

Department of Parks and Recreation (DPR), Division of Urban Forestry (DUF), Honolulu Botanical Gardens (HBG)
Baseline Services - Maintenance Positions (Nursery Worker I, II, and Plant Propagators)

Honolulu Botanical Gardens

Category	Description	Frequency
PROGRAMS SUPPORT		
Logistics	Provides logistical support to program staff, ensuring smooth operations for various events and activities. Responsibilities include setting up tents, tables, and chairs, performing work duties during events, assisting with safety/emergencies, preparing classrooms for educational programs, and handling other on-site logistical needs.	Weekly
Landscape Decoration	Creating intentional arrangements, enhancements, or adornment of trees, plants, and other natural elements to create aesthetically pleasing, themed, or functional displays. Use of artistic design and horticultural knowledge to transform spaces, support education, or create a specific ambiance.	Every 3-6 Months
PLANT COLLECTION SUPPORT		
Inventory Management	Keeping records of plant species and health status, as well as pruning/maintenance activities for all plant inventories.	Daily
Field Label Maintenance	Inspecting labels and making sure they are accurate, installed properly, clean and visible.	Daily
Field Inventory Management	Conduct field inventory inspections of accessioned plants for health, viability and aesthetics.	Daily
Seed Propagation	Conduct seed sowing techniques, monitor and record germination and seedling care for database.	Daily
Vegetation Propagation	Vegetatively propagate through cuttings, air-layering, grafting, and plant division.	Daily
Nursery Management	Maintaining various inventories and records within the nursery, such as plant care and inventory, chemical applications, soil mix formulations, fertilization schedules, and pest and disease management. Assist with research requests and plant import/export.	Daily
PLANT CARE		
Pruning	Plant pruning based on the plant's growth habits and aesthetic intent. Prune plants/trees to preserve access to pathways, ramps, railings, entrances, signs, and lighting.	Daily and on an as-needed basis
Fertilizing	Supplemental fertilizing based on plant species, season, plant health, and evidence of nutrient deficiency.	As needed
Pest and Disease Control	Insecticides/fungicides application based on plant species, season, pest or disease, and proximity to public spaces.	As needed
TREE CARE		
Pruning	Tree maintenance pruning is conducted every 18 to 24 months to prune/remove dead, dying, diseased, crossed, and defective branches in the tree canopy. Trees are pruned to the Standard specifications in the Urban Forestry Services Master Agreement, MA-DPR-2000134.	Every 18 to 24 months
Tree Inspection	During each maintenance pruning, a tree inspection is conducted to assess the overall health, identify and examine any defects, and ensure the tree's structural safety for visitors.	Every 18 to 24 months with Tree Pruning Contract

LAWN CARE

Mowing Frequency	Common area lawns are mowed according to the specific garden's schedule, which varies due to weather, soil, staffing capacity, visitation and programming, and other factors.	Every Four (4) Working Days
Fertilizing	All lawn areas are fertilized annually with a broad-spectrum turf fertilizer.	Annually
Irrigation	Lawn areas are evaluated individually for irrigation requirements. Rainfall, temperature, demand of plant materials, and event scheduling determine irrigation volume and frequency, as well as watering in fertilizers or other products.	Daily
Aeration	All lawn areas are aerated at least once yearly to help minimize/reduce thatch, maintain a healthy soil structure, and reduce compaction.	Annually

LANDSCAPE CARE

Planting Beds – General Maintenance	<p>Weeding: Weeds are monitored and removed immediately and daily.</p> <p>Dead Plants: Dead plants and dead plant materials (leaf and branch debris) are removed daily.</p> <p>Edging and Mulch: Planting beds are edged in alignment with the garden's mowing schedule and garden location.</p> <p>Irrigation: Irrigation frequency in planting beds occurred daily. The length of time the irrigation runs is determined by plant species, plant needs, season, temperature, and rainfall.</p>	Daily
Hedge	Hedges are maintained as needed. The frequency and technique are determined by the plant's aesthetic, function, and location.	As needed
Mulch Rings	Mulch rings are installed in uniform, 2-inch-deep, circular shapes around trees/shrubs and within planting beds to help suppress weed growth, improve soil, regulate soil moisture and temperature, and prevent mechanical damage to trees and shrubs.	Daily and on an as-needed basis

