

Aloha Tree Alliance Summary

Mission: To strengthen Hawaii's environmental resilience and mitigate climate change.

Category: Environmental protection and education

Contact: Cailyn Schmidt, Operations Manager

Address: 7192 Kalaniana'ole Highway, PMB 270, Honolulu, HI 96825

Grant History: N/A

2022 Request:	\$25,000 for general operating support
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Notes:

- Founded in 2020.
- Seeks to restore Kuli'ou'ou Ridge Trail from forest degradation due to invasive species, erosion, and hiker traffic.
- Kuli'ou'ou' Ridge Trail is a 5-mile trek close to Honolulu – one of the most popular hiking trails on the island.
- Goal is to plant 300 native trees, provide trail maintenance, and facilitate education of natural resources.
- Has formed alliances with similar organizations and Hawaii State Department of Land and Natural Resources and Department of Forestry and Wildlife.





Proposal to: Laurence H. Dorcy Hawaiian Foundation
Submitted by: Aloha Tree Alliance
Project: Kuli'ou'ou Trail Restoration Project
Amount Requested: \$25,000
Website: alohatreealliance.org
Date: January 31, 2022

Executive Summary

It is easy to look at a forest and simply see trees. Beneath a forest's vast canopy, however, lies one of Earth's most vibrant ecosystems. Hawaii's native forests shelter more than 18,607 plant and animal species, more than 90% of which are unique to the Islands. O'ahu's forests draw in two billion gallons of water per day, and safeguard and replenish Hawaii's sources of fresh drinking water while preserving rare native species. They contribute to healthy reefs by protecting them from destructive soil run-off and provide a beautiful, relaxing setting that promotes health and well-being to all.

Today, more than half of the Islands' native forest canopy has been lost, and threats of invasive species, climate change, and human behaviors that cause environmental damage and erosion destroy the very ecosystems we depend on. About 38% of Hawaiian plants are considered extinct or threatened, 10% presumed extinct, 12% endangered, 4% vulnerable, and 12% rare. Currently, the State of Hawaii allocates just 2% of its overall budget to natural resource management and does not have the capacity or budget to address the environmental degradation that is evidenced on many of its hiking trails. The fragility of Hawaiian natural ecosystems requires urgent vigilance if they are to remain sustainable and recognizable.

Aloha Tree Alliance's (ATA) first project to strengthen Hawaii's environmental resilience and mitigate climate change is the restoration of the Kuli'ou'ou Ridge Trail. This popular and once pristine hiking trail suffers from forest degradation due to invasive species, erosion from an influx of hikers influenced by social media and tourism, and lack of state funding to properly maintain the trail. Our trail restoration project will begin to increase the resiliency of Kuli'ou'ou's forest and help prevent soil run-off to Maunaloa Bay through native tree planting, environmental education about traditional Hawaii plants and trees, and active stewardship. ATA's work, which spans from *mauka* (mountain) to *makai* (sea), fills a need not currently met by state agencies and businesses.

Aloha Tree Alliance respectfully seeks support of \$25,000 from the Laurence H. Dorcy Hawaiian Foundation to continue its important work on the Kuli'ou'ou Ridge Trail for the next year. ATA aims to plant 300 more native trees while ensuring their survival rate through consistent trail maintenance, hiring and training of two candidates through ATA's Stewardship Program, and facilitating native and plant education programs on one of the most beloved hiking trails on O'ahu.

Organizational Background

Aloha Tree Alliance is a local 501(c)3 non-profit founded in 2020 with a mission to help mitigate climate change. We are committed to initiating and supporting projects that advance resilient forest ecosystems through native tree planting, and developing tomorrow's leaders by providing internships and environmental education.

ATA sources its trees from the Division of Forestry and Wildlife's (DOFAW) nursery in Makiki, O'ahu and other third-party nursery vendors when DOFAW's nursery cannot meet ATA's order requests. In the latter case, ATA must pay third party inspectors to prevent the introduction of agricultural pests and/or diseases into Hawaii's native forests.

