



Arboretum's Jill Laughlin named UH Employee of the Year

Our own Jill Laughlin, Education and Volunteer Programs Manager at Lyon Arboretum, was recently honored as University of Hawaii 2015 Employee of



the Year as part of the Governor's Awards for Distinguished State Service. The award is designed to honor state employees and managers who exemplify the highest caliber of public service and dedication to serving the people of Hawai'i.

Jill joined Lyon Arboretum as a student worker in 1992 and was hired in 1994 to serve on the grounds staff. She increasingly contributed to the development of education programs at the Arboretum up to 2001 when she was hired into her current position as manager of education and volunteer programs. Jill has selflessly and vigorously supported many facets of Lyon Arboretum's mission in research and education and greatly increased the University of Hawaii's presence and stature in the commu-

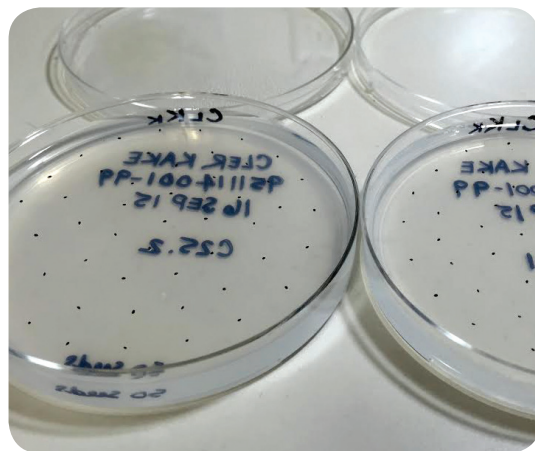
nity. She has for many years been the public face of Lyon Arboretum, cheerfully and competently interacting with schools, community groups, volunteers and the general public.

Under her management, Lyon Arboretum hosts thousands of K – 12 grade students per year as well hundreds of university students, adult classes, community groups and volunteers. This includes designing and developing educational materials, coordinating volunteer operations and maintaining an active and rigorous events calendar. Through Jill's efforts, Lyon Arboretum has been able to offer exceptional education services to many individuals and groups throughout Hawai'i. As Jill is quick to say, this work is a group effort and her success is due to the hard work, creativity, and selflessness of many other staff and volunteers at Lyon Arboretum. We are very proud of Jill and recognize that this prestigious award as the UH System 2015 Employee of the Year is well deserved. Keep your fingers crossed that Jill will subsequently be named the Governor's Employee of the Year for the State. Jill and other state department nominees will be recognized by Governor Ige in a ceremony at the State Capitol on October 2nd.

Lyon's Seed Conservation Lab celebrates 20 years

September was the 20th Anniversary of the founding of the Seed Conservation Laboratory, part of the Hawaiian Rare Plant Program at the arboretum. This also marks 20 years of seed storage research in Hawai'i. In 1995, Alvin Yoshinaga established the Seed Lab to determine if seeds of native Hawaiian plants could be stored using conventional seed banking methods. It had been hypothesized that few of our species would withstand long-term storage, since Hawai'i is tropical, and conventional storage requires the seeds to be dried to ~5% moisture content and then frozen. However, thanks to the research initiated by Alvin

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Seeds of Clermontia kakeana sowed on agar for germination testing, after 20 years of storage in Lyon's Seed Conservation Lab.

From the Director's Desk

Aloha
kākou,

For my article in the Kukui Leaf this month, I would like to reprise a speech

which I gave at the Lyon in Summer fundraising event sponsored by the Friends of Lyon Arboretum on July 11th. The theme of this event was "the living plant collections of Lyon Arboretum", which are a major reason for our existence. What I emphasized in the talk is that the living collections involve both the plants and the people who collected, planted and cared for them. We are indebted to many people for the legacy of our plant collections and I will only be able to mention a few people here to illustrate these connections between plants and people at the Arboretum.



in 1957, at which time the name was changed to Harold L. Lyon Arboretum. Dr. Lyon donated his estate to UH for the maintenance of the Arboretum. Dr. Lyon and his wife Maude's ashes were scattered in one of his favorite places in the Arboretum, Aroid Valley, where the plaque acknowledging his contributions now stands.



