



Native Hawaiian Plant Society

Nanea Nā Pua O Ka 'Āina Aloha

NHPS Newsletter

February 2014

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Bringing Back the Natives

By Katie Romanchuk

In 1999 I realized there were many 'ōhi'a trees (*Metrosideros polymorpha*) on the property catty-corner from where I rented in Ha'ikū. There, a neighbor made paths all over the formerly impenetrable property with a machete through thickets of weeds, uluhe fern (*Dicranopteris linearis*) and 'ōhi'a groves for his go-cart. I was stunned and elated to see the 'ōhi'a and other natives which prompted

me to buy the six acre parcel with my sister's help. The land, according to a former owner of the property, was pineapple fields in the 1930's and 40's, then cow pasture for about twenty years, then abandoned. Cows spread grass and guava seeds around, but fortuitously, 'ōhi'a seeds likely blew up onto the land facilitated by the trade-winds from the un-grazed gulch and became established on the abandoned land. I suspect that originally there were 'ōhi'a trees all over this elevation of Ha'ikū, as the gulch nearby is called 'Ōhi'a Gulch. I consider the 'ōhi'a trees sacred and worthy of respect, being the first tree to settle successfully in the harsh conditions of the lava-covered islands, taking millions of years to get here on their own.

Because residents and tourists have such little exposure to native plants, often mistaking tropical and exotic plants as natives, such as ginger, heliconia, and kukui nut trees, I wanted to have at least a little oasis of native plants that people could see at this elevation, and learn what real native plants look, feel, smell and even taste like. (My two-year-old grand-daughter's favorite fruit is 'ūlei (*Osteomeles anthyllidifolia*) berries, (and, by the way, she is a fabulous weeder!) Since I was a young girl I have cherished nature and being in natural settings. I feel great sadness at how fast our natural environment is disappearing and a sense of urgency to preserve what we have left. It is ironic and a conundrum to some, that bringing Hawai'i back to a natural state requires much human intervention at this point in time due to introduced invasive species, ungulates and development leading to loss of habitat.

My life changed drastically as I embarked upon trying to bring much of the land, which I call, 'Ōhi'alani, back to a mostly native state. I am not a purist and the learning is ongoing, but I have tried to be a steward to the land by protecting the natives that were here initially, and to rid the invasives, replacing them with native Hawaiian plants to the best of my ability. This turned out to be a much more challenging prospect than I originally thought! For many years I weeded and weeded, with the hope that native plants would naturally re-establish themselves, given a chance. To some extent this did happen, but I found that the weeds were much more abundant and aggressive than I anticipated, plus new invasive species joined the onslaught every year, and it was impossible to keep up. I would weed an area, then the weeds would come back, over and over.

In 2011 I qualified for a U.S. Department of Agriculture, Natural Resources Conservation Service cost-share program called EQIP or Environmental Quality Incentive Program. This allowed me to afford specific practices, such as woody tree
(continued page 3)



Kanahā Pond Update

by Victoria Stout



Maiapilo (*Capparis sandwichiana*) at Kanahā Pond. Above: flower. Below: shrub with deer damage.



Below: Americorp Intern, Kara Johanssen, and NHPS volunteer, Jennifer Rose, install a deer-proof cage around a newly planted 'ohai (*Sesbania tomentosa*).



Above: A non-native *Nicotiana glauca* or tree tobacco surrounded by 'aweoweo and 'ākulikuli. *Nicotiana* is not native, but the endangered endemic *Manduca blackburni* a/k/a Blackburn's Sphinx Moth or Hawaiian Sphinx Moth has adapted to feeding on this plant. To protect this endangered moth, *Nicotiana* should be preserved wherever it grows.

The maiapilo (*Capparis sandwichiana*) are blooming and the 'āweoweo (*Chenopodium oahuense*) are flourishing at Kanahā Pond! Established as a wildlife sanctuary in 1951, Kanahā Pond is home to three endangered and endemic Hawaiian waterbirds: the Hawaiian stilt (Ae'o), Hawaiian Coot ('Alae ke'oke'o), and the Hawaiian Duck (Koloa). The 150 acre sanctuary is also one of the few wetland habitats on Maui where you can find native coastal plants. Members of the Native Hawaiian Plant Society continue to care for the plants of Kanahā Pond by removing competitive weeds, protecting new growth from deer and out-planting more plants.

This year welcomes a new Americorps intern: Kara Johanssen! On December 14th she, along with Native Hawaiian Plant Society members and volunteers, out-planted 'ohai (*Sesbania tomentosa*) and pōpolo (*Solanum nelsonii*). The plants are doing great and have responded to the recent rains with new growth. Kara is working concurrently with Americorps intern Vic Stout to coordinate and undertake restoration efforts in Kanahā Pond.

