

# Ka‘Elele

The Messenger

The Journal of Bernice Pauahi  
Bishop Museum | Spring 2017



# UPCOMING EVENTS

## April

**29 | SATURDAY**  
**10th Annual HECO Grow Hawaiian Festival**  
9:00 a.m. – 3:00 p.m. (Great Lawn)  
The Grow Hawaiian Festival is a celebration of Hawai‘i’s culture, native plants, and sustainability, presented by Hawaiian Electric at Bishop Museum. Enjoy music by Nā Hōkū Hanohano-award winners Kuana Torres Kahele and Weldon Kekauoha and hula by Nā Pualei O Likolehua and Ke Kai O Kahiki. This annual free event offers the whole family a day filled with activities like keiki games, lei making, kapa printing, a native plant sale, farmer’s market, and ‘ono food to enjoy and more! FREE admission and parking for kama‘āina and military with ID. For details, call 543-7511 or visit [HawaiianElectric.com/GrowHawaiian](http://HawaiianElectric.com/GrowHawaiian).



## May

**7 | SUNDAY**  
**Fantasy Night Skies Keiki Art Workshop by Art Explorium**  
2:30 – 4:30 p.m. (Hale ‘Ikehu)  
\$10 per child, (ages 5 and up), Museum admission not included. Hear mo‘olelo (stories) about the constellations Polynesian navigators use to sail across the Pacific Ocean. Using a special photo solution, participants will make cyanotype prints to illustrate their own fantasy night skies. Register online at [BishopMuseum.org/Special-Events](http://BishopMuseum.org/Special-Events)

## June

**23 | FRIDAY**  
**Museum After Dark Members Event** 6:00 – 9:00 p.m. (Great Lawn)  
Patron-level members and above are invited to a family night of keiki activities, food trucks, a movie on the lawn, and *The Machine Inside: Biomechanics* exhibit. For more information call (808) 847-8280.

## August

**12 | SATURDAY**  
**19th Annual Bernice Pauahi Bishop Museum Dinner**  
5:00 – 10:00 p.m. (Great Lawn)

## J. Watumull Planetarium Evening Programs

### STARS & GUITARS

Saturdays, 8:00 p.m.  
May 6  
June 3  
July 1  
August 5  
September 2

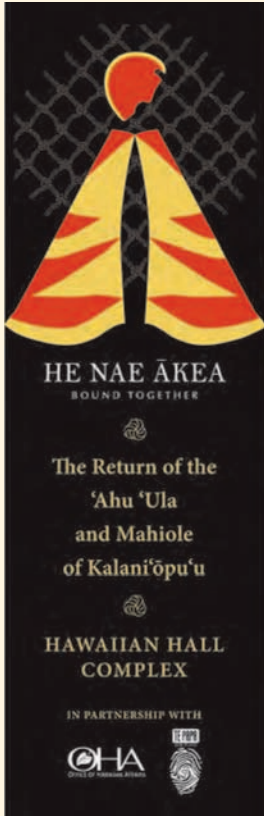
Tickets:  
Members: \$5  
General: \$10  
Ages 4–12: \$7

Planetarium lobby doors open at 7:15 p.m. Please arrive by 7:45 p.m. No late seating. Show length is one hour. Telescope viewing is offered after the program, pending weather conditions.

Due to limited space, advance ticket purchases are required.

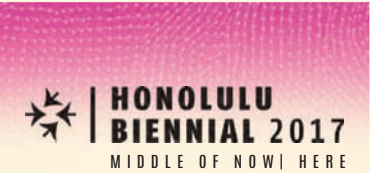
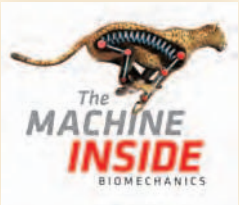
See the Planetarium schedule and purchase tickets online at [BishopMuseum.org/Stars-Guitars](http://BishopMuseum.org/Stars-Guitars).

## On Display



**The Machine Inside: Biomechanics**  
February 25 – September 10, 2017  
Castle Memorial Building

Spider webs stronger than steel? Fish that can bite through bricks? All species—from the long-extinct to the recently-discovered—have evolved specialized ways of adapting to the world. In this traveling exhibition from The Field Museum, discover the marvels of natural engineering—and see how humans can draw inspiration from the innovations of evolution. Through immersive design, real objects, and scientific models, interactives, and media, this exhibition will take visitors past the familiar surface of nature, and deep into its invisible workings.



