2012/JUL//AUG///SEP

OF THE AQUARIUM Our unique species are real gems!



une saw the 4th World Oceans Day celebration at the Waikīkī Aquarium. From the outset, we have opted to not focus exclusively on the day itself, but to highlight it with a series of themed events.

Friday 8th June, World Oceans Day, began at 7:00 a.m. with Aquarium staff doing a beach cleanup at the popular Kaimana Beach in Waikīkī. Later that morning, a beach cleanup involving the Aquarium and staff of one of our partner organizations, Duke's Restaurant in Waikīkī, took place at Baby Makapu'u Beach. Garbage was placed in a dumpster kindly provided by another of our partners, Matson Navigation, who also made a financial donation to the Aquarium in association with this project. The donation is allocated towards our ongoing marine research and conservation programs. From 9:00-11:00 a.m. there were extra educational presentations and children's activities at the Aquarium, involving the City and County of Honolulu and NOAA's Pacific Sanctuaries Papahānaumokuākea National Monument. At 11:00 a.m. the winners of our video contest were announced. This international "Youth On Board" video project for kids is being undertaken in collaboration with Nausicaa (Boulogne-sur-Mer, France) and Cabrillo Aquarium (Los Angeles) staff. The winners of our three respective competitions will be gathered into a 10 minute compilation video that will be shown at the International Aquarium Congress in Cape Town in September.

Volunteers release native urchins that will eat some of the invasive algae during the June 16th algae cleanup.

Throughout the day from Friday 8th through Mon 11th the Dr. Seuss movie *Reef Magic* was shown in our theatre, and proved extremely popular! Thanks to our friends at The Ocean Project for making this possible. On June 9th the Aquarium organized another community beach cleanup at Sandy Beach, this one in collaboration with Hard Rock Café, another of our partners.

On 14th June a Knowledge of the Ocean exhibit organized by the Aquarium and NOAA Marine Sanctuaries opened at Honolulu City Hall and runs until 28th. The exhibit filled the atrium area and highlighted marine conservation throughout the Hawaiian islands, and how scientific research is contributing toward increasing our knowledge and making informed decisions about conservation measures.

Between 9:00-11:00 a.m. on 16th June there was an alien algae cleanup at the reef fronting the Aquarium. The collected alien algae was gathered in a dumpster and transported to the zoo, where it is mixed with the herbivore dung from the Africa exhibit and composted. Divers plucked the algae, others carried it to shore and helped transport it, trained observers sorted the native and invasive algae, and yet others picked out invertebrates and replaced them on the reef. Over 80 people, comprised of local environmental groups, students and the laypublic, including passers by and tourists, participated in the event. Over 200 captive bred urchins were transplanted onto the reef in a Department of Aquatic Resources project. The urchins feed on algae, and it is hoped they will crop the alien algae and prevent it from becoming dominant again.

So, lots of programs and activities geared towards ocean education and conservation took place around World Oceans Day, but then again, lots is always going on at the Waikīkī Aquarium! Enjoy!

Dr. Andrew Rossiter

Kilo ia

Issue Number 182 2012/JUL//AUG///SEP

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MANAGING EDITOR +
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PRINTING Reskyu

Kilo i'a is published quarterly by the University of Hawai'i and the Friends of Waikīkī Aquarium and is dedicated to increasing the community's knowledge of the Waikīkī Aquarium and Hawai'i's marine life.

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MANA'O

kilo

Stargazer, reader of omens, seer, astrologer; to watch closely, examine, look around, observe, forecast.

i'a

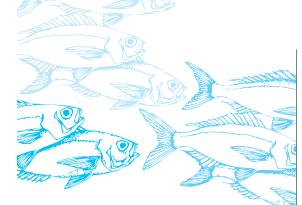
Fish or any marine animal

Traditionally, the *kilo i'a* was an expert of fish and marine life. He studied the behaviors and movements of *i'a*. The *kilo* stood at a high point of land overlooking the ocean to watch for an expected school of fish and steered the fishermen in the school's direction. The success of surrounding the school was entirely up to the *kilo*.

Hiroa, T. (1987). *Arts and Crafts of Hawai'i*. Honolulu: Bishop Museum Press.

Pukuʻi, M.K., & Elbert S.H. (1975, 1992). *New Pocket Hawaiian Dictionary*. Honolulu: University of Hawai'i Press.

Titcomb, M. (1977). *Native Use of Fish in Hawai'i*. Honolulu: University of Hawai'i Press.



