

# PACIFIC CURRENTS

MEMBER MAGAZINE OF THE AQUARIUM OF THE PACIFIC

## LIVING ON AN URBAN OCEAN





ERIC ZAHN



# RESTORING THE LOS CERRITOS WETLANDS

Aquarium members and the public can help revitalize this Southern California treasure.

**I**N SOME WAY, most living things rely on wetlands—places where water meets land and special plants grow in unique soil conditions. Humans rely on wetlands for flood protection, good water quality, erosion protection, recreation, and research. The threats to wetlands can be from human actions such as drainage, dredging, filling, logging, grazing, runoff, and air and water pollutants. There are also natural threats such as erosion, subsidence, sea level rise, droughts, and hurricanes and other storms.

Wetlands filter any water that runs off the land, absorbing pesticides, fertilizers, and disease-causing parasites. Improving and restoring freshwater wetlands near the ocean would help keep many parasites and pollutants from reaching the ocean. Fertilizers that make their way into the ocean can cause algal blooms, many of which are toxic to marine animals.

It is estimated that California has lost more than 95 percent of its wetlands—more than any other U.S. state. With only 13,000 acres of wetlands remaining in Southern California, wintering sites for migratory birds traveling the Pacific Flyway have declined markedly.

Southern California's tidal salt marshes

are unique wetland habitats because they are influenced twice daily by oceanic tides as well as by freshwater inflows from rivers and urban runoff. This mixing of fresh and salt water creates what is called an estuary. The coastal salt marsh plant community provides food, shelter, and breeding grounds for many organisms that could not exist without these wetlands. The Los Cerritos Wetlands, one of about 30 coastal salt marshes in Southern California, is one of the most biologically productive places in the world, acts as a sanctuary, and possesses an incredible amount of ecological value.

*The Los Cerritos Wetlands, one of about 30 coastal salt marshes in Southern California, is one of the most biologically productive places in the world.*

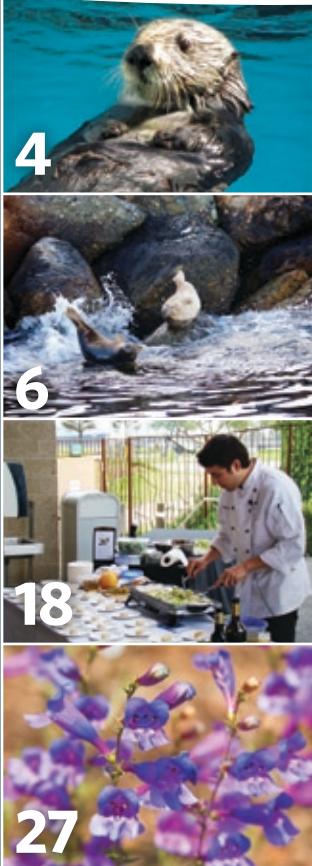
Because of the intense loss of habitat of Southern California wetlands, many of their plants and animals are rare and endangered. Some of the unique specimens that inhabit and frequent the Los Cerritos Wetlands include the Belding's Savannah Sparrow, the Least Tern, the California Brown Pelican, the

Wandering Skipper, and the tiger beetle, to name a few.

The Los Cerritos Wetlands Stewardship Program is working to restore 66 acres of wetlands owned by the Los Cerritos Wetlands Authority. These wetlands occupy habitat in two cities, Long Beach and Seal Beach, and two counties, Los Angeles and Orange. The program's ongoing restorative activities have included removing non-native plants, collecting seeds from rare plants for later use, and collecting trash.

The U.S. Fish and Wildlife Service awarded \$30,000 to the Los Cerritos Wetlands Authority for salt marsh restoration, which will allow the stewardship program, led by Program Coordinator Eric Zahn, to add plants to the wetlands. They will be planted at Joy Zelder Marsh, two to three acres of intertidal habitat. This small, graded marsh is full of ancestral plants and is home to at least one nesting pair of the endangered Belding's Savannah Sparrow.

Aquarium of the Pacific and the Los Cerritos Wetlands Stewardship Program will host this planting event, the first of its kind, on Sunday, October 10 from 10 a.m. to noon, and members and the public are invited to participate. For more information on how you can help restore these local wetlands, see page 10.



4

6

18

27

- 2 FOCUS ON SUSTAINABILITY
- 3 LETTER FROM THE CEO
- 4 ANIMAL UPDATES
- 6 FEATURE

## IN THIS ISSUE

**4 ANIMAL UPDATES** | Meet Big Maggie, a new addition to the Aquarium's Sea Otter Habitat.

**6 URBAN OCEAN** | Explore Southern California's coastal ocean, a place of intense interaction between humans and the sea.

**18 SEAFOOD FOR THE FUTURE** | Find out which Southern California restaurants are now serving sustainable seafood.

**27 WATER WISELY** | The Aquarium's Earth-Friendly Garden features California natives, drought-resistant plants, and drip irrigation.

- 10 AQUARIUM PROGRAMS & EVENTS
- 20 KIDS CORNER
- 23 AQUARIUM NEWS
- 27 CONSERVATION CORNER

PACIFIC CURRENTS is published for members of the Aquarium of the Pacific. If you have comments about this magazine, please send an email to our editorial staff at [PacificCurrents@LBAOP.org](mailto:PacificCurrents@LBAOP.org).

OUR MISSION | To instill a sense of wonder, respect, and stewardship for the Pacific Ocean, its inhabitants, and ecosystems.

PACIFIC CURRENTS STAFF | Editor/Writer: Tricia Bennett | Copy Editor: Cecile Fisher | Designer: Andrew Reitsma | Contributing Writers: Damiana Gallatin, Dominique Richardson, and Sabreena Kasbati

HOURS | Open daily from 9:00 a.m.-6:00 p.m. except Dec. 25 and during the Grand Prix of Long Beach

MEMBERSHIP OFFICE HOURS  
8:00 a.m.-5:30 p.m. daily

PHONE NUMBERS (562 area code)  
General Information.....590-3100  
FAX.....951-1629  
Membership.....437-FISH (3474)  
Development .....951-1605  
Pacific Circle.....951-1664  
Lost & Found .....951-1733  
Private Event Info .....951-1663  
Education Programs .....951-1630  
Gift Store .....951-1SEA (1732)  
Job Hotline.....951-1674  
Volunteer Hotline.....951-1659  
Advanced Ticket Sales ...590-3100, ext. 0  
(Note: \$2 service charge per ticket, up to \$10.)  
Group Reservations .....951-1695



The Aquarium of the Pacific is a non-profit 501(c)3 institution. To provide exciting and innovative exhibits and educational programs, we rely heavily on the generous donations of individuals, foundations, and corporations.



Aquarium Founding Sponsor

## LETTER FROM THE CEO

### DEAR MEMBERS,

**I** LOOK FORWARD to seeing you at the Aquarium this fall and winter. We have an impressive line-up of events and opportunities for you. The

Aquarium is a great place to see marine life, a place where you can hear world-renowned guest speakers, taste sustainable seafood, enroll kids in fun and educational classes—and even take a class yourself, watch fascinating cultural demonstrations and performances, and learn about the many facets of our ocean planet. We hope you take the opportunity to experience one, or more, of the many offerings that make the Aquarium of the Pacific a very special and unusual aquarium.



*This October your kids can take part in our first-ever one-mile Kids Fun Run.*

In October you can learn how seabirds depend on the ocean during our Seabird Day; help clean up the Los Cerritos Wetlands; experience the art, dance, and music of Southeast Asia; enjoy our Sea Fare fundraiser and tasting event; hear a variety of lectures on global climate change; experience the ocean in a whole new light at our Poetry Festival; and enjoy an evening of art, music, and drinks at our Night Dive. Children can enjoy our annual Halloween event that is both educational and fun and take part in our first-ever one-mile Kids Fun Run that will feature a race kickoff by Lola the cockatoo, an animal character cheering section, special sea star medals for finishers, and fun activities on our front lawn.

In November our Autumn Festival will feature taiko drummers, Chinese acrobats, and ocean origami. Our lecture series will include an illustrated presentation on the butterflies of Iguazú Falls and an evening panel discussion on Spirituality and the Environment with inspiring film clips. Also come and enjoy our annual Member's Late Night.

In December watch our animals enjoy the holidays and listen to live music during our Shark Lagoon Nights. Finally, January will bring a special film about sea lions and our annual Festival of Human Abilities, celebrating the talents of people with disabilities.

These are just some of the many opportunities for you to dive deeper at the Aquarium. Be sure to check out our events section in this issue and on our website for a full listing of events. We hope to see you many times in the coming months.

Thank you for your support.

Sincerely,

Jerry R. Schubel

# AQUARIUM WELCOMES A NEW SEA OTTER

HUGH RYONO



HUGH RYONO

Due to his very advanced age, Miller, our 29-year-old sea lion, has been moved to our behind-the-scenes area for our marine mammals.

**A**S AN ELDERLY ANIMAL, Miller is experiencing vision difficulties and has arthritic hips, which are being monitored and treated by our veterinary staff to ensure he is healthy and comfortable.

For all sea lions, summer is their rut or breeding season. It is natural for Parker, our dominant male seal lion, to joust with Miller for territorial dominance during this time. Because of Miller's vision and mobility issues, our husbandry staff felt it was in the best interest of his health and

*Miller is the third oldest sea lion in any zoological institution.*

safety to move him to his own area behind the scenes during this time. When rut is over, staff will examine the possibility of moving Miller back to the Seal and Sea Lion Habitat. Currently, Miller, who is peacefully enjoying his new home, can be visited on the daily behind-the-scenes tours.

On April 24 Aquarium of the Pacific acquired a new otter from the Monterey Bay Aquarium named Maggie.

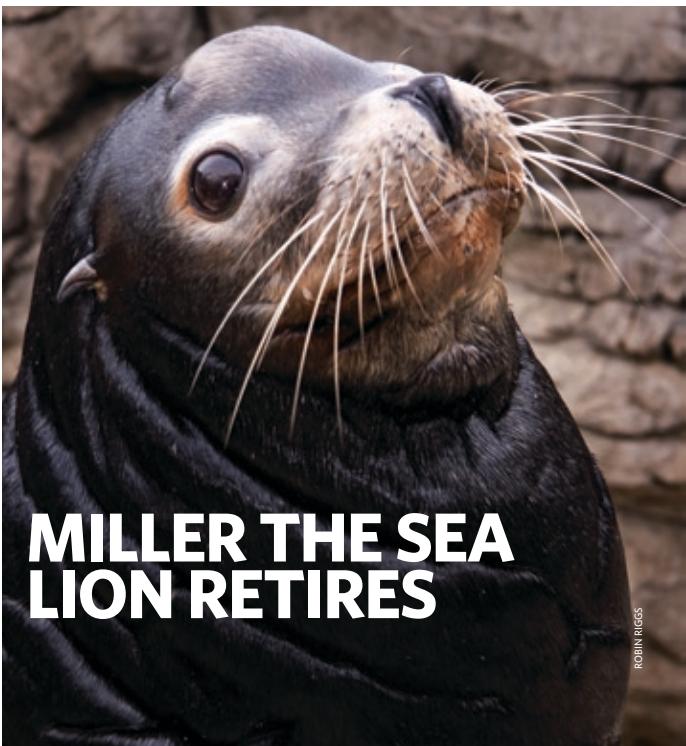
**T**HE NEWEST MEMBER of our otter family is nine years old, weighs 40 pounds, and is well trained and curious. Because we already have a young otter named Maggie, this newest otter is known as Big Maggie.

She was found stranded as a pup in 2001. She was nursed back to health by Sea Otter Research and Conservation (SORAC), the agency that rehabilitates otters in Monterey Bay. Big Maggie initially was re-released to the wild, but did not acclimate well to the ocean. She had bonded with humans and was attracted to people. For her safety and that of others, SORAC picked her up again. They initially tried to use her as a surrogate mom to care for stranded baby otters. However, Big Maggie was not an effective mom. Knowing that Aquarium of the Pacific was looking to acquire another otter, the agency offered her to us.

---

*Big Maggie is now on exhibit with our other sea otters. Be sure to stop by on your next visit to see our newest member of our otter clan.*

---



**MILLER THE SEA LION RETIRES**



# BLUE POISON DART FROGS

The Aquarium's pair of blue poison dart frogs (*Dendrobates azureus*) has produced a family of froglets.

**C**AREGIVERS NOTICED that our female blue poison dart frog was occasionally laying eggs and also knew that she was at the right age to begin breeding. They found the first successful clutch of eggs last February.

The eggs were taken behind the scenes where they developed and hatched into  $\frac{1}{2}$  inch tadpoles. Over the next three months they transformed into froglets. Tiny versions of their parents, the froglets were about an inch long and are continuing to grow behind the scenes.

