



Coordinating Group on Alien Pest Species (CGAPS)

Annual Report

January 1 — December 31, 2025

Submitted to:

Hau'oli Mau Loa Foundation
Hawai'i Department of Land and Natural Resources-Division of Forestry & Wildlife
Hawai'i Invasive Species Council
National Park Service-Pacific West Region
USDA Forest Service
University of Hawai'i- Pacific Cooperative Studies Unit
CGAPS Steering Committee & Partners

Photo: Laua'e, sometimes called pe'ahi (*Microsorum spectrum*), a fern endemic to Hawai'i

Introduction

Acronym Index (partial)

AG: Department of the Attorney General
BIISC: UH Big Island Invasive Species Committee
CBP: DHS Customs and Border Protection
CGAPS: UH Coordinating Group on Alien Pest Species
CRB: Coconut rhinoceros beetle
CTAHR: UH College of Tropical Agriculture and Human Resilience
DAB: Department of Agriculture and Biosecurity (formerly HDOA)
DAR: DLNR Division of Aquatic Resources
DLNR: Department of Land and Natural Resources
DOFAW: DLNR Division of Forestry and Wildlife
DOD: Department of Defense
EPA: Environmental Protection Agency
HAL: UH Hawai'i Ant Lab
HCAF: Hawai'i Conservation Alliance Foundation
HDOT: Hawai'i Department of Transportation
HGG: Hawai'i Green Growth
HIBP: Hawai'i Interagency Biosecurity Plan
HPWRA: Hawai'i-Pacific Weed Risk Assessment
KISC: UH Kaua'i Invasive Species Committee
LFA: Little fire ant
MISC: UH Maui Invasive Species Committee
MoMISC: UH Moloka'i-Maui Invasive Species Committee
NPS: National Park Service
OISC: UH O'ahu Invasive Species Committee
PCSU: UH Pacific Cooperative Studies Unit
PoEM: HISC Port of Entry Monitoring program
RCUH: Research Corporation of the University of Hawai'i
ROD: Rapid 'Ōhi'a Death
SCTLD: Stony coral tissue loss disease
UH: University of Hawai'i
UHF: University of Hawai'i Foundation
USCG: U.S. Coast Guard
USDA APHIS: U.S. Department of Agriculture-Animal and Plant Health Inspection Service
USDA ARS PBARC: USDA Agricultural Research Service Pacific Basin Agricultural Research Center
USDA FS: USDA Forest Service
USFWS: U.S. Fish and Wildlife Service
VIDA: Vessel Incidental Discharge Act

Overview of CGAPS

Two significant reports (NRDC TNCH 1992; OTA 1993) found that Hawai'i had the nation's worst invasive species problem due to gaps in prevention, detection, and control programs. These reports concluded that these gaps could be closed through increased communication, cooperation, and public participation. The Coordinating Group on Alien Pest Species, "CGAPS", (pronounced "C-GAPS") was formed in 1995 as a partnership of agencies and non-governmental organizations working together to close the gaps in Hawaii's biosecurity programs. In short, we "see the gaps" and try to fill them.

CGAPS has five full-time, grant-funded positions employed through the Research Corporation of the University of Hawai'i (RCUH): Christy Martin, Program Manager; Andrew Porter, Aquatic Legal Fellow; Stephanie Easley, Terrestrial Legal Fellow; Ambyr Miyake, Statewide Rapid 'Ōhi'a Death (ROD) Outreach Coordinator; and the Planner position which is currently vacant. CGAPS also occasionally employs contractors, interns, and students.

The CGAPS Steering Committee and staff advance the [HISC & CGAPS 2025 Joint Strategy](#) to reach our vision, that "Hawaii's natural environment, agriculture, economy, and the health, lifestyle, and culture of its people are protected from the impacts of invasive species." CGAPS also hosts quarterly multi-agency meetings to facilitate information-sharing and networking.

Visit www.cgaps.org for staff contacts and more information.



The CGAPS mission is to coordinate and catalyze action among government and non-government partners to prevent and manage invasive species in Hawai'i, as well as communicate key issues to the public.

Acknowledgement of CGAPS Support

Mahalo to the CGAPS staff and Steering Committee, the Hawai'i Invasive Species Council (HISC) and staff, and our communities for working to advance the [HISC & CGAPS 2025 Joint Strategy](#).

Leadership of CGAPS is through a rotating chair structure. Each year the CGAPS Steering Committee selects a Deputy Chair for the calendar year, who then serves as Chair the following year, and then Chair Emeritus in the third year. An effort is made to ensure that the 3-Chair structure is comprised of an individual each from a state agency, federal agency, and a non-governmental organization (such as academia, a non-profit, business, emeritus, etc.) to maintain these differing perspectives. Mahalo to 2025 CGAPS Chair Alan Holt (emeritus), Chair Emerita Susan Cordell (USDA Forest Service-Institute of Pacific Islands Forestry), and Deputy Chair Dexter Kishida (Hawai'i Department of Transportation) for taking on these roles!

CGAPS staff salaries and projects are entirely grant-funded, and this report is provided in partial fulfillment of grant requirements.

Mahalo to Hau'oli Mau Loa Foundation (herein the Foundation, multiple agreements), HISC (#C52830), Department of Land and Natural Resources-Division of Forestry & Wildlife (#C52806) and from DOD Office of Local Defense Community Cooperation, National Park Service (via Hawai'i-Pacific Islands Cooperative Ecosystem Studies Unit, #P17AC01216 Mod2), and National Fish and Wildlife Foundation Coral Reef Stewardship (#83122) for the support of CGAPS staff and projects.

Mahalo to the University of Hawai'i at Mānoa (UH) Office of Research Services and the University of Hawai'i Foundation (UHF), which administered multiple grants. Core CGAPS funds were managed through the Pacific Cooperative Studies Unit (PCSU) under the College of Natural Sciences by CGAPS Principal Investigator (PI) Shaya Honarvar and PCSU staff. ROD funds were managed through the College of Tropical Agriculture & Human Resilience (CTAHR) with Drs. Mike Melzer and J.B. Friday as PIs, and the Legal Fellows through the William S. Richardson School of Law Environmental Law Program, with Co-Directors David Forman and Richard Wallsgrave as PIs. Mahalo also to the Hawai'i Conservation Alliance Foundation, which served as a fiscal sponsor for some CGAPS projects, and to former and current Directors Emma Anders and Ulu Ching, respectively. CGAPS also provided pass-through funds to help support Hawai'i Green Growth (HGG). Mahalo to former Executive Director Celeste Conners, new Executive Director Kalani Ka'anā'anā, and the HGG team. Last but not least, thank you to the staff of UH, UHF, and RCUH for behind-the-scenes fiscal and administrative support. We are grateful for our partners and proud to share the accomplishments of the past year.

CGAPS Steering Committee

Hawai'i Department of Agriculture and Biosecurity

Hawai'i Department of Land and Natural Resources (Division of Aquatic Resources and Division of Forestry and Wildlife)

Hawai'i Conservation Alliance Foundation

Hawai'i Invasive Species Council
Invasive Species Committees of Hawai'i

The Nature Conservancy

U.S. Department of Agriculture (Animal and Plant Health Inspection Service and USDA Forest Service)

U.S. Department of Defense-Naval Facilities Engineering Command Pacific

U.S. Department of Homeland Security-
Customs and Border Protection

U.S. Fish and Wildlife Service

University of Hawai'i-College of Tropical Agriculture and Human Resilience

Valued Emeriti

HISC & CGAPS 2025 Joint Strategy Progress

The CGAPS Steering Committee is comprised of management-level participants from agencies and NGOs, with decades of experience and a deep understanding of the issues and gaps. In 2002, the legislature established the Hawai'i Invasive Species Council, which provided the framework for engaging the appointed executives of key state agencies. In 2019, these two networks worked together to assess the most pressing needs from the 2017-2027 Hawai'i Interagency Biosecurity Plan to create the five-year HISC & CGAPS 2025 Joint Strategy. Most Strategies have a Working Group chaired by a lead agency, and HISC and CGAPS staff provide planning and meeting coordination support, and at times lead work on some Key Actions.

For each of the 10 Strategies, the Key Actions are listed in the left column, and progress made in 2025 is listed in the right column with the following terms:

Achieved / Nearly complete: Key Action is complete or nearly complete

Ongoing: work that was done to support a Key Action that is perpetual in nature

In process: advances that were made and that are progressing towards completing an Action

No/little opportunity for progress: no significant progress was made in 2025

Strategy 1: Prevention & early detection/rapid response for new terrestrial invasions

Objective: Keep Hawaii's top invasive species threats from arriving and establishing in the state, by identifying and addressing high-risk pathways and major modes of introduction, and by improving early detection/rapid response.

Lead/Chair: Co-chaired by DAB and UH CTAHR with support from Stephanie Easley and Christy Martin, CGAPS & Jack Reef, HISC.

Key Actions:

1. DAB, HISC, and other partners collaborate on generating a non-regulatory Hawai'i Prevention Priority List to guide prevention and rapid response.
2. Assess capacity to detect, mitigate and/or treat each species on the Hawai'i Prevention Priority List, including procedures, training, and technology.
3. Conduct risk analyses and risk assessments along known and high potential pathways for invasive species introductions.

Progress:

Achieved. Led by Hawai'i Department of Agriculture (DAB), a non-regulatory Hawai'i Prevention Priority List was developed in 2020. In 2021/2022, a Pathways task group reviewed, validated, and updated [the list](#) to make it representative of the highest priority species across all taxa. The list is a living document.

Ongoing:

- Passage of [Act 236](#) provided additional authorities and capacity through transitional facilities, contracted inspections, and funding.
- HISC continued the Port of Entry Monitoring Program (PoEM).

Ongoing:

- HISC continued support of the Hawai'i-Pacific Weed Risk Assessment (HPWRA) screener to assess plant risk.
- DAB biosecurity framework flags need for improvement of risk analyses and assessments.

Key Action:

4. Address regulatory gaps for terrestrial invasive species in Hawai'i to address high-risk pathways and other modes of introduction

Progress:**Achieved.**

- Hawai'i Administrative Rules (HAR) chapter 4-72 completed rulemaking and was adopted, providing improved regulatory tools for pathways prevention including inter-, and intra-island movement. It is not clear if DAB has accessed these authorities.
- Supported the introduction and passage of Act 240 to require heat treatment for firewood shipped to Hawai'i from other states to mitigate pest and disease risk. This statutory addition started as a collaborative project between DAB and CGAPS for rulemaking in 2022.
- Supported the introduction and passage of Act 190 which provides clear authority for DAB to enforce USDA quarantines that prevent the interstate movement of high-impact pests such as the virus that causes citrus greening, Red Imported Fire Ants, and others. This project also started as a DAB/CGAPS rulemaking project in 2022.