We use a collaborative, science-based approach in our partnership with Hawaii State Department of Land and Natural Resources (DLNR) and Department of Forestry and Wildlife (DOFAW), landowners, policymakers, and businesses to bring together diverse interests for the benefit of Hawaii's people and our natural resources. Our conservation project utilizes sustainable forestry and best management practices to guarantee the health and longevity of our trees.

ATA was selected as a Kaulunani Urban Forestry and Community grant recipient in October 2021. Since then, the ATA team has built alliances with 15 like organizations, hosted 154 volunteers at five Kuli'ou'ou restoration project work days, developed a team of 10 restoration site leaders, launched an on-site pilot environmental science learning program, and supported one intern through its unique Stewardship Training Program. We also work with the Farm to School Hui, a partnership with the Department of Forestry and Wildlife and the Department of Education.

Our Project Solution: From *Mauka* to *Makai*

ATA's work spans from *mauka* to *makai*. Our vision is to protect, preserve, and restore a significant mauka forested area that connects to marine ecosystems on Oahu's southeastern coast. To achieve this vision, ATA's efforts are focused on three major conservation initiatives:

Forests and Watersheds

Hawaii's forests act like giant sponges, absorbing rainfall, mist and fog drip, and allowing it to slowly percolate into the ground, feeding our streams and ground water during times of drought or climate crises. Rehabilitating the forest by removing invasive species and planting native trees and shrubs protects Hawaii's water quality and reduces the amount of harmful soil runoff from reaching Maunalua Bay, a historically and culturally significant coastal recreational area that suffers from invasive algae, and loss of coral reefs and native fish populations. ATA's distinctive efforts to support healthy ecosystems from *mauka* to *makai* and promote resilience in the face of global climate change benefits thousands of Hawaii residents, visitors, and future generations. Since October 2021, ATA has:

- Conducted a biosurvey to assess the existing plant species on Kuli'ou'ou Ridge Trail. Met with Kuli'ou'ou Valley Association and notified residents to assess project concerns.

- Planted, with the help of over 150 volunteers, over half of approximately 300 native trees and shrubs to improve watershed functions and help transform the non-native forest to a thriving, diverse native-dominated ecosystem. These plantings include 16 Koa, 38 Milo, 28 Kou, 20 Alahe'e, 17 A'ali'i, 10 Wiliwili, 4 'Ōhi'a, 3 Lonomea, 5 Ma'o, 50 Ilie'e, 25 Fimbristylis, 10 Ulei and 10 Kawelu.
- Implemented a "kipuka" restoration method (small, controlled work areas) for efficient and effective site access and manageability.
- Removed smaller invasive species such as guinea grass, *koa haole*, and strawberry guava, while leaving intact large tree species at 12 restoration sites in preparation for new native tree planting.
- Remediated 8 of 60 shortcuts on the trail switchbacks to prevent further environmental degradation.
- Installed monitoring photopoints to reflect qualitative changes of the forest and trail.
- Documented all trees/shrubs planted at each new restoration site
- Submitted and reviewed with DOFAW personnel monthly progress reports.

Invasive Species

The silent invasion of Hawaii by weeds, insects, disease and feral ungulates (hoofed animals) pose serious risks and costs to the state's natural environment. ATA actively aims to prevent invasive pests from entering the forest ecosystem through regulated plant inspections, cleaning of footwear and gear, and social media outreach and education. These practices also help to mitigate extinction or near-extinction of native birds, such as the Elepai'o in Kuli'ou'ou Valley, and other species. In addition, ATA has:

- Procured 253 native trees and shrubs designated for trail planting from DOFAW's nursery, which requires stringent disease and pest control protocol.
- Ensured pest and disease inspection from a third-party inspector (if plants were not procured from DOFAW's nursery).
- Documented the number of invasive species removed from each site.

