



NEWS FROM

THE URBAN GARDEN CENTER

VOL 26



IN THIS ISSUE

- Page 1 Arbor Day
- Page 2 Bee Move
- Page 3 Arbor Day
- Page 4 Awards & Board
- Page 5 Fruit Growers
- Page 6 Seed Saving
- Page 7 Fruit Hui
- Page 8 Community Group

2014 Arbor Day a Success!!

For several years, Hawaiian Electric ("HECO") has sponsored the annual Arbor Day tree give-away event. This event is much anticipated by the public. This year, 2700 trees/shrubs were propagated for the give away. On 8th November 2014, the public swarmed the six give-away locations, including The UGC, and in just a few hours the plants found new homes.

This event has a goal of educating the public about the benefits of trees and shrubs in the home garden, the appropriate tree/shrub to plant in one's home microclimate and how to properly plant and maintain the trees. Through the materials given to the public, the public will obtain the maximum results from their new tree/shrub i.e.; more shade, cleaner air, less injuries in and around trees and a better environment.



Cont'd on Page 3



Bee Yard on the Move!!!

The UGC Bees and other pollinators are some of the hardest working volunteers on The UGC team! In the recent past, they have endured noise and vibration from nearby construction activity, overspray from pesticides, and less than ideal living conditions. They suffered Queen Loss, Small Hive Beetle infestation and deformed wing virus. Result? No honey.

The Bee Hui worried over their health so re-queened, and treated for mites. At last, honey flowed, a harvest was possible, and the bees are healthy going into the winter season. In order to secure these gains, the Bee Yard at The UGC has MOVED to a quieter location, with less pest and pesticide build-up! Jody Smith, Jackie Smith, Laura Mizumoto and Scott Nikaido worked by the light of the moon to relocate the hives whilst the bees were sleeping. It is now located next to the indigo planting and Hawaiian Medicinal Garden. The bees are back to work! Please be mindful of bees, and of impact of pesticides as you work near the new bee yard.

A pesticide free zone

Bees come in contact with pesticides at The UGC when they forage for pollen and nectar. The pesticides affect the adults and their developing eggs, larvae and pupae. Pesticides brought to the hive tend to leave pesticide residues in the wax comb, which harms the young. One particular class of pesticides, neonicotinoids, is suspected to be particularly harmful to bees. (Beekeepers on the mainland and in Canada are so concerned about them that they have filed class-action lawsuits against their manufacturers.)

At The UGC, bees can be exposed to pesticides when:

Insecticides are applied when bees are FORAGING. Bees generally forage during daylight hours and may visit some crops at specific times of day. Insecticides are applied to BEE-POLLINATED fruits and veggies during bloom.

Insecticides are applied to blooming WEEDS in orchards or field margins. Bees don't discriminate between flowering weeds and flowerbeds and Insecticide drift (OOPS!)

Bees collect insecticide-contaminated nectar and pollen from plants treated

with systemic pesticides from the NEONICOTINOID family (such as Merit with the active ingredient Imidacloprid, often used on ornamentals).

Bees collect insecticide-contaminated WATER.

This is what we can do at The UGC to reduce the threat of pesticides to our bees:

Screen our pesticides for bee toxicity, and where needed, choose/use less toxic alternatives. Be aware that even organic pesticides (such as Neem) can be lethal to bees.

Try to solve simple garden problems without relying on pesticides. Use IPM to control pests and minimize risks to our pollinators and beneficial insects.

Maintain PESTICIDE FREE ZONES, untreated buffers between our bee yard and other areas at The UGC.

Cont'd on Pg 4



Cont'd from Pg 1

Arbor Day Giveaway

Let us take a look behind the scenes and explore what it takes to prepare for this event. The O'ahu Urban Garden 'Ohana annually applies for funding from the State of Hawaii, Division of Forestry and Wildlife, Forestry Programs, Kaulunani Grant Program. Ext. Agent Steve Nagano coordinates the grant request. HECO funds and in-kind matches then match the grant funds. It is those "in-kind" matches that make this into such a successful event.

Beginning in January-February of each year, a full committee comprised of representatives from The UGC (S. Nagano), HECO and Kaulunani Urban & Community Forest Program meet to determine the plants that will be given away for Arbor Day. Certified Arborists serve on this committee. Two-thirds of the selected plants must be Hawaiian native plants.