**Honolulu Biennial 2017**  
**Middle of Now | Here**  
March 8 – May 8, 2017  
Various locations

Bishop Museum is proud to be a participating venue in Hawai‘i’s first international biennial. Art by Hawaiian artists Kaili Chun and Charlton Kūpa’a Hee are displayed across the Museum campus. New Zealand artist Lisa Reihana’s film can be seen in Pacific Hall and is the only art piece in the Honolulu Biennial that is directly inspired by a historic museum collection piece, the chief mourner’s costume, displayed in Pacific Hall. Presented by The Howard Hughes Corporation and Honolulu Biennial Foundation (HBF).



**Hulia ‘Ano: Inspired Patterns**  
March 18 – January 8, 2017  
J. M. Long Gallery

Explore Hawaiian aesthetic traditions, design motifs, and visual similarities in the natural world. The intriguing groupings of cultural and natural objects, considered together with Hawaiian language, enhance the understanding of patterns and promote creativity and contemplation.

Visitors can create beautiful and surprising patterns of their own in different interactive stations. Patterns can be projected onto a gourd, arranged into a Hawaiian quilt design, or repeated in various kapa styles. See the beauty in the patterns inspired by nature.

COVER | Artist Carlton Kūpa’a Hee installs his art piece, *Pōhue: Storied Gourds*, as part of the Honolulu Biennial 2017 exhibit. Each of these gourds reflect the effects of invasive species and the need for conservation. Photo by Kelli Soileau.

# Dear Friends of Bishop Museum:



Aloha Kākou,  
I hope that, like me, you are feeling energized to share in the exciting strides that are already underway at Bishop Museum for spring!  
Inside the Castle Memorial Building, young future scientists are finding inspiration in *The Machine Inside: Biomechanics*, a traveling exhibit from The Field Museum of Chicago. Here, visitors are discovering a new appreciation for the inner workings of all living

things by exploring how plants and animals endure weather, interact with predators, and function efficiently.

The Museum is also pleased to be a partner site for the Honolulu Biennial Festival. Four contemporary works of art are showcased across our campus as part of this inaugural community endeavor. I encourage you to come down and view provocative pieces by Kaili Chun, Charlton Kūpa’a Hee, and Lisa Reihana before May 8, when the festival concludes.

Our new J. M. Long Gallery installation is a beautiful complement to this art initiative. *Hulia ‘Ano: Inspired Patterns* celebrates Hawaiian creative vision through designs patterned onto gourds, stamped onto kapa, woven into mats, and tied into featherwork garments. Objects from our ethnology and natural science collections are displayed alongside contemporary and cultural artworks in this visually stunning exhibit.

I’m also pleased to share that the Library & Archives has reinstated public access hours on Tuesday and Thursdays from 1 to 4 p.m., and on Saturdays from 9 a.m. to noon except for holiday weekends. Tremendous resources abound there for historical, genealogical, and other researchers.

Finally, I’d like to say mahalo, mahalo, mahalo for your generous year-end support of Bishop Museum as we work through implementation of our new strategic business plan. There has been a great outpouring of support, and I am personally very grateful to all of you for your partnership in helping Bishop Museum strengthen its foundation in order to grow. I look forward to sharing more with you as we continue to move through the year.

Me ka ha’aha’a,  
*Linda Lee Kuuleilani*

Linda Lee Kuuleilani (Cissy) Farm  
Interim President and Chief Executive Officer



ABOVE | Moana Heu admires the detail of the ke’eke’e (zigzag) patterns woven into a makaloa mat in the *Hulia ‘Ano: Inspired Patterns* exhibit.

BELOW | Group photo of the contributing artists of *Hulia ‘Ano: Inspired Patterns* at the exhibit preview — (from left to right) Kawika Lum, Museum Interim President and CEO Cissy Farm, Board Chairman Watters Martin Jr., Taupōuri Tangarō, Matthew Kawika Ortiz, Verna Takashima, Lufi Luteru, and Museum Cultural Advisor Marques Hanalei Marzan.





