

PACIFIC
Currents

Aquarium of the Pacific

WINTER 2018



HOW TO
ADAPT TO A
**CHANGING
CLIMATE**



Weather ON STEROIDS

Visual artists were paired with climate scientists to create artwork examining climate change and our relationship with nature.

CLIMATE CHANGE SCIENCE is notoriously difficult to communicate. Not only is it a relatively complex topic, but also it is shrouded in a sense that we are doomed to suffer its consequences. The growing urgency around the issue of climate change and what we must do to adapt to its impacts is prompting communicators and educators to look for new ways to address it. The Aquarium regularly uses the visual and performing arts to help people make an emotional connection to environmental issues. The arts help us see the world in new ways and draw us into topics we may otherwise avoid or ignore.



To show that science can serve as inspiration, the La Jolla Historical Society asked visual artists and climate scientists to collaborate for an exhibition called *Weather on Steroids: The Art of Climate Change Science*, which is on display in the Aquarium's Great Hall on the second floor through February 26, 2018. Curated by Tatiana Sizonenko with Science Consultant Alexander Gershunov, the exhibition features media from photography to sculpture. Sizonenko is a professor of art history at the University of San Diego; University of California, San Diego (UCSD); California State University, San Marcos; and Grossmont College. Gershunov is an associate research meteorologist at UCSD's Scripps Institution of Oceanography.

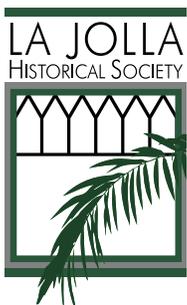
The artwork explores how weather variability affects our day-to-day lives and investigates Southern California's vulnerabil-

ity to the impacts of climate change. The pieces suggest such concepts as atmospheric rivers, floods, greenhouse gas emissions in the atmosphere, increased fire danger, and our sources of energy. The materials used also reflect human interaction with nature, such as recovered beach glass, cast Antarctic earth, and even a glass orb used by Charles David Keeling to collect air at the Mauna Loa Observatory in the 1950s. Dr. Keeling's measurements showed the first significant evidence of rapidly increasing carbon dioxide levels in the atmosphere.

The scientists who participated in the project include several from Scripps, including Ralph Keeling (Dr. Keeling's son), renowned ocean explorer Walter Munk, and Richard Somerville, a leading climate scientist who has contributed to other Aquarium programs.



Top: Three mosaics by Marcela Paz Luna Rossel, *Ablaze*, *Dissolution*, and *Dust*. Bottom: *Tipping Point Climate Change*, a sculpture by Lilleane Peebles.



Weather on Steroids: the Art of Climate Change Science is organized by the La Jolla Historical Society. Major support for this exhibition provided by Climate Education Partners (CEP), which is funded by the National Science Foundation (NSF)* and by The Ray Thomas Edwards Foundation, Donald G. Yeckel, Chairman. Additional support provided by IS Architecture, the Reuben H. Fleet Foundation, Samuel I. & John Henry Fox Foundation, Florence Riford Fund of the San Diego Foundation, Walter and Mary Munk, Jeffrey and Joy Kirsch, and ArtWorks San Diego.

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Letter from the CEO

Dear Members,



THANK YOU for your ongoing support as the construction continues on the Aquarium's new wing, Pacific Visions. This winter is an important period for the project, with several significant milestones. The concrete slab for the new wing was poured in November, and the placement of structural steel began in December and will continue through February. While the location

and layout of several Aquarium facilities have changed, the visitor experience and events schedule are unaffected by the construction. In fact, we will be celebrating our twentieth anniversary this year with numerous events and surprises.

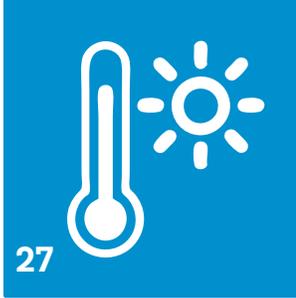
I encourage you to visit, enjoy our many events and programs, and watch as progress is made on the construction. Visitors can see the construction activities through portholes located in several locations in the fence. To develop the story line of the Pacific Visions visitor experience, the Aquarium has formed a scientific advisory board to work with staff, Board of Directors, and media company Cortina Productions. The advisory board includes scientists specializing in anthropology, environmental sustainability, marine science, and paleoecology. The Aquarium has asked these experts to bring the latest research to bear in thinking about how we can inspire visitors to imagine the future of our planet and what we need to do to create a sustainable future.

The Pacific Visions experience will begin in an immersive art gallery. Next, people will enter an orientation gallery that will establish our connections with the ocean and set the stage for the theater experience. In the Honda Pacific Visions Theater, audience members will be immersed by sights, sounds, and even smells of our ocean planet. They will have the unique opportunity to participate in the story through an interactive feedback system. After the show, the audience will exit the theater and enter the changing exhibit gallery, which will feature live animal exhibits, videos, and interactive displays inviting visitors to make their own personal commitments to creating a sustainable future.

Pacific Visions is slated to open to the public in spring 2019. You can learn more about the architecture, project advisors, exhibit spaces, and how you can get involved at pacificvisions.org. In the meantime, please join us in celebrating our twentieth anniversary year. Look for more details in the spring issue.

Sincerely,

Jerry R. Schubel



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Pacific Currents is published for members of the Aquarium of the Pacific. Please send your comments to our editorial staff at pacificcurrents@lbaop.org.

Our Mission: To instill a sense of wonder, respect, and stewardship for the Pacific Ocean, its inhabitants, and ecosystems.

Our Vision: To create an aquarium dedicated to conserving and building natural capital (nature and nature's services) by building social capital (the interactions between and among peoples).

Pacific Currents Staff: Editor/Writer: Claire Atkinson | Copy Editor: Cecile Fisher | Designer: Andrew Reitsma | Contributing Writers: Erin English, Lindsay Yates, and Alana Garibaldi.

Aquarium Hours: Open daily from 9:00 a.m.-6:00 p.m. except December 25.

Membership Office Hours: 8:00 a.m.-5:30 p.m. daily

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Private Event Info 951-1663
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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.



Meet Our New Sea Lion, Cain

He joins the other pinnipeds in the Seal and Sea Lion Habitat.

THE AQUARIUM WELCOMED a new California sea lion (*Zalophus californianus*) named Cain this winter. Cain came to Long Beach from another Association of Zoos and Aquariums-accredited aquarium. He is three years old.

After he was transported to the Aquarium in December, Cain began the quarantine period that all new Aquarium animals undergo. He will join the

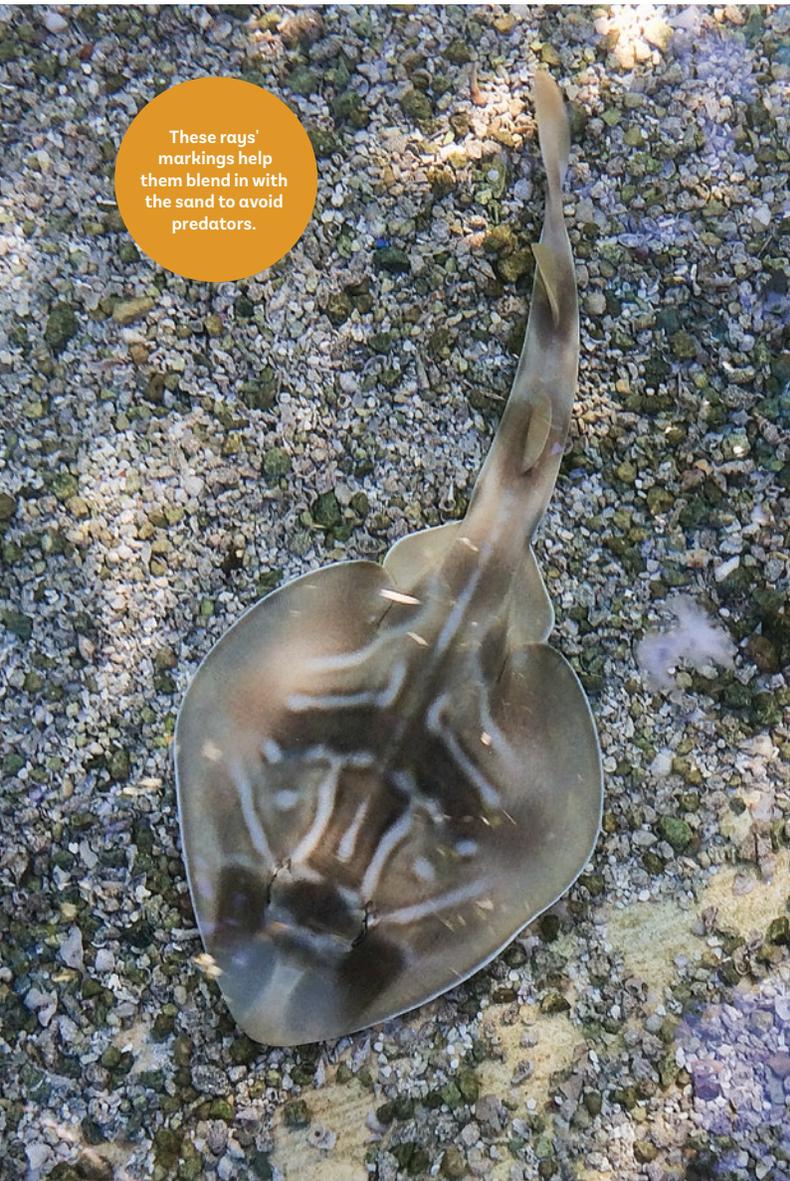
Cain arrived from another AZA-accredited facility.

other sea lions in the Seal and Sea Lion Habitat by the end of January.

