In January we accepted an unprecedented opportunity for the Garden to replace our thatched Hawaiian Hale with a new thatched Hale Papa’a (a building used as a storehouse). Kuhikuhipu‘uone Francis Palani Sinenci of Hālau Hale Kuhikuhi and Hawaiian Studies Assistant Professor Peter Kalawai’a Moore of Windward Community College in Kaneohe coordinated a hui of master builders to travel to MNBG and create the new structure as part of a traditional building certification class. Palani Sinenci is the only recognized Kuhikuhipu‘uone (Master Architect) in the state, with over 220 hale to his credit. Kumu Palani is credited with re-invigorating hale construction and related protocols. He has led the restoration of both Pi‘ilani Hale Heiau in Hāna and Pu‘ukoholā on Hawai‘i Island.

The last hale at MNBG was also built in 2003 by Kumu Palani with the first ever Indigenous Architecture Class held at UH Maui College. Despite being re-thatched by MNBG staff twice, the 2003 hale pou (uprights) were deteriorating and the frame itself needed replacing. Palani and Kalawai’a made a generous offer to provide a team of 10 skilled builders and we provided travel, food, tools, and materials. We jumped at the chance knowing we might not get the opportunity for another 15 years.

Both non-native and native Hawaiian plants were used to build the Hale Papa’a. Kumu Palani spent many days gathering invasive woods such as Ardesia elliptica (inkberry), Casuarina equisetifolia (ironwood), and Psidium (guava) for the roof purlins, posts, and frame. Although it seems odd not to build traditional Hawaiian hale from native woods, using non-native woods is more sustainable, since mature native trees like a‘ali‘i, ‘ōhia, and koa are scarce. Similarly, hale are always secured with cordage – there were no nails in ancient Hawai‘i – but the amount of cordage we would have time to make from our own hau, ‘ākia, koali ‘ai, hala, or hala pepe couldn’t supply something as large as a hale. Nearly 2,000 feet of paracord and polypropylene cord was used for the frame and roof thatching. Our 9 mature Pritchardia (loulu) palms planted by Rene Sylva 40 years ago supplied dried lou (leaves) towards the roof with donations added by friends. Most came from a Pritchardia hillebrandii and an endangered Pritchardia remota. We allow dead leaves to hang untrimmed because native loulu leaves store well on the tree. Green leaves for the ridgeline were non-native Livistona chininses (Chinese fan palm) donated by the Merwin Conservancy. In all enough leaves were harvested to cover the roof but not the walls.

Preparations started weeks before. On Martin Luther King Jr. Day, Hawai‘i Permanente Medical Group held their third Annual Day of Service at MNBG; 167 volunteers reported for duty at 7 am.

Continued on page 2
Save the Date

Saturday, May 12, from 10 AM to 12 PM: Mother’s Day Pot Painting with Kaili Kosaka

Spend a beautiful morning painting in the garden and celebrate the most important women in your life! Participants will take home two painted pots planted with a native plant. MNBG Horticulturalist Kaili Kosaka will teach basic painting techniques, general plant care, and the importance of planting with natives! Cost: $50, or $25 for current MNBG members. Fee includes all workshop materials. For reservations, email info@mnbg.org.

Saturday, June 16, from 9 AM to 12 PM: Noni Workshop with Ko’i Lum

Noni is a kinolau of the Hawaiian god, Ku. Though unpleasant in smell, noni is considered an exceptionally important medicinal plant. Learn more about the uses of noni with Hawaiian cultural Practitioner, Ko’i Lum. Cost: $50, or $25 for current garden members. Call 249-2798 or email info@mnbg.org for reservations.

Sat., June 30 (9am-6pm), & Sun., July 1 (8am-11am): Imu Workshop with Ikaika Nakahashi

In collaboration with Papa Ola Lokahi & Hui No Ke Ola Pono, this two-day in-depth workshop will teach many aspects of imu (Hawaiian underground oven) creation and use. Hands-on instruction will include how to gather materials, create, ignite, seal, open, and serve food from an imu; recipes and ingredient preparations; how to properly place food for cooking; imu monitoring and timing; traditional Hawaiian names for the parts of the imu; including making traditional coconut leaf platters. Imu cooking is a healthier and delicious method of food preparation that perpetuates the Hawaiian culture. Cost: $125, or $100 for current garden members. Call (808)249-2798 or email info@mnbg.org for reservations.

