Nā ana o Hawaiʻi: Hawaiian Body Measurements

by Kara Ueki

Have you worked in your yard and found yourself needing a measuring tape? Ancient Hawaiians found ways to approximate measurements by using the body!

What’s great is that we can use the measuring tape to measure our Hawaiian body measurements before going out into the garden and memorize the lengths. There is a song to help us remember the body measurements which starts from the smallest to the largest:

Nā ana o Hawaiʻi
Kiko, kiko*
Kikoʻo la
Pīʻā, pīʻā**
Haʻilima la
Iwilei, muku, anana
Eia nā ana o Hawaiʻi la

This song was shared with me during Kūlia I Ka Pono on Hawaiʻi Island in the summer of 2013. In order to memorize the words with the correct body measurement, there are movements which compliment the lyrics to help match the body measurements and words. Let’s define the words which are found in the Hawaiian Dictionary or online at wehewehe.org.

*Kiko – Start the measurement from the tip of the finger to the first bend which represents about an inch in imperial measurement.

Kikoʻo – Start the measurement from the tip of the index finger to the tip of the thumb as if you were making an L shape.

**Pīʻā – Start the measurement from the tip of the thumb to the tip of the pinky, also known as a shaka.

Haʻilima – Start the measurement from the tip of the longest finger to the elbow of the same arm.

Iwilei – Start the measurement from the center of the chest to the tip of the longest finger while the arm is stretched out to the side of the body, parallel to the ground.

Muku – Resembling the hula stance, both arms stretched out to the side of the body and parallel to the ground, then bend one arm at the elbow inward to the center of the body. Start the measurement from the bent elbow to the tip of the longest finger of the opposite arm.

Anana – Start the measurement from longest fingertip to the longest fingertip when both arms are stretched out and parallel to the ground.

Eia nā ana o Hawaiʻi la translates to “Here are the body measurements of Hawaiʻi.”

For more detailed instructions with photos, please visit the following sites:
hanaleiwatershedhui.org and search “moon calendar”, deviantart.com and search “ohukaniiohia measurement”

For those who understand ‘Ōlelo Hawaiʻi, ua wehewehe ʻia nā anakahi o nā mahele o ke kino.

E kipa iā: Nupepa.org a e imi i ka nūpepa ʻo Ka Nupepa Kuokoa, Puke 18, Helu 18, 3 Mei 1879, ‘aoʻao 4. Aia ia atikala ma lalo o “Ke Ano o ka Hana…”

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Layout Editor, U‘i Naho‘olewa
Have you ever wondered how to collect ‘ōhi’a seeds?

Find out at the Maui ‘Ōhi’a Seed Conservation Workshop, Monday, May 13, 2019.

By attending the FREE workshop hosted on Maui, you will help to expand capacity for collection and banking of ‘ōhi’a seeds in response to Rapid ‘Ōhi’a Death.

You will learn how to properly collect, handle, and process ‘ōhi’a seeds, without doing harm to trees or forests, using methods that protect seed viability and ensure conservation value for future restoration. Maui Nui Botanical Gardens is proud to be a partner in this statewide effort to store seeds from wild ‘ōhia trees before the disease spreads further.

Online registration is required. To register, go to http://www.friendsoflyon.com/ohia-workshops/or search for “Ohia Seed Conservation Workshops”.

Docent training program revived

By: Tamara Sherrill

The Garden’s mission is to foster appreciation and understanding of Maui Nui’s plants and their role in Hawaiian cultural expression by providing a gathering place for discovery, education, and conservation. The education program includes events, Saturday workshops, and group visits.

This year, we are working to address the increased demand for our group visits and tours, by training new volunteer docents with our Alaka’i Kuhi Program. A docent is a knowledgeable guide; alaka’i means leader, guide; kuhi means gesture and point, as well as infer and imagine.

In 2014, we hosted 34 school group tours. Five years later, we are in our third quarter and have already hosted 60 groups, making fiscal 2019 on track to be the most group visit requests to date. Most requests are from local schools, ranging from preschool to college, but we also get tourist visitors who call to schedule a tour. Every visit features a tour highlighting the ethnobotany of 10 to 20 different plants in our collection. Depending on the ages of the students, school groups then additionally participate in a hands-on activity with our staff, such as planting seeds in newspaper pots (preschool), learning to make kaula (cordage, elementary), learning the parts of a kalo plant, (intermediate), or helping us weed, mulch, and plant (high school and older). In all, there are about a dozen possible hands-on activities, in addition to the one-hour tour. The suggested donation per student is $2; for tourist visitors who schedule a tour by appointment, we ask $10 per person.