Sea lions are typically found in temperate or tropical waters from British Columbia to Baja California. Adult males may grow to over 7 feet long and weigh up to 860 pounds. They feed on fish and squid, swallowing their food whole.

ROBIN FRIGGS

Cain is a three-year-old male. Sea lions have a lifespan of around twenty years.



These rays' markings help them blend in with the sand to avoid predators.

CLAIRE ATKINSON

New Ray Species in Shark Lagoon

Look for the fiddler rays in the smaller touch pool at Shark Lagoon.

SHARK LAGOON IS NOW HOME to several small fiddler rays (*Trygonorrhina fasciata*), a species native to Australia. These rays spend their time hiding in the sand or scavenging for food in depths of up to 590 feet. They use their small, blunt teeth to feed on their prey, including shellfish and crabs. They can grow up to 50 inches long and weigh up to about 15 pounds. Their coloration and markings provide camouflage from predators, which include larger fishes and sharks. Fiddler rays are related to guitarfish, but their pectoral fins are shorter and rounder.

The male penguin chick born at the Aquarium this past summer has been named Gatz.

His name was chosen by his caretakers and was one of many submitted through our Adopt an Animal program. Gatz joined the other penguins in the June Keyes Penguin Habitat in August of last year.



ROBIN FRIGGS

Baby Flamboyant Cuttlefish On View

Their color-changing ability and unusual appearance make them a visitor favorite.

SEVEN FLAMBOYANT CUTTLEFISH (*Metasepia pfefferi*) hatched at the Aquarium in early October and are now on display in the Jewels exhibits in the Tropical Pacific Gallery. The Aquarium has bred this species before, but these cuttlefish arrived from another institution as eggs. Upon hatching, they were just 6 millimeters in length.

Flamboyant cuttlefish are cephalopods related to octopuses and squid. They can be found on coral reefs in the Philippines, Indonesia, Northern Australia, and Papua New Guinea. They feed on mollusks, crustaceans like shrimp and crabs, and small fish. This species gets its name from its bright coloration, which they can rapidly change thanks to special cells in their skin. Adults reach up to 3.5 inches in size, with females larger than males.

Flamboyant cuttlefish generally “walk” along the sea floor as their primary mode of locomotion.



ROBIN RIDGES

Visit [youtube.com/aquariumofthepacific](https://www.youtube.com/aquariumofthepacific) to see some of our popular flamboyant cuttlefish videos.

Diving Birds Show Off Seasonal Plumage

Their exhibit has timed lighting to mimic seasonal changes in the birds' natural habitat.

THE DIVING BIRDS in the Aquarium's Northern Pacific Gallery are currently displaying their winter plumage. This change generally begins in October and lasts through March, varying slightly among the different species. Four diving birds species inhabit the exhibit: pigeon guillemots (*Cepphus columba*), tufted puffins (*Fratercula cirrhata*), horned puffins (*Fratercula corniculata*), and crested auklets (*Aethia cristatella*).

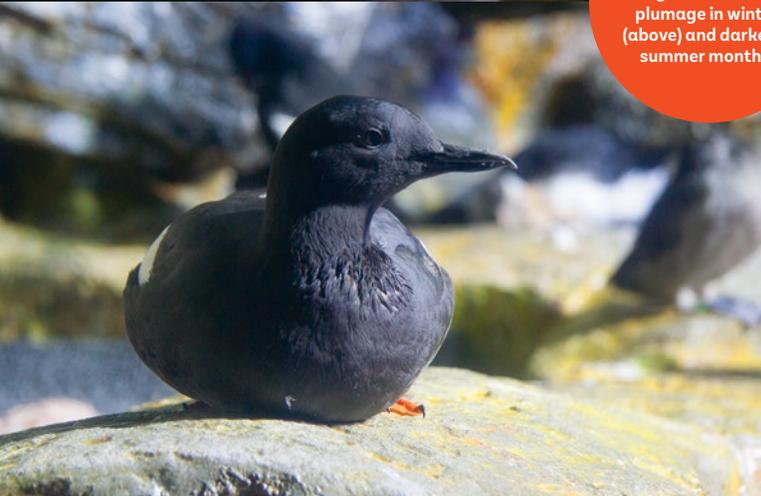
The Aquarium alters the lighting schedule for this exhibit to mimic the shorter days and lower light of winter in the birds' wild habitat. The light has a yellow hue and begins to dim earlier in the day. This change prompts the birds' coloration to change. The pigeon guillemots change from their striking black plumage with a white wing patch to being mostly white with dark speckles, and the puffins' feathers on their faces become darker.

Diving birds are specially adapted for life in the water, spending months at a time foraging at sea.



ANDREW RETISMA

The pigeon guillemots display lighter-colored plumage in winter (above) and darker in summer months.



ANDREW RETISMA



HOW TO ADAPT TO A CHANGING CLIMATE



Working together as a community is key to becoming climate resilient.

Find our booth at community events to talk with our staff about how to prepare.

What would you do to protect it?

#ResilientLB

@resilientLBAop



#ResilientLB
AQUARIUM OF THE PACIFIC



We know that Earth's climate is changing. In the future we can expect intense hurricane and wildfire seasons, prolonged droughts, and coastal flooding. What can we do?

The magnitude and complexity of climate change makes it a daunting problem for people to wrap their heads around. The doom and gloom stories we hear can chip away at our hopes of ever overcoming this challenge. But there is hope, and we have the tools we need to make a difference. It is becoming ever more apparent that this is a challenge we must tackle collectively—its scope and scale require people to come together across societal and ideological barriers to help create a better future for us all. We must start thinking about this problem in a new way.



Everyone can play an important role, from children to seniors.

What is Climate Resilience?

In recent months the term “climate resilience” has begun to enter the mainstream, popping up in the media and in messages from local city governments and institutions like the Aquarium. Climate resilience means withstanding or recovering quickly from challenging weather or climate conditions. It means having a plan in place for the kinds of situations that will arise due to climate change, such as more frequent high-heat days and other extreme weather. It means knowing what to expect and what to do when it happens so that we might succeed in being prosperous and healthy in the face of change.

Even if every country around the world decided to stop emitting greenhouse gases tomorrow, human activity has already changed our climate enough to affect our daily lives. At this point, we must continue to address the causes of climate change, but we must also prepare for its inevitable impacts. We must adapt to a warmer, changing world that presents us with such threats as poorer air quality and rising sea level.

This article was written with the assistance of Aquarium Director of Education David Bader and Education Programs Manager Alie LeBeau.



Impacts in Southern California

The impacts of climate change already being felt in Southern California are only predicted to increase in frequency and severity in coming years. We will likely see increasing numbers of high-heat days, longer and more intense periods of drought, rising sea levels and coastal flooding during storms, and poor air quality during hotter, sunnier days made worse by more frequent wildfires and ground level ozone.

Ground level ozone is created when emissions of volatile organic compounds (VOCs) and nitrogen oxides interact with heat and sunlight. VOCs come



What You Can Do

During community outreach sessions on this topic, Aquarium educators have been talking with residents and developing ideas for what people can do to build climate resilience. People will need to figure out how climate change will impact their community and how they can respond and adapt.

One way to help move that process forward is to contact city officials and urge them to recognize the impacts that will be felt in the community, residents who will be most vulnerable, and actions the city should take to prepare. Attending city council meetings and public hearings is a good way to stay on top of what local officials are doing to address climate resilience.

Another effective way for individuals to engage with this issue is to take the approach of being a good neighbor. Get to know the people who live close to you, identify those who might be most vulnerable to climate-related impacts, and make a plan to help others if and when the need arises. Our most vulnerable neighbors include the elderly and very

from sources like gas-burning engines, paints, cleaners, and insecticides. Nitrogen oxides are produced by the burning of fossil fuels, primarily motor vehicles and power plants.

