

Kilo iā

2014 JAN | FEB | MAR

- Celebrating -

110 YEARS

THE WINDOW

Since
1904

TO THE SEA

MILESTONE
CELEBRATION

110 YEARS AT THE END
OF KALĀKAUA AVENUE

page 5

YOU'RE HOW OLD?
MEET THE OLDEST
AQUARIUM ANIMALS

page 12



WAIKIKI
AQUARIUM

UNIVERSITY OF HAWAII

As we move towards the end of 2013, the Aquarium is preparing for its 110th year in 2014. As indicated in this issue of *Kilo i'a*, a wide variety of special events are planned, including a guest lecture series on ocean-related themes, presented by internationally-renowned scientists. Check out the events on offer, and join us for at least a few. Beyond acknowledging our long history, within the Aquarium, 2014 is slated to be a year of progress and change. Already the new flooring for the galleries is well underway, along with the retheming and renewal of several exhibits. On December 30th our new website was launched. The new gift shop is now complete and has garnered praise from many of our members for its array of merchandise, its new displays, its brightness, and the pleasant shopping experience it now offers. Drop by in January for those belated Christmas gifts! You might also notice the front of the Aquarium will have been painted a marine blue color. The materials and labor for this, which has greatly improved the Aquarium's curb appeal, was kindly donated by Kawika's Painting. For those with an eye for detail, the five concrete light bollards at the entrance will soon also be replaced with blue metallic bollards with solar lighting. And to the right of the Aquarium building, the large shipping container, which has been an eyesore for so many years, has been removed, and the site where it once stood will be converted into a rain garden. Plans are also afoot for a major refurbishment of the public bathrooms and the foyer area, along with the opening of our long-awaited seahorse, seadragon and pipe-



Living Legacies: The three living directors of the Waikiki Aquarium: Dr. Andrew Rossiter, Dr. Leighton Taylor and Dr. Bruce Carlson.

fish exhibit. Behind the scenes, a new live feeds area is already under construction. When operational, this will allow us to produce onsite the phytoplankton, zooplankton and small shrimps needed to feed our animals, providing us with a guaranteed source of live food that is disease free, improving food quality and cutting food costs. Did you know that a single weedy seadragon eats up to 1,000 of these small shrimps a day, and they cost 10¢ each! And by the next issue of *Kilo i'a* we should have hired two new staff in our live exhibits department. Lots of positives to look forward to in the next 12 months! And most importantly, almost all these projects are being funded through the Friends of the Waikiki Aquarium—and that means partly by you! All of us at the Aquarium thank you for your support and offer our best wishes for a happy and successful 2014, and hope to see you here, many times, throughout the year!

Andrew Rossiter

Dr. Andrew Rossiter
Director, Waikiki Aquarium

Kilo i'a

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MANA'O

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*.



SAVE
THE
DATE

7TH ANNUAL ALOHA KOI SHOW

SATURDAY, FEBRUARY 15

9:00 A.M. – 4:30 P.M.

SUNDAY, FEBRUARY 16

9:00 A.M. – 2:00 P.M.

For the fourth consecutive year, we are pleased to host The Aloha Koi Appreciation Society's annual Aloha Koi Show on February 15 and 16. Over 200 top quality koi from throughout the US will compete for best in show. Supported by the Japanese Cultural Center, the family-friendly event will feature expert talks, keiki activities, cultural demonstrations and Japan-themed entertainment. Free with admission to the Aquarium.



SUMMER BY THE SEA

SESSION I • JUNE 9-13

Mon-Thu 8:30 a.m.–3:30 p.m.

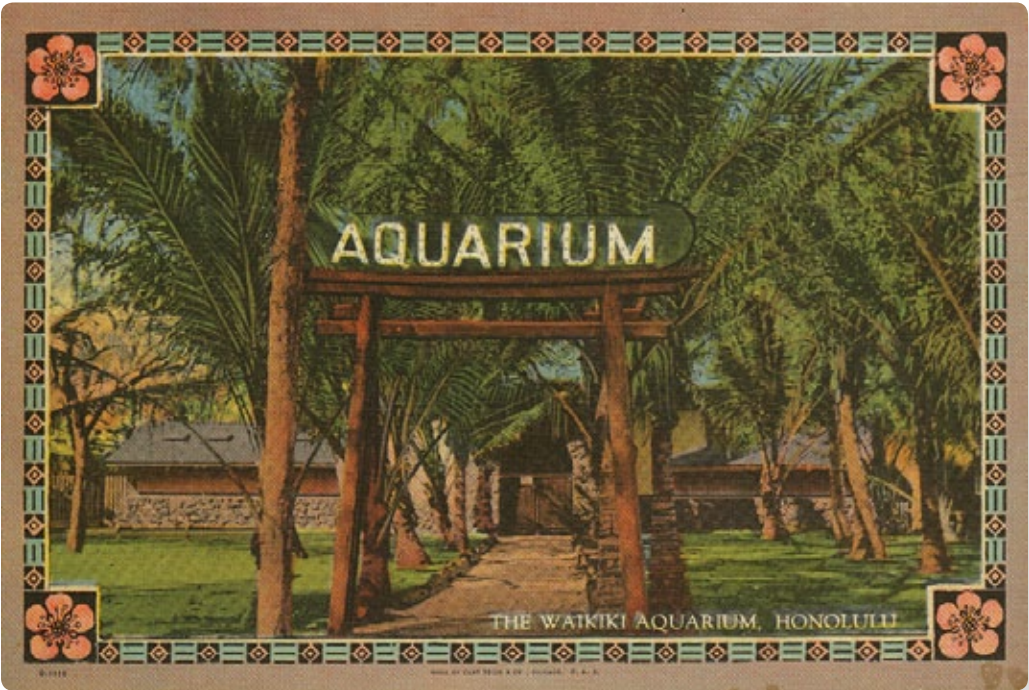
Fri 8:30 a.m.–5:00 p.m.

SESSION II • JUNE 23-27

Mon-Thu 8:30 a.m.–3:30 p.m.

Fri 8:30 a.m.–5:00 p.m.

Are your kids ready for summer? Splash into summer with the Aquarium's Summer by the Sea program! Students will spend a week learning about Hawai'i's unique marine animals and environments through hands-on activities and classroom sessions. Mark your calendars, registration begins April 1 and spaces fill up quickly! **More info on page 15.**



A New Wave

The Waikiki Aquarium turns 110 years old in 2014 and we're celebrating! Join us as we commemorate this momentous occasion in a two-day celebration of our past, present and future.

WED, MARCH 19 9:00 a.m. – 1:00 p.m.

SAT, MARCH 22 9:00 a.m. – 2:00 p.m.



2014 Lecture Series

In celebration of the Aquarium's 110th Anniversary, FOWA presents the 2014 Distinguished Lecturer Series with presentations by internationally renowned guest speakers. Presentations will address a variety of marine issues including marine conservation, biodiversity, climate change, ocean acidification, marine debris, overfishing and rising sea levels.

➡ The series will kick off on March 15, 2014 at the Waikiki Aquarium in recognition of the Aquarium's three living directors and a keynote speaker. Lectures continue every other month through the end of the year.

SEND US YOUR PHOTOS!

Do you have historic
Aquarium photos you
would like to share?
We'd love to see them.

Contact Graphics Coordinator
Kelsey Ige to submit your photos,
440-9018 or kige@hawaii.edu.