Stewardship and Education

Education is critical to promoting a culture of care and reciprocity with nature. We are committed to developing the next generation of forest stewards and environmental leaders to promote a more sustainable future for Hawaii.

- During ATA's monthly forest restoration workdays, volunteers of all ages learn to prepare new restoration areas for planting native trees and *mālama 'āina*, or how to care for the land.
- Our Stewardship Program is providing one young adult with a year-long, paid internship opportunity to gain valuable skills in reforestation planning, implementation, and leadership.
- ATA's Team Leader Training program, led by an ATA team restoration specialist with 20 years of forestry background, provides training to 10 enthusiastic, passionate young leaders on Hawaii's native trees and plants, reforestation best practices, team management, and safety protocol.
- ATA's signage project, in partnership with the Hawaii State Department of Forestry and Wildlife, incorporates a creative and fun approach to educating hikers about *pono* (proper) hiking behavior

and empowering them to take action by incorporating Hawaii's state bird, the Nene Goose, as a mascot for its signage designs.

- Our "Adopt a Kipuka" Program engages and educates local groups and businesses to "adopt" a trail restoration site and properly manage it. ATA currently is working with Architects Hawaii Ltd., our first stewardship business partner.

Clientele

Direct clientele

- Native trees, shrubs, birds and other animal species of Kuli'ou'ou Valley.
- Approximately 15,000 hikers annually of all ages, including Hawaii residents and tourists. *All Trails* app notes Kuli'ou'ou Ridge Trail is the 4th most popular trail on O'ahu.
- ATA's young adult stewards interested in pursuing careers in conservation.
- Over 150 volunteers of all different ages, ethnicities, genders, and walks of life.

Indirect clientele

- Native ecosystems of Kuli'ou'ou Valley and marine ecosystems of Maunalua Bay.

Anticipated Results

The Kuli'ou'ou Ridge Trail project will provide multiple environmental benefits including soil erosion mitigation, water quality improvement, enhanced tree canopy cover, and a positive impact on Honolulu's community, visitors, and all hikers on the trail.

ATA's goal is to achieve the following outcomes by 2022-23:

- Plant 300 more trees and plants at the Kuli'ou'ou Ridge Trail site (70% native trees and 30% native shrubs, ferns and grasses).
- Establish a cadre of volunteers to regularly maintain the site, including watering and weeding.
- Install two water catchment systems at middle and upper trail locations.
- Hire and train two interns and develop their skills in reforestation, restoration and leadership.
- Expand ATA/DOFAW creative, educational signage project statewide.
- Engage with DOE and charter schools and bring keiki to Kuli'ou'ou trail to learn about planting native trees and *pono* (proper) hiking practices. Create a hand-on learning site to teach keiki about traditional Hawaiian plants and trees.
- Continue to ally with like environmental groups and hiking clubs to further ATA's vision.
- Assess the perception of ATA's work and its impact on the environment.
- Provide new boot brush station.

Evaluation

ATA creates annual goals that tie into its two-year conservation plan. Team members agree upon planning and planting goals for each restoration site and define strategies to reach these goals. These goals are revisited by the team throughout the year and adjusted based on challenges and opportunities using an

evaluative adaptive management approach. Restoration actions are evaluated using quantitative and qualitative monitoring, which helps to guide decisions to improve the next round of management. This adaptive management feedback loop repeatedly occurs with monitoring of the site, providing feedback and driving management goals.

