

H2O Bay

All Grade Level Patch



A resource booklet is available at www.gscb.org to assist with completing this patch.

Daisies/Brownies/Juniors

Complete the starred requirement plus any four other requirements.

1. Some of the animals native to the Chesapeake Bay are the osprey, blue crab, terrapin, rockfish, bald eagle, canvasback duck and oyster. Learn about one of these animals; what it eats, what endangers it, where it lives.
2. Thousands of shorebirds (birds that like to live on the beach) come to Delaware beaches each year. For instance, one bird named the red knot comes to eat horseshoe crab eggs. Shorebirds have very long beaks they use to probe in the sand or mud for their food. To learn what it is like for these birds to catch their food do the following activity:

Fill a large dishpan with dry oatmeal with grapes at the bottom to represent crab eggs in the sand. Have the girls use different tools to “catch” their food. Have them try using items such as chopsticks, a nutcracker and strainer. They will find that the chopsticks work the best. Other birds have beaks that work like a nutcracker (sparrows, cardinals) and like the strainer (flamingos and some ducks) to eat seeds.
- 3.* Ask each girl to do “Sixteen Simple Steps” for two weeks. See how many they can do it. Ask them to try and continue these good habits every day. “Sixteen Simple Steps? Activity is located on page 6 of the H2O Bay Resource Book.
4. Do the activity “Water Plant Art” located on page 7 of the H2O Bay Resource Book.
5. Do the activity “Are You Me?” located on page 9 of the H2O Bay Resource Book. Which of these animals might live in or around the Chesapeake Bay?
6. Do “Plastic Jellyfish” located on page 15 of the H2O Bay Resource Book.
7. Read the “Horseshoe Crab Tale” located on page 20 of the H2O Bay Resource Book; then do the maze and make the horseshoe crab puppet. **Leader:** information on horseshoe crabs is located on page 17 of the H2O Bay Resource Book for your background and research.
8. Participate in an Earth Day or other local conservation event. Find out how you can help to save the bay!
9. Take a trip to a bay. Visit a nature center near the bay or just have a picnic! How many bay animals can you see?
10. Color the picture of Ollie the Osprey located on page 25 of the H2O Bay Resource Book. Share the information about Ollie with your family!

Cadette/Seniors/Ambassadors

Complete the starred requirement plus any five other requirements.

- 1.* What makes a body of water a bay? What is an inland bay? Find out the names of the major bay that surround the Delmarva Peninsula and three inland bays. Draw a map of their locations. What are the major pollution problems that bay face?
1. Do the activity "Soil Erosion" located on page 26 of the H2O Bay Resource Book. Water can cause erosion damage to land. Find out how erosion affects the Delaware or the Chesapeake Bay. What can you do in your community to stop erosion?

We have soil erosion at Camp Grove Point that has occurred from the waves of the Chesapeake Bay and the Sassafras River. If you can, take a trip to Grove Point to see what has happened. Don't go too far! (Do not go past the "do not enter" sign—it is dangerous.)
3. Match up the turtle names with their descriptions and complete the recycling word search located on page 27 and 28 of the H2O Bay Resource Book
4. Make a soda bottle terrarium using the directions located on page 29 of the H2O Bay Resource Book. Find out what kind of plastic that soda bottles are made of. When they are recycled what types of things can be made from that type of plastic?
5. Perform the play "Hot on the Trail of Tricia Trash and Wally Waste" located on page 30 of the H2O Bay Resource Book for a group of family and friends.
6. Find out about five animals that live in or around a bay. Find out where they live, what they eat, what their enemies are, how many babies they have each year and how they are affected (good and bad) by the bay environment. A few animals you could choose may be: blue heron, osprey, rockfish, crabs, beaver, ducks and bald eagle.
7. Complete the activity "Waste Watchers" on located on page 40 of the H2O Bay Resource Book. Make sure to do the handout at home with your family to find ways that you can save energy.
8. Read this quote from Chief Sealth of the Duwamish Native American tribe. You will see that Chief Sealth was talking about saving the environment back in 1855! Discuss why Chief Sealth's tribe had a different view of the Earth than the white settlers had. Why do you think the tribe believed the earth was sacred? How can your troop help Chief Sealth in his goal to save the environment?

Quoted from a letter Chief Sealth wrote to President Franklin Pierce

"Every part of the earth is sacred to my people. Every shining pine needle, every sandy shore, every mist in the dark woods, every clearing and humming insect is holy in the memory and experience of my people. The white man....is a stranger who comes in the night and takes from the land whatever he needs. The earth is not his brother but his enemy, and when he has conquered it, he moves on. He leaves his father's graves, and his children's birthright is forgotten....All things share the same breath—the beasts, the trees, the man....what is man without the beasts? If all the beasts were gone, men would die from great loneliness of spirit, for whatever happens to he beast also happened to man. All things are connected. Whatever befalls the earth befalls the sons of earth."
9. Using the information supplied located on page 46 of the H2O Bay Resource Book, do research on the Blue Crab (*Callinectes sapidus*—scientific names). Find out what body of water it is usually found in, when they breed (have babies), which one of the crabs is bigger (male or female), what do they eat, do they live in deep water or shallow, what is the status of the blue crab? Purchase a blue crab from the store and look at it's parts. How many claws do they have? How are they different from other kinds of crabs (horseshoe crab, Alaskan king crab, etc.)? Do "Crab Capers" multiple choice activity and "Go figure" located on page 50 of the H2O Bay Resource Book.
10. Visit a bay! Take a walk and look for signs of animals. Make up a scavenger hunt-look for things but don't take! Things to look for in a bay environment might be: a blue heron, crabs, sand, shells, a seagull, boats, a dock, marsh grass, crab pots, litter, foam (from the waves), dead creatures (crab/fish). Decide as a troop which things to look for.
11. Saving the bay is a big project. What hope does just one girl have of really helping? You might be surprised. You can change a few things that you do every day to help. You can also teach your parents and brothers and sisters things that they can do. Page 51 lists a few of the things just one girl can do to help the Bay. Have each girl write a pledge on a card that she promises to undertake these suggestions to help the Bay. They do not have to be signed. Post them for others to see.