Unfortunately, non-native plants and animals still present a serious threat to the success of the native plants. Even though the area is fenced, many deer live and breed within the sanctuary. In addition to eating new growth and seedlings of native plants, the deer rub their antlers and do serious damage on older plants. The Department of Land and Natural Resources is working to make deer removal a priority and the new year may bring new and more successful methods to this problem. In the meantime, Native Hawaiian Plant Society members have built cages to protect plants from the deer with funding for cages provided by the DLNR. Since the protection of the single wiliwili tree (*Erythrina sandwichensis*) in the Pond, the tree has begun to recover from the damage and make new leaves. NHPS and DLNR Americorps interns plan to use the same technique to protect damaged loulu palms later this month.

Many areas of the Kanahā Pond are also dominated by non-native plants such as date palm (*Phoenix* sp.), kiawe (*Prosopis pallida*), and fleabanes (*Pluchea* sp.). In the area that was most recently cleared by DLNR, date palms from the seed bank have emerged, and their presence is prohibiting the growth of native shrubs and ground cover. If left unchecked, the palms will continue to spread and take over large portions of the pond. Thankfully, on January 17th DLNR is bringing in a large crew to remove these thorny invasive plants. For the duration of 2014, Americorps interns will monitor the date palm regeneration in the area after this large-scale removal effort.

Please join us to help protect this special place! The Native Hawaiian Plant Society works in Kanahā Pond every 1st and 3rd Thursday of the month from 8:30 to 11am and all volunteers are welcome. If you have any questions about the Kanahā Pond or any of the information in this article, please feel free to contact me at stout.victoria@gmail.com.



Kara Johanssen, Jennifer Rose (back), Joanie Nielson, Martha Martin, Becky Lau and Marie Van Zandt.



Above left: *Manduca blackburni* caterpillar feeding on *Nicotiana glauca* at Kanahā Beach. Above right: *Manduca blackburni* a/ka/ the Blackburn hawk moth or Hawaiian sphinx moth. Photos by Forest & Kim Starr.

President's Message

The Native Hawaiian Plant Society works to protect and increase the plants and animals which are native to Hawai'i. The largest threat of extinction is caused by destruction of habitats from human activity. The next largest threat to native species survival comes from invasive plants and animals, which are generally here because of human activity.

Our volunteers cooperate with government agencies, public and private groups, and individuals hoping to find ways to avoid the extinction of endangered native species in Hawai'i.

All of the projects listed in this newsletter are done by unpaid volunteers. We sponsor some public informational events, and help some other groups that share our goals.

I am grateful to the officers, members and friends who volunteer to work, and to those who support our projects by gifts. They are the power which enables action.

Together lets work to do something about important problems, and to find ways to solve them.
Martha E. Martin, President

Bringing Back the Natives, continued from page 1

removal for christmasberry, guava, camphor, fiddlewood, herbaceous weed control using chemicals or hand pulling (I prefer the latter), wood-chipping, mulching using cardboard and woodchips, and planting. I've planted over 1,200 native plants, from ground covers to shrubs to trees; over 50 species in all. EQIP also helped me install irrigation to places where previously I carried hundreds of five gallon buckets of water via wheelbarrow on paths all over the land to water keikis and allowed me to plant non-invasive fruit trees up to 25% of total plants. While the fruit trees are not native, I value them for sustainability and feeding people.

'Ōhi'alani was unique for this EQIP project in that some of it was already native, and I had to work around the existing native plants, being careful not to disturb them. Often really tough weed roots such as laua'e (*Phlebodium aureum*) were inextricable from 'ōhi'a roots, making removal challenging. It's a fine and fragile line between removing unwanted invasive weeds sometimes, versus protecting fragile root systems and tender fern roots which invariably get tangled with grass roots. It was easier to work in the areas starting from scratch, where I could use cardboard and woodchip mulching, though I treasure the plants that got here on their own the most. I planted keikis strategically mostly in areas that were weed infested before, and some in the uluhe ferns.

Native plants can be tricky – slow growing and sometimes vulnerable to introduced pests such as ants, Chinese Rose beetles or koa twig borers. I also suspect climate change is hard on them, with longer droughts. And vog is a known problem. However, in spite of the challenges, the delight of looking out my window and seeing 'ōhi'a and koa trees and many other native plants gives me great satisfaction and joy.

If you are interested in the NRCS EQIP program for your property, contact Ranae Ganske-Cerizo, District Conservationist, Kahului Service Center, USDA-NRCS (808) 871-5500.