Don Anderson

Don was the grounds superintendent of the Arboretum, starting in 1956. Among many other accomplishments, Don collected and amassed the largest taro variety collection in Hawaii, with about 160 varieties, 56 of which were Hawaiian varieties. These varieties passed back and forth with the UH Experiment stations over the next few decades and in the 1990s, the collection was transferred to tissue culture at Lyon Arboretum. Without Don Anderson's collection and care, many of these Hawaiian taro varieties may have been lost. I had the good fortune to meet Don in the late 1970s and helped him plant taro in what is now the great lawn.



Harold L. Lyon

Dr. Lyon came to Hawaii in 1907 to work for the Hawaiian Sugar Planter's Association as a plant pathologist. When HSPA purchased the land in 1918, he was placed in charge of the Arboretum and began plantings of thousands of tree species for forest and watershed restoration. These trees are the foundation of our plant collections. Dr. Lyon had many other interests such as orchid breeding and was influential in helping to establish Foster Garden and Wahiawa Botanic Garden. In 1953, he convinced HSPA to deed the Arboretum to the University of Hawaii and stayed on as Director until his death



Beatrice H. Krauss

Auntie Bea was a legend and made many contributions to Lyon Arboretum that live on today. Born in 1903 and graduating from Punahou School in

1922 and University of Hawaii in 1926, she had a productive 42 year career working as a plant physiologist with the Pineapple Research Institute. When she retired in 1968, Bea started a 5 year career developing and teaching Hawaiian Ethnobotany at UH Manoa. Through these courses, she influenced a generation of Hawaiians at the beginning of the Hawaiian Renaissance in the early 1970s. Auntie Bea came as a volunteer to Lyon Arboretum in 1973, where she worked for the rest of her life, doing research, teaching, publishing, collecting and planting Hawaiian plants and mentoring thousands of young people – including me. While we greatly miss Bea Krauss, her legacy of ethnobotanical knowledge and public service lives on through her publications, course materials, plant collections and gardens, and mostly through the lives of thousands of students, colleagues, friends and community groups who loved her and whose lives were transformed by her teaching and spirit of aloha.



Robert Hirano

Bob was a horticultural researcher and directed the maintenance of the plant collections at Lyon Arboretum from the 1970s through the 1990s. With his wry smile and gruff demeanor, Bob directed many of the plantings throughout the Arboretum which visitors experience today. He studied, introduced and bred new hybrids of many horticultural and Hawaiian plants, including calathea, ginger, heliconia, ti, sandalwood and the beautiful Warsewiczia tree with it's large sprays of scarlet flowers that many people find so remarkable.

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Friends stay busy with fundraiser, new website

Aloha Friends of Lyon Arboretum,

Our annual fundraiser this past July was a wonderful celebration of all that makes the Arboretum special. We are truly humbled by the overwhelming support from the community and friends. In conjunction with the event, the membership committee released our fully redesigned website with added features, content and functionality. When you visit our website (Friends-of-Lyon.org), you will experience a very

friendly layout with the ability to read our newsletter, see important upcoming events, become a member plus much, much more. The website can be easily shared with friends and family via Facebook, Twitter or simply email the website link.

The strategic focus of the new website is to promote membership and enhance our communication with both existing and potential members. We truly hope that you enjoy the new experience, and

welcome your feedback.

These past two years as President have been very fulfilling personally. While my term as president has ended, I will continue to remain engaged with the Arboretum to support the ongoing mission for years to come.

Mahalo to our wonderful board, members and community!

— Paul Sibley

Fundraiser celebrates hues of Lyon

For this year's event, we wanted to try something new – a different approach to the typical fundraiser. Searching for ideas for the theme, Carl Evensen came up with "Collections." From there the committee went crazy, bursting with colorful ideas to showcase different aspects of the Arboretum in a myriad of ways.

