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KEEP HAWAII HAWAII

Mausoleum preserves royal history of Hawaii

By Robert M. Fox and David Cheever
Special to the Star-Advertiser

It is hard to imagine any other historic site in the islands that preserves the history of the monarchy more than the Royal Mausoleum. Besides kings, queens, chiefs and other royals, this sacred burial site also includes a few nonroyals like John Young, Robert C. Wylie and Charles Reed Bishop, all of whom, however, had strong ties to the Hawaiian monarchy.

The true importance of the Royal Mausoleum, however, also known as Mauna Ala (Fragrant Mountain), has to do with it being the final resting place of the two most prominent royal families of Hawaii: the Kamehameha and Kalakaua families.

King Kamehameha IV and Queen Emma provided the impetus for building Mauna Ala, which they planned as the burial site for their beloved son Prince Albert, who died in August 1862 at age 4. The royal couple were reportedly devastated when Albert died, and to honor their only son, they acquired a site on Nuuanu Avenue and hired architect Theodore Heuck to build a monument for him.

Those plans were disrupted when King Kamehameha IV himself became ill and died just 15 months

after Albert. He was succeeded by his brother Lot Kamehameha, who immediately started construction of the mausoleum. The west wing (or Ewa wing) was completed in 1864.

It was here in February 1864 that Kamehameha IV was laid to rest after a solemn procession from Iolani Palace. Prince Albert's casket was brought to Mauna Ala that same day and laid alongside his father. It is reported that Queen Emma was so grief-stricken that she "camped on the grounds and slept in the mausoleum."

WHEN THE OTHER three wings of the building were completed, the remains of kings and chiefs were transferred to Mauna Ala from their first tomb on the Iolani Palace grounds. They included the iwi (bones) of chiefs originally buried at Hale o Keawe, the City of Refuge, at Honaunau on the Big Island. Subsequently, other members of the Kamehameha and Kalakaua families were buried at Mauna Ala as well. The only two kings not buried at the Royal Mausoleum are King Kamehameha I and William Charles Lunalilo, the latter with his own mausoleum on

the grounds of Kawaiaha'o Church. The site of the remains of Kamehameha I are unknown.

The designer of Mauna Ala, Heuck, has been called Hawaii's first professional architect. He also designed Iolani Barracks. Author Nancy Bannick, the historic preservationist, wrote: "Mauna Ala is considered Gothic Revival designed in the shape of a Latin cross. The building's walls are of cut coral blocks with raised mortar joints. Its steep gabled roof was covered with English slate and surmounted by bronze and gilded crosses. Buttresses were added to the structure and later, in 1904, the walls were stuccoed and scored to represent mortar joints."

Keep Hawaii Hawaii is a monthly column on island architecture and urban planning. Robert M. Fox, president of Fox Hawaii Inc., studied architecture in California and Japan. He was one of the founders of the Historic Hawai'i Foundation in 1974. David Cheever, owner of David Cheever Marketing, has served on the boards of the Historic Hawai'i Foundation and the Hawaii Architectural Foundation. Send your comments to keephawaii@staradvertiser.com.

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grounds. Thus the building became vacant in 1918, and, as Queen Liliuokalani had suggested years before, according to Bannick, it was dedicated as a house of prayer in 1922. That makes Mauna Ala both a mausoleum and a chapel. The koa-lined chapel is mainly used for celebrations of the birthdays of the royalty of Mauna Ala.

IT IS SAID that in 1900, a joint resolution of the U.S. Congress removed Mauna Ala from the country's public lands. But this has been discussed and debated, with some saying there is no mention of this specific removal in the resolution. Nevertheless, the 3.5 acres of land that comprise Mauna Ala is under the Hawaiian flag and when you enter through metal gates, "the western world with its laws and customs are left behind on Nuuanu Avenue."

A caretaker, traditionally a descendant of Chief Hoolulu, who hid the bones of Kamehameha I, lives on the grounds. The whole site is in meticulous condition supported by state Department of Land and Natural Resources budgets with some funds from the Charles Reed Bishop Trust. Mauna Ala was added to the National Register of Historic Places in 1972.

The grounds are open to the public from 8 a.m. to 4:30 p.m. Monday through Friday except on some national and state holidays.

In 1887, after the death of Princess Bernice Pauahi Bishop (she was the last royal descendant of Kamehameha I), her husband, Charles Reed Bishop, decided that open storage of the caskets in the mausoleum was unfitting as the final resting place for Hawaii's royalty. He had an underground vault constructed for the Kamehameha family where the caskets of 21 of the line are entombed. In 1904, a second underground vault was built to house nine of Queen Emma's relatives and close associates.

Over the years, bodies were gradually moved to family crypts — the most influential of which can be found on the museum

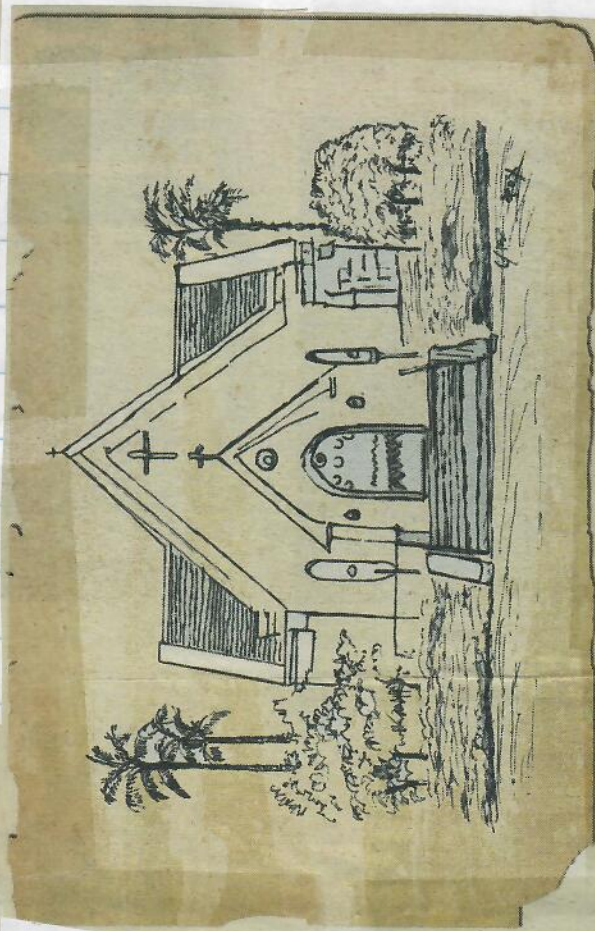


ILLUSTRATION BY ROBERT M. FOX

The Royal Mausoleum, also known as Mauna Ala (Fragrant Mountain), is the final resting place of the Kamehameha and Kalanika'oua families.

Sea Turtle Survey - CAST IX

The objective of the Sea Turtle Survey on Johnston Island is to obtain an estimate of the number of turtles in the area and to detect any changes in turtle activity over time. Surveys were conducted from the east (hidey hole) and west sides of the JCAD peninsula for one hour every other week. Two people at each location counted the number of turtles seen surfacing. These surveys are somewhat subjective from observer to observer as turtles often surface multiple times and estimates are made to avoid double counting.

A total of thirteen surveys were completed by CAST IX with an estimate of 182 turtles seen between both locations. An average of 14.0 turtles were seen each survey; this compares with a mean of 10.78 ± 4.70 SD turtles per observation period (n= 85) since January 2012.

Turtles were observed mating on March 21 and during the March 30 survey. Turtle tracks on South Beach were seen on several occasions with one sea turtle sighting in early April.

There appear to be no obvious trends in sea turtle presence around Johnston Island (Figure 29). Observations show some variation in sea turtle presence, ranging from six to eighteen total turtles with only one day resulting in fewer than ten turtles. Surveys during CAST IX's term were conducted on a fairly even mix of sunny and cloudy days, varying ocean conditions, and always incoming tide.

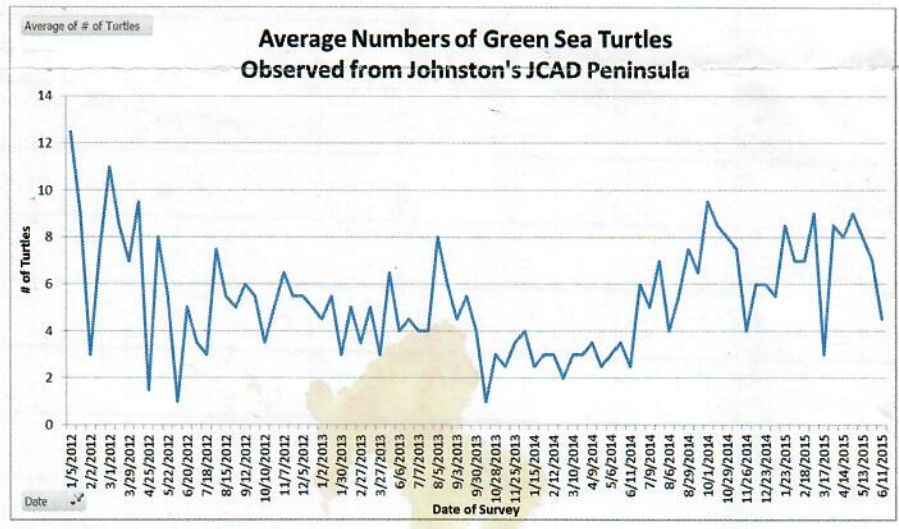
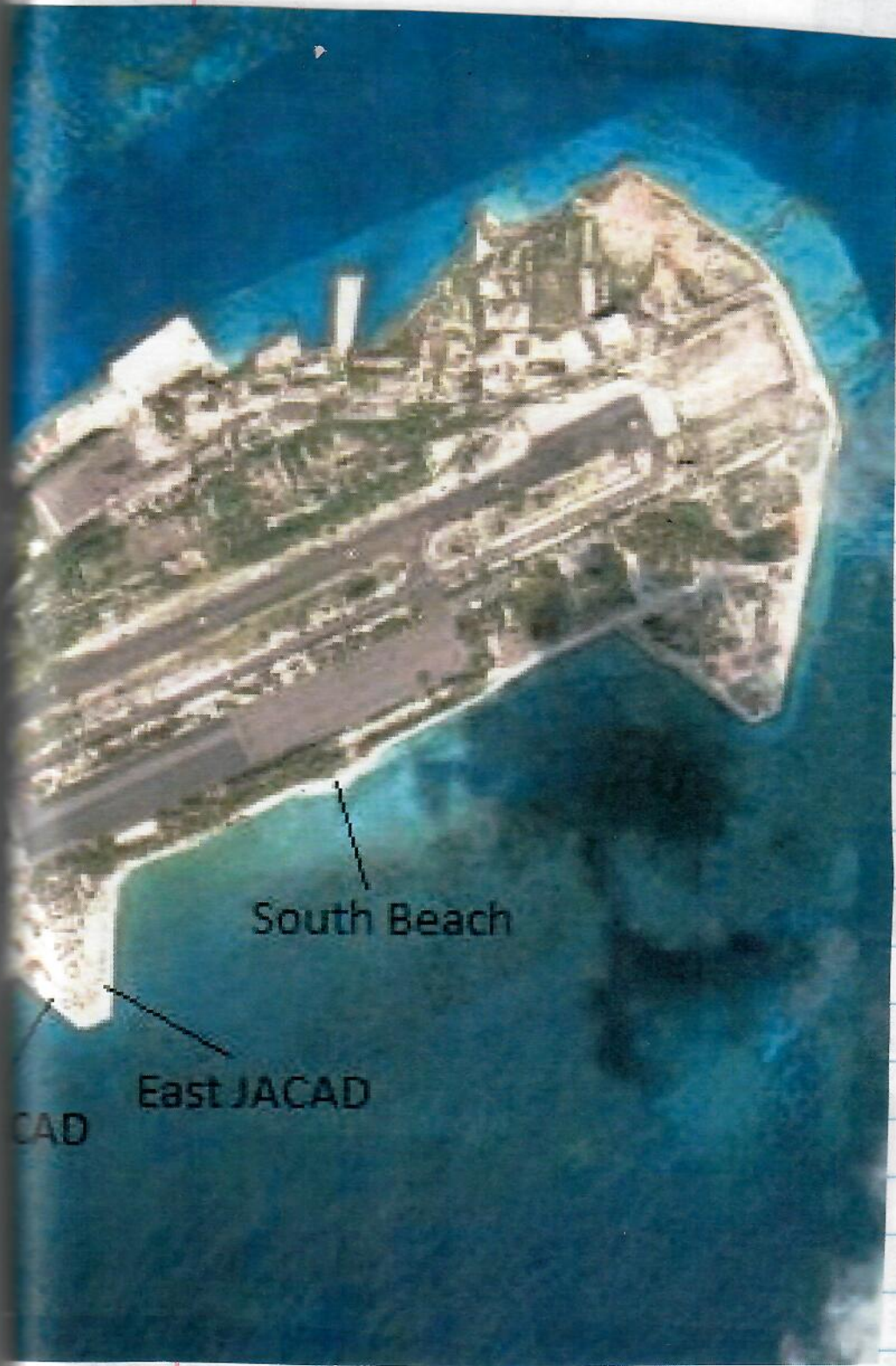