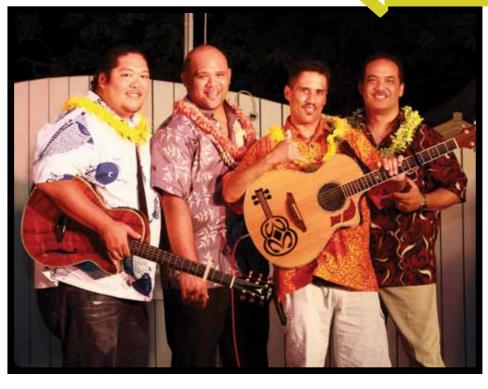
Family Night: Fish Frenzy!

FRIDAY, AUGUST 24

6:00 to 8:30 P.M.

Family Night is here again and this year it is brought to you by the Fishes: deep sea fish. pelagic fish, reef fish, sharks and sea horses. Visit the investigation station, filled with special artifacts, jaws, teeth and bones. Look through microscopes to see tiny fish larvae. Scientists will be on hand to answer questions. and share their expertise. And, there's more! Play games. Join the scavenger hunt through the exhibits. In between the activities enjoy the warm summer evening and bring a picnic to share on the lawn. It's fun for the entire family!

» \$9/person (\$12 for non-members), includes educational gift bags for children. All ages welcome; children 2 and under are free.



Ke Kani O Ke Kai

The 18th annual Ke Kani O Ke Kai concert series kicked off in June with stellar performances by Kuana Torres-Kahele, Mark Yamanaka and Darren Benitez on June 14, and Raiatea Helm and Weldon Kekauoha on June 28.

Join us on Thursday evenings under the stars on the lawn for performances by Jake Shimabukuro (July 12); HAPA and Ledward Kaʻapana (July 26); the series will conclude with Makana and Dennis Kamakahi (August 9). Doors open at 5:30 p.m., concert begins at 7:00 p.m. A menu of signature items prepared by a noted restaurant will be available for purchase. Beer, wine and soft drinks also available.

» Friends of Waikīkī Aquarium (**FOWA**) members receive discounted ticket prices! Purchase tickets at www.waguarium.org/kkokk or at the Aquarium front desk (between 9:00 a.m. and 4:00 p.m.).

Fish Tales

Chronicles, Critters and Crafts!

Celebrity storytellers, puppets, mascots, music and mermaids will help us celebrate our 3rd annual Ocean Literacy Day. LEGO will also help youngsters create their favorite marine critter. The event is sponsored in part by Aqua Hotels & Resorts and the National Oceanic & Atmospheric Administration (NOAA).



SAVE THE DATE

SATURDAY, SEPTEMBER 15

9:00 A.M. to 1:00 P.M.

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ou can see them dispersed throughout the galleries of the Aquarium: beautiful, tiny, aquatic gems swim through heads of coral, rock overhangs and seaweeds. The average person will rarely have the opportunity to see these unique species in their natural habitats. Many are only found in deep waters or in inaccessible locations, such as the Northwestern Hawaiian Islands, making them as rare and exclusive as the world's finest diamonds.

The Waikīkī Aquarium has a collection of unique species featured throughout the galleries, and not all of them are fish. Among the selection of unique species are several species of hybrid angelfishes, butterflyfishes, and wrasses; the *Montipora dilatata* rice coral; bigfin squids; deepwater anthias; the Hawaiian morwong; and bearded armorheads. Almost half of our exhibits house a unique species (or several unique species)!

Almost all of our unique fish species have been donated by commercial fish collectors and scientists who felt that such rarities should be studied and shared with everyone, not kept secreted away in the tank of a private collector where only a few can view them. The level of care and expertise provided to these fishes by Waikīkī Aquarium staff is second to none, and apart from their natural habitat, the Aquarium is the second-best environment to house them. By maintaining these fishes in exhibits that present near natural habitats with live corals, our staff and scientists have the opportunity to study their behavior and feeding ecology, something that is often impossible to do in the wild owing to the isolated areas or deep habitats these species live in. We are pleased to offer visitors the opportunity to view these rarely seen animals. These jewels of the Waikīkī Aquarium inspire a sense of wonder and appreciation of how much remains to be learned about marine life. sa

PEPPERMINT ANGELFISH

Paracentropyge hoyler

Our most recent unique addition, this peppermint angelfish is the only one of its kind available for viewing in a public aquarium. Its rarity is only second to the Abe's angelfish (both housed in our Reef Machine exhibit).



species of coral.

only in two localities in the wild.