NATURAL AREAS

General Maintenance	Work is conducted daily to manage the overgrowth of trees and plants in forested, unmaintained areas to prevent them from encroaching on roadways, sidewalks, neighboring properties, handrails, trails, and obstructing streetlights, pathway lights, signs, and entrances.	Daily
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FACILITY MAINTENANCE

Offices, Workshop, & Classroom	All work and program activity areas are vacuumed or swept and mopped based on use and on an as-needed basis to maintain cleanliness and sanitation.	Daily and on an as-needed basis
Restrooms	All restrooms are swept and moped daily. Paper & soap products are monitored and changed as needed, and all toilets, sinks, and restroom fixtures are cleaned and wiped down daily.	2 to 3 times daily and on an as-needed basis
Greenhouse	The Greenhouse is inspected to ensure that automated greenhouse functions are operating correctly, plants are well-maintained, and the greenhouse is clean and clear of debris.	Daily
Benches and Furnishings	All benches, tables, metal trash receptacles, and furnishings are clean, maintained, and inspected for defects daily.	Daily
ROADWAYS, SIDEWALKS, PATHS & TRAILS		
General Maintenance	Roadways (where applicable), sidewalks, paths, and trails are inspected and cleared daily of plant debris, branches, trash, or other objects to ensure visitor safety.	Daily and on an as-needed basis
Daily Maintenance	Roadways, where applicable, are blown twice a week. All sidewalks, paths, and trails are cleared of trash debris daily. Leaf blowers are used daily and on an as-needed basis to blow off the surface to remove leaves, dirt (off concrete), and debris.	Daily
Inspections	All roadways, sidewalks, paths & trails are inspected for cracks, potholes, and elevation changes due to tree root growth daily.	Daily
PARKING LOTS		
General Maintenance	Parking lots are inspected and cleared daily of any plant debris, branches, trash or any other objects to ensure visitor's safety.	Daily
Daily Maintenance	Parking lots are cleared of trash debris daily. Leaf blowers are used daily or on an as-needed basis to blow off the surface to remove leaves, dirt (off concrete), and debris.	Daily
Inspections	Parking lots are inspected daily for cracks, potholes, and elevation changes due to tree root growth.	Daily
TRASH AND DEBRIS REMOVAL		
Daily Maintenance	All trash and recycling receptacles are checked and emptied daily. During summer concerts, events, school, and large group visitation, receptacles are changed more frequently.	2 to 3 times daily and on an as-needed basis

Honolulu Botanical Gardens

Mowing and Restroom Baseline Standards Analysis

Foster Botanical Garden

- 3 Sets of Restrooms
- Accessible Mowing Areas

Ho'omaluhia Botanical Garden

- 3 Sets of Restrooms
- 7 Comfort Stations
- Vast, Challenging Mowing Areas

Lili'uokalani Botanical Garden

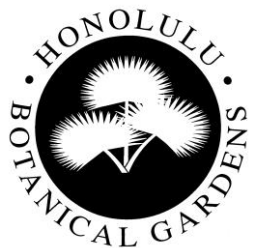
- 1 Set of Restrooms
- Accessible Mowing Areas