We currently do all this with the Executive Director, three garden staff who already have plenty to do keeping the garden functioning, and wonderful docents, Gloria Adlawan and Becky Lau, and we need more! Therefore, we are doing a six-session training program in exchange for committing to at least 6 tours per year according to each person’s availability. The Alaka’i Kuhi training program will run through July. Topics to be covered in training include MNBG history, Hawaiian geography, species evolution, conservation of native plants, Hawaiian migration and agricultural development, and religion. Docents will practice speaking about 20 core species, including demonstrating some of their uses, and will be given flash cards for many more species to allow for future creativity. We will repeat docent training in the Fall, so please contact us if you are interested.
With Gratitude from Our Garden:

MNBG Contributions to the Community:

Mahalo to our Interns & Volunteers:

Save the Date

Saturday, June 8, from 9 AM to 3 PM: Kapa Making Workshop with Lisa & Lei
In this in-depth, hands-on workshop, students will learn special techniques regarding the cultivation and maintenance of wauke plants, the harvesting and processing of the fiber, proper tool design and use, and traditional practices for making cloth with skilled kapa makers, Lisa Schattenburg-Raymond & Lei Ishikawa. Workshop fee includes all materials. Cost: $125, or $100 for current garden members. Email info@mnbg.org for reservations.

Saturday, June 22, from 9 AM to 3 PM: Dye Making Workshop with Lisa & Lei
Participants will learn innovative processing techniques of many Hawaiian plants, and other substances, to produce traditional natural dyes used on kapa cloth! Lisa Schattenburg-Raymond and Lei Ishikawa will share information on identifying, collecting, preparing dyes, and the use of natural additives to manipulate color. Cost: $125, or $100 for current garden members. Call 249-2798 or email info@mnbg.org for reservations.

Saturday, July 13, from 9 AM to 12 PM: Kukui Torch Making with Ko‘i Lum
Learn to make lamalama (a torch) from the kukui tree with cultural practitioner, Ko‘i Lum. Lamalama refers to the traditional Hawaiian practice of night fishing by the light of torches. Cost: $50, or $25 for current garden members. Call 249-2798 or email info@mnbg.org for reservations.

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. 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.
Garden News

Taro Preparations
By: Namea Hoshino

UH-MC student group Mu’o A’e volunteered with the MNBG staff to help prepare for this year’s East Maui Taro Festival. Student volunteers assisted with huki kalo (pulling taro) from Uncle Jerry Konanui ‘āina malo’o (dryland) kalo. Mu’o A’e participants learned about the oral-history and Hawaiian cultural connection to the taro plant.

They harvested twenty-two different kalo varieties which added up to 261 huli (taro tops). All huli were distributed for free at the East Maui Taro Festival held in Hana on Saturday, April 13th. People from all over the island dropped by the MNBG booth excited and interested in the different varieties of kalo available. Each person was pleased by the bountiful huli display and could not wait to plant their huli at home.


Translation: Chiefs of the lineage of Hāloa
Meaning: Perpetuate our lineage of Hāloa until the very end!

Glyphosate Herbicide Use Discontinued
By: Chris d’Avella

Glyphosate (commonly sold under the name “Roundup”) has been a broad-spectrum weed killer at MNBG in recent years. If you noticed blue dye on weeds, chances were good that it was marking an application of glyphosate. It has filled a role in maintaining our garden beds that could not have been sustained with hand weeding alone.

Increasingly, health issues associated with glyphosate and other conventional agricultural products have become a concern, both in the opinions of the staff and the volunteer base. As a result, MNBG is discontinuing the use of glyphosate. We will be substituting OMRI (Organic Materials Review Institute) listed products when possible.

As substitutes for glyphosate, we now use broad-spectrum weed killers utilizing citrus oil and clove oil. These products are made from sources like real oranges and work by stripping away the waxy cuticle that protects the leaves of a plant. Without the cuticle the plant cannot maintain sufficient moisture and will dry out and die. Another method of control is to apply a flame near the weed. With a propane torch we apply heat to the weed causing tissue damage and killing the weed.

We have found these methods to be effective. They are approved for use on farms that have been certified organic. We believe in combination with our other garden practices including, organic fertilizer and lots of natural mulch, that this is a step in the right direction.