Figure 1: A summary of average estimated Green Sea Turtles counts for Sea Turtle Surveys during CAST expeditions, 2012 - 2015.

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West JACAD



South Beach

East JACAD

CAD

Cultural claims at the core of

By Jennifer Sinco Kelleher
Associated Press

Long before dozens of people were arrested while protesting against building a giant telescope atop Hawaii's Mauna Kea, there were environmental studies, public hearings and court proceedings. The Hawaii Supreme Court is scheduled to hear oral arguments Thursday in a lawsuit challenging the project's permit from the state Land Board to build the telescope on conservation land.

Protesters are planning a rally before the hearing outside the Supreme Court building in downtown Honolulu. Many opponents say they are against building the Thirty Meter Telescope on land they consider sacred.

Here are questions and answers about the lawsuit that's before the high court.

Question: What is the lawsuit challenging?

Answer: In 2013, the state Board of Land and Natural Resources issued a conservation district use permit for the Thirty Meter Telescope. A group of opponents appealed, but a Circuit judge affirmed the Land Board's decision. The group then ap-



KRYSTLE MARCELLUS / JUNE 26

Opponents of the Thirty Meter Telescope sit in prayer outside the Mauna Kea visitor center.

pealed to the state Intermediate Court of Appeals, arguing in part that the Land Board failed to uphold Hawaii constitutional obligations to cultural and environmental rights.

Q: Who is appealing?

A: According to their lawsuit, Kealoha Pisciotta is president of Mauna Kea Anaina Hou and engages in "traditional and customary practices related to Hawaiian astronomy, cosmology ... on Mauna Kea, practices that were taught to her by her elder family members."

Clarence Kukauakahi Ching is a Native Hawaiian

and traditional subsistence and cultural practitioner. "Mauna Kea is Mr. Ching's temple and spiritual retreat," the lawsuit said.

The Flores-Case family argues in the lawsuit that if the telescope is built it "would cause a substantially new visual obstruction (on the mountain) and cause a visual and spiritual interference ... when directing chants and prayers toward the mountain during cultural practices, protocols and ceremony gatherings."

Deborah J. Ward is not Native Hawaiian, but wants to "preserve and protect the natural resources from deg-

radation," the lawsuit said.

Paul Neves, who is a hula dancer and teacher, has genealogical ties to the mountain, according to the lawsuit, and the telescope would harm his traditional and customary practices on Mauna Kea.

KAHEA, a Native Hawaiian environmental alliance, is also part of the appeal.

Q: Why is the permit significant?

A: The permit allowed the nonprofit company building the telescope to proceed with construction on land that is within the Mauna Kea conservation district.

Q: How did the case get to the Supreme Court?

A: After the permit was issued, the opponents filed a lawsuit appealing it.

Attorneys for the state and the University of Hawaii, which manages the land, argue in court papers that the permit was approved after extensive public input. In 2010, the University of Hawaii Board of Regents unanimously approved the plan to build the telescope, which cleared the way for applying for the conservation permit. At that meeting, seven members of the pub-

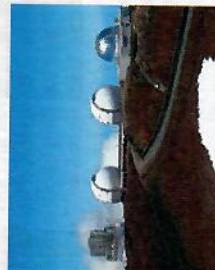


The VLBA seen from above.



The true summit of Mauna Kea.

Observatory Pictures



telescope lawsuit

8/27/15 HSA

lic testified in favor of the telescope. No opponents spoke, though critics had been vocal about their arguments against the telescope.

While the permit appeal was before the Intermediate Court of Appeals, the opponents asked to bypass the court and have the case go directly to the Supreme Court. The high court agreed to hear the case.

Q: How does the case affect the project?

A: Telescope construction began in March near the summit of Mauna Kea on the Big Island after seven years of environmental studies, public hearings and court proceedings.

The company building the telescope suspended construction in April after protesters were arrested for blocking the road to the summit and refusing to leave the construction site. More protesters were arrested again after a subsequent attempt to resume construction. The company hasn't indicated when it will make another construction attempt.

There is no stay in place pending the appeal so the project can proceed pending the outcome of the case,

said Joshua Wisch, a spokesman for the state Attorney General's Office.

Q: What are similarities with the Maui telescope case?

A: The justices heard oral arguments on April 2 in a similar case challenging the permit issued for a solar telescope atop Maui's Haleakala. Opponents are against that project for many of the same reasons as the Big Island telescope. However, construction of the Maui telescope's buildings is about 80 to 90 percent complete.

Q: When will there be a ruling?

A: It's not known when the justices will issue a ruling. There hasn't yet been a ruling issued in the Maui case.

Q: What are the possible outcomes?

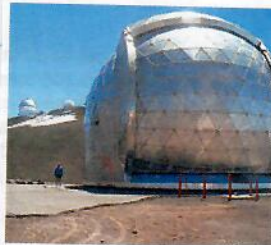
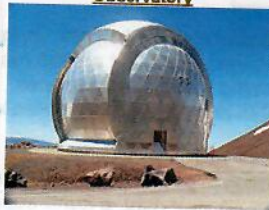
A: The court could side with the petitioners or side with the state. Or the justices could send the case back to the Land Board.

ON VACATION: Christine Donnelly is on vacation. Kokua Line returns Friday.

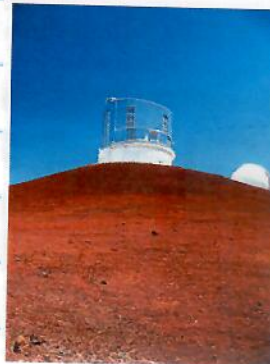
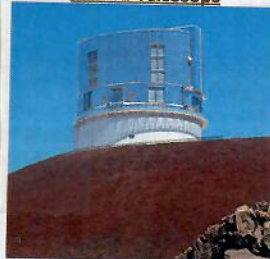
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Caltech Submillimeter Observatory



Subaru Telescope



NASA Infrared Telescope



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11/29 release
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12/30/15

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KIWA OFFSPRING
SLP HATCHLINGS LHF
7/4/2015

Amo Beach Release

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Plague likely 3,000 years older than first believed

By Maria Cheng
Associated Press

10/23/15
HSA

LONDON >> The plague was spreading nearly 3,000 years before previously thought, scientists say after finding traces of the disease in the teeth of ancient people — a discovery that could provide clues to how dangerous diseases evolve.

To find evidence of the prehistoric infection, researchers drilled into the teeth of 101 individuals who lived in Central Asia and Europe some 2,800 to 5,000 years ago. The drilling produced a powder that the researchers examined for DNA from plague bacteria. They found it in samples from seven people.

Before the study, the earliest evidence of the plague was from A.D. 540, said Simon Rasmussen of the Technical University of Denmark. He and colleagues found it as early as 2,800 B.C.

"We were very surprised to find it 3,000 years before it was supposed to exist," said Rasmussen, one of the study authors. The research was published online Thursday in the journal *Cell*.

Rasmussen said the plague they found was a different strain from the one that caused the three known pandemics, including the Black Death that swept across Medieval Europe. In contrast to later strains, including the one estimated to have wiped out about half of Europe, the Bronze Age plague revealed by the new study could not be spread by fleas because it lacked a crucial gene. So it was probably less able to infect people over wide regions.

But Rasmussen said knowing that plague existed thousands of years earlier than had been believed might explain some unsolved historical mysteries, including the "Plague of Athens," an epidemic that struck the Greek capital in 430 B.C. It killed up to 100,000 people during the Peloponnesian War.

"People have been speculating about what this was like was this measles or typhus, but it could well have been plague," Rasmussen said.

He said tracking how the plague evolved from being an intestinal infection to "one of the most deadly diseases ever encountered by humans" could help scientists predict the disease's future path.

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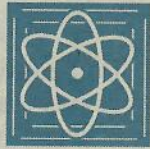
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SCIENCE

Hunting bigger fish, game unsustainable, study finds

By Seth Borenstein
Associated Press

WASHINGTON >> Humans are fishing and hunting animals that are the wrong size and age, in an unsustainable way that flies in the face of nature, a new study finds.

Long-held conservation policies and traditions that tell fishermen to throw back small fry and encourage hunters to bag only the biggest trophies often hurt species instead of helping them, according to the authors of a study released Thursday by the journal *Science*.

The study compared humans to other predators to see what they killed, looking at nearly 400 species in the oceans and on every continent except Antarctica. And while other animals tend to kill the young, small and weak, humans kill the more mature animals that are in their reproductive primes. It found humans killed up to 14 times more adults than other animal predators, with the biggest differences in prey seen in how humans fish.

Thanks to our tools and intelligence, humans now boast "rather unnatural, unusual predator behavior," said study lead author Chris Darimont, a conservation scientist at the University of Victoria in Canada. The method is "not considering the hand of Darwin."

The ways humans hunt and fish "change the rules of the game" of evolution from survival of the fittest to survival of the smallest, Darimont said. Humans, he said, are "super predators."

Taking bigger fish or wildlife has "remarkable short-term benefits" — for example, it makes it easier to process food. But long term it's a loser, Darimont said.

The collapse of the Atlantic cod is a good example, Darimont said. If female cod live long enough, they are "cod-making machines." He said a fish that can grow an extra 10 percent often produces more than double the amount of eggs.

As fishermen spare smaller cod and target bigger ones, scientists have noticed that Atlantic cod populations have changed to breed earlier in their lifetime, he said.

Renowned conservation expert Stuart Pimm of Duke University, who wasn't part of the study, praised it. "We ought to be harvesting animals that are about to die from other causes," he said.

Darimont himself hunts deer and fishes for salmon, but in both cases he prefers young prey because they taste better. But he added that men have evolved to like bigger trophies in hunting and fishing to impress others.

No one mounts a small fish above a fireplace, he acknowledged.

911 REPORT

9/21/2015 HSA

Tiger shark bites man off Big Island

A 27-year-old man was in serious condition Sunday after being bitten on the leg by a tiger shark off the north shore of Hawaii island, the Hawaii Fire Department said.

