

Fact Sheet

955 Kamehameha Highway Pearl City, Hawai'i 96782-2501 (808) 453-6050, fax: (808) 453-6052 http://www.ctahr.hawaii.edu/ougc beatriz@hawaii.edu

Oʻahu Master Gardener Hotline (808) 453-6055 UGC is owned by the University of Hawai'i, College of Tropical Agriculture and Human Resources, Cooperative Extension Service. The facility provides programs in urban horticulture focusing on a one-stop educational center concept for the public. Local school outreach programs and gardening demonstrations are available to the community. One of the largest collections of turf grass, ground covers, hedges, and citrus in the state occupy the site.

Mission Statements

UH System. The primary mission of the University of Hawai'i is to provide environments in which faculty and students can discover, examine critically, preserve and transmit the knowledge, wisdom and values that will help to ensure the survival of the present and future generations with improvement in the quality of life.

College of Tropical Agriculture and Human Resources. CTAHR creates and delivers knowledge that supports and strengthens families, agricultural and food systems, and the natural environment. We educate and serve the people of Hawai'i and those from around the world with integrity and excellence.

Urban Garden Center. To continuously and consistently provide innovative and diverse horticultural information to the gardening public.

Type of Garden: Public Garden

Established: 1989 (prior to 1965 was occupied by the Navy, National Guard, flood zone area;

1965 to 1988 community gardens; 1988 started fruit and plumeria gardens)

Size: 30 acres Average Walk Through: 45 minutes

Garden Hours: Monday-Friday 9:00 a.m. to 2:00 p.m. (except holidays).

Office Hours: Monday-Friday 7:45 a.m. to 4:30 p.m. (except holidays). All visitors must check in

at the Main Office.

Lost or Found: Located at the Main Office

First Aid Kit: Located in the Field Office and Classroom

Best Season to View: Spring

Gardens: plumeria, hedge maze, ecosystem-native plants, sub-tropical fruit orchard, turf,

ground covers, herbs, idea garden, vines, vegetable and fruit trials, hibiscus, pizza, plants with animal names, Hawaiian alphabet tree garden, crotons, heleconia, bromeliads, medicinal garden, taro specimens, day lilies, Alika Rabbit garden and

Rose garden.

Wheel Chair Access: Limited

Elevation: 17 ft. parking area

Soil: Various soil types, with 6.5 to 7.2 pH

Rainfall: Average 20 inches per year, predominantly in March and November

Garden Descriptions

Turf Plots

Total of 25 different turfgrasses are displayed. Large planting of turfgrass are found at the following sites:

'Tifgreen' Bermudagrass – Front of Main Office

Dwarf St Augustinegrass – Lawn fronting Hedge Maze

'El Toro' Zoysiagrass – Adjacent to Carport

'Sunturf' Bermudagrass – Herb Garden

Seashore Paspalum – Plumeria/AAS Garden

Seashore Paspalum – Behind Classroom

'Tifway' Bermudagrass – Ecosystem

Seashore Paspalum - Gazebo

Mondograss - Field Office

Dwarf Mondograss - Sensory Garden, Kiosk

Ground Covers

Previously housing over 75 ground covers, the gardens are under review.

Ecosystem Forest

The forest contains native and Polynesian introduced plants. Coastal, mesic, and dry land are the three primary ecosystems in the landscape. Additionally, two species of Azadirachta, or Neem Tree are in the landscape, with other non-native plants such as cotton, Erythrina sp., bamboo and some ferns. An amphitheater is located here for school tours to do activities.

Subtropical Fruit Orchard

Citrus and mango cultivars occupy about half of the 4½ acres. Collections of guava, lychee, longan, mountain apple and avocados are examples of what is found in the orchard. Fruits such as carambola, otaheite gooseberry, chico, black sapote, abiu, wi, tamarind, jack fruit, breadfruit, and others make up for the rest of the fruit orchard.

Heleconia

There are 41 different Heleconia sp. on display here.