The Waikīkī Aquarium is a genetic

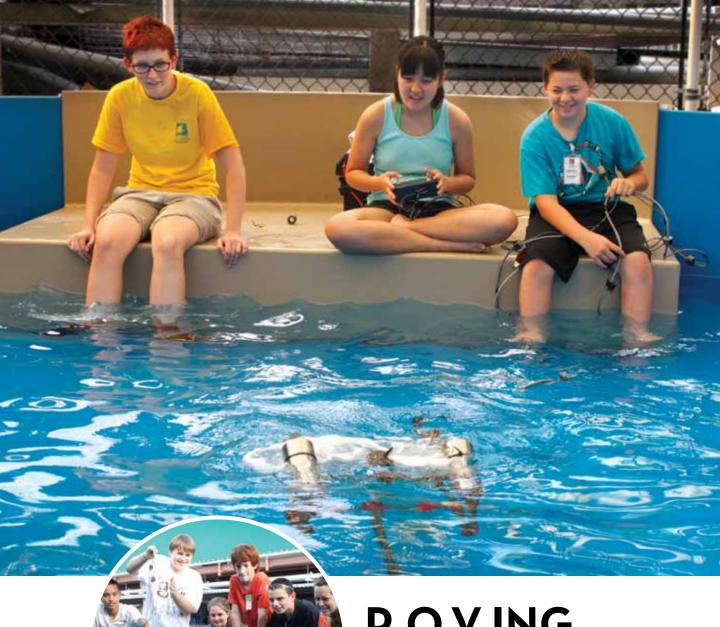
and specimen repository for this







Look for this symbol to identify our unique species throughout the Aquarium galleries! The next few issues of Kilo i'a will cover each of our unique species in detail, describing their biology and distribution, and how they came to the Aquarium. In the meantime, why not drop by and see if you can find them scattered throughout the exhibits?



R.O.V.ING UNDERWATER

Last Spring, the Aquarium teamed-up with the Marine Advanced Technology Education Center (MATE) to offer a scout-level underwater robotics class for teenagers. Every Wednesday afternoon, twelve teens learned about buoyancy and hydrodynamics by building and operating their own ROVs (Remotely Operated Vehicles). Along the way they learned a number of new skills including how to solder, operate drills and drill presses, wire electronics and install fuses. By the beginning of May, the teens had four ROVs ready to compete against 18 other O'ahu teams. Wreck recovery was the competition's theme; the goal for each ROV to safely transplant "coral" away from a shipwreck, to cleanup "oil" spills, and use a liftbag to float the wreck to the surface within a 15 minute timeframe. Each team operated the ROVs with intensity, and sometimes frustration, as they attempted to complete their missions. And, in the end, all of the teams were successful, with S.Q.U.I.D Inc. and Team T.A.P.E taking first and second place in their division.

PHOTOS AT LEFT: (Top) Team T.A.P.E. (from L to R) Isabella Leonardi, Mary Roney, Ryan Garcia and Noah Casey; (Bottom) S.Q.U.I.D. Inc. (from L to R) Talissa Wright, Mary Roney, Landon Lee and Jordan Kakugawa;



Mauka to Makai Expo

More than 4,000 people joined us to celebrate our Mauka to Makai Clean Water Expo in recognition of Earth Day on April 14. The event, sponsored by the City and County of Honolulu Department of Environmental Services and the State Department of Health, Clean Water Branch. Polluted Runoff Control Program, featured interactive educational displays, free native Hawaiian plants and activities from over 20 agencies and organizations, musical performances by Henry Kapono and Willie K, and special appearances by Wyland and even a mermaid!

Seasons and the Sea

On May 1st we celebrated Lei Day as well as the beginning of the dry season, *kau*, with Kumu 'Ohu Gon and Hālau Mele.

Happy Birthday!

We kicked off the month of May with a birthday celebration for both Maka and Hōʻailona. The May 3rd birthday party included an extra special birthday presentation, complete with "fish-cicle" treats, toys, and "Happy Birthday" sung by staff and visitors! Every Thursday in May was dedicated to educating our visitors about Hawaiian monk seals with special crafts and activities.