School children enjoy an early marine reptile exhibit at the Aquarium, circa 1960.

PHOTO: WAIKĪKĪ AQUARIUM ARCHIVES



110 YEARS

AS HAWAI'I'S WINDOW TO THE SEA

At the end of Kalākaua Avenue, at the base of picturesque Diamond Head, the Waikīkī Aquarium has made its home for 110 years, with a history and heritage that dates back almost to the beginning of public aquariums as institutions. What began as a small attraction to lure Honolulu Trolley riders to the end of the line in Kapi'olani Park has grown to a world-class institution.





*Editor's note: The facts presented in this history of the Waikiki Aquarium were compiled from various news clippings, government reports, past issues of Kilo i'a and personal accounts. This compilation does not attempt to be comprehensive; it merely highlights those events that stand as milestones in the 110-year history of the Waikiki Aquarium.

The facade of the original Honolulu Aquarium. The marine animal stones above the archway in this photo can be seen in the Aquarium's foyer.



Aquarium Director Spencer Tinker (third from left) during the grand opening of the new Waikiki Aquarium in 1955.

Excited patrons eagerly await the opening of the new Waikiki Aquarium.



PHOTO: TINKER COLLECTION, HAMILTON LIBRARY, UH MĀNOA

THE EARLY YEARS

During its early years, the staff of the Aquarium consisted of the Director, two caretakers and a cashier. Because of a lack of manpower, the Aquarium relied on local fishermen to supply new species to exhibit and replenish old ones. Potter would take a small boat out to the reef behind the Aquarium to meet the fishermen in their sampans to purchase various reef fishes, before they could be sold to local markets. Unfamiliar with the recent development of aquarium and fish-keeping, most of these suppliers were not concerned with keeping their catches alive (Potter estimated that up to half of these fishes did not survive for more than 24 hours). In spite of this and the Aquarium's shortage of manpower, Potter was able to maintain certain specimens, notably eels and jacks, for years.

The Aquarium's activities soon included research, and in 1912, an adjacent building became the first marine laboratory in Hawai'i, beginning its tradition of research. The laboratory's first researcher, Dr. Charles H. Edmondson, was the first professionally trained marine biologist to live in Hawai'i. His work in the Aquarium laboratory paved the way for University scientists to become active players in aquarium research and exhibitry; giving rise to many of the University's current prestigious research institutions, such as the Pacific Biosciences Research Center at Kaka'ako, and Hawai'i Institute of Marine Biology at Coconut Island, Kāne'ohe.

The Honolulu Aquarium saw many prominent visitors. Among them was the renowned William Jennings Bryan who wrote, "Language cannot do this subject justice. The fish are odd in shape and have all the hues of the rainbow. The tints are laid on as if with a brush and yet no painter could imitate them... No visitor to Honolulu should fail to see the Aquarium." Another satisfied visitor was author Jack London, who wrote, "I never dreamed of so wonderful an orgy of color and form. Each time I visited the Aquarium, I spent fascinated hours and each time I had literally to tear myself away."

The first 25 years of the Aquarium's existence saw more than a million visitors and it had become one of the first genuine tourist attractions in Hawai'i. Exhibits were sent to far-flung events such as the 1909 Yukon-Alaska Exposition in Seattle and the 1915 Panama-Pacific Exposition in San Francisco, which served to generate even more interest in the Aquarium.

After 36 years as Director of the Honolulu Aquarium, Potter retired in 1940. Despite never having received a formal education in marine biology, Potter's enthusiasm for the "fish business," as he called it, was well-known and admired. Potter's angelfish (*Centropyge potteri*) was named in his honor.

A NEW AQUARIUM

After a post-war surge in attendance, the original Aquarium building began to show signs of age. The Aquarium's second director, Spencer Tinker, actively pursued support and funding for a new aquarium from the Territory of Hawai'i.

In May 1949, the Territorial Legislature appropriated \$400,000 for the construction of a new Aquarium building, due primarily to the efforts of Representative Hiram L. Fong. After years of debate and input, the current site of the Aquarium was unanimously endorsed in 1952, and the newly christened Waikiki Aquarium opened on January 4, 1955.

State of the art for its day, the new Aquarium attracted the attention of Hawai'i's growing tourism market during the 1950's and 1960's. Its modern architecture and innovative exhibits brought in more than 260,000 visitors that first year.

NEW AQUARIUM, SAME PROBLEMS

Despite the early success of the new Waikiki Aquarium, it soon experienced some very familiar financial difficulties. The Aquarium's admission fees were originally maintained in a special fund to offset the cost of operations, but in 1961, this fund was abolished and all admission revenues were routed to the State's General Fund.

The consequent shortage of operating funds reached a head in the 1970's, with the Aquarium facing financial hardships and hiring freezes. On top of all this, O'ahu's declining fish population made stocking the Aquarium's displays progressively more difficult.

After 33 years of coping with the Aquarium's fiscal difficulties, Tinker retired in 1972, leaving behind a legacy that included his books on Hawaiian fishes, Pacific crustaceans, and other marine life. Tinker's book *Hawaiian Fishes* published in 1944, remains a classic. The handbook helped boost interest in the Aquarium and



Waikiki Aquarium facade, circa 1970.

DIRECTORS OF THE WAIKIKI AQUARIUM

The Waikiki Aquarium has celebrated its 110 year history with five diverse Directors.



Frederick Potter
1904-1940



Spencer Tinker
1940-1972



Dr. Leighton Taylor
1975-1986



Dr. Bruce Carlson
1987-2002



Dr. Andrew Rossiter
2004-present



The Aquarium's outdoor habitat has been home to several species: dolphins, sea lions, sea turtles and Hawaiian monk seals.



PHOTO: HAWAII VISITORS BUREAU / WAIKIKI AQUARIUM ARCHIVES



Television and radio personality Michael W. Perry interviews the candidates of the Hawai'i State Fish Election held at the Aquarium in 1984.

PHOTO: WAIKIKI AQUARIUM ARCHIVES



During the large facility renovation of the early 1990's, the Aquarium's Education Department, along with volunteer docents, became mobile and took to the road to bring ocean awareness and education to the schools.

PHOTO COURTESY OF NANCY MAGRAUDY.



New Director Andrew Rossiter joined past directors in a dive session at Hanauma Bay in 2004.

L to R: Leighton Taylor, Cindy Hunter (Interim Director), Alan Hong (retired Hanauma Bay Manager), Andrew Rossiter, Bruce Carlson.

PHOTO: MARJ AWAI

the islands' marine life during post-war Hawai'i. Visitors came to the Aquarium, book in hand, to see galleries of beautiful, now familiar fishes. Tinker's butterflyfish (*Chaetodon tinkeri*) was named in his honor.

FROM STRUGGLE TO RENAISSANCE

Following Tinker's retirement, Charles DeLuca, Aquarium curator since 1969, was given the unenviable task to temporarily fill the director's position. Despite the lack of staff and funding, DeLuca and his staff were constantly working to repair and upgrade the Aquarium's facilities with the help of volunteers who donated their time to help maintain the Aquarium's exhibits and perform odd jobs as needed.

In the mid 1970's, the Aquarium's survival as an institution of research, education and conservation was championed by its third director, Dr. Leighton Taylor. Coming from UH's Department of Zoology, he understood the need for a new Aquarium vision committed to education, conservation and research, as well as the importance of developing a strong relationship with UH. He also realized the need to diversify revenue sources, and out of these efforts, the Friends of the Waikiki Aquarium (FOWA) and the Natural Selection gift shop were established in 1977.