No opportunity for progress:

- No progress on CGAPS' petition to add Restricted Plant Rules and a list of prevention plants as HAR chapter 4-70A was heard by the Board of Agriculture and Biosecurity (BAB) on February 2019 and sent to be reviewed by the Advisory Committee on Plants & Animals. It has not been agendized. In 2022 CGAPS contractor Rachel Neville submitted petitions for federal import restriction of this same list of high-risk plants. However, USDA APHIS looks to the state to see if the same species are regulated domestically, which they are not.
- No action again in 2025 on rulemaking on updates provided in 2022 to the Noxious Weed Seed Administrative Rules and Species List (HAR chapter 4-67) and the Noxious Weed Administrative Rules and Species List (HAR chapter 4-68) produced at DAB's request and with agency participation.

Key Actions:

5. Continue to support adoption and implementation of Myrtaceae import restriction (domestic and foreign) and apply this approach for the protection of additional key native and economically important plant species.
6. Fund and fill key positions listed in the HIBP to enforce existing and new Administrative Rules and Hawai'i Revised Statutes. [link to Obj 6]
7. Support HDOT to make the Māmalu Poepoe airports pilot project permanent to enhance monitoring and detection of the Federal Aviation Administration approved list of invasive species (disease spreading mosquitoes, fire ants, coconut rhinoceros beetle, and Africanized bees). [link to Obj 2]
8. Identify and provide Best Management Practices (BMPs) for reducing pest risk at critical control points in systems, such as airports, harbors, and procurement contracts.
9. Strengthen early detection/rapid response (EDRR) capacity on each island for regulatory agencies and partnership projects, including mobilizing species-specific teams for high-risk terrestrial incursions.

Progress:

Nearly complete. No progress again in 2025. In 2024, despite direct communications on the urgency of the issue, USDA APHIS estimated it would take a year to accomplish, yet there has been no progress. Foreign imports of cut flowers and foliage that contains myrtle family plants is the only remaining pathway. USDA APHIS needs to add this restriction to apply to cut flowers, yet there is no established petition process for this. The underlying issue is included in the 2025 ISAC white paper "Invasive Species Threaten Food Security" due to its national importance as a gap.

In process.

- \$12.7M for DAB in 2025 to continue positions gained in 2024 through general funds and Act 231.
- Act 236 provided \$4.25M increase for the Hawai'i Invasive Species Council and \$500K for Hawai'i Ant Lab to partially support EDRR, research, and extension.

Ongoing.

- The increase in HISC funds through Act 236 will support PoEM (formerly Māmalu Poepoe) through 2026. DOD Readiness and Environmental Protection Integration (REPI) funding supported the program from 2024-2025.
- PoEM's new 5-year strategy is nearing completion
- Awaiting DAB review of the draft Japanese Beetle monitoring and response plan, drafted in 2024.
- PoEM Coordinator Mason Russo initiated planning for a learning exchange with Australian officials as part of the update to the Red Imported Fire Ant Response Plan.

Ongoing.

- BMPs developed and posted in previous years continue to be accessed and requested.
- HDOT's Statewide Noxious and Invasive Pest Program (SNIPP) strategic plan will include updated BMPs.

Ongoing.

- DAB, DLNR DOFAW and DAR, CGAPS, HISC, and ISCs each filled coordination roles for interagency EDRR work.
- EDRR partner capacity maintained on each island.
- HISC-supported 643PEST.org facilitated the sharing of reports and data for response.

Key Actions:

10. Support DAB in implementing transitional inspection facilities and opportunities to inspect other high-risk commodities.
11. Support DAB to promote and achieve clean nursery operations (e.g., treatment requirements, incentives). [link to Obj 2 & 7]
12. Maintain and strengthen the Pest Risk Committee and other mechanisms for federal and state agencies to share data, effective practices, lessons learned and informal observations.
13. Track and report annually on status of Hawai'i Priority Prevention List species (e.g. not established, prevented at source; detected & intercepted, established). [link to Obj 2]

Progress:

In process. Act 236 authorized the operation of private transitional facilities and contracted inspection personnel to begin on January 1, 2028.

No/little opportunity for progress. Supported [SB 562](#) to institute a registration program and criteria for nurseries. The bill passed through several committees before being deferred.

Ongoing. The Hawai'i Risk Assessment Committee (HI-RAC) continued to meet. Several participants were also consulted to better understand how federal and state agencies and territorial agencies interact on regional pest risk issues.

No opportunity for progress. This and several Key Actions in this Strategy depend on the support and drive of the Plant Industry Administrator, a position that oversees prevention and response for the majority of invasive species issues, with the exception of agricultural animal issues. The position was vacant since the departure of Helmuth Rogg in June, 2023. Richard Kim held the position from April 15, 2025 through his resignation at the end of 2025. This person typically also serves on the CGAPS Steering Committee.

Photo: L-R, CGAPS Program Manager Christy Martin, Vice Speaker Linda Ichiyama, ROD Statewide Outreach Specialist Ambyr Miyake, HISC 643-PEST.org Coordinator Elizabeth Speith, and HISC Port of Entry Monitoring Coordinator Mason Russo at the opening day of the 2025 legislative session.



Strategy 2: Inter/Intra-island movement of terrestrial invasive species

Objective: Keep Hawai'i's top invasive species threats from spreading within Hawai'i (inter- and intra-island), by identifying and addressing high-risk pathways and major modes of introduction and spread, and by improving early detection/rapid response for new populations.

Lead/Chair: The Working Group for Strategies 1 and 2 are combined to maximize DAB and other partners' participation and develop projects that address both the prevention, inter- and intra-state spread of high-risk invasive species. Co-chaired by DAB and UH CTAHR with support from Stephanie Easley and Christy Martin, CGAPS & Jack Reef, HISC

Key Actions:

1. DAB, HISC and other partners collaborate on generating a Hawai'i Limited Distribution Priority List of high-impact localized invasive species to address inter-island and intra-island movement.
2. Include an assessment of the Hawai'i Limited Distribution Priority List to support DAB in developing and executing a clean nursery program that reduces inter/intra-island movement of invasive species. [link to Obj 1]
3. Conduct risk analyses and assessments to identify and prioritize pest pathways and high-risk gaps for movement of terrestrial invasive species within Hawai'i

Progress:

Achieved. Led by DAB, a non-regulatory Hawai'i Limited Distribution List was developed in 2020, a Pathways task group reviewed, validated, and updated the list in 2021. Additional updates were made in 2024. [The list](#) is a living document.

Little opportunity for progress.

- HAR chapter 72 amendments became effective in January 2025, which allow DAB to stop the sale of pest-infested merchandise, on a case-by-case basis.
- DAB staff worked with some nurseries to control certain pests such as LFA and coqui frogs.

Ongoing.

- The HPWRA continued to be used to screen plants for risk of invasiveness, info posted on the Plant Pono site.
- Following discovery of CRB in potted plants on Lanai that had been inspected on Oahu, community members, CGAPS, MoMISC, and DAB staff worked on an interim rule to restrict the interisland shipment of plants, compost, and other high-risk materials to Molokai, which the Board approved in September.
- Act 236 language added a number of new requirements for interisland movement of ag products, which appears to be inadvertently more stringent than requirements for ag products imported from other states.

Key Actions:

4. Identify and implement cost-effective tools, technologies, and methods that improve management of priority pathways by state agencies and private companies.
5. Clarify DAB authority and determine capacity needed to assess and inspect high-risk non-agricultural commodities and cargo and develop voluntary initiatives to mitigate risk.
6. Work with ISCs to increase County support for prevention and rapid response of invasive species not known to occur on their island(s).
[link to Obj 6]
7. Support HDOT implementation and 2022 update of the Statewide Noxious and Invasive Pest Program Strategic Plan in cooperation with public and private stakeholders.

Progress:**Ongoing.**

- Act 236 provided an additional \$4.25M to the HISC, \$2.124M of which will support 29 research and development proposals.
- Drone treatment of LFA tested and demonstrated to be cost-effective; monitoring of 140 acres previously treated for LFA via helicopter continued to show absence.
- PoEM investigating vibrational detection devices for wood-boring insects such as the Queensland Longhorned Beetle.

No opportunity for progress. As in previous years, DAB leadership would need to request an interpretation of their authority, followed by the introduction and passage of a bill with clarifying language. It is also not clear if DAB collects the necessary data to conduct a capacity assessment.

Ongoing. Engagement between counties and the ISCs, HISC, CGAPS, CRB Response, DAB, and others has increased due to the ongoing responses to CRB, LFA, ROD, and other pests. County support for ISCs has increased and participation in response meetings is high.

Nearly complete. The program is still successfully operating via contractors and subject-matter experts as trainers. Following a move to HDOT at the beginning of 2025, Dexter Kishida, HDOT's new biosecurity deputy, contracted an update to the plan and it is nearly complete.

Photo: The status of priority pests and capacity to respond differ from island to island.

The development of an MOU between DAB, DLNR, and UH, and management plans for LFA, CRB, and coqui in each county led to multiple meetings to work out coordination of multi-partner responses to maximize each entity's strengths and responsibilities.



Key Actions:

8. Create standardized contract language for BMPs to minimize the spread of invasive species and incorporate into contracts by state agencies and other partners.
9. Promote the use of the State Pest Reporting System. [link to Obj 7]

10. Track and report annually on status of species on the Hawai'i Limited Distribution Priority List (e.g. prevented at source, detected & removed, established, other).

Progress:

Nearly complete. [BMPs](#) and draft contract language developed in 2023 continued to be requested and shared with partners. HDOT's updated SNIPP Strategic Plan will include updated BMPs.

Ongoing. Promoted 643-PEST (phone managed by DAB) and 643PEST.org (online managed by HISC). HISC developed a [new dashboard](#) for online report data. No phone data available. DAB and HISC received multiple reports and captured several skunks and possums around sea ports. HISC staff received an online report outside of normal DAB hotline hours, which they relayed directly to DAB inspectors, who then captured the live skunk at Honolulu Harbor.

No opportunity for progress. The short tenure of the DAB Plant Industry Administrator in 2025, following the departure of the previous Administrator in June 2023 and the ongoing vacancy has left this in flux.

Strategy 3: Aquatic biosecurity

Objective: Prevent the introduction and spread of aquatic non-native species (ANS) into, between, and around the Hawaiian islands, by reducing species movement through ballast water, biofouling, intentional import and release, and unintentional modes of introduction.

This working group dissolved in 2023. CGAPS, DAR, and partners continued to make progress on Key Actions through other working groups.

Key Actions:

1. Conduct risk assessments to identify and prioritize aquatic pest pathways and risks into and within Hawai'i.

Progress:

Ongoing. DAR continued to collect, analyze, and follow up on ballast water reporting data.