Firefighters said a tiger shark bit the man on the left thigh and calf at about 4 p.m.

HFD Battalion Chief Joseph Farias said firefighters reached the man near the 21-mile marker on Akoni Pule Highway as the man was in the back of a truck, traveling to meet with arriving firefighters. Paramedics took the man to Kamehameha Park, where a fire helicopter picked him up and took him to North Hawaii Community Hospital in serious condition.

Dan Dennison, a spokesman for the state Department of Land and Natural Resources, said the Kapaau man was spearfishing about 60 yards off Upolu Point in North Kohala when a 13-foot tiger shark bit him on his left leg. He was able to swim to shore and alerted his fishing companion, who called 911.

No beaches are closed, since the attack occurred in an isolated and remote area, Dennison said. Water conditions were murky due to heavy rain in the area.

It was the second shark attack in waters around Hawaii island this year. In March a Kansas doctor was bitten by a tiger shark about 8 to 10 feet long. He sustained lacerations to his left forearm, hand and thigh while standing in 4 to 5 feet of water.

There have been four shark-related incidents in Hawaii so far this year, including a fatal one in Maui waters April 29.

dustrial sewing machines and fabric. When the shipment arrived, I put it all in the spare bedroom, locked myself in and searched YouTube for tutorials," she related. "I never thought, 'What if I hate sewing?' I was all in."

After eight months, one bikini worked. Using quality materials, a warehouse and six employees, her sales are now up to 800 a month, from size 0 to 10.

CHERIE CHUNG is known as the Coconut Lady. She says one day her brother showed up with a coconut, reminding her that she painted when she was a youth. The coconut looked



COURTESY CHERIE CHUNG

like a lion, so she painted it that way. Library research led to painted fish with spots and stripes.

One day she went for a swim and thought she saw

turtle heads in the waves. "They turned out to be floating coconuts," Chung said. "So I painted hundreds of dry coconuts to look like turtles."

Each nut comes with a tripod-style stand. Coated with marine varnish; they are waterproof. Chung suggests with a giggle, "When you give one as a gift, toss it in the ocean and let them swim for it."

FRIDAY 6/21/15 >> HONOLULU STAR-ADVERTISER

Effort aims to revive tortoise

Associated Press

10/2015

SAN DIEGO >> Researchers have released a desert tortoise raised on a Marine Corps base as part of efforts aimed at reinvigorating the threatened population in the western Mojave Desert.

The female tortoise released last week is the 35th one set free this year on the

Marine Corps base at Twentynine Palms.

Biologists have been raising tortoises for nine years at a 6-acre facility to help boost a population that was nearly decimated by a respiratory virus in the 1980s.

They cannot be released until their shells are mature enough so they better survive predator attacks.



U.S. MARINES CORPS / AP

Col. James F. Harp, chief of staff at the Marine Corps Air Ground Combat Center, released a tortoise last week from the base's Desert Tortoise Headstart Program near Twentynine Palms, Calif.

Conservationists flock to Hilo

More than 1,000 registered for 4-day event

By IVY ASHE
Hawaii Tribune-Herald

At noon Tuesday, a flood of people emerged from the classrooms at the University of Hawaii at Hilo and headed for the dining hall.

Classes are not back in session until the end of the month, but this week

8/5/15 people from throughout the state are in town to further their conservation education.

The 23rd annual Hawaii Conservation Conference began Monday and continues through Thursday. Hosted by the Hawaiian Conservation Alliance — a group of 25 organizations

ranging from the Pacific Islands Climate Science Center to the Office of Hawaiian Affairs — the conference is a way for researchers, students and conservation officials to collaborate.

Typically hosted in Honolulu, the conference hasn't been to Hilo for

See EVENT Page A3

EVENT From the front page

more than 20 years.

More than 1,100 people registered for this year's event, with about 400 from the Big Island in attendance, according to Mary Ann Tsuchiyama, a member of the planning committee. That number doesn't include volunteers and vendors, Tsuchiyama said.

"We're so pleased that we have that amount of interest," she said.

Today also features several community-oriented sessions. Research presentations are free and open to the public from 3:30-5:30 p.m. on the UH-Hilo campus, and people will be able to meet with presenters during a poster session from 5:30-8:30 p.m.

A day-long exhibition spotlighting Papahānaumokuākea Marine National Monument begins at 10 a.m. in the UH-Hilo performing arts auditorium.

"We need to spread

that (conservation) message, because there's a lot of work to be done," said event co-organizer Jodi Chew of the U.S. Forest Service. She has attended the conference for the past 10 years.

Frances Quitazol, natural resources manager for the Nature Conservancy on Maui, sat in a morning session spotlighting the connections between culture and science (featuring presentations such as "Hawaii's Cultural Seascapes: Perspectives from Paddlers," "Fishers and Surfers in Hilo Bay," "Fall and Rise of the Hawaiian Honu," and "The Mystery of the Ake Plants").

"It's interesting and important," Quitazol said.

Kawena Elkington has attended three conservation conferences, but was at this year's in her official capacity as outreach assistant for the conservation alliance. Elkington, a student at UH-Manoa, wasn't

the only repeat conference attendee: She said she'd seen many others sporting gear from previous conferences.

The conference is a way for people to come together, she said. "There are some big ideas and big conservation opportunities going on."

A Tuesday morning session titled "Birds and Bats" drew so many people the space reached capacity and spilled into a different classroom, where it was standing room only.

"One thing is just to make connections," said Amanda Shore-Maggio, a graduate student at UH-Manoa studying pathogens on coral reefs. Shore-Maggio was set to present her dissertation research Thursday.

"There are so many agencies and groups I didn't even know existed until I got here," she said.

But regardless of where attendees were from or what agency they

represented, all hoped to pass on what they'd learned.

More than 10 staffers from Hawaii Volcanoes National Park attended Tuesday's programs. It's a way to relay cutting-edge science to visitors, park ranger Dean Gallagher said.

He and fellow ranger Travis Delamont already attended several presentations by lunchtime. Gallagher particularly was excited about a carbon sequestration talk he knew could be applied to HVNP's ongoing native

plant projects.

"That was awesome," he said.

"Every year, there's things that are at the forefront," Tsuchiyama said. "I'm hearing a lot about taking care of (Hawaii) for the future."

"We're building capacity so we have the next generation stepping up," Chew said.

But next year, the conference won't take place as usual. Instead, Hawaii is set to host the World Conservation Congress.

→ Email Ivy Ashe at iashe@hawaiiitribune-herald.com.

Ka Iwi coast land should be protected for native plants

The community is coming together to preserve the beautiful Ka Iwi mauka lands, 182 acres between the golf course and Makapuu.

We must band together to keep open this wild eastern end of Oahu and protect it from the poor planning and overdevelopment that has plagued the rest of the island.

Wild, open, undeveloped land is something we all need, where nature and open views to the ocean are visible and accessible.

For more than 40 years, the community has battled to keep this area free of development. Every time we thought that we had "won," some new money would come in and people would try to develop the aina for profit.

Now finally we have a victory. The Trust for Public Land and the Livable Hawaii

Kai Hui will jointly manage the lands and will help sew up all the details of caring for and managing the aina here.

When we were first learning about native Hawaiian plants, this was a great introduction. One of my favorites, which used to grow in the area in abundance, is mao, or Hawaiian cotton, *Gossypium tomentosum*.

We used to see the silvery leaved shrubs, with cheerful yellow flowers, driving by. If you got out and hiked, you could see them up close and admire the gorgeous, almost fakely perfect when freshly opened, flowers.

Some of us from Honolulu Botanical Gardens would then collect the fuzzy, copper-colored seeds so we could grow plants and perpetuate the mao.

Mao was used in old Hawaii to make a unique green kapa dye named omaomao. Kapa artists today have re-

9/21/2015

covered the lost technique of making this nice shade of green. Use of our native plants for dyes is one of the reasons that Hawaiian kapa is the most amazing and artful bark cloth in the world.

Development and wildfires threaten mao and other Hawaiian plants. One cigarette butt out the window and the mao is pau. In turn, the mao seedlings are quickly overwhelmed and overgrown by alien grasses and weedy, fire-prone brush. Native Hawaiian plants are not fire-adapted.

Other Hawaiian plants found naturally in the Ka Iwi area include wiliwili, naio, ilima, pau o hiiaka, naupaka kahakai and many more.

My sister Mimi and many of my friends went on the run/walk during which Kalaniana'ole Highway is closed and people can enjoy the scenery. Walking lets you see the plants close up, see the scenery slowly and visualize how we can restore this area with native Hawaiian plants. Then people can enhance instead of encroach on the scenic and natural Hawaii beauty.

Heidi Bornhorst is a sustainable-landscape consultant specializing in native, xeric and edible gardens. Reach her at heidibornhorst@gmail.com.

10/14/15

Climate change imperils park's odd Joshua trees

By Louis Sahagun
Los Angeles Times

LOS ANGELES >> Drought, more frequent wildfires and rising temperatures due to climate change are upsetting the delicate balance between life and death conditions for Joshua Tree National Park's peculiar namesake plant.

Many Joshua trees in the region have not reproduced in decades. If warmer, drier conditions continue, scientific modeling suggests the symbols of California's deserts will lose 90 percent of their range in the 800,000-acre park and surrounding terrain by the end of the

century.

As part of an effort to reverse the trend, the conservation group WildEarth Guardians petitioned the U.S. Fish and Wildlife Service last week to list the species as threatened under the Endangered Species Act.

"Joshua trees need our help," said Taylor Jones, a spokeswoman for the nonprofit. "Our petition seeking federal protections for them is a way of extending a helping hand."

Some conservationists have proposed translocation efforts and habitat restoration programs to save the trees from widespread extirpation.

HAWAII COUNTY COUNCIL

8/6/2015 HTH

Vote delayed on herbicide legislation

By TOM CALLIS
Hawaii Tribune-Herald

Hawaii County Council members Tuesday took plenty of testimony but no action on a bill banning the use of "toxic herbicides" by county workers, during a meeting of the Committee on Environmental Management.

After testimony stretched into the evening, the committee chose to delay a vote until Aug. 18 after hearing from more than 45

people who mostly, if not unanimously, were in favor of the measure.

Introduced by Kohala Councilwoman Margaret Wille, the bill seeks to prohibit county workers from spraying glyphosate and other herbicides not considered "eco-friendly" in parks and along roadways to control weeds.

The county spends \$30,000 a year on the Roundup herbicide, which contains glyphosate.

See **HERBICIDE** Page A3

HERBICIDE From the front page

The World Health Organization in March said the chemical is "probably carcinogenic," and testifiers expressed concern its use could be harming people's health and the environment.

Some cited examples of the county spraying the herbicide from moving trucks in areas where people walk.

"I will no longer stand and let you use my money to poison myself and you," said Paul Komura,

speaking from Ka'u.

Kelly Greenwell, a former County Council member, expressed regret for using the herbicide and said the county should consider banning it entirely. The bill doesn't prohibit private use.

"I recognize that it's time to start looking at another direction," he said. "I've been lucky I haven't gotten sick, but I know others probably have."

Some spoke

emotionally about the topic and portrayed the commonly used herbicide and Monsanto, which makes it, as public enemy No. 1.

To them, the product could be blamed for just about everything from the rise in cancer rates to the decline in fish populations.

"We can only depend on each other," said a woman from Waimea. "Take care of yourself and your land."

A spokesperson for Monsanto previously said

the product is safe if used as directed.