Once the plants have been selected, the propagators get busy. The Sprouts, Master Gardeners ("M.G.s") and other volunteers propagate each Thursday at The UGC; all coordinated by the Sprouts. Propagators are also busy at Waimea Valley Arboretum & Botanical Garden ("Waimea Arb."). Plants are propagated primarily from cuttings from plants at The UGC, donations and from

Waimea Arb.. These hard-working propagators have a success rate of @ 85%.

Besides the Sprouts meeting each and every Thursday until the event, the full committee meets monthly. This event requires extensive publicity and materials are prepared and printed for distribution at the plant give-away sites. HECO provides the publicity and publishes the Right Tree in the Right Place brochure. All parties participate in writing the Plant Selection & Information Sheet for each species that is to be given away.

As the November Arbor Day date approaches, the Sprouts begin the shift from propagators to organizers of the give-away event. Plants are counted out two days before the event and then the appropriate number of plants delivered to each give-away site the day before the event. The UGC give-away site draws some 450 people, so tickets are given to each person attending the event. Other sites have volunteers coordinating the long lines of folks anxious to receive their new tree/shrub.

'Oahu M.G.s and arborists are also at give-away sites to answer questions and, hopefully, insure that the appropriate plant is selected for its new home. Other volunteers at the give-away site include HECO personnel and members of a local Boy Scout troop.

Mahalo nui loa to the Sprouts for their dedicated work in coordinating this event. Their outstanding contribution to this event each year lives on in each and every tree/shrub that greens our 'Oahu neighborhoods.

Just a note: As you all are aware, HECO has announced its acquisition by a Florida energy company. Additionally, our state has a new governor and his Administration. Change brings forth both positive and not so positive actions. Please let your State Senator/Representative, the Governor's Office, State of Hawaii, Division of Forestry and Wildlife, and HECO know how much we appreciate their support of this tree give-away program.

Cont'd from Pg 2

Bee Yard

Avoid applying pesticides during daylight hours when bees are foraging. Apply as late in the day as possible.

Do not apply insecticides with long residual toxicity to bees to blooming plants, including weeds.

Read more about this topic at: Bring Back the Pollinators > Protect Pollinators from Pesticides <http://www.xerces.org/protect-pollinators-from-pesticides/> How to Reduce Bee Poisoning from Pesticides <http://ir.library.oregonstate.edu/xmlui/bitstream/handle/1957/42829/PNW%20591.pdf>



Advisory Board

After many months of consideration and review, a dedicated Working Group of Oahu Master Gardeners (“M.G.s”) has come up with a new way to administer their program.

The Advisory Board (“A.B.”) concept is essentially based on one the Maui Master Gardeners have utilized to conduct business for the past several years. The A.B. will function to primarily provide advice to their Extension Agent/Coordinator (Jayme Grzebik) in the administration of

M.G. programs.

The objective is to enhance “Communication, Coordination, and Cooperation”. They will initially meet monthly and then, if possible, less frequently, as needed. A Facilitator will lead their meetings with minutes recorded by a Record Keeper. These positions will be rotated (every 3 months or so) and will not be elected. Therefore, volunteerism will be the backbone of this group functioning smoothly.

Each Hui and Committee will be asked to have a representative present a short (no more than 5 minute) summary of their respective activities and funding needs, if applicable. The summary of any action items will be forwarded to the Extension Agent/Coordinator as advice and/or recommendations.

All M.G.s can find a draft of the A.B. By-Laws on the VMS (under ‘Documents’). A final version will be forthcoming. As all can see, numerous volunteers will be called upon to form the various committees that will function as the operational heart of the A.B. Our M.G.s are a varied and talented group of individuals. Where will you be best able to contribute?

The A.B.’s first meeting is tentatively planned for 10:00 AM on January 14th, 2015 at The UGC. All are encouraged to come and learn more of all the things the M.G.s collectively are doing.

‘Oahu Master Gardener 2014 Award Winners

During the Biennial Master Gardener Conference on Maui this year, several Master Gardeners

(“M.G.s”) received awards for: Outstanding Leadership, Outstanding Service and Public Outreach Awards. ‘Oahu M.G.s receiving these awards were: Rick Chavez, Public Outreach; Richard Karamatsu, Outstanding Leadership; Todd LaVine, Outstanding Service. These three M.G.s worked on various projects in various capacities in promoting the mission of the M.G. program.