**FEBRUARY 25  
THROUGH  
SEPTEMBER 4, 2017**  
**CASTLE MEMORIAL BUILDING**

Imagine if your jaws could crush over 8,000 pounds in one bite, and your legs could leap the length of a football field in a single bound. From the inside out, every living thing—including humans—is a machine built to survive, move, and discover. Explore how plants and animals stay in one piece despite the crushing forces of gravity, the pressure of water and wind, and the attacks of predators. Using surprising tactics, creatures find food against fierce competition and—without metal, motors, or electricity—circulate their own life-sustaining fluids. In an example of this, feel for yourself how hard a giraffe's heart works to pump blood up to its head.

Aspects of the hidden machine inside all of us are highlighted throughout the exhibit. Parents and children will:

- Learn how the sturdy dome shape is found throughout nature, in horseshoe crabs, eggs, and even your skull.
- Feel like they are flying with the birds and see why some wings are better for speed and others for long-distance flight.

- Be amazed by the echolocation skills of bats, the sensitive antennae of moths, and the pinpoint precision of owls' ears as they all explore their environments.
- See how researchers use fossils to deduce how animals lived in the past.

See why every living thing is a machine built to survive, move, and discover, and explore how these marvels of natural engineering inspired technological breakthroughs like Velcro, wind turbines, and chainsaws.



A special feature of this exhibit is seeing, up close, one of nature's most terrifying killing machines, with a life-size replica of the *Tyrannosaurus rex* known as Sue, the largest most complete fossil of its kind. Using the science of biomechanics, scientists recreated the way she moved, chomped on prey, and saw the world around her. They've calculated that Sue's speed maxed out at only 18 miles per hour. However, her bite was one of the strongest on Earth with a force of 12,500 pounds! And she could see up to 13 times more sharply than we can in daylight.

Join us in this exciting educational traveling exhibit about the complex engineering machines that are the animals, plants, and even ourselves in *The Machine Inside: Biomechanics*, created by the Field Museum of Chicago.

The Field  
Museum

INTERNATIONAL SPONSOR:



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# HONOLULU BIENNIAL 2017

## MIDDLE OF NOW | HERE

MARCH 8 THROUGH MAY 8, 2017

GREAT LAWN & NATIVE GARDEN | HAWAIIAN HALL PICTURE GALLERY | PACIFIC HALL

Bishop Museum is proud to be a participating venue of the international arts festival Honolulu Biennial 2017. This multi-site arts festival staged throughout Honolulu celebrates works by Native Hawaiian artists and Hawai'i-based artists alongside national and international artists, all from countries and continents linked by the Pacific Ocean.

Bishop Museum is exhibiting four pieces of art by three artists: Lisa Reihana, Kaili Chun, and Charlton Kūpa'a Hee. Their installations are sited across the Museum campus.

Hee's ceramic gourds are hanging from the 'ulu tree in the Native Garden. They have images etched on them to tell a story, similar to the style of ancient Greek urns and vases.

Chun has two art pieces displayed, both of which reflect issues of restraint and containment. *Veritas II* is on the lawn and *Untitled – Bishop Museum Intervention 1* is displayed in the Picture Gallery.

Showing on the large screen in Pacific Hall, Reihana's film tells the story of a dying warrior whose death is avenged by a chiefly mourning party. This is the only art piece in the Honolulu Biennial that is directly inspired by a historic collection piece, the chief mourner's costume displayed in Bishop Museum's Pacific Hall.

Presented by The Howard Hughes Corporation and Honolulu Biennial Foundation, this is Hawai'i's first international biennial. Fumio Nanjo, Director of the Māori Art Museum in Tokyo, serves as the Curatorial Director. Ngahiraka Mason, formerly the curator of Indigenous Art, Māori Art at Auckland Art Gallery Toi o Tāmaki, a position she held for 20 years, is serving as Curator. Complementing this arts festival is a variety of public programs, including lectures, panel discussions, artist talks, keiki workshops, performances, and tours.

Join in and experience this unique and exciting celebration of art.