These impacts threaten our infrastructure, public health, and quality of life. On top of this, the population of Los Angeles County is expected to grow by about 14 percent by 2050, which could mean more traffic on our freeways, more air pollution, and a greater need for electricity and water, all adding to both the immediate and long term effects.

young, people with disabilities, people with chronic health conditions, those who lack financial resources, and people who are socially isolated. Identify family members, friends, co-workers, neighbors, and others who might need assistance during extreme heat, storms, or other events. Encourage your neighbors to sign up to receive alerts from your city government or other agencies for local disasters or emergencies, and develop a plan for how you will respond as a neighborhood and community.

One of the simplest ways to help spread the idea of climate resilience is to talk about it with others. Use the community connections you already have, whether in a church group, parent-teacher association, neighborhood association, sports team, or other social group. You can also use your spheres of influence as a business owner or decision-maker to start conversations about climate resilience with friends, family, and colleagues. Sharing ideas about how these groups can help make a difference can lead to building climate resilience while strengthening bonds among friends and neighbors.

THREAT ACTION

HIGH-HEAT DAYS

Identify neighbors who might be affected by high-heat days, locate cooling centers nearby (community centers and libraries), work with the city to organize a tree-planting day in your neighborhood to provide more shade.

DROUGHT

Conserve water at home by replacing lawns with drought-tolerant and native plants. Encourage your neighbors to do the same. Share plants and expertise, or help to do the planting.

RISING SEA LEVELS AND FLOODING

Learn about living coastlines, and make sure storm drains in your neighborhood are clear to avoid flooding.

POOR AIR QUALITY

Drive less, take public transit, or bike. Plant trees. Exercise early in the day before smog builds, avoid outdoor work on hot afternoons, and exercise outdoors away from freeways.

How to Start the Conversation

Climate change can be a challenging topic to talk about. To make it easier, start with the basics and talk with friends and neighbors about what you love about your community and what you would be willing to do to preserve it. Start to identify how climate change will affect the things you love, from beaches and parks to historic architecture and clean air. Ask how you want your community to look in the future. Identify which parts of your community might be hit harder than others. The topic of climate change feels incrementally easier to tackle when you look at it from a practical standpoint: What can we do to be prepared? Often, the actions taken provide other benefits, including improved health, beautifying your neighborhood, increasing urban wildlife, and saving money. We get information from people we trust and people we know. Friends and family are the trusted sources we look to in making decisions in our lives.

Aquarium Programs

The Aquarium is also working to be a good neighbor in its community by providing resources and going out into the community to listen to residents' concerns and learn more about the community's needs. Look for the Aquarium's outreach booth at local events and talk to the educators about what you can do to build climate resilience. If you are a community leader or member of a community group that might be interested in hosting a climate resilience workshop, send an email to resilient@lbaop.org.

You can find the Aquarium's *Citizens' Guide to Building a Climate-Resilient Long Beach* on the website by entering citizens' guide in the search bar. While the guide focuses



The more opportunities we find to talk about climate resilience and changes we expect to see in the future, the more comfortable we will be with finding creative, community-based solutions.

Planting trees helps beautify neighborhoods, provide cooling shade, and clean the air.



on Long Beach, the concepts and climate impacts it covers apply to much of Southern California and other cities across the U.S. You can also follow the Aquarium's Twitter feed dedicated to climate resilience at twitter.com/resilientLB or visit our Climate Resilient Long Beach Page at aquariumofpacific.org/conservation/climate_resilient_long_beach.

At the Aquarium's resilience booth, you can give input on what you value about your community and pick up materials you can take with you.

Aquarium staff members Jenny Lentz, Carrie Abrahams, and Eliot Freutel participate in a local tree planting event.



* Member Events

Please join us for these select events just for our members and donors.

Member Kids Activity Nights

■ **Thursday & Friday, Feb. 1-2**
6:30 P.M.-9:00 P.M.

It's going to get wild at this year's Kids Activity Nights! Bring the family in for a jungle safari right here at the Aquarium. Your little monkeys will love the fun and educational activities, including jungle-inspired crafts, a safari scavenger hunt, and a special visit with some of our Aquarium animal friends.

- **Free for members. Member guests receive 20% off general admission.**
- **RSVP (562) 437-3474 by January 29**



May 3: Member Prom—The Roaring Twenties!

Member Prom (21+ only)

■ **Thursday, May 3**
7:00 P.M.-10:00 P.M.

In honor of our upcoming twentieth anniversary, we're getting out the glam for an evening inspired by the Roaring Twenties! Come dressed in your best to dance the night away to hit songs from across the decades. When you need a break from the dance floor, take part in one of our prom activities, enjoy a cocktail from the cash bar, or wander around the Aquarium during this adults-only night.

- **Free for members ages 21+ only. Member guests receive 20% off general admission.**
- **RSVP (562) 437-3474 by April 30**

* Special Events

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

Shark Lagoon Nights

■ **Fridays, January 19–June 8**
(except for Feb. 2, March 16 & 23, and April 13)
6:00 P.M.-9:00 P.M.

Get up close with the ocean's ultimate predators for free during Shark Lagoon Nights. Guests will have the opportunity to touch bamboo sharks, epaulette sharks, and cownose rays and see large sharks, such as sand tiger and zebra sharks in the Aquarium's Shark Lagoon. Cold beer, sodas, and snacks are available for purchase. Live music offered on select evenings.

- **Free for everyone.**

Underwater Parks Day

■ **Saturday, January 20**
9:00 A.M.-12:00 P.M.

Learn more about Southern California's network of Marine Protected Areas (MPAs). Guests will be able to learn about the commercial and recreational activities permitted. MPA stories will be told using film, lectures, and interactive exhibits. The event will also feature educational booths and activities in the Great Hall.

- **Free for members, included with general admission for non-members.**

Valentine's Day Dinner

■ **Wednesday, February 14**
7:30 P.M.-9:30 P.M.

Spoil your loved one with a one-of-a-kind Valentine's Day at the Aquarium of the Pacific. Arrive early and enjoy beverages with a harbor view at the Veranda cash bar starting at 6:30 p.m. It will be a memorable evening showcasing a unique culinary experience, a romantic setting surrounded by marine life, and stellar ambiance.

- **\$74 per member, \$84 per non-member. Limited VIP seating available in the Tropical Pacific Gallery for an additional \$20 per person.**



President's Day Weekend Late Night

■ **Sunday, February 18**
5:00 P.M.-8:00 P.M.

Enjoy a visit to the Aquarium with special extended hours and discounted admission in celebration of President's Day Weekend. The entire Aquarium will be open, except Lorikeet Forest. Watch the nighttime activities of our animals, touch a shark, and enjoy the beautiful evening lighting of the Aquarium's architecture.

- **Free for members, \$14.95 for non-members after 5:00 p.m.**

Divers Day

■ **Saturday, March 10**
9:00 A.M.-5:00 P.M.

Learn about recent advancements in diving at the Aquarium's annual Divers Day, featuring educational presentations and live dive demonstrations. The Aquarium will also host several organizations that are related to the sport and science of diving. The diving community is invited to find out about volunteer diving and other opportunities for involvement with dive-related organizations in Southern California. Divers who present valid proof of certification with their photo I.D. will receive free admission.

- **Free for members and SCUBA divers with valid proof of certification and photo I.D.**

Autism Families Night

■ **Sunday, March 11**
6:00 P.M.-9:00 P.M.

Join us for a special evening at the Aquarium exclusively for families with adults or children

For tickets and information, visit aquariumofpacific.org or call (562) 590-3100, ext. 0.

with autism. The entire Aquarium, except Lorikeet Forest, will be open until 9:00 p.m. This will be an evening when guests can enjoy the tranquility of our exhibits and meet 11,000 animals from the world's largest ocean. The Aquarium closes to the public at 6:00 p.m.

- Free for members, \$7 per non-member.

Night Dive

■ Friday, March 16
7:00 P.M.-11:00 P.M.

The Aquarium presents Night Dive, an adults-only event featuring food and drink, live performances, and other special programming for an 18-and-over crowd. Discover the Aquarium at night, and explore its galleries in a new way, with DJs and local artists creating an eclectic ambiance. Live bands take the stage in front of the Honda Blue Cavern, turning the Great Hall into Long Beach's unique music venue.

- Free for Aquarium members, \$17.95 for non-members
- Open to ages 18+ only

Noche de Estrellas

■ Friday, March 23
6:30 P.M.-10:30 P.M.

Party with the sea stars at the Aquarium's Latin-themed night, Noche de Estrellas. The Aquarium will remain open until 10:30 p.m., so you can dance to the sounds of cumbia, rock en Español, salsa, cha cha, and other Latin rhythms. Noche de Estrellas (Night of the Stars) will feature live bands, DJs, underwater dive shows, scavenger hunts with prizes, and ocean activities. Mexican cuisine, beers, and drinks will be available for purchase.

- Free for members, \$14.95 for non-members after 6:30 p.m.

Easter Breakfast

■ Sunday, April 1
8:30 A.M.-10:30 A.M.

Celebrate Easter at the Aquarium and join us for a buffet-style breakfast. Includes all day admission.