Plumeria

Over 70 different cultivars are in bloom during the season.

Herb Garden

The original Herb Garden was designed and implemented in 1989, showcasing a variety of herbal themes in designed landscapes. The original four quadrants are currently being renovated with organic gardening practices to revive the original herbal themes and show diverse landscape materials. The herbal themes, working clockwise from the front-right quadrant, are culinary, medicinal, other, and Asian spice.

Idea Garden

Sample of what gardeners can grow on Oahu. UH varieties of, for example, cucumbers, soybeans, or lettuce are grown to show how these have been adapted to Hawaii's climate. Hard to find cultivars of different vegetables and grains are grown seasonally. Various containers and beds for physically challenged and senior gardeners are on display. Volunteers are allowed to garden and are encouraged to grow various crops. Produce is the property of the Urban Garden Center volunteers and staff. Winter melon, soybeans, beets, bittermelon, virus-free Tahitian taro, okra, yard-long beans, and eggplant are just a few of the common vegetables grown by volunteers. Vine-type vegetables are found growing on the trellises. School tours with advance appointments have access to visit the garden during the year.



Garden Descriptions

Vines

Thirty different subtropical vines are found on fan trellises and arbors.

Greens/Lei

Different plants used for lei making are found planted behind the Hedge Maze.

Crotons

A colorful rainbow of different varieties lines the front entrance to the facility.

Hedge Maze

Over 60 different plant materials are at the hedge maze. Plantings are spaced two feet apart. Trimming is done every 3-4 weeks.

Compost Area

Various compost bins are being demonstrated for the home gardener. Home-made bins are also on display. Various mulches are also on display. Approximately 2,500 cubic yards of mulch are spread yearly in the garden areas. Currently, a compost demonstration site to provide compost for our gardens has been started in Quadrant III of the Herb Garden.

Greenhouse or Shade House

A 4,800 square feet shade house (20% shade in front and 80% shade in rear) is used to propagate and grow plants for future landscape projects as well as for germplasm collection of anthurium, orchids, and other ornamentals.

Hibiscus

There are Hibiscus sp. cultivars with flower colors including red, pink, yellow, orange, white and colors in-between are planted in front of the entrance to the Labyrinth.

Children's Garden

- 1. <u>Pizza</u>: Plants that are commonly found on a pizza are found in this garden, such as basil, pineapple, wheat, tomato, parsley, chili pepper, and green pepper. The new pizza is 20 feet in diameter and was relocated to its current location.
- 2. <u>Animal</u>: Plant collection with animal names in major categories (wild animals, farm animals, house hold pets, birds, ocean creatures and insects) are found in this garden.
- 3. <u>Hawaiian Alphabet Tree</u>: Native Hawaiian trees representing the 13 letters of the alphabet (5 vowels, 8 consonants including the okina) found in the Hawaiian language are located in this garden.
- 4. <u>Sundial</u>: A combination sundial and compass features have been incorporated in this garden.
- 5. <u>Sensory</u>: Accessible to the physically challenged, this garden is equipped with hand railings and the only one with concrete walkways. Plants with color, texture, geometric growth and patterns are planted in two raised garden beds.
- 6. <u>Boardwalk</u>: Accessed by two different bridges, visitors can walk along a unique boardwalk and see a collection of plants with varied color, shape, and texture.
- 7. <u>House</u>: A story book house can be found here. There are five different rooms with plants associated with each room (such as bottle brush tree in the kitchen or shower tree in the bathroom).
- 8. <u>Butterfly</u>: Kids will enjoy walking through a caterpillar tunnel and watch Monarch butterflies hover overhead.
- 9. <u>Alika Rabbit Garden</u>: The tale of Peter Rabbit and Mr. McGregor was adapted for this garden theme.

Garden Descriptions

Variegated Plant Collections

Over 12 different plants with splashes of white and green occupy this site.

Dryland Taro Trial Garden

Garden is being renovated.