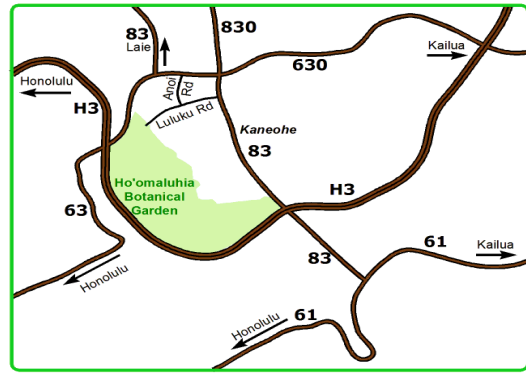
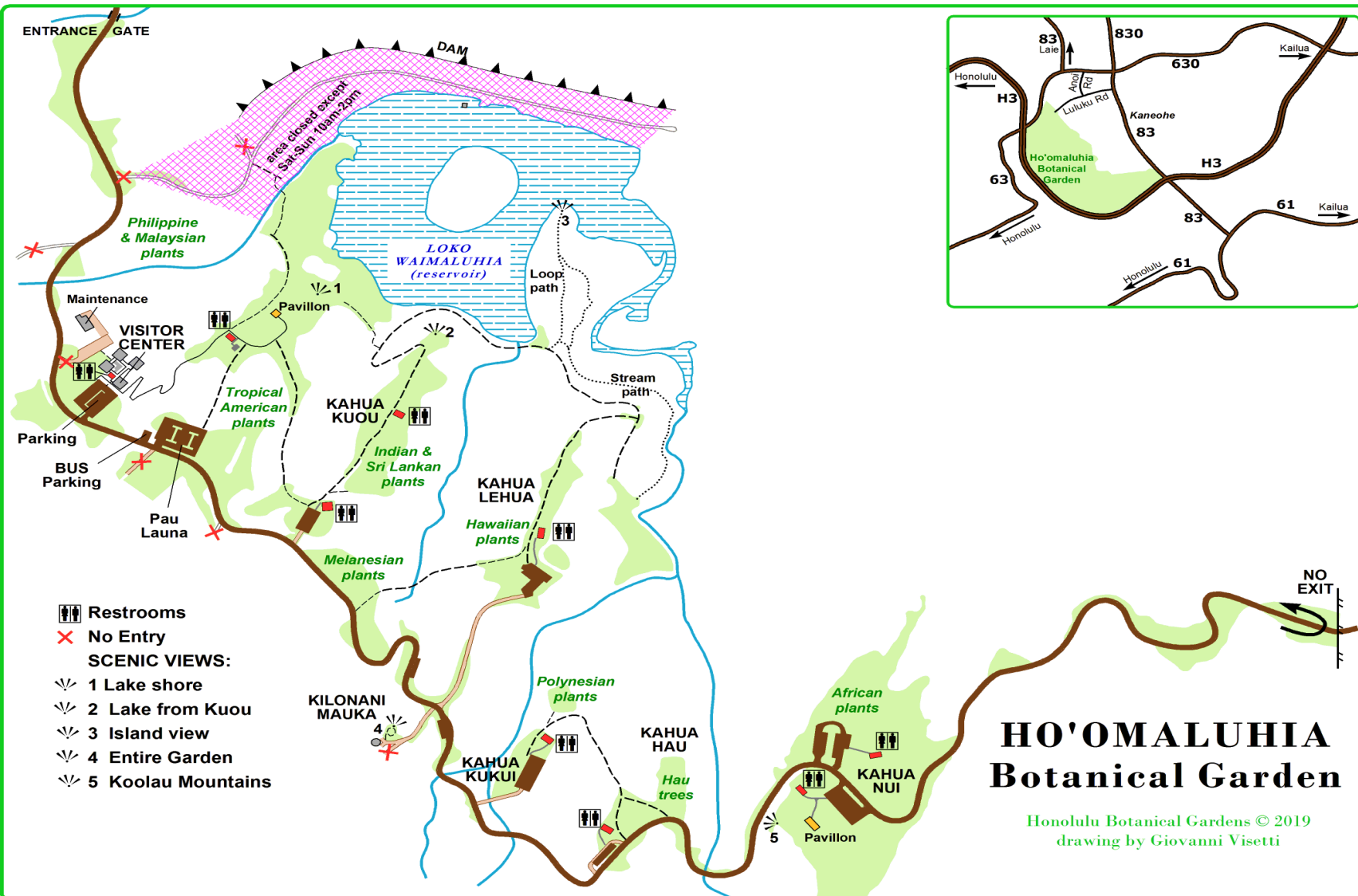
Koko Crater Botanical Garden