Rick Chavez has really reached out to the gardening public by leading the effort to establish a Plant Doc Booth at the Pearlridge Farmers’ Market. Rick can be found staffing the booth most 3rd Saturdays of each month. The public also is eager to purchase UH seeds at these booths. To assist the seed-growers, Rick developed a sheet, which can be scanned by ‘Smartphones’ that links to information about UH, seeds. Rick’s technological expertise and dedication to the mission of the M.G. program yield lasting benefits to the ‘Oahu gardening public.

Richard Karamatsu initiated and coordinates the Grafting Hui at The UGC. This Hui does everything from planting seeds or cuttings to generate rootstock for grafting, grafting, and taking care of grafted plants and rootstock. It focuses on tropical fruits and Hibiscus. The skills acquired during the Hui’s monthly sessions give members an opportunity to supply plants for The UGC plant sales, as well as eventually taking a plant home that they have propagated. Richard has been present at The UGC Plant Sales in order to educate the buyers of the grafted plants; a well cared for plant will be a productive plant! Richard, assisted by Steve Oshiro, has also conducted a grafting session for the 2014 M.G. class as well as at the recent M.G. Conference on Maui.

Cont'd on Pg 5

Cont'd from Pg 4

Award Winners

You may have attended Richard's most recent educational session at The UGC on 13 Dec. 2014, wherein he presented a slide presentation showing the process from seed to grafted plant. Participants were also given a popular hands-on session. He also served as Secretary and Treasurer for the 'Oahu M.G. Assn. and has made improvements in the accounting procedures as Treasurer. For more on Richard's Grafting Primer, see:

<http://www.ctahr.hawaii.edu/uhmg/conference/downloads/2014Karamatsu-grafting.pdf>

Todd LaVine became a Certified M.G. in 2014 and he has plunged into volunteer commitments wholeheartedly. After more than fulfilling the requirements to become certified, Todd continues to staff Plant Doc Booths as well as work the M.G. Helpline and acting as a mentor to fellow M.G.s.

Todd was very active volunteering during the 2014 M.G. class: setting up early, answering questions, and encouraging the class participants to keep their commitments as they eventually work during certification. Todd, himself, fulfilled a requested yearlong follow up commitment to his group's 2013 M.G. class project. He is a strong proponent of the M.G. program. Todd is fluent in Japanese and he translated The UGC Docent Guide into Japanese, which he has made available to Japanese visitors to The UGC to enhance their understanding of this community resource. Todd can also be found leading others as a docent through the multi-faceted UGC. A common thread connecting these award winners is their strong commitment to the mission of the M.G. Program, aiding the gardening public.

To them and to all the dedicated 'Oahu M.G.s, mahalo nui loa!

Hawaii Tropical Fruit Growers Meet on Oahu

The Master Gardeners ("M.G.s") of 'Oahu have supported the Hawaii Tropical Fruit Growers Assn. ("HTFG") in a variety of ways over the years, particularly by support volunteers at the HTFG Annual Conference. This year, as part of the HTFG Annual Conference, there was a "mini-conference" on 'Oahu and the M.G.s and other UGC volunteers supported an afternoon and evening of conference events at The UGC on 16 Sept. 2014.

Two M.G.s led a group of Conference participants through the Orchard, which those new to 'Oahu and The UGC appreciated. Afterwards, Conference participants were ushered to the Classroom for two very illuminating lectures. The lecturers were: Dr. John E. Preece, Supervisory Research Leader/Horticulturist with the Nat'l. Clonal Germplasm Repository, Davis, CA Dr. John Yoshimi Yonemoto, Representative Director of the Japan Tropical Fruit Association

Dr. Preece spoke of recommended procedures for successful rooting and grafting. His presentation included useful visuals as well as examples of the 'fruits' of his recommended procedures. This was a nice compliment to the presentation given by M.G. R. Karamatsu at The UGC recently.

Dr. Yonemoto spoke of his work in Hokkaido, Japan growing, specifically Mango and Avocado.

Since the climate in Hokkaido is far from tropical, these trees are planted in greenhouses. One of Dr. Yonemoto's slides showed the greenhouses in winter and one could barely see the roofs of the greenhouses for all the snow! Needless to say, the greenhouses are heated and, most importantly, a method has been perfected to grow these trees so that they are kept to a reasonable size indoors. The trees are planted in large containers or in-ground in trenches that have a root limiter sheet. The trench is only 150 cm in width and 30 cm in depth (the tree is actually planted 10 cm above the grade). These trees can be espaliered and bear fruit within two years using that method! Otherwise, one must insure controlled growth by judicious pruning of the trees. This is definitely something that we can try at home, even with limited space.

