

University of Hawaii Foundation

Maui Invasive Species Committee Summary

Mission: To detect and eradicate invasive little fire ants throughout the Hawaiian Islands.

Category: Environment Preservation & Education

Contact: Teya Penniman, Interim Manager

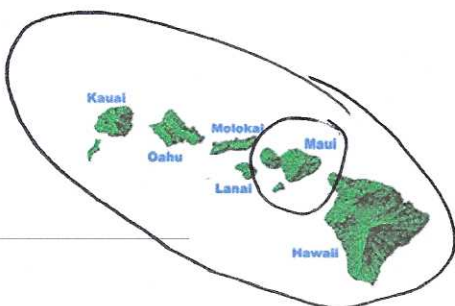
Address: P.O. Box 983, Makawao, HI 96768

Grant History: 2015: \$45,000
2021: \$25,000
TOTAL GRANTS TO DATE: \$70,000

2024 Request:	\$25,000 for little fire ant detector dog project
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Notes:

- MISC is a project of the Pacific Cooperative Studies Unit at the University of Hawaii Foundation, which serves as fiscal agent for MISC.
- The Pacific Cooperative Studies Unit is housed in the College of Natural Sciences.
- Little fire ants are microscopic invasive species which threaten native forest, agriculture, pets, livestock, and human health.
- Infestations are out of control and spreading throughout the islands.
- Australia has had success in training dogs to detect the little fire ants.
- Funds requested to dog and handler.
- Primary funding for MISC's operations is from County of Maui and Hawaii Invasive Species Council.
- 2015 grant was applied toward little fire ant surveys, treatment, website, public education programs, and research.
- 2021 grant to be applied toward purchase of "Spencer" the ant dog and handler.
- **2024:** Infestations of little fire ants are spreading despite recent successes in locating and eradicating.
- New outbreak discovered in Kauai.
- Freddie the black labrador Little Fire Ant Detector Dog is trained and ready to come to Maui from Australia in Spring 2024.
- Funds needed to send handler to Australia for team training w/Freddie and transport him to Hawaii.
- Freddie expected to start working throughout Hawaii in May 2024.





UNIVERSITY of HAWAII^{*}
FOUNDATION

**Little Fire Ants – An Imported Solution for an Unwelcome Guest
A Proposal to the Laurence H. Dorcy Hawaiian Foundation
from the University of Hawai'i Foundation and
Maui Invasive Species Committee
a project of the Pacific Cooperative Studies Unit with
the University of Hawai'i**

The University of Hawai'i Foundation and Maui Invasive Species Committee (MISC) are requesting \$25,000 to implement the little fire ant (*Wasmannia auropunctata*, LFA) detector dog project in Hawai'i. Funds from the Laurence H. Dorcy Hawaiian Foundation will help ensure the smooth transition of "Freddie," the LFA detector dog, to his new job and home on Maui.

THE PROBLEM

Little fire ants are one of the worst invasive species in the world. These tiny ants form massive, connected colonies, driving out nearly all other arthropods. They damage plant vitality by farming harmful pests, create a "rain" of stinging ants when people brush against infested plants, and impact local agriculture, pets, and livestock. Residents in heavily-infested areas report that they are no longer able to enjoy being outside in their own yards. The ants threaten the health of native ecosystems, including the keystone species of our koa-'ōhi'a forests.

Little fire ants continue to spread on and between the Hawaiian Islands. Infestations on Hawai'i Island are too widespread to control, and homeowners are caught in an endless cycle of treating their properties just to maintain ant-free areas. On O'ahu, the number of known little fire ant sites has grown to at least 40 locations. New, challenging locations have been detected on Kaua'i.

Success is possible—Maui is an example. Since 2009, a total of 19 infestations have been detected on Maui; 7 have been eradicated, 4 are in a monitoring phase (no LFA currently detected), and 8 are under active treatment, with several of those nearing the end of their planned treatment. MISC's innovative, [helicopter-based strategy](#) at a 175-acre site on Maui's north shore successfully reduced a massive infestation to undetectable levels. Previous funding from the Laurence H. Dorcy Foundation has been critical for helping to achieve these accomplishments. Other funders have included the County of Maui, Hawai'i Invasive Species Council, Hawai'i Community Foundation, Hawaiian Electric Industries, Alexander and Baldwin, Hawai'i Tourism Authority, and the Hau'oli Mau Loa Foundation.

More effective tools are needed. Even with demonstrated success at known sites, the single biggest challenge is finding LFA when infestations are small. The ants are master hitchhikers—moving in plants, vehicles, mulch, and even coconut husks. Most of the infestations on Maui were discovered after the colony had grown so large that people started being stung. The current detection strategy relies on deployment of vials smeared with a small amount of bait. Humans are not good at seeing the ants and using a bait system isn't 100% reliable. Additionally, small pockets of ants can persist undetected even after years of systematic control.