Blue poison dart frogs are territorial and do not live well in groups. Females especially tend to fight. "That's why I always thought we had a male and female pair, because they always got along so well," said Aviculturist Karen Anderson. The appearance of eggs confirmed this. After this first success, more eggs kept appearing about every three weeks.

Guests can see the Aquarium's breeding pair at the frog exhibit in the Tropical Pacific Gallery. On the left side of the case, you will see the coconut shell where the female lays her eggs.

The frogs have an interesting breeding ritual. The female initiates by stroking the male frog's back and leading him to the coconut shell in their exhibit, where she lays her eggs. The male fertilizes the eggs. In the wild, the male cares for the eggs until the tadpoles hatch. He then carries the tadpoles to water, where they start their new lives.

Poison dart frogs are found in humid, tropical environments in Central and South America. The frogs have glands in their skin that contain strong neurotoxins. They acquire these toxins by eating certain insects, so the frogs may lose their toxicity when they are in an environment like the Aquarium.



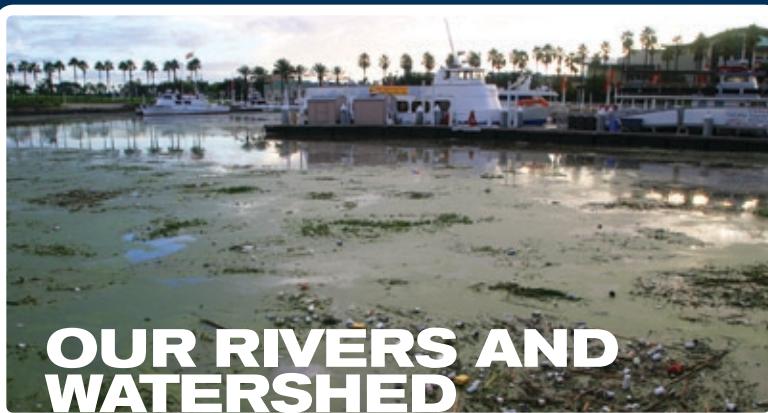
# LIVING ON AN URBAN OCEAN

Coasts and the ocean affect people in many ways. The coast provides a place to live and recreate. The ocean provides food for our growing population, a transit way for our commerce, and sources of energy.

**T**HE COAST AND OCEAN have direct and indirect effects on our physical, emotional, and personal well-being as well as support jobs and provide the foundation of many economies.

Greater Los Angeles has one of the most urbanized coastlines and ocean in the United States and in the world. When combined, the Port of Los Angeles and the Port of Long Beach are the fifth busiest port facility in the world. A population of more than 10 million people lives within 10 miles of this segment of the coast, utilizing ocean resources. The area is also a home and stopover place for a diverse assemblage of animals.

The various uses of Southern California's coastal ocean are intense and can potentially come into conflict with one another. Also, marine animals that call these waters home are subjected to human-induced threats. Nature and human society will be further challenged in the near future as our population grows, as sea level continues to rise, as the ocean becomes warmer and more acidic, and as the frequency and intensity of coastal storms increases.



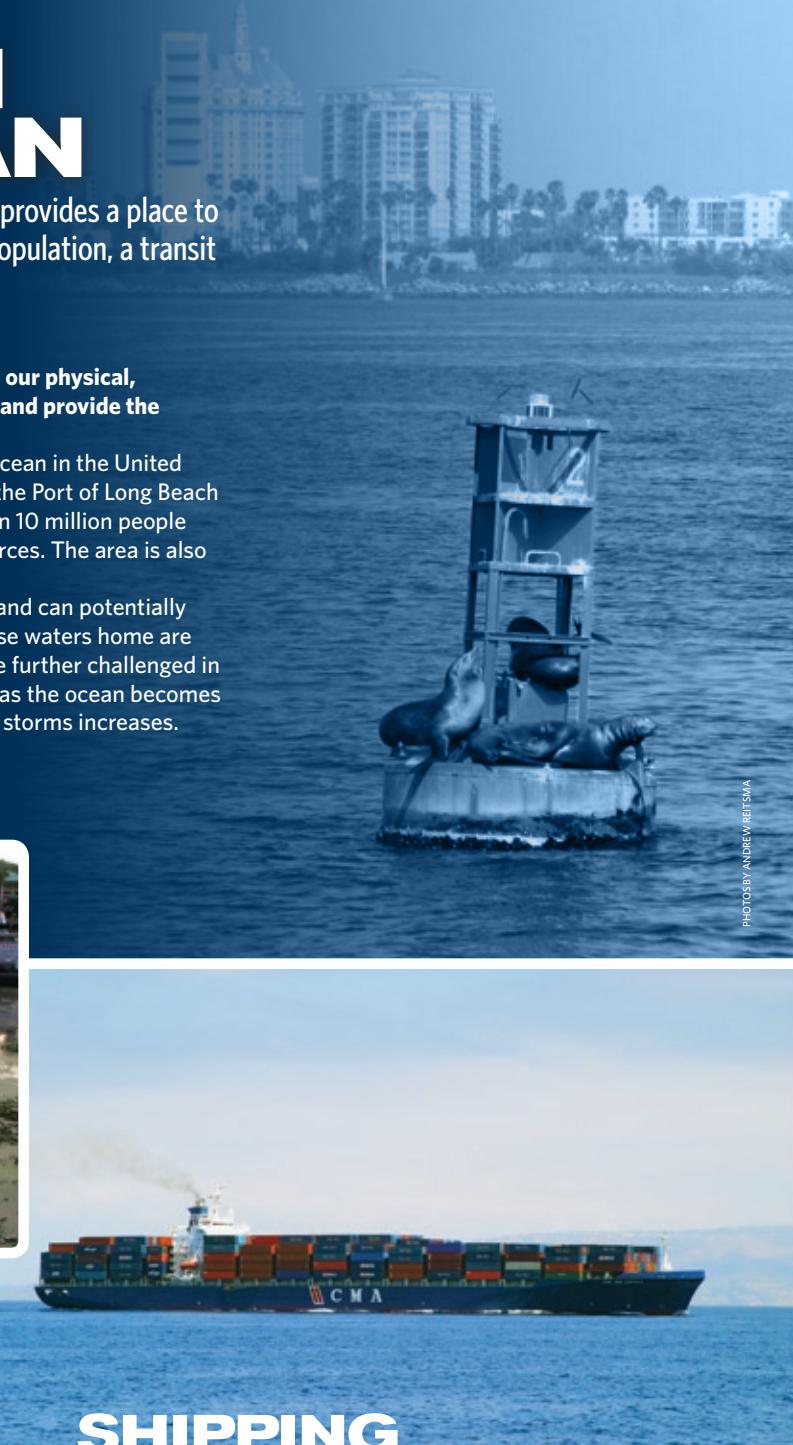
## OUR RIVERS AND WATERSHED

### MUCH OF WHAT IS ON LAND drains into our rivers and winds up in the ocean.

Here in Los Angeles, our watershed and everything in it—such as trash and chemicals in the streets—is drained into our rivers out to the Pacific Ocean.

When a watershed is unpaved, much of the water that lands on the ground, from rain or human use, percolates into the earth. When a watershed is heavily paved like those in Southern California, water that normally would percolate into the ground runs across the pavement into storm drains that feed the rivers. Along the way, that water picks up pollutants of all kinds, including pesticides and fertilizers from lawns, soap from washing cars, oil, metal and rubber dust from cars, and fecal matter from our pets. Anything that gets into the streets is carried down the river and into the ocean.

Because there is no one identifiable source and everyone is partly responsible, this pollution is called non-point source. The mix of water and pollutants that drains into the ocean is called urban runoff. This accounts for double the pollution in the urban ocean as that from all of the region's wastewater plants. The release of contaminants, particularly from urban areas, can result in beach closures for days after rainstorms and lasting effects on wildlife. Everything we do on land directly affects the ocean.



## SHIPPING

THE PORTS OF LOS ANGELES AND LONG BEACH exemplify our use of the ocean for transportation and our dependence on it for the global movement of all kinds of goods. They create jobs for Southern California and the rest of the nation, generating more than half a million jobs within Southern California alone. They create about 3.5 million jobs nationwide in fields such as truck driving, engineering, and administration.

Over 90 percent of all freight travels by sea. Since the year 2000 over 55,000 ships have visited the two ports. That translates into an average of 17 ships entering or leaving the ports every day. The ports handle things such as clothes, furniture, sports equipment, electronics, food, cosmetics, and medical supplies. The two ports account for almost 40 percent of all of the imports and exports shipped to and from the United States.



## OIL DRILLING

**WE USE THE OCEAN** for its abundant natural resources. Oil was discovered in Signal Hill in the 1920s and in Long Beach during the early 1930s, leading to extensive drilling and oil production. In the 1960s voters restricted close offshore drilling to the four THUMS oil islands, named after early astronauts Grissom, White, Chaffee, and Freeman. Because the operations had to be aesthetically pleasing, the wells are hidden by tall condo-like structures. Wellheads are in below-grade cellars, and rigs can be moved along tracks around the islands. Sculptures, palm trees, and waterfalls also help to hide the activity on the islands.

These islands actually tap into the third largest oil field in the United States. At their peak the islands had 22 active rigs and were producing about 200,000 barrels of oil per day, but were hardly noticeable as anything other than a nice addition to the harbor. Today Occidental runs the THUMS oil islands, with only 1.5 active rigs—one working daily, the other working every other day. Together with Pier J, they produce about 29,000 barrels of oil per day or approximately 10 million barrels per year. At current rates of extraction, it is estimated that there are about 25 years left of oil production for Long Beach's oil islands. When oil production ends the islands will be returned to the City of Long Beach.

## WASTEWATER DISPOSAL

### THE OCEAN IS A DISPOSAL SITE for wastewater

**from our sinks, toilets, and showers.** Before the 1960s wastewater was dumped into the ocean without any treatment. The wastes and pollutants created large dead zones around discharge sites where ocean animals could not survive. To prevent the negative effects of disposing of raw sewage, Southern California built wastewater treatment plants that treat the sewage before it is discharged into the ocean. The treatment of wastewater has helped reduce the impacts on Southern California's urban ocean ecosystems.

In the next few decades it is likely that Southern California will need to consider wastewater as a resource. With climate change, California's water resources will be even more stressed. More counties in the state will likely need to follow the actions of Orange County and San Diego County, capturing, treating, and recycling much of the wastewater that is now discharged into the ocean. Southern California imports more than 60 percent of its water. A simple way to reduce the amount of imported water and the amount of wastewater going into the urban ocean is to conserve water.



## FISHING

**WE USE THE URBAN OCEAN extensively for food, both commercially and recreationally.** Americans eat more than 16 pounds of seafood per person each year and seafood consumption is on the rise. Commercial fisheries in California, including halibut, market squid, white seabass, sea urchin, and hagfish, brought in more than 314 million pounds of seafood in 2008, according to the U.S. Department of Fish and Game. Recreational fishing in California waters is a major tourist attraction. In addition to pier fishing, sport fishing companies operate more than 128 party boats and head boats. Sport fishermen catch fish such as bocaccio, California barracuda, halibut, yellowtail, Pacific bonito, and rockfish.

In the last decade one third of the world's fisheries have collapsed and two-thirds are fished beyond sustainable levels. In our urban ocean, the California Department of Fish and Game and NOAA's National Marine Fisheries Service manage, monitor, and regulate fishing activity and fish populations. Good management has helped make commercial and recreational fishing prominent in the area. However, the United States currently imports over 80 percent of its seafood, making its sustainability difficult to monitor.



# RECREATION

## WATER SPORTS AND RECREATION are integral parts of the Southern California lifestyle.

Statewide, tourism and recreation make up the largest portion of California's ocean economy. California beaches attract residents and tourists from all over the world, and beach tourism generates \$10 billion annually. Water sports such as body boarding, wind surfing, kayaking, SCUBA, jet skiing, sailing, and recreational boating are major draws for residents and tourists and are large revenue generators. Southern California, with its year-round good surf, has over 250 documented surfing locations, including Surf City, USA—Huntington Beach—which hosts a variety of surfing competitions each year.

There are over 5,000 recreational boats in Los Angeles. The largest small boat marina in the world is located in Los Angeles County in Marina del Rey. The Long Beach Municipal Marina alone has over 1,600 boats. Southern California also regularly hosts a variety of sailing races and regattas, like the Transpacific Yacht Race that has its homeport in Rainbow Harbor.



# WILDLIFE

**THE SOUTHERN CALIFORNIA** urban ocean has some of the most diverse populations of wildlife living in the World Ocean. Whales, seals, sea lions, fish, invertebrates, and both resident and migratory birds use the area for food. People from all over the world come to dive in our kelp forests and experience the rich wildlife.