Department of Public Works Director Warren Lee has said the herbicide accounts for between 25 and 30 percent of weed control activities.

He warned banning its use could be costly.

If the bill is adopted, the county will have until July 1 to come up with an alternative.

While speaking with a reporter last week, Wille, who made use of

Roundup-resistant crops a central part of her push to restrict use of genetically modified crops on the island, dismissed the idea of establishing a pilot project to test alternative weed control methods.

"I think that's lame," she said. "I think that's a do-nothing and that would be an excuse to say we've done something when we haven't."

Email Tom Callis at tcallis@hawaiitribune-herald.com.

Fishhook database offers insight into old Hawaii

By Nina Wu
nwu@staradvertiser.com

5/17/2015

The world's largest collection of Hawaiian fishhooks is now available for viewing and study via an online database. The digital treasure trove comprises more than 4,000 artifacts from the Bishop Museum's archaeology collections.

The fishhooks, excavated from three cultural sites in the Ka'u District of Hawaii island during the 1950s, reveal the varying design adaptations by Hawaiians over six centuries.

"Fishhooks have always been important for archaeologists looking at change over time," said Bishop Museum anthropologist Mara Mul-

rooney. "Cultural practitioners can gain inspiration from looking at ancient designs, educators can look to this database to learn more about ancient Hawaiian fishing practices and students of all ages will enjoy looking at these fishhooks."

The database, made possible by a

Please see **FISHHOOKS**, F7

A bone barbed fishhook, circa 1600 to 1800, from Waiahukini Rockshelter, Ka'u, Hawaii island.

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A pearl shell fishhook, circa 1300 to 1500, from the Puu Alii Dune site, Ka'u, Hawaii island, excavated by Bishop Museum and University of Hawaii archaeologists from 1953 to 1959.

Below, a two-piece bone fishhook from Hawaii island can be seen on display in Bishop Museum's Pacific Hall.



Bishop Museum archaeologist cal excavations at Puu Alii, Ka'

FISHHOOKS:

Continued from F1

grant from the Hawai'i Council For the Humanities, went online last month. Each entry offers four images against a black background, showing both sides of the fishhook, with and without scale measurements.

Mulrooney said the pilot project is part of the larger Ho'omaka Hou Research Initiative, which aims to use modern techniques to learn more from the museum's archaeology collections and foster collaborative international research.

NEXT, THE institution will digitize fishhook collections from other parts of the Pacific, including the Marquesas, the Society Islands and Nukuoro in the Caroline Islands of Micronesia.

The fishhooks, which typically measure less than an inch tall, were excavated by noted archaeologists Kenneth P. Emory, Yoshiko Sinoto and William Bonk between 1953 and 1959 in Ka'u.

The three sites — Puu Alii, Waiahukini Rockshelter and Makalei Rockshelter — offer a wealth of archaeological information dating from as early as A.D. 1300 to the mid-1800s. The items gathered there include the fishhooks as well as tools to make them and volcanic glass.

Sinoto, a trained archaeologist and Bishop Museum's senior anthropologist, classified Hawaiian fishhooks as one-piece (made from a single piece of material), two-piece and composite (multiple pieces). During the classification process, an archaic style of composite fishhook — a bonito trolling lure made from two shell

Yoshiko Sinoto sieves material recovered during archaeology, on Hawaii island in 1954.

Collection can be studied online

pieces— captured his attention, Mulrooney said, because it was exactly the same style as a hook he recovered in the Marquesas.

“He was able to see many similarities between the two groups of artifacts,” she said.

From that finding Sinoto derived his model for the initial settlement of the Hawaiian Islands.

Approximately a dozen of the fishhooks in the database are on permanent display in the museum’s Pacific Hall, which explores the origins and cultures of Pacific islanders and their migration over the Pacific Ocean.

Researchers can examine moolelo, or oral stories, that relate to the artifacts and conduct comparative studies with fishhooks from other parts of Hawaii and across the Pacific.

One research affiliate, Kelley Esh, a doctoral student from the University of Hawaii at Manoa, for instance, is studying fish bones at the Ka’u sites to analyze the changes in the kinds of fish that people consumed through time, said Mulrooney.

MANY FISHHOOKS were made from shell, especially pearl shell, but most were made from bone. The two-piece bone fishhook was unique to Hawaii, said Mulrooney.

With the online database, research affiliates from abroad can now analyze the items without having to visit the museum.

“It opens the door to new possibilities in looking at change in the bigger picture of Hawaiian archaeology,” said Mulrooney. “In terms of conservation, we now have a digital record of each of these artifacts, which is really valuable to have.”



A bone point from a two-piece fishhook from Waihukini Rockshelter, Ka’u, Hawaii island.

COURTESY BISHOP MUSEUM



(16)
A
fish
hook
from
the
Marquesas
island
is
very
similar
to
the
one
found
at
Waihukini
Rockshelter
in
Ka'u,
Hawaii
island.

What is a Service Animal?

Service Animals perform some of the functions and tasks that an individual with a disability cannot perform easily for him or herself. Service Dogs can be trained to assist with tasks and work related to a wide range of disabilities, including – but not limited to – deafness, blindness, autism, epilepsy, severely limiting psychiatric conditions, life-threatening allergies, mobility issues and much more. Some disabilities are invisible and may not be apparent to others.

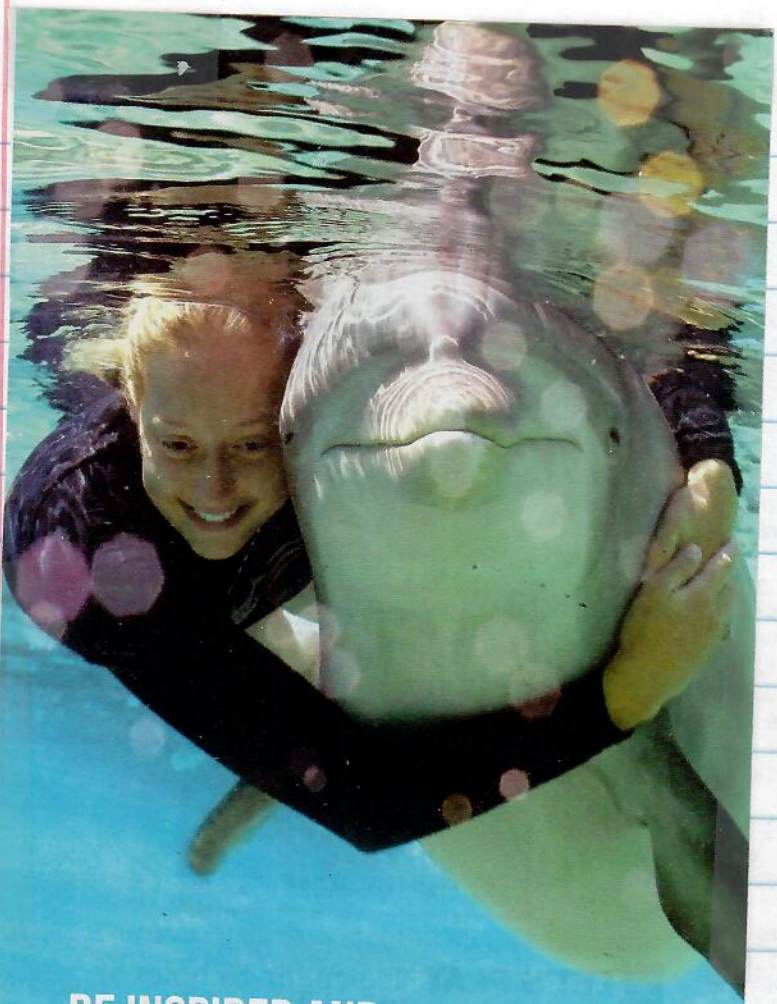
The Americans with Disabilities Act (ADA) defines a Service Animal as: any dog that is individually trained to do work or perform tasks for the benefit of an individual with a disability, including a physical, sensory, psychiatric, intellectual, or other mental disability. Other species of animals, whether wild or domestic, trained or untrained, are not service animals for the purposes of this definition. The work or tasks performed by a service animal must be directly related to the individual's disability. Examples of work or tasks include, but are not limited to, assisting individuals who are blind or have low vision with navigation and other tasks, alerting individuals who are deaf or hard of hearing to the presence of people or sounds; providing non-violent protection or rescue work, pulling a wheelchair, assisting an individual during a seizure, alerting individuals to the presence of allergens, retrieving items such as medicine or the telephone, providing physical support and assistance with balance and stability to individuals with mobility disabilities, and helping persons with psychiatric and neurological disabilities by preventing or interrupting impulsive or destructive behaviors. The crime deterrent effects of an animal's presence and the provision of emotional support, well-being, comfort, or companionship do not constitute work or tasks for the purposes of this definition.

Source: Part 35 Nondiscrimination on the Basis of Disability in State and Local Government Services (as amended by the final rule published on September 15, 2010) Authority: 5 U.S.C. 301; 28 U.S.C. 509, 510; 42 U.S.C. 12134. Subpart A—General § 35.104 Definitions

[View the full ADA Legislation >](#)

The ADA also allows miniature horses to also be used as Service Animals, however the focus of the United States Service Dog Registry is on canines alone.

QUESTIONS THAT CAN BE ASKED:
- IS THIS SERVICE DOG REQUIRED BECAUSE OF A DISABILITY?
- WHAT IS THE DOG TRAINED TO DO TO MITIGATE THE DISABILITY?



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Travel

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Paradise

Moshe Rapoport, a doctoral student in geography at the University of Hawaii, spent several weeks in the Tuamotus, coral atolls in the South Pacific; so isolated most can be visited only every few months, via copra schooner. These are his memories of the tiny islet where he spent the most time.

**Welcome,
stranger! Welcome
to the land of Vairaatea!**

Sunday
Star-Bulletin & Advertiser

Honolulu, September 3, 1989

G1



By Moshe Rapaport

Special to the Advertiser

IT is only a few weeks since I have returned, but the memories of Vairaatea remain remarkably vivid.

I still wake at dawn expecting to see the sun rising across Puka Runga. Opening my door, I half expect to step out onto the coral rubble in the tiny atoll village. Something calls me to head out towards the deep canyons in the reef edge and cast for fish.

In the evening, I walk around Manoa Valley, listening for the young men vigorously playing the ukulele and guitar, and chanting the songs of the gods and the heroes.

We arrived at the pier of the Vairaatea Atoll in the early morning of a Saturday. There are only eight families on the atoll, all clustered in the tiny village at the northern tip of Puka Ruga, the sole inhabited islet.

They all came down to greet us and presented us with leis and coconut frond hats.

I was invited to stay with Kahui, brother-in-law of the mayor, who had accompanied me from Papeete aboard the copra boat. On our way to his house, I noticed an old woman moving towards us rapidly and I knew it must be Nauriki, the village matriarch. I had been told about her.

Addressed simply as "the old one," she is the last of those who are still in touch with the ancient knowledge of the land, the lagoon, the sea and the sprits.

"You are Nauriki!" I greeted her.

"How do you know that?"

"Kahui told me."

"Very good, Welcome, welcome!"

In the Tuamotuan language, almost all words are doubled. Some people think it is to make sentences easier to understand.

I think it is an echo of the rhythmic motion of the sea in the subconscious of the atoll inhabitants.

I explained to Nauriki that I had come to study the life of the eastern Tuamotus. "You are most welcome," she said.

"In the past," she said, "the spirits of the ancestors used to walk the land in the evenings. The land would be blessed with frequent arrivals of migrating fish and seabirds. At regular periods, massive schools of 'ature' (scad fish) would move in the channels between the lagoon and the sea."