World Oceans Day

For the fourth year in a row, we celebrated a World Oceans Day the Waikīkī Aquarium. Staff and volunteers cleaned marine debris from Kaimana beach and educated the community about the dangers of ocean pollution. New to the World Oceans Day celebration this year was the Youth On Board video contest and a special presentation of Dr. Seuss' Reef Magic. The contest was a collaborative ocean awareness project with the Waikīkī Aquarium, the Cabrillo Marine Aquarium in California, and Nausicaa Aquarium in Boulogne, France.

As a part of the World Oceans



Knowledge of the Ocean exhibit at Honolulu Hale. Our thanks to national and local partners: the Mayor's Office on Culture and the Arts, Department of Transportation Storm Water Management Program, Papahānaumokuākea Marine National Monument, Kona Brewing Company, Matson Navigation's Ka Ipu 'Āina project, Duke's Waikīkī. Hard Rock Café, NOAA, National Marine Sanctuary Foundation and the Ocean Project for Dr. Seuss' Reef Magic.



PHOTO: Aquarium staff members found a rusted pot at the Kaimana Beach cleanup on World Oceans Day (from L to R: Charles Laidley, Karen Quinn and Gerald Crow.)



Critter Cam

Hōʻailona, one of our resident Hawaiian monk seals, is making his way to your homes via the Aquarium website! A brand new critter cam was set up in the monk seal habitat and is currently streaming live feed to the web. Now, all you offisland friends can visit him any time of the day to watch his playful antics, training and feeding sessions (and even sun bathing sessions) live from the comfort of your own home.

VISIT HŌʻAILONA ONLINE AT:
www.waquarium.org/webcams-hoailona.html



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Fresh Faces

The newest members of the Aquarium 'ohana.



Charles W. Laidley, Ph.D

CURATOR, LIVE EXHIBITS

Education B.S. in Biological Sciences, University of Guelph (1983); M.S. for research on stress physiology of fishes, University of Guelph (1987); Ph.D. for work in reproductive endocrinology and environmental toxicology, University of Texas at Austin (1995).

Roots I was born and raised in Ontario, Canada spending most of my early years in the nation's capital and summers on (or mostly in) the waters around the Great Lakes. My path has taken me from Ontario to Austin and Port Aransas, Texas for schooling; Berkeley, California for my post-doctoral training; with a stint as an assistant professor at Oregon's Pacific University before arriving in Hawai'i. **Interests** I have a life-long passion for all things aquatic, which outside my professional duties, includes getting out on the water for a good day of windsurfing, kiteboarding and surfing or SUP mixed in with snorkeling and diving; reducing my golf handicap; and (true to my Canadian roots) playing ice hockey... yes, we have it all in Hawai'i. **Career Background** As an undergraduate researcher with the Department of Fisheries and Oceans, I conducted field surveys and laboratory trials in the development of environmental biomonitoring bioassays for environmental toxins. During my graduate studies, I researched the physiology of disease and stress in fish. My doctoral studies consisted of research on the reproductive physiology and toxicology of marine fish; I served as graduate representative; taught undergrad classes; and assisted in various research projects, including ornamental fish culture. My post-doctoral work included research on the mechanism of action of herbicides and pesticides. As research scientist and program director at the Oceanic Institute, I lead the development of a suite of reproductive, live (planktonic) feed and hatchery technologies enabling the first-ever captive propagation of the Hawai'i and the Pacific region's high demand species of jacks, snappers, angelfishes, and tangs.

In coming on board, I am further enthused by the tremendous talent and dedication of the Aquarium hui and the endless opportunities to make a difference.

My niche Most recently, my work has focused on the development of captive culture technologies for marine fishes, including the design and maintenance of state-of-the-art fish reproduction, plankton propagation, and larviculture systems and rearing protocols. These technologies are essential for successful maintenance and captive propagation of aquatic species as an alternative to wild harvesting. I wanted to join the Waikīkī Aquarium because of its storied history and contributions in education, research and conservation of aquatic species. In coming on board, I am further enthused by the tremendous talent and dedication of the Aquarium hui and the endless opportunities to make a difference.

favorite child?" They are all fantastic! Some of our newest residents (cover your ears Hōʻailona) including the Peppermint and Abe's angelfishes along with seadragons hold a special allure for the possibilities of captive culture and the positive impact we can make on reef conservation efforts in Hawaiʻi and around the world.