(Continued from page 1: New Hale at MNBG)

One group helped to trim and tie cord onto thatching leaves, and another laboriously stripped bark from dozens of branches to be used as purlins and frame. Kumu Palani was on hand with several alaka’i (leaders) and haumana (students) from Hālau Hale Kuhikuhi to instruct in preparing cord, thatching, and wood. Haumana Mario Cueva came from O’ahu and spent two weeks on the project. He drew a beautiful chalk diagram (pictured, right) of the hale plan with each structural element named in Hawaiian. Mario, Kumu Palani, and others had previously spent several days in the rain cutting and hauling the wood from Hāna, obtaining posts, and gathering equipment. After the Annual Day of Service, Kumu Palani and his crew took down the old hale and prepared new holes for the posts. Americorps volunteer Norah Clark and the Weed and Pot club volunteers spent days painting every stripped branch with wood sealant and stain. In all many hours of labor were already logged before the weekend scheduled for the build, January 20 and 21.

A few days before that weekend the builders’ hui traveled from O’ahu, Big Island, and Hāna. Kumu Sinenci, Pippa Harriman, Mario Cueva, and Brett Deccio traveled from Hāna; Eric Matanane, Kainoa Holt, Scotty Garlough, Peter Kalawai’a Moore, and Clarence Ako came from Honolulu; and Walter Wong and Iwikauikaua Joaquin came from Kona and Hilo. They completed the removal of the former hale and building the frame. All scaffolding and ladders were made from the same materials as the hale; other tools used included chainsaws, a jawhorse, and a small concrete mixer. As the frame was being built, rock was being laid around the posts to reinforce the post holes, which were the same as the former hale. The purlins were added, and on the last day the thatching was completed. Several Maui volunteers came to help build, including Laura Rosenthal and MNBG board members Ikaika Nakahashi and Koa Hewahewa. Even Councilmember Don Guzman stopped by to help. Our Weed and Pot Club volunteers came to bring food, take photographs, and help set up meals. In the weeks after the builders’ hui left, MNBG Horticulturalist Kaili Kosaka led the charge to finish the loft and build the rock flooring with Ikaika Nakahashi and his ethnobotany class, Kalo Varieties Manager Namea Hoshino, and Norah Clark.

The new Hale now stands in our Hawaiian Craftsman garden featuring native plants traditionally used for building. It was named a Hale Papa’a by Kumu Palani because of the loft feature which allows for the storage of our valuable native loulu leaves for future thatch maintenance. MNBG’s Hale Papa’a has already hosted two groups of second graders from Kamehameha schools, who learned how to make cordage from hau branches. We look forward to using this hale to teach and inspire for years to come.
Mahalo nunui (thank you so much) to Kuhikuhipu’uone Francis Palani Sinenci, Peter Kalawai’a Moore, Mario Cueva, Brett Deccio, Pippa Harriman, Clarence Ako, Iwikauikaua Joaquin, Scotty Garlough, Kainoa Holt, Eric Matanane, and Walter Wong for your alaka’ina (leadership), hana lima ‘ike (skilled labor) and ho’o ikaika (hard work).

We would also like to say mahalo to Ikaika Nakahashi, Laura Rosenthal, Kayla Kamali, and the volunteers with Hawai‘i Permanente Medical Group for donating considerable time and effort to assisting the builders, and to others who assisted, including Don Guzman, Koa Hewahewa, and all those who lent a hand but were not counted in the excitement. Mahalo to Hawaiian Cement for providing rocks; Angelina Owina for photographs; Olin Erikson of the Merwin Conservancy, Sonny Gamponia, and Jeremy Spencer for thatching; and the East Maui Watershed Partnership for paracord. Mahalo to interns Norah Clark and Karen Pollard, and staff Kaili Kosaka, Namea Hoshino, Chris d’Avella, and Whit Germano for making the extra effort. Our heartfelt thanks to the Weed and Pot Club who helped paint and lift our spirits each week, especially Diane Carr, Malie Unabia-Verkerke, Janet Allan, Maggie Sniffen, Vilma Seiler, Paul Kastner, Dorothy Pyle, Jennifer Rose, Linda Tesar-Amimoto, and Anna Mae Shishido, who made and brought food for the workers.
‘Ōhi‘a Seed Banking Initiative

By Kaili Kosaka

The seed bank at MNBG has gotten a lot busier these days. Rapid ‘Ōhi‘a Death (ROD) is of growing concern on Hawai‘i Island and the threat of it hitting Maui is ever increasing. A proactive approach to combating the disease is through the banking of ‘ōhi‘a lehua seeds. Lyon Arboretum and Laukahi Network partnered to fundraise through #OhiaLove and created a statewide seed banking initiative.

Staff attended the December meeting at UH Maui College to learn about the project, proper collection techniques, and to introduce MNBG as the primary repository for ‘ōhi‘a collections on Maui. Since the meeting we have received 54 collections with about 1.5 million seeds from other conservation organizations on the island. We hope to continue to bank ‘ōhi‘a seeds as the threat of ROD increases and establish more relationships with fellow conservation programs on island.

Learn to Make Kulolo

By Namea Hoshino

Aloha mai Kākou! I will be teaching a Kalo Kūlolo Workshop at Maui Nui Botanical Gardens on Saturday, July 14th, from 9am-12pm. Please join me!