THE SOLUTION

Detector dog to the rescue: The use of little-fire-ant detector dogs by government agencies in Australia has proven extremely successful at finding new LFA populations and evaluating whether control work

has been completed. MISC has been trying to establish a little fire ant detector dog program for many years, working closely with Craig Murray, arguably the most-qualified LFA detector-dog trainer in the world. They have the dog, and we have the handler. Freddie, the LFA-trained black lab, will be ready for action in spring 2024.

The handler and the LFA project coordinator will travel to Australia to be trained by Craig Murray, working directly with Freddie. The requested funds will provide supplies for the dog's comfort and wellbeing, and will ensure a smooth transition from the training location in Australia to Maui, pursuant to a services contract. Freddie and his handler will begin searching for new infestations of little fire ants and will assess progress at existing sites. After an initial adjustment period, Freddie and his handler are expected to travel to O'ahu and Kaua'i to assist with LFA detection work on those islands.

COMMUNITIES SERVED

The communities affected by little fire ants encompass public and private landowners, agricultural businesses, the tourism industry, pet owners, and those without a voice – pets, native plants and animals, and ecosystems. The geographic area to be served includes Kaua'i, O'ahu, Maui, and Molokai. Community support is expected to be high for this project. The use of a trained detector dog for little fire ants has huge potential for community engagement.

APPLICANT QUALIFICATIONS

The University of Hawai'i Foundation, a 501(c)(3) organization, exists to unite donors' passions with the University's aspirations by raising philanthropic support and managing private investments to benefit the University, the people of Hawai'i, and future generations. The Foundation also manages more than 7,000 gift accounts, including one directed to the work of the Maui Invasive Species Committee. The Foundation follows detailed and rigorous fiscal procedures for all grants. For more information: <https://www.uhfoundation.org>.

The Maui Invasive Species Committee is a project of the Pacific Cooperative Studies Unit at the University of Hawai'i. MISC and its sister project on Molokai have 45 staff (full- and part-time) who focus on the most harmful plant, vertebrate, and invertebrate pests. Committee members help secure funding and provide scientific and subject matter expertise. Accomplishments include more than 20 island-wide eradications, preventing ecosystem-changing plants from establishing in pristine forests, and conducting comprehensive outreach and education programs. For more information: www.mauiinvasive.org.

EXPECTED TASKS & OUTCOMES

- Handler and project coordinator trained in detector dog protocols and welfare.
- Handler and detector dog conduct surveys at high-risk sites and existing infestations.
- Detections of previously-unknown infestations and
- Increased confidence of eradication at known sites.
- Enhanced public awareness about little fire ants.
- A final report and public recognition of the Laurence H. Dorcy Hawaiian Foundation.

TIMELINE

Funds will be used over a 12-month period:

- May 2024: complete handler training in Australia and transition work on Maui.
- May 2024-April 2025: detector dog team conducts surveys on Maui and other islands.
- May 2025: submit report to Laurence H. Dorcy Hawaiian Foundation.

BUDGET

Category	Cost
Services contract	\$ 21,250
Materials & Supplies	\$ 2,500
Total Direct Costs	\$ 23,750
UHF Administrative Fee	\$ 1,250
Total	\$ 25,000

BUDGET JUSTIFICATION

- Services contract will cover costs associated with two-week transition training on Maui.
- Materials and supplies will include costs for safety and operating supplies for the dog and handler.

PRIMARY FUNDING SOURCES

Primary funding sources for MISC's operations and outreach activities covered work on 26+ invasive plant species, two invasive vertebrates, and a suite of early detection targets on Maui and Molokai. Sources: County of Maui (\$2,000,000 – anticipated for FY24) and Hawai'i Invasive Species Council (\$825,000).

CONTACT INFORMATION

Questions about this proposal may be directed to:

Teya Penniman, Interim Manager
Maui Invasive Species Committee
P.O. Box 983, Makawao, HI 96768
808-280-1170