- \$40 for adult members, \$15 for child members (ages 3 to 11). \$50 per non-member adult, \$25 per non-member child.

Abilities Night

■ Sunday, April 22
6:00 P.M.-9:00 P.M.

At this exclusive event for people with disabilities, experience a tranquil evening where guests can explore the exhibits and enjoy the nighttime lighting of the Aquarium. All animal exhibits will be open with the exception of Lorikeet Forest. Capacity is limited; advance reservations are required.

- Free with RSVP
- Reserve online at aquariumofpacific.org/abilitiesnight. For groups of seven or more, call (562) 590-3100, ext. 0 to reserve.

Mother's Day Brunch

■ Sunday, May 13
9:00 A.M.-1:00 P.M.

Join us for a memorable Mother's Day Brunch at the Aquarium, and celebrate the special women in your life. Enjoy a decadent meal and explore the wonders of the Pacific Ocean as you visit over 11,000 animals. All-day Aquarium admission is included. Groups of eight or more may reserve a table.

- \$59 per member adult, \$19 per member child (3 to 11). \$69 per non-member adult, \$29 per non-member child.

* Festivals

Experience our community's diverse cultures and their connections to the ocean and environment. All festivals are free for members; member's guests receive 20% off regular admission.



January 27-28: Festival of Human Abilities

Festival of Human Abilities

■ Sat. & Sun., January 27-28
9:00 A.M.-5:00 P.M.

The Festival of Human Abilities is a celebration highlighting the creative talents and abilities of people with disabilities. This event features wheelchair dance performances, live music, signing choirs, art demonstrations, accessible SCUBA diving demonstrations, storytelling, interactive workshops, and other creative performances by people who have disabilities. Sign language interpreters will be present at all major shows, and an audio tour and Braille visitor guides are available for those who are blind.

African-American Festival

■ Sat. & Sun., February 24-25
9:00 A.M.-5:00 P.M.

Join the Aquarium of the Pacific as it hosts its fifteenth annual African-American Festival, celebrating the rich diversity of African-American and African cultures. The weekend will feature live entertainment, arts and crafts, and ethnic food. Festival performers include Mardi Gras second line dancers, hip hop and break dancers, jazz musicians, interactive drum circles, West African dancers, and storytellers.



ANDREW REITSMA

March 11: Autism Families Night provides an opportunity to see the animals in a tranquil environment.

International Children's Festival

■ **Saturday & Sunday, March 17-18**
9:00 A.M.-5:00 P.M.

The Aquarium's annual International Children's Festival is a special event for kids. Celebrating the amazing talents of children of many cultures, this festival features West African, Mexican, Pacific Islander, Cambodian, Chinese, Korean, Japanese, Persian, Irish, Slovak, and Czech dance performances. Enjoy performances by an international children's choir and martial arts demonstrations. Kids of all ages can join a percussion circle and try their hand at Japanese origami, Native American crafts, and Pacific Islander traditional children's games. The Aquarium will also honor a local youth with its annual Young Hero Award in recognition of his or her efforts to make our planet a better place.



March 17-18: International Children's Festival.

Earth Day Festival

■ **Saturday & Sunday, April 21-22**
9:00 A.M.-5:00 P.M.

Learn what you can do to help our ocean planet at the Aquarium's seventeenth annual Earth Day Celebration. Join the Aquarium for a weekend of family fun celebrating Earth Day while learning simple, everyday tips to protect our environment. Visit booths from various Earth-friendly organizations, and participate in hands-on learning demonstrations for people of all ages.

Urban Ocean Festival

■ **Saturday & Sunday, April 28-29**
9:00 A.M.-5:00 P.M.

Explore and celebrate Southern California's coast during the Aquarium's annual Urban Ocean Festival. The event will include art exhibitions, a fashion show and contest for designs using recycled materials, mural painting, poetry readings, booths, and educational activities. Urban Ocean boat cruises exploring the local coast and port complex will be available during the weekend at an additional cost.

* Guest Speakers

Lectures are free for Aquarium members, teachers, seniors age 62 and up, and students with valid ID and advanced reservations. Otherwise, tickets are \$5. All lectures are streamed live and start at 7:00 p.m. Visit aquariumofpacific.org/news/lectures.

GAZETTE NEWSPAPERS
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Thomas White | An Ethicist's View of Climate Change

■ **Tuesday, January 16**

While the topic of global climate change has been debated from scientific and political perspectives, the heat of those discussions has caused the ethical dimensions of the issue to be overlooked. No matter what the cause, the planet is warming in a way that will likely lead to serious harm to billions of people as a result of shortages of food and water, greater incidence of certain diseases, mass migrations of millions of people, threats to national security from increased risk of conventional military conflict, and likely increase in terrorism linked to extremist political movements. A fundamental, universally recognized ethical principle is that if we are able to prevent harm to others, we have a responsibility to do so. How serious is the challenge we face, and how should we respond? Dr. Thomas White will address these questions. He is the Conrad N. Hilton Chair of Business Ethics and the director of the Center for Ethics and Business at Loyola Marymount University.

J.D. Talasek | Integrating Art and Science: Shifting Perspectives to Inspire Change

■ **Thursday, January 18**

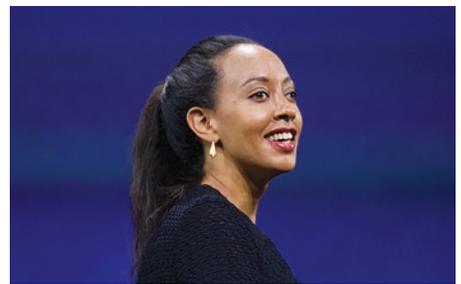
When one thinks of art and science integration, a name that comes to mind is that of Leonardo da Vinci. But today our disciplinary structures of knowledge have separated, creating distinct cultures and practices—very different from the time of Leonardo. Creating better dialogue and collaboration between art, science, engineering, medicine, and the humanities is an opportunity to challenge perspectives and inspire impactful change. In his lecture, JD Talasek will provide an overview of some of the activities occurring in the office of Cultural Programs of the National Academy of Sciences that explore the integration of art, science, and other creative inquiries. Talasek is the director of Cultural Programs of the National Academy

of Sciences. He is currently on the faculty at Johns Hopkins University in the Museum Studies Master's Program.

Haben Girma | People with Disabilities Drive Innovation

■ **Sunday, January 28**

People with disabilities represent the largest minority group, numbering one billion worldwide. Reaching a group of this scale creates value for everyone. Organizations that prioritize accessibility benefit by gaining access to a much larger user base, improving the experience for both users with disabilities and without and facilitating further innovation. The first deafblind person to graduate from Harvard Law School, Haben Girma is an advocate for equal opportunities for people with disabilities. She will share her expertise in this lecture. President Obama named her a White House Champion of Change, and *Forbes* recognized her in *Forbes 30 Under 30*. Girma travels the world consulting and giving lectures, teaching clients the benefits of fully accessible products and services. Her memoir will be published by Grand Central Publishing in 2019. Please note: This lecture will be held from 5:00 p.m. to 6:30 p.m.



January 28: Haben Girma

Brian Fagan | The Big Fish Come to Land: An Archaeologist Explores the History of Fishing

■ **Wednesday, January 31**

Author Brian Fagan will detail the million year-old history of fishing, including how fishing contributed to the first settlement of the Americas. The story continues with the building of the Egyptian pyramids, in the watery landscapes of Angkor Wat, and with albacore fishing in Tahitian waters. He will also tell the story of how the Industrial Revolution started today's crisis of the oceans. Fagan is the author of *Fishing: How the Sea Fed Civilization*, *Elixir: A History of Water and Humankind*, and *Beyond the Blue Horizon: How the Earliest Mariners Unlocked the Secrets of the Ocean*.

Dr. William Cooper | California's Water Future

Monday, February 12

Learn about California's water supply and the threats it faces now and in the future in a lecture by Dr. William Cooper. He is a professor of civil and environmental engineering and director of the Urban Water Research Center at the University of California, Irvine.

Katelyn Sullivan | Deep-Sea Exploration Aboard the Nautilus

Tuesday, February 13

Aquarium Education Coordinator Katelyn Sullivan was selected as a 2017 AltaSea Nautilus Ambassador and sailed aboard the Ocean Exploration Trust's *E/V Nautilus* as part of an expedition off the California coast last July and August. Since 2008 this program has worked with scientists, data teams, engineers, educators, and artists to gather information and offer the world a window into an ocean environment few had previously seen. Hear about Sullivan's experience working alongside Dr. Peter Girguis of Harvard University in a mission to study a methane seep habitat located off of Point Dume, California.