"It is Naurike who sent away the ature," put in another atoll resident, Andre. "She was disgusted with the way the local

so, turning Moshe into Mote.)

"What is it?," I asked.

"Wait," he said. "There will be an announcement."

Then Nauriki stood to speak. All the population had gathered on the ground in the deep darkness of the atoll. Nauriki is small and she was engulfed by a mountain of leis.

"Welcome," she said again.

"Welcome to this land Vairaatea! "Welcome, stranger, whom we will give a new name!"

"From now on," she said, "let nobody in this land call you Mote! For your new name, we have picked the name of an ancient 'kaito' (warrior). Your name shall be Moeava! We have selected this name because this kaito, like yourself, traveled across many lands in the Pacific seeking knowledge. He faced many challenges, all of which he overcame. You, too, will face numerous challenges which you will overcome easily!"

She then warned me about revealing my name if I visited Hao, one of the larger islands in the Tuamotan Archipelago.

"They are extremely jealous of this name. If they know you are Moeava, they will attack you immediately," she said.

Later that evening, I asked her, "Nauriki, what is the meaning

WHAT: "Vahi-Tahi Revisited: The Southeastern Tuamotus in the 1980s," a talk by doctoral candidate Moshe Rapaport on community life in one of the most isolated parts of the South Pacific, with slides and music.

WHEN: Noon, Tuesday.

WHERE: The East-West Center's Environmental Policy Institute conference room.

people gathered the fish for sport by the hundreds and let them rot."

"She walked out to the seafont one evening and commanded the ature, 'Go! Go!' They never came back."

The evening of our arrival, a table was set up in the central square. Mati, the mayor, had been to Papeete since his election the previous March, discussing the development needs of the islands with the government ministries. He explained to the people about the work he had been doing. Then he told them about my project.

When he finished, he told me, "The people have decided to honor you with a new name." (In fact, they had already done

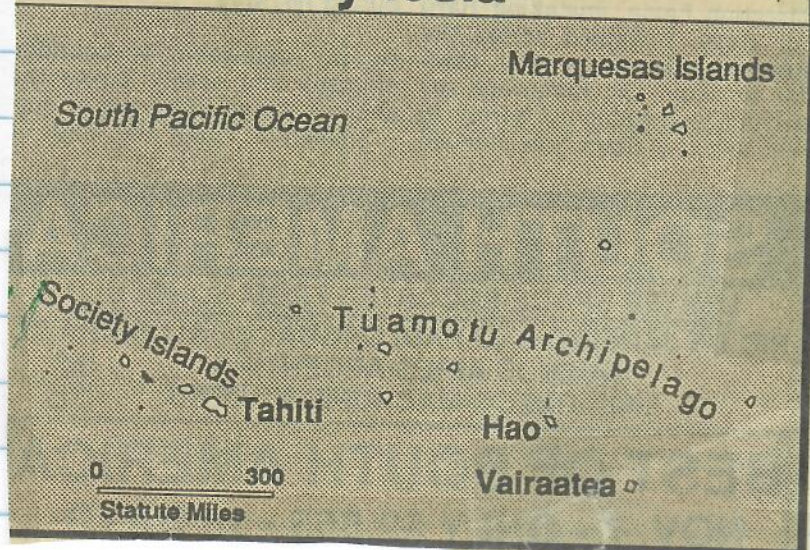
See A hearty, Page G-2



Tiny "Amanu" atoll is famous for its three churches, seen among the palms: Catholic, Morman

Photo by Moshe Rapaport

Eastern Polynesia



Advertiser graphic by James Takamiya

A hearty Tuamotu welc

FROM PAGE G-1

of this name?"

She said, "Moeava, the sleep of the channel. A kaito does not sleep in a bed, lying down. He does not close both of his eyes. A kaito has many enemies. He sleeps in the channel standing up, with one eye open and watchful, while the water rushes back and forth between the lagoon and the sea.

"Moeava," she said, "we will teach you the old traditions, the true knowledge of the atoll. In return, you will help us revive the land. The fish will return and the spirits will walk again."

The next day, after church services, Kahui, Tavana Haka and his wife and Nauriki sat on the coral rubble in the center of the village, ukulele and guitar in hand, and began to chant the ancient songs, beginning with the songs of Vatea, Tane, Tagaroa and Rogo (corresponding to the Hawaiian's Ku, Lono, Kane and Kaneloa).

They sang of the migration of the rabbitfish and of nightfishing by lamp for flying fish; of copra work on the outer islands; of ancient wars; of Tahaki, Maui, Rata and other heroes; of love; of the long sea voyages.

I wrote down each song and recorded it on tape, with explanations by Nauriki.

One afternoon, while I was fishing alone between Puka Ruga and Puka Raro, evening fell suddenly, and I took the wrong direction home, mistaking Raro for Ruga. I walked across the knee- to ankle-deep water, careful to avoid the numerous sea urchins, and suddenly, barely 10 feet away, a shark was startled



Photo by Moshe Rapaport

"Anna," a resident of Vairaatea, who became friends of Rapaport during his stay.

by my approach. It bounded the reef, thinking "I have never clumsily and noisily across the shallow water, like a pig or dog. Shaken, I found the edge of

come

hurriedly toward where I thought the village would be. A chill went down my spine as I looked across the reef flats and saw lights on the opposite islet, where I should have been.

Fortunately, I had a rain jacket with me, and I considered spending the night where I was. I was most reluctant to enter that shark-infested reef. However, I soon began to think how worried Kahui would be. I thought, "Well, my namesake Moeava would definitely have returned across the reef flats at night."

So I found a stout stick and started across, fishing rod and basket of fish in one hand, stick in the other. Fortunately, the moon had risen and I was just about able to make out the sea urchins, although I did take a few spines in my heels.

Half-way back, I saw a lamp across the reef moving in my direction and I knew it was Kahui and Andre. I shouted, "O!" (the traditional calling word), "Kahui! Andre!" They stopped and I walked across to them.

Kahui said, "Don't go fishing again in darkness."

And I replied, "Don't worry. You forget, I am a kaito." About a week before I was to leave Vairaatea, Nauriki, Mahiaga, Kahui, Tanui, Teigo and others began to tell of their "arofa" (aloha): "You go and we stay! We have arofa for you. We will grieve. When you leave, we will cry."

Mahiaga asked, "How will I send you your money for your copra?" I assured her that the

RE: :) "The Disease Comes and Goes"

1 message

Foley, Allen <Allen.Foley@myfwc.com>

To: George Balazs - NOAA Federal <george.balazs@noaa.gov>

Wed, Jun 17, 2015 at 9:08 A

Hey George. I did call it a nuisance but I don't like that description anymore. That makes us sound a little glib when it's obvious that many turtles greatly suffer from the disease. I would say that it is a serious issue and concern, and is responsible for some mortality, but fortunately our current conservation efforts appear to be making up for that loss and then some (as evidenced by clearly recovering populations in Hawaii and Florida). I would also say that the mortality from FP does not appear to be as substantial as we thought it might be. I think it's clear that many turtles recover from it.

When I said the disease comes and goes, I was referring to FP in loggerheads. I suppose you could say the same for most green turtles, but it is especially true in loggerheads.

(769)

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He'll return in October to 2nd visit

FROM PAGE G-1

where in the South Pacific. People still speak Tuamotuan, while people in the western islands of the archipelago have succumbed to Tahitian. And elders still remember songs, stories and traditions that are largely forgotten elsewhere.

As far back as the 1930s, researcher Kenneth Emory thought there was nothing left to research in the Tuamotus, Rapaport said. But then Emory ventured into the eastern islands and was greeted by a high priest singing the ancient songs of welcome. The 95-year-old Emory's tapes and notes now reside in the Bishop Museum and his name is spoken in hushed tones by today's researchers.

Rapaport was delighted when he was greeted with some of the same songs that Emory heard, though the high priests are long gone. He even met a woman who remembered Emory from her childhood.

Still, what's left is going fast. One woman's story tells it all: Nauriki is a woman in her 70s or



Photo by Moshe Rapaport

The lagoon at Pinaki Atoll, famous for being the site of hidden treasure. Pinaki is about 20 miles from Vairaatea.

80s; Rapaport is not sure. Of her numerous children, grandchildren and great-grandchildren, not one has remained on Vairaatea. Though she knows the songs and stories of old, the young people teased her for filling Rapaport's ears with what they called, only half-joking, "the words of a pig," meaning something useless.

"One of the things I tried to do is to impress on them that I as an American am interested in the old stories, that if they weren't recorded, they would be lost and that they were valuable," he said.

He even tried to persuade one young man to make Tuamotuan

history and culture the topic of his college studies, to which the boy responded it had never occurred to him that you could major in such a thing.

Rapaport spent his days on Vairaatea simply, living as the people lived: helping to work copra (coconut meat — the chief source of income) in the mornings, fishing for his supper in the afternoons, and interviewing and taping in the evenings.

Of all the supplies he could have brought, he said, that was the most important: "an open spirit. The extent to which you're friendly and open to them is the extent to which they welcome you."

Islanders gave him 'aloha; and gifts upon his departure

FROM PAGE G-2

"You have all been very kind to me. I will write to you and I will return next year."

One morning during my last weekend on Vairaatea, when we were visiting Pare Tavake, the southernmost tip of the islet, Nauriki told me, "Remember that photo of Vavega, the elder of Tokelua that you showed me? He appeared to me last night. My back had been severely hurting me because of the pandanus mat I had been working on all last week, and this Vavega appeared to me and said, 'Nauriki!' 'O!' I answered. He said, 'I have brought you medicine from Tokelau, prepared from the bones of the sea turtle, here it is!' I took the medicine and now my back feels much better."

The time had come for me to leave the islands. Everyone gathered at the pier to chant the traditional goodbye songs, accompanied by ukuleles and guitars. They sang songs of departure to far-away lands, of mothers praying for the safe re-

turn of sons, and other songs I had not yet heard. I was too distraught to have the presence of mind to record the songs.

I made a short speech thanking the people for my new name and for their kind welcome. They showered me with beautiful flower and shell leis and gave me gifts of small pandanus baskets.

On these islands, they still retain the ancient custom of rubbing noses as a sign of arofa. I rubbed noses with the people who had come to wish me good-bye, and descended into the speedboat.

The boat set out on the chan-

nel and I waved for the last time to the people who had been so hospitable to me.