Southern Californian coasts have kelp forests—which only occur in a handful of places in the world—that are home to over 800 different species of animals.

The major component of our kelp forest is *Macrocystis pyrifera*, or giant kelp; it is an alga, not a plant, and can grow to be over 150 feet long at a rate of over two feet per day. Leopard sharks, the garibaldi—California's state fish, threatened giant sea bass, and sheepshead wrasse are just a few of the unique animals that can be found in California kelp forests.

In addition to supporting a wide variety of life, kelp forests are an important economic resource. Kelp can be harvested, often sustainably, to extract a product called algin, which is used as a thickening agent in foods like soups, jellies, drinks, and ice creams. It is also used in makeup and personal care products as well as in pharmaceuticals and even in the production of some papers, fabrics, and medical supplies.

Southern California has one of the most diverse gatherings of whales in the World Ocean. During the summer blue whales—the largest animals that have ever lived—gather in our urban ocean to feed on krill. During the winter gray whales migrate down the California coast to Baja California to birth their calves. They then make a return trip up the coast to Alaska to feed during the summer. Fin whales—the second largest animals on the planet—and curious Minke whales can be found here year-round. Humpback whales and their calves are occasionally spotted in the area, and there have even been sightings of sperm whales over our deep coastal basins. In addition to the larger whales, common dolphin, bottlenose dolphin, Risso's dolphin, and Pacific white-sided dolphin can be regularly found here. The presence of these animals is a large tourism draw, with California whale watching grossing \$20 million in 2006.

California sea lions and harbor seals are commonly found in the waters off the coast. They haul out of the water to rest on buoys or along the breakwater. Resident birds such as brown pelicans, cormorants, and the endangered California least tern can be found sharing the waters with these mammals. Southern California's urban ocean is also a stopover on the Pacific Flyway, a path for a wide variety of migratory birds, attracting bird-watchers from across the country.

# WHY HERE?

**THE UNIQUE GEOGRAPHY** and oceanography of Southern California is the main reason the area is able to sustain the wide variety of uses with relatively little conflict. The underwater topography and currents make our urban ocean a very forgiving place in terms of what we put into it and take out of it. There are a variety of underwater valleys, or basins, off of our coast ranging from 600 to 10,000 feet deep. This unique topography of underwater mountains and valleys creates a wide variety of habitats and a great deal of biological diversity. It allows us to find deep-sea animals very close to land and coastal animals to be found further offshore.

In combination with the underwater layout of the land, different currents in our urban ocean bring in animals and take away our waste. The California Current, from the north, brings cold water, cold-water animals, and nutrients that can help to support our kelp forests. The Davidson Counter-Current, which flows irregularly from the south, brings warm, salty water and warm water animals. Intermediate water can be pushed back along the coast from the central Pacific Ocean bringing open ocean animals with it. These three types of ocean water, as well as fresh water that runs off of our streets, build up in layers—like in a salad dressing or cocktail—in the basins off the coast. These layers create a variety of habitats and trap pollutants and waste in lower layers of the ocean, keeping them away from the surface and coasts. Eddies created as currents pass through the offshore basins can also pull pollutants away from the coast and bring oxygenated water and nutrients in to the benefit of the ocean wildlife.

The geography and oceanography of our urban ocean has allowed us to sustain a wide variety of uses. However, occasionally when weather patterns change, the layering can break down and eddies can bring pollutants back to the coast. Further development and population growth will also increase the stresses on our urban ocean. To maintain a healthy ocean and ensure our future use of the area, it is important to reduce our footprint so as not to overload what our ocean can handle.



## FINDING A SUSTAINABLE COEXISTENCE

**THE MANY USES** of our urban ocean by people and wildlife make finding a long-term balance critical. Our population and dependence on the ocean will continue and grow, and we will need to accommodate these potentially conflicting uses while ensuring nature can thrive as well. In addition to various laws and agencies that regulate our use and effects on the ocean, there are several options that are being implemented and explored as long-term solutions to the health of our urban ocean.

A comprehensive process is currently under way to redesign a network of Marine Protected Areas (MPAs) along the California coast. Marine Protected Areas act like the state parks on land. They are designated by law to protect the wildlife and habitat under the water and on land in the given area. There are three kinds of MPAs: State Marine Reserves, State Marine Parks, and State Marine Conservation Areas. In State Marine Reserves, people can swim and play in the area but cannot fish or take anything away from them. In State Marine Parks, people can swim, play, and fish in the area for fun and education, but businesses and companies cannot fish in the areas. In State Marine Conservation Areas, research, education, recreational activities (including fishing) and some commercial fishing are allowed as long as the activities do not compromise the protection of the area.

Marine spatial planning is also being explored as a method to aid in the design of MPAs. Marine spatial planning simply involves planning out the way a section of ocean can best be utilized by considering all of the different current uses of that area, as well as the habitat, inhabitants, and other natural resources in a comprehensive way. By understanding how the ocean is used, planned approaches can maximize benefits and reduce conflicts. Marine spatial planning is a new concept and requires the cooperation of all involved parties. It can be used to balance the many ocean uses, such as designating specific areas for waste and fishing, reducing contamination.

Each of us can make a difference by learning more about our dependence on the urban ocean, how we impact the environment, and what we can do to help reduce that impact. Some easy ways to make a difference are to keep pollution off our streets and out of the ocean, conserve water, purchase sustainable products, and support legislation that improves ocean use and protects wildlife. You can learn more about the urban ocean on the Aquarium's Urban Ocean: World Port and Sealife Cruise, which examines the many uses of Southern California's ocean and coastline. It also explores how various people and groups are working to make these uses more sustainable and reveals things each person can do to help ensure the continued health of our ocean and coasts. For a list of upcoming cruises, visit our website.



The Aquarium of the Pacific offers programs and events for all ages and interests. With exclusive events for our members, cultural festivals, a guest speaker series, and educational classes for families and children, there is something for everyone.

# GREAT AQUARIUM ACTIVITIES!

## MEMBER EVENTS

Please join us for one of these select events just for our members and their guests.

### **M MEMBER LATE NIGHT AND SPARK OF LOVE TOY DRIVE**

SUNDAY, NOVEMBER 14 | 6:30–9:30 p.m.

Join us for a special Member Late Night as we will collect toys for the Long Beach Fire Department's Annual Spark of Love Toy Drive benefiting local Long Beach families and children in need this holiday season. Each person bringing a new and unwrapped toy valued at \$15 or more will receive one complimentary Aquarium admission ticket. Then explore the Aquarium and watch the nightlife of our animals as you touch a shark in Shark Lagoon or enjoy a beautiful view of the Long Beach Harbor. Pacific Collections Gift Store will offer a 20% discount off all purchases and Café Scuba will be open until 8:00 p.m. The entire Aquarium will be open except for Lorikeet Forest. To ensure the animals get a good night's sleep, exhibit lighting will begin to dim at 8:30 p.m.

**COST** | Free for members; members may bring four guests at no charge

### **M SENIOR MEMBER AFTERNOON**

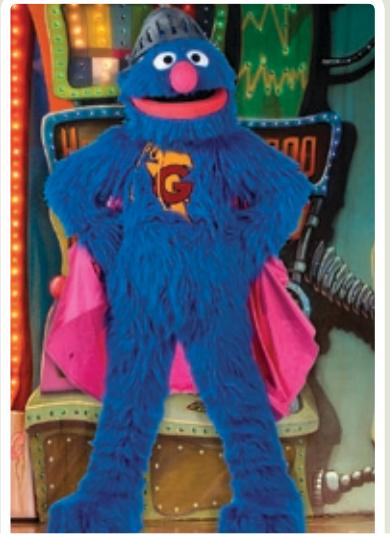
THURSDAY, JANUARY 20 | 2:00–3:00 p.m. and 3:30–4:30 p.m.

Senior members are invited to a relaxing and educational afternoon in the Watershed Classroom while sampling delicious tastes prepared by the Aquarium's Seafood for the Future Manager Andrew Gruel. Watch and learn as he shares tips on sustainable cooking and how you can determine which seafood is most sustainable and delicious to eat.

**COST** | Free for senior members; members may bring guests with their 20% discount off general admission.

**RSVP** | (562) 437-FISH (3474) required by January 17

## MEMBER EVENTS



TM & © 2010 Sesame Workshop. All Rights Reserved. PHOTOGRAPH COURTESY OF VEE CORPORATION



### **M KIDS ACTIVITY NIGHT**

**Save the date and mark your calendar!**

FRIDAY, FEBRUARY 25 | 6:30–9:30 p.m.

Member kids and parents are invited to the Aquarium for an exciting night as we have a special surprise visit from one of our favorite residents of Sesame Street, Super Grover! Learn how Sesame Street Live and Super Grover promote healthy living for kids, and how our husbandry and education staff promotes healthy living for the animals that call the Aquarium home. This exciting night will be action packed with crafts, face painting, animal presentations, and of course, your chance to see Super Grover! This is sure to be a member event you won't want to miss. Please visit the website for more details and RSVP soon as space is limited.

**COST** | Free for members; members may bring guests with their 20% discount off general admission.

**RSVP** | (562) 437-FISH (3474) required by February 22

## SPECIAL EVENTS

The Aquarium of the Pacific hosts a variety of fundraisers, lunches, and other events throughout the year. Check our website for more details and additional events.

### **SE SHARK LAGOON NIGHTS**

FRIDAYS, SEPTEMBER 17–DECEMBER 31 (except October 29 & December 24)

Shark Lagoon is open for everyone for free after 6:00 p.m. Guests can touch and learn about sharks, shop at Shark Shack, and enjoy live music on select nights.

**COST** | Free for everyone

**INFO** | (562) 437-FISH (3474)

### **SE LOS CERRITOS WETLANDS CLEANUP**

SUNDAY, OCTOBER 10 | 10:00 a.m.–noon

The Aquarium is hosting a habitat restoration at Los Cerritos Wetlands. This is your opportunity to visit and learn about our local wetlands, help the environment, and support Aquarium of the Pacific. The wetlands are wildlands, so please dress accordingly. Closed-toe shoes are required. Drinking water will be provided, but this is a plastic water bottle-free event. Children under 14 must be accompanied by an adult.

**COST** | Free

**INFO** | (562) 437-FISH (3474)

### **SE AQUARIUM KIDS FUN RUN**

SATURDAY, OCTOBER 16 | 9:00 a.m.–12:00 noon

Come out and join in on the fun at the Aquarium of the Pacific's Kids Fun Run. The grand marshal and race starter is our very own Lola the cockatoo. The course will lead kids on a mile run around the Aquarium. All participants receive a special commemorative sea star medal. After the race, there will be a family expo, fun Aquarium characters, and crafts. This event is part of the Long Beach International City National Bank Marathon. Space is very limited. For more information on this event, visit <http://www.runlongbeach.com>.

**COST** | Free

**INFO** | (562) 427-4606



## SEA FARE FUN

### SPECIAL EVENTS

#### SE SEA FARE

**SATURDAY, OCTOBER 16 | 7:00 p.m.–11:00 p.m.**

The Aquarium of the Pacific will host its seventh annual Sea Fare, an evening of dining, live music, and auctions. Guests can enjoy tastes from over 20 local restaurant chefs—serving delectable entrees, local brews, fine wines, and desserts. In addition to strolling through our Aquarium galleries, you can visit one of our open bars while listening to live music and bidding on one-of-a-kind items at our live and silent auctions. We will have a \$500 cash raffle and a "Go Fish" opportunity game where you can win gift certificates, gift baskets, hotel stays, tickets to performances, and more. All proceeds support our education and conservation initiatives.

**COST** | \$100 per person (\$50 is tax deductible)

**RSVP** | (562) 437-FISH (3474)

#### SE THANKSGIVING LUNCH

**THURSDAY, NOVEMBER 25 | 11:00 a.m.–5:00 p.m.**

Take the stress out of Thanksgiving and enjoy a traditional Thanksgiving buffet at Café Scuba.

**MENU:** Garden Salad, Orange Ginger Glazed Ham, Rosemary Rose Turkey, Cornbread Stuffing, Mashed Potatoes and Gravy, Candied Yams, Green Beans, and Pumpkin Pie Squares

**COST** | \$24/adult or senior member, \$17/child member; \$34/adult non-member, \$27/child non-member (includes admission to the Aquarium)

**RSVP** | (562) 437-FISH (3474)

#### SE NIGHT DIVE

**FRIDAY, OCTOBER 29 | 7:00–11:00 p.m.**

Join us for an evening of art, bands, DJs, and more. This Halloween-themed Night Dive is inspired by the concept "metamorphosis."

**COST** | Free for members; \$11.95 for guests

**AGES** | 18+

**INFO** | (562) 437-FISH (3474)

### FESTIVALS

To honor the rich diversity of Southern California, the Aquarium of the Pacific hosts cultural and family festivals throughout the year. Check our website for more details and additional family festivals.