Peter Moyle | Floodplains: Processes and Management for Ecosystem Services

Tuesday, February 27

Peter Moyle will discuss and sign copies of his book, *Floodplains: Processes and Management for Ecosystem Services*. The book provides an overview of floodplains and their manage-

ment in temperate regions. It synthesizes decades of research on floodplain ecosystems, explaining hydrologic, geomorphic, and ecological processes and how under appropriate management these processes can provide benefits to society ranging from healthy fish populations to flood-risk reduction. Moyle is distinguished professor emeritus in the Department of Wildlife, Fish, and Conservation Biology and associate director of the Center for Watershed Sciences at the University of California, Davis.

A.G. Kawamura | Envisioning an Agricultural Renaissance: Resilient Food Systems

Tuesday, March 6

Global food systems are changing in dynamic and remarkable ways. The nexus between food, water, energy, and changing climate is forcing agriculturists to re-imagine how they will provide sustenance to a hungry world. The challenges and opportunities that are emerging with the advent of expanding knowledge, technology, and information systems are forcing us to re-think all aspects of agriculture. A.G. Kawamura will discuss the threats to food security that confront our attempts to manage life systems and resources in a sustainable manner. He will also explore expanding farmers' capacity while enhancing the predictability of their agricultural activities on a planet with changing climate regimes. Kawamura is third generation fruit and vegetable grower and shipper and owner of Orange County Produce. He is the former Secretary of the California Department of Food and Agriculture.

Lauren Harper | Leatherback Sea Turtles

Tuesday, March 13

From November to March in Costa Rica, endangered leatherback sea turtles emerge from the water and heave their enormous bodies onto the beach to nest. Sixty days later, tiny hatchlings crawl out of the sand to make a treacherous trek to the sea. Because of human impact, leatherback sea turtle populations in this area have declined by 80 percent in the last thirty years. Lauren Harper, senior aquarist in the Aquarium's Tropical Pacific Gallery, had an opportunity assist The Leatherback Trust with the conservation of these living dinosaurs. In her lecture Harper will discuss working hands-on with nesting leatherback sea turtles and releasing newborn hatchlings. She will also talk about leatherback sea turtle biology and what we can do to help their population recover.

Wendy Schmidt | The Lowdown on the High Seas: What We Don't Know about the Oceans Can Kill Us

Monday, March 19

The land is intrinsically connected and dependent on the ocean, which covers 71 percent of Earth's surface. Any threat to the ocean is a threat to all of us. This is why we need to understand our oceans, as they govern our systems and play an important role in our future. Wendy Schmidt, cofounder of the Schmidt Ocean Institute, will discuss how philanthropy can impact ocean science and conservation.

Craig Heberer | Bites, Cameras, Action: Tracing Tuna Catch, Hook to Dock

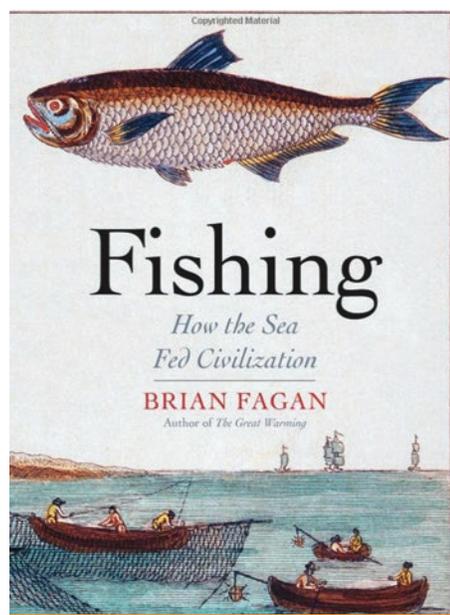
Tuesday, March 20

An estimated 3,600 foreign tuna longline vessels fish in the productive waters of the western and central Pacific Ocean. They harvest thousands of tons of yellowfin and bigeye tuna destined for markets and restaurants around the world. Less than 1 to 2 percent of these vessels are actively monitored by fisheries observers, creating significant data gaps for sustainable management of target and non-target catch, including sharks, turtles, and seabirds. Craig Heberer, deputy director of the Nature Conservancy's Indo-Pacific Tuna Program, will discuss how the organization has partnered with Pacific Island nations, the fishing industry, and regional science and management agencies to use electronic monitoring technology to provide consumers with confidence that the fish on their plates was caught legally, sustainably, and without slave labor.

Panel Discussion | Storied Seafood: California Swordfish

Wednesday, April 25

The Aquarium's Seafood for the Future Program will host a panel discussion and debut the latest in its Storied Seafood series highlighting California swordfish. View an exhibit of photographs telling the stories surrounding the local swordfish industry and sample a seafood tasting starting at 6:00 p.m. The panel discussion begins at 7:00 p.m. For more information on Storied Seafood, see page 22.



March 13: Leatherback sea turtle conservation.

*Aquarium
of the Pacific*







ROBIN RIGGS

Track recent whale sightings on Twitter (@OceanWatchLB) or our blog: aquariumofpacific.org/blogs/category/whale_watching



Whale Watching CRUISES

Gray Whale Watching Trips

■ Winter Season

Enjoy a voyage out in the open Pacific Ocean in search of one of the world's longest-migrating mammals. Learn new, exciting information about gray whales and other local marine life from an on-board Aquarium educator. Cruisers will also have the opportunity to spot dolphins, seals, sea lions, and other marine animals.

- Members: \$25 per adult, \$20 per senior (ages 62+), \$15 per child (ages 3-11). Non-members (includes Aquarium admission): \$49.95 per adult, \$45.95 per senior, \$33.95 per child.
- 2 to 2.5 hours
- (562) 590-3100, ext. 0

Aquatic Academy

Redrawing the Map of the World's Coastlines

■ Wednesdays, March 7-28
7:00 P.M.-9:30 P.M.

Sea level is rising and will continue to rise for decades and probably much longer. The rate of rise is accelerating as the ocean warms and expands and as mountain glaciers, and particularly Greenland and Antarctica, melt more rapidly than projected. The map of the world's coastlines will be redrawn well before the end of this century. Big chunks of some nations and U.S. states will be swallowed up by the sea. Low-lying islands will be drowned and hundreds of thousands of residents will have to find new homes. California will not be immune.

Join experts in exploring how rapidly and how much sea level might rise, the amount and causes of the uncertainty, and how sea level rise will affect the world's and California's coasts and cities, the infrastructure we have built, as well as nature's infrastructure, and what we can do to adapt.

- \$35 per member, \$40 per non-member, \$10 extra for CEU credit through CSULB



Tours & Encounters

These programs are opportunities to see the Aquarium in a different light and get up close to the animals.

Behind-The-Scenes Tours

See what it takes to maintain a world-class aquarium, from water filtration to animal care and feeding. Venture to the top of our largest exhibit and discover more about the Aquarium!

- \$15 per member, \$19 per non-member
- Children must be age 7 or older.

Animal Encounters

Animal encounters offer a chance to feed a sea otter, train a sea lion, feed a shark, or hang out with a penguin. Age restrictions apply.

- \$99 per member, \$109 per non-member (Aquarium admission included). Pre-registration required at least 24 hours in advance.

Dive Immersion

■ Daily with reservation 3:00 P.M.-5:00 P.M.

Certified SCUBA divers can dive in our warm 350,000-gallon Tropical Reef Habitat with more than 600 animals.

- \$279 per member, \$299 per non-member
- Age 15 and up. Ages 15 to 17 require a supervising adult to also sign up for the dive.

VIP Experiences

■ By reservation.

Get even closer to our animals in this exclusive experience! Tour the Aquarium and meet two separate animals. Choose from Otters and Octopus, Penguins and Sea Lions, or Sharks and Rays. Participants must be 10 years old for VIP experiences, except for Sharks and Rays (minimum age: 13).

- \$330 per member, \$350 per non-member (Aquarium admission included).
- Pre-registration required at least two weeks in advance.



EDUCATIONAL OPPORTUNITIES



Family Programs

Public family programs give children of all ages the chance to participate in fun classes with an Aquarium educator. Every class brings another opportunity for learning more about the ocean, discovering new things about the Aquarium, and exploring marine life. Pre-registration is required.

Job Shadow Class

Four rotating themed programs.

■ **First Saturday and third Sunday of every month**
9:00 A.M.-12:00 P.M.

- Ages 13 to 17
- \$35 per member, \$39 per non-member (Aquarium admission not included)

Junior Biologist

Six rotating themed programs.

■ **Second and fourth Saturday of every month**
9:30 A.M.-11:30 A.M.

- Ages 7 to 12
- \$25 per member, \$29 per non-member (Aquarium admission not included)



DON'T FORGET
Aquarium summer camps go on sale on March 15! Visit aquariumofpacific.org/ for details



For program scheduling and to reserve spaces, visit the Aquarium's website or call (562) 590-3100, ext. 0.

NEW!

Parent and Me Classes

Introducing an all-new class at the Aquarium! Parent and Me classes allow parents and children to learn together through play, movement, and exploration. Participate in interactive activities, Aquarium tours, and creative crafts with other families. Topics will include otters, octopuses, penguins, and sharks. Join the Aquarium for a class that is fun for the whole family!