- No Restrooms
- No Areas to Mow

Wahiawā Botanical Garden

- 2 Sets of Restrooms
- Manageable Mowing Areas





Size	
Acreage	400
Cultivated Acreage	225

Attendance	
Annual Visitors	601,782

Plant Collection	
Accessions	2,186

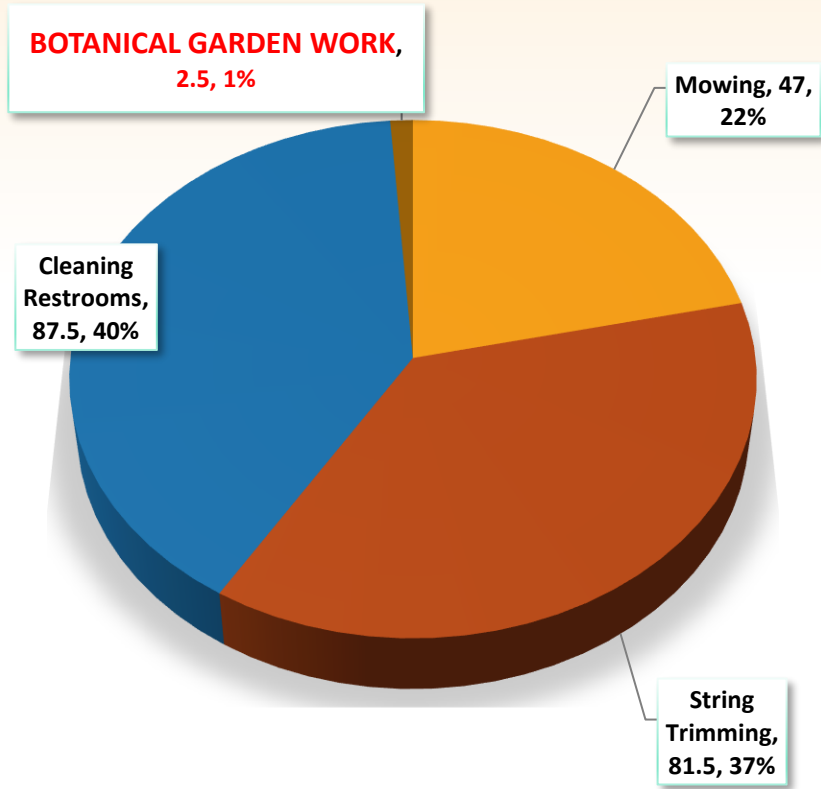
Facilities	
Comfort Stations	7
Restroom	6
Buildings	6
Camp Sites	28
Pavilions	2

Staffing	
Recreation	
Recreation Specialist I	2
Program Aide PT	8 – 10
Park Attendant PT	4
Grounds	
Maintenance	
Supervisor	1
Plant Propagator	1
Nursery Worker I	5

Ho'omaluhia Botanical Garden – Mowing/Restroom Analysis



**218 Hours Spent/Week
MOWING AND RESTROOMS**



Current Available Staffing

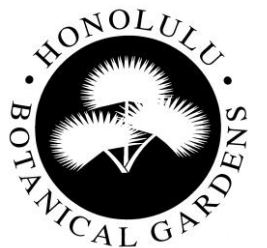
Category	Details	Calculation	Total Hours
Number of Staff	5 Nursery Worker I		
Daily Hours/Staff	8 Hours/day	5 x 8	40 available hours/day
Work Days/Week	5 days/week	40 x 5	*200 available hours/week