In the 1900s, the traditional Hawaiian practice of making kūlolo (a pudding made from cooked taro and coconut cream) was a mastered art in poi factories and family kitchens. Today, the practice is slowly becoming a lost art.

This workshop will focus on the process of making kūlolo, in stages, using 3 favored varieties of taro, along with sugar and coconut milk. We will cook the taro two ways; by steamer and by pressure cooker. A taste test will follow, using honi (smell), ho‘a‘o (taste), haha (texture), and nānaina (sight). The cost is $50, or $25 for current Garden members. Email info@mnbg.org for reservations.

New Interns at MNBG!

By Chris d’Avella

We wish to welcome our new interns Norah Clark and Benjamim Souza. Norah has a strong interest in sustainability and fashion, paired with a detail-oriented meticulous personality. Originally from Cleveland, OH she has come to Maui to study Global Environmental Science, with the intention of transferring to UH Mānoa. Norah has taken the lead in organizing and maintaining our seed bank, as well as preparing and storing new seeds. Norah’s internship is contracted with the Maui Economic Opportunity AmeriCorps Program.

Benjamim (pronounced Bay-ja-mim) is currently completing core classes while studying physics at UH Maui College and has recently been accepted into the physics program at UH Mānoa. Originally from Brazil, Benjamim speaks both English and Portuguese fluently and embodies a strong interest in learning different skills. He has been assisting in the seed bank, garden and nursery, and has taken the initiative to lead our volunteers. Benjamim’s internship is in partnership with Kupu and sponsored by Nā Hua Ho‘ohuli i ka Pono, an organization that emphasizes training for careers founded in leadership and a conservation ethic.
Breadfruit Day
MAUI NUI BOTANICAL GARDEN
(150 Kanaloa Avenue, Kahului)

HAWAIIAN PLANT + VARIETIES SALE!

FREE COMMUNITY EVENT!!!

Come learn, share & try ‘ulu (breadfruit)!
SATURDAY, SEPTEMBER 8TH - 10AM-3PM

LIVE ENTERTAINMENT - HAWAIIAN CULTURAL ACTIVITIES
COOKING DEMONSTRATIONS - EXPERT INFORMATION ON ‘ULU

For more information and full schedule of events visit, WWW.MNBG.ORG

In association with Maui Green & Beautiful and Maui Brewing Company.
‘Ulu Agroforestry Workshop Recap
By Kaili Kosaka

The March 3rd Breadfruit Agroforestry workshop hosted by National Tropical Botanical Gardens at MNBG was a great success! 55 people attended including chefs, farmers, land managers, and home gardeners interested in learning more about this amazing plant.

The day started with pule under the grand ‘ulu (breadfruit) tree in Rene’s garden. Hōkūao Pellegrino started the symposium with a talk on the cultural importance of ‘ulu. Uses, ‘ōle-lo no’eau, and old Maui ‘ulu systems were just some of the things covered. Diane Ragone, Director of the NTBG Breadfruit Institute, and Craig Elevitch, a noted educator and researcher of breadfruit and agroforestry, were next. They talked about the years of research they have done with breadfruit varieties throughout the Pacific and how it led to the opening of the Breadfruit Institute at NTBG.

After a quick break, Heidi Bornhorst, a certified arborist, horticulturalist and landscaper, shared her expertise on proper pruning and maintenance of ‘ulu trees. This interactive demonstration got everyone up and moving around the Garden. Next was Gerry Ross, who owns a certified organic farm in Kula. He shared insight into organic farming and agroforestry systems.

A beautiful lunch provided by John Cadman of Pono Pies featured kalo salad in a light vinaigrette, yellow ‘ulu curry with brown rice, and a vast selection of pono pies to choose from. John Cadman also shared insight into the commercial production of ‘ulu and different techniques of cooking.

A much more in-depth discussion about agroforestry and its applications in farming was covered in the second half of the day. Participants were given detailed instructions on how to create a functioning agroforestry system. Lots of knowledge was shared in this inspiring workshop. For more information on ‘ulu, our annual Lā ‘Ulu festival, on September 8th, will celebrate this Pacific staple!

Group tours and cultural activities at MNBG are available by appointment only. Call 808-249-2798 or email info@mnbg.org for reservations at least 2 weeks in advance. Contact the Gardens office for student and nonprofit rates.

With Gratitude from Our Garden:
Jules Medeiros for a standing halogen light, Gloria Adlawan for napkins, Janet Allan for volunteer drinks, Jennifer Rose for garden clippers, Diane Carr for garden pruners and sickles, Anna Mae Shishido for gardening gloves, Maggie Sniffen for volunteer raincoats, plates and utensils, Bill & Anne Ripperger for a seed processing blender, Rose Ann Chapman for volunteers drinks, Paul Kastner for anti slip stair grip tape, Maui Eko Compost and Jeff Gray for mulch, and Orchids of Olinda for planting pots, flats, and fertilizer.