Tables were decked with foliage from the grounds, placed in colorful mason jars with precious test tube baby plants. Guests received hot pepper jellies made by the Jams and Jellies Ladies of the Arboretum as their unique favors.

The Hui Hana Lei Ladies displayed their beautiful handiwork and special Hawaiian Plants for sale were also used as decoration on the buffet tables and throughout the tents. Colorful murals hung on the side walls and a towering "Wish Tree" was a center of activity in the middle of the tented area. Despite being smaller than previous events, The Silent Auction featured distinctive items.

A scavenger hunt was organized to encourage guests to explore the garden. Those who braved the damp conditions found koa near the gazebo, wauke at



the hale, and the Bodhi tree at the rain shelter. They were rewarded for their efforts with Lyon Arboretum shopping bags.

FLA Member Donations

'Ohi 'a Lehua

\$250 - \$500

Sharon Geary
Sono Hirose-Hulbert

'Ilima Level

up to \$250

Helene Arata
Debra Balfour
Judith Cronin
John Egan
Janet Henderson
IBM
Garrett Webb



Mahalo to our Wish Tree donors! Thanks to you we were able to provide much needed equipment to the Arboretum.

Allison Wong
Patti Young
Matt Kellie
Richard Kennedy
Kenneth Peterson
Susan Palmore
David Marchant
George Masumoto
James Yatsushiro
Susan Ing

Susan Palmore
Mary Ann Bell
Jann Kadowaki
Bertie Lee
Courtney Sibley
CKW Financial Group
Laurie Lee
Ann Kadowaki

It is not often that an event turns out even better than planned but this certainly was the case for Lyon in Summer 2015, as the evening surpassed all expectations. Credit the tremendous success of this fabulously uncommon fundraiser to the hard work, help and endless support of our event committee, the Board, Carl and staff, the Hui Hana Lei and Jams and Jellies ladies and our friends and families who pitched in as well. One of our premier table guests told his wife that he never wanted to attend another boring fundraiser, but would always like to come to ours. Thanks to all of you!

— Ann Kadowaki

Lyon in Summer 2015 Event Chair



Lyon Classes

Yoga In The Garden

Instructor: Amanda Painter

Come refresh the mind and body with a beautiful hike through Lyon Arboretum followed by a yoga class in our open-air classroom. Explore the Arboretum trails and indulge the senses in glorious green hues, earthy rainforest smells, and raucous calls of cockatoos! Then unwind in an all levels Hatha yoga class to explore in our bodies the shapes we see outside. Amanda Painter is a trained Lyon Arboretum guide and Yoga Instructor at Open Space Yoga and Yoga Hawai`i. Meet at 12:00 in the classroom, bring a yoga mat. Class meets on the second Saturday of each month. Sign up for one class or all 4. Each class will focus on a different theme and expression. Class size is limited, so sign up early.

Yoga 6: Saturday Nov. 14 12-2:45 \$20

Yoga 7: Saturday Dec. 12 12-2:45 \$20

Guides Training Class:

Instructor: Jill Laughlin

Join our elite garden guides group at Lyon, and help share your Aloha with garden visitors. Learn about the Arboretum and its collections, history and mission. This series of 5 classes is for those committed to becoming a garden guide at Lyon Arboretum. Classes will include both indoor and outdoor sessions. Classes cover plant conservation, Hawaiian natural history, Hawaiian ethnobotany, and the Arboretum's special gardens and collections. All participants will be expected to guide garden tours at the Lyon Arboretum after completion of the classes.

5 weeks: Wed. Oct 7, 14, 21, 28 and Nov. 4 9:30-11:30 am.

\$25 +\$10 supply fee

Bee Keeping in Hawai`i

Instructor: Howard McGinnis

Howard McGinnis is an O`ahu beekeeper who manages beehives from Kahala to Waianae. The honey he produces is sold in farmer's markets on O`ahu. Howard will share his experiences and provide some background on the state of bees and beekeeping in Hawaii, and bee pests and parasites in Hawai`i. You'll get an update on the current state of bees on the mainland and some advice on beekeeping equipment for Hawai`i beekeepers. He will also discuss some of the "uncredited pollinators" in Hawai`i.

