

Marine Mammal Badge

Juniors



GIRL SCOUTS of GREATER LOS ANGELES

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GSGLA Marine Mammal Badge- Juniors

"The world's finest wilderness lies beneath the waves ..." — Wyland, Marine Life Artist

Purpose: This badge will guide you through the discovery of California coastal marine mammals and the roles they play in the food chain, and in our culture. By exploring marine mammals, how they live, what they eat and where they go, you will be introduced to a world like no other, a one beneath the waves and full of life.

Directions: Choose one option either a, b or c from each step in the badge. This badge is intended to get you or your troop out into the educational areas of Los Angeles County and to discover different marine mammals by exploration. When you are completing this badge try to be as adventurous as possible and try to learn about all of the marine mammals while completing the steps to the badge. For instance, if you accomplish one step learning about whales, learn about dolphins or seals/sea lions on other steps. Try to accomplish the other steps at other locations so your education will be broadened by your experiences.

Steps:

1. What kind of Marine Mammals live off the coast of Southern California? Refresh and discuss on what makes an animal a mammal and how this is different from other kinds of animals that live in the ocean. Are marine mammals here year round or do they migrate to and from? Contact the **Los Angeles Chapter of the American Cetacean Society** to see if a naturalist can visit your troop and discuss whale research and identification or visit the **Cabrillo Marine Aquarium in San Pedro** to complete the research to learn about some of the amazing marine mammals off our coast! Pick one of these marine mammals to focus your research on with the American Cetacean Society or the Cabrillo Marine Aquarium.
 - a. **Whales**- the California Grey Whale, the Blue Whale, the Finback Whale, the Humpback Whale and the Orca. How big are these whales? Do these whales migrate (what is migration)? Where to? What times of year can you see these whales off our coast? After your research, create a poster, collage or other art project about one or more of these whale species including pictures, and information about migration patterns and behaviors typical for that species (what is a species?).
 - b. **Dolphins**- Research the Bottlenose Dolphin, the Pacific White Sided Dolphin, the Risso's Dolphin, and the Common Dolphin. What is the difference between a porpoise and a dolphin? How big are these different species of dolphins (what is a species)? What is a group of dolphins called and how many are found in a

group for each of these species? Create a poster, collage or other art project for one or more of these dolphin species showing pictures and defining characteristics that allow you to identify this specific dolphin from other dolphins.

- c. **Seals and Sea Lions**- What is the difference between a seal and a sea lion? Research the California Sea Lion, the Stellar Sea Lion, the Pacific Harbor Seal, Northern Fur Seal, and the Northern Elephant Seal. Where do they live and what is their range? What are the characteristics of these species (what is a species?). Create a poster, collage or other art project on one or more of these species with pictures and a description about this animal.

- 2. Marine mammals are often a predator, which means they hunt for other animals (prey) to eat, however sometimes they become food as well! This relationship of how animals eat and are eaten is called a Food Web. Find out more about how and what different kinds of marine mammals eat and what eats them! Visit the **Aquarium of the Pacific in Long Beach** to learn about whales, dolphins or sea otters or sea lions. Remember to learn about a different marine mammal from step 1 but if your curiosity leads you to learn about more than one, follow your own path and make it an adventure!

- a. **Whales**- Whales belong to a group of animals called cetaceans which includes whales, dolphins, and porpoises. There are two different groups of cetaceans, the Odontocetes and the Mystocetes. Find out what these two terms mean. HINT* it has to do with how these two different groups eat their food. Then do an activity where you explore how these whales eat. In a pan of water empty a few tablespoons of oregano/basil or other kitchen herb (this will be the “prey”). Then use a pair of tweezers, a spoon, a toothbrush and a small net to catch the prey! What species of whales do you think each of these tools might represent and why? Make it extra fun and play as partners or in teams to make a Food Feast competition and record how much prey you can catch in 10 seconds!
- b. **Dolphins**- Dolphins belong to a group of animals called cetaceans, just like whales and porpoises but all dolphins are considered “toothed” whales. Find out about what dolphins eat. Dolphins have incredible ways to find and catch their food. An adaptation that “toothed” whales like dolphins have for finding food is something called echolocation. Find out what echolocation is? Play a game of dolphin tag (marco polo) where one person is the dolphin and the rest are her prey. The dolphin must close her eyes and sound off by saying “dolphin” and the prey will respond by saying “fish”. The dolphin must find her fish within a small well defined area and tag them, whoever gets tagged gets to be the dolphin! If you leave the area and get caught, you become a “fish out of water” and must sit

in the “chowder pot” (or mush pot- a time out area) for 1 minute before returning to the game. For extra fun- play this game in a swimming pool like you would Marco Polo- *Reference Volunteer Essentials first for safety when swimming with your troop and have appropriate supervision!*