#### GE BAJA SPLASH

**SAT.–SUN., SEPTEMBER 25–26 | 9:00 a.m.–5:00 p.m.**

In honor of National Hispanic Heritage Month, the Aquarium of the Pacific celebrates the beauty and diversity of Hispanic cultures. Baja Splash features music, dance, art and cultural displays, ethnic foods, and much more. Guests can also learn more about the animals of Baja California, Mexico and how to protect them.

**COST** | Free for members |  
members' guests  
receive 20% off  
regular admission

**INFO** | (562) 437-FISH (3474)



#### GE SEABIRD DAY

**SATURDAY, OCTOBER 2 | 9:00 a.m.–5:00 p.m.**

The Aquarium will host its first Seabird Day held in partnership with National Oceanic and Atmospheric Administration (NOAA). Throughout the day you will have the opportunity to learn about seabirds from illustrated presentations; explore your artistic capabilities in drawing, painting, and photographing seabirds; and you will even have a chance to take a field trip to observe seabirds in their natural habitat. There will be programs and activities for people of all ages.

**COST** | Free for members; members' guests receive  
20% off regular admission

**INFO** | (562) 437-FISH (3474)

#### GE SOUTHEAST ASIA DAY

**SATURDAY, OCTOBER 9 | 9:00 a.m.–5:00 p.m.**

The Aquarium celebrates its annual Southeast Asia Day by highlighting the beauty and diversity of Cambodian, Thai, Vietnamese, Burmese, Laotian, and Indonesian cultures. Guests will enjoy live performances, including music, dance, and cultural craft demonstrations. Ethnic dishes will be available for purchase, and children will have the opportunity to partake in arts and crafts.

**COST** | Free for members; members' guests receive  
20% off regular admission

**INFO** | (562) 437-FISH (3474)

### FESTIVALS

#### GE SCARIUM OF THE PACIFIC

**SAT.–SUN., OCTOBER 23–24 | 9:00 a.m.–5:00 p.m.**

Discover the creatures lurking in the depths of Pacific at the Scarium of the Pacific—a spooktacular educational Halloween event for the whole family. Enjoy special Halloween programs, including the annual children's costume contest, the creepy coloring contest, magic shows, spooky storytelling, kooky crafts, and eerie animals in the Great Hall.

**COST** | Free for members; members' guests receive  
20% off regular admission

**INFO** | (562) 437-FISH (3474)

#### GE AUTUMN FESTIVAL

**SAT.–SUN., NOVEMBER 6–7 | 9:00 a.m.–5:00 p.m.**

Join us as we celebrate the traditions and cultures of Japan, China, Korea, and the Philippines during this weekend of learning opportunities and family entertainment. Move to the sounds of Taiko drumming, watch dancers, acrobats, and martial arts demonstrations. Try your hand at origami, and purchase hand-made crafts.

**COST** | Free for members |  
members' guests  
receive 20% off  
regular admission

**INFO** | (562) 437-FISH (3474)

#### GE HOLIDAY TREATS FOR THE ANIMALS

**SAT.–SUN., DECEMBER 4–5 | 9:00 a.m.–5:00 p.m.**

In celebration of the holiday season, Santa will be delivering an ocean of gifts to the sea otters, seals, sea lions, birds, fish, and other animals at the Aquarium. Watch the Aquarium's animals receive their special treats and enrichment gifts during the weekend. Families can enjoy holiday music, crafts, special presentations, unique photo opportunities, and shopping. The Seal and Sea Lion Habitat will be decked out for the season with frozen "fishmas" treats. The sea otters will receive candy cane-shaped ice treats, gourmet lobster tails, and their very own snowman. Throughout the day Aquarium staff will give special gift delicacies to other marine animals as well.

**COST** | Free for members; members' guests receive  
20% off regular admission

**INFO** | (562) 437-FISH (3474)



## UNDERWATER PARKS DAY

### FESTIVALS

#### UNDERWATER PARKS DAY

SATURDAY, JANUARY 15 | 9:00 a.m.-5:00 p.m.

Learn about California's network of underwater parks called Marine Protected Areas (MPAs). Share an underwater adventure with an Aquarium diver to learn how MPAs are monitored. Participate in an interactive activity to learn about different habitats along our coast. Tour the Aquarium, watching for habitats modeled after underwater parks.

**COST** | Free for members; members' guests receive 20% off regular admission

**INFO** | (562) 437-FISH (3474)

#### FESTIVAL OF HUMAN ABILITIES

SAT.-SUN., JANUARY 29-30 | 9:00 a.m.-5:00 p.m.

The eighth annual Festival of Human Abilities continues our recognition of the creative talents and abilities of people with disabilities. Wheelchair dance, live music, sign language choirs, art demonstrations, storytelling, service dog demonstrations, and other creative performances will be featured. Sign language interpreters will be present at all major shows and an audio tour is available for those who are blind.

**COST** | Free for members; members' guests receive 20% off regular admission

**INFO** | (562) 437-FISH (3474)

#### AFRICAN HERITAGE FESTIVAL

SAT.-SUN., FEBRUARY 26-27 | 9:00 a.m.-5:00 p.m.

The African Heritage Festival celebrates the richness and diversity of African and African American cultures. The weekend will feature interactive drum circles, West African dance, live jazz, and storytelling.

**COST** | Free for members; members' guests receive 20% off regular admission

**INFO** | (562) 437-FISH (3474)



## CALIFORNIA'S THIRST FOR WATER

### GUEST SPEAKERS

The Aquarium hosts guest lectures on a variety of topics from experts across the country.

#### GS JEANINE JONES & ERIC SODERLUND Overview of California's Water Supply

THURSDAY, SEPTEMBER 30 | 7:00 p.m.

Where does California's water come from? How much is there? How do we manage it? What do we know about droughts and floods? And how do we govern our water resources? Hear Jeanine Jones and Eric Soderlund answer these questions as we explore what global climate change will mean for California's water supply.

Jeanine Jones, PE, serves as the Department of Water Resources' (DWR) interstate resources manager. A civil engineer, she has a background in interstate water negotiations, statewide planning, and drought preparedness. Eric Soderlund, JD, is a staff counsel with DWR's legal office. He specializes in natural resources, environmental, and water law.

*This is part of our Climate Change and What it Means to California lecture series.*

#### GS MIKE ANDERSON & JEANINE JONES Climate Change Impacts on California Water

THURSDAY, OCTOBER 7 | 7:00 p.m.

What are the estimated impacts of climate change on California's water resources? What can we expect relative to sea level rise? What do we know and what is uncertain? And what are the priorities for research on climate change related to water? Mike Anderson and Jeanine Jones discuss these questions in the second night of our series on how climate change will affect our water supply.

Mike Anderson, PE and PhD, serves as the California state climatologist in the Department of Water Resources (DWR). A civil engineer, he has a background in hydroclimate modeling and monitoring and works in DWR's flood forecasting section.

*This is part of our Climate Change and What it Means to California lecture series.*

### GUEST SPEAKERS

#### GS KATHY KELLY & JEANINE JONES Water Sector Adaptation to Climate Change

THURSDAY, OCTOBER 14 | 7:00 p.m.

What plans are being made at the state level for adaptation to the changes in our water supply due to climate change? What tools or techniques are available? What plans are underway to address major resource management concerns in the San Francisco/Sacramento-San Joaquin River Bay Delta, the hub of much of California's developed water supplies? And where does adaptation to sea level rise fit in the picture? Hear Kathy Kelly and Jeannine Jones explore the answers to these questions.

Kathy Kelly, PE, is chief of the Department of Water Resources' (DWR's) Bay-Delta Office, which plans facilities and implements actions in the Sacramento-San Joaquin River Delta to improve water quality, water supply reliability, and the ecosystem. She is a civil engineer with experience in planning and hydrologic engineering.

*This is part of our Climate Change and What it Means to California lecture series.*

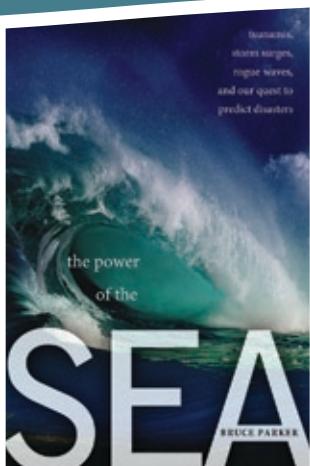
#### GS SEA POETRY FESTIVAL MONDAY, OCTOBER 25 | 7:00 p.m.

Join us as we celebrate the ocean and marine life through poetry. This event, which is being choreographed by poet Elliot Fried, will feature poetry on the ocean and on sea otters. Hear classic and modern poetry readings and explore what makes good ocean and marine life poetry. Winners of the Urban Ocean High School Poetry Contest will be announced and their poems will be read by poet Linda Albertano.

The first part of the evening will explore historic and contemporary poetry of the sea and the changes in how we view our ocean today. During the second part of the evening poet Robert Carpio will read his poem on sea otters, Aquarium animal husbandry staff will present an illustrated overview of these fascinating marine mammals, and a Q&A will take place on how art and poetry can help sea otter conservation. The winning entries of our 2010 Sea Otter Poetry Contest will also be read during the evening.

## The BUTTERFLIES of Iguazú Falls, Argentina

**William J. Cooper,  
Ph. D.**



### GUEST SPEAKERS

#### © SPIRITUALITY AND THE ENVIRONMENT

WEDNESDAY, NOVEMBER 3 | 7:00 p.m.

Come explore our relationship to the Earth and how spirituality can play a role in conservation of the environment. The evening will feature short films by award-winning producer, director, and cinematographer Louie Schwartzberg, followed by a panel discussion featuring Christian, Islam, Jewish, Buddhist, and Native American spiritual leaders, and a performance by a gospel choir. *This event is free.*

#### © WILLIAM COOPER | *Butterflies of Iguazú Falls*

TUESDAY, NOVEMBER 9 | 7:00 p.m.

Iguazú Falls is shared by Argentina and Brazil and is considered one of the natural wonders of the world. Discover the symmetry and every color of the rainbow as we trek through the jungle and see the butterflies that live around these picturesque falls.

Dr. William Cooper is a professor of civil and environmental engineering and director of the Urban Water Research Center at the University of California, Irvine. He serves as a consultant to the International Atomic Agency and is involved in several international research projects.

#### © RICHARD SOMERVILLE | Climate Science and Climate Policy: What Do We Know and What Should We Do?

WEDNESDAY, NOVEMBER 17 | 7:00 p.m.

"Perhaps the most important function of climate science on an issue of broad interest like global warming is to help educate the public and to provide useful input into the policy process. Governments, corporations, and individuals should listen to and learn from the science, just as intelligent people listen to their physicians when their health is in question. Good science input can inform wise policymaking. The role of scientists is to help assess the science and present it in an

### GUEST SPEAKERS

intelligible way that is policy relevant," says Richard Somerville. Hear him speak about what we should know about climate change and what we need to do to address the issue.

Somerville is a distinguished professor emeritus and research professor at Scripps Institution of Oceanography at the University of California, San Diego. He was a coordinating lead author in Working Group I for the 2007 Fourth Assessment Report of the Intergovernmental Panel on Climate Change. *This lecture is funded by The Donald Slavik Family Foundation.*

#### © CALIFORNIA SEA LIONS—AN UNFORGETTABLE ENCOUNTER

THURSDAY, JANUARY 13 | 7:00 p.m.

The movie *California Sea Lions—An Unforgettable Encounter* will take you on a journey into the mysterious world of sea lions. Narrated by actor Sean Astin, the film shows the beauty and grace of these acrobatic animals as they thrive in the cool Pacific waters off the California coast. Meet the researchers who are determined to learn more about the lives of these fascinating creatures. Discover how the Pacific Marine Mammal Center in Laguna Beach rescues, rehabilitates, and releases sick and injured seals and sea lions. And journey throughout the Channel Islands National Park to swim with the sea lions. This movie is presented by Rio Films and will be followed by a Q&A by the director Alan De Herrera. *This showing is free.*

### GUEST SPEAKERS

#### © BRUCE PARKER | *The Power of the Sea—Tsunamis, Storm Surges, Rogue Waves, and Our Quest to Predict Disasters*

THURSDAY, JANUARY 27 | 7:00 p.m.

"When the sea turns its enormous power against us, our best defense is to get out of its way. But to do that we must first be able to predict when and where the sea will strike," says Dr. Bruce Parker. Hear him discuss our struggles to understand the physics of the ocean in his latest book *Power of the Sea*. His book is a scientific journey from our earliest strange ideas about the sea to modern marine predictions made using hydrodynamic computer models fed with gigabytes of real-time oceanographic data. It tells stories of scientific discovery interwoven with stories of unpredicted natural disasters.