Achieved. A 2025 review by CGAPS of DAR non-native aquatic animal detections showed 14 non-native marine aquarium species, all illegal imports, released or outplanted on reefs since 2017.

Little opportunity for progress. CGAPS and DAR continued to wait on the Department of the Attorney General's (AG) review of a draft permanent administrative rule to mitigate the risk of Stony Coral Tissue Loss Disease (SCTLD), a required step to enter rulemaking.

Key Actions:

2. Develop aquatic rapid response plans to address high-risk vessels.
3. Establish a vessel inspection program in Hawai'i harbors with the maritime industry and government partners, including a framework to co-regulate commercial vessels related to ANS as incidental discharges regulated under VIDA.
4. Develop framework and associated rules to manage ANS risks from non-commercial vessels (those not exempted and not covered under VIDA).
5. Fund and establish an aquatic biosecurity team to perform vessel ballast water and biofouling risk assessments within Hawai'i. [link to Obj 6]
6. Identify and implement tools, technologies, and methods that improve detection and/or management of priority species and pathways. [link to Obj 1 & 2]
7. Increase awareness of key private stakeholders of their role and opportunities to help address aquatic invasive species introduction and spread. [link to Obj 7]

Progress:

Little opportunity for progress. As with Key Action 3, it is not yet clear how DAR and USGS might share data and enforce co-enforce, or the tools that might be available to “address high-risk vessels.”

In process. DAR, CGAPS, and HDOH Clean Water personnel participated in USCG discussions on data sharing and co-enforcement for [EPA's discharge standards](#). Final regulations are expected in the fall of 2026.

No opportunity for progress. The SCTLD rule would apply to non-commercial vessels, but this Key Action continued to be a lower priority (and risk) than others.

Ongoing. DAR added a civil service position in 2025 and maintained the position established in 2021. Recruitment is ongoing for one grant-funded position, and DAR continued to host one intern. DAR estimated that a team of ten will be needed to achieve this Action.

Ongoing.

- CGAPS continued to facilitate multi-agency meetings to support the U.S. Navy's attempt to eradicate pulse coral and five other marine aquarium species from Pearl Harbor, of which 34% of the 80+ acres have been controlled to-date. Partners received grants to develop new tools including eDNA, AI image detection, and hot water treatment. The hot water unit was also used in a rapid response to a new detection in Kāne'ohe Bay.
- DAR developed EDRR reporting guidelines and CGAPS, USGS National Wildlife Health Center, Bishop Museum, and DAR hosted early detection workshops statewide.

Ongoing. DOD partners in the Hawai'i Octocorals Working Group worked with contractors to consider and plan additional strategies to minimize the potential spread of invasive marine species through maintenance projects.

Key Actions:

8. Research and develop a list of high-risk aquatic animals and prohibit their introduction to Hawai'i.
9. Establish a baseline for aquatic biosecurity and initial measures for tracking effectiveness at preventing introduction and spread of ANS.

Progress:

No opportunity for progress: Conditions continued to be unfavorable for requesting rulemaking on the short list formulated in 2022.

In process: The goal should be to have regulations, systems, interagency/collaborative relationships, tools, and personnel in place to monitor for and evaluate risk, and to take action where necessary

Strategy 4: Large-scale control of high-impact invasive species

Objective: Implement at least one new large-scale control or eradication project for an invasive species population with highly significant ecological, economic, and/or health impacts in Hawai'i, and build momentum for action on other widespread high-impact species (e.g. mosquitoes, rats, marine algae).

Lead/Chair: DLNR. This Strategy does not have a working group. Instead, HISC and CGAPS staff and networks are participating in new (novel) large-scale control projects that meet the intent of this strategy and that have already been prioritized for action by agencies.

Key Actions:

1. Identify and prioritize at least five established invasive species (aquatic or terrestrial vertebrates, invertebrates or plants) with populations that have highly significant ecological, economic and/or health impacts and where large-scale projects could be implemented in the next 10 years (e.g. mosquitoes, rodents, marine algae).
2. Research and identify tools, technologies, and methods that are proven effective (or have high potential) for large-scale control or eradication of at least three priority invasive species by 2021.

Progress:

Achieved. In 2020, HISC and CGAPS staff identified rodents, mosquitoes and the diseases they carry, LFA, coqui frogs, and invasive algae as top invasive pests that would require--and that already have promising novel control technologies that would be difficult to implement in Hawai'i without significant help. More recent additions to this list of species include CRB, Unomia, and similar marine invertebrates.

Achieved. Due to the complexity and effort, two species and their control tools were prioritized: mosquitoes (specifically *Culex* sp.) using the incompatible insect technique, and LFA using aerial delivery of an insect growth regulator in areas with waterways (this tool is not yet labeled for use on fire ants). In 2023, the almost complete lack of tools for control of marine invertebrates led to the addition to this list.

Key Actions:

3. Select first pilot/demonstration large-scale eradication project and identify political, regulatory, funding, social, cultural, and other barriers/opportunities to implementation with possible ways to reduce barriers and leverage opportunities.
4. Develop and implement a model community engagement plan (BMP) for the first large scale control or eradication project(s) and make it available for future large-scale projects. [link to Obj 7]
5. Work with partners to implement at least one large-scale project and initiate planning for at least one more.
6. Ensure the large-scale impact is sustained, including regular monitoring and follow-up. [link to Obj 6]
7. Assist lead agencies to evaluate the large-scale project(s), including model community engagement, evaluation and follow-through.

Progress:**In progress.**

- [Birds, Not Mosquitoes](#) (BNM) continued its monthly subgroup and key agency leadership meetings.
- Releases of male incompatible mosquitoes continued on Maui and began on Kaua'i.
- MISC and HAL completed little fire ant aerial control across 175 acres via helicopter in 2023, and monitoring surveys in 2024 and 2025 found no LFA. Drone applications began on O'ahu.
- DOD contractors demonstrated the systemic use of tarps and sandbags to smother Unomia across multiple acres.

In process. BNM drafted and continued to update its engagement strategy, which is a model for other projects with complex communications needs. The strategy has also facilitated productive communications between the many partners.

In process. CGAPS, HISC, and many partners are working to advance the research and demonstrations necessary for initiating new projects.

Ongoing.

- BNM partners are conducting monitoring to support expanded use of the incompatible insect technique.
- MISC continued the prescribed LFA monitoring surveys.
- DOD contractors conducted monitoring sweeps of the 34 acres cleared of Unomia, as work continues on the remaining acres.

No opportunity for progress. This step will occur once projects are deemed successful and repeatable. In addition, no public awareness and opinion surveys were conducted in 2025 to assess community sentiment, although funding to conduct one was awarded in 2026.

Strategy 5: Pacific regional biocontrol center

Objective: Increase the capacity and scope of biocontrol work in Hawai'i by creating a Pacific regional biocontrol center with planning for new facilities, base funding, and core staff in place. With existing capacity, release biocontrol agents for at least three top priority established invasive species and annually assess, prioritize, and advance critical biocontrol projects.

Support: Christy Martin for CGAPS, Chelsea Arnott for HISC, changed to Rob Hauff in November. Monthly partners teleconference meetings have been held since February 2020.

Key Actions:

1. Build a broad coalition to support the building and long-term maintenance of Pacific regional biocontrol facilities that can test potential classic biocontrol organisms across different taxonomic groups.
2. Develop a feasibility assessment for raising capacity of new Pacific regional biocontrol facilities for Congressional delegates and agency use.
3. Identify and secure lines of potential funding, site(s) and designs for climate-resilient containment facilities, including options for natural hazard mitigation.
[link to Obj 6]
4. Maintain and develop new regional and international partnerships to strengthen regional biocontrol capacity and success of exploration missions.

Progress:

Ongoing.

- Coalition was built and is maintained via monthly Biocontrol Working Group videoconference meetings.
- Continued engagement with broader partners on Pacific regional programs and needs, and communication with national and international partners.

Ongoing. On behalf of USDA ARS PBARC and USDA FS Institute of Pacific Islands Forestry (IPIF), CGAPS drafted and submitted a Congressionally Directed Spending request for \$6M for shared modular facilities, of which \$4M was appropriated. The request was provided to DLNR DOFAW, who duplicated the submission.

In process.

- A contractor, hired through a 2024 grant to UH Mānoa from the U.S. Department of Defense Office of Local Defense Community Cooperation, conducted site visits and multiple consultation meetings to draft a feasibility study for biocontrol facilities at UH, expected in 2026.
- UH, HISC, REPI staff, and others discussed the use of REPI funds to support facilities and capacity for CRB biocontrol research, including a new mobile containment unit, if necessary. Talks and planning ongoing.
- DAB received facility planning funds through Act 231 in 2024. Replacing the cooling system of the King St. facility is one of the urgent repairs needed.

Ongoing: HISC, DLNR, and CGAPS maintained national and international partners through participation in the 2nd National Forum on Biological Control held in Maryland.

Key Actions:	Progress:
5. Secure funding and increase biocontrol staff for both state and federal biocontrol projects. [link to Obj 6]	Ongoing. Act 236 funds for HISC provided \$300K for biocontrol research by USDA FS IPIF and CTAHR, including exploration and lab support.
6. Test at least eight biocontrol agents, and release five by 2025.	Little opportunity for progress. There has been no movement in 2025 on any of the tested and pending biocontrol agents through the approval process for release.
7. Evaluate and harmonize the biocontrol regulatory process for greater efficiency.	No opportunity for progress. As in previous years, DAB would need to prioritize this Key Action for rulemaking.
8. Build and maintain public support for 21st century biocontrol practices. [link to Obj 7]	Ongoing. CGAPS, HISC, ISCs, UH, and partners conducted messaging, social media, and outreach, and DOFAW maintained BiocontrolHawaii.org . Decision makers continued to ask about possible biocontrols for CRB.
9. Measure effectiveness of released biocontrol agents over time (>5 years) and track the number of biocontrol agents in pipeline and released annually.	Ongoing. <ul style="list-style-type: none"> Regulatory approval process slowed in 2024, with no new agents approved and released in 2024 or 2025. Effectiveness measures are ongoing for several released biocontrols, including strawberry guava biocontrol.

Strategy 6: Increased and diversified funding for invasive species priorities

Objective: Increase & diversify funding for invasive species priorities to secure at least \$100M annually through county, state, federal, regional, and private sources, including \$90M for operational and personnel requirements and \$10M for essential facilities (in support of other Strategies).

This Strategy does not have a Chair or Working Group. HISC and CGAPS staff and partners continued to advocate for new funding and engage new partners.