Parent and Me

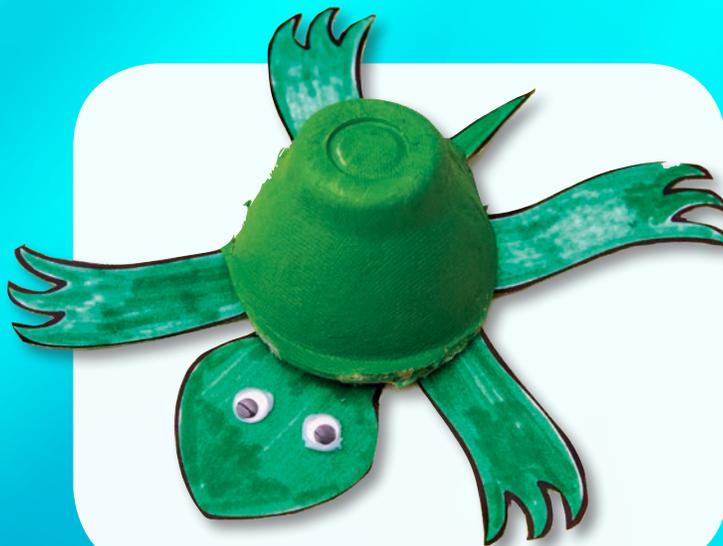
■ **Every third Saturday beginning January 20**
10:00 A.M.-11:30 A.M.

- 2 to 6 years old with an adult
- \$19 per member/child pair; \$10 for additional guests. Non-members: \$49 per adult/child pair; \$20 per additional guest (Aquarium admission included).

EGG CARTON TURTLE CRAFT

SEA TURTLES NEED PROTECTION!

Many turtles feed on sea jellies, which look a lot like plastic bags. Be sure that your trash makes it into a trash can or recycling bin so that it enter the ocean, where animals like sea turtles might eat it. Reduce waste by creating art and toys from disposable products, such as toilet paper rolls and egg cartons!



Materials:

- egg carton
- green paint or markers
- scissors
- glue
- optional: googly eyes, glitter

Instructions:



1. Cut an individual cup from an egg carton. Paint or color it green. This is the turtle shell.



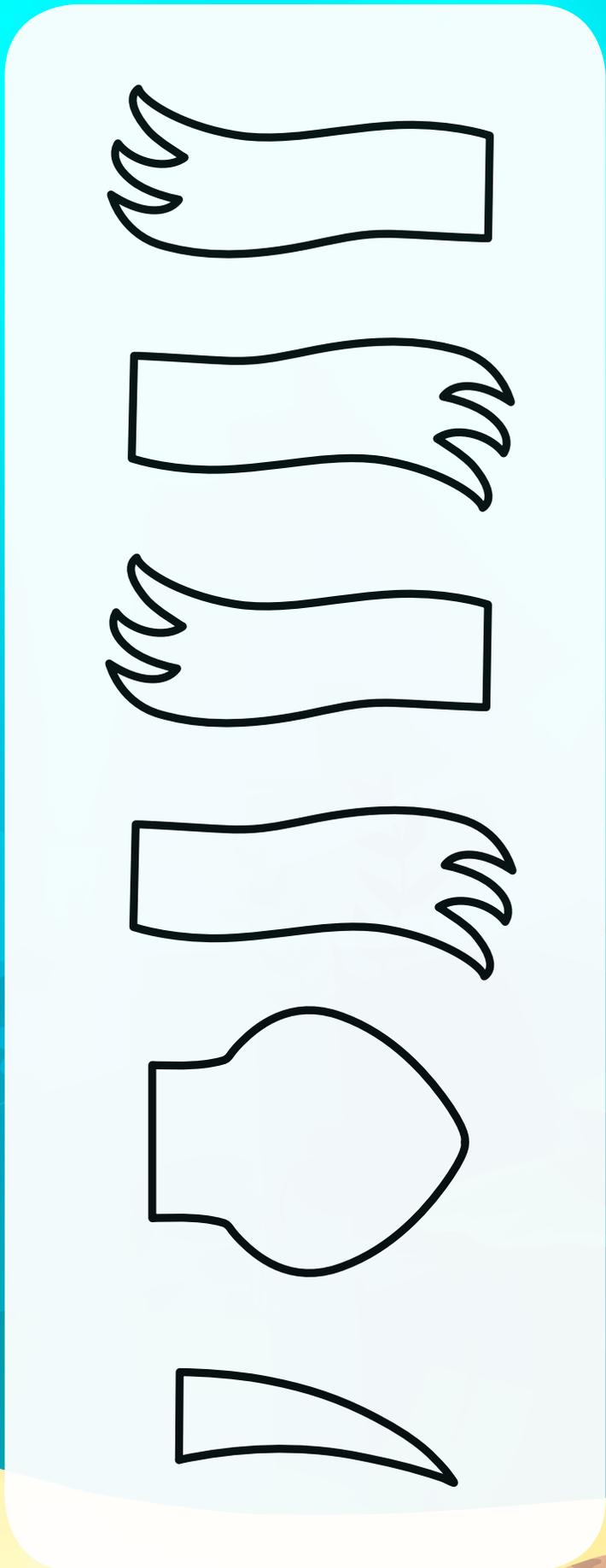
3. Glue the turtle body parts to the shell.



2. Color the turtle's head, tail, and flippers on the next page, then cut them out.



4. Time to decorate!



Solomon Island Leaf Frog

Ceratobatrachus guentheri



*Aquarium
of the Pacific*

TROPICAL PACIFIC GALLERY

Tricolor Poison Dart Frog

Epipedobates tricolor



*Aquarium
of the Pacific*

TROPICAL PACIFIC GALLERY

Magnificent Tree Frog

Litoria splendida



*Aquarium
of the Pacific*

TROPICAL PACIFIC GALLERY



Solomon Island Leaf Frog

Ceratobatrachus guentheri

PHYSICAL CHARACTERISTICS

Solomon Island leaf frogs grow up to 3 inches long and are golden yellow to brown or green. Their heads are triangular, helping them blend in with leaves on the forest floor.

DIET

These nocturnal frogs sit and wait for their insect prey to come close, then lunge and swallow it whole. They also eat small vertebrates, including other frogs.

HABITAT

This frog lives in tropical rainforests of the Solomon Islands and Papua New Guinea.

FUN FACT

This species is sometimes referred to as the eyelash frog, due to the shape of the bumps above its eyes.

Tricolor Poison Dart Frog

Epipedobates tricolor

PHYSICAL CHARACTERISTICS

Tricolor poison dart frogs are small, only reaching about 0.75 to 0.8 inches. They can range in color, but the Aquarium's frogs are red with three white stripes running down their backs.

DIET

These frogs feed on small insects like ants, fruit flies, crickets, and small beetles.

HABITAT

Tricolor poison dart frogs are found on lowland forest floors and in wetlands in Ecuador.

FUN FACT

This frog's toxin is being researched for use as a painkilling drug.

Magnificent Tree Frog

Litoria splendida

PHYSICAL CHARACTERISTICS

Magnificent tree frogs come in varying shades of green with yellow or white spots and a pale underside. They can grow up to about 4 inches long.

DIET

These frogs eat insects, including moths, locusts, and spiders and sometimes earthworms.

HABITAT

Although this Australian species is called a tree frog, it is often found on rocks and in caves and crevices.

FUN FACT

Magnificent tree frogs will also find shelter in water tanks, kitchens, and bathrooms when water is scarce.

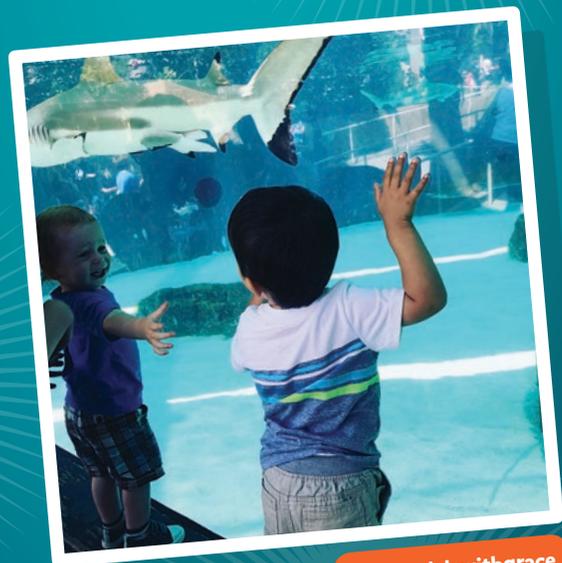
#AquariumMemberPhotos



@kaylamaxine



@_lovely_lil_e



@essentialswithgrace

For a chance to be featured, tag your public photos with **#AquariumMember** on Instagram, or email your favorite photos to MemberServices@lbaop.org.



These devices will help protect young abalone released into the ocean.

