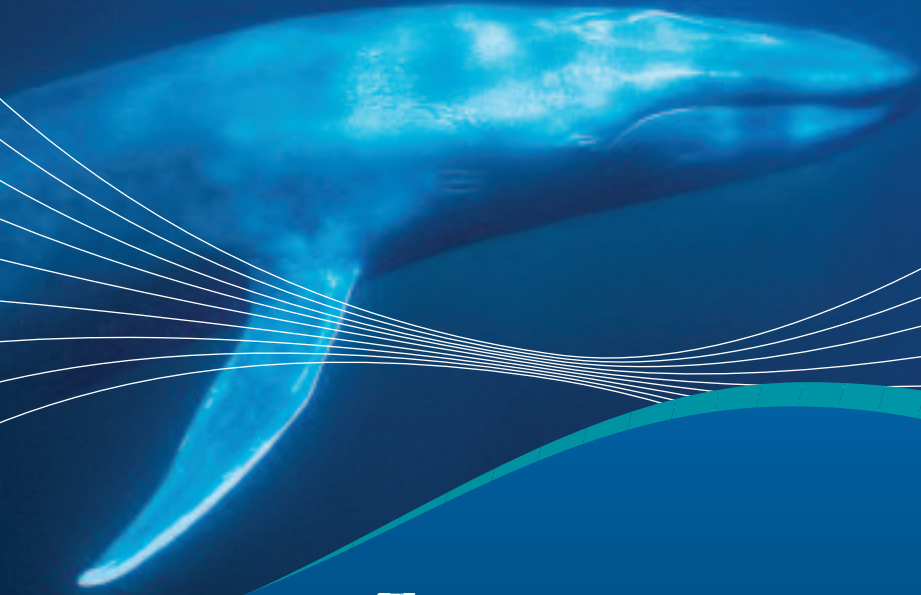


PASSPORT BOOK



WHALES

a journey with giants

Join us as we take you on a journey to explore the Pacific Ocean and its inhabitants, including the largest animals on the planet. Use this Passport to guide your journey. Look for our Passport Stops, and mark your travels at our Embossing Stations.



Aquarium Floorplan

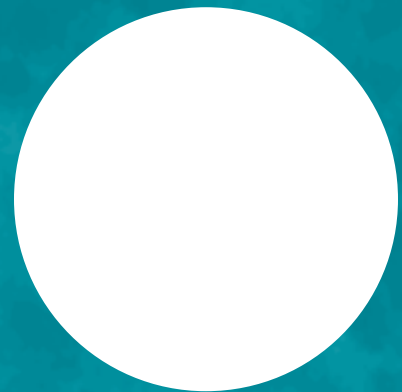
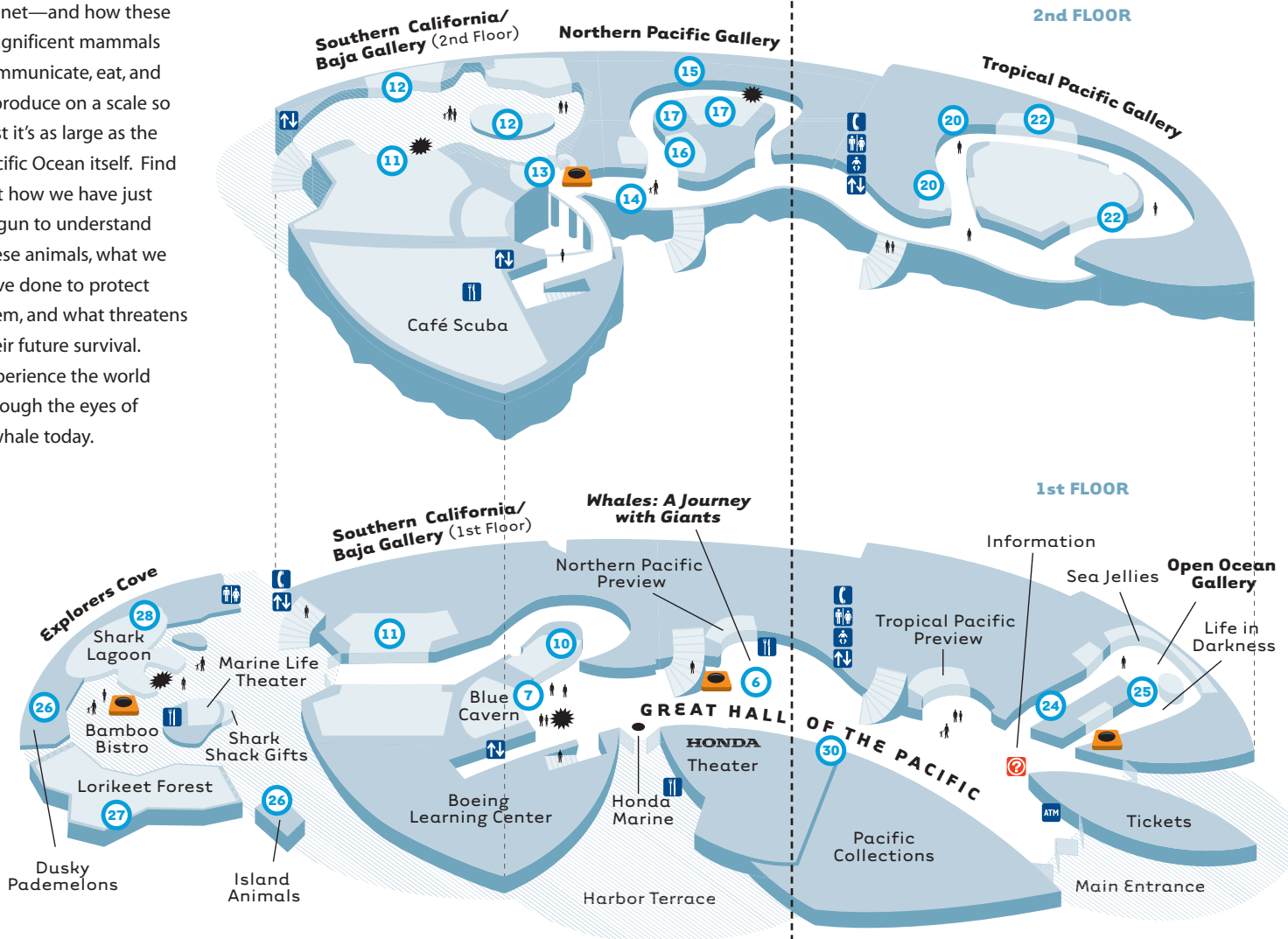
As you enter the Aquarium's Great Hall, look above you and discover a 26 m (88 ft)-long, full-scale model of a blue whale and her newborn calf.

Step up to our Blue Cavern habitat at the end of the Great Hall to start today's journey, and explore the diverse regions of our vast Pacific Ocean.

Also learn about whales—the largest animals on our planet—and how these magnificent mammals communicate, eat, and reproduce on a scale so vast it's as large as the Pacific Ocean itself. Find out how we have just begun to understand these animals, what we have done to protect them, and what threatens their future survival. Experience the world through the eyes of a whale today.



© MIKE JOHNSON



Blue Whale

Balaenoptera musculus



The largest animals on the planet, blue whales today can reach lengths of up to 30 m (100 ft) long. They can be identified by their short stubby dorsal (top) fins, massive size, and their tall, column-like blows that can reach heights of 10 m (30 ft). In June to October, the Southern California coast has the highest concentration of blue whales in the world.