Key Actions:	Progress:
1. Work with a diverse group of advocates to increase state general funds to DLNR, DAB, UH, HDOH and HDOT for implementing HIBP actions (e.g. staff, electronic databases, adopting new technologies).	Ongoing. <ul style="list-style-type: none"> State general funds for DAB biosecurity work increased for the second year in a row, supported by engaged legislators and advocates. Additional funding for the biennium for HISC, the CRB Response, and others were included in Act 236. CGAPS, HISC, and HDOT participated in Hawai'i Green Growth (HGG) on the Aloha+ Challenge which includes HIBP implementation as a measure.

Key Actions:

2. Secure additional HISC project funding to support specific critical new initiatives in the HIBP and 2025 Strategy, including risk assessments.
3. Secure a funding mechanism (public and/or private) to provide at least \$1 million annually for emergency response to new terrestrial or aquatic incursions.
4. Increase annual support from all four counties to ensure stable and effective Invasive Species Committees (ISCs), ROD response and other priority invasive projects.
5. Double private discretionary funding to support CGAPS' ongoing and new invasive species initiatives (estimated at \$700K per year). [link to Obj 10]
6. Build a relationship with visitor industry decision-makers and develop mutually beneficial projects.
7. Investigate existing and new lines of federal funding for invasive species work.

Progress:

Ongoing. HISC, which is administratively attached to DLNR, received \$5,750,000 in annual recurring general funds from 2022-2025. An additional \$1.5M was provided in 2024 and in 2025. Act 236 provided \$4.25M in non-recurring funds to DLNR, but also transfers HISC from DLNR to DAB Jan. 1, 2030, and provided \$4.25M to DAB for HISC in 2026.

Ongoing. Although the Green Fee became law as Act 96, the funding criteria in the application for the first round of projects were not consistent with emergency response needs. However, [Act 43](#) created the Ocean Stewardship Fee in 2021. DAR began collecting the fee in 2024, 5% of which may be used for aquatic invasive species response.

In process. County engagement in responses to CRB, LFA, and other pests led to increased financial support for MISC, BIISC, and KISC.

Ongoing. The increased funds allocation from Hau'oli Mau Loa Foundation supported additional projects in 2024, 2025, and 2026. This target continued to be extremely challenging to meet. With the exception of the Foundation, private grants tend to favor on-the-ground projects and are less excited to fund salaries and behind the scenes coordination.

No opportunity for progress. Although relationships were maintained, there continued to be no available CGAPS and HISC staff time to develop proposals or to manage new projects.

Ongoing.

- DOD program liaisons met with DLNR, HISC, CGAPS, and partners to identify priorities, projects, and potential funding programs.
- USDA FS invited CGAPS to apply for funds to work with U.S. Territories on biosecurity policy gap analyses, a grant which was awarded at the end of 2025.
- CGAPS drafted and submitted an appropriations requests for the U.S. Navy to support work on pulse coral eradication, but was unsuccessful. As noted in Strategy 5, a request for \$6M for modular biocontrol facilities was funded at \$4M.

Key Actions: <ol style="list-style-type: none"> 8. Identify invasive species management as a priority use for DLNR's forest carbon offset program and secure annual commitment in addition to annual appropriations to HISC funds and Watershed Partnership Program Grants. 9. Secure capital funding for essential facilities. [link to Obj 5] 10. Repeat funding analysis conducted by LRB in 2015 to assess progress. 	Progress: <p>No opportunity for progress. Through Pacific RISCC and the ISAC, CGAPS and partners continued to message on the confluence of invasive species and climate change, and that addressing invasive species is essential for meeting adaptation goals</p> <p>In process. The USDA ARS PBARC/USDA FS biocontrol facilities continued to move up on the ARS construction priority list for facilities co-housed with a university.</p> <p>No opportunity for progress. As documented in the 2015 LRB report, the collection of these data is extremely onerous, even for LRB staff.</p>
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Strategy 7: Engaged and supportive community

Objective: Raise or maintain strong awareness and support (70% in polls) for key invasive species issues and expand, diversity, and mobilize a network of allies to achieve 2025 Strategies.

Lead/Chair: Christy Martin for CGAPS and Elizabeth Speith for HISC, with support from Ambyr Miyake, CGAPS

Key Actions: <ol style="list-style-type: none"> 1. Provide quality, timely, accessible information to community, decision-makers and allies. 2. Develop resonant/targeted messages (related to the core values of the audiences) and use effective methods/channels. 3. Increase adoption of specific biosecurity behaviors at ports of entry, especially airports. [link to Obj 1 & 2] 	Progress: <p>Ongoing.</p> <ul style="list-style-type: none"> • HISC, CGAPS, and partners provided timely, accurate, and accessible information through a variety of events and methods.. <p>Ongoing.</p> <ul style="list-style-type: none"> • CGAPS and HISC staff continued to co-chair the Public Outreach Working Group, CGAPS led the LFA Outreach Working Group and co-led the ROD Outreach Working Group which included outreach specialists from each county, and used social marketing practices. • A new ten-minute video follow-up to the Saving 'Ōhi'a documentary was released to appeal to communities to work together to protect forests for all. <p>Ongoing.</p> <ul style="list-style-type: none"> • DAB's Akamai Arrivals declaration app piloted and expanded. • DAB and ROD messaging featured at several airports. • HISC's Port of Entry Monitoring Program continued work with port managers on monitoring.
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Key Actions:

4. Identify and engage influencers in different sectors, industries, and groups who can champion invasive species priorities.
5. Increase CGAPS & partner understanding and use of social science and raise capacity for the effective use of social science concepts and social marketing for invasive species messages.
6. Increase political will to support policy and funding needs.
7. Coordinate statewide or regional strategies and messages across lead agencies and partners; provide communications/coordination support for agencies and partners for key issues.
8. Evaluate effectiveness of communications periodically and use these lessons to improve future initiatives.

Progress:**Ongoing.**

- Noted Big Island outdoorsman Justin Lee and family participated in the video short on ROD and the need to work together to protect forests for all.
- Pacific Island partners, National Invasive Species Council, Sierra Club, and others remained engaged as champions on a variety of invasive species issues.

Ongoing. Public Outreach Working Group meetings and annual outreach campaigns, such as Stop the Ant Month, allow the Working Group to assess messages, audiences, delivery methods, and ways to reduce barriers to desired behavior adoption. Social marketing concepts were used to examine slug and snail control messages to manage rat lungworm.

Ongoing. Like in 2024, biosecurity was again a priority for policymakers in 2025, with passage of significant policy changes and funding bills.

Ongoing.

- HISC staff continued to lead interagency coordination and communication, and developed MOUs. Partners developed species-specific multi-agency plans.
- CGAPS staff continued to support DAR related to VIDA, SCTLD, and rapid responses, and the U.S. Navy's work on pulse coral, including through messaging and communications.
- Coordinated information and action at the nexus of climate and invasives through the Pacific Regional Invasive Species and Climate Change management network ([Pacific RISCC](#)).
- Pacific RISCC, BIISC, CRB Response, and partners organized the 2nd Pacific regional [CRB symposium](#) via videoconference.
- Elevated regional and island-specific messages in regional workshops, presentations, and ISAC white papers.
- HGG and partners continued to highlight the HIBP as part of the Aloha+ Challenge.

Achieved. Evaluations for Stop The Ant, HISAM, ROD outreach events, and other projects showed the effectiveness of messages and effort.

Strategy 8: HISC engagement across sectors

Objective: Improve HISC's engagement and support across key sectors (agriculture, conservation, economy, health, tourism, transportation, and culture/way of life), and systems (terrestrial and aquatic), as measured by engagement in HISC activities and effective use of HISC tools (e.g. funding, policy resolutions, testimony).

Lead: HISC staff, Council members or designees, and working group chairs. As Strategy 8 is an internal HISC Strategy, progress on Key Actions are not included in this report.

Strategy 9: Strong CGAPS network

Objective: Include representatives across the diverse invasive species community of practice in the CGAPS Network and actively engage all partners needed to implement this 2025 Strategy.

Lead: CGAPS staff and Steering Committee members.

Key Actions:

1. Continue to engage and support CGAPS partners by assessing and improving current network communications, including general meetings, list-serve, website, information sharing and other network activities.
2. Provide and socialize a simple description of what CGAPS does and how it relates to HISC with all CGAPS participants, especially Steering Committee members.
3. Challenge the CGAPS Steering Committee to actively lead, implement and/or support elements of the 2025 Joint Strategies (Objectives and/or Key Actions) most relevant to their positions and agencies.

Progress:

Ongoing.

- Four quarterly general meetings were held, three via video conference, one as hybrid, averaging 40-50 participants from across Hawai'i and occasionally from outside of the state.
- CGAPS listserve subscribers decreased slightly with multiple federal retirements, and website visitors decreased by 3%.

Ongoing. The simple “we see and fill the gaps” description works well. There continues to be confusion not just between HISC and CGAPS, but also the relationship with the ISCs. New participants and decision makers have the most difficulty.

Little opportunity for progress. 2025 was a very difficult year for federal staff, resignation of the DAB member, and the departure of HISC Coordinator Chelsea Arnott in the fall made this Key Action difficult. Initiation of strategic planning in 2026 aims to set priorities and commitments.

Key Actions:

4. Identify and recruit additional public and private sector partners needed to implement the 2025 Joint Strategies, using various meeting formats, venues and other engagement mechanisms.
5. Track member participation and periodically gather input on their satisfaction with the CGAPS network and opportunities for adaptive management.

Progress:**Ongoing.**

- Continued to expand CGAPS and HISC networks and increase focus on the HIBP through Hawai'i Green Growth and projects.
- Again in 2025 CGAPS and HISC staff and partners participated in town halls and public meetings with legislators and continued networking at in-person conferences and events.

Ongoing. Participation in Steering Committee and General Meetings remains steady. Also, a U.S. Navy biologist said that they intend to set up a group similar to the CGAPS-facilitated Hawai'i Octocoral Working Group in order to organize the response to a new octocoral detection in Guam.

Strategy 10: Stable CGAPS funding and staffing

Objective: Secure committed, consistent annual contributions from CGAPS partners to provide core support for two staff and core operations (est. \$250K per year, not including project funds).

Lead: CGAPS staff, Steering Committee members.

Key Actions:

1. Review CGAPS funding needs with the Steering Committee and request/secure annual contribution commitments from all members.
2. Work with the CGAPS Steering Committee to assess the potential core funding mechanisms, contributors, and amounts to ensure CGAPS financial security and continuity after 2022 (when HMLF 11-year commitment ends).
3. Secure additional annual commitments from active CGAPS partners outside the Steering Committee.

Progress:

Achieved. The annual funding spreadsheet was shared at the first and third quarter Steering Committee meetings with the request for support. Funds were secured through existing contributing agencies that have available funding mechanisms.