FOWA, formed through the UH Foundation, was a non-profit organization created to support the Aquarium's programs through donations. Funds donated through FOWA would be channelled directly into the Aquarium's programs, unlike admission revenues.

FOWA funds were eventually responsible for the addition of new Aquarium exhibits and educational programs.

By the time Taylor retired in 1986, his list of accomplishments were long and far-reaching. The logo, Education Department, Volunteer Program, library, research facility, and the first Exhibits Master Plan (1978) all came to fruition during his tenure. The Aquarium's galleries were more visitor friendly with various physical improvements as well as conceptual organization and themes, and the Aquarium's exhibits expanded to the outdoors with the establishment of the Hawaiian Coastal Gardens. His stewardship initiated and supported research programs focused on improving water quality on exhibit tanks, maintaining health of exhibit specimens, developing nutrition programs, and rearing selected marine life. Taylor's goby (*Trimma taylori*) is named in his honor.

RECONSTRUCTION AND REVITALIZATION

Following the Aquarium's extensive growth during Dr. Taylor's tenure, the Aquarium in 1987 found new leadership in its fourth director Dr. Bruce Carlson who worked his way from graduate student aquarist, through the ranks, up to director. Carlson emphasized new, naturalistic exhibits which characterized habitats of Hawai'i and the Western Pacific. He developed a set of clearly defined goals and plans, and initiated the coral propagation program, for which the Aquarium is now world-renowned.

The Aquarium took a step back to focus on the long-term goals of the facility and a master plan for revitalization of the Aquarium

received funding support from the 1988 Legislature. From 1992-1994, Carlson oversaw the Aquarium's most extensive renovation since 1955. This included the construction of the Edge of the Reef exhibit and the renovation of the Hawaiian Monk Seal Habitat. The \$3.2 million investment served the Aquarium's responsibility of research, education and conservation through living collections and new visitor facilities.

The Carlson era saw many achievements and developments in marine sciences. In October 1990, the Waikiki Aquarium received national attention for being the second facility in the world to successfully hatch chambered nautilus eggs in captivity. The opening of the mahimahi hatchery allowed the Aquarium onsite research of the species as well as exploring the correct methods of running a hatchery. The Aquarium continued to propagate coral behind the scenes and in the new Coral Farm exhibit (probably every public aquarium in the country that exhibits live coral, has some specimens provided by the Waikiki Aquarium).

After 15 years as a fixture of the Waikiki Aquarium, Dr. Carlson departed to accept a position as Vice President for Life Sciences at the Georgia Aquarium in Atlanta in 2002. Three reef animals are named in his honor; a damselfish (*Paraglyphidodon carlsoni*), an anthurus (*Pseudanthias carlsoni*), and a nudibranch (*Halgirda carlsoni*).

A NEW WAVE

After an extensive international search, Dr. Andrew Rossiter was appointed as the fifth and current director of the Aquarium at the

onset of the Aquarium's centennial celebration. His career had taken him to five continents and he had most recently served as Senior Research Scientist at the Lake Biwa Museum in Japan's Shiga Prefecture.

Rossiter was drawn to the Waikiki Aquarium by its immense potential and has a goal to consolidate and build upon the solid foundation laid down by his two predecessors. His leadership has revamped many existing displays and developed several new key exhibits, such as the immensely popular Goldfein-Spottswood Jellyfish Gallery, the Northwestern Hawaiian Islands exhibit, as well as acquiring extremely rare fish species such as the Abe's and peppermint angelfishes.

As the Aquarium enters its next wave of history, visitors can look forward to new exhibits, such as the highly anticipated seahorse, seadragon and pipefish exhibit, a new ocean sciences laboratory and many other exhibits in the works. From a small attraction at the end of the trolley line, to the modern institution it has become today, the success of the Waikiki Aquarium can be attributed to its incredible history and all of its amazing staff, volunteers, and of course, its visitors and members. Now, as the second oldest Aquarium in the country, the Waikiki Aquarium looks forward to another 100 years at the helm of progress in educating the world about the marine life of Hawai'i and the Pacific. 🐠

Marine Educators' Night

Educators from across the state mingled under the stars during the Marine Educators' Night on Friday, October 18. Exhibitions from various agencies and an incredible presentation by renowned ichthyologist Richard Pyle rounded out the evening. Attendees gathered on Coconut Island the following day for a daytime workshop sponsored by a \$25,000 grant from NOAA's Ocean Explorer program and the National Marine Sanctuary Foundation.

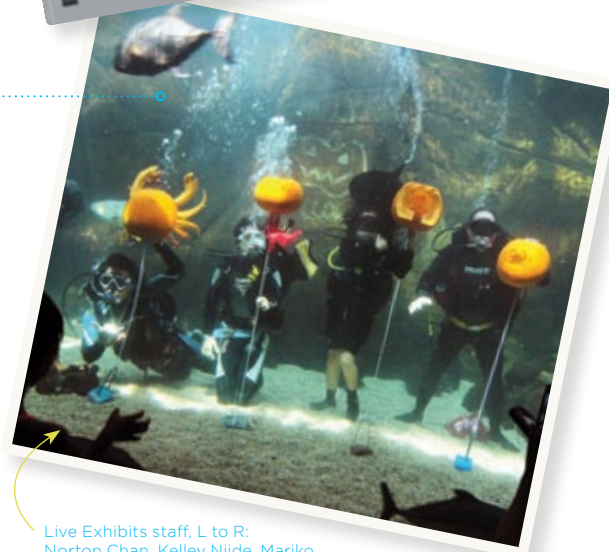
The Ocean Explorer site is not just for teachers; log on and follow real time ocean explorations across the Pacific and beyond:
www.oceanexplorer.noaa.gov.

Hawai'i's 5-0

Once again, the work of the Graphics Department has been recognized as one of the best in the state. Out of a sea of hundreds of entries, the 2013 Ke Kani O Ke Kai and the 2013 Family Night: Circus Under the Sea campaigns were clear crowd favorites. Two Awards of Excellence (out of a total of just 50 available awards) presented by AIGA, the Professional Association for Design, Honolulu Chapter, were presented to Graphics Coordinator Kelsey Ige on October 26 aboard the USS Missouri.

Aquamarine Halloween

Staff divers competed in a compelling spectacle of underwater tricks and treats in our Aquamarine Halloween Underwater Pumpkin Carving Contest on October 31. Held in the Hunters on the Reef exhibit, the first-time event gathered a very excited crowd. Although the competition was fierce, only one winner prevailed: Norton Chan and his inventive pumpkin crab was a crowd favorite and the winner in our Facebook fan poll. Congratulations to Norton and mahalo to all of our staff involved in making Halloween at the Aquarium a fun one!



Live Exhibits staff, L to R: Norton Chan, Kelley Niide, Mariko Katayama and Alan Nelson with their carved creations.

Members' Night 2013

Members spent an evening with the turtles at Members Night on November 3. Special presentations by Dr. Kyle Van Houtan, leader of NOAA Fisheries Protected Species Division's Marine Turtle Assessment Program, and Irene Kinan Kelly, sea turtle recovery coordinator with NOAA NMFS Pacific Islands Region, focused on the rescue, rehabilitation and ongoing conservation of sea turtles in Hawai'i. Aquarium Biologist Jesse Ciletti, who oversees the new sea turtle exhibit, was on hand to share how we care for our newest marine reptilian residents.