**Honolulu Biennial 2017**  
**Middle of Now | Here**  
**Exhibit Locations:**

- The Hub of Honolulu Biennial
- Honolulu Museum of Art
- IBM Building at Ward Village
- Honolulu Hale
- Foster Botanical Garden
- Bernice Pauahi Bishop Museum
- The ARTS at Marks Garage
- The Hawaii Prince Hotel Waikiki
- Shangri La Center for Islamic Arts and Cultures

For a fully updated list of exhibition sites, events and programs, please visit [HonoluluBiennial.org](http://HonoluluBiennial.org)

PRESENTED BY:

Howard Hughes



HONOLULU  
BIENNIAL  
FOUNDATION

OPPOSITE, TOP LEFT  
*Veritas II*  
Kaili Chun, Hawai'i  
On the Great Lawn

OPPOSITE, TOP RIGHT  
*Untitled – Bishop Museum Intervention 1*  
Kaili Chun, Hawai'i  
In the Hawaiian Hall Picture Gallery

OPPOSITE, BOTTOM LEFT  
*Pōhue: Storied Gourds series*  
Charlton Kūpa'a Hee, Hawai'i  
Hanging from the 'ulu tree in Nā Ulu  
Kaiwi'ula Native Hawaiian Garden

OPPOSITE, BOTTOM  
*Tai Whetuki – House of Death REDUX*  
Lisa Reihana, New Zealand  
In Pacific Hall  
Film still courtesy of Lisa Reihana.

BELOW | Nicholas Bright assists with the installation of Kaili Chun's *Veritas II* as part of the Honolulu Biennial 2017 installation at Bishop Museum.

Photos by Kelli Soileau.



# Cultural Connections to Our Environment

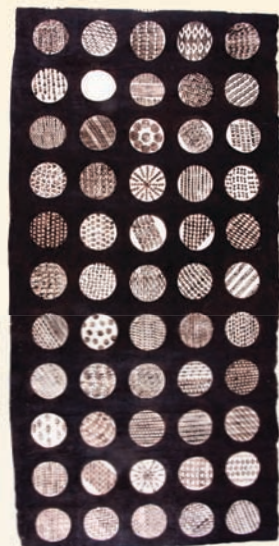
To highlight modern expressions of making patterns for the upcoming *Hulia 'Ano: Inspired Patterns* exhibition, Bishop Museum partnered with five contemporary artists embodying a range of Hawaiian understanding, fundamental to the art of Hawai'i.

The artists visited Bishop Museum's Ethnology Collections to draw inspiration for new works created specifically for the exhibit. Their contributions complement the collections displayed in *Hulia 'Ano*, emphasizing the environmental kinships that exist with the people of these islands.



Verna Takashima, a kapa practitioner and teacher based in Honolulu, shares the skill and practice of kapa making throughout our community. She began making kapa over a decade ago after her brother, noted Hawaiian woodworker Solomon 'Apio, discovered that their grandmother, Mama, of Pāhoehoe, South Kona, had made kapa in the late 1800s. Takashima is proud of her family heritage and strives to hone her craft and explore deeper layers of artistic understanding.

In her teaching, she instills cultural values in her students while encouraging experimentation and creativity in their work. During her time with the collection, she looked at many examples of kapa, examining variations in technique and applications of color and surface design.

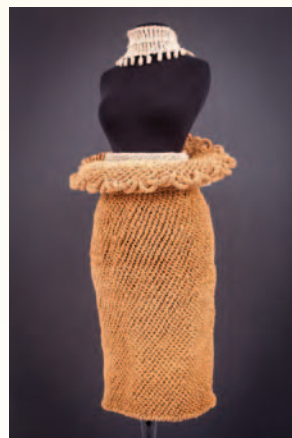


*Mahina Poepoe (The Many Faces of the Full Moons)*, kapa made by Verna Takashima. Photo by Jesse W. Stephen.



Taupōuri Tangarō, of Hilo, Hawai'i Island, is the kumu hula of Unukupukupu and the director of Hawaiian culture and protocols engagement at the University of Hawai'i at Hilo and Hawai'i Community College. He teaches students, faculty, and the greater community the benefits of perceiving the world from multiple perspectives.

Tangarō's inspiration to work with cordage can be traced back to the first time he saw a carved wooden image dressed in a cord pā'ū, or skirt. To this day, that vision continues to serve as his creative stimulus. He uses his work to facilitate dialogue, engage in leadership building, and exercise community empowerment.



A garment made from coconut cordage by Taupōuri Tangarō. Photo by Jesse W. Stephen.

## HULIA 'ANO INSPIRED PATTERNS

MARCH 18 THROUGH OCTOBER 16, 2017  
J. M. LONG GALLERY IN THE HAWAIIAN HALL COMPLEX



Kawika Lum, of Wahiawā, O'ahu, as one of the last apprentices of esteemed Hawaiian featherworker Paulette Nohealani Kahalepuna, perpetuates the art of Hawaiian featherwork. Lum creates feather lei and kähili (feather standards) with stunning combinations of colors and feather types.