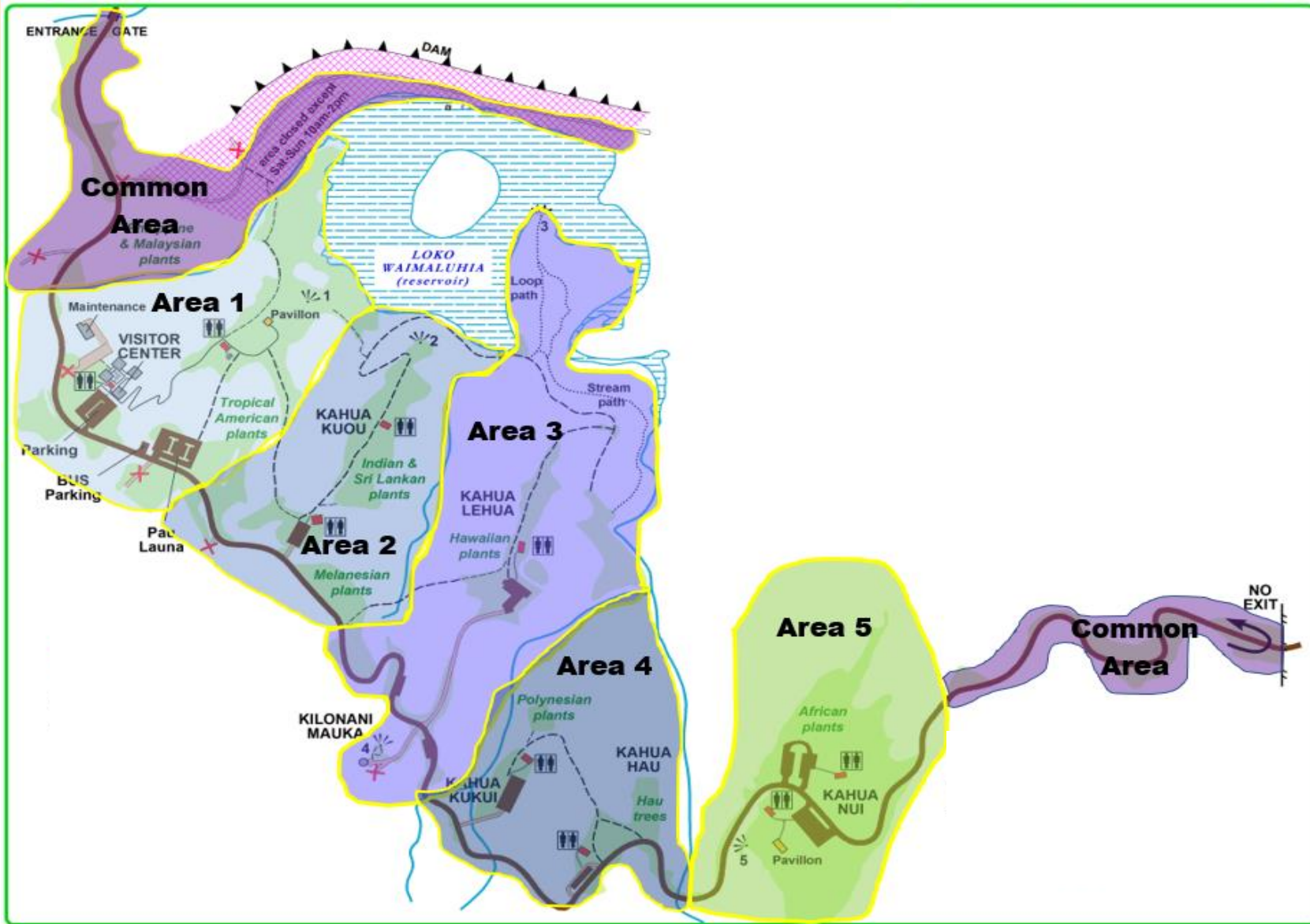
* Hours are reduce by vacation, sick, holidays

Basic Maintenance Tasks

Task	Hours/Week	Percentage
Cleaning Restrooms	87.5	40%
String Trimming	81.5	37%
Mowing	47	22%
Botanical Garden Work (Plantings, Early Tree Care, Accession Data Collection, etc.)	2.5	1%
TOTAL HOURS PER WEEK	218	100%

Ho'omaluhia – Task-to-Time Comparison





Ho'omaluhia – Mowing Areas (30+ acres per)