Making it Rain

The Aquarium's Hawaiian Cultural Gardens will soon grow more beautiful with the addition of a new Rain Garden thanks to The Department of Health Clean Water Branch and Hui 'o Ko'olaupoko. The site of the new garden was previously occupied by a large storage container. The future garden will be home to native plants that will capture natural rainwater.

Breakfast with the Biologists

Our first Breakfast with the Biologist event for Aquarium volunteers on November 14 was a resounding success. Volunteers had the opportunity to talk with some of our Aquarium biologists and learn more about our exhibits in hopes of sharing the information with visitors. Thanks to Live Exhibits staff Norton Chan, Alan Nelson, Kelley Niide, Mariko Katayama, and Curator Shawn Garner for their invaluable contributions.

On Deck

The Aquarium's Live Exhibit staff will soon be able to work on a brand new research deck. The new live feeds area will allow us to produce our own food for our animals, improving quality and cutting costs.

My Favorite Job

BY DR. LEIGHTON TAYLOR

Third Director of the Waikiki Aquarium • Years at the Aquarium: 1975 to 1986

WORKING AT THE WAIKIKI AQUARIUM WAS THE BEST JOB I'VE EVER HAD. Better than managing a mongoose colony at Hawai'i Institute of Marine Biology's (HIMB) Coconut Island; better than teaching fishery biology; better than trying to manage a natural history museum; better than swimming with sharks (in both seawater and formalin); even better than running a winery (all of these enterprises have much in common, ask me later). What was it about the Aquarium that made it such a great place to be and to work? Part of it was what I was able to do there. Think of it, I got to name a newsletter (*Kilo i'a*); named a book and a gift shop (Natural Selection gift shop); helped run a political campaign (for the election of the official state fish); helped found a respected non-profit corporation (FOWA); helped figure out a way to collect money from the public—and not give it back to the State; got paid to swim in the sea, collect fish, and watch students and colleagues build living ecosystems within our walls; and watched a variety of creatures grow and flourish—from corals to seals, to clams to fish, and even aquarists and students. Oh yes, and I got to testify at the Legislature a lot, too.

Over the years since having worked at the Waikiki Aquarium, I have tried to figure out what made it such a fine place to be. I gained some understanding when I wrote

a book reviewing the history of aquariums and recounting the founding and management of contemporary institutions (*Aquariums; Windows to Nature*, Macmillan). But recently, it has dawned on me that what I loved most about the Waikiki Aquarium was its quality as a center of learning. If that sounds grandiose, let me explain. The Aquarium is a key part of the University, and like every smaller (not younger) sibling, it must continually speak up to get recognition and its share of resources. It is this foundation in a center of research and scholarship that nourished the multiplex of learning and teaching that my colleagues and I all enjoyed and to which we contributed.

No job is without setback or disappointment. Given Hawai'i's cultural and daily interactions with the sea, many of us have long felt our residents and our visitors deserve a larger, better aquarium. My colleagues and I failed to achieve that goal, but we can take some solace in the small scale "jewel box" spirit of the place, but Hawai'i needs and deserves more.

Through it all, every person who has crossed the threshold to the Aquarium was committed to learning about the sea—visitors, students, aquarists, support staff, volunteers, and patrons. We learned to work together, to respect and protect each and every organism in our care, to learn



R to L: Bruce Carlson (then, Curator), Leighton Taylor, Pat Raines (then, Waikiki Aquarium Docent Coordinator), Governor George Ariyoshi, Jerry Mart (Honolulu Zoo).

PHOTO COURTESY OF LEIGHTON TAYLOR.

their biology and behavior so we could help others understand how these animals lived and why they matter. We were able to share what we learned with colleagues in other parts of the world: informally by helping other aquariums, and formally by earning accreditation with professional organizations. Many, many of these learners went on to measurably help other institutions and to write books, create films, build exhibits, and establish organizations.

Oh, and the most important thing I did in my job at the Aquarium? Probably, hire Bruce Carlson as a student aquarist, fresh from the Peace Corps in Fiji. 🐠

Distinguished Residents

Have you ever wondered how old some of your favorite Waikīkī Aquarium animals are? With the expert TLC every inhabitant is accorded, we have accumulated many long-term residents. From the lovely golden pygmy angelfish to the giant trevally, you can find these seniors throughout the Aquarium's galleries and exhibits.

RED-TOOTHED TRIGGERFISH

A favorite of guests and volunteers, the beloved red-toothed triggerfish was added to the Barrier Reef exhibit in 2003. (A)

SMITH'S BUTTERFLYFISH

The Smith's butterflyfish, collected by Brian Greene in Easter Island, has doubled in size since it went on display in the Barrier Reef exhibit in 2002. (J)

HARLEQUIN SWEETLIPS

With its dark spots and big brown eyes, the harlequin sweetlips in the Reef Predators tank was collected in Tonga by Aquarium biologist Norton Chan in 2002. (K)

GOLDEN PYGMY ANGELFISH

Swimming amongst a technicolor palette, the golden pygmy angelfish in our Corals Are Alive exhibit arrived in 1998. (B)

EMPEROR ANGELFISH

Arriving from Guam, the beautiful emperor angelfish in the Coral Farm exhibit was added in 1998. (G)

PINEAPPLE CORAL

Collected in Palau by former Director Bruce Carlson, the pineapple coral first came to the Aquarium in 1998 and was added to its current home in our Barrier Reef exhibit in 2002. (D)

GIANT GROUPER

Hunters on the Reef is home to many of our longest-termed residents. The largest of our giant groupers came to us from the Cairn's Marine Aquarium in Australia in 1998. (C)

RED SNAPPER

Our always curious red snapper was collected by fisherman Glen James near Fanning Atoll, Kiribati, in 1997. (M)

BLUEFIN TREVALLY

The bluefin trevally ('ōmilu), was collected in Kāne'ohe Bay in 1996. (E)

ZEBRA SHARK

The graceful zebra shark arrived at the Aquarium from Australia in 1995. (F)

GIANT TREVALLY

The giant trevally (ulua aukea) was collected by former Aquarium biologist Kirk Murakami and former Graphics Coordinator Tom Kelly in January of 1993 while diving off the Honolulu Airport's Reef Runway. (L)

MAKAONAONA

At almost 30 years old, we can't forget to recognize our most beloved (and most distinguished) Waikīkī Aquarium resident, Makaonaona, who came to us from the French Frigate Shoals as a young monk seal on May 31, 1984. (H)

GIANT CLAMS

The longest-lived giant clam in any aquarium happens to live in our Barrier Reef Exhibit. It has resided here for more than 31 years! (I)



PHOTO: WAIKIKI AQUARIUM ARCHIVES / KWAJALEIN HOURGLASS, DAVE JOHNSON

Recollections

BY DR. BRUCE CARLSON



Fourth Director of the Waikīkī Aquarium • Years at the Aquarium: 1976 to 2002

1986: what an exciting time it was for all of us at the Waikīkī Aquarium. That's the year I took over the reigns of the Waikīkī Aquarium from Dr. Leighton Taylor, and when we began an era of reconstruction. During the previous decade, Leighton had primed us all with a vision that we could make the "modest" Waikīkī Aquarium into a world-renowned institution. Leighton initiated new sources of revenue, organized the Friends of the Waikīkī Aquarium (FOWA), worked with us to develop more educational exhibit themes, and most importantly he attracted a talented group of educators, aquarists, aquaculture specialists and many others to work as a highly motivated team. With all this in place, we couldn't fail—and I do mean "we"—because everyone participated in all aspects of the renewal and success of the Waikīkī Aquarium.