Dr. Parker is presently a visiting professor at the Center for Maritime Systems at the Stevens Institute of Technology. He is the former chief scientist of the National Ocean Service in NOAA, the former director of the Coast Survey Development Laboratory, and the former director of the World Data Center for Oceanography.

#### © DAN GOODS | *Art, When Science Isn't Enough*

WEDNESDAY, FEBRUARY 2 | 7:00 p.m.

Between working at the Jet Propulsion Laboratory and his own commissions, artist Dan Goods collaborates with scientists and engineers to create artwork that engages people on multiple levels. From drilling a hole into a grain of sand to creating an artwork to go into space, Goods will discuss his work and his experiences being an artist in a research environment.

Goods is a visual strategist for NASA's Jet Propulsion Laboratory where he develops creative ways of communicating. Installations for JPL include The Hidden Light, about finding planets around other stars, and The Big Playground, in which a hole drilled into a grain of sand shows the scale of the universe and the small area in which we have found hundreds of planets around other stars.

**COST** | Free for Pacific Circle

Guest speaker sponsor:

members, teachers, and students with Valid ID and advanced reservations. | \$4/members  
\$8/non-members

**RSVP** | (562) 437-FISH (3474)



## AQUARIUM TOURS

These programs are opportunities to see the Aquarium and its animals in a different light.

### **AT** BEHIND-THE-SCENES TOURS

DAILY | *times vary*

Guests will go above our largest exhibit to feed the fishes, get a glimpse of areas behind Shark Lagoon, and see our new Molina Animal Care Center.

**COST** | \$11/member | \$15/non-member  
*does not include Aquarium admission*

**AGES** | 7+ years

**LENGTH** | one hour

**GROUP SIZE** | maximum 10 participants

**RSVP** | (562) 951-1630, online, or sign up on day of visit

### **AT** ANIMAL ENCOUNTERS

SATURDAYS and SUNDAYS | *see times below*

Join us for a very special experience to learn about feeding and caring for some of our marine animals. Roll up your sleeves, prepare some food, and get ready to be up close and personal for a feeding with a seal, sea lion, sea otter, or even a shark. There are lots of surprises along the way, so be prepared to get your hands wet!

**THEMES** | Seals & Sea Lions 9:30-11:30 a.m. | Sharks 12:30-2:30 p.m. | Sea Otters 12:30-2:30 p.m.

**COST** | \$80/member | \$90/non-member  
*includes Aquarium admission*

**AGES** | 10+ years | Seals & Sea Lions | Sea Otters  
13+ years | Sharks  
*Some height restrictions apply. Participants under 16 years must be accompanied by an adult*

**RSVP** | (562) 951-1630

### **AT** HARBOR TOUR

Tour the Long Beach/Los Angeles Harbors with Harbor Breeze Cruises for a 45-minute narrated cruise around one of the most active ports in the world. See the downtown shoreline, ocean vistas, ships from around the world, and even sea lions. Tours are offered throughout the day on a daily basis. Tickets may be purchased in advance or at the ticket window upon arrival. Meet 15 minutes prior to departure at Dock #2. This program is led and staffed by Harbor Breeze Cruises.

**COST** | Members: \$12/adult, \$10/senior, \$6/child (3-11) | non-members: \$33.95/adult, \$28.95/senior (62+), \$15.95/child (3-11) (includes Aquarium admission)

**RSVP** | (562) 951-1630

## AQUARIUM TOURS

### **AT** DIVE IMMERSION

**BASED ON AVAILABILITY** | 3:00-5:30 p.m.

Certified divers can now dive in our warm 350,000 gallon Tropical Reef Habitat with over 1,000 animals. Tour the dive program, dive in our exhibit, and receive a certificate of completion, souvenir towel, use of an underwater camera, and a memory card of your photos. All equipment is provided.

**COST** | \$279/member | \$299/non-member

**AGES** | 15+ years | ages 15-17 require participating adult chaperone

**RSVP** | (562) 590-3100



## AQUARIUM SLEEPOVERS

Pack your sleeping bag and toothbrush for a night of adventure at the Aquarium of the Pacific. These programs include a pizza dinner, snack, craft, cereal breakfast, and T-shirt.

### **SL** BIRTHDAY PARTY SLEEPOVER

**BASED ON AVAILABILITY** | 5:00 p.m.-7:00 a.m.

Join us for an all-night celebration with a special birthday party sleepover featuring animal touch time, a feeding opportunity, presentations, a behind-the-scenes tour, and crafts. Please bring your own birthday cake.

**COST** | \$60/member | \$70/non-member

**AGES** | 5+ years | one adult required per 10 children

**THEMES** | Sharks, Marine Mammals, or Turtles

**GROUP SIZE** | 20-50 participants

**RSVP** | (562) 951-1630

### **SL** ADULT SLEEPOVER

**BASED ON AVAILABILITY** | 6:00 p.m.-9:00 a.m.

Enjoy the tranquility and serenity of the Aquarium at night. Unwind with yoga and meditation before meeting an animal, hearing an informal lecture by a marine educator, taking guided tours, seeing special presentations, and sleeping next to one of our large exhibits. Included are a gourmet pizza dinner with wine, beer, or soda and a continental breakfast.

**COST** | \$60/member | \$70/non-member

**AGES** | 18+ years

**GROUP SIZE** | 20-60 participants

**RSVP** | (562) 951-1630

## AQUARIUM SLEEPOVERS

### **SL** YOUTH GROUP SLEEPOVERS

**MONDAY OR WEDNESDAY EVENINGS**

*based on availability* | 5:00 p.m.-7:00 a.m.

Anchors aweigh as we become sailors in search of the missing treasures of the sea. Investigate the fascinating aquatic food web and follow a treasure map in search of ocean knowledge!

**COST/PERSON** | \$50/member | \$60/non-member

**AGES** | 5+ years, plus adult chaperone

**GROUP SIZE** | 20-60 participants

**RSVP** | (562) 951-1630

### **SL** HALLOWEEN FAMILY SLEEPOVER

**FRIDAY, OCTOBER 22** | 5:00 p.m.-7:00 a.m.

Have a "spooktacular" evening at the Aquarium with creepy crawlly critters, pumpkin painting, and a freaky flashlight tour. The sleepover includes a pizza dinner, light snack, animal interactions, cereal breakfast, and more. Family-friendly costumes welcome. Space is limited so sign up today!

**COST** | \$50/member, \$60/non-member

**AGES** | 5+ years, plus adult chaperone

**RSVP** | (562) 951-1630

### **SL** HOMESCHOOL FAMILY SLEEPOVER

**MONDAY, NOVEMBER 15** | 5:00 p.m.-7:00 a.m.

Homeschool families are invited to join us as we explore the Aquarium with fun and educational hands-on activities. The sleepover includes a pizza dinner, light snack, T-shirt painting, theater programs, animal interactions, cereal breakfast, and more.

**COST** | \$50/person

**AGES** | 5+ years, plus adult chaperone

**RSVP** | (562) 951-1630

### **SL** NEW YEAR'S EVE FAMILY SLEEPOVER

**FRIDAY, DECEMBER 31** | 5:00 p.m.-7:00 a.m.

Ring in 2011 and party with the fishes! You will start a new tradition when you bring your family to the Aquarium for a very memorable New Year's experience. This program includes a pizza dinner, snack, cereal breakfast, and T-shirt. We will also have sparkling cider toast to celebrate the New Year.

**COST** | \$60/member; \$70/non-member

**AGES** | 5+ years

**RSVP** | (562) 951-1630



## CELEBRATE A BIRTHDAY

### SPECIAL PROGRAMS

#### **SP** BIRTHDAY PARTIES

AVAILABLE BY RESERVATION ONLY

Let us make your child's next birthday celebration special. The Aquarium will supply all the ingredients for an unforgettable party, including a themed one-hour classroom program featuring animal touch time, biofact discovery, and a take home souvenir craft project. The party concludes with an additional half hour in the classroom for the birthday celebration. Please bring your own birthday cake. Aquarium admission is included. All you need to do is call us at least two weeks prior to reserve a date (subject to availability), and then invite your guests. We also offer birthday sleepovers.

**COST** | \$33/member | \$39/non-member | 15 person minimum, includes Aquarium admission

**AGES** | all ages, one adult required per 10 children

**THEMES** | Sharks, Marine Mammals, or Turtles

**GROUP SIZE** | 15-45 participants

**INFO** | (562) 951-1630



#### **SP** AQUARIUM ON WHEELS

AVAILABLE BY RESERVATION ONLY

The Aquarium on Wheels is dedicated to developing children's appreciation for the wonders of the ocean environment. Along with an educational presentation, hands-on activities, and environmental message, our outreach educational program provides children the chance to touch sharks, sea stars, anemones, urchins, and other marine inhabitants. This mobile tidepool exhibit is not just for schools—it is also great for display at festivals, fairs, and even birthday parties. Aquarium on Wheels will deliver a memorable experience for all!

**INFO** | (562) 951-1630



## THE URBAN OCEAN

### OUTDOOR ADVENTURES

Go beyond the Aquarium to participate in one of these offsite classes in the great outdoors.

#### **OA** GRAY WHALE WATCHING TRIPS SEASONAL

Take a voyage with Harbor Breeze Cruises in search of whales as they migrate along our coastline. Learn about these gentle giants from an Aquarium onboard educator.

**COST** | Members: \$25/adult, \$20/senior, \$15/child  
Non-members (includes Aquarium admission): \$42.95/adult, \$39.95/senior, \$28.95/child

**AGES** | Children under 16 must be accompanied by an adult

**LENGTH** | 2-2.5 hours

**RSVP** | (562) 951-1630

#### **OA** DOLPHIN AND SEA LIFE CRUISE FALL SEASON

The Pacific Ocean is home to many wondrous animals year 'round. Join us as we search for dolphins, seals, sea lions, and marine birds on our Dolphin and Sea Life Cruise. This is an experience you and your family will not soon forget!

**COST** | Members: \$25/adult, \$20/senior (ages 62+), \$15/child (ages 3-11)  
Non-members (includes Aquarium admission): \$42.95/adult, \$39.95/senior (ages 62+), \$28.95/child (ages 3-11)

**AGES** | Children under 16 must be accompanied by an adult

**LENGTH** | 2-2.5 hours

**RSVP** | (562) 951-1630

### OUTDOOR ADVENTURES

#### **OA** URBAN OCEAN: WORLD PORT AND SEALIFE CRUISE

CALL OR VISIT WEBSITE FOR SCHEDULE

Join us on a double-deck yacht as we explore one of the most distinctive sections of our coastline and experience the wonders of the Southern California urban ocean. In this place of high intensity, massive ships from around the world slip past whales on their way to the nation's two biggest ports. Here windsurfers and sailboats glide by sea lions and offshore oil islands. Guided by commentary from an Aquarium educator and an experienced boat captain, you will see seals lounging along the breakwater, pelicans and gulls pursuing commercial fishing boats looking for a snack, and sea lions competing with one another by the docks for the catch of the day. Learn what makes the Southern California urban ocean one of the most amazing segments of the entire World Ocean.

**COST** | Members: \$26.95/adult, \$8.00 child  
Non-members: \$29.95/adult, \$10.00/child

**AGES** | Recommended for ages 10+

**LENGTH** | 2-2.5 hours

**RSVP** | (562) 951-1630

#### **OA** NATURE BY KAYAK

SATURDAYS, OCT. 23, JAN. 22 | SUNDAYS, NOV. 21, DEC. 19, FEB. 20  
9:00 A.M.-12:00 P.M.

Join us for a morning of gentle paddling in the Upper Newport Bay Ecological Preserve for an up-close view of nature. After an introductory lesson, you will be led on a naturalist-guided kayak expedition. Both double and single kayaks are available in this off-site class.

**COST** | \$53/member | \$58/non-member

**AGES** | 11+ years, plus adult chaperone if under age 16

**WHERE** | meets offsite | map included in confirmation materials

**RSVP** | (562) 951-1630

**DAY CAMPS****DC 12 DAYS BY THE SEASHORE****SATURDAY, DECEMBER 18 | 9:30-11:30 a.m.**

Join us as we create a fun and educational holiday-inspired book in this two-hour workshop. Learn about 12 ocean creatures that live by the seashore, including sea stars, lobsters, sand dollars, and five golden trevallies! Not only will you discover fascinating facts about each of these animals as you tour through the galleries, but you will also take home a special keepsake book. Sign up now, as space is limited.