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HON/HONG KONG/SHANGHAI/XIAN/BEIJING/GUILIN/GUANGZHOU/HONG KONG/HON

CHINA YANGTZE RIVER CRUISE 20 DAYS
HON/HONG KONG/SHANGHAI/SUZHOU/XIAN/BEIJING/WUHAN/YANGTZE RIVER CRUISE/CHONG QING/HONG KONG/HON

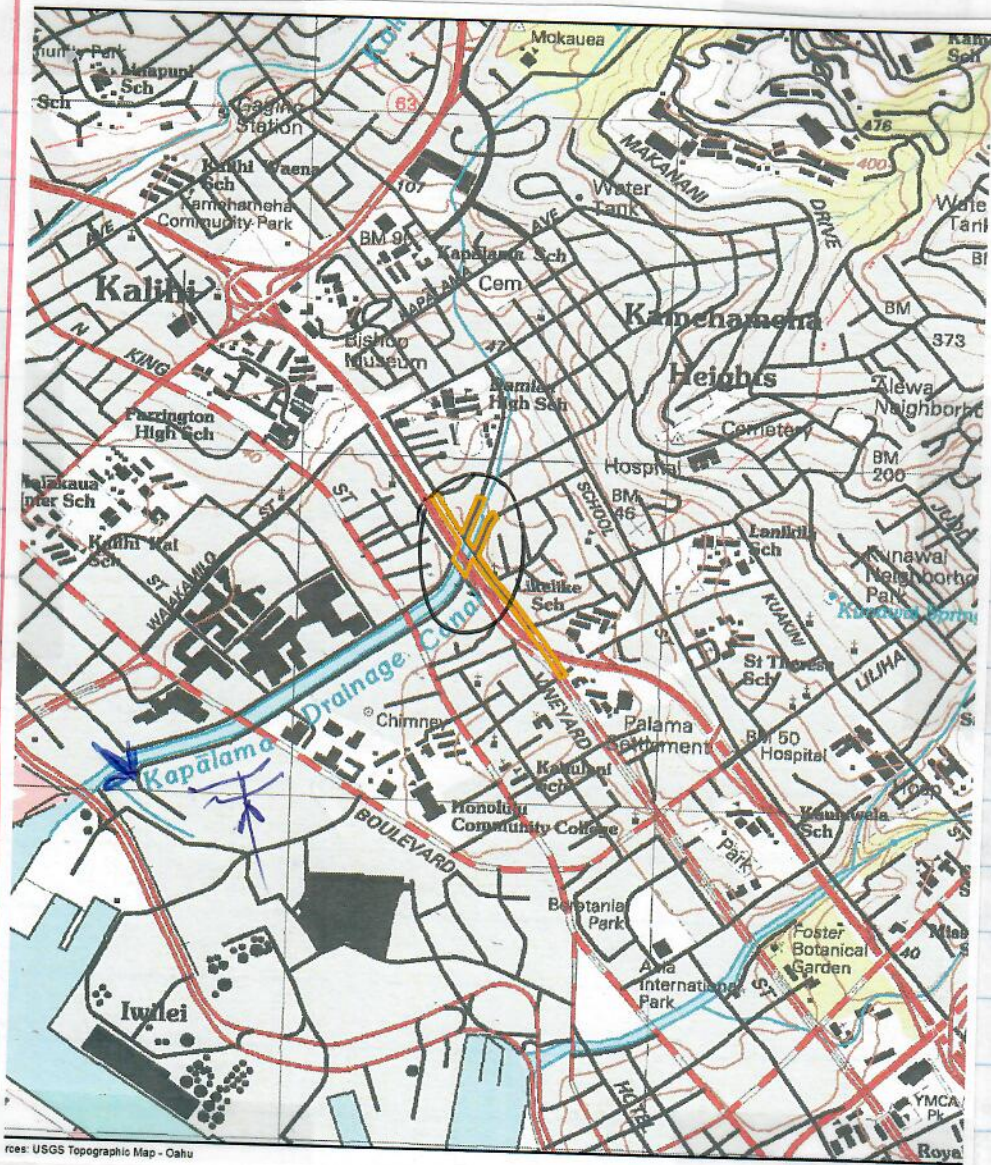
CHINA AND ORIENT 18 DAYS
HON/HONG KONG/SHANGHAI/XIAN/BEIJING/BANGKOK/SINGAPORE/HONG KONG/HON

SPECIAL AND F.I.T. ITINERARY CAN BE ARRANGED ON REQUEST.



CULTURAL TOURS

TA 428 100 N. BERETANIA ST., SUITE 147 PHONE 524-0775
MON.-FRI. 9AM-5PM; SAT. 9AM-NOON



Source: USGS Topographic Map - Oahu

Also
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DIAGNOSTIC CASE REPORT

U. S. GEOLOGICAL SURVEY-BIOLOGICAL RESOURCES DIVISION
NATIONAL WILDLIFE HEALTH CENTER-HONOLULU FIELD STATION
P. O. BOX 50167, 300 ALA MOANA BLVD., Rm. 8-132
HONOLULU, HAWAII 96850

Tel: 808-792-9520, Fax: 792-9596, Email: thierry_work@usgs.gov

Case Number: 25198

Submitter Name:

Mr. Pii Lahea
Mauna Lani Resort
68-1400 Mauna Lani Dr.
Kohala, Hawaii 96743
United States

Species submitted (n):

Turtle: Green (1)

Location: Mauna Lani Bay Resort
Area: Hawaii
State: Hawaii
Country: United States

DateCollected: 5/16/2015
DateSubmitted: 5/16/2015
DateReceived: 5/17/2015
DateExamined: 5/17/2015

SPECIMENS SUBMITTED: Carcass-Chilled

History: This turtle was hatched at Sea Life Park on 21 June 2013 and was transferred to Mauna Lani Bay Hotel on 24 June 2014. It was found dead in the Honu Pond on 16 May 2015. Identification: LHF pit - 4C497C4763, SLP shell #14, #33 (shell).

Findings: Accession 1-green turtle immature male in excellent body condition. Significant gross findings included torsion of the small intestines with fluid accumulation in abdomen and bloody mucus in the intestinal lumen. Microscopy revealed massive death of tissues in intestines. No causative infectious agents were seen.

Final diagnosis: Accession 1-Torsion.

Comments: Gross and microscopic lesions pointed to intestinal torsion as cause of death. No predisposing infectious disease was seen. Why this animal developed this condition cannot be determined based on available data. The death of intestinal tissue due to lack of blood secondary to torsion led to generalized toxicity and death.

Management: Intestinal lesion in turtles in the past at Mauna Lani were associated with fireworms, but there was no evidence of this here. Continued vigilance for other cases is warranted.



Moshe Rapaport

Writer turns French Polynesia into his classroom

By Wanda A. Adams

Living Section Editor

WHEN Moshe Rapaport embarked on a research trip to the remote eastern islands of the Tuamotu Archipelago last July, he had no idea where he'd stay, how he'd get from island to island, whether he'd brought the right supplies or enough money.

But all turned out well.

A doctoral candidate in geography at the University of Hawaii, Rapaport found that he could drop his suitcases at the front door of any "fare" (house) in the islands and be made welcome.

Copra boats — primitive but dependable — carried him inexpensively from Tahiti to Vairaatea atoll, more than 500 miles to the east.

And his supplies, which ranged from antibiotics to toilet paper, held out well with the exception of batteries and a few minor items.

Rapaport specializes in the human geography of French Polynesia and his dissertation focuses on the challenges faced by isolated societies in the Tuamotus and the mechanisms by which these small communities cope and adapt to the constraints placed on them by distance, lack of natural resources, economic problems and natural forces (such as hurricanes and tidal waves).

He'll return to the Tuamotus briefly in October, to check out other islands, then spend the better part of a year doing the actual research for his dissertation.

Rapaport said life in the eastern Tuamotus is about as unchanged as any-

See He'll, Page G-3

Tuamotus include more than 70 isles

A few facts about the eastern Tuamotus for prospective travelers and the merely curious:

● The Tuamotu Archipelago is composed of more than 70 islands located between the Society Islands (Tahiti and its cousins) about 500 miles to the west and the Marquesas roughly 500 miles to the northeast. The islands are coral atolls. The classic atoll is an outer ring of coral surrounding a lagoon with sand-and-coral islets atop the coral ring. Some atolls are broken, some continuous. All are rather small.

● There is but one hotel in the Tuamotus; most atolls lack stores, sheets or amenities. Younger people are likely to speak some French but most eastern Tuamotans speak only their own language which is similar to Hawaiian (since our islands were probably populated from southeastern Polynesia).

● Virtually the only source of income in the eastern Tuamotus is copra, the dried meat of the coconut. Tenacious coconut trees can sprout where soil is all but nonexistent and most islands now are covered almost exclusively by coconut groves. The islanders gather the fallen coconuts and split the nuts and stack them carefully,

then allow them to air-dry before digging the meat out and packing it in bags. Copra is used to make soap, oil-based foods and shampoo.

● The only way to travel through the islands is via your own boat or copra boats, which embark from Tahiti on an irregular basis. The boats spend three weeks to a month on the round trip and travelers can choose to disembark and stay on an island until the next boat comes, or remain with the boat making brief stops.

The cost from Tahiti is \$300-\$400 if you're hardy enough to sleep on deck; \$1,000 or more if you insist on a berth; arrangements can be made with copra companies in Tahiti. The food is very simple — rice, beans, vegetables. And you'll need seasickness medication unless you're a very experienced sailor.

● Travelers in the Tuamotus should carry antibiotics, antifungal medications, vitamin and mineral supplements, personal supplies, a blanket and beach mat, towels — virtually anything you'll need. It's also appropriate to pack gifts for the islanders who offer hospitality: inexpensive watches, items of clothing, dried or fresh fruit all are appropriate.



JANUARY 2015 LIUCHIU

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8/26/2015 HSA

Coattail riders are confident but they are not Dan Inouye

It has been 2-1/2 years since U.S. Sen. Daniel K. Inouye died, and Hawaii has yet to come to terms with the loss.

Not just the emotional loss — the mention of his name can still make die-hard Dems choke up — but the loss of his leadership

(dictatorial though it was), his vision and his gravitas.

Inouye was a hugely influential man, but his power went with him. Still, there are people who seem to believe that, like Obi Wan Kenobi, he can speak through the Force to his Jedi acolytes.

Why else would Council Chairman Ernie Martin hire Peter Boylan, a former newspaper reporter who suddenly is being called a "political operative" even though his last two jobs were running Colleen Hanabusa's losing campaign and serving in Mayor Billy Kenoi's office while Kenoi was busy running his political career into the ground? Boylan's most impressive credential is that he served as Inouye's press secretary in the last years of the senator's life. He brings no expertise in solving homelessness to this job, but he does bring essence of Inouye.

Why else would NextEra

hire Jennifer Sabas to try to right their sinking attempt to buy Hawaiian Electric? The hope is that Sabas can wield some Inouye-like Jedi mind tricks and change the minds of the governor, the consumer advocate and the long list of others who think it's a bad deal. Hard to imagine NextEra pursuing the local utility in the Inouye era if the senator didn't give them his blessing.

Then there's Colleen Hanabusa, who was recently appointed to the boards of both Hawaii Gas Co. and the Honolulu Authority for Rapid Transportation. Hanabusa has political credibility all her

own, but she has made the most of her connection to Inouye.

Hiring someone who knew Inouye is now the next best thing to having the esteemed senator's support.

His absence is felt in myriad ways.

If he were still with us, would there be protests about the Maui Daniel K. Inouye telescope? It was named for him posthumously, yes, but it's difficult to imagine he'd let things get to this point.

Inouye would find the second \$5 billion to extend

rail if it suited him.

If Inouye were alive, David Ige would know better what to do and how to do it. Ige might not have even run for governor if Inouye had a different plan.

Inouye might not have been able to wrest the Obama Presidential Library away from Chicago, but he might have been able to arrange a satellite branch.

The paternal Inouye made things too easy for us. Now we're on our own, and despite those with overblown ambition, there's no heir apparent. Without him there's dysfunction.

Reach Lee Cataluna at 529-4315 or lcataluna@staradvertiser.com.