Hawaiian Herbal Garden

Organic practices are used in growing Hawaiian medicinal plants such as aloe, kukui, laukahi, and ti.

Gardenia Garden

The garden has been redone in May 2014 with sweetly scented gardenia bushes and trees using water saving irrigation techniques.

Bromeliad Collection

These unique plants are found in the bus turnaround area and along the sidewalk leading to our main office.

Container Gardens

Throughout the gardens, various containers have been arranged along pathways, gardens, and around buildings.

Rose Trial Garden

A variety of roses are planted in arbor stone beds that leads to the garden. The first feature to see is the Peace and Hero's Garden at the entrance to the large open air Pavilion that features climbing roses and the current year's outstanding roses. Tree roses form a stoic line on one side. Along the hillside, a peanut groundcover holds the steep slope in place and overseen by the rose Lokelani near the fence line. Members of the Honolulu Rose Society care and manage the hybrid tea and floribunda roses.

Cacao Trials

40 trees representing 10 different varieties of cacao used in making chocolate were planted in fall 2010. After the plants mature to producing cacao pods, demonstrations on making chocolate will be presented. In late 2013, the first chocolate was made from this trial. Currently, the project is on-going.

Labyrinth Garden

15 hybrid hibiscus borders the entrance to this unique garden. The visitor can walk and mezmerise themselves while walking over the gravel pathway leading from the outside towards the center and back out to the exit. A hardscape type of garden built with S4C gravel and lined with red bricks.

White Garden

Plants with white in either the flowers or in the leaves (variegation) are featured.

Bee Hives

10 hives are maintained by volunteers, who do the cleaning and harvesting the honey.

Future Gardens

- 1. Bark-n Garden
- 2. Bougainvillea Collection
- 3. Conifer Collection
- 4. Seasonal Garden
- 5. Anthurium Collection
- 6. Papaya



Other Programs

Research Activities

On-going monitoring program with trapping of fruit flies in the citrus orchard. Indigo plants are cultivated to gather information for using plants as dyes by a master from Japan. UH researchers monitor varroa mites on honey bees with a lure station and active beehive and study different growing environments for cacao. NOAA has installed a weather station recording rainfall and temperature. The termite plot was discontinued in Fall 2013.

U.H. Master Gardener Program

The Oahu Master Gardener program disseminates horticultural information to the gardening client through phone consultation, plant clinics, demonstrations and e-mail. Walk-ins are assisted and always welcomed. Hours are 9:00 a.m. to noon Monday thru Friday (except holidays). Volunteers assist with the KCC and North Shore Farmer's Market, community promotions, the farm fair, and health fairs.

Garden Demonstrations

Each month (except for Dec. and Jan.) on the second Saturday, the Urban Garden Center hosts Second Saturday at the Garden, where volunteers and Master Gardeners feature a different gardening demonstration each month. For a list of demonstrations, see http://www.ctahr.hawaii.edu/ougc/.

Volunteer Program

Currently about 100 volunteers. They assist in planning, construction and maintenance of the gardens, in dissemination of gardening information, construction of infrastructure and buildings, and fundraising. U.H. Master Gardeners volunteer weekdays to assist homeowners with gardening questions. To volunteer, sign up for the Volunteer Training Class with Bea Aragon-Balgas at 453-6050 or beatriz@hawaii.edu. To become a tour guide for adults, senior groups, school and youth tours, sign up for the Docent Training Class with Bea Aragon-Balgas at 453-6050 or beatriz@hawaii.edu

Youth and Garden Program

About 2,500 youths participate in Children's Garden tours annually. Docents lead Grades K to 2nd grade children to the flora of the facility. Self-tours are popular with the preschool aged children. The annual Agriculture Awareness and Environmental Day conducted at UGC averaged about 550 4th and 5th grade students each year. Oahu MGs work with the schools to develop gardens in the school.