**COST** | \$30 member pair; \$14 additional member

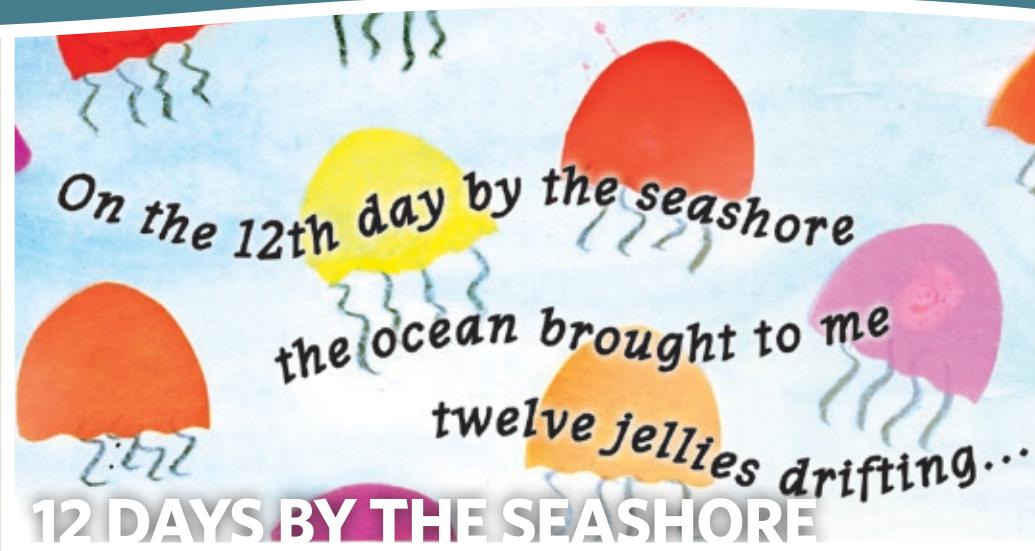
\$42 non-member pair; \$20 additional non-member (includes Aquarium admission)

**AGES** | 7+ years; 3-6 years with adult chaperone**RSVP** | (562) 951-1630**DS SEA SQUIRT WINTER CAMP****MON.-WED., DECEMBER 20-22 | 8:30-11:30 a.m.**

This three-day camp offers an exciting introduction to marine biology for five- and six-year-olds. Campers will discover an underwater wonderland filled with wiggly fish, furry mammals, and fluffy birds. This camp encourages little ones to interact and explore independently from parents. Through hands-on activities, stories, crafts, and tours, your child will prove that little learners can learn big things!

**COST** | \$90/ member; \$115/non-member**AGES** | 5-6 (children only)**RSVP** | (562) 951-1630**DC WINTER DAY CAMP****TUE.-THU., DECEMBER 28-30 | 9:00 a.m.-3:00 p.m.**

Join us as we explore the Pacific Ocean and its inhabitants during our three-day winter day camp adventure. Campers will learn about marine life through hands-on activities, games, and crafts. Participants will even get the chance to go behind the scenes at the Aquarium, meet our animal husbandry staff, and help us take care of some of the animals that make their home here at the Aquarium. Extended child care is available from 8:00-9:00 a.m. and 3:00-5:00 p.m. for an additional cost.

**COST** | \$125/member; \$150/non-member**AGES** | Grades 2-4 (children only, must be at least 7 to participate)**RSVP** | (562) 951-1630**YOUTH PROGRAMS****YP JUNIOR BIOLOGIST PROGRAM****SATURDAYS | 9:30-11:30 a.m. | topics vary, see below**

Participants will independently investigate marine life during this exploratory program. This class offers hands-on animal touch time, Aquarium animal observation, and activities relating to each topic. Select the topic that is most interesting, or take all the classes to learn about the variety of animals found at the Aquarium.

<b>TOPIC</b>   Southern Calif./Baja	OCT. 9 (ages 7-10) OCT. 16 (ages 10-12)
Northern Pacific	NOV. 13 (ages 7-10) NOV. 20 (ages 10-12)
Tropical Pacific	DEC. 4 (ages 7-10) DEC. 11 (ages 10-12)
Sharks	JAN. 15 (ages 7-10) JAN. 22 (ages 10-12)
Marine Mammals	FEB. 12 (ages 7-10) FEB. 19 (ages 10-12)

**COST** | \$19/member | \$24/non-member

*Due to the popularity of this program, all participants must RSVP and pre-pay; does not include Aquarium admission*

**RSVP** | (562) 951-1630**YP JOB SHADOW****SATURDAYS | 9:00 a.m.-noon  
topics vary, see below**

This program is for students who are interested in animal husbandry or marine biology careers. Students will learn what it takes to run a world-class aquarium and get a hands-on opportunity to participate in everyday activities that help maintain the Aquarium. Students will go behind the scenes, shadowing education and husbandry staff.

**TOPIC** | Veterinarian OCT. 2 or FEB. 5 | Aquarist NOV. 6  
Mammalogist DEC. 11 | Aviculturist JAN 8**COST** | \$24/member | \$29/non-member  
*does not include Aquarium admission***AGES** | grades 7-12**RSVP** | (562) 951-1630**SATURDAY FAMILY FUN PROGRAMS**

Children, along with a parent or adult chaperone, will investigate the ocean world in a structured classroom program that includes interactive and hands-on activities. These programs foster the students' discovery as well as interaction in relationships.

**FP TOTALLY TURTLES****SAT., OCTOBER 23 or FEBRUARY 26 | 10:00-11:30 a.m.**

You may enjoy a sweet treat of Jelly Bellies, but a sea turtle prefers having a belly full of jellies! Discover fun facts and turtle trivia as we explore these reptiles.

**FP SHARK SLEUTHS****SATURDAY, NOVEMBER 20 | 10:00-11:30 a.m.**

Discover how sharks' amazing adaptations make them excellent predators. Get an up-close view of these creatures and others as we learn all about sharks!

**FP SEA JELLIES AND OTHER INCREDIBLE INVERTEBRATES****SATURDAY, JANUARY 29 | 10:00-11:30 a.m.**

They may be spineless, but they are the backbone of nature. Join us as we learn all about jellies and their invertebrate relatives that inhabit the ocean.

**COST** | ADULT-CHILD PAIR: \$24/member

\$36/non-member

EXTRA PERSON: \$10/person  
*(includes Aquarium admission)***AGES** | 4-6 years, plus adult chaperone**RSVP** | (562) 951-1630

## AQUA TOTS

Toddlers team up with their parent or chaperone for a first look into ocean life. Each of the Aqua Tots programs focuses and expands on a particular concept while encouraging adult and child interaction.

### **AO SHORELINE SHAPES**

**TUESDAY, OCTOBER 5 | 4:00-5:30 p.m.  
THURSDAY, JANUARY 6 | 3:00-4:30 p.m.**

Did you know a sea jelly is shaped a lot like a bell or that some fishes are as flat as pancakes? In the Aquarium, there are eels so skinny they look like shoestrings! Explore the exciting shapes of ocean life through a craft, songs, and hands-on activities.

### **AO MOVIN' & GROOVIN' BENEATH THE SEA**

**THURSDAY, OCTOBER 21 | 3:00-4:30 p.m.  
TUESDAY, JANUARY 18 | 4:00-5:30 p.m.**

Roll like an otter and slide like a snail as we discover animals through movement. Explore the world of sea creatures by taking a closer look at the way they move. Join us as we move and groove like the animals beneath the sea!

### **AO SLIPPERY TO PRICKLY**

**THURSDAY, NOVEMBER 4 | 4:00-5:30 p.m.  
TUESDAY, FEBRUARY 8 | 3:00-4:30 p.m.**

Whether it's a slippery sea cucumber, soft and velvety bat ray, prickly sea urchin, or simply the smooth shell of a hermit crab, discover the many lovable and touchable creatures that live in the ocean. Learn what can be explored safely as we use our sense of touch on a journey through the Pacific Ocean.

### **AO SUPER SENSES OF THE SEA**

**TUESDAY, NOVEMBER 16 | 3:00-4:30 p.m.  
WEDNESDAY, FEBRUARY 23 | 4:00-5:30 p.m.**

Smell the salty air and feel the cool breeze as we use our senses to explore how ocean animals use their sight, taste, touch, and hearing in their watery home. Immerse yourself in the wonder and discovery of this interactive program.

### **AO SOUNDS OF THE SEA**

**THURSDAY, DECEMBER 2 | 3:00-4:30 p.m.**

Shake, rattle, and roll as we listen to the sounds of the ocean. Experience the wonderful world of sea sounds, from the songs of a big blue whale to the barking of a sea lion.

### **AO COLORS OF THE OCEAN**

**TUESDAY, DECEMBER 14 | 4:00-5:30 p.m.**

Below the surface of the blue ocean are animals with amazing colors. Some are bright and flashy while others blend into the ocean bottom. Discover some of these colorful animals, and search for those that may be hiding.

**COST** | ADULT-CHILD PAIR: \$24/member

\$30/non-member | ADDITIONAL PERSON:  
\$10/person, includes Aquarium admission

**AGES** | 2-3 years, plus adult chaperone

**RSVP** | (562) 951-1630



## PRESCHOOL PROGRAMS

Designed for young children to independently explore marine life, each Preschool Program class offers hands-on animal touch time, a craft project, story time, time to explore the Aquarium, a snack, and activities relating to the project.

### **PP SENSATIONAL SHARKS**

**THURSDAY, OCTOBER 14 | 2:30-4:30 p.m.**

Discover super sharks and radical rays, and learn what these relatives have in common even though they look so different. We will also get to touch these cool cartilaginous creatures.

### **PP JIGGLING JELLIES**

**THURSDAY, NOVEMBER 11 | 2:30-4:30 p.m.**

Have you ever jiggled like a sea jelly? Come explore the Pacific Ocean in search of these rainbows of the sea. Learn all about these squishy creatures and even make one to take home.

### **PP PUFFINS AND PALS**

**THURSDAY, DECEMBER 16 | 2:30-4:30 p.m.**

Puffins are amazing seabirds that not only use their wings to fly, but also to swim! Join us as we "zoom in" on puffins and other seabirds to find out what makes them so special.

### **PP "O" IS FOR OTTER**

**WEDNESDAY, JANUARY 12 | 2:30-4:30 p.m.**

Find out how a sea otter spends its day, both above and below the water's surface. Discover what tools they use to eat, what keeps them warm, and why their teeth are sometimes purple.

### **PP COLORFUL CORALS**

**THURSDAY, FEBRUARY 17 | 3:00-5:00 p.m.**

Join us as we discover the undersea city of the coral reef. Learn about the busy residents that make their home in the cracks and crevices of the reef. And see how colorful both a reef and its inhabitants can be.

**COST** | \$19/member | \$24/non-member

does not include Aquarium admission

**AGES** | 4-5 years

**RSVP** | (562) 951-1630



## OTHER CLASSES

### **OC UNDER THE SEA SHAPES**

**AVAILABLE BY RESERVATION ONLY**

The ocean is full of incredible animals and vibrant colors. In this interactive educator- and video-led program, children will match ocean animals, such as sharks and sea anemones, to their shapes. This exciting program is designed especially for preschool and daycare groups.

**COST** | \$9/member or non-member (March-June)

\$7.50/member or non-member (July-February)

**AGES** | 4-5 years | plus one free adult chaperone per 10 children

**LENGTH** | 45 minutes

**GROUP SIZE** | 20 student minimum

**RSVP** | (562) 951-1630

### **OC SEA LIFE STROLL**

**TUESDAY, OCT. 19 or WEDNESDAY, JAN. 26  
8:30-9:30 a.m.**

View the Aquarium before it opens! Bring your child in a stroller for a close-up look at our exhibits. This class features a personalized Aquarium tour designed with your toddler in mind.

**COST** | ADULT-CHILD PAIR: \$14/member

\$20/non-member

EXTRA PERSON: \$10/person, includes  
Aquarium admission

**AGES** | toddler, plus adult chaperone

**RSVP** | (562) 951-1630



# SEAFOOD FOR THE FUTURE EXPANDS

Seafood for the Future is a seafood advisory and promotional program that encourages healthy and responsible seafood choices.

**T**HE AQUARIUM'S sustainable seafood program, Seafood for the Future, has expanded its reach throughout Southern California. Since its inception in 2009 Seafood for the Future has grown to more than 50 partners, including some of our region's top restaurants.

Seafood for the Future is a seafood advisory and promotional program that encourages healthy and responsible seafood choices. The program is designed to make it easy for consumers. Just look for the Seafood for the Future logo next to menu items at the following participating restaurants and caterers. These items have been reviewed and approved by our Seafood for the Future staff as healthly for the environment and you.

Every time you purchase a sustainable seafood choice, you will receive a free ticket to the Aquarium. And by patronizing and supporting those restaurants that serve well-managed seafood, you are creating positive incentives for the marketplace to produce and serve even more well-managed options.

For more information on the program or the full list of partners, visit [seafoodforthefuture.org](http://seafoodforthefuture.org).