The major event during my tenure was the comprehensive renovation of the old Aquarium. With the design talents of architect Sid Snyder, and exhibit designers Dr. John Nightingale and James Peterson, we upgraded everything from the entryway to the Edge of the Reef. The FOWA Board and then President Wayne Richardson were instrumental in helping us secure funding (\$3 million) from the Legislature. The Education Department worked closely with the Live Exhibits and Facilities Management teams and together we developed new

gallery themes, new exhibits, and new educational tours for students. The renovations brought new vitality (and awards!) to the old Waikīkī Aquarium and re-motivated the staff to strive for even loftier goals.

Sadly, the last few years of my tenure were not as productive. Proposals to develop a new, world-class aquarium in Kaka'ako put further renovations at the Waikīkī Aquarium on hold. Eventually the Kaka'ako plan fell through but by then I had accepted a new opportunity on the mainland.

I still recall my years at the Waikīkī Aquarium, and the friendships I made, as the best years of my life. It is amazing that the Waikīkī Aquarium as an institution has survived for 110 years; it's a great testament to the staff, to management, and to the community for all the support it has received. Despite its small size and age, I hope that it can enter another phase of major renovation and renewal to keep it vibrant for yet another 100 years. 🐠



TOP: Collecting chambered nautilus in Palau, 1978; Photo by Mike deGruy. ABOVE: Before and after renovations of the Hawaiian Monk Seal Habitat.

PHOTOS COURTESY OF BRUCE CARLSON.



PHOTO COURTESY OF NANCY MAGRAUDY

From Seals to Sales... and Everything in Between

Among the ranks of our longest serving volunteers—one volunteer has dedicated over two decades in a variety of programs to promote the Aquarium’s mission.

Sitting behind the register in the Aquarium’s gift shop, volunteer Nancy Magraudy flashes her electric smile to shop customers as she helps them finish up their purchase. As a new Hawai’i resident, Magraudy joined the Aquarium after retiring from the real estate business in California. “I saw an advertisement for volunteer training in the newspaper and I was looking for something to do and ways to get involved,” she recalls. That was 23 years ago. As one of the longest serving Aquarium volunteers, Nancy’s dedication to the Aquarium has spanned many volunteer programs: from the Edge of the Reef, to Docent, to the Hawaiian Monk Seal program and now her current position in the gift shop. Magraudy’s fondest memories are from her time as part of the Hawaiian Monk Seal program in the mid-1990’s. She

worked directly with Makaona and the late Nuka’au giving educational presentations to guests during the seals’ enrichment training. “The monk seal training program was very different at that time. Its one of the biggest changes I’ve seen,” she says, “I smelled like fish every day in the elevator going home! But it was worth it, I loved those seals.” She was ecstatic when her son and grandson came to see her train the seals for the first time, “It was rewarding to have my family see what I do here, especially my grandson. Not all kids can say their grandma is a monk seal trainer!” Nancy continues to share her extensive knowledge of the Aquarium and its history with people she meets, talking with shop guests about their visit and, of course, making sure they’ve seen her favorite resident, Maka. With all the changes the Aquarium has



gone through, she is excited for the future and what is next for a place that means so much to her family and countless others, “Affordability and accessibility for all families is so important. And I appreciate the sense of place the Aquarium has maintained. I’ve continued to volunteer because I feel at home at the Aquarium, the people here are great and I like to do something rewarding. I look forward to many more years as an active volunteer.”

▶ The Waikīkī Aquarium is fortunate to have so many talented individuals donating countless hours to carry out our mission of education and conservation. Nancy is one of over 200 active volunteers at the Aquarium. Volunteers provide more than 17,000 hours every year and are the backbone of our educational outreach. Interested in volunteering? For more information, contact the Volunteer Program at 440-9020.

Aquarium After Dark

Feb 7, Fri 6:30-8:30 p.m.
Feb 21, Fri 6:30-8:30 p.m.
Mar 21, Fri 6:30-8:30 p.m.
Apr 4, Fri 6:30-8:30 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. Are yellow tang always yellow? Come for a class followed by a tour of the exhibits. Minimum age 5 years; youngsters must be accompanied by an adult. \$10/adult, \$7/child (\$14/10 for non-members).

Exploring the Reef at Night

Jan 29, Wed 7:00-9:00 p.m.
Feb 12, Wed 6:30-8:30 p.m.
Feb 27, Thu 7:00-9:00 p.m.
Mar 13, Thu 6:30-8:30 p.m.
Mar 28, Fri 7:00-9:00 p.m.
Join us as we explore the reef at night in an experience you’ll not forget. Aquarium staff and participants waded up to their knees on these wet and wild excursions. We’ll look for crabs, shrimps, eels and octopus. For adventurers ages 6 and up; youngsters must be accompanied by an adult. \$15/adult, \$9/child (\$18/12 for non-members).

Meet the Monk Seals!

Every 1st & 3rd Tuesday of the month 3:00 p.m.
More sightings of seals around

the main Hawaiian Islands have renewed interest in these amazing and endangered animals. Learn about seals in the wild: What do they eat? How deep do they dive while hunting? Do they really have fingernails? Then move to the monk seal habitat where Aquarium Biologists will introduce you to the resident seals, Makaonaona and Hō’ailona. Participants will assist with seal enrichment activities. Designed for participants 6 and up, but anyone interested is invited to attend. Groups of 15 or less are welcome. \$7/person (\$10/person for non-members).

Behind the Scenes

Every 2nd & 4th Tuesday of the month 3:00 p.m. (Starting Jan 7, 2014)
Learn what makes the Aquarium run, from fish food to quarantine, and many stops in between. Climb-up and peer into the backs of the exhibits and see how exhibits are created. Visit the coral farm and the Jelly Hale, where sea jellies are raised. The program will end with participants feeding the animals the Edge of the Reef exhibit. Minimum age 7 years; youngsters must be accompanied by an adult. Accessibility is limited. Groups of ten or less are welcome. \$12/adult, \$8/child (\$15/\$10 for non-members).

Afterschool at the Aquarium

Wednesdays 3:00 p.m.
Looking for something to do after school? Every Wednesday, the Aquarium hosts an interactive activity on the Moi Deck. Join us for a critter encounter or a marine-inspired craft activity. The activities last anywhere from 10 to 20 minutes and are designed for ages 4 to 8, but everyone is welcome. Free with admission to the Aquarium.