LEGEND

- Restrooms
- Child Care Station
- Elevators
- Discovery Presentation
- Embossing Station
- Information Center
- Phones
- Dining
- Outdoors

Have your Passport book embossed at the seven Embossing Stations in the Aquarium. Look for the embossing space on the upper right-hand corner of pages 3, 11, 13, 17, 23, 25 & 29.

Passport Stop
Look for Passport Stops at exhibits throughout the Aquarium. The numbers correspond to page numbers in this book.

Aquarium Information

The Aquarium of the Pacific is organized into three main galleries plus a special exhibits gallery and our outdoor Explorers Cove with Lorikeet Forest and Shark Lagoon.

The main galleries highlight the major regions of the Pacific Ocean—Southern California/Baja, the Northern Pacific, and the Tropical Pacific. As you explore the Aquarium, be sure to stop by our hands-on Discovery Labs to touch marine life and hear interesting facts from our education volunteers. And learn even more about our animals at special Discovery Presentations held throughout the day at major exhibits. See your *Today at the Aquarium* flyer for times and locations.

ADDITIONAL ADVENTURES

Whales: A Journey with Giants

Experience our Great Hall transform into the underwater world of the blue whale. Check the Information Center for showtimes.

AnimalVision 3-D*

Enjoy this film that combines stunning state-of-the-art 3-D technology, fun-loving animal characters, and important environmental messages.

Behind-the-Scenes Tour*

See what goes on behind the scenes in this one-hour guided tour. We'll take you through parts of the Aquarium previously off limits to the public, including quarantine, food-prep, life support, and more! Age restrictions apply.

AQUARIUM MEMBERSHIP

Apply the cost of your admission today to a membership and enjoy the Aquarium all year long. When you become a member of the Aquarium of the Pacific, you're supporting our marine education, conservation, and research. In return, you'll enjoy unlimited FREE admission to our exhibits and members-only events for one full year, plus special discounts on educational programs, trips, and purchases made at the Aquarium stores. Join today at the Information Center or ticket window, and we'll apply today's admission fees (for those who will be listed on your membership) toward the cost of your membership. You can also join online at www.aquariumofpacific.org or you can call (562) 437-FISH(3474).

Ocean Experience*

Be a marine biologist for a day as you join the crew of a 90-foot ocean research vessel in collecting and identifying local marine life. Seasonal.

Animal Encounters*

This is your chance to feed the animals with a member of our animal care staff. Age and height restrictions apply. Advance reservations required.

** Additional charge. Please visit the Information Center for times, pricing, and availability.*

Hours of Operation: 9:00 a.m. to 6:00 p.m. daily

Aquarium closed December 25 and during the Long Beach Grand Prix weekend. For same day re-entry, please ask to have your hand stamped at the exit.

GENERAL INFORMATION

First Aid/Emergencies/Lost & Found

Please proceed to the Information Center near the main entrance or contact any security associate.

Please Refrain From...

Smoking and gum are not allowed in the Aquarium. Please use trash and recycle bins, and do not toss objects into the exhibits.

Information

Visit the Information Center, located in the Great Hall of the Pacific near the main entrance, to inquire about tours, Aquarium membership, special events, and more.

Café Scuba, Bamboo Bistro, & More

Café Scuba on Level 2 serves a tasty selection of sandwiches, salads, and grilled entrees. Bamboo Bistro in Explorers Cove offers yummy pizza, hot dogs, cold beer, and refreshments. The Coffee Cart in the Great Hall serves coffee, capuccinos, sodas, and snacks. Harbor Terrace is open seasonally for sandwiches, salads and more.

Gift Stores

Be sure to stop by Pacific Collections and the Shark Shack, open daily from 9:00

a.m. to 6:00 p.m., for a unique selection of clothing, books, toys, gifts, CDs, and educational items.

Restrooms and Baby Care Station

See map for restroom locations. There are changing stations in the restrooms on Levels 1, 2, and in Shark Lagoon. The baby care station is located in the Level 1 (first floor) women's restroom.

Visitors With Disabilities

Wheelchairs are available at the Information Center. All exhibits are wheelchair accessible. See map for the location of elevators throughout the Aquarium. Audio tours for guests who are blind are available at the Information Center.

Credit Cards

We accept VISA, MasterCard, and American Express for admission, membership, merchandise, and food purchases.

Amazing Pictures

Purchase a unique souvenir from your Aquarium visit with this fun photo opportunity located in the Great Hall of the Pacific.

EDUCATION

The Aquarium of the Pacific hosts a variety of fun and engaging programs for both adults and children. We offer a range of exciting educational opportunities for those just discovering marine life as well as those looking to further expand their knowledge of the ocean and surrounding issues. From Aqua Tot Adventures to courses and lectures for adults, there is an Aquarium program suitable for every age group that will engage and empower. For more information, call (562) 951-1630 or pick up a brochure at our Information Center.

BECOME AN AQUARIUM VOLUNTEER

Do you want to make a difference? Join our team of more than 800 volunteers who help us achieve our mission of ocean education and conservation. Be a guest ambassador, educator, diver, and more. For information on becoming a volunteer, pick up an application at the Information Center, visit our Web site at www.aquariumofpacific.org, or call (562) 951-1659.



Species with the Vanishing Animal symbol are listed as threatened or endangered under the United States Endangered Species Act or are listed on the IUCN-World Conservation Red List.

WHALES

a journey with giants

Step into the wondrous world of whales at the Aquarium of the Pacific in Whales: A Journey with Giants. Through a compelling multi-sensory experience of light, sound, and imagery, the Aquarium's Great Hall will transform into the underwater realm of the planet's largest living animal—the blue whale. Follow a blue whale and her calf on their travels along our coast and to the dark depths of the ocean. Discover the remarkable animals they encounter along the way. Watch sea lions play. Encounter humpback and killer whales. And discover sea jellies, swordfish, deep sea creatures, and the impressive great white shark. Whales: A Journey with Giants is a five minute experience that takes place in the Great Hall throughout the day. Please see the Information Center for showtimes.

6

To understand how a whale lives, you need to think outside of your daily reality.

Imagine living in almost total darkness, breathing air but living your entire life in water, and traveling hundreds of miles to find food and even thousands of miles to raise your children. How would you find a mate across these vast distances and accomplish all of this without any technology? It is only when we realize their size, how they communicate and navigate, and the vast scale of their home ranges that we truly begin to understand the mysterious world of whales, our potential impacts on them, and what we must do to ensure their survival.



© MIKE JOHNSON

WHALES IS SPONSORED BY:



Official Summer Sponsor:



BLUE CAVERN GREAT HALL

7

The Blue Cavern habitat in the Great Hall is modeled after Blue Cavern Point, a kelp forest along the eastern coast of Santa Catalina Island. This represents the underwater habitat you would find both along our coast and local islands. Look for the pair of giant sea bass in the exhibit as well as the model on the wall. Giant sea bass are listed internationally as critically endangered. The two you see in this exhibit are the only breeding pair in the world in a protected environment. The Aquarium has already witnessed some initial successes in breeding these animals.