He was recently inspired after the 2016 return of the 'ahu 'ula (feather cape) of high chief Kalani'ōpu'u to Hawai'i and expanded his practice to include the creation of 'ahu 'ula.



*Ka Mahana o Kānehoalani*, feather cloak by Kawika Lum, inspired by the beauty of the 'ilima blossom. Photo by Jesse W. Stephen.



Lufi A. Luteru, of Mākaha Valley, O'ahu, is an educator and cultural practitioner. She is a full-time entrepreneur and owner of Pāwehi Creations. She specializes in the art of ulana lau hala (pandanus-leaf plaiting), weaving one-of-a-kind pāpale (hats) and adornments, using lau hala and various fibers of Moananuiākea (from across the Pacific Ocean) to manifest mo'olelo 'ike kupuna (ancestral stories) through patterns, designs, and colors.



Hats by Lufi Luteru are inspired by the intricate and diverse patterns found in i'e kuku, or barkcloth beaters. Photo by Jesse W. Stephen.



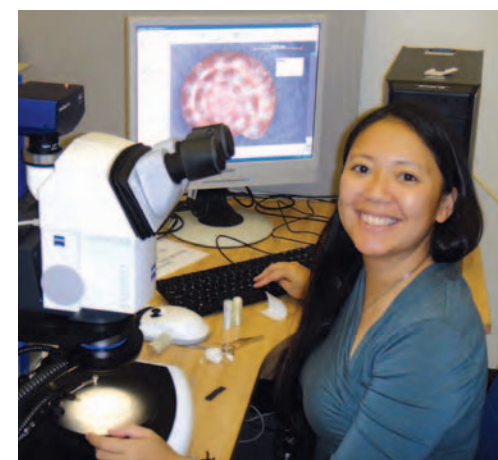
Artist Matt Kawika Ortiz, from Lā'ie, O'ahu, draws upon Hawaiian values and concepts, effortlessly presenting them in a contemporary visual context. With conscious attention to detail, Ortiz integrates the natural world into his work with fluidity and consistency. His work speaks to the interdependent nature of our natural resources and our actions to care for it. Ortiz and his wife Roxanne are founders of the creative consulting company Wooden Wave, best known for its signature treehouse murals.



*Waiwai 'Āina* by Matthew Ortiz reflects the natural flow of water from the uplands to the sea. Photo by Jesse W. Stephen.

# Using the Malacology Collection to Save Hawaiian Land Snails

by Norine W. Yeung



Habitat destruction, climate change, and invasive species are wiping out Earth's biodiversity at an alarming rate. Of all the major animal groups (e.g., birds, mammals, insects, and reptiles), molluscs have the highest recorded extinction rate and most of these extinctions are from Pacific islands such as the Hawaiian Islands. There are more than 6,000 Pacific islands land snail species and the majority of these are endemic to a single island, if not a mountain ridge or valley.

To conserve this vast and unique diversity, we need accurate and current knowledge of the species' systematics—what they are and how they are related to each other. Museum natural history collections are critical to developing this knowledge and making decisions about how best to conserve species. These collections provide the first steps in conserving biodiversity by providing a historical record of species diversity. These permanent records provide us insights into species

distribution, abundance, and variation (genetically, morphologically, and over time). The largest Pacific island land snail collection in the world is at Bishop Museum. The Charles Montague Cooke Jr. Malacology Center dates to the late nineteenth century and houses more than six million specimens, of which four million are terrestrial snails. The other two million specimens represent marine molluscs with notable collections. Many of these specimens, whether terrestrial or marine, represent threatened, endangered, and extinct species, all of which are irreplaceable.

In August 2016, the National Science Foundation Collections in Support of Biological Research awarded Dr. Kenneth A. Hayes, me, and our collaborators a three-year grant (DBI-1561774) to protect and upgrade the spectacular land snail collection at Bishop Museum. In addition, the project will improve physical and virtual accessibility to this critical data resource for researchers, natural resource managers, students, and the public. Collaborators from museums around the world, Bishop Museum Malacology staff, volunteers, and interns will be:

- 1) Rehousing specimens in environmentally stable and protective containers;
- 2) Imaging all type material (original specimens on which the species descriptions are based) to create Hawaiian land snail guides;
- 3) Digitizing collection data and making information readily available to the community both in-house and via web-accessible databases.