Gazebo

An octagon shaped building measuring 24 ft. by 24 ft with shingle roof and accented with a copper cupola accents the gardens and serves as a resting place for visitors, classroom, and meeting area for the community.

Informational Kiosk

An informational bulletin board for visitors of upcoming events, classes, facts, new plants, CTAHR new releases, etc.

Facility Rental

The facility is available for rental. Contact Bea for more information.

Staff involved with the Urban Garden Center

Kalani Matsumura (kalanitm@.hawaii.edu) – Jr. Coop. Ext. Agent, Oʻahu Master Gardener Coordinator. Josh Silva, (jsilva@hawaii.edu) – Asst. Cooperative Extension Agent, Sustainable Agriculture. Steven Nagano (snagano@hawaii.edu) – Coop. Ext. Agent, 4-H youth programs; ecosystem and Children's Garden Project Leader

Support Staff

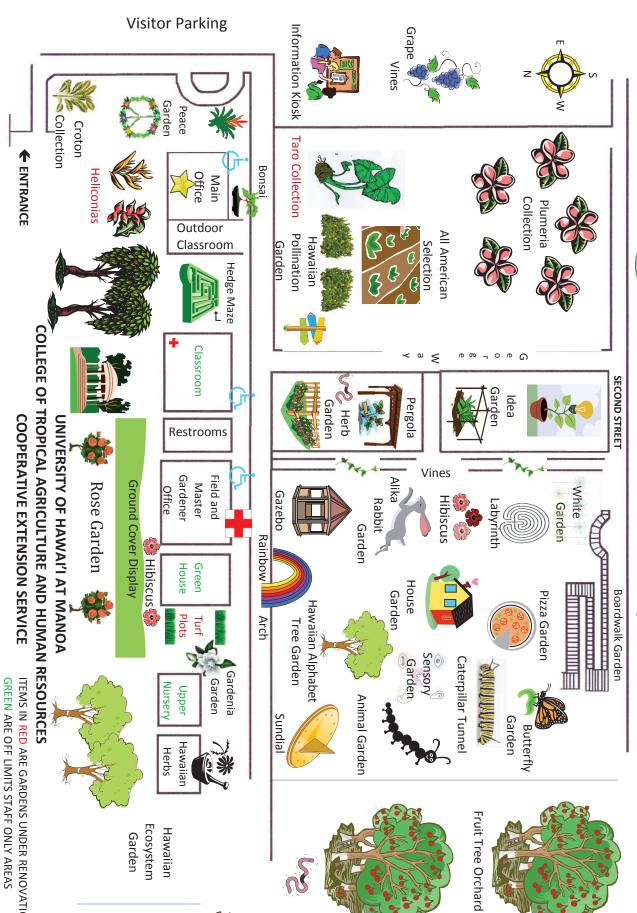
Bea Aragon-Balgas beatriz@hawaii.edu 453-6050) – Administrative Assistant ito Cacho – Ag Tech Nestor Dela Cruz – Ag Tech



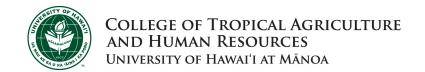
URBAN GARDEN CENTER

955 Kamehameha Highway, Pearl City, Hawaii (808) 453-6050 - www.ctahr.hawaii.edu/ougc/ "Home of Second Saturday at the Garden" 96782