- c. **Sea Otters and Sea Lions**- Sea Otters and Sea Lions are also marine mammals. Seals and Sea Lions belong to a group called “pinnipeds” meaning flipper-footed and sea otters belong to a group called “fissipeds” meaning paw or pad-footed. Both of these groups are very significant in California’s food web. One of these animals is endangered and the other is saturated which means it is over-populated. Find out which is which. Then find out how this affects the food web. What do these animals eat and what has happened to the California food web because of this imbalance? Then do a food web activity and make a human food web! With at least 3 friends or family members stand in a tight circle (shoulder-shoulder), have everyone reach across to hold hands with someone else in the group. Everyone needs to hold hands with 2 different people. Without letting go of each other’s hands, try to untangle your group so everyone is back to a circle. Make it extra fun- find an example of a food web online and write with washable marker an animal on everyone’s hand. Only connect hands with an animal that you can eat! See what happens when you take an essential animal out of the circle.....
3. Watch a Marine Mammal in Action! Visit a place where you can see live marine mammals. (Parents/guardian’s and troop leaders- please review Volunteer Essentials for any permission forms that may be necessary).
 - a. Visit the **Los Angeles Zoo**. So you think that there aren’t any marine mammals at the zoo? Are you sure? Visit any marine mammals such as seals and otters and make observations on how they behave in captivity. How do you think this is different or the same as the natural habitat? Then observe the elephants. What are some similarities between elephants or other large mammals and whales? Can you find any mammals at the zoo that behave similarly to dolphins or seals/sea lions?
 - b. Attend a **whale watching expedition** through Harbor Breeze in Long Beach, the Cabrillo Marine Aquarium or another Los Angeles based company and view marine mammals in their natural habitat (what is a habitat?). Ask about the migration patterns of the California Gray Whale and other local whale species. Why do they migrate from one area to another? Are there any other animals that migrate-why? Do people migrate-why?

- c. Take a trip to a **county or state beach in Los Angeles** and see if you can spot any marine mammals. Coordinate with a naturalist, life guard, park ranger, marine biologist, animal control or someone that works with marine animals about how to stay safe when you see a marine mammal. How close should you get? What are some things to be aware of? Can they hurt you? Even if you don't see any marine mammals learn about the Marine Mammal Protection Act and how it protects animals and people from getting hurt.
4. How have marine mammals influenced our cultures? From songs and stories, cave paintings and artwork, to Moby Dick and Free Willy, marine mammals have been a part of human culture for thousands of years. Find out a little more about the splash they have made in our cultures.
 - a. Take a trip to the **Satwiwa Native American Indian Center in Newbury Park** to learn more about the Chumash culture. Ask about the Rainbow bridge story. After your visit learn about a Native American culture from the area of Los Angeles that you are from. How might have marine mammals impacted this culture? What other mammals were important if marine mammals were not? Then create an art project or craft that represents marine mammals in a Native American Culture.
 - b. Learn about how marine mammals are celebrated in a different country/culture. Some ideas are Japanese, Pacific Islander, Latin Caribbean, Alaskan, or North Atlantic cultures like Irish, Scandinavian or Icelandic. Visit a cultural festival or event in your city, or other Los Angeles areas. The **Aquarium of the Pacific in Long Beach** has cultural festivals annually; however you may need to plan ahead for a particular festival. Do some research or talk to others from different cultures to find out about how marine animals are celebrated and then have a marine mammal party where you and your friends celebrate a marine mammal!
 - c. Visit **Leo Carrillo State Beach**, one of the most used beaches in Southern California for movies and TV shows. Think about how whales or other marine mammals have influenced books and movies in our culture. What are some examples? Do you think that this can influence the way people think about marine mammals? Create a movie or play with your friends or troop about a marine mammal. Make sure there is a positive message, a plot that includes a beginning, middle and end, and includes educational information about the animal and its habitat. Share with your family and friends after your production is ready to view, and with parental consent show your video or play publically or post to YouTube to be seen.

5. Protect and Save! What kinds of marine mammals are endangered? What does it mean to be endangered or extinct?
- a. Visit the **Fort McArthur Marine Mammal Care Center in San Pedro**. Learn more about the threats to marine mammals and then plan a service project to help marine mammals. Create a service project to benefit the Fort McArthur Marine Mammal Care Center or other animal rescue group in Los Angeles of your choice.
 - b. Find out what threats exist for whales specifically in history and today. Invite a naturalist for **American Cetacean Society** to discuss these statistics with you or your troop or contact the **Cabrillo Marine Aquarium** for more information on this topic. What kind of groups help to protect whales? What do they do to help? Create a service project to benefit a conservation group that works towards helping whales.
 - c. Take a tour of the **Hyperion Treatment Plant**, Los Angeles' waste water treatment plant. There are a lot of people living in Los Angeles, which means there is a lot of waste. Discuss how trash, chemicals, waste, fertilizers, and other human impacts affect marine mammals. Learn about how the treatment plant helps to reduce the impact on the environment and what you can do to help. Create an awareness service project that helps to increase public awareness about waste and the human impact on marine mammals.

Once you have completed the requirements for this badge you can purchase them in any of our seven Girl Scouts of Greater Los Angeles shops.

Check out our locations, hours and contact information at
<http://www.girlscoutsla.org/pages/shop/index.html#hours>