estuary? What types of wildlife and plants did you see? Did you use the water for recreation?

Now at home

Activity 1 - Exciting Estuary Ecosystems

With your child, pick an estuary to research. You can choose an estuary near your home or others like the San Francisco Bay, the Chesapeake Bay or the Hudson River. Find out what type of animals live in the water and what land animals rely on the estuary. What type of plants are in the estuary? What is at the bottom of the estuary? Is it sand, reef, rocks or something else? Do humans use it for transportation, recreation, or fishing? What two bodies of water converge at your estuary?

Try to find some fun facts about your estuary. For example, oyster restoration projects are happening in the Hudson River, and the San Francisco Bay is the biggest estuary on the west coast of the USA!

Ask your child to draw or make a 3D model of the estuary you researched! Be sure to include plants, animals, and anything else you researched!

Activity 2 - Migrating Through Estuaries

Euryhaline organisms can survive in freshwater, brackish water or saltwater! For example Pacific Salmon eggs are hatched in freshwater lakes, rivers, and streams, and they migrate through estuaries out to the saltwater of the North Pacific Ocean. What an exciting journey that must be!

Have your child write a creative writing story from the perspective of a euryhaline animal! They can write about a Pacific Salmon, an American Eel, a Blue Crab, or you can help your child research other euryhaline animals. Where are you starting and ending your journey? What type of animals would you meet along the way? What type of food would you eat? Are you scared to be making this new journey or are you excited?

To send us any photos, videos, or questions, email us at education@sproutup.org!