Bat ray
Myliobatis californica



California barracuda
Sphyraena argentea



Yellowtail
Seriola lalandi



White seabass
Atractoscion nobilis



Giant sea bass
Stereolepis gigas



California sheephead (male)
Semicossyphus pulcher



Shovelnose guitarfish
Rhinobatos productus



Kelp bass
Paralabrax clathratus



California sheephead (female)
Semicossyphus pulcher



Ocean whitefish
Caulolatilus princeps



Leopard shark
Triakis semifasciata



Southern California/Baja

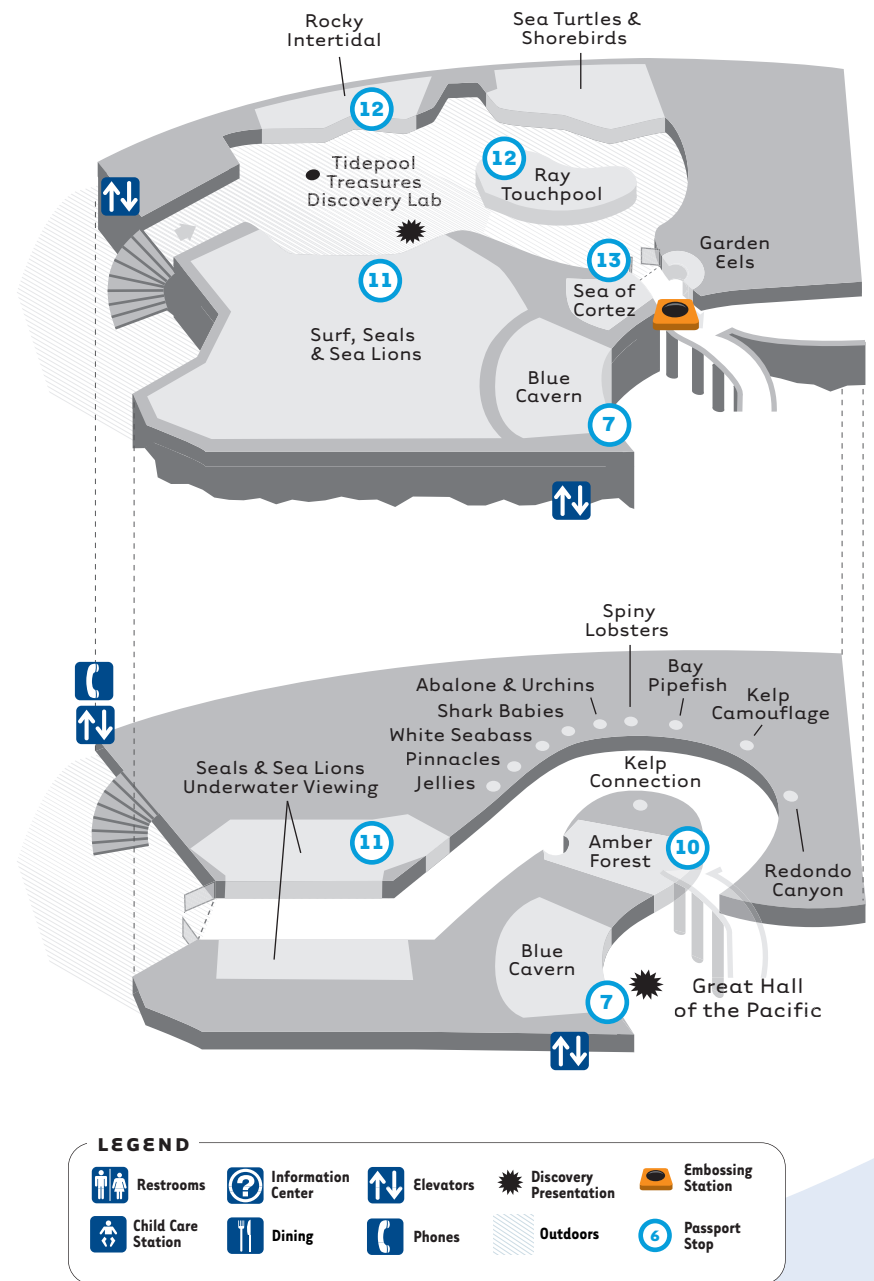
Extending 1,269 km (800 miles) from Oregon to Mexico, the California coast includes a variety of ecosystems. From kelp forests teeming with life and biologically productive wetlands to extreme environments such as tidepools, each habitat is home to an array of life forms. The Southern California and Baja coasts serve as critical habitats for numerous whales. They provide places for them to eat, breed, and to raise young whales. Great whales such as blue, gray, humpback, and fin and common dolphins all spend part of their lives along these coasts. Each year residents can see these animals, especially gray and blue whales, as they pass right by our shores.



Fin Whale

Balaenoptera physalus

The second largest animal on the planet, the fin whale can reach lengths of up to 25 m (85 ft). They are the fastest of all the great whales with speeds of up to 59 km (37 miles) per hour. Consuming as much as two tons of food a day, fin whales eat krill, squid, or larger schooling fish such as cod, herring, or capelin. Using their speed, they can circle a school of fish, forcing them into a compact ball that the whale gulps down in one big mouthful.



AMBER FOREST

SOUTHERN CALIFORNIA/BAJA

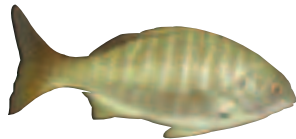
10

Our Amber Forest represents the diversity of marine life that depends on kelp forests for food, for protection, and for breeding.

Gray whales have been known to use kelp forests to hide their young from predators and find food. Although grays are the first whales to be removed from the Endangered Species List, they still face numerous threats, including pollution and global climate change.



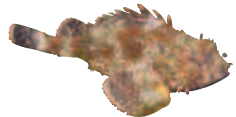
Black surfperch
Embiotoca jacksoni



Zebra perch
Hermosilla azurea



Garibaldi
Hypsypops rubicundus



California scorpionfish
Scorpaena guttata



Pacific sardine
Sardinops sagax



Seniorita
Oxyjulis californica



Giant spined sea star
Pisaster giganteus



Salema
Xenistius californiensis

CULTURAL FACT

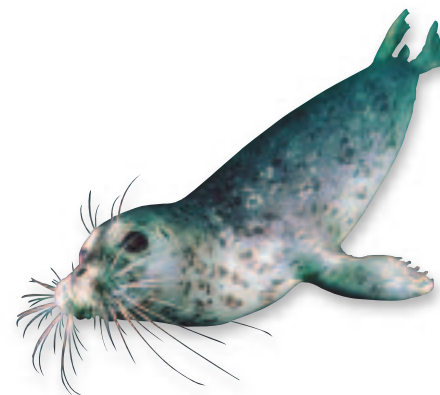
Our local Native American cultures, the Tongva/Gabrielino and Chumash have witnessed whales along our coast for generations. Native peoples believe that all life is interconnected and that what happens to whales also affects people. Whales, referred to as *paxat* in the Chumash language, were used for food, offerings, houses, and protected the Chumash and Tongva ancestors. This reverence for whales is depicted in Tongva cave pictographs found on San Nicolas island off our coast.

SEALS & SEA LIONS

SOUTHERN CALIFORNIA/BAJA

11

Sea lions live throughout our coastal waters. Their local breeding grounds are protected in the Channel Islands National Park and Channel Islands National Marine Sanctuary. During the summer 75,000-120,000 California sea lions can be found in the Channel Islands. In the winter these same areas serve as breeding grounds for more than 55,000 elephant seals. Five pinniped species, including the harbor seal, use these important islands throughout the year. To find out more about this sanctuary and how to visit it, go to www.cinms.nos.noaa.gov.



Harbor seal
Phoca vitulina



California sea lion
Zalophus californianus

Eastern Pacific Gray Whale

Eschrichtius robustus

Gray whales can be identified by their lack of a dorsal (top) fin, heart-shaped blows, and extensive barnacles and gray patches. With one of the longest migrations of any mammal, gray whales pass by our coast each year as they swim to and from Alaska to eat and Baja to breed and raise their young. They can travel as many as 16,000 km (10,000 miles) each year. The best time to spot them off our coast is from December to April.