JANUARY 2015 Church Hill

A LIFELONG RELATIONSHIP WITH HAWAIIAN AND FRENCH POLYNESIAN GREEN
TURTLES, 1963-2015

George H. Balazs

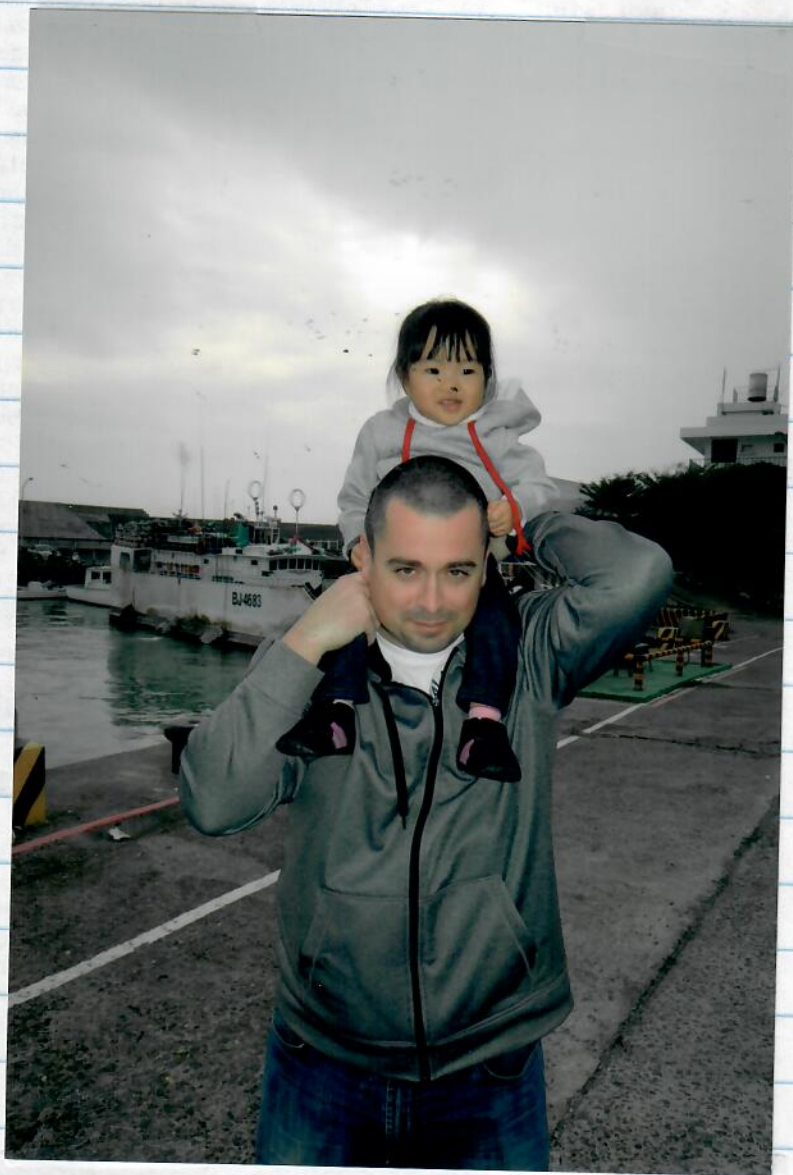
Pacific Islands Fisheries Science Center, NOAA Fisheries, 2570 Dole Street, Honolulu,
Hawaii 96822 USA

The story of green turtles being restored in the Hawaiian Islands during recent times has been heralded in several scientific and popular publications, but perhaps most eloquently in "The Book of Honu" and on the Turtle Trax web page <www.turtles.org> authored by Peter Bennett and Ursula Keuper-Bennett. Less known to most is the past and present complexities of the green turtles of French Polynesia, where they are also called honu. The bond between the native peoples and honu of the far-flung islands of French Polynesia continues to be deep-rooted, diverse, and intense, likely as previously existed in Hawaii, and may happen again, as the honu population of Hawaii proceeds upward and the tumor disease continues in decline. My relationship with green turtles began in French Polynesia in 1963 and evolved, through a series of lucky events, into a 42-year endeavor focused in the Hawaiian Archipelago.

In 1963, my wife Linda and I sold our possessions, emptied our small bank account, and left California to experience life in the South Seas among the people of Tahiti. Our journey there included a week in Hawaii before flying to the newly-opened jet airport near Papeete. Through the kindness of strangers, for seven months we subsisted in the then-outlier District of Paea in Tahiti. Visa limitations eventually returned us to California on a cargo ship via Nuku Hiva in the Marquesas and Panama. A few months later, we were back in Hawaii building a life, family, and careers that endure to the present.

I saw my first sea turtle in Tahiti, a juvenile honu that would have been dinner if not for my poor aim as a spear fisher. Later, walking the shoreline of Bora Bora with Linda, I saw my second sea turtle kept as a pet in a pen on the reef flat. I regularly still dream about French Polynesian people, islands, and turtles, as the natives still dream at night when an ancestor tells them where a turtle can be caught the next day on the reef. Since leaving in 1964 I've returned to French Polynesia on six short trips, five by invitation to assist with sea turtle studies, and once with Linda for a brief stop on a cruise vacation to Sydney. The most memorable visit was in 1991 to remote Scilly Atoll to work with Rene Tuputu and family, Rene being one of the most knowledgeable turtle hunters of the region. My most recent visit was in October 2010 as part of the "First International Symposium on Sea Turtles in French Polynesia" where Rene Tuputu and I met again after 20 years.

There is great potential for traditional ties with the honu to persist, on a sustainable basis, among the people of French Polynesia. The status of the stocks and the sustainability of the harvest need to be examined within the cultural context of island communities. I am committed to playing a role in aiding both the honu and the people in their interwoven relationships.



JANUARY 2015 LIOSCHAU
GCB with HAI YIN

Officials clear up rules on turtles

By William Cole
wcole@staradvertiser.com

The honu hubbub at the USS Arizona Memorial has been resolved.

The famed sunken battleship, a grave for most of the ship's 1,177 crew members killed on Dec. 7, 1941, was deemed a no-go when the Navy detachment piloting launches to the memorial's floating dock noticed threatened green sea turtles nibbling on algae near the boat landing,

officials said.

The memorial was closed parts of four days in late July and early August, resulting in about 7,000 people not being able to set foot on it. The turtle standoff ended up making national news.

As it turns out, some confusion over the Endangered Species Act may have been to blame.

"We're still seeing turtles around," said Abby Wines, a National Park Service spokeswoman. But Irene

Kelly, the Oahu-based sea turtle recovery coordinator for the National Oceanic and Atmospheric Administration, spoke with the Navy detachment "and gave them much clearer guidance as to just how close they can get to the turtles," Wines said.

"In this context, we were told that the boats can slowly approach the turtle," Wines said, adding the boats run slowly anyway since they are docking at the memorial over the Arizona.

that led to standoff at memorial

"So the boats can slowly approach the dock, and the turtle should submerge or move out of the way, and that's what's been happening."

One and sometimes two sea turtles were spotted near the floating dock, Wines said. Kelly said she's not surprised.

"There's algae. So if you look (underwater) at the dock and the memorial now, it's been underwater for how long? Seventy-plus years. And so it's got a

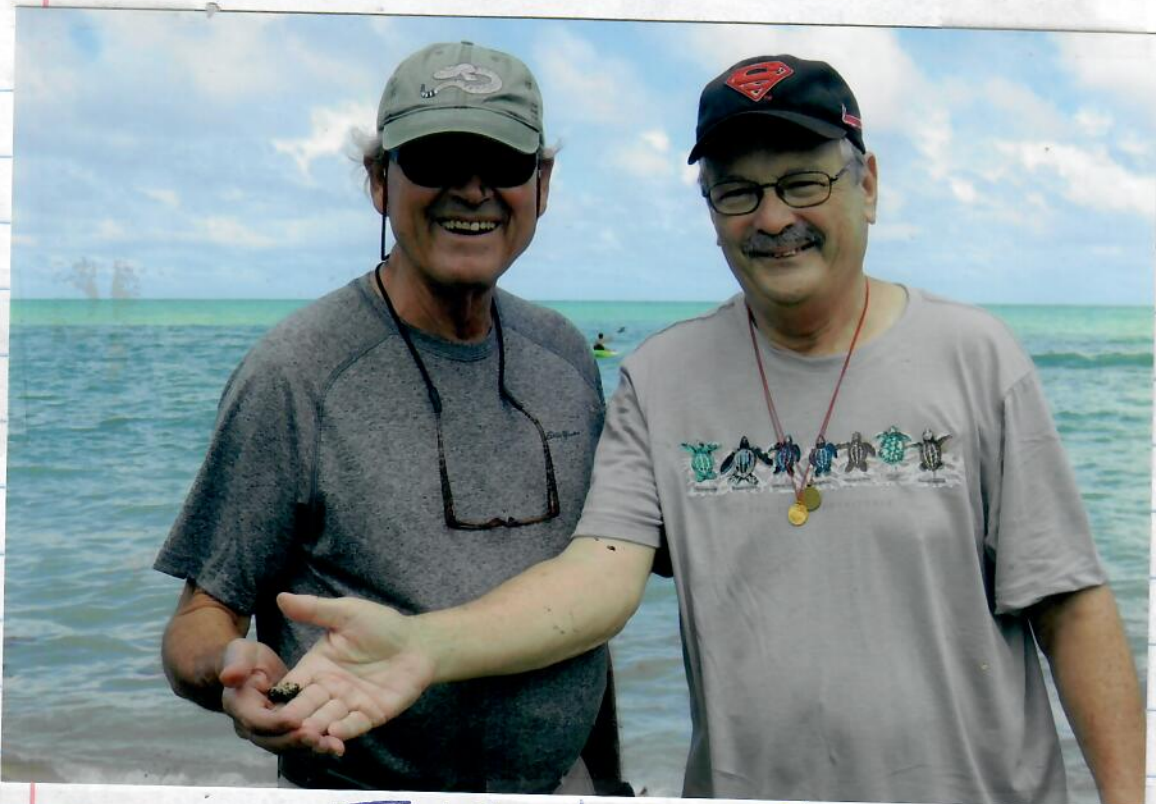
habitat now growing," Kelly said. She added that "it seems to be a productive and healthy habitat, and turtles are taking advantage of that."

The green sea turtle is threatened and protected and falls under the Endangered Species Act, but there are no standoff provisions, Kelly said. The state Department of Land and Natural Resources said in 2014 that although federal and state conservation laws differ, all prohibit disturbing

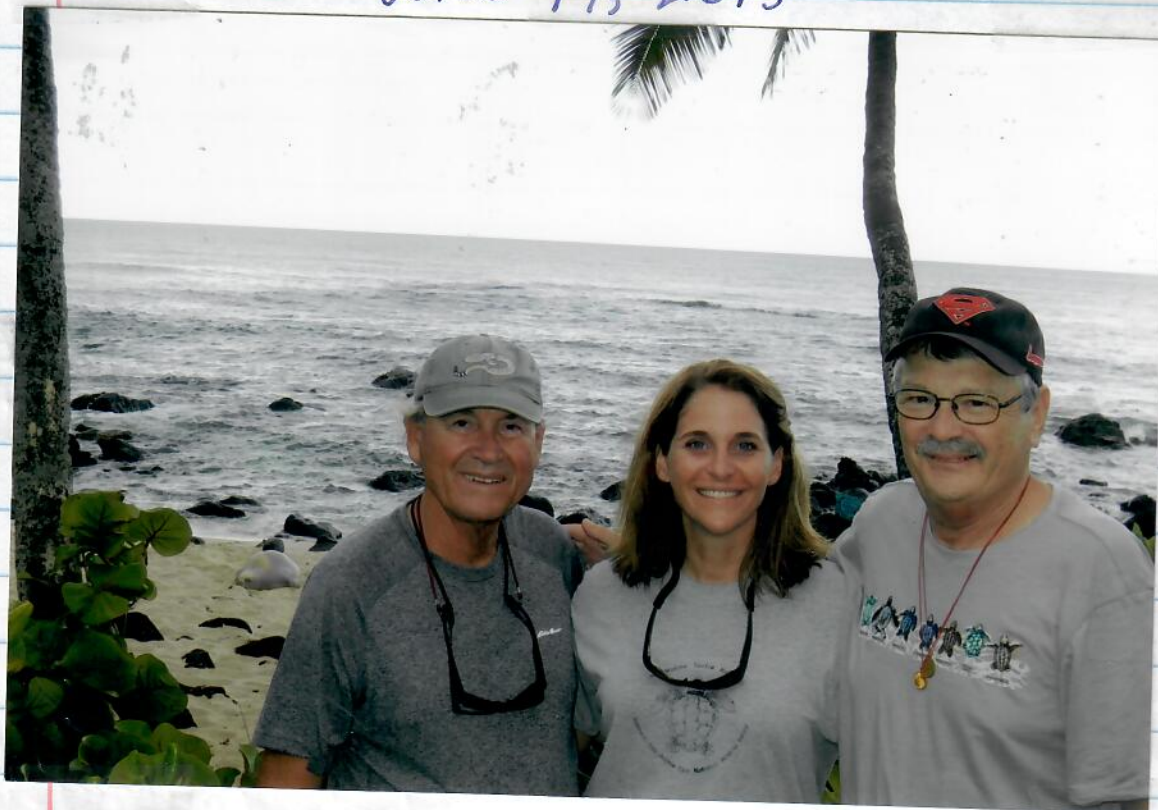
or harming sea turtles without a permit. Touching a turtle is considered disturbance and is illegal, the DLNR said.