Funded by:



## Participating restaurants and caterers:

**SAVOR...Long Beach**  
[smgcatering.com](http://smgcatering.com)

**Fuego Long Beach**  
[fuegolongbeach.com](http://fuegolongbeach.com)

**The Lido Deck**  
[thelidodeckrestaurant.com](http://thelidodeckrestaurant.com)

**Nook Bistro**  
[nookbistro.com](http://nookbistro.com)

**Michael's on Naples**  
[michaelsonnaples.com](http://michaelsonnaples.com)

**Providence Restaurant**  
[providencela.com](http://providencela.com)

**Malibu Fish Grill**  
[malibufishgrill.com](http://malibufishgrill.com)

**Eco Caters**  
[ecocaters.com](http://ecocaters.com)

**Andrei's Restaurant**  
[andreisrestaurant.com](http://andreisrestaurant.com)

**Pace**  
[peaceinthecanyon.com](http://peaceinthecanyon.com)

**Delius Restaurant**  
[deliusrestaurant.com](http://deliusrestaurant.com)

**Original Fish Company**  
[originalfishcompany.com](http://originalfishcompany.com)

**Lucques Restaurant**  
[lucques.com](http://lucques.com)

**California Club**  
[californiaclub.org](http://californiaclub.org)

**Renaissance Long Beach Hotel**  
[marriott.com/hotels/hotel-information/restaurant/lgbrrn-renaissance-long-beach-hotel/](http://marriott.com/hotels/hotel-information/restaurant/lgbrrn-renaissance-long-beach-hotel/)

**Hillcrest Country Club**  
(310) 553-8911

**Sip Restaurant and Lounge**  
[siplongbeach.com](http://siplongbeach.com)

**Village Idiot**  
[villageidiota.com](http://villageidiota.com)

**Nino's Long Beach**  
[ninoslongbeach.com](http://ninoslongbeach.com)

**Walt's Wharf**  
[waltswarf.com](http://waltswarf.com)

**Parker's Lighthouse**  
[parkerslighthouse.com](http://parkerslighthouse.com)

**Sorrento Grille**  
[sorrento-grille.com](http://sorrento-grille.com)

**Gladstone's Long Beach**  
[gladstoneslongbeach.com](http://gladstoneslongbeach.com)

**Haven Gastro Pub**  
[havengastropub.com](http://havengastropub.com)

**McKenna's on the Bay**  
[mckennasonthebay.com](http://mckennasonthebay.com)

**Sea Rocket Bistro**  
[searocketbistro.com](http://searocketbistro.com)

**The Factory**  
[thefactorylongbeach.com](http://thefactorylongbeach.com)

**San Diego Marriott Hotel & Marina**  
[marriott.com/hotels/travel/sandt-san-diego-marriott-hotel-and-marina/](http://marriott.com/hotels/travel/sandt-san-diego-marriott-hotel-and-marina/)

**Primal Alchemy**  
[primalalchemy.com](http://primalalchemy.com)

**606 Congress**  
[606congress.com](http://606congress.com)

**The Sky Room**  
[theskyroom.com/new/theskyroom/](http://theskyroom.com/new/theskyroom/)

**Orange County Mining Company**  
[orangecountyminingco.com](http://orangecountyminingco.com)

**Kavikas**  
[kavikas.com](http://kavikas.com)

**Long Beach Fish Grill**  
[longbeachfishgrill.com](http://longbeachfishgrill.com)

Seafood for the Future is funded by the Pacific Life Foundation. SAVOR...Long Beach is a founding partner.

# Adopt an Animal for the Holidays!



ADOPT ONLINE [www.aquariumofpacific.org/adopt](http://www.aquariumofpacific.org/adopt)  
OR BY PHONE 562-437-FISH(3474)

Looking for the perfect gift for all of the  
people on your holiday list this season?

With the Adopt-an-Animal program  
you can take care of all of your holiday  
shopping and help feed and take care of  
our animal residents at the same time!

All Animal Adoptions include a certificate, photo,  
animal fact sheet, and are tax deductible. When you  
adopt at the \$50.00 level or higher, you will also  
receive a plush toy of your adopted animal!



ANIMAL ADOPTIONS START  
AS LOW AS \$10.00!

# Be a Water-Use Expert!

**F**IND OUT HOW MUCH WATER YOU AND YOUR FAMILY USE EACH DAY. Answer the questions below. Then multiply the number of times you have done each activity by the number of gallons it used. Finally, add up the last column to see how much water you used today.

Now, pledge to be a water-use expert. Think of things you and your family can do to reduce the water you use each day. Then try them out, fill out the questionnaire again, and see how much water you saved. Remember even little changes can add up over time to make a big difference! Be sure to encourage friends to do the same.

## WATER FACTS

- Believe it or not, over 70% of planet Earth is covered by water.
- 97% of the Earth's water is saltwater and only 3% is freshwater.
- 2% of our freshwater supply is locked away in polar ice caps and remains out of our reach. That leaves 1% of all the water in the world for billions of people to share. Think of some ways that you can save water.

Answer the questions below, and see how much water you use!

Questions	Write Your Answers in the Spaces Below & Multiply by the Given Rates	Gallons I Used
How many times have you flushed a toilet today?	_____ flushes (x2 gallons/flush)	= _____
How many times have you used a washing machine today?	_____ washes (x45 gallons/wash)	= _____
How many times have you used a dishwasher today?	_____ washes (x9 gallons/wash)	= _____
How many baths have you taken today?	_____ baths (x24 gallons/bath)	= _____
How many minutes have you showered today?	_____ minutes (x7 gallons/minute)	= _____
How many minutes have you left a faucet on today?	_____ minutes (x1 gallons/minute)	= _____
How many 8 oz glasses of water have you consumed today?	_____ glasses (x0.32 gallons/glass)	= _____

Total Gallons of Water I Used Today = \_\_\_\_\_

I, \_\_\_\_\_, vow to protect our limited supply of freshwater by being water wise in all that I do. I will use less water and share how to use less water with my friends and family. I will also explain to them why it is important to save water.

(SIGNATURE)

(DATE)

## WATER USE EXPERT



Cut along the dashed lines to remove your official Water Expert badge.

## Fishing for KNOWLEDGE! ? ? ?

1. A \_\_\_\_\_ is a place where water meets land and where unique plants grow, protecting the coast and providing shelter and food for animals.
2. Although about 70% of Earth is covered in water, only \_\_\_\_% of this water is fresh water for billions of people to share.
3. One way to save water is to grow \_\_\_\_\_ plants, ones that are originally from the region where you live, in your family's yard.

### Last Issue's Questions and Answers:

1. To camouflage their babies and stop them from floating away, sea otters wrap their babies in kelp.
2. Sea otters are marine mammals with a thick layer of fur instead of blubber to keep them warm.
3. Sea otters typically eat sea urchins, which are high in energy and healthiest for them to eat.

### BUFFLEHEAD

*Bucephala albeola*



SHOREBIRD SANCTUARY

### WEST COAST SEA NETTLE

*Chrysaora fuscescens*



NORTHERN PACIFIC GALLERY

### DOUGLAS IRIS

*Iris douglasiana*



EARTH-FRIENDLY GARDEN

## BUFFLEHEAD

*Bucephala albeola*



### PHYSICAL CHARACTERISTICS

Buffleheads are North America's smallest diving duck. They have a large white head ringed with thick black feathers, black wings, and a white belly. During mating season, the male's head is dark green and the neck is purple. Females are smaller with a light brown color and white wings.

### FUN FACT

Buffleheads are one of the quickest flying waterfowls, reaching speeds of 48 mph.

### HABITAT

During breeding season, Buffleheads are found from central Alaska to Quebec, Canada, to Wyoming, Oregon, and Northern California. They spend winters along the West Coast from Alaska to Mexico, along the East Coast from Nova Scotia to Florida, and inland in the south in bays and inlets.

### DIET

During breeding season, they eat young insects and small invertebrates. In winter they eat small shrimp, crabs, clams, and snails.

## WEST COAST SEA NETTLE

*Chrysaora fuscescens*



### PHYSICAL CHARACTERISTICS

The West Coast sea nettle has a bright orange bell fading to a dusky, deep orange at the edges with pink and white stinging tentacles.

### FUN FACT

Sea jellies can flourish in water with lots of chemical runoff from the land. Therefore, too many jellies in a coastal area can be a sign of declining ocean health.

### HABITAT

They are found along the coasts of California and Oregon.

### DIET

They will eat any marine animal that cannot escape their stinging tentacles, typically small fish and plankton.

## DOUGLAS IRIS

*Iris douglasiana*



### PHYSICAL CHARACTERISTICS

The Douglas iris is an evergreen perennial. The blades are long and wide. In the spring it blooms a lavender flower. It is drought tolerant.

### FUN FACT

This plant can help save water in California. Using native plants can leave water available for other uses.

### HABITAT

It is native to the Central and Southern California coasts and can be found inland in sandy soil.

### DIET

The Douglas iris photosynthesizes, using energy from the sun, carbon dioxide in the air, and water to make its own food.

## Member Specials



# Dive in!

 Let the Aquarium of the Pacific turn your next special event into a night to remember. Available for unique evening events, ranging from a casual reception to a formal sit-down dinner. Shark Lagoon and Cafe Scuba are also available for early evening events.

For more information call **(562) 951-1663** or visit [aquariumofpacific.org](http://aquariumofpacific.org).



**SAVOR...**  
Long Beach

*Aquarium  
of the Pacific*

[aquariumofpacific.org](http://aquariumofpacific.org) 562-590-3100 • 100 AQUARIUM WAY LONG BEACH, CA 90802

 AQUARIUM OF THE PACIFIC

## SAVE 20% this fall on all merchandise!

Present your membership card along with this coupon to receive an additional 10% discount in conjunction with your member discount, for a total of 20% off merchandise in Pacific Collections and the Shark Shack.

MEMBERS-ONLY  
SPECIAL

This coupon is valid through 02/28/11 inside Pacific Collections and the Shark Shack. Valid as a one-time offer. Cannot be combined with any other offer. No cash value. Restrictions may apply.

N-0211-A



# THE MOLINA ANIMAL CARE CENTER IN ACTION

Sea otter Brook receives her annual physical examination

**S**INCE THE OPENING of the new Molina Animal Care Center several months ago, the Aquarium's husbandry staff has performed a variety of procedures on many of our animals. We x-rayed our falcon to check on a previous wing injury. In addition, he received a beak and nail trim. We performed a routine quarantine and new animal physical on a Killdeer shorebird, along with numerous other physicals. Most recently the Aquarium's husbandry staff performed an annual exam on Brook the sea otter.

Before the exam took place several preparations were necessary to maintain the safety of the animal and husbandry staff. First, Brook was anesthetized and then ice-packs were gently placed around her to help maintain the correct body temperature. Sea otters have the densest fur of any animal on the planet to stay warm in their natural habitat, so it was important to keep her body cool while outside her temperature-controlled exhibit. Just as a surgeon monitors their patient, Aquarium Veterinarian Dr. Lance Adams carefully watched Brook's temperature, blood pressure, heart-rate, and oxygen levels throughout the procedure.

The physical involved checking all her joints for mobility, inserting a hormone implant to maintain birth control, and a teeth cleaning performed by Veterinary Technician Colleen McLaughlin. It may seem strange to provide birth control to an

otter; however, all the Aquarium's otters are overseen by the U.S. Fish and Wildlife and providing birth control is part of their guidelines. The teeth cleaning was necessary to prevent gum and other diseases that could threaten the otter's health.

---

*After the examination Brook was determined to be a healthy 13-year-old otter. She was carefully put back in her transport crate and given a reversal drug to wake up.*

---

Husbandry staff members monitored her closely to ensure a full recovery. After a long day Brook enjoyed a nice lunch consisting of clam, shrimp, squid, and a white fish called hoki. Otters in the wild typically live 10-15 years, but thanks to facilities such as our new state-of-the-art Molina Animal Care Center, regular examinations, and our caring professionals, the Aquarium's otters can live 18-25 years, nearly double their average life span.

# FUNDRAISING HIGHLIGHTS

The Aquarium of the Pacific relies on support from individuals, corporations, foundations, and government partners to support its mission with contributions to the operating budget or to a diverse range of projects.

## ■ **Honda Annual Sponsorship**

The Aquarium's largest corporate sponsor, American Honda Motor Co., Inc., continued their support with a donation of \$360,000 this past spring. Their support of the Aquarium's mission-driven programs allows for continued high-quality education services to our community and focused conservation initiatives that keep science and sustainability at the forefront of the Aquarium's daily activities.

## ■ **Ahmanson Foundation Supports Molina Animal Care Center**

Sponsors of the new Molina Animal Care Center's interactive exhibit kiosks, the Ahmanson Foundation grant of \$250,000 now provides unprecedented educational opportunities for visitors to experience close-up interaction with our animal care staff and the procedures and practices of aquatic veterinary medicine.