Funding Sources

The Laurence H. Dorcy Grant Foundation will support Aloha Tree Alliance's operations by:

- Enabling the Kuli'ou'ou Ridge Trail restoration project to operate for another year with implementing proper maintenance, such as two 275-gallon crucial water catchment systems for \$1,120 to be installed before the dry summer months to ensure new plantings survival rate.
- Funding 300 additional native trees at approximately \$3,870.
- Training and hiring two young adults interested in pursuing a career in forestry conservation. ATA's year-long stewardship program would train two young adults in how to conduct ecological assessments, monitor and address plant health (weeding and watering), perform trail maintenance techniques (including assessing and remedying new trail cut erosion zones), plan, select and conduct new restoration sites, and learn environmental leadership skills. Interns would be paid at a rate of \$20/hr, 8 hrs a week for one year for a total of \$16,640. The program period would start in June 2022 and go through June 2023.
- Elevating interactive ecology and environmental education program to include topics as native and invasive plant species, biodiversity, watershed conservation. Lessons are sourced from the Aloha Aina Project place-based curriculum, developed by Pacific American Foundation and designed for elementary to high school students.

Project Budget Sheet

📄 Proposed Project Budget Sheet for Laurence H. Dorcy Hawaiian Foundation

Acknowledgment

Aloha Tree Alliance is inspired by Laurence H. Dorcy's passion for and contributions to protecting, preserving, and restoring Hawaii's native koa trees through his seed orchard in Kula and reforestation efforts on Haleakala, Maui. ATA strives to continue Mr. Dorcy's legacy by respecting, protecting, and restoring Hawaii's biological treasures—our native forests—and furthering ecological and environmental science programs for the benefit and well-being of current residents, students, and generations to come.

The Laurence H. Dorcy Hawaiian Foundation will be acknowledged with:

- Press release highlighting your foundation's gift.
- Recognition on the Aloha Tree Alliance website, Kuli'ou'ou Ridge Trail educational materials, in ATA's community newsletter, and on social media.
- Personalized site tour and/or presentation to meet the interest of your organization.

**ALOHA TREE ALLIANCE
STATEMENT OF FINANCIAL POSITION**

December 31	2021
Assets	
Cash	78,625
Tools	2,657
Total Assets	81,282
Liabilities and Net Assets	
Liabilities	0
Net Assets - Unrestricted	81,282
Total Liabilities and Net Assets	81,282

STATEMENT OF ACTIVITIES

December 31	2021
Operating Revenues	
Donations	107,283
Interest	34
Total Operating Revenues	107,317
Operating Expenses	
Stipends	17,959
Administrative	5,279
Trail Remediation	4,034
Total Operating Expenses	27,272

ORGANIZATION NAME:	Aloha Tree Alliance				
PROJECT TITLE:	Kuli'ou'ou Ridge Trail Restoration Project				
	LHDHF Grant Share	Applicant Share	In-kind Share	Cash Donation	Total
Revenue Sources 2021					
Kaulunani Urban Community		\$7,500	\$16,159	\$150	\$23,809
Donations				\$107,317.00	107,317
Total Net Revenue					\$131,126
LHDHF Grant Budget 2022					
CONTRACTUAL					
Personnel					
--Intern 1 @ \$20/hr 8/hr per	\$8,320				
--Intern 2 @ \$20/hr 8/hr per	\$8,320				
Volunteers			\$35,960.40		
--Volunteers- \$28.54/hr x for					
Professional Services					
--3 plant inspections @ \$90	\$270				
Other Contractual					
--Restoration Specialist/intern		\$12,000			
--Operations Manager		\$36,000			
Total Contractual	\$16,910	\$48,000	\$35,960.40		\$83,960
MATERIALS/SUPPLIES					
275 gal water catchment system	\$656.00				
10'x10' EZ corner tent with 1"	\$464				
Jute mat 10 rolls @ \$149 ea	\$1,490				
Weed mat 9 rolls @ \$144 ea	\$1,296				
Jute Staples 1000/box @	\$53				
Rope 10 @ \$17.50	\$175				
Weed Wrench 1 @ \$65.00 ea	\$65				
300 native trees @ \$12.90 per	\$3,870				
Total Materials/supplies	\$8,068.90				
Total Expense	\$24,979	\$48,000	\$35,960.40		\$108,939
Total Project Cost	\$24,979	\$48,000	\$35,960.40		\$192,900