Turtles have always been found in the vicinity of the Arizona Memorial, and the green sea turtle population has been increasing about 5 percent a year within the Hawaiian archipelago, Kelly said.

"As we see the population growing, we're going to see more and more turtles everywhere," she said.



JUNE 14, 2015



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Law creates state's first subsistence fishing area

HSA 8/5/15

A public hearing on a management plan for the Kauai grounds is expected

By Rosemarie Bernardo
rbernardo@staradvertiser.com

Gov. David Ige has signed a law establishing a community-based subsistence fishing area in Haena, Kauai, the first of its kind.

The law will give the Haena community the opportunity to protect local fish populations using traditional fishing practices.

The Department of Land and Natural Resources is expected to hold a public hearing on the management plan for the fishing grounds. A date has yet to be set.

Thomas Hashimoto, founding member of Hui Maka'ainana o Makana, a nonprofit organization that advocated for the designation in Haena, said, "The

land and the ocean are life for the people." Born and raised in Haena, Hashimoto learned from his great-grandparents how to protect ocean resources in his community.

"I have been honored and humbled to share knowledge I received from my kupuna from past generations with all who live in Haena, so these same places that I have fished and gathered my whole life will continue to be here for my great-grandchildren and all future generations," he said in a DLNR news release.

The Land Board approved administrative rules for the fishing area in October. Other communities have since requested information from the state about establishing a similar designation.

Commercial fisherman Michael Sur, who has raised concerns about the administrative rules, said of the

new law, "For us to comment on this is premature because we haven't seen a management plan."

Sur has said some of the rules for the fishing area, which include a ban on commercial harvests, could put commercial fishermen out of business.

Alton Miyasaka, acting administrator of the state Division of Aquatic Resources, said discussions will continue with the fishermen to see if they can come to an understanding.

In 1994 the state Legislature passed Act 271, a pilot project of the Mo'omomi Community-Based Subsistence Fishing Area on Molo-kai. DLNR monitored activities from 1995 until the project ended in 1997. A group called Hui Malama o Mo'omomi has continued to manage it.

Miyasaka said the group is seeking to re-establish the area as a community-based subsistence fishing area.

MARECIELO HOSTEL

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Some of us think laws should be clear-cut statements of what you can and cannot do. Indicting people under laws that can lead to fines in the billions of dollars over what "we believe" or what international bureaucrats have "doubts" about is not really law. It is an exercise of arbitrary power, based on whatever subjective notions are in vogue among government bureaucrats.

The history of American antitrust law shows too many similar vague and confused notions masquerading as law. The idea that the accused must prove their innocence, under the "rebuttable presumptions" of the Robinson-Patman Act of 1936, was a forerunner of the same mindset under later "disparate impact" theories in civil rights law.

What such fancy words boil down to is that very little evidence is required to shift the burden of proof to the accused, in defiance of centuries-old legal traditions that the accuser has the burden of proof in criminal cases and the plaintiffs have the burden of proof in civil cases. Otherwise, any fact or theory that sounds plausible to legal authorities is enough to force the accused to prove a negative or lose the case.

Such violations of the legal standards used in most other cases are usually inflicted on those who have

already been demonized and whose guilt has been assumed and punishment is fervently desired, such as big business, employers accused of discrimination or men accused of rape.

Google is accused of running its Internet search programs in such a way that they are more accessible to the public than other search programs available through Google. Since people can search through other sources besides Google, it is not at all clear why Google cannot run its own operation for its own benefit, while others run their operations for their own benefit.

The whole point of competition in the market is to create economic efficiency which, by its very nature, means eliminating the less efficient producers. Confusion about the difference between maintaining competition and maintaining competitors has long plagued antitrust law on both sides of the Atlantic.

But Americans seem in recent years to be recognizing the difference.

In Europe, there still seems to be a notion that big companies with many customers should help their smaller competitors survive — especially if the big companies are American and the smaller companies are European.

In other words, Google should be run in such a way that competing search programs are as prominently featured as Google's own search program.

Whatever the case that could be made for this argument, as a matter of manners, noblesse oblige or whatever, people in charge of anti-trust law are not in charge of manners or noblesse oblige.

Law is too serious to be subordinated to fashionable notions or political expediency.

Thomas Sowell is a senior fellow at Stanford University.

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Title Fall and Rise of the Hawaiian Honu: A 50-Year Witness to Cultural and Conservation Change

Track II. Effective Conservation and Restoration

Secondary Track I. Cultural Integration

Affiliations (1) IUCN/SSC Marine Turtle Specialist Group, Oceania Region, Honolulu, Hawaii, USA

Authors George Balazs (1) Presenting
Linda Balazs (1)

Categories Marine

2nd Category Com

Abstract

Dr. Lo Liu-chih
Department of Geography
National Kaohsiung Normal University
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...). Over the past 50 years
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... authors. Even more beneficial changes and acclimations can
... the future, including shifts in nesting to adapt to climate change, as sea
... have successfully done with resiliency for millennia. In light of their rise to
... abundance, green turtles in the Hawaii constitute a unique experimental model to
... comprehensively understand the restoration dynamics of an increasing sea turtle
... population. Conservation practices in Hawaii can serve as a real-life learning ground for
... people in other regions striving to save and sustainably use their own charismatic and
... culturally important sea turtle resources.

International Union for Conservation
of Nature
Red List

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Linda Balazs (1)

Categories Marine

2nd Category Community

Abstract

Seven species of ocean turtles exist globally as descendants of ancient reptilian lineages that have adapted and survived for millions of years. Over the course of human history an array of relationships have developed with turtles, and especially marine turtles amongst coastal and island peoples such as in the Hawaiian Islands. Turtles are woven deeply into the cultural, traditional, and contemporary fabric of humanity with uses ranging from food to fortune telling, pets to funerary. In 2012 Hawaii's green turtles or honu (*Chelonia mydas*) were downlisted from Endangered to the category of Least Concern following a comprehensive assessment by the IUCN Marine Turtle Specialist Group (see < <http://www.iucnredlist.org/details/16285718/0>>). Over the past 50 years Hawaii's honu have exhibited new behaviors and adaptations along with an increasing population and expansion into new habitats. These favorable changes have ranged from increases in terrestrial basking to feeding on new types of vegetation, to name a few as witnessed first hand by the authors. Even more beneficial changes and acclimations can be expected in the future, including shifts in nesting to adapt to climate change, as sea turtles have successfully done with resiliency for millennia. In light of their rise to abundance, green turtles in the Hawaii constitute a unique experimental model to comprehensively understand the restoration dynamics of an increasing sea turtle population. Conservation practices in Hawaii can serve as a real-life learning ground for people in other regions striving to save and sustainably use their own charismatic and culturally important sea turtle resources.

International Union for Conservation
of Nature
Red List



1964 Paea Tahiti - Lagoon harvest for dinner. Happily, a small honu missed that meal due to my poor aim as a 21-year old novice spear fisher.



1991 Scilly Atoll - Rene Tuputu and family members hand-capturing a male honu for traditional dinner.



1991 Scilly Atoll - Rene Tuputu extended family and guests.



2006 Bora Bora - Mating pair of honu captured for satellite tracking. Project conducted by SPREP and PF Government Miri Tatarata.



2010 Bora Bora - Honu petroglyph symbol of Tahitian power carved into stone of ancient marae temple.

1 gallon water = 8.33 lbs.

Circle diameter x 3.1416 = circumference

Circle diameter squared x 0.7854 = area

Atmospheric pressure is 14.7 lbs. per square inch at sea level

13.5 cubic feet of air weighs 1 lb

Em is the square width of any given type size.



1973 - Prominent honu nesting site of East Island at French Frigate Shoals in the remote Northwestern Hawaiian Islands.



1973 - First of 43 annual field camps to monitor and tag nesting honu at East Island.



1974 - Honu nesting at East Island.



2010 Laniakea, Oahu - Honu foraging near shore in abundance.



2012 Hookipa, Maui - Numerous honu coming ashore at sunset for their nightly sleep.

9 square feet = 1 square yard

30.25 sq. yds. = 1 sq. rod

160 sq. rods = 1 acre

640 acres = 1 sq. mile

An acre measures 208.71 ft. on each side

A section of land is 1 sq. mile.

A quarter section is 160 acres.

A township is 36 sq. miles.

Conversion Tables

LENGTH

- 1 meter = 100 cm. = 1,000 mm.
- 1 millimeter = 0.001 meter
- 1 centimeter = 0.01 meter
- 1 decimeter = 0.1 meter
- 1 decameter = 10 meters
- 1 hectometer = 100 meters
- 1 kilometer = 1,000 meters

CAPACITY

- 1 liter = 100 cl. = 1,000 ml.
- 1 milliliter = 0.001 liter
- 1 centiliter = 0.01 liter
- 1 deciliter = 0.1 liter
- 1 decaliter = 10 liters
- 1 hectoliter = 100 liters
- 1 kiloliter = 1,000 liters

WEIGHT

- 1 gram = 100 cg. = 1,000 mg.
- 1 milligram = 0.001 gram
- 1 centigram = 0.01 gram
- 1 decigram = 0.1 gram
- 1 decagram = 10 grams
- 1 hectogram = 100 grams
- 1 kilogram = 1,000 grams

METERS YARDS INCHES

1.000	1.093	39.37
0.914	1.000	36.00

CENTIMETERS INCHES FEET

1.00	0.394	0.0328
2.54	1.000	0.0833
30.48	12.000	1.0000

KILOMETERS MILES

1.00	0.621
1.609	1.000

GRAMS OUNCES POUNDS

1.00	0.035	0.0020
28.35	1.000	0.0625
453.59	16.000	1.0000
1,000.00	35.274	2.2050

KILOGRAMS OUNCES POUNDS

1.000	35.274	2.2050
0.028	1.000	0.0625
0.454	16.000	1.0000

LITERS PINTS QUARTS GAL.

1.000	2.113	1.057	0.264
0.473	1.000	0.500	0.125
0.946	2.000	1.000	0.250
3.785	8.000	4.000	1.000