ROCKY INTERTIDAL

SOUTHERN CALIFORNIA/BAJA

12

Tidepools teem with life, including purple sea urchins, giant green anemones, and bat stars.

Each of these animals has adapted specific ways to handle changes in water and salinity levels. Every rising tide brings in water rich with food and oxygen. As the water recedes, it carries away wastes, eggs, and larvae to be dispersed in the ocean.

Be sure to also visit our Tidepool Treasures Discovery Lab and touch some of these local marine residents.



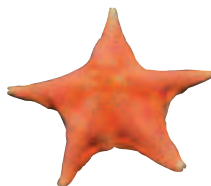
Shiner Surfperch
Cymatogaster aggregata



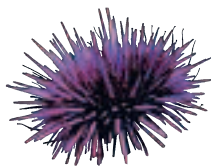
Giant keyhole limpet
Megathura crenulata



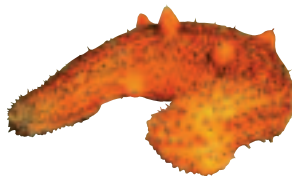
Giant green anemone
Anthopleura xanthogrammica



Bat star
Patiria miniata



Purple sea urchin
Strongylocentrotus purpuratus



Warty sea cucumber
Parastichopus parvimensis



RAY TOUCHPOOL

12

Reach into our Ray Touchpool and gently feel one of our rays or shovelnose guitarfish. These local residents live along the sandy bottom of our beaches where they feed on mussels, clams, and crustaceans. Rays have a small barb at the base of their tails that is used for self-defense. Like a fingernail, these barbs are painlessly clipped on the animals in this exhibit.

SEA OF CORTEZ

SOUTHERN CALIFORNIA/BAJA

13

The Baja Peninsula extends south of the United States along the west coast of Mexico to the Sea of Cortez.

The Sea of Cortez (Gulf of California) was formed when part of Mexico separated from the mainland as a result of plate tectonics. Because of its variety of marine habitats and complex geological history, the Sea of Cortez is considered one of the world's most biologically productive and diverse seas. This unique environment is home to some very interesting animals, including the vaquita. The Sea of Cortez also serves as critical wintering grounds for blue, fin, and humpback whales. The Mexican government has established several reserves to protect these important areas.



Mexican lookdown
Selene brevoortii



Cortez rainbow wrasse (male)
Thalassoma lucasanum



Long-nose hawkfish
Oxycirrhites typus



Balloonfish
Diodon holocanthus



King angelfish
Holacanthus passer



Popeye catalufa
Pristigenys serrula



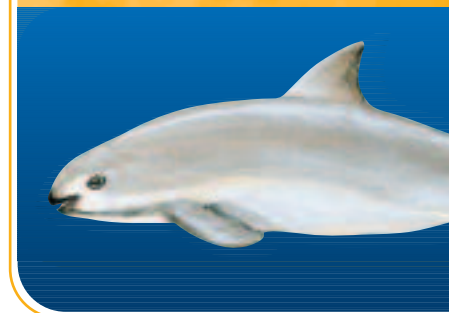
Barberfish
Johnrandallia nigrirostris

Vaquita

Phocoena sinus



At only 1.2-1.5 m (4-5 ft) long, the vaquita, a porpoise, is considered to be the smallest whale. This rare and elusive animal lives in the extreme northern end of the Sea of Cortez, close to the Colorado River Delta. With a population of only 100-300 individuals, the vaquita is extremely endangered. One of the biggest threats it faces is loss of habitat due to overuse of the water in the Colorado River, which drains into the Sea of Cortez.





Northern Pacific

This gallery represents the northern-most region of the Pacific Ocean, specifically habitats in and around the Bering Sea, which covers over 2,071,990 km² (800,000 square miles)

between Alaska, Siberia, the Bering Strait, and the Aleutian Islands.

Here, an upwelling of cold water replaces the warmer surface water creating temperatures below 12° C (54° F). Numerous whales use these

plentiful waters to feed, including the orca (killer), gray, sperm, and humpback. Researchers are currently engaging in an international effort to study humpback whales throughout the world, including the Northern Pacific. This cooperative research project, called SPLASH (Structure of Populations, Levels of Abundance and Status of Humpbacks), is identifying and collecting information so we can better understand these animals and how we are impacting them. The National Marine Sanctuary Program is participating in the SPLASH research project.

The National Marine Sanctuary Program is part of NOAA (National Oceanic and Atmospheric Administration) and was created in 1972 to preserve our nation's marine treasures, including important habitats for numerous species of whales.



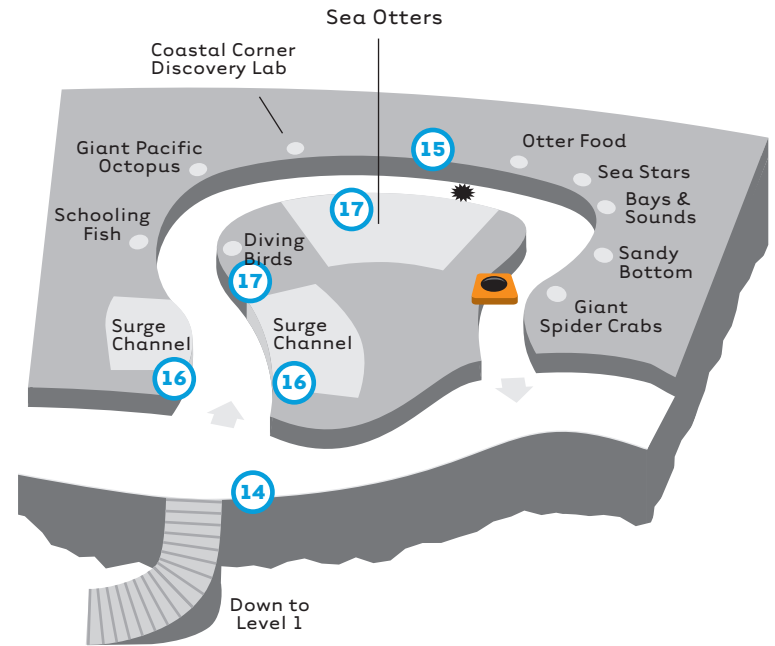
WHALES: VOICES IN THE SEA

14

Presented by Pacific Life Foundation

Step up to this touch screen exhibit and explore how whales use complex sounds to communicate and navigate through their world. Hear the voices of six whale species, learn about their differences, and record your own version of whales sounds.

Discover how the humpback, sperm, gray, blue, beaked, and northern right whales use sound—which travels efficiently underwater—to communicate in darkness and across vast distances. And learn the key characteristics of each animal and their conservation issues.



LEGEND

- Restrooms
- Information Center
- Elevators
- Discovery Presentation
- Embossing Station
- Child Care Station
- Dining
- Phones
- Outdoors
- Passport Stop

FROM SEA TO SHINING SEA

15

Visit this interactive painting entitled *From Sea to Shining Sea: A Celebration of Marine Sanctuaries* in our Northern Pacific Gallery. The centerpiece of the exhibit is a painting by artist Robert Lyn Nelson that depicts marine animals and plants that are found in our nation's marine sanctuaries. The exhibit also features a digitized version of the painting on a touch screen monitor, which allows you to learn more about the marine life. This exhibit was made possible by the National Marine Sanctuary Foundation (www.nmsfocean.org).



SURGE CHANNEL

NORTHERN PACIFIC GALLERY

16

Crashing waves, extreme changes in temperature and salinity, and exposure to air are some of the elements tidepool animals must contend with to survive.