Katie Romanchuck, cutting guava at 'Ōhi'alani.

Come to the NHPS Annual Membership Meeting & Lecture

**Friday, February 28, 2014
7:00 pm**

**At Hannibal Tavares
Community Center,
Poolside Room, Pukalani**

**Speaker: Jesse Felts,
Climate Change Intern,
Haleakalā National Park**

**Topic: "The Effects of
Climate Change on the
'Āhinahina"**

***This Event is Free and
Open to the Public!***



Argyroxiphium sandwicense
subsp. *macrocephalum*
('āhinahina, Haleakalā
silversword). Photo by Forest
& Kim Starr

D.T. Fleming Arboretum at Pu'u Mahoe by Irene Newhouse



Martha Vockrodt-Moran introduces the plants that will be outplanted: kauila (*Alphitonia ponderosa*), koai'a (*Acacia koaia*), and 'a'ali'i (*Dodonaea viscosa*).

The 2013 trip to Fleming Arboretum at Pu'u Mahoe was a great success once more. Participants were Janet Bostick, Mia Charleston, Heather Coad, Elle Cochran, Fern Duvall, Spencer, Arianna Feinberg, Steven Fischer, Kalani Gonsalves, Peter Gooch, Jake Grodzynski, Tama Kaleleiki, Bo Mahoe, Karin Mahoe, Martha Martin, Elena Newhouse, Irene Newhouse, Joanie Nielsen, and Karim Wingedheart. Videographers from the Maui Huliau Foundation were Dylan, Kauai, and Nicolette. The group outplanted 48 plants into a new section; the goal is for it to eventually represent the diversity of a kauila (*Alphitonia ponderosa*) forest. In addition to kauila, we also outplanted koai'a (*Acacia koaia*), and 'a'ali'i (*Dodonaea viscosa*). NHPS will work in this section again in the future. Also, as usual, Martha Vockrodt-Moran provided a sumptuous lunch, topped by her traditional purple cow dessert.

Article, photos and captions by Irene Newhouse.



Alani (*Melicope knudsenii*). This is one of the few remaining trees of this species. The bags are to catch mature seeds should no one be there to harvest them at the crucial time.



Native gardenia, nanu (*Gardenia brighamii*). Extremely rare and near extinction.



These kauila (*Alphitonia ponderosa*) are only a foot high or less, but some are already flowering. Kauila wood is so dense it sinks in water. It was used for anchors. It's also extremely hard, and was prized for tools and weapons.



The planting crew hard at it! The Maui Huliau Foundation is a program promoting environmental literacy and leadership among Maui's youth through community-based educational experiences. More at www.mauihuliaufoundation.org

A volunteer enjoying the view while lunch is prepared. The Friends of the D.T. Fleming Arboretum at Pu'u Mahoe, Inc. exists to sponsor, fund and assist in the protection and preservation of the Fleming Arboretum. Its mission is to preserve Hawaiian native plants through protection, propagation and distribution. More at www.flemingarboretum.org

**Kahului Public Library Courtyard Garden
Project Leader Lorna Hazen**

In 2013 NHPS was awarded a Certificate of Appreciation from the Hawaii State Public Library System for its dedicated volunteer service at the Kahului Public Library. NHPS would like to thank Project Leader, Lorna Hazen, and all the volunteers who helped keep the Kahului Library Courtyard Garden looking beautiful. We'd also like to thank Head Librarian, Sana Daliva, and all the staff at the Kahului Library for their support of our efforts to keep native plants thriving and available for people to see and enjoy at the library. To volunteer, call Lorna Hazen 572-6338.



Recently we planted six new 'ōhelo kai (*Lycium sandwicense*) at the Kahului Library Courtyard Garden along the wall which we will keep pruned down below the Tadashi Sato mural. We also planted six *Carex macloviana* sedge. We've put rocks around each plant to prevent cats from digging them up. If you have any ideas for more plantings, please let Lorna Hazen know. Thanks to Muffie Davis, Martha Martin, Becky Lau, Anna Mae Shishido, Irene Newhouse, Marvin Miura, Katie Romanchuck, and Pamela Jayne for volunteering this year.
Photo by Lorna Hazen



Noooooooooooo...!



Little Fire Ants have come to Maui!

It's going to take ALL of us to stop this stinging pest!

WHAT CAN I DO?