*Dr. Norine W. Yeung is a researcher in the Bishop Museum Charles Montague Cooke Jr. Malacology Center with a focus on Hawaiian land snails.*

OPPOSITE | *Auriculella pulchra* was originally described from O'ahu in 1868. The species was last recorded in 1986 and thought to be extinct, but it was rediscovered in 2013. Photo by N. Yeung.

ABOVE | Specimens from the Bishop Museum malacology collection representing various *Achatinella* spp., an endemic and mostly extinct land snail genus. Photo by N. Yeung.

INSET | Dr. Norine W. Yeung at work imaging and assessing type material of Hawaiian land snails. Photo by K. Hayes.



## What is Malacology?

Malacology is the study of molluscs, a diverse group of animals that include some well-known groups like Cephalopoda (octopus, squid, cuttlefish), Bivalvia (clams, oysters, 'opihi, geoducks), and Gastropoda (snails, nudibranchs, sea hares). Representatives from these groups can be found in the Bishop Museum Malacology Collection. Molluscs are the second-most diverse group of animals among the 1.5 – 2.4 million recognized species and live in the ocean, on land, and in freshwater ecosystems. They are important contributors to ecosystem health and often key providers of nutrients.

## Bishop Museum Malacology Center Volunteer and Internship Program

The Bishop Museum Malacology Center has a long history of systematic, taxonomic, and malacological training, beginning with the first researcher, Dr. Charles Montague Cooke Jr., who was curator from 1902–1948. Continuing in his footsteps and aiding in the development of a new generation of taxonomists, conservationists, and museum researchers, we are recruiting and training high-school and college students and the public to assist with upgrading the collection. All members receive training in topics ranging from systematics to curation and museum conservation. They also participate in outreach activities to increase public understanding of the overall importance of invertebrates in ecosystems and the value of natural history collections to conserving and securing biodiversity. If you are interested in becoming a volunteer or intern, sign up online at [BishopMuseum.org/Volunteer/](http://BishopMuseum.org/Volunteer/).



A rare photograph of *Kaala subrutila*, a highly-threatened native land snail that was thought extinct until its rediscovery in 2008. This land snail is endemic to Mt. Ka'ala, the highest peak on O'ahu, and one of the most biodiverse areas in Hawai'i. Photo by N. Yeung.

## HAWAIIAN PATTERNS

Traditional Hawaiian patterns, usually taken from kapa, have been re-used in a myriad of ways. In the late 1960s and early 1970s, men's aloha wear jackets appeared with kapa motifs, like the one seen here. Its well-known design is copied from a piece in the Bishop Museum collection that depicts a hā'uke'uke, a type of sea urchin. Showing off this jacket in October 1969 is George W. Bunton, head of the Bishop Museum Planetarium. He also wears the jacket in the framed photo he's holding, which shows him with two television news reporters during a Honolulu broadcast of the first landing on the Moon in July 1969. Photo by Sadie Doyle, Bishop Museum Archives.



## Raising Awareness of Endangered Hawaiian Birds



As animal lovers and philanthropists with a strong passion for wildlife conservation, it is no surprise that Bill and Barbara May have become keenly interested in the forests of Hawai'i. Here, conservation efforts are focused on securing a sustainable future for a marvelous array of endemic bird species found nowhere else on earth.

At the San Diego Zoo, Bill's role as a member of the Board of Directors, including ten years as vice chairman of the board, has helped to direct the couple's passions. Through the Zoo's conservation initiatives, the Mays became involved in a project across Maui and Hawai'i Island focused on reintroducing the 'alalā, the critically endangered Hawaiian crow, to its native forests through a captive breeding program.

The Hawai'i Endangered Bird Conservation Program is a unique collaboration between the San Diego Zoo's Global Institute for Conservation Research, the U.S. Fish & Wildlife Service, and the state of Hawai'i Department of Land and Natural Resources Division of Forestry and Wildlife, and other partners. "I remember going to the Maui and Hawai'i Island bird conservation centers and seeing all the good work they had done, bringing the 'alalā back from near extinction, and reintroducing other endemic Hawaiian birds to the islands," says Bill.