In my new position, I will work with Andy Rossiter and the Aquarium team to build upon existing exhibits and programs and reinvigorate research efforts, particularly the captive propagation of marine life. Without a doubt, there is nowhere better in the world than the leeward shores of Oʻahu and the heart of Waikīkī (literally the edge of the reef) to study and research the extraordinary diversity of marine life found in the world's oceans, create new exhibits, and share this enthusiasm for science and the natural

environment with the public.

Favorite Aquarium resident That's like asking, "who's your



Jacy Cutitta

EVENTS ASSISTANT

Education Castle High School (1995); B.A. in Natural Sciences, minor in Marine Science, U.H. Hilo (1999).

Roots I grew up in "God's country," Kāne'ohe.

Career Background I began as an Aquarium community

enrichment program (CEP) volunteer in 2000. Later, I worked parttime in CEP programs such as Small Fry, Aquarium After Dark, etc., and at facility rentals. For a while, I was the night resident and lived within the walls of the Aquarium. I have also worked at the Hanauma Bay Gift Shop and for the Natural Selection Gift Shop. Interests I love to travel, go hiking, and listening to country music. I also enjoy gardening and making costumes for my nieces and nephews. I've read just about every book by Christopher Moore and Nicholas Sparks.

I wanted to join the Waikīkī Aquarium because my 11th grade science teacher, Mr. Shigetani, introduced me to the marine world. He made it interesting and encouraged me to learn more. I started setting up tanks in my bedroom, living room, outside, etc. and collected animals to fill them. This passion overflowed into my travels and I've visited aquariums across the country and around the world. I really enjoy being in and around the realm of aquarium research, new species and local marine happenings.

Favorite Aquarium resident 'Ōmilu (Bluefin Trevally) **On a personal note** Currently, I don't have a single tank at home. I've moved from *makai* to *mauka* and am trying my hand at orchids and herb gardens.



Heather Down

MONK SEAL PROGRAM MANAGER

Education Palm Springs High School (1999); B.A. in Natural Psychology, minor in Education, U.C. Santa Cruz (2003).

Roots I grew up in the dry desert of Southern California. A marine themed 5th grade curriculum exposed me to the

wonders of the sea. I was hooked from age 10 and directed my career goals toward the marine world!

Career Background I have been working with marine mammals and participating in conservation efforts for twelve years. I got my start at the University of California, Santa Cruz Long Marine Laboratory research facility, where we focused on examining the physiology of Atlantic bottlenose dolphins, southern sea otters, and California sea lions. For nearly six years, I was a research mammalogist at the Alaska SeaLife Center in Seward, Alaska, where I assisted in the captive management of harbor seals and endangered Steller sea lions. While with the Oregon Department of Fish and Wildlife, I assisted in fish predation studies on the Columbia River. Interests SCUBA diving; majority of my diving experiences have been in Alaska, so I am very excited to explore the Hawaiian waters while not freezing!

I wanted to join the Waikīkī Aquarium because we provide visitors a once in a lifetime opportunity to see species they would most likely never see. We are a small aquarium that packs a big punch in bridging the gap between knowledge and conservation of the marine environment!

Favorite Aquarium resident Hō'ailona!

In my new position, I hope to increase our partnerships with research facilities and continue to facilitate the investigation into the decline of Hawaiian monk seals. Being one of three public facilities that house monk seals, we have an important role in the management of these animals. Public education and outreach are crucial to the survival of Hawaiian monk seals. We need to learn to coexist before its too late.



Guerin Earhart

EDUCATION SPECIALIST

Education B.A. in Education and B.S. in Biology, Eastern Washington University (1997); M.A. in Education, Florida Atlantic University (2000). Roots I grew up in Seattle, Washington, then settled in Florida after college.

Career Background Prior to the Aquarium, I taught middle school science in Florida.

Interests Coral reef ecology and symbiotic relationships such as anemonefish.

I wanted to join the Waikīkī Aquarium because I have a lifelong passion for ocean life and teaching others about the wonders of biodiversity on Earth.

Favorite Aquarium resident Peppermint angelfish **In my new position,** I am glad to inspire understanding and appreciation of Pacific marine life with the Waikīkī Aquarium team.

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Rescue 911

In the span of three days, three Hawaiian monk seals were transported to the Waikīkī Aquarium for emergency care.