- **INFORM YOURSELF**—Watch the movie on **YouTube**: *Invasion - Little Fire Ants in Hawaii* by Maui Invasive Species Committee
- If you bought ANY plants from ANY nursery on Maui or O'ahu in the last year, **DO THE PEANUT BUTTER TEST** explained in the movie and contact the numbers below if you find ants
- Test for LFA **BEFORE BRINGING PLANTS AND MATERIALS HOME**
- **ASK YOUR PLANT VENDORS** if they test for LFA
- **SUPPORT ON-ISLAND VENDORS OF PLANTS AND AGRICULTURAL PRODUCTS** Let's not bring any more pests here!
- **CONTACT YOUR STATE AND LOCAL REPRESENTATIVES** to let them know you are concerned

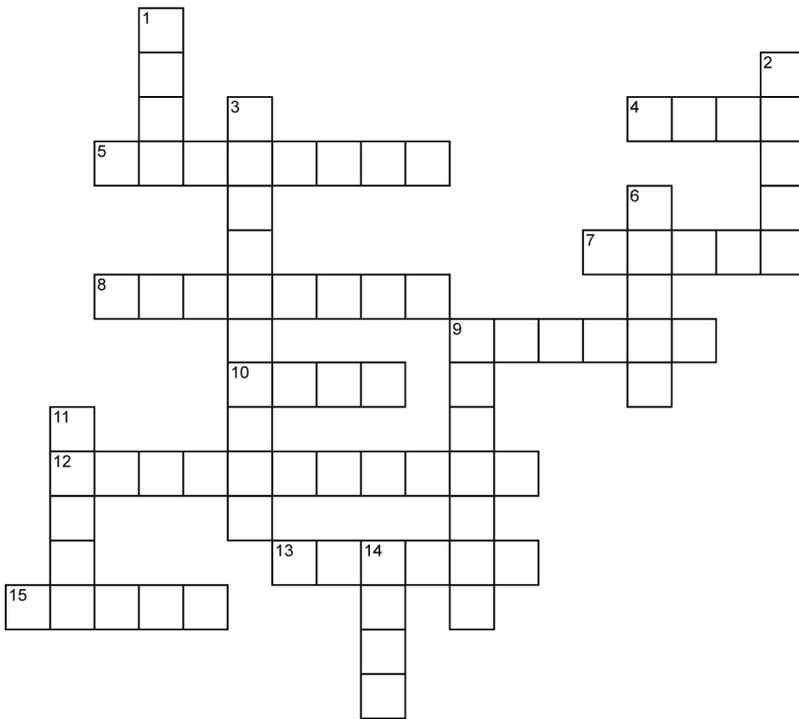
Maui Invasive Species Committee
Tel: 573-7471
www.mauiinvasive.org

Hawaii Department of Agriculture
Toll free PEST HOTLINE: 643-PEST (7378)
Or on Maui 872-3848

More at: www.lfa-hawaii.org

Plant Puzzles!!!

Hawaiian Plant Crossword By Chuck Chimera



ACROSS

- 4 Hawaiian name of the false or "bastard" sandalwood.
- 5 This genus in the Malvaceae includes many popular ornamental and native species, including our state flower Ma'o hau hele.
- 7 All members of the endemic genus in the hibiscus family (Malvaceae) are highly endangered or extinct.
- 8 Last name of the botanist, naturalist, and conservationist, who has turned dry forest restoration at Auwahi into an art form.
- 9 Although an ornithologist by training, this state wildlife biologist is also an adept botanist, and is equally at home among the flowering plants and ferns.
- 10 Last name of one of the first botanical rock stars in both the Hawaiian Islands and China, who authored "The Indigenous Trees of the Hawaiian Islands.
- 12 This famed rare plant botanist, popular NHPS speaker and service trip leader, shares his last name with the "father of the atomic bomb."
- 13 The largest genus of the Hawaiian Campanulaceae (Bellflower family), whose species are known by their Hawaiian name Hāhā.
- 15 Last name of the native Hawaiian botanist and sylvan explorer who was a founding father of the Maui Nui Botanical Garden & Native Hawaiian Plant Society, with an endangered *Tetramolopium* species named in his honor.

DOWN

- 1 Native Hawaiians used this grass to thatch hale (houses).
- 2 Hawaiian name for native species of trees and for a native migratory bird.
- 3 Last name of the German physician and botanist, who wrote the "Flora of the Hawaiian Islands" in 1888, and has an endemic genus in the begonia family named in his honor.
- 6 The only native palm trees in the Hawaiian Islands are known by this Hawaiian name
- 9 Last name of botanist who published the "Flora Hawaiiensis" series of botany books, & whose first name is a palindrome.
- 11 Last name of retired state forester, and renowned botanist who has discovered many new species of Hawaiian plants, including a *Wilkesia* named after him.
- 14 The Hawaiian name of trees in the tomato family that are the native host of the endangered moth *Manduca blackburni*. Also the name of a town on Oahu.