## ■ **The William Randolph Hearst Foundations Gives to Education Fund**

The Aquarium received its first grant from the William Randolph Hearst Foundations for \$50,000 in support of the Education Fund. This grant supports the entire range of educational opportunities and outreach programs offered to more than 200,000 students, teachers, and community members annually.

## ■ **Thomas & Dorothy Leavey Foundation Provides Grant to Education Fund**

The Aquarium is pleased to begin a new partnership with the Thomas & Dorothy Leavey Foundation. Its \$25,000 award helps underwrite the work of the Aquarium's professional education staff and all the programming that is at the core of the Aquarium's mission, including K-12 inquiry-based programs, standards-based curricula development, and teacher training.

## ■ **Dwight Stuart Youth Fund Supports Local Education**

Supporters of the Aquarium's Cesar Chavez Elementary School Partnership, the Dwight Stuart Youth Fund has granted \$25,000 toward the new RISEabove program. Furthering our reach to underserved students in Long Beach, RISEabove will enhance and strengthen science education at Chavez as well as Washington Middle School.

## ■ **Target Provides Grant to Scholarship Fund**

Target continued their support of local Title I schools by awarding \$50,000 for the 2010-11 school year. Disadvantaged students throughout greater Los Angeles will be given the opportunity to take a field trip, free of charge, to the Aquarium. Along with participating in one of our interactive classroom or theater programs, students can explore and learn about the inhabitants of the Pacific Ocean.

## ■ **BCM Foundation Supports Student Scholarships**

The BCM Foundation granted \$30,000 to the Aquarium Scholarship Fund to provide opportunities for students from the city of Whittier to visit the Aquarium this year. This grant is especially timely as schools continue to experience budget cuts and are forced to cancel field trips.

# AQUARIUM ACCOLADES

The Aquarium's Gala raised over \$270,000 while celebrating honorees Janet and Jerry Zucker. The Aquarium also honors Alec Loorz and George Briand for outstanding community service.



## 2010 Ocean Conservation Awards

Our 2010 Ocean Conservation Awards Gala was a success by raising \$270,000 for the Aquarium, while bringing together 350 guests to celebrate the union of arts, science, and technology. The honorees were producer Janet and writer/director Jerry Zucker. They are vice chairs of The Science & Entertainment Exchange, a program for the entertainment industry that translates advances in scientific understanding into forms that engage, educate, and empower the public.



### Alec Loorz | Heritage Award

Alec Loorz was presented a Heritage Award at our Dia del Niño Festival. Loorz founded Kids vs. Global Warming, a non-profit organization that teaches kids about global warming and empowers them to take action. He founded the organization when he was 12 years old after watching Al Gore's documentary *An Inconvenient Truth*. Feeling the weight of the global situation and sensing that he could make a difference, Loorz felt compelled to tell other kids about the problems we are facing. He created a presentation made specifically for youth that is full of videos, animation, easy-to-understand science, and motivation for kids from kindergarten to college. He gave over 30 global-warming presentations and was invited by Al Gore to be trained with The Climate Project in October of 2008. He is now the youngest trained presenter with The Climate Project. Loorz is 15 and attends El Camino High School in Ventura, California.



### George Briand | Heritage Award

George Briand has been the community organizer for Costa Mesa's Marshallese Community for 29 years. He is a founding member of the Marshallese Club, Jake Jebol Eo Club, and served as its president three terms. He participated in the formation of the Pacific Islander Community Council in Los Angeles in 1991 and served on its board for several terms. He is a founding member and treasurer for the Pacific Islander Health partnership. Briand's passion is to work with people. He is currently working to educate Pacific Islander men, particularly Marshallese men, about colorectal cancer. He has chosen to focus on cancer, especially colorectal cancer, because almost all the members of the Marshallese community have little or no knowledge on this type of cancer, what causes it, how to prevent it, and how to access the healthcare system. Briand is pastor of the Assembly of God Marshallese Christian Center in Costa Mesa. He was presented a Heritage Award at our Pacific Islander Festival.

Pictured: Aquarium President and CEO Jerry R. Schubel; gala committee members Patricia Wang and Michelle Molina; producer Janet Zucker; writer/director Jerry Zucker; Aquarium VP of Development Nancy Weintraub; and gala committee members Gail Engvall, Charlotte Ginsburg, and Denise Wynn.

Pictured: Kids vs. Global Warming founder Alec Loorz and Aquarium President and CEO Jerry. R. Schubel

Pictured: Honoree George Briand and Aquarium VP of Development Nancy Weintraub



## EXECUTIVE OFFICERS

**DR. JERRY R. SCHUBEL**  
PRESIDENT AND CEO

**MS. BARBARA LONG**  
CORPORATE SECRETARY

## BOARD OF DIRECTORS

**MR. JAMES M. BRESLAUER**

**MR. HOWARD CHAMBERS**

**MR. STEPHEN CONLEY**

**MR. CRAIG COONING**

**MR. EDWIN FEO**

**MR. JOHN FIELDER**

**MS. JENNIFER HAGLE**  
BOARD SECRETARY

**MR. JAMES C. HANKLA**

**MR. ROY HEARREAN**

**MR. RUSSELL T. HILL**  
VICE CHAIRMAN

**MR. SAMUEL KING**

**MR. BERT LEVY**

**MR. STEVEN MAYER**

**MS. JANICE MAZYCK**

**MR. JOHN MOLINA**

**DR. J. MARIO MOLINA**  
CHAIRMAN

**MR. STEPHEN OLSON**

**MR. DOUGLAS OTTO**

**MS. LYNNE M. PRESLO**

**MR. CHRISTOPHER ROMMEL**

**DR. JERRY R. SCHUBEL**

**MR. MICHAEL SONDERMANN**

**MR. MARVIN J. SUOMI**

**MR. PETER TONG**

**MR. EIISUKE TSUYUZAKI**

**MR. THOMAS TURNER**

**MS. DENISE WYNN**

**MR. STEPHEN YOUNG**

[WWW.AQUARIUMOFPACIFIC.ORG](http://WWW.AQUARIUMOFPACIFIC.ORG)

# Volunteer at the Aquarium

Volunteering is an integral part of the tapestry of life. If you love the Aquarium, why not volunteer?

It's fun, it's rewarding, and as a non-profit organization, we depend on our volunteers to perform a myriad of important responsibilities. Our volunteers receive not only the experience of a lifetime, but also ongoing education about our marine animals, participation in special events, discounts at our restaurants and store, discounts on tickets, free tickets for family and friends (awarded for hours of completed service), and much more!

To find out more, visit <http://www.aquariumofpacific.org/volunteer/>



## Give the Gift of Membership

**NEW MEMBER BENEFIT:** Active Aquarium of the Pacific Members can now purchase gift memberships for 20% off!\*



AT THE AQUARIUM Guest Information Desk  
PURCHASE BY PHONE 562-437-FISH(3474)

Now you can take care of everyone on your holiday shopping list, save money, and help protect the ocean all at the same time!!

\*Some restrictions apply. Not valid on Pacific Circle



# AQUARIUM OPENS NEW EARTH-FRIENDLY GARDEN

California native and drought resistant plants plus drip irrigation add up to water savings.

**T**HE AQUARIUM OF THE PACIFIC opened a 4,700 square-foot Earth-Friendly Garden on its front lawn in April. Illustrating part of the solution to Southern California's ongoing water shortage, the garden features California native and drought-resistant plants, as well as a water efficient irrigation system. The garden was made possible by grant funding from the United States Bureau of Reclamation and a partnership with the Long Beach Water Department.

If you have recently been hiking Southern California trails or strolling through some neighborhoods, you will recognize local favorites among the 33 species in the garden. Varieties of succulents, agave, sages, and aloe are some of the more common plants. Plant groupings are arranged in informal swathes, complimenting the Aquarium's existing architecture and providing visual interest from all sides of the garden.

Additionally, plants have been selected to provide interesting contrast in foliage on an annual basis. Some flowering varieties such as lantana and Dusty Miller will provide year-round blooms. Other varieties with seasonal bloom times such as Sunset Ceanothus (spring to early summer) or Autumn Joy Stonecrop (late summer to winter) are intermingled. The garden will always be in bloom and be in a state of transition any time of the year.

In order to further minimize the garden's water consumption, a drip irrigation system connected to a weather-based irrigation controller has been installed. Drip irrigation involves tubes releasing water by a slow, constant drip at set intervals. This technique is proven to reduce water usage by at least 50% when compared to traditional sprinkler systems. Drip irrigation benefits the plants as well, by minimizing soil erosion, minimizing soil nutrient loss, minimizing weeds, and reduced leaching. Plants are also less susceptible to disease if their leaves are not exposed to constant

wet and dry times, which is unavoidable with the conventional sprinkler method. The weather-based irrigation controller customizes the watering schedule automatically based on the local conditions, allowing you to save even more water.

Drip irrigation systems and weather-based irrigation controllers are available for home landscapes. Many home-improvement and garden centers now carry the controller and drip hoses that attach to the average garden hose tap. Rebates often are available—just check your local water department's website.

---

*"The goal of the project is to show that creating a drought-tolerant garden is easy, beautiful, and functional. We wanted to inspire people, and we made sure that all the plants are easy to grow and easy to find at local retailers with garden centers and nurseries," said Barbara Long, vice president of government relations and special projects.*

---

The Earth-Friendly Garden has incorporated ground covers, flowering plants that attract butterflies, herbs, and tall grasses. Going drought-resistant does not have to mean a front yard full of sand and cacti, but is rather creating a mini eco-system of low-maintenance plants that thrive in your climate naturally. Conserving valuable drinking water is something we can all do by making informed landscaping choices and implementing water saving techniques. For more information, visit our online watershed exhibit at [www.aquariumofpacific.org/ourwatersheds\\_site/](http://www.aquariumofpacific.org/ourwatersheds_site/).



AQUARIUM  
OF THE PACIFIC®  
A non-profit institution

100 Aquarium Way  
Long Beach, CA 90802

©2010 Aquarium of the Pacific All Rights Reserved  
Free for members | \$3.95 for non-members

Non-Profit Org.  
U.S. Postage  
**PAID**  
Long Beach, CA  
Permit No. 233

**OPEN BAR  
ALL EVENING**

OVER 30 LOCAL  
RESTAURANTS

IMPROVED "GO FISH"  
OPPORTUNITY GAME

**\$500 CASH  
RAFFLE**

LIVE MUSIC  
AND DANCING

*Benefitting the Aquarium of the Pacific*

# SEA FARE

**SATURDAY, OCTOBER 16, 2010**

7:00 p.m. to 11:00 p.m.

## Unique Auction Items

- New York Home
- Suite at LA Kings Hockey Game
- Christmas Market Cruise
- Down the Rhine
- Private Gourmet Dinner for 10
- Dive at the Aquarium
- Skydiving in Santa Barbara

## Participating Restaurants

- \* Bubba Gump Shrimp Co.
- \* Buono's Authentic Pizzeria
- \* Delius Restaurant
- \* Dinner Mojo
- \* Forbidden City
- \* Four Paws and a Tail Wine
- \* Fuego at the Maya
- \* Gladstone's Long Beach
- \* Haven Gastropub
- \* Islands Fine Burgers & Drinks
- \* Kavikas
- \* King's Fish House
- \* Mai Tai Bar
- \* McKenna's on the Bay
- \* Naja Tea
- \* P.F. Chang's
- \* Parkers' Lighthouse
- \* Rossmoor Pastries
- \* SAVOR...Long Beach
- \* simply sweet cakery
- \* SIP at the Renaissance Hotel
- \* Stone Brewery
- \* Super Mex
- \* Taco Beach Cantina
- \* Temecula Olive Oil Company
- \* The Auld Dubliner Irish Pub
- \* The Bruery
- \* The Factory
- \* The Sky Room
- \* Walt's Wharf

## EVENT SPONSORS

 <b>GAZETTE NEWSPAPERS</b> GOLDEN GAZETTE SPORTS GAZETTE DOWNTOWN GAZETTE	 <b>VIKING</b> <b>RIVER CRUISES</b> <i>Exploring the World in Comfort™</i>	 <b>SEAFOOD FOR THE FUTURE</b>	 <b>SAVOR...Long Beach</b>
---	---	---	-------------------------------

Age of Aquariums | Aon Construction Services Group  
Esther S. Chao | Doug Otto and Freda Hinsche Otto

**TICKETS ARE \$100**

Call (562) 437-FISH (3474) or visit us online at  
[www.aquariumofpacific.org/seafare](http://www.aquariumofpacific.org/seafare) to order your tickets today!

**AQUARIUM  
OF THE PACIFIC**  
A non-profit institution

100 Aquarium Way,  
Long Beach, CA 90802