For many, just hanging on is the top priority. Snails have muscular sticky feet. Sea stars, sea cucumbers, and sea urchins have tube feet that act as suction cups. Barnacles produce glue from their heads. And sea anemones secrete a sticky substance to keep from floating away.



Quillback rockfish
Sebastes maliger



Copper rockfish
Sebastes caurinus



Red Irish lord
Hemilepidotus hemilepidotus



Buffalo sculpin
Enophrys bison



White-spotted rose anemone
Urticina lofotensis



Canary rockfish
Sebastes pinniger

WHALE VOYAGES

Whales use vast areas of the ocean to feed, breed, and raise their young. In the Pacific Ocean, they spend time throughout the Northern Hemisphere, including the Bering Sea, Hawaiian Islands, Central America, and parts of Asia. In addition, some are known to dive to depths of up to 3,000 m (9,800 ft) to find food. To better understand and protect these animals we must look to study and conserve their entire home range.

DIVING BIRDS

NORTHERN PACIFIC GALLERY

17

Living in and above the icy waters of the Northern Hemisphere, puffins, auklets, and other diving birds spend most of their lives on the open ocean. In the summer months, they use the rocky coasts and islands for breeding. During this time Crested Auklets emit a distinct tangerine scent.



Pigeon Guillemot
Cepphus columba



Crested Auklet
Aethia cristatella



Tufted Puffin
Fratercula cirrhata



Horned Puffin
Fratercula corniculata

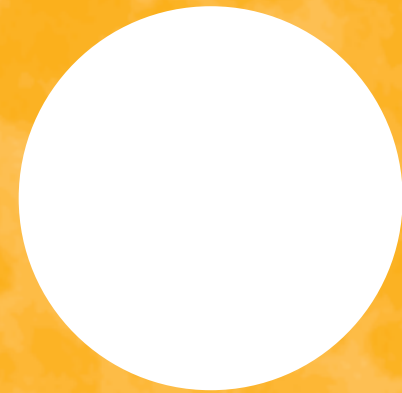
SOUTHERN SEA OTTER

Enhydra lutris nereis



17

Sea otters, which are protected animals, still face many threats, including pollution. One recent example illustrates how changes in the balance of an ecosystem can have unpredictable results. In 1998 orcas began to prey on northern sea otters in a region of Alaska. Because stellar sea lions and harbor seals—the orca's primary diet—have declined in numbers, these whales were forced to seek sea otters as an alternative food source. Scientists are now monitoring how this will affect the future of this sea otter population.



Killer Whale

Orcinus orca



The orca or killer whale is easily identified by its black body and white eye patch. This toothed whale is very social, living in pods or groups of up to 150 individuals. Each pod develops its own unique dialect, usually stays together for life, and engages in cooperative hunting.



Tropical Pacific

The Aquarium's Tropical Pacific Gallery represents the archipelago of Palau, the western-most section of the Micronesia islands. Palau's waters contain an incredible diversity of coral, fish, and other marine animals. They are home to sharks, seahorses, stonefish, sea turtles, and many others.

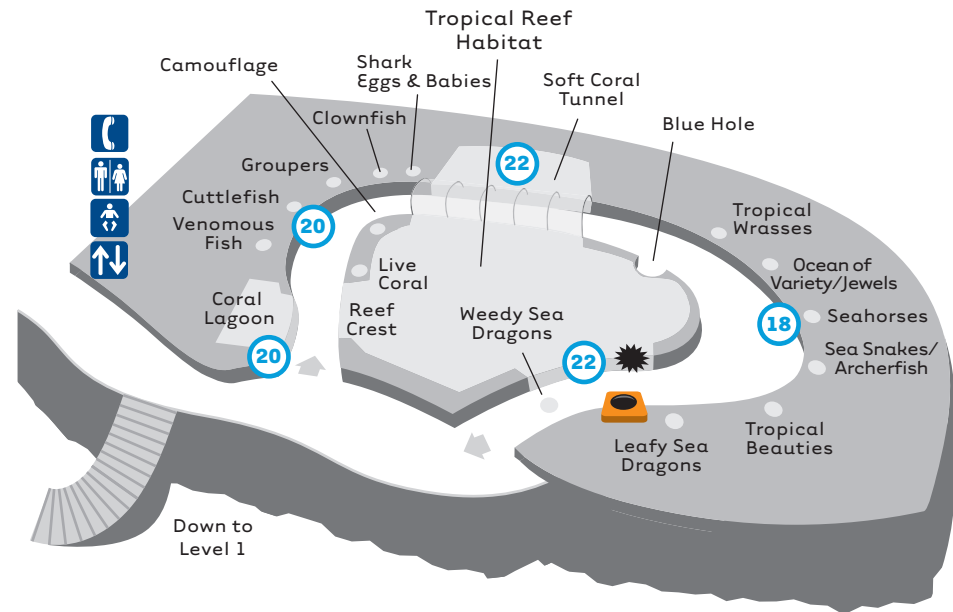
GREEN SEA TURTLES

Although 250 species of turtles inhabit the world today, only seven of these are sea turtles. Uniquely adapted to life underwater, sea turtles navigate vast distances through the ocean and rest on coral reefs. Most sea turtles are listed as threatened or endangered. The turtles you see in the Aquarium's Tropical Reef Habitat are East Pacific green turtles.



Seahorse
Hippocampus erectus

Unlike most animals, male seahorses, not the females, carry the eggs and give birth to the young. The Aquarium has a successful seahorse breeding program.



LEGEND

- Restrooms
- Information Center
- Elevators
- Discovery Presentation
- Embossing Station
- Child Care Station
- Dining
- Phones
- Outdoors
- Passport Stop



Bonnethead shark
Sphyrna tiburo



Rockmover wrasse
Novaculichthys taeniourus

AMAZING FACTS

Water covers 71% of the Earth's surface. About 4 billion years old, the World Ocean averages 3,800 m (12,460 ft) deep—that's the same as 8 1/2 Empire State buildings stacked on top of each other. Most of the ocean is in total darkness with temperatures averaging 3.9° C (39° F). It is home to at least 250,000 known species and many yet to be discovered.



CORAL LAGOON

20

TROPICAL PACIFIC

Our Coral Lagoon is habitat for many animals that have developed very specific adaptations to capture and consume their meals as well as to avoid becoming someone else's prey. Through specialization, coral reef animals have found ways to co-exist in a very dense and competitive environment. As the future of reefs are threatened, so too are the diverse animals that have adapted to survive in this unique environment. Coral reefs, also known as the rainforests of the sea, face a variety of threats, including pollution, global climate change, and destructive fishing practices.



Parrotfish
Scarus sp.



Goatfish
Family Mullidae



Bird wrasse (male)
Gomphosus varius



Guinea fowl puffer (golden phase)
Arothron meleagris



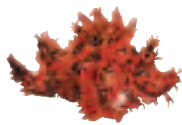
Picasso Triggerfish
Rhinecanthus aculeatus

CAMOUFLAGE

20

TROPICAL PACIFIC

Like the stick insect that resembles a twig and the tiger that blends in with the tall grass, ocean animals have also developed ways to go unnoticed. Whether it's looking like a rock to surprise prey or mimicking gravel to fool predators, camouflage is an effective survival strategy that comes in many forms. Nowhere are camouflage techniques stranger than in the ocean. Animals like the weedy scorpionfish have fins and skin coloration that blend in beautifully with the surrounding algae. And flounders change their eye position, body orientation, and color as they mature to ensure that they blend in perfectly with the ocean bottom. Look for some of these masters of disguise throughout our Tropical Pacific Gallery.



