

HER 2024 Summary Report



Another year has passed, and **Hawaii Environmental Restoration** is happy to offer its 2024 final report with much gratitude in our hearts for your trusted support; we deeply appreciate our growing collaborations within local and global communities! Based on HER budget arrangement with principle grantors, following this final 2024 report, HER will be switching from a New Year's annual report, to a fiscal year reports, so please keep your eyes open for our summary of accomplishments in July of 2025.

Brief Overview



The year 2024 marked a decade of intensive restoration and education efforts in the Keau'ohana Forest Reserve and in the Puna/Hilo Community. HER underwent significant changes in 2024, hiring a new CPA with Kinamona Bookkeeping, which has been a true professional upgrade to our financial record system; and enrolling in a highly efficient online ADP payroll company. HER's operation is functioning smoothly and steadily, accomplishing well beyond proposed goals on all levels. HER gives special

thanks to the local Kosasa, the Atherton Family Foundations, and to County District 4

for contingency funds, all of which helps keep our team going strong. We also are so grateful to several treasured private donors, and to ALL OF YOU for generous donations and essential moral support!

The Keau'ohana crew began a 9th pass of the 20 acre restoration site in late August of 2024; the 8th pass was accomplished well within the annual aim, and included secondary passes in the volunteer area, endangered species rich area, and trails systems. HER expects to again complete its systematic restoration pass within a year.



Due to the amount of young plantings in core regions of the restoration site, brief yet regular sweeps by the entire crew in support of them have become necessary, rather than the task being conducted by one individual recording and monitoring on a regular basis. The anticipated fencing project has not yet been initiated by Fish and Wildlife, and we are hopeful that the project will occur in 2025 as promised, in order to enhance plant protection against feral pig activity.

A total of 600 volunteer hours were completed by 135 volunteers in 2024, bringing our total since 2014 to 7,590 volunteer hours by 1,212 volunteers. A record high of 1,107 seedlings were planted within the year, bringing our grand total to 2,963 keiki planted in Keau'ohana since the project's launching in 2014. The greater part of these plants have been donated by Ann Kobsa at the Koa'e Native Plant Nursery, which is now under the umbrella of HER nonprofit!

Also in 2024, 7 forest volunteer events were facilitated, and HER participated in 10 outreach/education events completing a total of 17 special events. Since 2014, we have facilitated, and participated in over 148 special events! All totals for 2024 were well beyond stated intentions. HER has beyond 1,000 e-mail subscribers and an actively growing Facebook/ Instagram audience that informs and engages people about HER highlight activities throughout the year. Please view our website blog <https://hawaiienvironmentalrestoration.org/blog/> to enjoy photographs, and to learn more about the details of HER activities in 2024.



The decade has been productive despite ongoing environmental challenges, especially in light of ROD. HER goals have adjusted to much loss in native shade over the years, and another decade is projected before shade establishment again offers more stable conditions to a delicate native assemblage. There is an exciting array of native species being introduced into Keau'ohana for its ultimate protection and preservation in light of

climate change, invasive species success, and numerous other human impacts (see attached plant list). We aspire towards a native plant community vision that resembles its original state, and secures a last remaining representation of a biodiverse native lowland rainforest (<1,000ft).

Special Forest Volunteer Events:

(please see excel document for details about forest events)

1. March 17th – Spring Equinox Planting Event
2. May 20th – Trinity University, BC. Canada.
3. June 22th --Summer Solstice planting event
4. July 13th – Koa’e Coastal Cleanup (coordinated effort which engaged HER volunteer community)
5. Sept 22nd – Fall Equinox planting event
6. Oct 7th -- Volunteer Ekaha Planting
7. Dec 21st -- Solstice planting event

Community Outreach, Research and Education Events

1. March 9th -- Revitalize Puna Program Kīlauea Recovery Team/ Council District 4 environmental resource platform for quarterly activations to bring community and County together. HER is also on the Environmental Resource Capacity Area (RCA) team to advance on broader lowland environmental issues and concerns.
2. April 22nd – Earth Day at the University of Hilo campus (first since Covid-19), hosting bus loads of students from schools all over the Island as far as Na’alehu! HER was supported by two board members /volunteers (cultural advisor, Thomas Brennon, and Secretary/treasurer Batya Okunov) alongside Jaya, creatively engaging students and faculty in learning the Hawaii plant distinctions (native, Polynesian-intro, invasive species) and species, and informing the public about the Keau’ohana project. HER recruited 16 new e-mail subscribers and volunteers at this event.
3. May 17th -- HER *Lowland Wet Forest Working Group (LFWFG)* site visit to *Wao Kele O Puna*, located directly above Keau’ohana Forest Reserve. HER goal is to help support numerous forest professionals in lowland restoration efforts throughout Puna and Hilo Districts. Discussion was held concerning the Office of Hawaiian Affairs’ (OHA) management details and restoration strategies for this large 126,000 acre lowland wet forest unit (above 1,000ft).
4. May 18th -- The Native Hala Community Festival located at the Maku’u market place in Puna event hosted numerous workshops, performances, and exhibitors, to help educate and inspire the public to protect hala (*Pandanus tectorius*) and its rich traditional value. HER tabled the event, experiencing the highest number of volunteers (36) ever recruited in her outreach history. HER also offered a discussion workshop on ways to incorporate the species in our yards and toward sustainable development.