Amphitheater



Examples of current activities

Information prepared for Navy and UH Easement Review Meeting February 14, 2019

CTAHR

- 2017 Facility Improvements to Infrastructure
 Final contract amount for General Repairs project
 by Close Construction was \$851,029.19. Interior
 painting of the Classroom and Main Office Buildings were not part of the scope of work. Contract
 work only called for touchup for the trim around
 the windows being replaced. On 4/6/48, classroom
 reopened for meetings new aluminum tables, new
 light fixtures, and new air-conditioning. There is also
 a new outside lanai in the back of the classroom.
- 4-H Youth Programs (Oahu 4-H Livestock Program and Oahu County 4-H Council, 250 youths) use the classroom for monthly meetings and workshops.
- Breadfruit production monitoring
- Compost Demonstration
- **Dryland Taro Cultivars Germplasm Project.**Started in 8/09, about 78 different dryland taro are planted as educational displays for the public.
- **Germplasm** bank for researchers and commercial producers.
- **Green Manure Demonstration.** Rotated with trials with dryland taro project and future All-American Selections Display (on-going)
- Legislative Ag Tour
- New citrus adaptability
- Nutrition Education for Wellness (NEW) Program. 7-8 staff and 15-16 aides utilize the classroom every 2nd Monday and 2-3 staff and 4 5 aides utilize the office every week.
- Oahu Master Gardener Program. OMG hotline is FTF on Wed mornings. OMG coordinates the Second Saturday at the Garden.

- 2017 Facility Improvements to Infrastructure. Final contract amount for Perimeter Fencing project by PIER was \$245,028.11
- Agricultural Diagnostic Service Center (ADSC).
 UGC is dropoff and pickup for soil, plant tissue and disease, and water samples. Seed varieties are promoted in the Idea Garden.
- Agriculture and Environmental Awareness Day is coordinated by Ania Wieczorek, Interim Associate Dean, Research, who continued the program started by Charlie Kinoshita. Over 500 5th grade youths from different DOE complex are rotated each year, with about 20 presenters and exhibitors involved.
- Cacao Tree Project
- Family Community Education (FCE) Program
 assists with Second Saturday at the Garden events
 with hands on activities for keikis related to the
 theme of the event
- Indigo and Mulberry Trials. Begun in 2006. The Introduction and Field evaluation of New Crops for Hawaii.
- Hawaii Native Plant Garden
- Plant Propagation Outdoor Expo One day for farmers and one day for public, that was attended by 395 people. Various agencies from Farm Bureau, HARC, Board of Water Supply, and college departments show cased their agricultural activities. (Summer 2017)
- **Pesticide Re-certification Program**. Classroom used the for classes
- Tropical Peach Research
- UH Bee Program

National

- All American Selection Garden is the only AAS garden in Hawaii.
- American Public Gardens Association (APGA). UGC is now part of the APGA. This list is used by garden professionals when looking for gardens to visit when on leisure travel or for any potential collaborative projects. It also puts us "on the map" of public gardens and university gardens.
- NOAA Weather Station. National Oceanic and Atmospheric Administration (NOAA), National Weather Service.
- Star Roses donates about 150 bare root and Weeks Roses about 35 bare root roses to the UGC Rose Garden every year.

State

- Arbor Day. UGC volunteers have provided 50,000 trees to the Arbor Day Tree Giveaway over 25 years. This was the 25th year of the Arbor Day Tree Give Away starting in 1993. The partners included: Hawaiian Electric Company (HECO), the Kaulunani Program, the Urban Garden Center (affiliated with the University of Hawaii College of Tropical Agriculture and Human Resources), the Wahiawa Botanical Gardens, and the Waimea Valley Audubon Center.
- NPDES MS4 Permit and Compliance. The Urban Garden Center possesses its "National Pollutant Discharge System Elimination System (NPDES) permit for Municipal Separate Storm Sewer System (MS4)". The Urban Garden Center informs volunteers, researchers, tree trimmers and other users to assist with compliance efforts.(DOH)
- Rough Sweetpotato Weevil. Traps and flyers in the gardens (9/1/10)

- The Ōhia Legacy Initiative, in partnership with the Kaulunani Urban and Community Forestry Program presented Oahu based Ōhia Presentation and Propagation Workshop. About 30 UGC vols, OMGs, and friends attended workshop on learning about ROD and how to propagate Ōhia from seed. (8/18/18) (DLNR)
- Coconut Rhinoceros Beetle (CRB) Monitoring stations and update on survey (HDOA)
- Little Fire Ant (LFA) Wasmannia auropunctata survey (HDOA)
- Mealy bug on papaya (HDOA)
- Oriental fruit fly monitoring (HDOA)
- Pollinators and Pesticides. Steve Russo (HDOA)
- Rat lung worm survey (HDOA)