MNBG Contributions to the Community:
Ka‘ala Farms (wauke), Ha‘alau Nā Lei Kaumaka O Uka (ko‘oko‘olau, koki‘o ke‘oke‘o, ‘ihi, ‘uki‘uki), Grow Some Good Program (pia), Kula School (pōhinahina, ‘ape, haha, nehe, ‘ilie‘e), UH-Maui College (kalo), Kamehameha Schools Maui (wauke, ʻōlena), Simpli-Fresh Farms (ʻula, wiliwili, ʻilima papa), Hawaiian Islands Land Trust (kupukupu, hala), Ka Ohana O Kahilikinui Inc. (kalo), Kaho‘olawe Island Reserve Commission (naupaka).

Mahalo to our Interns & Volunteers:
Gwen Yip-Chow, Ka‘upena Morando, Lawehe Vasconcellos, Stella Joy Daoang, Shay Maio, Abri Minor, Sean Tacla, Rene Harvey, Rachel See, Caroline Sabharwal, Karen Pollard, Norah Clark, Bejamin Pinto Souza, Janmel Dumadag, Justin Silva, Brian Leeper, Ballard High School student volunteers, and Hawaii Permanente’s 2018 Annual Day of Service Volunteers.

Check Out What’s Blooming!
Nehe
Melanthera lavarum
Endemic

The bright yellow flowers of this species of nehe can be used to make beautiful lei. Nehe is similar in appearance to the non-native Wedelia, but is non-invasive. This endemic Native is drought, heat, salt and wind tolerant.
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Fund, Fred Baldwin Memorial Foundation,
the Zadoc W. and Lawrence N. Brown Foundation,
AHS Foundation, and the Kaulunani Program of the DLNR
Division of Forestry and Wildlife and the USDA Forest Service.

**Ka Palapal O Kanaloa ($5,000+)**
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(1,000 - $4,999)
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We are extremely grateful to all who have made donations to the Gardens over the years. We make every effort to assure an accurate membership list; however, if your name was omitted or misspelled, please contact us at info@mnbg.org and we will be happy to update our records.

LOCATION & HOURS
150 Kanaloa Avenue
Keōpūolani Park, Kahului
Across from the War Memorial Sports Complex
Monday-Saturday
8:00 am - 4:00 pm*
Closed Sundays & Major Holidays
*Weather permitting

GROUP RESERVATIONS
Reservations are required for group activities.

CONTACT INFORMATION
Mailing: P.O. Box 6040
Kahului, HI 96733
TEL: (808) 249-2798  FAX: (808) 249-0325
Email: info@mnbg.org
Website: www.mnbg.org

The Hawai’i Tourism Authority has made new initiatives possible at MNBG through grants provided by the Aloha ‘Āina Program, which supports our seed storage project, the Kūkulu ‘Ola Program supporting our cultural activities, and the Community Enrichment Program which supports in part the Lā ‘Ulu-Breadfruit Day event. These projects primarily benefit and are utilized by Maui County residents. Mahalo to the HTA for your support.

SAVE A TREE!
If you would like to receive your newsletters via email, please email us at info@mnbg.org. You may also view them on our website at: www.mnbg.org

HAWAI’I TOURISM AUTHORITY
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Michelei Tancayo
Linda Tesar-Amimoto
Debra Thiel
Ron Thomas
John Torres
Malie Unabia-Verkerke
Jacyln Van Bourgondien
Ray & Laura Van Wagner
Lehua Vander Velde
Shawn Wallace
Wallette Pellegrino
Carrie Wheatley
Peter & Melinda Wing
Jenny Wu

In Memoriam
Jerry Konanui
Richard Nakagawa
Yearly memberships help to fund important botanical and educational programs, research and conservation efforts. Fill out the enclosed donation envelope or call 249-2798 to become a member.

Donations of monetary or in-kind contributions are greatly appreciated. To contribute, please fill out the enclosed donation envelope, call 249-2798 or visit www.mnbg.org to donate online.

Yearly memberships help to fund important botanical and educational programs, research and conservation efforts. Fill out the enclosed donation envelope or call 249-2798 to become a member.

Play a lasting part in protecting Hawai‘i’s native plants through planned giving. Consider making a bequest to the Maui Nui Botanical Gardens in your will or trust. Call 249-2798.

Give a gift of time. Volunteering at MNBG helps the Gardens accomplish many projects and also gives you an opportunity to learn about and work with native plants. Join our Weed & Pot Club every Wednesday morning from 8:30 am - 10:30 am. Call 249-2798 or visit www.mnbg.org for more information.