Summer by the Sea

Session 1: June 9-13
Mon-Thu 8:30 a.m.-3:30 p.m.
Fri 8:30 a.m.-5:00 p.m.
Session 2: June 23-27
Mon-Thu 8:30 a.m.-3:30 p.m.
Fri 8:30 a.m.-5:00 p.m.
Spend a week of summer learning what lives in Hawaiian waters. What’s the best way to learn? By doing! Snorkel, swim and explore the coast from Waikīkī to Diamond Head. After a morning of outside adventures, the Aquarium turns into a classroom. Learn about the animals in our exhibits and watch them being fed on special behind-the-scenes tours. For marine biologists ages 8-12 years. All students should be confident swimmers and enjoy snorkeling. \$275/child (\$325 for non-members).
Registration begins: April 1, 2014

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Look for class updates on:
www.waquarium.org
PRE-REGISTRATION IS 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 “University of Hawai’i”):

IF PAYING BY CREDIT CARD

Credit card # _____ VISA ☐ MC ☐

Expiration Date _____ Last three digits of security code on back of card _____

I am a FOWA Member Yes ☐ No ☐



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ON
BOARD

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Welcoming a New Wave

The year 2014 marks a major milestone for the Waikīkī Aquarium with its 110th anniversary. Get ready to enjoy “A New Wave” of exhibits, improved facilities and special events. The Aquarium’s Distinguished Lecturer Series (DLS) will kick off the festivities, featuring internationally renowned speakers who will address major marine conservation issues such as climate change, ocean acidification, ocean debris, overfishing and sea level rise. The series begins March 15 with a noted keynote speaker.

The Aquarium could not have met this significant milestone without its Friends of the Waikīkī Aquarium (FOWA) members. We appreciate your support and thank you for your contributions that have helped to transform the Aquarium from an entertainment venue at the end of the trolley line in Waikīkī into a world-class marine educational institution that now welcomes more than 330,000 visitors each year. We know the Aquarium is important within our Island community and we strive to grow it as an economic and educational resource.

As the Aquarium’s research programs develop, we hope that FOWA members continue to enjoy our activities and special events, and take an active interest in our conservation efforts. For the past decade, the Aquarium and the University of Hawaii Botany Department, along with local businesses, have participated in invasive algae beach clean ups to help restore the ecosystems in the reef fronting the Aquarium. Concurrent with an Aquarium-led research study that begins this January, we will host six invasive algae clean ups in 2014, and we invite you to participate. These beach clean ups are just one way that the Aquarium increases public awareness on key ocean issues. We look forward to seeing you and your families as we enter a very important year in this “New Wave” for the Aquarium.


Marcus R. Boland
CO-CHAIR, FRIENDS OF WAIKĪKĪ AQUARIUM


Faye Kurren
CO-CHAIR, FRIENDS OF WAIKĪKĪ AQUARIUM

There are 18 people currently serving on the Friends of the Waikiki Aquarium board. To acquaint you with these people who volunteer their time to help the Aquarium, Kilo i'a features one board member in each issue.

FRESH
FACES



SHAWN O. GARNER

POSITION
Curator of Live Exhibits

EDUCATION
B.S. in Aquatic Biology & Fisheries
Management, Ball State University

FAVORITE AQUARIUM RESIDENT
Banggai cardinals;
I have bred this species in the past
(I have a tattoo of the pair I bred!)

With his roots stemming from Indiana, branching to Missouri, Florida, and now Hawai‘i, the Aquarium is turning a new leaf with curator Shawn Garner. His career has led him from owning and operating a small coral farm during and after college; biological survey on freshwater rivers and streams for the State of Indiana; working at the Wonders of Wildlife in Springfield, Missouri; and most recently, creating the Seahorse Conservation Laboratory at Mote Marine Lab in Sarasota, Florida. “I was able to reproduce four different species of syngnathids for 69 different zoos and aquariums to help offset the amount of seahorses taken from the wild.”

As a kid, Garner’s family owned a large horse farm and, interestingly enough, a 76 truck stop. Hawai‘i is proving to be a much different scene from what Garner is used to, “I’m learning to surf, and hiking and biking these mountains has been very interesting and fun. I’m enjoying my new surroundings: its very different from the very flat landscape of Florida and Indiana with corn fields as far as the eye can see!”

Garner has high expectations for the Aquarium, “I hope to advance the public’s knowledge

The Waikīkī Aquarium has so many amazing accomplishments and I hope to lead my team to even more achievements!

and respect for the wonderful resources around us and bring the Aquarium to the forefront of conservation and aquaculture technology by building and designing new and modern exhibits. The Waikīkī Aquarium has so many amazing accomplishments and I hope to lead my team to even more achievements!”

BEHIND
THE
SCENES

Diving with Horses

Aquarium curator finds himself among seahorses in the Caribbean.

Roatan, Honduras — a small, narrow island surrounded by extensive coral reefs and the second largest barrier reef in the world. Aquarium Curator Shawn Garner set sail for four daily dives (sometimes more) aboard the Coco IV in warm Caribbean waters as a key speaker at the First Annual Seahorse Festival at the Coco View Dive Resort in Roatan.

The week long event, held from November 2-9, was established in an effort to identify Caribbean seahorse species in local waters and educate participants of the importance of seahorse conservation. Coming from Mote Marine Laboratory in Florida, Garner is experienced in working with syngnathids (seahorses, seadragons and pipefishes) and corals. Finding syngnathids is no easy task while diving over underwater cliffs, grassflats and a sunken boat wreck teeming with large fishes. With Garner’s assistance, participants were able to observe and identify a variety of local seahorse and pipefish species in the vibrant environment surrounding the resort. Each dive was followed by group discussions to review findings.

Days were concluded with evening presentations, of which Garner gave three. He first discussed the biology of seahorses and how their amazing adaptations (head like a horse, pouch like a kangaroo, and a tail like a monkey) are well-suited to their natural habitats. In his following presentation, Garner discussed the seahorse conservation efforts of the Waikīkī Aquarium and, his previous home, Mote Marine Lab. Garner’s third presentation taught attendees about responsible Aquarium keeping—how to integrate seahorses



PHOTO COURTESY OF COCO VIEW DIVE RESORT

and other fishes in home aquariums without impacting the animals’ natural environments.

To round out a week of successful dives and seahorse observations, Garner shared the Aloha spirit and (no, he didn’t dance the hula) presented all attendees with special edition Hard Rock Cafe Honolulu/Waikīkī Aquarium seadragon pins in promotion of the new syngnathid exhibit.

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 registration form with a check or credit card information to:

Waikīkī Aquarium • Education Department
2777 Kalākaua Avenue
Honolulu, Hawai‘i 96815-4027



Ten Years After... and Beyond

BY DR. ANDREW ROSSITER

Fifth Director of the Waikiki Aquarium • Years at the Aquarium: 2004 to present

TIMING IS EVERYTHING. I joined the Aquarium in April 2004, just after its official 100th Birthday on March 19. At that time I was working at one of the largest natural history museums in Japan, which housed the largest freshwater aquarium in the county. Only eight years old, everything about the building and its contents was pristine, designed to be aesthetically pleasing and functional, and oh so clean and sparkling.

As noted by Bruce Carlson in his article, since the idea of a new aquarium at Kaka’ako was first floated in 1996, uncertainty had surrounded the Waikiki Aquarium’s future. So, by 2004 the Aquarium had been in a hiatus for many years: no significant upgrades or renovations to the 50-year-old building had taken place, and it was showing signs of wear and tear.

Against this backdrop, I still remember my initial impressions when visiting the Aquarium just before my interview for this position. It was poorly signposted, inconspicuous and easy to miss. Fronting the entrance was a puzzling display of ceramic ‘easter eggs’, whose marine connection still escapes me. A modest, even unexciting, exterior, and a dated and dull foyer area.