Ho'omaluhia Staffing

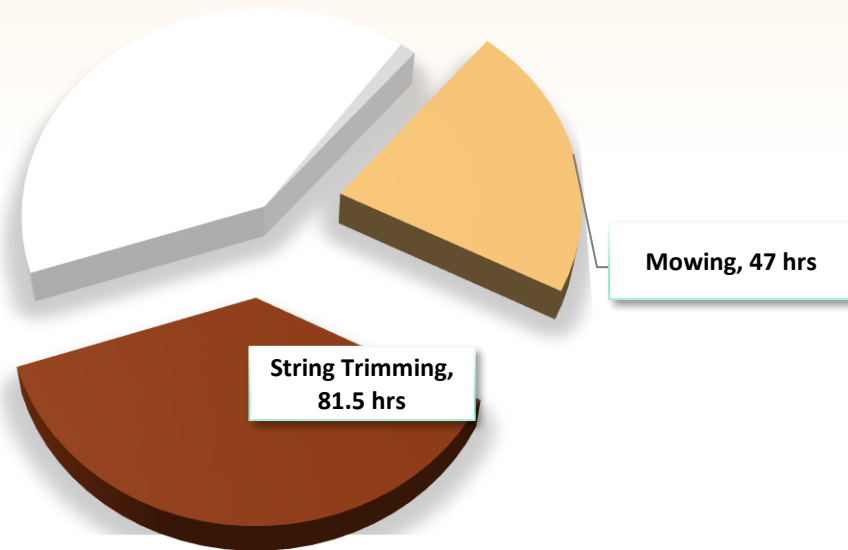
Area	Staffing	Acreage (Approx)
Two Common Area	All Staff Common Area	100
Area 1 thru 5	1 staff member/ area	30

Garden Examples

Facilities	Staffing	Acreage
UH Manoa	1 staff member	10
"Standard" Botanical Gardens	1 staff member	1 - 2
"Higher End" Botanical Gardens	3 to 5 staff members	1



Hours Spent/Week MOWING & STRING TRIMMING



128.5 out of 200 hrs/week dedicated to mowing & string trimming

Obstacles:

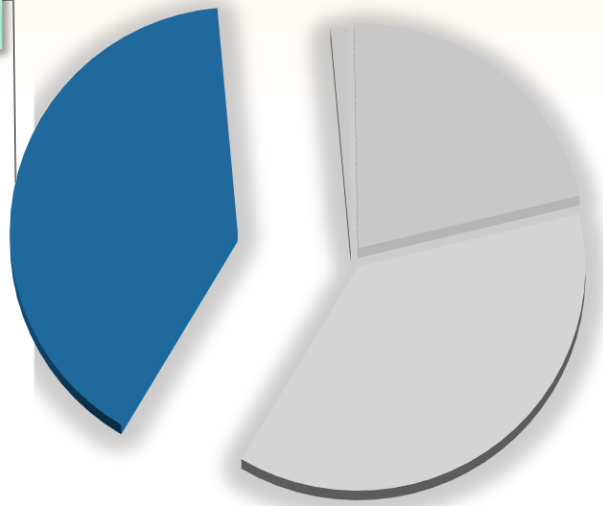
- ✓ Garden mowing is not like mowing athletic fields
- ✓ 2,186 plant accessions; singular trees, planting beds, etc.
- ✓ Areas have rocks, roots, uneven terrain
- ✓ Trees and plants scattered throughout the areas
- ✓ Vast acreage
- ✓ Inclement weather
- ✓ 600,000 visitors per year
- ✓ Hard-to-reach areas; streams/culverts
- ✓ Only one staff per area large area (30+ acres per)

Ho'omaluhia - MOWING (cont.)



Hours Spent/Week RESTROOM MAINTENANCE

Cleaning Restrooms,
87.5 hrs.

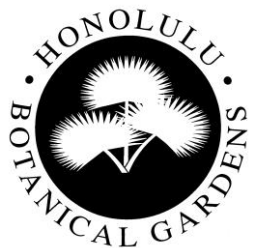


Total Hours	Task Description	Duration	Total Time Per
87 Hours	Daily Cleaning	30 Mins./ Men's/Women's Comfort Station	60 mins.
	Refresh Cleaning	15 Mins./ Men's/Women's Restroom	30 mins

- 3 Restrooms**
- Toilet Stalls
 - Urinals

- 7 Comfort Stations**
- Toilet Stalls
 - Urinals
 - Interior Showers
 - Surrounding Walkways
 - Camper Sink

Ho'omaluhia - Task to Time Comparison



Hours Spent/Per Week Botanical Garden Work