UNIVERSITY OF HAWAII FOUNDATION AND SUBSIDIARIES

Consolidated Statement of Activities

Year ended June 30, 2022

	Net assets		
	Without donor restrictions	With donor restrictions	Total
Revenue:			
Contributions	\$ 424,051	139,293,248	139,717,299
Fees and other	4,504,905	1,386,248	5,891,153
Investment loss, net	(9,019,596)	(45,307,300)	(54,326,896)
Administrative fees	9,790,348	(9,790,348)	—
Fund-raising events and projects	—	710,743	710,743
	5,699,708	86,292,591	91,992,299
Net assets released from restrictions	48,644,881	(48,644,881)	—
	54,344,589	37,647,710	91,992,299
Expenses:			
Program services:			
Extension and public services	993,526	—	993,526
Academic support	5,647,814	—	5,647,814
Research	6,802,618	—	6,802,618
Student aid and services	14,430,406	—	14,430,406
Faculty and staff support	3,242,676	—	3,242,676
Capital projects	2,421,832	—	2,421,832
Athletics	3,171,395	—	3,171,395
Special programs	10,003,666	—	10,003,666
Other	1,930,948	—	1,930,948
Total program services	48,644,881	—	48,644,881
Supporting services:			
Administrative, management, and fiscal services	6,715,330	—	6,715,330
Development	8,416,955	—	8,416,955
Total supporting services	15,132,285	—	15,132,285
Total expenses	63,777,166	—	63,777,166
Change in net assets	(9,432,577)	37,647,710	28,215,133
Net assets at beginning of year	12,377,779	669,228,462	681,606,241
Net assets at end of year	\$ 2,945,202	706,876,172	709,821,374

See accompanying notes to consolidated financial statements.

UNIVERSITY OF HAWAII FOUNDATION AND SUBSIDIARIES

Consolidated Statements of Financial Position

June 30, 2023 and 2022

Assets	2023	2022
Cash and cash equivalents	\$ 13,066,086	32,438,212
Assets whose use is limited or restricted	15,781,805	20,068,837
Contributions receivable, net	78,973,441	77,288,600
Prepaid expenses and other receivables	4,797,536	10,373,750
Property and equipment, at cost, net of accumulated depreciation and amortization	79,198,201	30,278,746
Other assets, at cost	1,880,502	1,742,032
Investments	671,151,004	627,394,903
Beneficial interests in trusts held by others	28,673,526	29,411,668
Total assets	\$ 893,522,101	828,996,748
Liabilities and Net Assets		
Liabilities:		
Accounts payable	\$ 21,049,477	8,045,938
Liabilities under split-interest agreements	11,539,235	11,769,560
Amounts held for others	3,386,287	4,933,144
Long-term debt	92,865,611	92,876,167
Other liabilities	1,615,586	1,550,565
Total liabilities	130,456,196	119,175,374
Net assets:		
Without donor restrictions	6,497,158	2,945,202
With donor restrictions	756,568,747	706,876,172
Total net assets	763,065,905	709,821,374
Commitments and contingencies		
Total liabilities and net assets	\$ 893,522,101	828,996,748

See accompanying notes to consolidated financial statements.

UNIVERSITY OF HAWAII FOUNDATION AND SUBSIDIARIES

Consolidated Statement of Activities

Year ended June 30, 2023

	<u>Net assets</u>		
	<u>Without donor restrictions</u>	<u>With donor restrictions</u>	<u>Total</u>
Revenue:			
Contributions	\$ 398,083	73,810,875	74,208,958
Fees and other	3,757,590	508,878	4,266,468
Investment gain, net	4,022,075	36,764,005	40,786,080
Administrative fees	9,357,116	(9,357,116)	—
Fund-raising events and projects	800,000	1,261,184	2,061,184
	<u>18,334,864</u>	<u>102,987,826</u>	<u>121,322,690</u>
Net assets released from restrictions	<u>53,295,251</u>	<u>(53,295,251)</u>	<u>—</u>
	<u>71,630,115</u>	<u>49,692,575</u>	<u>121,322,690</u>
Expenses:			
Program services:			
Extension and public services	900,655	—	900,655
Academic support	7,811,481	—	7,811,481
Research	11,643,238	—	11,643,238
Student aid and services	15,308,744	—	15,308,744
Faculty and staff support	2,777,185	—	2,777,185
Capital projects	1,308,327	—	1,308,327
Athletics	4,486,432	—	4,486,432
Special programs	8,703,820	—	8,703,820
Other	355,369	—	355,369
Total program services	<u>53,295,251</u>	<u>—</u>	<u>53,295,251</u>
Supporting services:			
Administrative, management, and fiscal services	5,712,672	—	5,712,672
Development	9,070,236	—	9,070,236
Total supporting services	<u>14,782,908</u>	<u>—</u>	<u>14,782,908</u>
Total expenses	<u>68,078,159</u>	<u>—</u>	<u>68,078,159</u>
Change in net assets	3,551,956	49,692,575	53,244,531
Net assets at beginning of year	<u>2,945,202</u>	<u>706,876,172</u>	<u>709,821,374</u>
Net assets at end of year	<u>\$ 6,497,158</u>	<u>756,568,747</u>	<u>763,065,905</u>

See accompanying notes to consolidated financial statements.