After the informative presentations, all partook of an excellent fruit tasting and fresh fruit preserves courtesy of UGC volunteers, M.G. Coordinator and 'Oahu M.G.s. Makaha Mangoes and The UGC Orchard contributed the delicious varieties of fruits. This was an excellent way to sample numerous varieties of Mango to determine which to plant using Dr. Yonemoto's method!

Mark your calendars now for the September 2015 HTFG Conference to be held in Kona. See:

<http://www.hawaiitropicalfruitgrowers.org/> to learn more about HTFG and for details of the 2015 Conference.

Seed-Saving Field Trip

On October 29, 2014, several M.G.s attended a tour of the UH Seed Lab, as arranged by M.G. Ann Tanaka. Attendees were M.G.s Ann Tanaka & Amy Teves, Lyn Howe, Daniella Dutra, Nancy Redfeather and Jay Bost. At the Seed Lab, Desmond Ogata, Seed Specialist, demonstrated saving papaya and eggplant seeds and showed some of the blowers he uses to remove chaff from seed. The station managers pollinate, isolate, and collect the fruits that are labeled and sent to the seed lab where the seeds are processed. The seeds sold by the Master Gardeners are all organically grown even though the package is not labeled as such. Seeds are sold at the Seed Lab to walk in customers as well as through the Seed Lab website and the Plant Doctor booths. Seeds are sold in bulk to commercial farms and seed dealers. Desmond has even sent papaya seed to France. Before we left we took the opportunity to buy some seeds.

Just a note, Desmond's specialty is actually plant pathology. He took over running the Seed Lab when his predecessor suddenly died. He said he learned how to save seeds from the grad students, who were working at the lab when he started. He's definitely an expert now and he works so fast.

The Seed Lab has 29 varieties of seeds. There are very few new varieties since there aren't many people doing research and they currently do not have a plant breeder to develop new seed lines. However, at The UGC we have had the opportunity to thresh soybeans to collect seeds for the seed lab. The Seed Lab is very compact and when hundreds of pounds of papaya have to be processed there is hardly room for

all of the buckets and he says the lab becomes very "fragrant" with all of the fermenting fruit around. So, even if there were more seeds available, there isn't much space to do additional processing. The plants are grown at Poamoho, Waimanalo, Hawaii Island and Kauai. The station managers have to get up early to pollinate the plants before the bees come out to ensure that the seeds come true. The fruit are sent to the Seed Lab to be processed, cleaned and packaged.

Dr. Uchida stopped by as well and answered a few questions on how the program gets funded. He said funding has been decreasing and the priority is for educators since without instructors, there aren't classes, and without classes there aren't students enrolled in the program. Sounds a bit like a variant Catch 22?

Next, it was off to Waimanalo Research Station. We met with Drs. Brewbaker and Ahmad and talked about some of the research that Dr. Brewbaker has done in breeding corn. Jay Bost gave us a tour of the "Go" farm plots where they are growing all kinds of plants. He said each participant had 5,000 square ft. to plant with the advisers assisting him or her. The graduates of the program then can, if they want to, lease a larger plot from the UH.

They are doing basil trials and a couple of the plants looked promising. We saw the papaya trees that were all hermaphrodites since the males and females are rouged out. This increases the likelihood that the plants will be self-pollinated, especially since there are no other species of papaya trees nearby. Unfortunately, thieves raided the taro patch before they could collect their data, so there was a new planting of taro from which they were able to salvage.

The field trip attendees are involved with or interested in getting seed

saving on the curriculum for the M.G. Program classes. Currently there is no mention of seed saving, breeding, or disease resistance or transmission by seed in the curriculum. With the rising cost of seeds, people would benefit from saving more of their own seeds and sharing seeds to preserve the good lines. To successfully do this, people would need to understand how plants need to be grown i.e.; to isolate or hand-pollinate the flowers to ensure that the seeds are true, as well as how to select, collect, process, and store seeds for the future. This would greatly aid the future M.G.s in teaching to the public and in the schools.

Food (seed) for thought?

A Community Resource That Keeps On Giving

The UGC Orchard was originally planted some 25 years ago. Over the years some trees have died or it has been determined to remove certain of them and new trees have been planted. Currently there are some 15 dozen + fruit trees, grape and lilikoi vines in the orchard. This excludes the cacao experimental plot overseen by Dr. Bittenbender. This is quite a resource for the gardening public and others wanting to learn about fruit tree cultivation in Hawaii.