Friday November 13, 2015 9:30-11:30 a.m. \$15

This class is co-sponsored by The Garden Club of Honolulu, one of the "Stepping Stones to Good Gardening" classes offered at Lyon Arboretum.

Christmas Wreath

Instructor: Kitty Wo

Create a Christmas wreath that will welcome family members and guests to your home for the holiday season. In this class you will create a Christmas wreath using a variety of plant material. Learn about material selection, conditioning, mechanics and placement. Please bring a pair of clippers and any accessories that you may want to include such as wired ribbon, pine cones or ornaments. Additionally, if there are particular greens or floral materials that you would like to use, feel free to bring them. If you have additional accessory items that you are willing to share that would be greatly appreciated. A wreath, plant and floral materials will be provided. Other materials such as wire, wired picks and floral tubes will also be included.

Thursday December 10, 2015

9:30-11:30 Class fees: \$15 + \$15 supply fee *This class is co-sponsored by The Garden Club of Honolulu, one of the "Stepping Stones to Good Gardening" classes offered at Lyon Arboretum.*

Orchid Culture & Growing Techniques

Instructor: Peter Wiggin

Peter Wiggin, Lyon Arboretum Research Support staff in Lyon Arboretum's Micropropagation Program, will review the basics of the orchid family, including some of the fascinating history of orchid culture. The main focus of the class will be on orchid horticultural practices and orchid growing techniques. Peter will be happy to answer your questions regarding your own orchids, problems you may have growing, or any questions you may have about orchids in general (you are invited to bring along an orchid "problem plant"). There will be lots of pictures, time for questions, and a repotting demonstration. **Friday Feb. 19, 2016 9:30-11:30 \$20.**

This class is co-sponsored by The Garden Club of Honolulu, one of the "Stepping Stones to Good Gardening" classes offered at Lyon Arboretum.

Botanical Jewelry Workshop

Instructors: Pat Wassel and Victoria

Hill Designing botanical jewelry is the art of combining dried natural materials (leaves, pods, seeds, etc.) into decorative items. During this class you will create a small medallion cluster which may be made into a pin or an ornament. Dried materials will be provided and a tools needed list will be sent out to you prior to the class. Nature's bounty of geometric shapes and textures will be enhanced with your artistic talents during this class!

Friday April 15, 2016 9:30-11:30 a.m. \$15 plus \$15 supply fee *This class is co-sponsored by The Garden Club of Honolulu, one of the "Stepping Stones to Good Gardening" classes offered at Lyon Arboretum.*

Children's Classes

Traditional Hawaiian Dyes (a hands-on class for children) Instructor: Wes Sen

This class will introduce Hawaiian native and Polynesian-introduced plants traditionally used to dye and decorate kapa. Participants will tour the gardens to see important dye plants and learn how to identify and use them. Students will each receive a piece of prepared kapa to dye and decorate. Supplies are included in the cost of the class. The instructor learned many of the Hawaiian dye preparations while studying with Beatrice Krauss at Lyon Arboretum, and has taught adult and children's kapa dye classes in the community for many years. \$15 class fee includes the cost of materials and supplies for one person (if a parent is accompanying the child, they'll also need to register. The instructor will have additional pieces of kapa available for sale during the class. For children currently in grades 4 and up (younger children may attend if accompanied by a parent). **Saturday Nov. 7, 2015**

9am-1pm

\$15

Lauhala plaiting, Christmas Decorations (for adults and children) Instructor: Wesley

Sen Kumu Wes Sen will demonstrate and teach the fine art of Hawaiian lauhala weaving. Selection of leaves, collection practices, preparation of leaves, dying, and finally plaiting and weaving will be taught to participants. Woven lauhala Christmas Decorations will be the final product for each participant. Additional prepared material kits will be available for purchase on the day of the class for \$6 per kit.