MNBG’s Endangered Logo Plant
By: Tamara Sherrill

January marked our first 2019 working field trip to mālama the endangered dwarf naupaka (Scaevola coriacea), inhabitant of increasingly rare consolidated dune systems in Central Maui. Since 2016, Maui Nui Plant Extinction Prevention Program Coordinator Hank Oppenheimer has accompanied us and helped our volunteers understand the history and importance of this species. Volunteers are careful not to trample native plants as they weed and cut invasive shrubs. To join a field trip, come to our Wednesday Weed and Pot Club garden work days held every Wednesday from 8:30 to 10:30 am, or ask to be put on our field trip mailing list.
Come learn, share & try 'ulu (breadfruit)!
SATURDAY, SEPTEMBER 7TH • 10AM-3PM

LIVE MUSIC AND HULA • HAWAIIAN CULTURAL ACTIVITIES
COOKING DEMONSTRATIONS • EXPERT INFORMATION ON 'ULU

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

Support provided by Hawai‘i Tourism through the Community Enrichment Program.
Arbor Day Recap

The Maui Nui Botanical Gardens’ 15th annual Arbor Day 1,000 Hawaiian Tree Give-Away was held on November 3, 2018, supported by Kaulunani Urban & Community Forestry Program, DLNR Division of Forestry and Wildlife; and the USDA Forest Service. A total of 1,525 trees and shrubs of 28 Hawaiian species were given away. Twenty organizations, five certified arborists, and ten Master Gardeners helped give away the trees and educate attendees about native Hawaiian plants. Ten free cultural activities funded by the Fred Baldwin Memorial Foundation allowed families to make a native plant lei, a lauhala bracelet, kaula (cordage), ooeo (kamani nut whistles), or kapa (cloth), or play a Makahiki game, all activities that use some part of a native or Polynesian introduced tree. New this year were maps for each species provided by the U.S. Geological Survey showing historic ranges and an interactive tree planting map to show where each tree being given away would ultimately be planted.

Welcome Kara!

We are delighted to welcome Kara Ueki to our staff as a Grounds and Maintenance gardener. Kara was born and raised on Maui and has a B.A. in Kinesiology and Exercise Science as well as Hawaiian Studies. She is a speaker of ‘ōlelo Hawai‘i, is a former Kupu and PIPES intern, and has done land use internships in north Kona, Kauai, and Malaysia. Kara has quickly become invaluable to MNBG as a leader of the Wednesday Weed and Pot Club, and she began including ‘ōlelo no’eau each morning for the group. Kara has been tackling each new challenge with great cheer. Welcome to the team!

Seed Bank Update

This summer, we will be hosting three interns provided by The Hawai‘i Tourism Authority’s Aloha ‘Āina Program and Atherton Family Foundation to help us with seed storage and improve the plant collection. These funders also helped us purchase a laboratory balance for weighing that allows us to count seeds which are impossible to count by hand, such as tiny seeds like ‘ōhia lehua being stored as part of the Rapid ‘Ōhia Death seed banking initiative. #OhiaLove (See page 2 for info on an important workshop.)

Our heartfelt thanks goes to Margaret Pereyra, who began volunteering with MNBG in February for her UH-MC Ethnobotany class. Margaret is an associate scientist for Columbia University living in Maui. She made an extraordinary effort that included a complete redesign of our accessions (plant tracking) database, cleaning up years of data, and making data entry more user friendly for interns.
If you love working with native plants, you’ll love the Weed & Pot Club! This volunteer gardening group meets every Wednesday morning, from 8:30 AM to 10:30 AM. Spend your morning helping the Gardens thrive through weeding and propagation. Come prepared to work with covered shoes and gardening attire.

**Mahalo Weed & Pot Club**

- Gloria Adlawan
- Janet Allan
- Diane Carr
- RoseAnn Chapman
- Mikki Clark
- Paul Kastner
- Perrisa Kilmer
- Becky Lau
- Renee Leiter
- Jennifer Rose
- Fred Rymsha
- Janet Rymsha
- Enid Sands
- Vilma Seiler
- Anna Mae Shishido
- Maggie Sniffen
- Linda Tesar-Amimoto
- Irene Newhouse
- Margi Calder
- Sandy Viloria
- Robin Yamashita

MNBG appreciates Kaunoa’s RSVP partnership for its support of MNBG volunteers. Like MNBG, Kaunoa provides opportunities for people 55 and better to learn and grow through a variety of programs throughout Maui Nui. Call (808) 270-7986 for more information.

**Wish List**

- Umbrellas
- Garden gloves (all sizes)
- Rakes (leaf or landscaping)
- Medium sized picks
- Shovels
- Sickle
- Hand pruners (clippers)
- Leaf shredder
- Wood chipper
- Pressure washer
- Outdoor tables & chairs
- Hawaiian Miles (for interisland travel for staff training)
- 50+ inch television screen or power point projector

NEW! Check out MNBG’s wish list on AMAZON by visiting this link: [http://a.co/eWBZKw3](http://a.co/eWBZKw3)

We are no longer accepting drop offs of used plastic pots. If you have new or used cement or ceramic pots to donate, please give us a call and we will be happy to arrange a pick up.
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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.

*Soil & Water Conservation* (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:

www.mnbg.org
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.

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.