Achieved. The best core funding mechanisms are contributions from multiple partner agencies combined with grants or contributions from private foundations at \$500K. Hau'oli Mau Loa Foundation's commitment to an additional five years of support through 2028 is critical to CGAPS' work.

Achieved. CGAPS secured a 2-year non-competitive grant from a new partner outside of the Steering Committee.

Key Actions:

4. Complete the first eleven years of partnership with HMLF and agree on future partnership priorities by 2022.
5. Present CGAPS “value proposition” and funding needs to the Environmental Funders Group (EFG) to seek core funding and/or project support.
6. Explore feasibility of permanent funding for one CGAPS position in a partner institution’s budget (e.g. faculty specialist at UH).
7. Provide annual CGAPS budget and financial report to the Steering Committee, especially tracking core support from partners.

Progress:

Achieved. CGAPS and the Foundation Board met in 2023 and agreed to a new 5-year time frame, partnership priorities, and benchmarks. CGAPS shared its progress with the Foundation board in November.

Achieved. This presentation was made in 2021. However, no additional opportunities have been available to build interest in core support.

No opportunity for progress. UH discontinued creating faculty specialist positions in 2024. New options will be needed.

Achieved. CGAPS support remained steady and provided adequate core support and project funds.

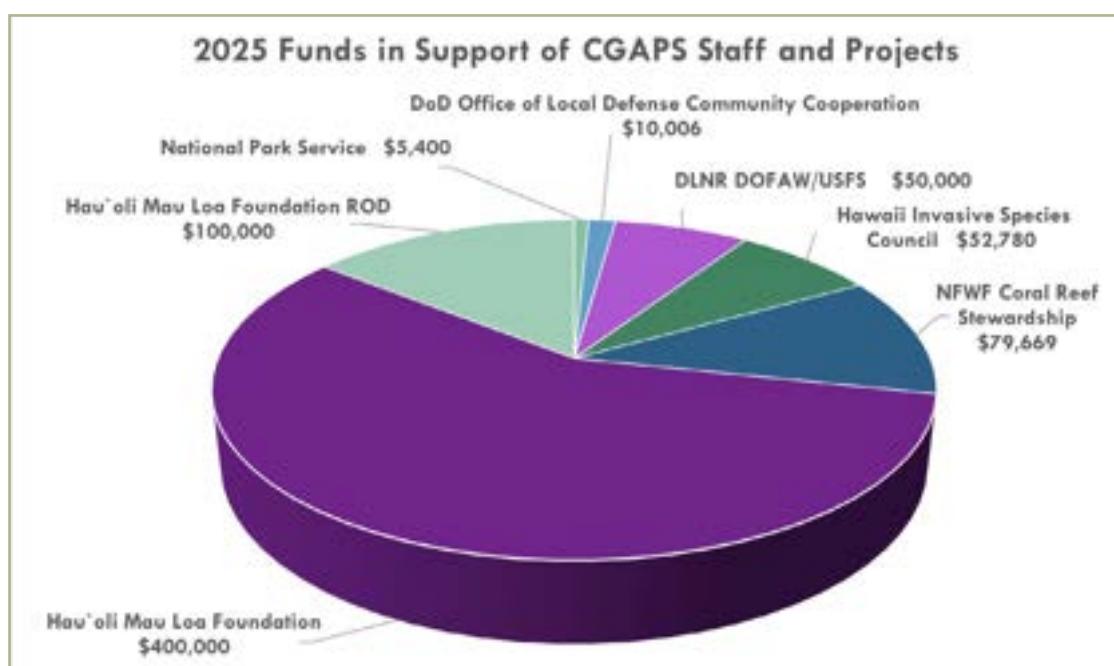


Fig. 1. Total funding committed for CGAPS staff and projects in 2025 was \$697,855. This is a increase over 2024 funding, which was 663,371. Most of the increase represents grant funds for projects.

HISC Project: Stop The Ant Month

Funded through a grant to CGAPS from HISC (agreement # C42861), the annual Stop The Ant Month campaign was held again in October with outreach staff from DLNR DOFAW, ISCs, HAL, and CGAPS. Statewide message planning, confirmation, and other logistics were again facilitated by CGAPS. As in previous years, messages were confirmed with partners:

- Request a free ant collection kit from StopTheAnt.org
- Collect and submit ants for ID to your island ISC or HAL (as DAB has requested since 2022)
- Everyone's help is needed find LFA or other new and harmful ant species early

Monthly planning meetings and preparations included updating the website, writing and coordinating a [news release](#) with DLNR, tailoring information for legislators to share, ordering kit supplies, drafting and contracting radio and print ads, designing and scheduling social media posts, and other tasks. Stop The Ant Month was featured in several radio, [e-news](#), television [interviews](#) and [news programs](#), and partners' social media, reaching approximately 700,000.

The estimated reach from paid media includes:

- HAL ran 231 radio ads on 4 stations for an estimated reach of 38,900 for \$995.
- MISC ran 208 radio ads on 2 stations that reached 54,000 for \$2,434 (some MISC funds).
- KISC ran 245 radio ads with 6 stations that reached 27,000 for \$1524.
- OISC ran 1 Sunday ad in the Honolulu Star Advertiser for \$2550 and one in Midweek for \$1275 with a QR code leading to the kit request page for a combined reach of 422,600.
- 73,953 people were reached via October social media posts with 5.1% engagement rate, which is considered above average for the platforms.
- 203 public ant samples were submitted in October and November, five contained LFA.
- 424 ant samples from students' yards were submitted through the [Hō'ike Little Fire Ant Activity](#) conducted by outreach partners with classes in October, with no LFA detected. The activity is available year-round and earlier in 2025, 29 of the samples collected by students at a school in an area with a known but not fully mapped LFA infestation contained LFA, showing the efficacy of this activity.

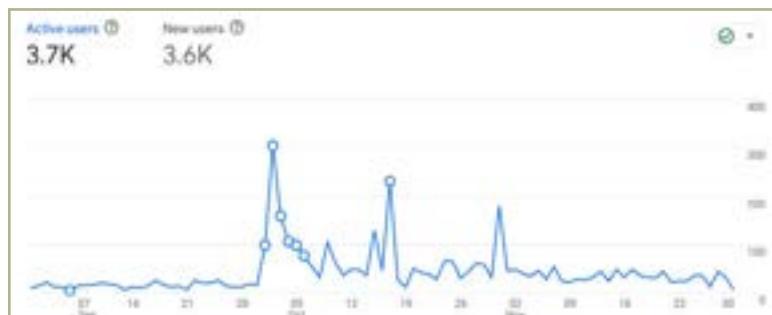


Figure 2. Web analytics from August 1 through November 30 shows the traffic generated by the focused outreach effort in October. The October 1-3 increase is likely associated with the press release and stories generated in the following days.

2025 October Stop the Ant Month Campaign	Ant Collection Kits Requested via Web/Mail in October	Public Samples Submitted in October + November	School Visit Samples Submitted in October	LFA Detections from Samples Submitted in October + November	Previously Unknown Infestations
Hawai'i Island	116	61	n/a	multiple	multiple
Maui County	38	10	77	0	0
O'ahu	254	67	205	4	1
Kaua'i	150	65	142	1	1
TOTALS	558	203	424	5	3

Table 1. Radio and print ads ask people to request a free ant collection kit through the website. Although kits are available year-round, participation increases during the October campaign and in the following month. There were five LFA detections, three of which were new locations, and no new species.

Hau'oli Mau Loa Foundation Projects

This section of the annual report focuses on invasive species prevention projects funded by Hau'oli Mau Loa Foundation, the first of a new five-year natural environment protection partnership between the Foundation and CGAPS. The CGAPS Steering Committee uses the 2025 Strategy and the HIBP to prioritize projects that could not otherwise be carried out by agencies. Project funding is awarded at the end of a calendar year and may be single- or multi-year, and some projects (including funding for some CGAPS staff) are funded through multiple sources. The progress and final report summaries of projects are provided below.

Support for Hawai'i Green Growth (annual)

Funding provided by the Foundation through CGAPS (grant #24-1211-22-457) provided partial support for the general operating cost of the [Hawai'i Green Growth](#) (HGG) staff and projects that drive progress on the [Aloha+ Challenge](#) goals. Invasive species priorities are a part of several of the Aloha+ Challenge goals, including Natural Resource Management (the implementation of the Hawai'i Interagency Biosecurity Plan is one of the measures), Local Food, Smart & Sustainable Communities, and even Green Workforce & Education.

HGG continued its critical function of engaging county and state leadership to ensure that the goals of the Aloha+ Challenge remain priorities through the years. The working groups and annual meetings provided spaces to meet and share biosecurity messages and priorities with a wider audience than CGAPS staff typically interacts with. HGG staff continued to maintain and improve the Aloha+ Challenge Natural Resource Management and Invasive Species Target Dashboard metrics. HGG also worked in different spaces, such as the United Nations, which helped carry and convey the serious impacts and existential threat of invasive species on islands, and the solutions that can come from islands.



HGG 2nd Quarter Policy and Legislation working group meeting.

Communications on Marine Invasive Species (2024-2025, extended through 2026)

Detections of invasive marine aquarium species that have been released or intentionally outplanted on reefs across the state continue to increase. This project, #23-1206-20-432, is divided into three related projects focused on building awareness of this issue. In 2024, Hannah Chang, a marine illustrator and then a UH Mānoa marine biology student, was contracted to design a new logo and communication pieces for a Don't Let it Loose campaign. In the spring of 2025, the second project was initiated, which is a contract with Bishop Museum to design and install a new exhibit on marine invasive species at the museum. Bi-weekly planning meetings between CGAPS and Bishop Museum staff have this project on track to meet the target installation date in May 2026. The final part of this grant is intended for a contract for professional communications assistance to get the word out more widely, a project that is best

conducted in conjunction with newsworthy events, potentially including the launch of the new exhibit.

Strategic Planning (2025; extended through 2026)

The HISC and CGAPS 2025 Joint Strategy prioritized the most urgent and achievable of the 147 actions in the Hawai'i Interagency Biosecurity Plan and focused the effort of these two networks on this subset for five years. A status review and strategic planning for the next five years was to occur in 2025 as a limited update to the existing plan (#24-1211-23-458). However, legislative changes to DAB and HISC, federal staffing and budget issues, and changes in key personnel resulted in postponement of a contract. Towards the end of 2025, it became clear that a full planning process was needed due to the many changes. A second request for additional funds for this contract was awarded for 2026 (#25-1209-21-481).



Christy Martin and Hannah Chang (right) met with Bishop Museum staff Holly Bolick (left), Brad Evans (center) to plan a new exhibit on marine invasive species. The exhibit is expected to open in Bishop Museum's Science Adventure Center in May, 2026.