Bv David Schofield

Marine Mammal Health and Response Program Manager, NOAA Fisheries Service, Protected Resources Division, Hawai'i

n May 5, "Kaiwi" (RK96) was captured on Rabbit Island and brought to the Aquarium's temporary holding facility for assessment. NOAA staff were concerned, as the hook in her mouth was not immediately visible. With the help of Sea Life Park veterinarian, Beth Doescher, x-rays were taken, and the damashi hook was promptly removed and Kaiwi was returned near Irma's Beach (RK96's natal beach, southeast O'ahu) the same day.

Two days later, on May 7, NOAA received a monk seal hotline call of a seal with a fishing line hanging from its mouth at White Plains Beach, O'ahu. A 27-29 year old male seal, "Sharkbite" (T15M), was hauled out on the beach with not only a fishing line hanging from his mouth, but a large trail of tangled fishing line. The NOAA team and Aquarium veterinarian, Michael Wong, responded and transported Sharkbite to the

Waikīkī Aquarium where x-rays confirmed he had ingested fishing gear with a wire leader, sinker, and circle hook about one meter into his esophagus.

The following day, Kaua'i coordinators reported a 7-9 year old male, "Kolohe" (RK36), at Baby Beach, Poʻipu, with a swivel trailing from his mouth. NOAA staff and veterinarian Bob Braun flew to Kaua'i early the next morning and found Kolohe swimming in slow circles in shallow water. He was slowly corralled on to shore and flown to O'ahu to be temporarily housed at the Aquarium.

On May 10, Sharkbite and Kolohe were transported to the Honolulu Zoo's clinic. Kolohe's hook was successfully removed, while Sharkbite's procedure took several hours in that the hook was embedded deep in his throat. Kolohe has made a great recovery despite initial concerns he was fighting an infection and pneumonia and



PHOTO AT RIGHT: Kolohe's release on

has since been released at Salt Ponds Beach, Kaua'i. NOAA discovered Kaiwi had picked up another hook and was returned to the Aquarium for x-rays. Luckily, no hooks were found and she was released the same day. Despite the great success in the recovery of Kolohe and Kaiwi, Sharkbite had to be due to an infection and associated deteriorating health.

Handling these hookings has been very labor and resource Haulena, and Dr. Francis Gulland.

intensive and we could not be doing it without significant support and leadership from our partners. These include, but are not limited to: DLNR and the State HIHWNMS staff, Waikīkī Aquarium, Honolulu Zoo, the response volunteers (HMRSTO humanely euthanized on May 19, and Kaua'i volunteers), Vancouver Aquarium, USCG Air Station Barbers Point, The Marine Mammal Center, Dr. Bob Braun, Dr. Marty

A Warm Welcome! On Tuesday, June 19, the Aquarium welcomed U.H. Mānoa's Executive team of chancellors, deans and directors. Staff and volunteers proudly shared the Aquarium's outstanding exhibits with the distiguished guests. The group toured three of the University's integral community outreach locations, Lyon Arboretum, Ka Papa LoʻiʻO Kānewai and the Waikīkī Aquarium.

PHOTOS: (LEFT) Incoming Chancellor, Tom Apple and Dr. Andrew Rossiter, (RIGHT) Volunteer Peter Chiapperino shows Kapena Shim live animals at our water



Afternoons at the Aquarium Every Wed 3:00 p.m.

This summer, thanks to a grant from Aqua Hotels and Resorts, the Aquarium has invited storytellers, puppeteers and crafts people from the community to join the Afterschool at the Aquarium line-up. Critter encounters, puppet shows, Stories by the Sea, and animal feedings are just some of the fun designed for kids. Free with admission to the Aquarium.

Ke Kani O Ke Kai

July 12, 26, Aug 9 Our summer concert series, continues through the summer, check our website for more info!

Monk Seal Mania

July 12, Thu 3:00-3:45 p.m. 3:00-3:45 p.m July 19, Thu July 26, Thu 3:00-3:45 p.m With the arrival of Hōʻailona to Waikīkī Aquarium, we feel it's time to learn more about Hawaiian Monk seals. What do seals eat? How long do they hold their breath? How many are there? What can I do to help? Designed for audiences ages 7 and up, but anyone who is interested is invited to come. \$2/person (plus admission to the Aquarium) preregistration for FOWA members only.

Aguarium After Dark

July 31, Tue 7:00-9:00 p.m. Discover if fish sleep on an after-dark flashlight tour of the Aquarium. Find the sleeping spot for the red-toothed triggerfish or the rock-mover wrasse. What color are yellow tang at night? Minimum age 5 years; youngsters must be accompanied by an adult. \$10/adult, \$7/child (\$14/10 for non-members).