Recertification Programs

- The **Landscape Industry Certified Technician** (LICT) training program is administered by Hawaii Landscape and Irrigation Contractors Association (HLICA) that consist of landscape contractors, landscape and irrigation businesses, non-profit organizations, and government representatives. UGC hosts the classroom.
- **Arbor Day Tree Giveaway**. Aloha Arborists Association members assist the public in tree selection and earn CEU to update their certification.

Memorandum of Understanding

- UGC has ~25 volunteer individuals or organizations that maintain an area or garden. The purpose of the completed MOUs is an agreement between UGC and the hui. It covers mission statement, budget, list of educational opportunities, and contact persons.
- Some hui have outside UGC ties with national, UH, or local: Hawaii Tropical Fruit Growers (local fruit growers), Soka Peace Garden (Soka Gakkai International), Honolulu Rose Society (American Rose Society), Fruit Hui (Hawaii Food Bank), Bee Hui (UH Bee Program).

Open Houses

- Childrens Garden opened in August 2004.
- Senior Garden Fair

- Filipino 100 year celebration
- Pollination Summer 2018



UGC Volunteer Program

- Averaged 8,913 man hours per FY since FY16 (13 years data) = \$226,390 x 13 years = \$2,943,072
- Oahu Urban Garden Ohana (OUGO) is a IRS 501(c)
 (3) organization formed to provide funds to support UGC programs, gardens, and volunteers. Helped sponsor renovations (security, lighting, and painting) for new UGC volunteer and staff breakroom.
 \$42,000 for the 2018 calendar year covered garden maintenance, propagation and supplies, board administration, and UGC projects overseen by Agent.
- In FY18, **\$233,115** was the value of **9,178 man hours** x \$25.40, which was Hawaii's rate in 2017.
- In 2018, there are **25 established groups, OMGs or individuals** with special interest who have worked at UGC for the past 3-4 years. The groups are given the Hawaiian name hui. They have provided to UGC much needed help in garden maintenance and development.
- Maintaining a strong cadre of **81 registered UGC volunteers** involved planning UGC events that help bring volunteers closer together. UGC sponsored a quarterly workday which attracted average 20 volunteers who helped in one major garden maintenance and with lunch hosted by OUGO. Ohana sponsored 2 educational ag tours to different farms have peaked volunteer interest in the commercial side of gardening. Staff and volunteers promoted to 22 people who were interested of volunteer orientation at UGC. Volunteers setup seasonal Halloween and Christmas decorations. An annual Christmas party of about 36 UGC volunteers and staff shared their ethnic foods, volunteer crafts, dance, and games. The mochi pounding and kadomatsu is our annual year ending event involved 45 volunteers with traditional and ethnic cultures being preserved by seasoned UGC volunteers. (FY2018)

Grants

• DLNR Kaulunani Program, \$7,800 (Arbor Day)

• Hawaiian Electric Industries Foundation, \$15,000 (Arbor Day)

Tours for FY13 TO FY18

- 76 docent led tours for 3,977 children Gr. K to Gr. 2 and 571 teachers and chaperones with user fees collected \$10,256
- **30 docent led tours for 422 adults** from Daycare Centers, Waikiki Community Center, and Plaza with donations collected \$233.
- **149 self-tours for 4,435 children** in preschool aged and 1,746 parents with user fees collected \$1,203
- Japanese Tours. Non-English speaking Japanese visitors can get a guided or self-guided docent tour of our Urban Garden. An abbreviated version of the garden tour was recently translated into Japanese so that Japanese-speaking friends can experience and enjoy all the beauty our garden has to offer. Guided tours in Japanese can be arranged on a limited basis from OMG Trainee Todd La Vine. July 2013