Weedy Scorpionfish
Rhinopias froudosa



Stonefish
Synanceia verrucosa



Flatfishes
Order Pleuronectiformes

Whale Research

The Tools Behind The Ocean's CSI Detectives



They are big, fast, travel vast distances, and spend most of their time below the ocean's surface. So how do scientists study these elusive animals? Visual observation has long been the "tried-and-true" way of studying cetaceans (whales) and is still used extensively. However, today scientists also have at their disposal a wide array of "high tech" methods—many only developed in the past few years. By using a combination of the old and the new, we're beginning to understand a little more about these gentle giants of the deep.

John Calambokidis, a scientist with Casadia Research, studies the travels of humpback, blue, and gray whales. Using high-powered binoculars, a camera, and his own observation skills, he photo-identifies these animals based on skin mottling, and coloration and scarring of the tail (fluke). Future sightings of an identified animal may be useful in determining the distance it travels and where it feeds and breeds. Data on many identified whales provides information about population sizes and distribution

John Hildebrand, an oceanographer at the Scripps Institution of Oceanography and a whale acoustics expert, and Erin Oleson, a graduate student, are using an instrument called a FLIP (Floating Instrument Platform) to study fin and blue whale behavior. Underwater listening devices, called hydrophones, hang at varying depths from the FLIP and detect whale sounds. Another instrument measures ocean salinity and temperature at the corresponding depths. And other devices attached to whales record depth changes during dives and can even tell whether a whale's head is up or down!

Scientist Don Croll at the University of California, Santa Cruz links new technology with visual observation to study fin, humpback, and blue whales. Collecting fecal samples in dip nets helps determine what whales eat, while towing long nets collects plankton for laboratory analysis to determine species mix as well as to make quantity (biomass) estimates. Recorders attached to whales monitor diving behavior and help Croll understand how these animals feed at varying depths. Other tools used to study whales include ship and satellite-monitored radio tags, DNA analysis of skin biopsies, and echo sounders.

Despite advances in technology and the efforts of many dedicated scientists, we still have much to learn about whales and how we are affecting their future survival.





TROPICAL REEF

TROPICAL PACIFIC

22

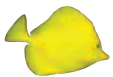
The Tropical Reef Habitat is the Aquarium's largest exhibit, containing 350,000 gallons of water and over 1,000 animals from the tiny cleaner wrasse to the sleek blacktip reef shark. This exhibit represents the famous Blue Hole off the coast of Palau. This area, lush and abundant with life, is considered one of the most beautiful dive sites in the world.



Blacktip reef shark
Carcharhinus melanopterus



Sandbar shark
Carcharhinus plumbeus



Yellow tang
Zebrafish flavescens



Palette tang
Paracanthurus hepatus



Bluefin trevally
Caranx melampygus



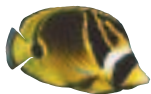
Orangespine unicornfish
Naso lituratus



Bluespine unicornfish
Naso unicornis



Sergeant major
Abudefduf troschelii



Raccoon butterflyfish
Chaetodon lunula



Emperor angelfish
Pomacanthus imperator



Semicircle angelfish
Pomacanthus semicirculatus



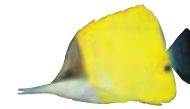
SHARKSUCKER

Echeneis naucrates

The sharksucker, similar to the remora (*Remora remora*), has a dorsal fin that has evolved into a large suction disk that allows the fish to latch onto sharks, turtles, whales, and even ships. This helps protect the shark-sucker from predators, conserves its energy, and gives it access to scraps from its host animal.



Golden trevally
Gnathanodon speciosus



Forcepsfish
Forcipiger flavissimus



Oriental sweetlips (adult)
Plectorhinchus vittatus



Blue-green chromis
Chromis viridis



Coral cardinalfish
Sphaeramia nematoptera



Redtooth triggerfish
Odonus niger



Wedge Picasso triggerfish
Rhinecanthus rectangulus



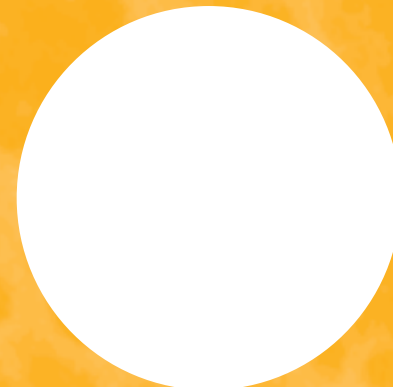
Clown triggerfish
Balistoides conspicillum



Napoleon wrasse
Cheilinus undulatus



Reaching sizes of up to 2 m (7 ft) in length and over 181 kilograms (400 pounds), Napoleon or humphead wrasses usually live in the outer areas of coral reefs. They spend their days roaming the reef and return back to the same cave or ledge each night to rest. When they mature, Napoleon wrasses may change sex from female to male.



Humpback Whale

Megaptera novaengliae



Humpback whales are identified by their long pectoral (side) fins edged with small bumps, low dorsal fins, bushy-shaped blows, and V-shaped flukes (tails) with rough edges. They are well known for their impressive breaching where they rocket themselves into the air. Humpback whales travel to warm tropical waters in the winter to give birth. They can be found in the Hawaiian islands from November to February. These breeding grounds are protected by the Hawaiian Islands Humpback Whale National Marine Sanctuary.



SEA JELLIES

24

OPEN OCEAN

Experience more than a dozen different species of sea jellies. These mysterious animals have no eyes and no brain, yet they have thrived in our oceans for more than 550 million years. Depending on the species, a sea jelly may have up to 800 tentacles that bear stinging cells called nematocysts. When the tentacles touch another object, thousands of the stinging cells involuntarily explode, launching barbs into potential predators and prey.



Fried egg jelly
Phacellophora camtschatica



Purple striped jelly
Chrysaora colorata



West Coast sea nettle
Chrysaora fuscescens



Lagoon jelly
Mastigias papua



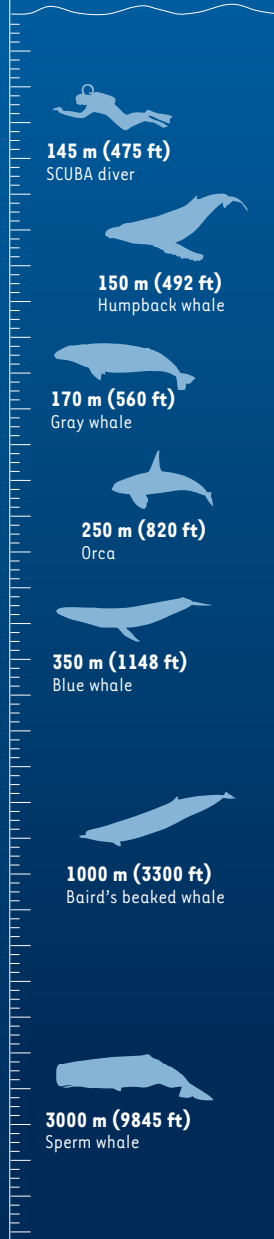
Moon jelly
Aurelia labiata and *A. aurita*



Leidy's comb jelly
Mnemiopsis leidyi

WHALE DIVE CHART

Many whales make impressive dives well beyond the reach of light. Here's how far different species have been known to dive

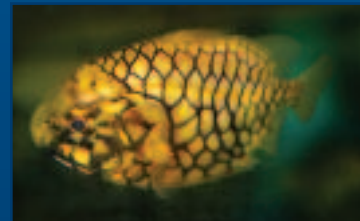


LIFE IN DARKNESS

OPEN OCEAN

25

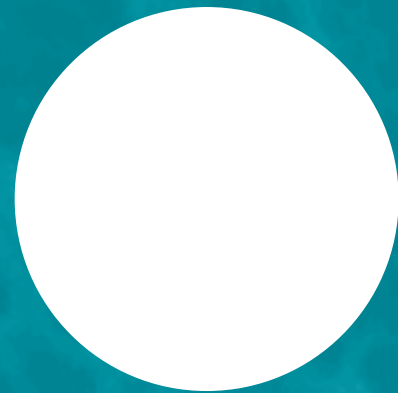
As you descend deeper into the ocean, past twilight where plants cease to grow, through the deep ocean where no light penetrates, you finally reach the pitch black abyss. Here the pressure is immense, oxygen is scarce, and the temperature is a bone-chilling 2° C (36° F). Over 90% of the ocean is beyond the reach of light. Here animals must have special tools, like bioluminescence or migrate to higher levels at night to find food, or wait patiently until a dead whale or another animal falls from above to feed on.