But then I entered the galleries and saw, facing me, the Barrier Reef Exhibit. Having dived on many tropical reefs, the authenticity of that exhibit, with its profusion of live corals, anemones and multicolored fishes, held me awestruck. Wow! Others may be larger or newer, but even today, I think this is the best coral reef exhibit I have seen in any aquarium, anywhere. I wandered through the rest of the galleries, and it was clear that there was a talented team of people here. The level of detail, the health of the animals, and the educational components were top notch. It was clear that much work needed to be done on building and grounds maintenance, upgrades and renovation. But beyond these challenges I saw a firm foundation of marine education through exhibitry laid down by Leighton Taylor and Bruce, my two predecessors. And I saw immense potential. It was this potential that attracted me to the Aquarium, and it is this potential that stimulates me today.

In 2004, the Aquarium had for long been operating under difficult conditions and I am still deeply appreciative of the commitment, ingenuity and hard work of the Aquarium staff at that time, which kept the Aquarium operational. But of course, in a dynamic world, standing still means that everything else moves ahead of you, and so we had some catching up to do. Often, when viewed daily, this goes unnoticed and unaddressed.

With fresh eyes and fresh ideas we have addressed many of the issues, and identified others for future attention.

But just as overfamiliarity can lead to inattention, equally, so do positive changes and achievements drift from the memory and become forgotten. So before writing this article, I asked staff what we had accomplished during the past 10 years, and we came up with the following partial list. Given the financial constraints and staff shortages we have been operating under, I think it is a remarkable achievement; a testament to our skill, tenacity and dedication, and something we can be proud of.

Several significant physical improvements have been made.

Our first priority was to upgrade the classroom. Cosmetic changes in 2004 made it more presentable until the 2008 installation of a new interactive wall, new flooring in 2009, and in 2010 a complete renovation. In 2008 a new electrical system and backup generator replaced our outdated and inadequate system. A new roof coating installed in 2010 solved the issue of water dripping into the offices and galleries whenever it rained. A new awning along the ewa side of the building replaced the torn and tattered tarpaulin canopy, sprucing up the exterior appearance and providing a dry walkway. Extensive replanting of the grounds with native Hawaiian plants, with accompanying information labels, improved the aesthetics of the grounds while adding an educational perspective. And most recently, a complete renovation of all

offices, the age-related condition of which was wholly below par.

Feedback indicates that you, FOWA members, have noticed and approved of the new format *Kilo i’a* and the new website (both designed in-house) and the many improvements and additions within the galleries. In our collection we now house several species not on display in 2004, including the spotted knifejaw, Hawaiian morwong, Abe’s angelfish, peppermint angelfish, bearded armorheads, several jellyfish species, green sea turtles, several threatened coral species, the inarticulated brachiopod *Lingula reevii*, deepwater anthias, etc. Several of these can be found here and at no other public aquarium worldwide.

Of the 40 exhibits we had in 2004, 21 have been completely renovated and/or rethemed, five have been removed, and seven have been newly added. Behind the scenes, a doubling of our coral propagation capacity, a new seadragon research area, and the complete replacement of our two quarantine areas with new equipment, allows us to expand our research activities and ensure the best care and attention for our animals. Addition-



ally, two new 20-foot circular tanks allow us to provide emergency care to our resident monk seals, sharks and larger fishes. Through a collaborative working relationship with the team at NOAA's Hawaiian Monk Seal Research Program, these two tanks house sick or injured wild monk seals for treatment and rehabilitation before being released back into the wild. The value of this program can be appreciated from female R5AY (known locally as “Honey Girl”), which was housed here early last year with a hook-related injury that required surgical removal of two-thirds of her tongue. She gave birth to the first monk seal pup of 2014 on January 10.

Progress requires people, and our progress has originated from within. I am a believer in empowerment, placing people in positions of responsibility, and have assigned almost all staff a lead role in a given project, irrespective of their ‘seniority’. Some individuals can lead, are team players, are enthusiastic and motivated, are well-organised, willing to push boundaries and try new things. Others are not. ‘Seniority’ is irrelevant. It was with this approach that in 2005 I assigned ‘junior’ Aquarium biologists Kelly Niide and Mike Callahan to convert a large, broken, interactive wall map of the South Pacific, into the new Goldfein and Spottiswood Jellyfish Gallery. The first major renovation here in over a decade, they did an excellent job, and this gallery is consistently listed among visitor’s favorites. Since then other significant projects successfully headed by ‘junior’ staff include the 2010 classroom renovation and the new 2012 Northwestern Hawaiian Islands exhibit. Although not all project delegations have been so successful, I would also like to think that all staff involved have learned and developed from the experience of being in a leadership position.

I’m often asked what is my major achievement or best project? I’m never satisfied with the status quo, and am always looking to improve, be it myself, things I can influence or affect, and the Aquarium in general. So, I’d have to paraphrase Frank Lloyd Wright and say, “The next one... and then the one after that!” That said, I am very pleased with some of the new hires we have attracted, and I’m especially proud that all have been selected irrespective of nationality, race, color or creed. We have hired the best, and they have brought new ideas, new skill sets and a vibrancy and enthusiasm to complement and strengthen the team already in place. I’m delighted at our strong relations with the University and the University Foundation—both have been very supportive over the past decade. I’m pleased with our renewed commitment to marine research and conservation, and especially proud of our active involvement as a Coastal



Rescued monk seal KE18 was housed behind the scenes in one of the 20-foot tanks in 2013 during a NOAA rehabilitation effort.

“Progress requires people, and our progress has originated from within.”

Ecosystem Learning Center, and our signing of a Memorandum of Agreement with NOAA: we have a level of support and collaboration with NOAA at both the local and national level that is unparalleled in our history. I am also proud that we reinstated our Ke Kani O Ke Kai summer concert series, after several years of hiatus. From a relatively modest start in 2004, these are now signature summer events for the local community, introducing the Aquarium to many people who might not otherwise visit. Each year, concert proceeds are earmarked for a given Aquarium project, and so are critical to our progress here. And I’m especially appreciative of the enthusiasm, ideas and support that the revamped FOWA board has provided.

So? What’s next? Well, over the next year or two, plenty! A new Hawaiian Streams exhibit next to the foyer area will have an overhead waterfall feeding into a turbulent pool via a series of streams. Our new curator will ensure the completion of our major new Seahorse, Seadragon and Pipefish Gallery, while another new hire is heading the design and construction of a new Live Food Culture area. Gallery 4 will be rethemed to a Marine Protected Areas and Conservation Gallery, with two large new coral reef exhibits replacing the four freshwater exhibits. The imminent addition of a Disease and Quarantine Specialist will ensure the best care for our animals whenever they become unwell, and an incoming Coral Specialist



will head the consolidation and expansion of our coral propagation, research and conservation programs.

New audio wands with updated commentaries will be available in mid-2014. A new hands-on learning center, the Ocean Sciences Laboratory, will be designed and headed by our new Ocean Scientist staff, recruitment of whom is ongoing. Installation of a photovoltaic array on the Aquarium roof is imminent. A phased upgrade of the entire public face of the galleries is already underway. Complete renovation of the public bathrooms, installation of a new security camera system, a new canopy and viewing panels on the monk seal deck, and a new rain garden area, are among other major projects scheduled.

And still at the conceptual phase are projects involving repositioning of the stage area, a new Research and Conservation area, the replacement of our Edge of the Reef touch pool with an expanded unit, and construction of a major new exhibit highlighting sharks.