Family Night: Fish Frenzy Aug 24, Fri 6:00-8:30 p.m.

Family Night is here again and this year it is brought to you by the Fishes: deep sea fish, pelagic fish, reef fish, sharks and sea horses. Visit the investigation station, filled with special artifacts, jaws, teeth and bones. What does a fish larva look like? Look under the microscopes to see them. Scientists will be on hand to answer questions, and share their expertise. And, there's more! Play games. Join the scavengerhunt through the exhibits. In between the activities enjoy the warm summer evening and bring a picnic to share on the lawn. It's fun for the whole family! \$9/person (\$12 for non-members), includes educational gift bags for children. All ages welcome; children 2 and under are free.

Marine Munchies Sep 10, Mon 4:30-6:00 p.m. Sep 17, Mon 4:30-6:00 p.m. Discover animals' adaptations for capturing their meals and what they eat here at the Aquarium. Included is an exclusive afterhours animal feeding. Watch the octopus open a jar to get its dinner. Then it's your turn to feed the animals in our Edge of the Reef exhibit. Minimum age 5 years; youngsters must be accompanied by an adult. \$16/adult, \$12/child (\$20/\$15 for non-members).

Ocean Literacy Day

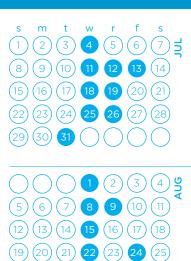
Sep 15, Sat 9:00 a.m.-1:00 p.m Join us for keiki arts and crafts, storytelling, and more as books about the ocean come to life with mermaids and costumed characters. No pre-registration required.

NOAA Ocean Exploration Curriculum Workshop at Coconut Island

Sep 29, Sat 9:00 a.m.-3:00 p.m. Bring the excitement of modern day explorers to your classroom through NOAA Ocean Explorers' website and curriculum - focusing on explorations into extreme environments. The Learning Ocean Sciences through Ocean Exploration Grades 6 – 12 curricula includes sections on incredible deep-sea creatures, ocean exploration, geology, currents, and human impacts and more. Held on Coconut Island in conjunction with Hawai'i Institute of Marine Biology. Stipends to cover time, teaching materials and travel costs from neighbor islands will be provided. Prior workshop participants are invited to attend a special session tailored to their needs.

Marine Educator's Night at the Waikīkī Aquarium

Sep 29, Sat 6:00-8:30 p.m. Explore the Aquarium while discovering new education resources and old friends. NOAA's Ocean Explorer website, research and curricula will be highlighted, as well as the many resources available to educators to support marine curricula. Representatives from State and Federal organizations will have tables set up with instructional materials. Refreshments will be provided. The evening is free for educators and a guest. Both programs sponsored by NOAA's Ocean Explorer program and the National Marine Sanctuary Foundation.



2012/JUL//AUG///SEP

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23) (24) (25)	26	27)	28	29
30) (

(26) (27) (28) (29) (30) (31)

Look for class updates on: www.waquarium.org **PRE-REGISTRATION REQUIRED**

ACTIVITY REGISTRATION FORM

NAME(S)				
Adults			Phone (Home)	
Children/Ages			Phone (Work)	
Address				
City/State/Zip		Email		
PLEASE REGISTER ME FOR				
Activity	Session	Date(s)	Number of Adults/Children Price	
	/	_		
	/			
	/	_		
	/			
Total amount of payment enclosed (check	payable to "Univer	sity of Hawaiʻi"):		
F PAYING BY CREDIT CARD				
Credit card #			UISA MC	
Expiration Date		Last three digi	ts of security code on back of card	
am a FOWA Member 🗌 Yes 🗎 No				



Artful Oceans

Two hundred-eighty Hawai'i students—ranging from kindergarten through high school—created artwork as a part of the 2011-2012 Coastal America Student Ocean Art Contest. Schools from around the nation, Mexico and Canada, submitted original art pieces illustrating an essential principle of ocean literacy. Three Hawai'i students-Gabriel Viloria and Troy Souza (pictured above) from Moanalua High School and Joseph Payongayong of Kapolei Middle School— had their artwork chosen from the thousands of entries around the nation, Mexico and Canada. The winning artwork will be displayed in an exhibition at the Department of Commerce and other Washington galleries for a six month period.