ANDREW REFSHAK



Aquarium News

Methods are shared with educators from other museums.

Testing Abalone Equipment at the Aquarium

ON A RECENT VISIT you may have noticed a set of small cages at the bottom of the Amber Forest exhibit just to the right of Honda Blue Cavern. These cages are actually short-term abalone fixed enclosures (SAFEs), and they were part of a five-week experiment for the National Marine Fisheries Service (NMFS), a division of the National Oceanic and Atmospheric Administration.

The Aquarium has partnered with NMFS and several other organizations since 2012 to breed endangered white abalone with the hopes of rebuilding the wild population in waters off Southern California. The SAFEs are being tested as potential tools for outplanting white abalone in the wild so they are protected as they establish themselves in the ocean. The experiment tested whether the abalone survived and grew more quickly in SAFEs that contained shelter consisting of live rock versus PVC pipe and if anything could get in or out of the module. In November scientists from NMFS came to the Aquarium with a set of improved SAFEs for another test.

These modules are designed to gradually release young white abalone into the natural environment. When deployed in the ocean, the SAFEs will be filled with about forty abalone and a supply of kelp and left for a few weeks so that the animals can adjust to their new environment, seek shelter, and be protected from predators. Then, divers will return and raise the top of the module, allowing the abalone to crawl out onto the reef while still partially protected by the module enclosure as they begin their lives in the ocean.

New Aquarium Film Showcases Climate Solutions

THE AQUARIUM'S NEW FILM *The Time is Now, The Future is Here* is designed to inspire viewers to take action in response to climate change. The film uses examples of people of all ages and various backgrounds around the world developing sustainable solutions in the face of a changing climate, from high school students who learned to make biodiesel from algae to farmers in Bangladesh growing different crops to adapt to sea level rise. It plays daily in the Aquarium's Ocean Theater and is included with admission.

While the film acknowledges the dramatic impacts of climate change and the urgent need to act to address its impacts, it emphasizes that humanity has the ingenuity and rapidly evolving technologies to be effective in helping communities become resilient to climate change. *The Time is Now* features interviews with Richard Somerville, a leading climate scientist based at the Scripps Institution of Oceanography; Per Espen Stoknes, a psychologist and economist from the Norwegian Business School in Norway; and Francisco Ayala, professor of biological sciences, philosophy, and logic and the philosophy of science at University of California, Irvine.

The film, produced in-house by the Aquarium with funding from Charlotte and Allen Ginsburg and narrated by Aquarium President and CEO Jerry Schubel, is one of the outputs from a forum cosponsored by the Aquarium and American Honda Motor Company. The forum gathered climate scientists and social scientists from across the country to develop strategies to get the public to act on climate change. The strategies developed by the forum participants, including the film, will be tested at the Aquarium with its visitors.

Aquarium Workshops Provide Professional Development for Educators

IN SEPTEMBER the Aquarium's education department hosted a two-day professional development workshop for informal education institutions, including other museums, science agencies, and universities. The Reflecting on Practice workshop was first developed by the University of California, Berkeley's Lawrence Hall of Science, and the Aquarium was one of the original partner institutions to pilot test these workshops in 2010.

The Reflecting on Practice workshops use the latest research in ways of learning and teaching to help educators improve their teaching methods. The learning practices presented in the workshops have been structured and tested for informal education settings. The institutions participating in this most recent session at the Aquarium included the National Park Service's Cabrillo National Monument, the Los Angeles County Natural History Museum, Los Angeles Conservation Corp's SEA Lab, NASA's Jet Propulsion Laboratory, the Los Angeles Maritime Institute, and the University of Southern California's Viterbi School of Engineering.

"Reflecting on Practice has become an integrated part of educational practice at the Aquarium, helping to define not what we teach but how we teach and how we manage our staff at all levels of the department," says Director of Education David Bader. "These workshops help to professionalize our field and to validate and improve our shared practice to benefit the audiences served by our institutions."



Junior exhibit guide Dylan Johnson (left) was paired with Keith Romero.



Visiting students had the chance to feed nectar to the lorikeets.



PIER researchers affix a satellite transmitter to a swordfish prior to release to better understand the migratory pathways and stock structure of swordfish in the Pacific. For more information on swordfish research, visit www.pier.org.

PIER INSTITUTE OF ENVIRONMENTAL RESEARCH

New Volunteer Program for Middle School Students

THE AQUARIUM is now offering a program called Junior Exhibit Guides for sixth- to eighth-graders, ages eleven to fourteen.

Participants interact with Aquarium visitors to help them learn more about the animals and exhibits. Each junior exhibit guide is accompanied by a seasoned older high school student who has completed one of the Aquarium's youth volunteer programs. The older students coach the junior exhibit guides and provide them with feedback and pointers. Before they begin shifts on the Aquarium floor, these guides are trained on marine biology basics and customer service skills to help them interact with the public.

This program is offered on weekends twice a year; participants may choose to apply for the fall (November - February) or spring (March - June) session. For more information, visit aquariumofpacific.org/volunteer/middle_school_volunteering, and fill out the junior exhibit guide application request form if you are interested in participating.

SoCal Honda Guys in Blue Surprise Aquarium Visitors

THE SOUTHERN CALIFORNIA Honda Dealers, a new Aquarium partner, surprised visitors with special experiences and tours throughout 2017.

In October and November of last year the Helpful Guys in Blue surprised three groups of students visiting the Aquarium for field trips. On October 11 sixty third-grade students from Cesar Chavez Elementary School in Long Beach came to the Aquarium for a scholarship-funded field trip. They were greeted by the Guys in Blue and the Aquarium's ray costumed character, who escorted the students into the Aquarium. Next the third-graders were surprised with free nectar cups to feed the birds in Lorikeet Forest. In November another visiting school group participated in a "meet a diver" experience, and a teacher in need was presented with a free field trip for her students. On Saturdays throughout 2017 the SoCal Honda Dealers surprised Aquarium visitors with free animal encounters, behind-the-scenes tours, and other upgrades.

Seafood for the Future Highlights Swordfish

THIS SPRING the Aquarium's Seafood for the Future (SFF) program will celebrate the debut of the second edition of its Storied Seafood series with a special reception featuring a seafood tasting, video screening, photography exhibit, and expert panel discussion at the Aquarium on April 25.

The Storied Seafood series examines various issues in the seafood industry, usually highlighting one particular seafood species. This latest offering will provide the public an in-depth look into one of the most complex, controversial, and innovative fisheries in the U.S.—the California swordfish fishery. The project will highlight the complex intersection of environmental, economic, and social dimensions of the fishery as well as science-based solutions to harvest local swordfish responsibly. The information will be provided from the perspectives of the scientists, fishermen, fishery managers, nongovernment organizations, and others who are involved in the California swordfish fishery. Their stories will be brought to life through exhibit-quality photography, a short video, and in-person interviews.

Storied Seafood was developed by SFF and the National Oceanic and Atmospheric Administration (NOAA) Fisheries' Southwest Fisheries Science Center to highlight various perspectives surrounding seafood and efforts to find environmental and economic solutions for some of the most complex and controversial aspects of the seafood supply.

For details on the opening event on April 25, please see page 13.



Aquarium Hosts Locals for Around the Table

IN SEPTEMBER the Aquarium served as one of the meeting sites for Around the Table, a program presented by the Long Beach Community Foundation, the Knight Foundation, and We Love Long Beach. The event gave residents the chance to gather and talk about their community at more than 300 locations around the city.

About twenty people including Aquarium staff members attended the Aquarium's event, which was held on board the *Caroline*, a vessel owned by the Aquarium's partner for its boat programs, Harbor Breeze Cruises. Attendees discussed what they love about Long Beach and ideas for improvements, including increasing connections within the community. Aquarium staff members provided information on questions related to the environment, sustainability, and climate resilience.



Celebrate Easter at the Aquarium of the Pacific in Long Beach and join us for a buffet-style breakfast.

APRIL 1 • 8:30AM - 10:30AM

PRICING:

Includes Aquarium admission

General Public:

Adults: \$50
Child 3-11: \$25

Members:

Adults: \$40
Child 3-11: \$15



Mother's Day Brunch

SUNDAY, MAY 13 • 9:00 a.m. to 1:00 p.m.

PRICING:

Includes Aquarium admission

General Public:

Adults: \$69 (12+)
Child: \$29 (3-11)

Members:

Adults: \$59
Child: \$19 (3-11)



Valentine's Day Dinner

**FEBRUARY 14
7:30 PM - 9:30 PM**

Pricing:

Includes all day Aquarium admission

General Public:

Adults: \$84

Members:

Adults: \$74

Fundraising Highlights

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

Aquarium on Wheels Travels to Whittier



This past October 4 the Aquarium's outreach vehicle, Aquarium on Wheels, traveled to Lydia Jackson Elementary School in Whittier, California. Aquarium on Wheels will visit eight Whittier schools throughout the current school year, thanks in part to the support of the BCM Foundation. Last year 2,274 Whittier students touched sharks, sea anemones, and sea stars and were inspired to learn more about marine life, science, and the environment during their Aquarium on Wheels experience.