Business In-Kind Donations

- Alakona donated partial tubs of seal coat for parking lot and donated about 12,000 yds of cold planned material for garden pathway and service roads.
- Tree trimming companies like Davey, Sherwood, and Eager Beaver have exchanged rent for tree maintenance at UGC.
- Richard Lee Trucking donated hauling services for donated compost from Menehune Magic (50 cu yds)
- Home Depot with equipment, tools, equipment and garden supplies
- **Ideal Construction** donated materials, backhoe, trencher, and mechanic on-call

Community Groups

- Boy Scout Troops 75, 147, and 326 have worked with UGC volunteers and staff to complete Eagle Scout Awards.
- Diamond Head Kiwanis have assisted with the Rose Garden
- Girl Scout Daisy program work on patches
- Pearl City Bonsai Club established a bonsai garden in FY15 and host club meetings on the Third Saturday in the UGC Carport.
- Pearl City Home Depot Employee Day at the Gardens. 29 HD employees toured the gardens as a professional improvement day and ended with lunch. (7/20/16)
- Pearl City Lions have assisted with road restriping (Ogata Eagle Project) and garden work
- Soka Gakkai International has hosted Peace Day events in the Peace Garden for 3 of last 5 years.
- MidPac Road Runners have their annual Bill Beauchamp Bike Path 10K Run on Mother's Day race start and finish at UGC. Run sponsored since 2015.

- Hawaii Butterflies.org (Darlene M) assisted with the 2018 Pollination Event Second Saturday at the Garden for Monarch butterfly in exchange for crown flower collections.
- Local church members have done annual cleanups in the Animal Garden in exchange for donation of dwarf lauae and monster for luau
- Rotary Club of Pearl Ridge. Two garden projects were completed. The first project was installing, leveling and grouting slate pieces on a gravel base under the double pitch roof structure in the organic demonstration garden. Mr. David Morihara, work coordinator, has been the driving force every first Saturday of the month with workday projects in the Herb Garden. He also graciously offered to provide lunch for all the volunteers as he has for every first Saturday since taking charge. The second project was amending 5 pre-dug areas for the new proposed rose garden with compost and bone meal. Mr. Robert Speer, Oahu Master Gardener, led the amending of the soil for the planned spring planting of the roses in conjunction with the members from the Honolulu Rose Society. (11/27/10)
- The William P and Dana Anne Yee Foundation donated two insect cabinets, drawers and actively bring in collected insects. The Dana Anne Yee Foundation, a Hawai'i non-profit corporation, focuses on early stage protection and preservation of our beautiful state. "Early" is the key word. Responsible stewardship begins with teaching and sharing our knowledge with our keiki at an "early" age. Dana Anne Yee, the Foundation's principal and a prominent local landscape architect, has long been a leader in teaching the keiki of Hawai'i to be helpers and future leaders in keeping Hawai'i special. The grass roots Foundation provides sustainable, native, edible, and learning gardens for the keiki in areas of the island that are in need. The collection is being housed in the UGC classroom for classes and students to look at. (4/1/16) The collection was generously donated by 'Oahu Nursery Growers Association, Scenic Hawai'i, Inc., Landscape Association of Hawai'i, Karen Li, New York, and the Dana Anne Yee Foundation. Donation value, \$1,700. Dedication was done on Oct 8, 2016, 10 am in the classroom

Homeless Concerns

- December 2018 working with Governor's Office to Incident and HPD reports of ag thefts, damage to address homeless at UGC.
 - personal and company vehicles, break-in to Quonset hut and office, and threats to staff must be addressed.

Military 4-H

• Kate Eickstead coordinates her staff work at military bases to involve youth with the **Disney Grant** focused on the environment. Military 4-H conducts programming and workshops at UGC. 2017 4-H and **Disney** Connecting Youth to Nature Program involved approximately 80 youth.

Digital Newsletter

• Short Takes at UGC is our e-mail weekly newsletter to 190 volunteers, friends, CTAHR staff, and interested persons.