Ocean of Treasures" highlights the pelagic fish and a marine ecosystem that Troy is very interested in, because this ecosystem feeds the world. But, he notes, this important ecosystem is under much stress from fishing pressures.

Trov Souza Grade 11, Moanalua High School 2ND place High School Division



'Illuminated" depicts both real and imaginary deep sea creatures. Gabe chose to imagine what an anglerfish would look like as it evolved, with extra eyes and additional fishing lures.

Gabriel Viloria Grade 12, Moanalua High School 3RD place High School Division



'Diverse Ocean" shows how the ocean supports a great diversity of life. Corals reefs have many types of fishes and invertebrates, some of which are highlighted in his picture

Joseph Payongayong Grade 6, Kapolei Middle School 3RD place Middle School Division

















Mahalo!

On May 12th, it was our turn to give back as we recognized the invaluable contribution of our precious volunteers with the annual Volunteer Appreciation Luncheon. We recognized the long years of service of several volunteers, presenting them with custom-made marine animal pins. The event was held at the Willow's Restaurant.

REGISTRATION INFORMATION

- >> Pre-registration is recommended.
- >> FOWA members are allowed up to four total registrants at FOWA rate.
- " Questions about the activities? Call the Waikīkī Aquarium Education Department at 440-9007.
- » A handling fee of \$5 will be assessed for withdrawals.
- "No refunds can be made for no-shows or for withdrawals made seven days or less before an activity."
- >> Please do NOT fax or email your registration.

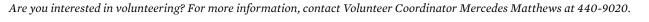
To register by phone:

" Call 440-9011. Visa and Mastercard are accepted.

To register by mail:

- "> Full payment must accompany completed registration forms. Please, no cash.
- » Make checks payable to University of Hawai'i. Visa and Mastercard are also accepted.
- "Mail the completed registation form with a check or credit card information to:

Waikīkī Aquarium **Education Department** 2777 Kalākaua Avenue Honolulu, Hawai'i 96815-4027



New & Renewing FOWA Members

Mr. & Mrs. Reid Imai

recorded these new and renewing memberships between Mar. 1, 2012 and May 31, 2012.

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Tammy Chung Edward & Janet Clark Kerry and Linda Cloward Marc & Joycelyn Cobb-Adams Mr. & Mrs. Kaai Cobb-Adams Erika Codav Charles & Sue Cooke Reed & Anne Copsey Leah & Thom Cornog Jack L. Covington

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Tim & Susan Donolon

Mark Duplessie

Dan & Heather Ellis

Ms. Nola R. Epp

Heather Fickett

Jimmy J. Fonseca

Mr James Fujimori &

Kenneth K. Fuiii

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If your name is not listed or is listed incorrectly, please accept our apologies for the error and our most sincere thanks for your support.



Fun and Games

KCC's Information Technology Program create web apps for the Waikīkī Aguarium.

At the beginning of the semester, Kapiolani Community College students met with the Aquarium to create apps that would allow young marine lovers to interact with the Aquarium in a fun and educational way. The semester-long project resulted in the creation of three unique apps that feature games about the Aquarium. One game is a word match activity that features student-created art, the second game is a hermit crab maze (think PacMan but with hermit crabs) and the third is an interactive maze with the Hawaiian monk seal avoiding predators to find his way to the exit. The apps are available for download through our website. Thanks to Dr. David Nickles and his hard working, talented students!

YOU CAN FIND THE APPS AT:

http://wag-sealsurvival.appspot.com http://wag-hermit-crab-home.appspot.com http://wag-reef-riddles.appspot.com



Hard Rock Café Rocks!

Mahalo to Hard Rock Café for their generous support in sponsoring a NOAA Workshop on Climate Change for teachers, as well as a beach cleanup held on June 9th. As a part of their contribution, Hard Rock will also host a fundraiser at their new location on the Waikīkī Beach Walk in the fall.

WALL OF FAME »MARCH TO MAY 2012

The beautiful exhibits at the Waikīkī Aquarium and the valuable research and conservation efforts that go on behind the scenes and in the classroom are the result of the work of many. Here we recognize those who support us through their generous donations. Our thanks to all those who believe in what we do.

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PHOTO: Dr. Andrew Rossiter; Jill Gilboy and Jenny Takayesu, Hard Rock Café; and Jennifer Faught, NOAA's Climate Program



University of Hawaiʻi at Mānoa Waikīkī Aquarium 2777 Kalākaua Avenue Honolulu, HI 96815-4027

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