Pinecone fish
Monocentris japonica



Flashlightfishes
Anomalops katoptron and *Photoblepharon palpebratum*

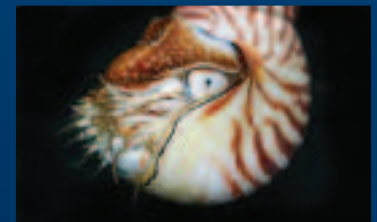


Baird's Beaked Whale

Berardius bairdii

Most Baird's beaked whales can be identified by a dolphin-like beak, large forehead, extensive scarring on their bodies, and large size—10 m (33 ft). These whales spend most of their time in the open ocean and routinely dive to more than 1,000 m (3,300 ft). They feed on or near the bottom of the ocean where they use suction to capture their prey. Very little is known about these mysterious animals.

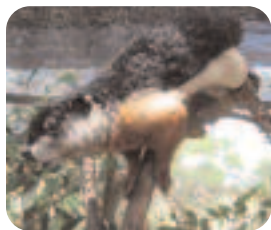
© NANCY BLACK



Chambered nautilus
Nautilus pompilius

Come discover some of the unusual animals found only on islands in the Pacific Ocean.

Islands, along with their inhabitants, are an important part of the entire ocean ecosystem. Learn why these animals and other island residents around the world face significant threats.



Prevost's squirrel
(*Callosciurus prevosti*)

Found in Southeast Asia and Indo-Pacific islands, Prevost's squirrels live mainly in trees and are becoming increasingly rare due to habitat destruction and over-collection for pets.

The dusky pademelon is located near the Shark Lagoon underwater viewing window.



Dusky pademelon
(*Thylogale brunii*)

Found in New Guinea, the dusky pademelon is a member of the kangaroo and wallaby family. Their status is currently listed as vulnerable.

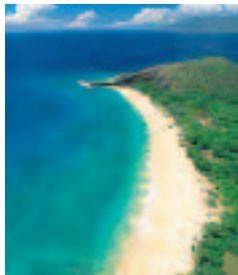


Binturong
(*Arctictis binturong binturong*)

Found in the dense forests of Southeast Asia east through the Indo-Pacific islands and Malaysia, binturongs spend much of their lives in the trees. The buttery popcorn-like smell near this exhibit is an oily musk given off by the scent glands of the binturong. Rubbed on branches, the musk marks the binturong's territory. The subspecies of binturong that lives in Borneo and Sumatra is currently listed as threatened.

CONSERVATION ISSUES

Because they evolved in relative isolation, island animals and plants are particularly vulnerable to outside threats, such as invasive species and changes to their habitat. By protecting fragile island ecosystems and using selective measures when harvesting natural resources, we can limit the impact we have on these animals and their homes.



Purchase a cup of nectar and step into our Lorikeet Forest. These Australian birds will land on your hand, arm, and even your head to get a sip of their favorite food. Lorikeets are able to drink nectar easily because of a special tongue. Look closely as the bird sips the nectar. Notice the tongue's fuzzy appearance. This is due to tiny projections called papillae, which increase the surface area of the tongue. Like a sponge, these help the birds soak up large amounts of nectar.

RAINBOW LORIKEETS



Swainson's Lorikeet
Trichoglossus haematodus moloccanus



Edward's Lorikeet
Trichoglossus haematodus capistratus



Green Nape Lorikeet
Trichoglossus haematodus haematodus



Pale Head Lorikeet
Trichoglossus haematodus caeruleiceps



Forstens Lorikeet
Trichoglossus haematodus forsteni

OTHER LORIKEET SPECIES



Violet-necked Lory
Eos squamata riciniata



Ornate Lorikeet
Trichoglossus ornatus



SHARK LAGOON

EXPLORERS COVE

28

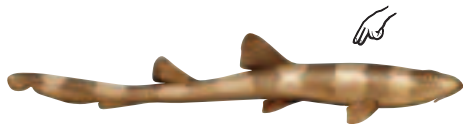
Visit Shark Lagoon and learn more about the ocean's most mysterious and misunderstood predator. Step up and touch a nurse shark or bamboo shark, and peer into the depths to see sandtiger sharks, as well as rays and our sawfish. These remarkable denizens of the deep are critical links in the ocean food chain. Without sharks, our oceans would undergo drastic and devastating changes. For the health of the ocean and planet, it is important that we learn to respect and protect sharks and their habitats.

PLEASE NOTE: to continue your journey to Southern California/Baja, proceed up the stairs or elevator and return to page 12 "Rocky Intertidal."

= Please touch



White-spotted bamboo shark
Chiloscyllium plagiosum



Brown-banded bamboo shark
Chiloscyllium punctatum



Epaulette shark
Hemiscyllium ocellatum



Stingray
Dasyatis sp.



Zebra shark (Juvenile)
Stegastoma fasciatum

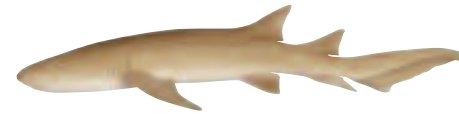
SAWFISH

Pristis microdon

Related to sharks and rays, the sawfish uses its "saw" for both hunting and defense. It can be used to immobilize fish and to dig through sand to dislodge invertebrates. At birth, a newborn sawfish's snout is flexible and wrapped in a fibrous sheath. After a few days the sheath wears off, and the pup's snout hardens into a rigid saw.



Whitetip reef shark
Triaenodon obesus



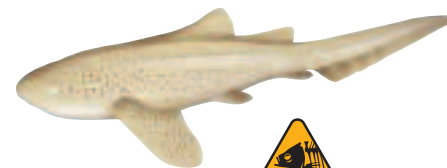
Nurse shark
Ginglymostoma cirratum



Reticulate whiptail ray
Himantura uarnak



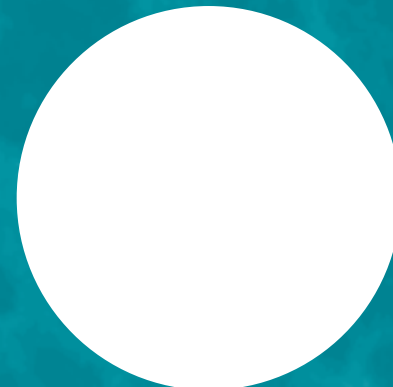
Thorny ray
Urogymnus asperrimus



Zebra shark (Adult)
Stegastoma fasciatum



Sand tiger shark
Carcharias taurus



Sperm Whale

Physeter macrocephalus



The largest of the toothed whales, sperm whales are easily identified by their square-shaped heads and wrinkly skin. They can reach lengths of up to 17 m (59 ft). They are one of the deepest diving whales, achieving depths of 3,000 m (9,800 ft) to hunt their favorite prey—the giant squid.



