



GIRL SCOUTS OF NORTHERN CALIFORNIA

IN THE BAY

A GS NORCAL COUNCIL'S OWN BADGE PROGRAM

CADETTES, SENIORS & AMBASSADORS

TO ENCOURAGE AND INSPIRE GIRLS TO EXPLORE
THE WORLD OF THE SAN FRANCISCO BAY.



PURPOSE

San Francisco Bay's mud provides habitat, food and shelter for hundreds of species of plants and animals. However, the Bay has seen many changes in the past 200 years. Development of the area has led to altered shorelines, increased pollution and the introduction of non-native plants and animals. With this Badge you will examine how the Bay has changed, explore the diversity of life at the bottom of the Bay and learn about the impact of non-native, or invasive, species.

REQUIREMENTS

Complete the Required Activity and then one activity from the Learn, Do and Share sections. Create and complete one activity of your own design and reflect upon the whole process when you have finished using the reflection form.

All members of Girl Scouts of the USA are eligible to earn the In the Bay Badge.

The In the Bay Badge is an official award and should be worn on the front of the vest or sash.

ORDER INFORMATION

To order the In the Bay Badge please visit www.girlscoutsnorcal.org and purchase the items online. Please note that shipping and handling will be added to all online orders.

Members of Girl Scouts of Northern California will not be charged for shipping and handling if they use the GS NorCal Council's Own Order Form and have badges shipped to the closest GS NorCal store in their area for members to pick up.

ORDER PATCHES ONLINE AT WWW.GIRLSCOUTSNORCAL.ORG
FOR FURTHER INFORMATION ON PATCH PROGRAMS CONTACT PATCHES@GIRLSCOUTSNORCAL.ORG

IN THE BAY BADGE FOR CADETTE, SENIOR & AMBASSADOR GIRL SCOUTS

REQUIRED

What is the Seafood Watch Program? Monterey Bay Aquarium and others designed a program to raise consumer awareness about the importance of buying seafood from sustainable sources. They also looked into the health risks associated with mercury and other contaminants in fish. Visit the website www.seafoodwatch.org. Please search the website with an adult and answer the following questions

1. What are the four Fishy Issues that are troubling our water?
2. Learn how fish are caught. Find 5 different fishing methods.
3. What is aquaculture?
4. Why is aquaculture not always a good thing?
5. Click on “What’s New.” Take the “Seafood Smarts” quiz. Are you a Bluefish Brainiac, a So-So Shrimp, or a Floundering Flounder?
6. What is the newest high-tech way to have Seafood Watch information at your fingertips?
7. Click on “Browse All Seafood,” browse the list from the letters “O-Z” and find Albacore Tuna. Why is there a Health Alert for this fish?
8. Click on the link for www.oceansalive.org, and then click on the link for “Seafood and Your Health.” How did mercury or another contaminant end up in fish?

LEARN

1. Find out about the San Francisco Bay watershed. Which rivers flow into the bay? Go to <http://sfbay.wr.usgs.gov/generalfactsheets/change.html> to find out. Can you name three things that are different about the bay now compared to the bay in 1848?
2. Many people enjoy seafood. What kind of edible fish live or travel through San Francisco Bay? Go to <http://www.dfg.ca.gov/fishingpassport/guide.asp>, and click on the “View Online Fishing Guide” button. Pick a location in San Francisco Bay and list 10 kinds of fish that can be caught there.
3. Until recently, ocean fishing has been a slow process. Due to technology, fishermen can collect a large amount of fish in a short period of time. Using the research that you collected in your Required Activity above discover some advantages and disadvantages of technological advancements in fishing? Refer to www.seafoodwatch.org for additional information.
4. Aquaculture can take pressure off of wild fish populations, but sometimes it does more harm than good. Go to www.seafoodwatch.org and click “Browse All Seafood.” Browse the list from “O-Z” and find Salmon. Click on the link for farmed salmon—why is farmed Salmon in the “Avoid” category? Are the concerns about the environment, human health, or both.

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DO

1. Print and keep with you the Seafood Watch pocket guide found at www.seafoodwatch.org.
2. Visit Aquarium of the Bay and take a guided tour with an Interpretive Naturalist. Circle all the animals from the Seafood Watch card that you can find on exhibit.
3. Examine the menu of a seafood restaurant. Are the seafood choices mostly sustainable or unsustainable? Explain. What letter grade would you give to this restaurant's seafood sustainability? Why would you give that grade?
4. Research the Cosco Busan oil spill that happened in San Francisco Bay. Which local fishery was affected by the spill? What were the concerns? What kind of action was taken to protect seafood consumers? Go to www.sfgate.com and find articles that support your findings.
5. Design an experiment that shows the effects of pollution on plants or wildlife. Follow the scientific method to determine your conclusion:
 - a. Question: What do you want to know about the effects of pollution?
 - b. Research: What do you need to know before you can formulate a hypothesis?
 - c. Hypothesis: What do you think is going to happen?
 - d. Experiment: How will you test your idea? Write detailed steps so that someone else could repeat what you did.
 - e. Data: Will you be counting or measuring? What sort of units will you use for your data?
 - f. Analysis and Conclusion: What sort of data would show your hypothesis to be true? What would show it to be false?

SHARE

1. Find a local restaurant or grocery that serves sustainable seafood and send them a card thanking them for making responsible choices. Find a local restaurant that does not serve sustainable seafood and send them information about the seafood they serve and how it can affect food webs, water quality or human health. You can create your own card or download one from www.seafoodwatch.org.
2. Perform a skit for your troop, family or friends that takes place in a seafood restaurant. Scenario: two friends are looking over the menu, but only one knows about the Seafood Watch program. When the waiter arrives to take their orders, what happens when one person orders something from the Seafood Watch red list? Be creative. Perform the skit for a group of adults and share with them what you learned about sustainable seafood.

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3. Create a poster that explains why some kinds of fish are more contaminated with pollution like mercury than others. Tell the whole story: How did the pollution get in the water? What consequences does this have for human health? Ask the officials at your school for permission to place your poster in a visible spot.

4. Interview someone whose job helps to protect San Francisco Bay. Examples include scientists, educators, policy makers, and journalists. Make an oral presentation to a younger troop about their job and how it protects local marine life or water quality. What sort of education is required for their job? What other steps did they have to take to enter their profession?

YOUR ACTIVITY:

MY REFLECTION:

PART OF THE PROMISE AND LAW THAT RELATES TO WHAT I DID IN THIS BADGE:

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