Saturday, November 14, 2015 9am-1pm \$15 fee per person, includes one bracelet kit.

Adults and children ages 9 and up.

All classes require preregistration

Call 988-0456 to register for classes

For information about upcoming classes, please call our Education Department at 988-0461



Ray Baker

For many of us, Ray Baker was Lyon Arboretum, working here for 38 years right up until he passed away in 2010. He came to the Arboretum in 1972 as student help, studying on the GI Bill after serving in Vietnam. He fell in love with the Arboretum and remained as student help for years until a position opened as a research technician. Ultimately he became the grounds manager, working initially under Bob Hirano, and then taking charge of the plant collections after Bob retired. Ray was known worldwide as a palm expert and he helped to greatly expand the palm collection at Lyon Arboretum to over 800 species and teaching very popular classes on palms. He also helped to

expand our collections of gingers, heliconia and other Zingiberales. However, Ray became intimately familiar with all the plants in the Arboretum – studying, documenting, mapping, and caring for them. Ray designed and helped to build much of the network of trails at the Arboretum, making the collections more accessible to visitors and scientists. On his passing, Ray contributed \$50,000 to establish a fund to continue to support the grounds and living collections at Lyon Arboretum. Still on walking through the Arboretum, one expects to find Ray coming out of the bushes, sporting his combat fatigues, bare feet and iconic handlebar mustache.

An important component of the plant collections at Lyon Arboretum for the past several decades is the Hawaiian Rare Plant Program, which helps to collect and preserve hundreds of rare and endangered native Hawaiian plants through seed banking and tissue culture. This program, developed under the leadership of Alvin Yoshinaga and now led by Nellie Sugii is expanding involvement in the newly developing Laukahi Network, which partners with

other leaders in Hawaiian Plant Conservation.

Many other people have been influential to Lyon Arboretum and our living collections and there isn't space here to name them all. In summary, over the past 95 years we have amassed outstanding collections of palms, ficus, aroids (including taro), gingers, heliconias, marantas, calatheas, bromeliads, Hawaiian native and ethnobotanical plants (including kalo, uala, ulu, ko, wauke, ki, awa, mamake and medicinal plants such as olena). For the future, we intend to continue to maintain and curate these worldclass plant collections with better maintenance and observation, improving our collections database (possibly to include geospatial referencing with GIS) and selectively add to our collections. And always, the people of Lyon Arboretum will be crucial for selecting and maintaining these living treasures.

Mahalo,

A handwritten signature in black ink that reads "Carl Evensen".

– Carl Evensen

New gazebo built in the Native Plant Garden

The construction of a gazebo in the Native Hawaiian Plant Garden was recently completed and is a welcome addition for those seeking shelter from the rain or sun. The structure was designed by the late Cary Smoot of Source Tropical with modifications by landscape architect Rick Quinn and Andy Brooks of Cole-Brooks Construction. Funding for the materials needed for the project was provided by the Friends of Lyon Arboretum (FLA) and a grant from the Sidney Stern Memorial Trust.

A very special thanks goes to Andy Brooks and his staff, who generously volunteered their time and exceptional skills to build the gazebo. Rick Quinn was instrumental in getting this project completed from start to finish and he brought along many of his colleagues from Helber, Hastert and Fee Planners to help on Saturdays. FLA Board members Duane Okamoto and Joel Kurokawa, and Administrative Assistant, Lillian Ito, with support from the FLA Board, were also instrumental in getting the project completed. We are very, very grateful to all who helped!



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and his collaborators, we now know that the majority of our species can be banked long term – up to two decades and counting! The Seed Lab now stores over 11 million seeds from over 550 native species (representing ~40% of the Hawaiian flora), the majority of which

are rare species at risk of extinction.

Alvin retired at the end of 2010, but he continues to volunteer, and the research he began has been continued by Tim Kroessig, the Seed Conservation Lab Technician, and Dr. Marian Chau, the Seed Conservation Lab Manager.