5. July 8th – The Vitousek Talks at UHH have a long held annual tradition of bringing researchers together to share about their studies and environmental projects. HER offered a full presentation and discussion at the event to summarize its work since 2014.
6. July 13th – HER completed its 11th and final Revitalize Puna Event in Pahoia where more than 550 community members, staff and volunteers joined. The Puna community has come a long way over the past several years thanks to organizers of this quarterly event, County Representative Ashley Kierkiewicz , Zoe Callahan, and many others.
-- Two HER special Events occurred on this day including A marine debris cleanup, organized collaboratively by the Koa`e Community Association, Malama O Puna, and Hawai`i Environmental Association, recruited 26 volunteers from the Koa`e/Wa`awa`a area. In total, 750 pounds of waste were removed, requiring a total of 83 person-hours (please see excel document for details about forest events).
7. July 20th – La 'Ohana o Pohoiki' Festival, was a celebration and gathering for the generational 'ohana of Pohoiki and all 'ohana. It was a day to bring our community together and learn from one another through a diverse range of workshops, performances, and exhibitors. This special event, organized by Na Maka Haloa and Hua 'Āina in collaboration with the County of Hawai'i and Kamehameha Schools, was deeply successful in its aim to foster connection to Hawaiian culture and traditions for future generations. HER was honored to table the event, and recruited 16 more subscribers/volunteers!
8. August 8th -- 25 Kosasa Community-Based Environmental Stewardship (CBES) grantees gathered at the University of Hawai'i - West O'ahu's Academy of Creative Media to share and learn about the practices used to affect and track place-based environmental improvements; employ a "trifecta" approach to meaningful collaboration; and engage the community to be aware, understand, and take action to address critical environmental concerns. HER offered a presentation formally recorded by the Kosasa Foundation, engaging discussion in an interactive learning space where we shared about practices that are working well; challenges that we are facing; and explore possibilities of how to overcome barriers together.
9. October 23rd -- Hawai'i Island Weed Management Forum was a collaboration between Big Island Invasive species (BIISC), the National Park Service (NPS), Three Mountain Alliance (TMA) and the University of Hilo (UHH) Ecosystem Extension. This event brought East Hawai'i environmental managers together to make connections and exchange information, and to bolster collective weed management and restoration efforts occurring in our community. HER shared among other presenters offering synopses of projects being conducted, with a focus on the challenges and successes regarding invasive species control. It was a powerful opportunity to engage around inspiring techniques and achievements. Talks and activities, both structured and unstructured throughout the day provided a warm environment to support one another in what is very demanding but necessary work.

10. HER *Lowland Wet Forest Working Group* (LWFWG) visited Kūkūau, a 1,600 acre healthy early succession ohia/uluhe forest site under the stewardship of the Hawai'i Land Trust, hosting a number of other native species, and showing much promise to future biodiverse native forest land above Hilo. By collaborating together we strive to ensure best possible restoration practices for each of our projects in support of remaining lowland wet forest environments in Hilo and Puna Districts. Collectively, we are working toward developing a cohesive stewardship manual for public support regarding native vegetation and invasive species issues.

Collaborations Update

With every year *HER* furthers in its alliances with like-minded organizations within our local and global communities. We value these growing collaborations and recognize that this work can only be accomplished by joining forces. We at *Hawaii Environmental Restoration* face the future with growing inspiration and are sincerely grateful to all who recognize our contribution to Hawaii's challenged environment.