FOR THE HEALTH AND SAFETY OF OUR ANIMALS, PLEASE BE GENTLE!



Sharks you can touch, gently with **two fingers**.



Do not scratch!



Do not grab!



HONDA THEATER

GREAT HALL

30



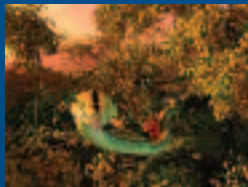
ANIMALVISION 3-D

Experience the icy north with a polar bear family, frolic in the ocean with a sea turtle, and play ball with apes and other rainforest inhabitants as you meet some of the many animals that depend on people for their futures. AnimalVision 3-D is an animated adventure that

takes you and your family across the globe to see how our actions at home are affecting the animals with which we share this planet.

During your journey, discover the effects of global climate change, destructive fishing practices, and tropical deforestation—some of the most pressing environmental issues that are threatening our entire planet. AnimalVision 3-D combines stunning state-of-the-art 3-D technology, fun-loving animal characters, and digital animation with important environmental messages. It's an adventure you won't soon forget!

See Information Center or Theater Kiosk for show times and prices.

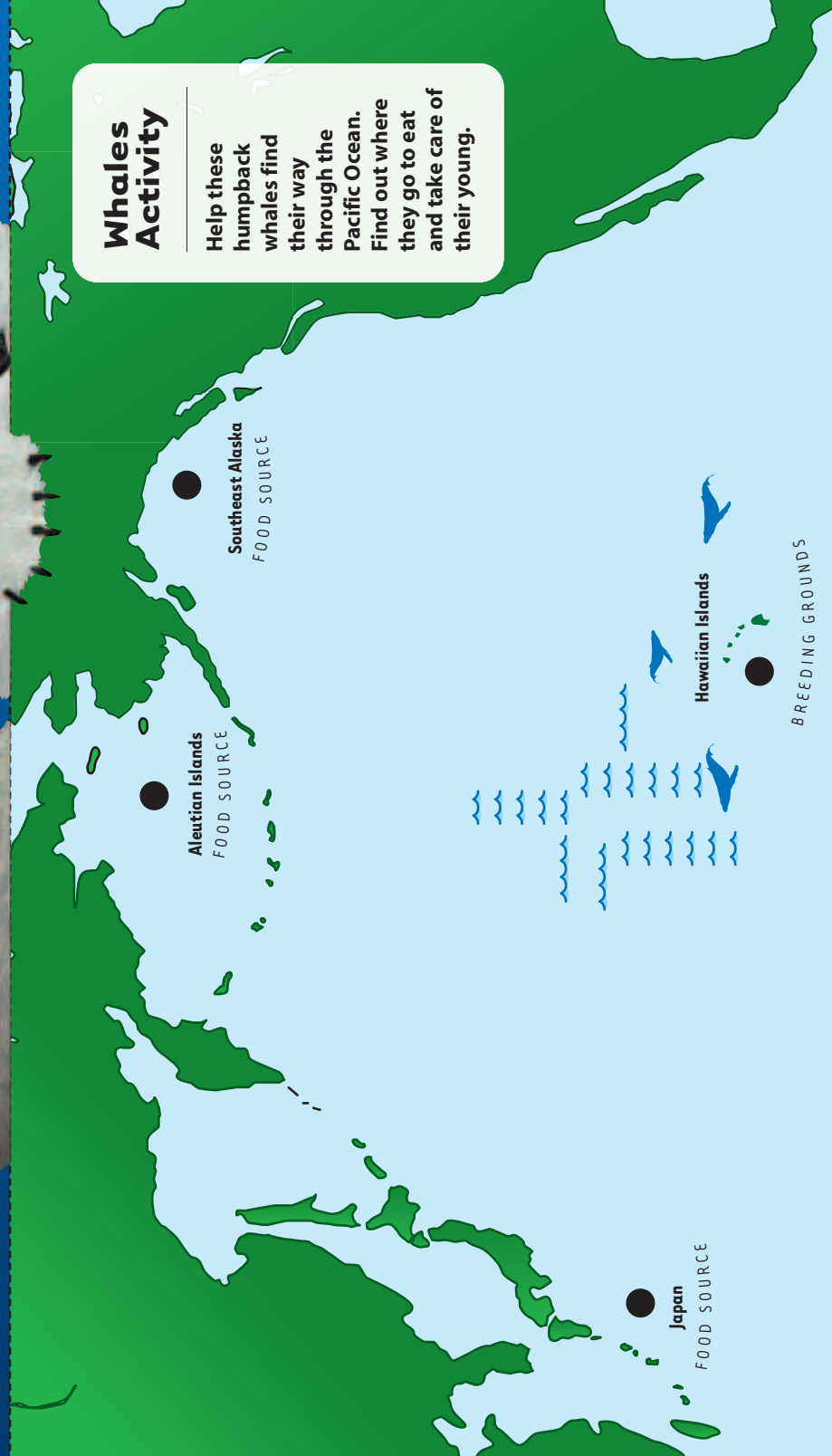
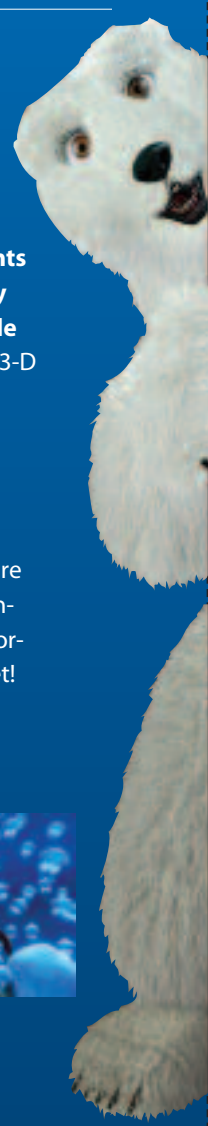


OTHER FILMS

See Information Center or Theater Kiosk for other films showing in the Honda Theater during your visit.

Whales Activity

Help these humpback whales find their way through the Pacific Ocean. Find out where they go to eat and take care of their young.



WHALES

a journey with giants

The Aquarium of the Pacific is a nonprofit 501(c)3 institution with a mission to instill a sense of wonder, respect, and stewardship for the Pacific Ocean, its inhabitants, and ecosystems. We rely heavily on the generous donations of individuals and organizations.

During your visit you may be filmed, videotaped or photographed by an Aquarium of the Pacific employee, volunteer, or contract service professional. Your admission to our facility serves as permission for use of your image by the Aquarium of the Pacific and its constituents. The commercial use of photographs, video, and film you may have taken during your visit is strictly prohibited without the full written consent of the Aquarium of the Pacific.

AQUARIUM DIRECTORY

(AREA CODE 562)

General Information:	590-3100
Membership Information:	437-FISH(3474)
Group Tours & Reservations:	951-1695
Special Events & Private Parties:	951-1663
Education Programs:	951-1630
Gift Store:	951-1732
Volunteer Opportunities:	951-1659
Cafe Scuba:	951-1740
TDD:	951-3140
Website:	www.aquariumofpacific.org

A JOURNEY WITH GIANTS IS SPONSORED BY:



100 Aquarium Way
Long Beach, CA 90802
www.aquariumofpacific.org



©2005 Aquarium of the Pacific.
Printed on recycled paper.

Cost: 50¢