Tesoro Corporation, now Andeavor, provided a multi-year grant to the Aquarium in 2015 for the renovation of Aquarium on Wheels, which received a major overhaul in early 2016 with this funding. The truck traveled nearly 12,000 miles last year and served more than 35,000 students and community members throughout the greater Los Angeles area.



The Aquarium on Wheels truck is outfitted with touch pools, where students can interact with marine life.

The Munzer Foundation Supports Science Education

This past October The Rudolph J. and Daphne A. Munzer Foundation awarded \$25,000 in support of the Aquarium's efforts to help those in need in our Long Beach community. This funding will allow third grade students from throughout the Long Beach Unified School District to visit the Aquarium and become ocean explorers for the day. The students will also participate in one of the Aquarium's hands-

on science classes, such as Discover Earth. This class uses the National Oceanic and Atmospheric Administration's Science on a Sphere to take a closer look at Earth's weather, continents, and ocean currents.

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(as of 12/31/17)
www.aquariumofpacific.org

Donor Highlight

HCP Inc. provides funding and staffing support to the Aquarium's popular annual Senior's Day event.

HCP Employees Serve Local Seniors

HCP Inc., a real estate investment trust serving the healthcare industry, continued its support with a \$25,000 sponsorship of the Aquarium's Seniors Day event this past October 5. The event welcomed more than 4,000 visitors, and free admission was given to attendees over the age of fifty.

HCP employees volunteered their time to assist with greeting attendees and directing them to various booth displays and special programming, including a safety presentation and sustainable seafood cooking demonstration and tasting. "Over the past five years, HCP's support has truly transformed the Aquarium's Seniors Day event, and we remain grateful for the HCP volunteers' generosity of their time and spirit," said Ryan Ashton, the Aquarium's director of development.



HCP employees volunteered at the Aquarium's Senior's Day event.



Join the Corporate Circle
and involve your company
in the Aquarium's mission.

Fulfill your company's philanthropic goals while enjoying exclusive benefits, such as free or discounted admission for your employees, company recognition online and onsite, employee volunteer opportunities, and more.

Visit aquariumofpacific.org/acorporatecircle
or call (562) 951-1674 to learn more about this
tax-deductible opportunity.

 AQUARIUM OF THE PACIFIC



CORPORATE
CIRCLE

Winter 2018 | Pacific Currents | 25

Aquarium Accolades

The Aquarium presents awards to individuals and organizations in recognition of their service to the community and achievements in conservation.

Dr. Lorenzo Rojas-Bracho & Dr. Armando Martin Jaramillo Legorreta

Heritage Award

The Aquarium presented the Heritage Award to Dr. Lorenzo Rojas-Bracho and Dr. Armando Martin Jaramillo Legorreta at the Baja Splash Cultural Festival in September in recognition of their extensive work on behalf of the critically endangered vaquita porpoise. They have worked together on vaquita conservation since the late 1990s and helped direct a last-chance effort to save the species in October 2017.

A David Bader, director of education, Aquarium of the Pacific, and Dr. Armando Martin Jaramillo Legorreta and Dr. Lorenzo Rojas-Bracho, Heritage Award honorees.

Jimi Castillo

Heritage Award

The Aquarium presented the Heritage Award to Jimi Castillo during the annual Moompetam Native American Festival in September. He worked as a Native American spiritual leader for the California Youth Authority and has spent many years volunteering to help others in recovery from addiction. He has also served as a leader and moderator between tribal groups and state and local governments and documented sacred sites to prevent their loss due to development.

B Marilyn Padilla, director of public relations, Aquarium of the Pacific, and Jimi Castillo, Heritage Award honoree.

Sylvia Mendivil Salazar

Heritage Award

The Aquarium presented the Heritage Award to Sylvia Mendivil Salazar during the annual Moompetam Native American Festival in September. She serves as coordinator for Native American Concerns of the Roman Catholic Church Archdiocese of Los Angeles. In this role, she has helped to guide support and funding to issues affecting Native Americans. Salazar also serves as the chairperson for Pukúu, a non-profit organization that connects and expands opportunities for the betterment of Native Americans of diverse cultures living in Los Angeles County.

C Sylvia Mendivil Salazar, Heritage Award honoree, and Marilyn Padilla, director of public relations, Aquarium of the Pacific.

Baghawan Ciptoning

Heritage Award

The Aquarium presented the Heritage Award to Baghawan Ciptoning at Southeast Asia Day in October. Ciptoning is a dancer and choreographer from Solo, Indonesia. He has performed internationally and at universities to share Indonesian dance with students. He is also a regular fixture at community events celebrating Indonesia and connecting the public with his country's performing arts. He served as a dancer and dance coordinator on behalf of the Indonesian Consulate at the Aquarium's Southeast Asia Day from 2011 to 2015.

D Ryan Ashton, director of development, Aquarium of the Pacific, and Baghawan Ciptoning, Heritage Award honoree.

Asians for Miracle Marrow Matches

Heritage Award

Asians for Miracle Marrow Matches (A3M) was founded by Sharon Sugiyama with the goal of increasing the likelihood of finding a donor match for minority patients, particularly Asians and Pacific Islanders. A3M's mission is to improve the health and welfare of patients with leukemia and other blood cancers by educating and recruiting potential donors into the National Registry and providing patient support services.

E Susan Choi, director, A3M, and Sandy Trautwein, interim vice president of husbandry and curator of fish and invertebrates, Aquarium of the Pacific.

Friend of Child Life Award

The Aquarium was presented with the 2017 Friend of Child Life Award from Miller Children's and Women's Hospital Long Beach in July 2017. The hospital selected the Aquarium for the award in recognition of the resources the Aquarium shares with pediatric patients and the services provided to educate the community about marine life, sustainability, and conservation of natural resources.

F Debi Fingerhut, senior child life specialist/educator, child life internship coordinator, Miller Children's & Women's Hospital Long Beach, and David Bader, director of education, Aquarium of the Pacific.



Climate Resilience Quick Tips

Residents of Southern California can help prepare themselves and their homes for the impacts of a changing climate by making a few simple upgrades and planning ahead.

PREPARE TO PROTECT THE HEALTH OF OTHERS



- * Identify family members, friends, co-workers, neighbors, and others who might need assistance during extreme heat, storms, or other events. The elderly, infirm, and young are at highest risk for heat-related illness. Getting to know your neighbors and checking in on them on hot days can help them in an emergency and bring you closer as a community.
- * Know where the nearest public cooling centers are located and what other resources are available to your neighbors during extreme weather events.

PREPARE FOR DROUGHT AND WATER SHORTAGES



- * Be a trend setter! Convert your lawn to a California-friendly landscape of drought-tolerant and native plants that also supports local wildlife. You can save time on lawn maintenance, plus up to 80 percent of the 9,000 gallons the average household uses every week to water the front lawn. Check for information and rebates with your water utility company or city water department.
- * When the time comes, replace dishwashers, toilets, sprinkler systems, and clothes washers with new high-efficiency models.
- * Take five-minute showers, turn off the faucet while brushing your teeth, and fix leaky faucets. This will also reduce your water bill.

PREPARE FOR COASTAL FLOODING AND SEA LEVEL RISE



- * Carefully collect trash to prevent it from washing into storm drains, and make sure drains are clear in your neighborhood to prevent flooding.
- * Get involved in civic planning by contacting your city council member, neighborhood association, or county supervisor.

PREPARE FOR MORE AIR POLLUTION



- * Plan outdoor activities to avoid high pollution levels. Exercise or work outdoors early in the day, before smog builds.
- * Create less pollution. Walking, cycling, and using public transit instead of driving reduces pollution.
- * When it's time to replace your car, choose a fuel-efficient model. For example, a car that gets 40 miles per gallon emits 50 percent less toxic pollution and carbon dioxide as a car getting 20 miles per gallon.
- * Planting trees helps to provide shade and remove both toxic pollutants and carbon from the air.

PREPARE FOR HIGHER TEMPERATURES AND MORE EXTREMELY HOT DAYS



- * Shade your windows with plants or blinds on the outside. This works better than closing the curtains indoors.
- * Plant California-friendly shade trees close to your home or business to reduce temperatures by up to 15 percent.
- * Fill any gaps in your insulation, and weather-strip around doors and windows.
- * Use natural ventilation to let hot air escape. Use fans to circulate air. Install an attic fan to pull in cool outside air in the evening and blow hot air out. This will also reduce your utility bills.

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adopt an animal

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Adopt an animal for Valentine's Day at the \$50 level or higher, and you will be entered into a drawing for a free **animal encounter** for two. Promotion ends February 5.

ONLINE aquariumofpacific.org/adoptvalentine

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