Testing In-Water Cleaning Technologies (2018 – 2019; extended through 2025)

This project (#17-1213-12-294) is a multi-year grant administered by HCAF that was initially delayed due to the passage of the Vessel Incidental Discharge Act in December 2018, which will preempt state regulations related to biofouling once federal regulations come into force. In 2024, the Environmental Protection Agency (EPA) published its final discharge standards, and the U.S. Coast Guard will have less than two years to develop, propose, and adopt regulations based on EPA's standards. Discussions were initiated in October with a conference call with lead collaborators from the U.S. Maritime Administration and the Maritime Environmental Research Center.

CGAPS Legal Fellows (annual)

The CGAPS Legal Fellows (#24-1211-20-455) is a collaborative project between the UH William S. Richardson School of Law and CGAPS. The work of the Legal Fellows is crucial in helping CGAPS, HISC, and partners with legal research and potential policy changes to support better invasive species prevention and response programs. The Legal Fellows also assist the Environmental Law Program through occasional talks, working with Legal Interns and Externs, and other special projects. The Legal Fellow Program has educated the community of next-generation leaders in invasive species issues for years. Former Legal Fellows have become legislators, managers at State agencies, and other leaders in conservation in Hawai'i.

Stephanie Easley continued in her role as the CGAPS Terrestrial Invasive Species Legal Fellow providing support for regulations, legislation, and activities that prevent the introduction or spread of high-impact invasive species.

During 2025, Stephanie utilized her background in legislation and legislative drafting to respond to requests from legislators related to invasive species prevention. She researched and provided draft legislative language at the request of members of the State Legislature to prepare

bills and amendments. The legislative session included dozens of bills related to invasive species, ranging from large, multi-issue measures to bills focused on a single issue. Like the previous year, Stephanie led CGAPS' bill tracking, analysis, and the drafting of testimonies. She worked with Christy to review and refine main points and provided written and oral testimony at more than 40 legislative committee hearings.

Stephanie supported the introduction and passage of [Act 190](#), which authorizes DAB to enforce federal quarantines to prevent the introduction of invasive pests and diseases into the State from the continental U.S. Enforcement of USDA quarantines includes interstate inspection conducted by USDA APHIS; however, in Hawai'i, USDA APHIS does not conduct inspections of interstate agricultural commerce. They inspect foreign importations of agricultural commodities into Hawai'i and inspections of conveyances bound for the U.S. continent from Hawai'i. Act 190 provides clear authority for DAB to enforce USDA quarantines to prevent the interstate movement of high-impact pests such as the virus that causes citrus greening, Red Imported Fire Ants, and others. After its enactment, Stephanie organized a meeting with DAB, USDA, and University of Hawai'i personnel to discuss DAB's implementation of this new authority.

[Act 240](#), which requires firewood imported into Hawai'i to be heat-treated to kill forest and hitchhiker pests hiding in the wood, also passed. The movement of firewood is a documented pathway for the spread of destructive invasive species. Many other states have adopted heat treatment requirements for firewood, leaving Hawai'i vulnerable as one of the remaining states that would accept untreated, often low-quality firewood, and the passage of Act 240 is the result of several years of work led by Stephanie. Stephanie, working with Christy, provided testimony at each of the four hearings for the bill that became Act 240. Stephanie has worked with DAB on different approaches to require heat treatment of imported firewood since 2020, including providing staff support for a firewood working group, coordinating with experts at The Nature Conservancy's national Don't Move Firewood project, and drafting firewood regulations, making the enactment of Act 240 a very exciting win for invasive species prevention in Hawai'i.

In addition to these new Acts, several changes proposed in CGAPS' testimony were accepted by the legislature and included in several enacted laws. As an example, the bill that became Act 236 initially proposed deleting the statutory basis for chapter 72, Hawai'i Administrative Rules, DAB's authority to regulate pests moving within the State. CGAPS testimony requested that this language be restored, that testimony was accepted by the Senate Committees, and that critical authority remains in the law.

Throughout the year, Stephanie provided research and policy options to decision-makers to prevent the spread of coconut rhinoceros beetle (CRB) in Hawai'i. CRB was first detected in Hawai'i on O'ahu in 2013. DAB and its partners were able to prevent the spread of CRB to other islands until 2023, when CRB was detected on the Island of Kaua'i, where it is now widespread. In March 2025, an active CRB infestation was detected in west Hawai'i Island. Throughout the year, Stephanie endeavored to provide decision-makers with available regulatory options to contain the infestation. This included providing testimony at a Board of



CGAPS Legal Fellow Stephanie Easley testifying in front of the House Committee on Agriculture & Food Systems.

Agriculture and Biosecurity meeting that presented a description of regulatory options available to contain the infestation and participating in a bi-weekly CRB working group and other CRB-related meetings. Stephanie also provided support for a [petition to initiate rulemaking](#) submitted by residents of the Island of Moloka'i that sought to prevent the movement of all CRB host material to the Island for a one-year period. That petition was ultimately successful, and the interim rule is currently in effect.

In administrative rules work, the [HISC administrative rules](#) became effective in March 2025 after several years of providing assistance. These are the first administrative rules for HISC since its inception, and the adoption of these rules provides HISC departments and counties with an important tool to control and eradicate high-impact invasive species. Stephanie continues to work with partners to consider the use of the HISC rules framework to obtain access to property to survey for and control high-impact invasive species, such as miconia.

Stephanie also reviewed administrative rules for the Department of Land and Natural Resources to identify invasive species-related provisions and provide suggestions on rule language. She also continued her efforts to raise awareness of the biocontrol organisms that have been stalled in the rulemaking process for years.

Throughout the year, Stephanie participated in meetings for the MOU for High Priority Pests. She also assisted in the preparation of the legal/regulations section of the statewide LFA response plan.

In September, Stephanie participated in a two-day facilitation skills workshop, where she gained skills in assisting groups in reaching consensus.

In preparation for an upcoming biosecurity policy gap analysis project with Pacific Territories, Stephanie participated in meetings to better understand the federal and local laws and practices. She also attended planning sessions for the American Samoa Biosecurity Forum, which had been scheduled for October 2025 but has been postponed until 2026.

In support of the William S. Richardson School of Law, Stephanie was a guest lecturer in the Legislation class during the spring and fall semesters and participated in a panel on rulemaking for the Administrative Law class in March 2025. Through these interactions, Stephanie connected with law students and offered advice and support to students on legislation-related projects during the year. Stephanie also continued to participate in the Legal Fellows meetings and CGAPS quarterly General and Steering Committee meetings.

Andrew Porter, CGAPS Aquatic Legal Fellow, focused on marine invasive species issues, including pathogens that cause coral disease, and the vessel-related pathways of ballast water and biofouling. Andrew worked closely with the DAR Ballast Water and Biofouling Coordinator, Elizabeth Monaghan, DAR staff, the Hawai'i Office of the Attorney General, Pacific region and West Coast partners, and on national working groups.

Participating in USCG meetings with the states was one of Andrew's main projects in 2025. The EPA's finalization of the vessel incidental discharge standards in late 2024 triggered the start of the USCG's development of VIDA's implementation, inspection, and enforcement regulations for those discharge standards. VIDA allows states to enforce or co-enforce with the USCG, and as required by VIDA, the USCG must consult with states on the implementation, inspection, and enforcement of such regulations. USCG holds monthly state coordination meetings in which the USCG would present a draft regulation for a specific action and included time for questions and discussion. The states were also given an opportunity to submit written comments on that section/action and the USCG would address the comments for discussion at the next state coordination meeting. Andrew worked with Elizabeth and West Coast partners to discuss potential impacts of each action, and to draft and submit Hawai'i's comments.

The most important question from the USCG implementation and enforcement regulations was regarding federal and state co-enforcement of the EPA discharge standards.

The outcome of this work resulted in Hawai'i retaining three options for enforcement: (1) leaving enforcement completely up to the USCG, (2) co-enforcing federal regulations with the USCG, (3) or enforcing state or federal incidental discharge regulations without involvement or assistance from the USCG. The impact of retaining these options is that it allows the state to mirror the federal regulations under state law and bring an enforcement action through a Hawai'i administrative process or through Hawai'i state courts. Without such authority, Hawai'i would be forced to rely on the USCG completely or bring any state enforcement action in the Federal District Court, which poses several logistical hurdles. With such state enforcement authority now appearing to be included in the USCG final regulations, it will be important for the state to expand DAR authority over all incidental discharges included in VIDA and to automatically mirror federal incidental discharge regulations in the Hawai'i Administrative Rules.

Another goal in 2025 was to make progress on developing and passing the SCTLD regulations to prevent its introduction into Hawai'i and the greater Pacific region. In furtherance of this regulation, Andrew revised the language of the rule and addressed comments received from the Legislative Reference Bureau and the Deputy Attorney General. This year Andrew also drafted the companion paperwork for the SCTLD rule outlining the background of the rule, the need for its provisions, and a more detailed review of each provision and its potential effects on Hawai'i's society and economy. This companion material is required for submission of the rule to the Board of Land and Natural Resources. Andrew set up regular meetings with DAR through the spring and summer of 2025 to work on language for the rule and coordinating communications with the Attorney General. As the year came to a close, the team was still waiting on final approval from the Office of the Attorney General to clear the way for submission of the rule package to the Board of Land and Natural Resources.

This past year, Andrew and colleagues from USCG and EPA made several presentations on his 2024 white paper, "An Overview and Analysis of Current Regulations Available to Prevent the Transmission of Stony Coral Tissue Loss Disease Through Shipborne Vectors," Online presentations to the U.S. Coral Reef Task Force's (USCRTF) working groups on Coral Disease and Disturbance, SCTLD Transmission, and the fall meeting of the Invasive Species Advisory Committee reached important audiences across the U.S. The question-and-answer session sparked a broader discussion about the need for additional SCTLD-specific vessel regulations in the United States. Andrew continued to participate in monthly meetings with the USCRTF working groups on coral disease issues, outbreaks, and regulations.

Andrew also continued to participate in the bi-weekly Hawai'i Octocoral Working Group meetings and worked with Stephanie to meet with and assist Navy personnel in drafting installation directives for Joint Base Pearl Harbor-Hickam that mirror Hawai'i state regulations prohibiting aquarium release and DAB's Plant and Animal import rules.

At the request of the Department of the Interior, Andrew, Stephanie, and Christy were invited to participate in a biosecurity workshop in American Samoa and Andrew was asked to focus on VIDA and SCTLD for the marine biosecurity



CGAPS staff Andrew Porter, Stephanie Easley, Ambry Miyake, Hannah Chang, and Christy Martin participated in the Unomia Learning Exchange, hosted by CGAPS and Bishop Museum. National Fish and Wildlife Foundation Coral Reef Stewardship funds supported the participation of representatives from each U.S. Territory.

track. Although planning has been on hold through the holidays, the American Samoa Biosecurity Forum is expected to be rescheduled for May 2026, and the planning meetings will likely restart in the new year.