(Puzzle answers on page 7)

Ha'ikū School Landscaping By Project Leader, Becky Lau

Mahalo to those that came out in September to help with weeding and trimming at the lower area of Ha'ikū School. Lots of weeds now at the upper area with all the rains. Lots of good babies too! We (Martha Martin and I mostly) would love to have help any time. We are there most Sundays and some Mondays. Call me (Becky) at 575-2369 or 283-8493.



Right: Ha'ikū School Project Leader, Becky Lau, standing in the shade of an ho'awa tree (*Pittosporum* sp.). The pōhinahina hedge (*Vitex rotundifolia*) is thriving and needs frequent trimming. Pōhinahina is a hardy indigenous plant which makes a good hedge or ground cover. The fruits of the pōhinahina were used medicinally by native Hawaiians for the treatment of headache, cold, migraine and other conditions. (USDA NRCS)

Left: Ho'awa flowers on a branch.

Photos by: Shannon Paapanen



Upcoming NHPS Events & Announcements

Annual NHPS Membership Meeting & Lecture

February 28th (Friday) 7:00 pm

Speaker: Jesse Felts, Climate Change Intern, Haleakalā National Park will speak on “The Effects of Climate Change on the ‘Āhinahina.”

Location: Hannibal Tavares Community Center, Poolside Room, Pukalani

The Annual NHPS Membership Meeting to elect the 2014 Board of Directors will be held at 6:45 pm, just prior to the lecture.

Regular Service Trips

Kanahā Pond (1st and 3rd Thursdays 8:30-11am)

Contact Becky Lau (808) 575-2369

Ha’ikū School (Every Sunday 8:30 am)

Contact Becky Lau (808) 575-2369

Kahului Library (2nd Thursday 9am-12 noon)

Contact Lorna Hazen (808) 572-6338 or email lornajack@clearwire.net

NHPS service trips, hikes and other events are scheduled frequently.

For up-to-date information, contact Irene Newhouse at

einew@hotmail.com

(808) 264-6977

Mahalo Nui Loa

Donors

NHPS extends a special *mahalo* to the following donors for their generous contributions in 2013:

Harold Appleton
Ann Carter

Lisa Shattenberg-Raymond
Susan Wirtz

Corporate , Government & Exclosure Partners:

Maui County Parks and Recreation for the use of Hannibal Tavares Community Center Pool Room.

Maui Nui Botanical Gardens for propagating plants

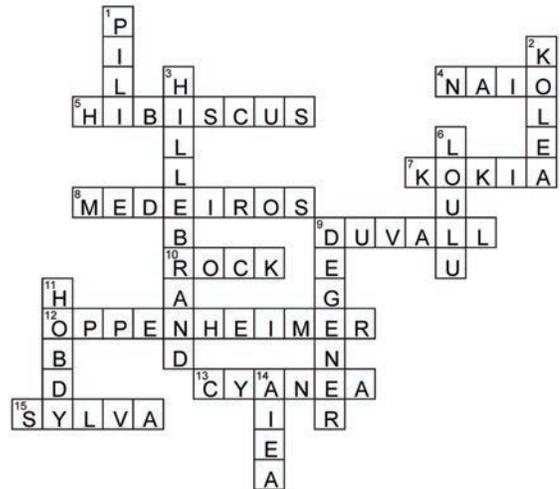
Haiku Elementary School

Exclosure Partners:

Duane Ting and family,

Hawai’i State Department of Land and Natural Resources, and Ulupalakua Ranch.

Hawaiian Plant Crossword—Answers



Volunteers needed for NHPS Booth at Ha’ikū Ho‘olaule‘a



**Saturday, April 12
9am—4:30pm
at Haiku
Community Center**

Learn to make lei with native Hawaiian plants and then teach others.



A chance to meet new people and learn new skills.

Call Katie Romanchuck at 214-8887 to sign up for a time slot.

It’s easy and fun!

Hibiscus arnotianus subsp. *punaluensis*
Photo by Irene Newhouse



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Website: www.nativehawaiianplantsociety.org

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DON'T FORGET TO RENEW!

Membership Form

Name (please print) _____ Date _____

Address _____

City _____ State _____ Zip _____

Telephone (Hm) _____ (Cell) _____

Email _____

(Please print carefully!)

Donation Categories: Individual \$20 _____ Family \$25 _____ Other \$ _____

Native Hawaiian Plant Society, P.O. Box 5021 Kahului, Hawai'i 96733-5021

The Native Hawaiian Plant Society is a nonprofit 501(c)(3) organization founded in 1980.