Incredible Edibles

Virginia has historically harvested seafood from the Chesapeake Bay or near by Atlantic Ocean. Most of us are familiar with the Bay’s blue crabs, rock fish and oysters but what about other ocean products? Today we consume seafood from oceans around the world.

Ask Students ...

Ask your students to list all of the foods they eat that live in the Bay or ocean.

Some students may not eat fish so won’t list anything. Next ask them to then list their favorite foods that are land based. By show of hands or on paper have them answer some of these questions.

Do you eat finfish, like flounder or tuna?
Do you eat crabs or lobster?
Do you eat shellfish, like oysters, clams, scallops or mussels?
Do you eat fish eggs, like shad roe or caviar?
Do you eat unusual things from the sea, like: Squid? Shark? Skate or ray? Seaweed or marine algae?
Do you eat really unusual things from the sea like: Raw sea slugs? Whelks? Periwinkles? Horseshoe crab?

How many foods in the following list do you eat? Keep track of the number.

- Mrs. Butterworth’s syrup
- Sealtest polar bars
- Carnation instant breakfast
- Cake Mate decorating icing
- Wish Bone creamy Italian dressing
- Royal and Jell-O brand chocolate pudding
- Reddi Whip topping
- Hostess filled cakes
- Kraft marshmallow topping

Ask Students ...

Ask the students if they knew that each of these materials contains a substance that came from an organism that lives in the ocean?

The ingredient agar, carrageenan and algin are all edible seaweeds or marine algae. Algal derivatives are found in many foods such as ice cream, puddings, salad dressings, cheese spreads and many others. They are used as thickeners or stabilizers and are derived from one of three seaweed extracts: Algin, agar and carrageenan. Algin is from brown algae; Agar and carrageenan are from red algae. Sea weeds or marine algae provide food and cover for many marine organisms. Over harvesting of algae that is used for nurseries of young fish or sea turtles can damage ecosystems.

Ask Students ...

Ask students to bring in containers from food items that may have been from the Bay or Ocean.

Where was the item harvested, manufactured, and transported from? Did it come from the Atlantic or another ocean? Students may need to use the internet to learn more about the species and its life history. Have the students create a flow chart showing the path the food took from the ocean to the store and finally to their table.
Trace a food item that started on land.

Ask the students to choose an item out of their lunch box and research where that item came from? Was it locally grown or transported around the world to the local grocery store and then ended up in their lunchbox or on the cafeteria tray? To find out where a food comes from, students will need to read the label or ask the grocer if it is locally grown produce. Some products contain multiple items that are blended in a factory such as fruit cocktail. Choose one item off the ingredient list and trace it back to its source.

Create a flow chart with the information obtained about the food include harvest, packaging and transportation of the item. If land needed to be cleared, what species of wildlife might have lived there before the land was cleared to grow crops. How was the packaging created? Students should share the information they have gathered with their classmates.

Discuss how we can still eat healthy and have a smaller footprint or impact on the environment. If there is a change that can be made, students can try to make the change for a week and then discuss if it was difficult and what impact they may have made.

Project WILD Activities that support this lesson:
- Where have all the salmon gone?
- What did your lunch cost wildlife?
- Lobster in your lunchbox
- Water we’re eating?