Capacity Support for CGAPS Program Manager and Planner (annual)

The Foundation provides part of the annual salary and operating costs for the CGAPS Program Manager and Planner (grants #22-1208-16-403, #23-1206-18-430, and #24-1211-21-456, and #), which are set up as projects under UH PCSU. Additional support for these positions and operating was received from HISC (C4507981) and DLNR DOFAW (USDA Forest Service passthrough C52806). For the Program Manager, additional funds were received from NPS (#P17AC01216 Mod2), National Fish and Wildlife Foundation Coral Reef Stewardship (Easygrants ID: 83122), and OLDCC (via subaward) also supported partial salary and activities related to these grants.

Uncertainty regarding federal agency budgets and capacities led to the decision not to permanently fill the Planner position. Instead, the position has been filled twice as 89-day temporary hires. Having this open position with funding from the Foundation, combined with UH/RCUH's internal federal action policies, allowed for the rapid hiring of key personnel to fill the Planner position.

Troy Levinson was near the end of the year-long probationary period as Brown Treesnake Coordinator at the U.S. Fish & Wildlife Service when, on February 19, he and other non-permanent federal employees nationwide were laid off. An RCUH request for recruitment was initiated on 2/26, and Troy started at CGAPS within 7 working days, focused primarily on Strategies 1 (Prevention), 7 (Engaged and Supportive Communities), and 9 (Strong CGAPS Network). In his first week at CGAPS, Troy provided briefings to Senator Hirono's staff and fielded media and decision-maker questions about the federal role in brown treesnake work and the importance of the work for Hawai'i and throughout the Pacific. He continued to coordinate with multiple state, territorial, and federal agencies to ensure that interdiction activities continued, while also taking on CGAPS duties, including participating in response meetings for little fire ant and pulse coral. Troy was reinstated at U.S. Fish & Wildlife and ended his work at CGAPS at the end of March.



Senator Hirono addressed Congress on the impacts of federal policy on public safety and brown treesnake work in the Pacific, information received from Troy Levinson in his first week at CGAPS.

The success of this flexible approach prompted CGAPS to keep the permanent position open in case of similar federal issues, and instead do a targeted 89-day hire to provide an early-career opportunity for **Hannah Chang** who graduated with a degree in marine biology from UH Mānoa in the spring of 2025. After hearing Christy's presentation in her Marine Option Program class in 2023, Hannah reached out and was contracted by CGAPS to design the Don't Let it Loose Hawai'i campaign logo while she was a student. With this experience and her prior BFA in design from Rhode Island School of Design, Hannah started in this 89-day temporary Planner position on 6/17 to assist with communication projects. She participated in a number of communications planning meetings, designed new art for the Stop The Ant campaign, and

researched and planned potential components of a new marine invasive species/Don't Let it Loose exhibit at Bishop Museum. Hannah also helped to coordinate logistics for the NFWF Unomia Learning Exchange workshop, activities primarily focused on Strategies 7 (Engaged and Supportive Communities), and 3 (Aquatic Biosecurity). Hannah's last day was 11/3/25, but CGAPS is seeking to contract her for more marine invasive species design projects in the future.

Christy Martin continued as the Program Manager and Information Officer, responsible for public and policy maker outreach and media-related duties (50%); staff direction and supervision, partnership coordination, and partner project support services (25%); grants and reports, planning, and project management (20%); and other duties as assigned (5%). In this position, Christy continued to conduct and coordinate outreach and communications, provide direction for CGAPS staff, contractors, and projects, work with fiscal staff and administrators on procurement and contracting, and assist the CGAPS Chairs, Steering Committee, and the Working Groups, to advance action on the Strategies.

Each year, nearly six months are spent in communications with decision makers in preparation for, or participating in, the state legislative process and requests for congressional appropriations. For the 2025 legislative session, Christy and Stephanie worked together to provide background information on gaps and potential solutions for biosecurity programs and authorities. During the session, they monitored 45 bills and resolutions and provided more than 40 written and verbal testimonies. Each hearing was an opportunity to share information and describe the real-world implications of gaps in authorities, how different invasive species programs operate and their needs, and why certain statutory language is important. Details on successful legislation are included under the Strategies Progress and Stephanie's section of this report.

Christy continued to work with staff from each of Hawaii's congressional offices to brief them on issues. One such issue was the announcement in February of the elimination of contract positions throughout the federal government, which, over time, would have eliminated USDA Wildlife Services personnel on Guam. These fee-for-service staff are technically contractors responsible for inspecting for and trapping brown treesnakes around Guam's ports to prevent their spread, and who are also responsible for protecting against bird-aircraft collisions by controlling wild birds that nest within the Guam airport property. Media stories were generated, and within two weeks, following communications from multiple leaders from Hawaii and U.S.-affiliated Pacific Islands, a "clarification" was issued that these USDA Wildlife Services contract positions and their operations were exempt.

Other communications were related to congressional appropriations requests drafted and submitted by Christy on behalf of partners, and provided to DOFAW to also submit as a coordinating approach. In 2025, a request was submitted to provide dedicated funding for the U.S. Navy to continue its eradication work on pulse coral and the other marine aquarium species detected



CGAPS staff facilitates multi-partner responses such as the Hawaii Octocorals Working Group and Oahu LFA Response to promote collaboration and support effective, research-based responses. Pictured above is an LFA survey day in Lanikai with OISC, HAL, DAB, CGAPS, district legislators, and community members.

in Pearl Harbor in 2023. While in the DC area for the National Forum on Biological Control, Christy met with Congressman Case's staff to provide an update on the unexpected success of eradication efforts across multiple acres of pulse coral using hand removal and tarping. While this appropriation request was not reflected in the FY2026 National Defense Authorization Act, partners at Joint Base Pearl Harbor-Hickam were able to prioritize other funds to continue the work towards eradication in the coming year and to begin work on a separate population of an invasive anemone at Ford Island. Working with Senator Schatz's staff, Christy also drafted and submitted requests for Congressionally Directed Spending for \$6M to purchase modular biocontrol units at USDA ARS Pacific Basin Agriculture Research Center to co-house USDA ARS and USDA Forest Service Institute of Pacific Islands Forestry biocontrol projects. In November, Senators Schatz and Hirono announced that they secured \$4M to initiate that project.

In 2024, legislators requested that DAB, DLNR, and UH clarify how they were working together on priority pests, so HISC Coordinator Chelsea Arnott led the joint drafting and adoption of an interagency Memorandum of Understanding (MOU). As part of the MOU, response plans were drafted in 2025 for multi-agency responses in each county to LFA, CRB, and coqui frogs. For LFA on O'ahu, Christy continued to facilitate the O'ahu LFA Response meetings, held every other month for the past several years, and coordinated the drafting of the O'ahu LFA Response Plan which details how and where HAL, OISC, USFWS, DLNR, Army Natural Resources Program-O'ahu, DAB, CGAPS, and others focus field and outreach time, resources, and expertise.

Christy also continued to facilitate bi-weekly multi-agency Hawai'i Octocoral Working Group meetings, completing its third year, to advise the U.S. Navy work towards the eradication of pulse coral in Pearl Harbor, O'ahu. Control work was primarily via contractors, with 34% of the infestation (80 acres, including buffer zone) controlled since removal work began in 2024. Cleared areas are receiving periodic maintenance sweeps to remove any regrowth, missed individuals, or newly recruited pieces (these have been minimal, which is a good sign). Working group meetings continued to provide the space and format for collaboration, with DAR requesting and receiving permission to survey the seaward edge of the known infestation and detecting just a handful of small new infestations (removed). The collaboration also sped a response to a new report of Kenyan tree coral in Kāne'ohe Bay, the sampling and identification of the species, and the rapid response using a hot water unit treatment developed and piloted in Pearl Harbor, all within three weeks.

Through a grant from the National Fish & Wildlife Foundation Coral Reef Stewardship Program, CGAPS worked with partners to plan and hold an Unomia Learning Exchange in Honolulu that brought together representatives from each U.S. Territory and local staff from agencies and NGOs for a two-day workshop to learn from each other on how to prepare and respond to this and similar species. Participants learned about Unomia and other recently detected marine aquarium species that have been detected on U.S. reefs, saw living examples at the Waikīkī Aquarium, and participated in talking through a response plan. Following that,



Pacific RISCC continued to explore and communicate about the confluence of invasive species and climate change on Pacific islands. (L-R): Christy Martin, Laura Brewington, and Heather Kerkering are three of the co-founders.

CGAPS, DAR, and US Geological Survey National Wildlife Health staff organized and held early detection workshops were then held across the state.

Christy continued to co-lead the US Coral Reef Task Force & Aquatic Nuisance Species Task Force working group on invasive soft corals, through quarterly nationwide videoconference meetings, and also continued to co-lead with HISC's Elizabeth Speith, quarterly statewide Public Outreach Working Group meetings, to ensure coordination and collaboration around shared priority issues and messages.

Work also continued with the Pacific Regional Invasive Species and Climate Change (Pacific RISCC) management network and with other RISCCs across the U.S. and now in Canada towards the goal of communicating the intersecting and synergistic effects of invasive species and climate change. As one of several co-founders of the Pacific RISCC, Christy worked with Elliott Parsons and the core team to identify and host webinars on the intersection of climate change and invasive species on islands.

At the end of 2024, Christy was reappointed to the Invasive Species Advisory Committee (ISAC), a federal advisory committee that provides information and advice for consideration by the National Invasive Species Council. After serving as Vice Chair in 2022-2024, Christy served as Chair and also co-led the subcommittee that developed ISAC's first-ever marine invasive species white paper, "Opportunities for Improved Marine Biosecurity," and contributed to a second white paper, "Invasive Species Threaten American Food Security". Unfortunately, ISAC was not one of the federal advisory committees renewed via Executive Order in the fall of 2025.

One project that did not go as planned was the review, copyediting, and layout for the new 5-year Rapid 'Ōhi'a Death Strategic Plan, which was intended to be completed by the close of 2024. Instead, internal and external reviews of the draft text were completed and addressed in 2025, and additional updates were made to reflect new developments in the response. At the close of 2025, Christy and Rob Hauff, DLNR DOFAW State Forester and ROD Response Coordinator, submitted a final round of comments on the draft and will continue to work with the contractor to produce print and PDF versions for distribution.

As part of the UH PCSU and RCUH community, Christy supported and highlighted the University's role in invasive species adaptive management research and work through lectures, presentations, informal advising, and other communications and collaborative projects with students, faculty, and staff. The Outreach & Media section of this report contains a more complete list of these activities.