"I am happy to see the seed lab continues its work in good hands after my retirement," said Alvin. The Seed Lab recently sowed the first germination test using seeds that had been stored for 20 years and is eagerly awaiting germination!

Mahalo for your support!

Mandy Bowers – Jaboticaba for Jams & Jellies; Alvin Yoshinaga – Rope for tree climbing for Grounds Dept. (\$50); Audrey Wagner – ponchos, \$100 & a book to Education Program; Grady Laughlin – flat screen television for Education Program; Andrew Dedrick of Geobunga – (3) ceiling fans for main greenhouse work area

A SPECIAL MAHALO TO DAVID MCCAULEY who donated \$2000 to fund an IUCN Red List Intern for 8 weeks. Kristyn Schuller was able to conduct research and input data for approximately 70 rare and endangered PEPP (Plant Extinction Prevention Program) and US Federally Listed species. With this data, the multi-organizational Hawaii Red List group was able to complete the complex assessments for 50

Hawaiian endemic plant species. After the IUCN Red Listing staff complete their reviews, these species will be placed on the authoritative Red List of the International Union for Conservation of Nature. The listing on these species will help to bring global recognition to Hawaii's unique flora, just in time for the World Conservation Congress to be held in Hawaii in 2016. Thank you David!

Save the trees!

If you'd like to receive future newsletters in PDF format via email, please contact higashiz@hawaii.edu.



Sign up for the email newsletter by November 30 to be eligible for a \$10 gift certificate redeemable at the Arboretum gift shop.

Congratulations to Ramona Chiya, our Summer 2015 drawing prize winner!

Good luck next time!



Wish List

- Habanero Peppers for Jams & Jellies
- \$150-\$200 to subsidize a title 1 school group for field trip
- \$200 scholarship for students to attend 1 week nature camp
- \$2000 to fund 10 week university student internship scholarship
- \$1000 to upgrade rare plant greenhouse w/ ventilation fans

We appreciate your donation

Name: _____ Phone: () _____ — _____

Address: _____ City: _____ Zip: _____

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Payment method: _____ check (payable to Lyon Arboretum/UHF, Attn account #12043404)

Or Credit Card: _____ (Visa) _____ (Master Card) _____ (American Express)

Account #: _____ Exp date: _____/_____/_____ Security code: _____

Signature: _____

Please send to: Lyon Arboretum / UHF, Appeal code: 09LY2, 3860 Mānoa Rd, Honolulu, HI 96822



University of Hawai'i-Mānoa
Harold L. Lyon Arboretum

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on Sundays & Holidays

\$10 Docent led tours available
at 10am, Monday-Saturday.
Please call 988-0461
for reservations.

Arboretum Staff

Interim Director: Carl Evensen

Administration: Destin Shigano,
Derek Higashi

Education & Volunteer Programs:
Jill Laughlin, Richard Sears,
Rebecca Beralas

Plant Collections & Grounds:
Līloa Dunn, Tristan Williams,
Anna Becker

Micropropagation Lab: Nellie
Sugii, Cindy Yamamoto,
Doug Okamoto, Peter Wiggin

Seed Lab: Marian Chau,
Tim Kroessig

Horticulture: Liz Huppman,
Gerrit Evensen

Botanist: Karen Shigematsu

Facilities / Maintenance:
Ken Seamon, Clancy Ako

Holiday Plant & Craft Sale

At Lyon Arboretum
Saturday, November 21, 2015
9 a.m. to 2 p.m.
Free Admission

Colorful Ti varieties, Heliconias, Gingers, Anthuriums, Hawaiian Plants, Hawaiian Ferns, Orchids, Cactus & Succulents, Tillandsias, Bromeliads, Herbs & Vegetable Plants. Jams, Jellies, Fresh & Dried Holiday Wreaths, Bromeliad Wreaths, Ornaments, Oshibana Crafts, Hand-painted Pots & Hawaiian Honey.

Free shuttle service to the Arboretum. Pick up points at Po'elua Street and Nipo Street where they intersect with Manoa Road.

Please call 988-0456 for more information.