Within the last few years a Fruit Hui was formed to harvest fruit for donation to the Hawaii Foodbank. EFNEP also harvests for their program, as well as sharing any excess they harvest for the weekly donation to the HI Foodbank.

Cont'd on Pg 7



Cont'd from Pg 6

Community Resource

To date, almost 6000 pounds of fruit has been harvested and donated during 2014! This is remarkable considering the volume of fruits that 'disappear' from the trees before the Hui can harvest them. In an attempt to deter unwanted harvesting, six new signs were installed informing all who enter the Orchard that fruits are harvested and given to the Hawaii Foodbank for distribution to the needy in our community. Mahalo to Steve Nagano for coordinating/obtaining these signs.

The Fruit Hui also inventories the Orchard. For those wanting to learn what trees are in the Orchard, there is an updated (as of 12/2014) map hanging on a peg in the Field Office as well as available on the VMS for 'Oahu M.G.s to access. The Hui continues to work on a Data Base of the Orchard trees.

During 2014, Hui members coordinated with international virologists in Honolulu for a conference by conducting a tour the Orchard, as well as with participants in the mini-Hawaii Tropical Fruit Growers Conference held on 'Oahu. The Hui is also reaching out to

young residents of 'Oahu and has participated with an edible (!) exhibit at the Annual Ag. Day event, as well as for other school groups. The Hui has also supplied harvested fruits, as requested, for other UGC events.

As those of you with fruit trees well know, sometimes fruits will fall before they can be harvested. The Hui conducts 'sweeps' of the Orchard on harvest days to sanitize it. Two augmentorium (tent-like structures) have been resurrected in the orchard to dispose of fallen fruits to suppress fruit flies while releasing beneficial parasites. While there are fruit fly traps hung in various trees, this is a project that is not under the purview of the Fruit Hui.

Sounds like a great project for someone(s)!?

While the Fruit Hui does light pruning to facilitate harvesting, there is now a UGC Pruning Group that does heavier pruning of the trees. The Irrigation Group, along with The UGC Ag. Techs., have also been updating the irrigation system for the fruit trees. The Fruit Hui has also begun, with assistance from Dale Sato, fertilizing the trees three times a year; yielding healthier

and heavier producing trees. The trees are responding to this increased care.

As 2014 draws to a close, take a stroll through the Orchard. It is developing quite nicely with the added attention from the various volunteers/M.G.s. On behalf of the trees, Mahalo!



Aloha Aina o Kamilonui



Oahu M.G.s often can be found volunteering with worthwhile community-based projects. M.G. Jody Smith has become involved with a group called Aloha Aina o Kamilonui. Good news for fellow gardeners! In 2015, Aloha Aina o Kamilonui

<<http://www.kamilonuivalley.org/2.html>>, a community-based nursery staffed by volunteers, opens its native plant nursery <<http://aloha-aina-kamilonui-nursery.weebly.com/>> in East Honolulu. Gregory Koob of Hawaii Horticulture <<http://hibort.blogspot.com/>> will be providing training on growing native plants for home gardens and restoration projects. Learn to grow native plants, teach classes in sustainable gardening and support school programs in East Honolulu!

This project is great for Master Gardeners:

- ~ interested in learning about and propagating native plants
- ~ wanting to offer classes on sustainable gardening (vermicomposting, compost tea, beneficial insects, mulch and compost, less toxic pesticides, etc.)
- ~ interested in Hawaiian cultural plants
- ~ involved in school programs in East Honolulu (Kamiloiki, Hahaione, Koko Head, Kaiser H.S.)

For more information, contact Jody Smith (smithjos@hawaii.edu) <<http://smithjos@hawaii.edu>>, Elizabeth Reilly (kamilonuivalley@aol.com) <<http://kamilonuivalley@aol.com>> or call 864-8081.

Thanks to all who submitted photos, articles & information. We appreciate all who contribute to sharing their volunteer activities with other volunteers at The UGC.

Barbara Alexander & Catherine Ano

Newsletter Coordinators

We would like your help!

When you participate in an activity at The UGC or volunteer for one of the off-site events, please share your experiences and photos.

Some of these events are held annually and hearing about your experience will, hopefully, generate interest for future volunteers to participate.

With DETAILS from you, we can put together an article for the “News From The UGC” newsletter.

Please contact Barbara Alexander @744-8547 or Catherine Ano @ 223-7107

HERE’S TO A NEW YEAR OF FUN GARDENING IN 2015!