It was through this project that Bill and Barbara were introduced to the watercolor paintings of Marian Berger. Clifford Hague, a member of the San Diego Zoo Board of Trustees, and a few others partnered with Berger to create and reproduce a series of 33 artworks following John James Audubon's

famed style of painting. The series presents 37 surviving species and subspecies of Hawaiian endemic birds at life size in double elephant folio format (26½ x 36 inches). The project was a fundraiser to help preserve Hawai'i's remaining native birds. Bill and Barbara then purchased the 33 original paintings with the intention of exhibiting them in art galleries and museums to raise awareness of these birds and the need for their conservation.

Bill says, "I'm afraid the only species prospering is the human species. We are putting so much pressure on these habitats and it's becoming more and more of a challenge."

Meanwhile at Bishop Museum, an exhibition called *Lele O Nā Manu: Hawaiian Forest Birds* was on display in the J. M. Long Gallery with the same mission in mind. The exhibit included a selection of seven giclee of Berger's stunning watercolors (donated to the Museum by Clifford Hague) to help raise awareness about conservation issues around species like the 'akeke'e, the palila, and the 'iwi, just to name a few.

Once word of the exhibit and its educational messages reached Bill and Barbara, they generously gifted their collection of original Berger watercolors to Bishop Museum's Library & Archives, "where more people can see and appreciate them and also recognize the importance of Native Hawaiian birds to Hawai'i's ecosystem," says Bill.

This gift to the Museum's collections will ensure that Marian Berger's artistry and the stories of Hawai'i's native forest birds can be shared with the public now and in the future.

ABOVE, LEFT | A Marian Berger painting of a family of puaihi, small Kaua'i thrush (*Myadestes palmeri*) nested in a lalapa (*Cheirodendron platyphyllum*) tree. Image courtesy of Marian Berger.

ABOVE | Bill and Barbara May. Photo courtesy of Bill May.

BELOW | A Marian Berger painting of a group of 'akikiki, Kaua'i creeper (*Oreomystis bairdi*), sitting in an 'ōhi'a hā (*Syzygium sandwicense*) tree. Image courtesy of Marian Berger.

**You can support research and collections, too!**  
**Please donate online at [BishopMuseum.org](http://BishopMuseum.org) or call the Development Office at 808-847-8281 to learn more.**



# Mahalo to Our Supporters!

*On behalf of the Board of Directors, staff, and volunteers of Bishop Museum, we wish to recognize and thank those who contributed to Bishop Museum between September 1, 2016 & January 31, 2017. Mahalo for your support of the Museum.*

## In Support of the Annual Fund

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If you have questions about this issue of *Ka ‘Elele*, please contact the Bishop Museum Institutional Advancement Division at 847-8271.

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## HAWAII’S GOOD GUYS | BAD GUYS

### Good Guy: Chinese Cowrie (*Ovatipsa chinensis*) or leho

This native cowrie is found throughout the Pacific, but is fairly uncommon here in Hawai‘i. It lives only in waters deeper than 40 feet, where it grazes on small marine invertebrates such as sponges, anemones, and soft corals. The marine mollusc, about one to two inches long, is active only at night, hiding in cracks and crevices or under rocks during the day.

Cowries are favorites with many shell collectors because of their rounded, shiny, porcelain-like shells with beautiful patterns. In fact, the word “porcelain” derives from the Italian term for the cowrie shell, porcellana. Due to their beauty, cowries were used in jewelry making; some cowrie shells were even used as money in the trade networks of Africa, and South and East Asia. The Chinese character for money (貝) was a stylized drawing of a cowrie shell.



Image © Hawaii Biological Survey

In Hawai‘i, the Hawaiians ate cowries, fashioned them into octopus lures, and used their shells as scrapers.

Visit the [Hawai‘i Biological Survey list of Good Guys & Bad Guys at hbs.BishopMuseum.org/good-bad/list.html](http://Hawaii Biological Survey list of Good Guys & Bad Guys at hbs.BishopMuseum.org/good-bad/list.html).

## Ke kāhuli leo le‘a o ka nahele.

*The sweet-voiced kāhuli landshell of the forest.*

A compliment to a sweet-voiced person.

Selection no. 1717 from Mary Kawena Pukui’s ‘Ōlelo No‘eau:  
Hawaiian Proverbs and Poetical Sayings, © Bishop Museum, 1983.