Collaborations include:

- Local, U.S. mainland and international schools and community organizations – Coordinating volunteer restoration/ educational opportunities
- University of Hawaii at Hilo (UHH) - Supporting vegetation classes, student graduate studies, and special events.
- UH Hilo Climate Adaptation Science Center; developing a climate-resilient restoration approach that combines functional, climate and geographic data; under which HER collaborates with the *Lowland Wet Forest Working Group* (LWFWG).
- Hawaii Community College (HCC) – Hosting service learning events and internships
- Plant Extinction Prevention Program (PEPP), the Division of Forestry and Wildlife (DOFAW), and the Volcano Rare Plant Facility (VRPF) – Monitor, help propagate and preserve the endangered ha'iwale
- Natural Areas Reserves (NARS)/ DOFAW) - Fencing of all natural clusters of the endangered ha'iwale (*Cyrtandra nanawalensis*).
- USDA FS IPIF – Institute of Pacific Islands Forestry; US Dept. of Ag; help support bio-control against target invasive species.
- United Nations Environmental Program / *Restoration Road Trip* representing HER restoration efforts among worldwide efforts.
- Revitalize Puna Program -- Kīlauea Recovery Team/ Council District 4 environmental resource platform for quarterly activations to bring community and County together. HER is now on the Environmental Resource Capacity Area (RCA) team to advance on broader environmental issues and concerns.
- Big Island Invasive Species Committee (BIISC) – volunteer opportunity, community webinar, outreach collaborations.

- LEMU – Innovative conservation platform in developing an “Atlas of the Biosphere” to help revert the environmental crises by connecting and supporting organizations whose work targets forest & habitat conservation/restoration.
- Malama O Puna (MOP) – Initial umbrella organization for HER current efforts
- Fruit Tree Planting Foundation (FTPF) - Provides seedlings and out-planting support
- Hawaiian Affairs (OHA) – Collaboration for preservation of Wao Kele O Puna (WKOP).
- Hawaiian Tourism Authority -- Malama Hawaii Program directing tourists to our volunteer program
- Rustic Pathways - Summer volunteer events student-travel programs that empowers students through innovative and responsible travel experiences to positively impact lives and communities around the world.
- Global Giving Community- Fundraising support/ Global exposure
- Give Big Community Foundation – Local Hawaii Fundraising platform
- USGS PIERC -- Pacific Island Ecosystems Research Island Forestry -- Hawai'i Cooperative Studies Unit Developing a Restoration synthesis
- Ecosystems Extension Project/UH Mānoa, Dept. of Natural Resources and Environmental Management -- finds collaborations to support knowledge exchanges on the topics of Invasive Plants, Invasive Animals, and Climate-Change Resilient Restoration for Natural Resource Managers.
- HIARNG - Hawaii Army National Guard / Keaukaha study/experimental plots
- HILT—Hawai'i Land Trust
- OHA - Office of Hawaiian Affairs/ Wao Kele o Puna
- Pohaku Pelemaka / Puna coast protection and preservation
- KS – Kamehameha Schools

Restoration Out-planting Species for Keau'ohana (in a general order of abundance):

Mamaki (*Pipturus albidus*) (direct seeding)
 Ohe (*Polyscias hawaiiensis*)
 Akia (*Wikstroemia sandwicensis*) Hapu'u (*Cibotium spp.*)
 Alahe'e (*Psydrax odorata*)
 'Ohi'a (*Metrosideros polymorpha*)
 Hala (*Pandanus tectorius*) –
 Kopiko (*Psychotria hawaiiensis*)
 Lama (*Diospyros sandwicensis*)
 Kolea (*Myrsine lessertiana*)
 Loulu (*Pritchardia beccariana*)
 Ha'iwale (*Cyrtandra Nanawalensis*)
 Ma'o hau hele, (*Hibiscus brackenridge*)
 Papala kepau (*Pisonia umbellifera*)
 Kou (*Cordia subcordata*)
 Neneleau / Hawaiian Sumac (*Rhus sandwicensis*)
 Ama'u (*Sadleria pallid*)

Pōpolo kū mai (*Phytolacca sandwicensis*)
'Uki'uki (*Dianella sandwicensis*)
Naupaka kuahiwi (*Scaevola chamissoniana*)
Akiohala (*Hibiscus Furcellatus*)
'Ilie'e (*Plumbago zeylaniza*)
Ahu'awa (*Cyperus javanicus*)
'Clermontia hawaiiensis (Oha kepau)
Pohinahina (*Vitex rotundifolia*)
Ulei (*Osteomeles anthyllidifolia*)
Ko'oko'olau (*Bidens hawaiiensis*)
'Opuhe (*Urera glabra*)
Uki (*Machaerina angustifolia*)
Hame (*Antidesma platyphyllum*)
Maile (*Alyxia stellata*)
Pukiawe (*Styphelia tameiameiae*)
'Ahakea (*Bobea timonioides*) (no seedlings available but would like to plant)
Milo (*Thespesia populnea*) (not yet tried but may introduce in more disturbed areas)