All these projects require money, and given how much we have accomplished in these past 10 years it might appear that the Aquarium has emerged from a period of uncertainty and non-investment mentioned by Bruce, followed by the recession, and that now its full importance has been recognized and money is flowing in. Unfortunately, nothing could be further from the truth. With the exception of the 2008 electrical renovation, all projects were funded either by grants, donations, through Aquarium accounts, or by funding from FOWA. How have we achieved this? An era of fiscal prudence, entrepreneurship and resource seeking has characterized the past 10 years. A bare-bones budget, elimination of redundancy, improved operational efficiencies, the elimination of non-essential expenditures, and the non-replacement of some positions where staff retired or moved on have reduced expenditures. For example, we have streamlined the offerings of the Education Department, reduc-



ing the overall quantity of programs while adding new ones and improving the quality of those available: many of you will be familiar with the exciting new format of our Family Night. Increased and successful grantsmanship and fundraising efforts, an improved media profile, a carefully targeted advertising presence, new or improved ties with the University and other researchers, conservation- and education professionals, have been effective in increasing revenues. Although full time staff has remained almost identical at 34 in 2004 (31 at present), strategic hiring of talented, motivated individuals in line with refocused operational priorities has maximised the gain though any new recruitments. For example, such hires have produced strong increases in grants and donations that have underpinned several of our programs, allowing us to expand our education, conservation and research activities. Likewise, they have introduced new events, such as the Aquarium’s Mauka to Makai, Ocean Literacy Day and World Oceans Day, that are now firm fixtures on Hawai’i’s marine events calendar.

Underpinning any and all progress at the Aquarium has been a team of skilled and dedicated staff, and the input and efforts of our volunteers. From 218 volunteers in 2004, our volunteer program now hosts 407 full time volunteers—the public face of the Aquarium. Without these two cohorts, and the support of FOWA, the Aquarium would have found it difficult to survive. Instead, we have advanced with a vision for the future. I’m especially proud of our staff for having dug deep and persevered through the tough times inflicted upon us over the past 15 or so years.

Positives? The place, the people I’ve met in Hawai’i and those I’ve worked alongside, and the increasing importance the Aquarium is playing as a center for research and conservation of Pacific marine life. I’m also really enthused at the leadership team we have, who bring a level of expertise, commitment and support that is truly exciting. Regrets? Nothing major, although I do wish I was able to pursue my scientific research interests. But given the time demands of this job, this is unfeasible. And a hope? I must echo Leighton here, and say that, wonderful though the present Aquarium is, our residents and our visitors deserve a larger, better aquarium. Hawai’i needs and deserves

more. My hope is that the state legislature will acknowledge this need, recognise their responsibility, and show the initiative to make it happen. (Some gentle nudging from FOWA members might help).

In summary, although much progress has been made, much remains to be done. But with the team now in place, with perhaps a few additions, I am confident we are on track to achieve our aims and meet our potential. Even after 10 years in this job, I wake up and can’t wait to get to work... and that is a good place to be! 🐠

NEW + RENEWING FOWA MEMBERS

The Membership Office recorded these new and renewing memberships between September 1 and November 24, 2013.

Norma H. Abe
Christine Ahn & Albie Miles
Norine & Kamiko Ajimine
Paul & Jana Akaka
Blaine & Shannon Alexander
Anthony Amend & Nicole Hynson
Jana-Rae N. Amoy
Aaron & Jennifer Anderberg
Arvillie & Makua Annon
Yasukazu Arai & Junko Wada
Dale Armstrong
Niles & Alyssa Armstrong
Patricia Conjugacion Augustine
Raleigh & Judy Awaya
Harold & Tonya Bacos
Al & Kate Barbieto
Norina Barcenas
Robert and Stacy Barclay
Sue Barker
Helen J. Baroni & Rodman Low
Kasey Barton & John Maurer
Thomas & Rae-lynn Bayer
Mr. & Mrs. Joseph A. Behlert
Mr. Stewart K. Bell, Jr.
Dr. Carter Berlin
Eesha & Alison Bhattacharyya
Ms. Jervin Bisquera
Deborah C. Blair
Bernard & Karen Boglioli
Simran & Eric Bott
Beverly Bownds
Christine & Christopher Brown
Dana & Thomas Brown
Jeff & Rebecca Brown
Justin & Tammy Brownfield
Mr. & Mrs. Randal Bruckner
Matthew & Kristen Brummel
Peter & Bianca Bryant-Greenwood
Vicki Bunao
Thomas Burke & Marie Wagner
Robert Calvert & Mary Rydell
Jim Cannon & 'Wendy' Tan
Richelle & Joshua Cardwell
Elizabeth & David Castillo
Warren Chaiko & Tiffany Chaiko
Chi Chi & Aidan Millar
Gordon & Krislynn Chan
Yan Nan Chen
Warren Cheng
Stephen & Gloria Chong
Ayres Christ
Christopher & Jamie Chun
Evelyn A. Chun & Lisa Conley
Michael & Margaret Chun
Doug & Sera Cochran
Roger Couture & Darlene Weingand
Mr. Wade E. Couvillon III & Dr. Patricia A. Couvillon
Heidi Creighton-Redican & Sean Redican
Richard A. Cromwell
Bob Crone
Ronald R. Cunitz & Wendy L. Marx-Cunitz
Eric Curtis
Allan Daluddung
Kalei Okike
Ashley & Guerric de Coligny
Gloria & Gwen De Francia
Joanna DeRyke & Shannon Walker

Andy Do
Jerry & Marilyn Drino
Mr. Ronald & Dr. Cherie Dubats
Robert Duchek & Todd Janovicz
Nancy Dudoit & Charlie Dudoit
Marilyn & D. B. Dunlap
Theresa Dunn
Ralph V. Dykes
Tiara Egdamin & Brandon Egdamin
Lewis & Darcy Evans
Mr. & Mrs. Bernard Fajota
Jeffrey & Wendy Farah
Kathrine Fast
Robert and Patricia Faus
Dr. Domonkos Feher
Joanne Feng & Maggie Lee
Pamela & Fred Ferguson-Brey
Ging Ging & William Fernandez
Troy Ford
Mimi Forsyth
Nick & Ann Marie Fredland
Mr. Kirk Fritz & Mrs. Rachel Fritz
Janell Fujimoto & Doris Manabe
Mr. Lee Funai
Gen & Aya Furumaki
Micah & Eri Furuyama
Christopher & Catherina Gaines
Trisha & Kevin Galloway
Mr. & Mrs. Matt Gambetta
The Gegg Family
Deborah Gilpin-McKay
Christine Glazer & Susan Curtess
Ms. Sally Glenn
Mr. Mathew Goo
Kimo & Kate Greenwell
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A Gift to Honolulu's Lifeguards

Duke's Waikiki and the Waikiki Aquarium recently showed their support of Hawai'i's ocean heroes by donating 200 copies of the Aquarium's 2014 Calendar to City & County of Honolulu lifeguards.

From L to R: Bill Ingram, South Shore; Victor Marcal, North Shore; J.R. Sloane, East Shore; Dylan Ching, Duke's Waikiki general manager; Mac William Hall, West Shore; Ralph Goto, Hall Dannon, West Shore; Matt Lamke, East Shore; Mel Pu'u, Rescue.



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