ROD Emergency Special Funding Projects (annual since 2019)

HMLF has provided special additional support for emergency response work on Rapid 'Ōhi'a Death (ROD), which is deeply appreciated (grants #18-1212-22-321, #21-1208-22-382, #22-1208-18-405, #23-1206-21-433, and #24-1211-24-459). Most ROD funds are administered by the University of Hawai'i Foundation and Office of Research Services because UH plays a key role in the research, response, and extension work on ROD. A portion of the funds supported Ambyr Miyake and her work as the ROD Statewide Outreach Coordinator, and a portion provides partial support for Xiaohua Wu, the ROD Diagnostician housed at USDA ARS Pacific Basin Agricultural Research Center, to process the thousands of samples submitted for ROD pathogen testing.

Ambyr Miyake continued in her ninth year as the ROD Statewide Outreach Coordinator, under the supervision of CGAPS, with Drs. Mike Melzer and J.B. Friday as Principal Investigators. Ambyr is responsible for coordinating and implementing the public engagement goals and actions in the 2020-2024 ROD Strategic Response Plan. Ambyr worked closely with Charlotte Godfrey-Romo, the Hawai'i Island ROD Outreach Specialist, Kim Rogers, the Kaua'i ROD Outreach Specialist, and J.B. Friday, the CTAHR Extension Forester, to plan and conduct

outreach projects.

In 2025, Ambyr participated in 30 in-person and virtual events, workshops, and presentations that reached nearly 7000 people from across the state. One of the main objectives of the coordinator position is to engage new partners to increase outreach capacity and extend the reach of the ROD messages. Ambyr focused her time on several large events and workshops throughout the year. Ambyr coordinated and hosted several key events such as the ROD outreach booth at the Merrie Monarch Festival, the annual ROD Outreach Workshop, 'Ōhi'a Love Festivals in each county, the Roots of Connection curriculum, and 'Ōhi'a-free Wreath Making Workshops.

Every April the Merrie Monarch Festival (MMF), the largest hula festival in the world, is held in Hilo, with many cultural practitioners and others engaging with forests and 'ōhi'a lehua. Each year, Ambyr applies to host a booth, and in 2025 was successful in gaining a prime booth location among the lei vendors in the Craft Fair section of the MMF. Ambyr planned and coordinated the booth and volunteer schedule, which allowed the team to interact and reach over 3000 attendees over the four-day event. The ROD outreach team also wrote and contracted two radio public service announcements regarding the ROD quarantine rule that were broadcast on KWXX and KAPA, the two radio stations with the largest reach on Hawai'i Island. Ambyr also worked with DAB to temporarily switch one of their illuminated pest report signs with the 'ōhi'a quarantine sign at the Daniel K. Inouye Honolulu Airport to remind travelers that 'ōhi'a plant materials—including lei—cannot leave Hawai'i Island without a permit.

Each year, a community partner initiates a request to the Governor's office to request that April 25th be named "'Ōhi'a Lehua Day" which this past year coincidentally occurred during Merrie Monarch. Ambyr met with the Governor's office staff and arranged to hand-carry the signed proclamation to be hosted at our outreach booth in Hilo. Festival attendees got to see the 'Ōhi'a Lehua Day proclamation in celebration of 'ōhi'a.

To extend the reach of the ROD outreach team, Ambyr and the team again organized and hosted the ROD Outreach Workshop as a train-the-trainers approach detailed in the ROD Strategic Response Plan. Invited participants included people who conduct related outreach or are likely to conduct outreach about 'ōhi'a if provided with the information and tools. The two-day workshop was held in Hilo and provided basic information about 'ōhi'a and ROD, a site visit to a community-led restoration site, and exercises to help the nearly 60 participants assess, plan, and coordinate ROD messaging. Survey results from the workshop were overwhelmingly positive, with participants saying that they learned a lot of new skills that they could use in their work, had a great time networking with other educators, and thoroughly enjoyed it.

Since 2017, Ambyr has coordinated various aspects of the annual 'Ōhi'a Love Fest (OLF), which aims to celebrate 'ōhi'a trees, promote cultural and social responsibility, and ignite quality dialogue between scientists, cultural practitioners, educators, conservation agencies, and the community. The festival layout has changed throughout the years from being a full one-day event based in Hilo, to going online during the COVID-19 pandemic, and now to hosting smaller and



(L-R): Ambyr Miyake with Lt. Governor Sylvia Luke and DLNR DOFAW State Protection Forester Rob Hauff at the ROD booth at Ag Day at the Capitol.

more intimate events in each of the 4 Hawai'i counties. The ROD outreach team, led by Ambyr, coordinated a total of 4 festivals during the 2025 calendar year. Ambyr helped to coordinate various aspects of the festivals on O'ahu, Maui and Hawai'i Island. In January, Ambyr helped to coordinate the Hilo OLF and partnered with the UH Master Gardener Program to co-host it combined with their annual plant sale. The festival attracted nearly 2000 attendees and made for a successful event. During October, Ambyr partnered with the Patagonia Honolulu store to create an all-day event that included a showing of our 3x Emmy Award-winning documentary, Saving 'ōhi'a, followed by the newly released short video on how fences and hooved animal management can protect 'ōhi'a from ROD. The event attracted an estimated 450 attendees and reached a new audience. In November, the team partnered with the Maui Nui Botanical Gardens for their annual Arbor Day Expo event. The event attracted 1950 people and nearly 500 'ōhi'a plants, along with care tips, were given away. Survey responses from event attendees showed an increase in knowledge of 'ōhi'a and ROD from before and after attending the events.

A new project in 2025, Ambyr partnered with the Wahine Freelance Alliance (WFA) to create and pilot the Roots of Connection Curriculum. The project aimed to connect and empower the next generation of environmental storytellers to share their connection with forests by equipping them with a Community Forests Illustration Library and an Animation & Storytelling Curriculum, to imagine, create, and share their own unique connections to the community forests around them. The project supported the Year of Our Community Forests initiative, emphasizing the vital role trees, including 'ōhi'a, play in Hawai'i's urban environments and the benefits that trees provide. Ambyr's role in this effort was to enhance the students' knowledge base by teaching them about 'ōhi'a and their importance. The pilot project worked with 6 elementary schools on O'ahu and Hawai'i Island, and reached approximately 250 students. At the conclusion of the project, Ambyr worked with WFA to host an all-day event that included presentations, educational booths, networking, and knowledge exchange opportunities.

In December, Ambyr planned and hosted three in-person 'ōhi'a -free wreath making workshops with nearly 60 attendees. The workshops covered basic information about the importance of 'ōhi'a, ROD and how it can spread, materials collection permits, the art of wreathmaking, and the use of non-'ōhi'a foliage, which reduces the likelihood of injuring 'ōhi'a. Many of workshop attendees had never made a wreath before and were very excited to participate.

As part of the CGAPS team, Ambyr also provided organizational and logistics support for non-ROD meetings and events, and took notes for quarterly CGAPS general and Steering Committee, and other meetings.



(L-R): BIIISC's Franny Brewer, Ambyr Miyake, and Kim Rogers of KISC collaborated on a ROD outreach poster at the Hawai'i Conservation Conference.

CGAPS Staff Outreach & Media

Staff participated in in-person, videoconference/webinar, and hybrid outreach opportunities in 2025. The following is a list of events where Ambyr Miyake (AM), Stephanie Easley (SE), Andrew Porter (AP), Christy Martin (CM), Troy Levinson (TL) and Hannah Chang

(HC) conducted outreach to the public or stakeholder groups via presentations, workshops, booths at community events, or via radio, print, television, or social media stories.

1/26 Booth (AM): Outreach booth on ROD, Hilo ‘Ōhi‘a Love Fest.

2/4 Booth (CM): UH Research Day at the Capitol. Outreach booth on PCSU projects.

2/17 Media interview (CM): “[Sea anemones invade Kāne‘ohe Bay, likely from home aquariums](#),” article in Civil Beat.

2/20 Booth (AM, CM, SE): Ag Day at the Capitol. Outreach booth on ROD and assist at OISC booth.

2/24 Presentation (SE): Guest lecture for the William S. Richardson School of Law, Legislation and Statutory Interpretation Class

3/5 Media interview (CM): “[Federal cuts could impact Hawaii’s ability to keep the brown tree snake away](#),” story on Hawai‘i Public Radio.

3/6 CGAPS 1st Quarter General Meeting (AM, AP, CM, SE) via videoconference.

3/10 Presentation (CM): *Natural history of Hawai‘i and Plant Pono* for ARCH 484, O‘ahu

3/24 Article (TL): “[Hawaii brown tree snake concerns grow after federal firings](#)”, based on information provided to Senator Hirono’s office

Big Island Video News.

3/24 Article (CM): “[Top 5 things you should know about the 2025 legislative session](#),” posted in the Landscape Industry Council of Hawai‘i Blog and social media channel.

3/25 Presentation (SE): Panel participant, William S. Richardson School of Law, Administrative Law Class

4/10 Presentation (CM): *Monitoring and preventing invasions* for NREM 491, O‘ahu

4/11 Booth (AM): Outreach booth on ROD. ‘Iolani School Sustainability Fair.

4/17 Presentation (CM): *Biological Control: programs, plans, and policies*, keynote for the National Forum on Biological Control.

4/22 Booth (AM): Kaulunani (DLNR) Program sponsored an ‘ōhi‘a planting with Governor Josh Green at Washington Place.

4/23-25 Booth (AM): Outreach booth on importance of ‘ōhi‘a and ROD, Merrie Monarch Festival, Hilo.

4/24 Presentation (CM): “*Food policy & invasive species*,” for Food Policy class, UH West O‘ahu

4/29 Presentation (CM): “*Resepone to pulse coral*,” at the Pacific Ballast Water & Biofouling Working Group Meeting, Longbeach, CA.

5/1 Booth (AM): Outreach booth on the importance of ‘ōhi‘a and ROD, City and County of Honolulu’s May Day at Kapiolani Park. .

5/6 Media interview (CM): “[May is invasive species awareness month](#),” interviews during the KHON 2 morning program, *Wake Up 2Day*.

5/6 Media interview (CM): Invasive species: [Hawai‘i primes itself to battle biosecurity threats](#),” article in Civil Beat.

5/9 Presentation (AM): Presentation to kindergarteners on the importance of ‘ōhi‘a, ‘Iolani Elementary School.

6/5 CGAPS 2nd Quarter General Meeting (AM, AP, CM, SE, TL) via videoconference.

7/22-24 Booth (AM, CM): Outreach booth on ROD, Hawai‘i Conservation Conference.

7/23 Presentation (CM): “Adaptive management responses to the growing threat of marine aquarium releases” at the Hawai‘i Conservation Conference, Honolulu.

7/23 Presentation (AM): “‘Ōhi‘a Love: successful outreach and engagement strategies in stopping the spread of ROD”, poster presentation on Hawai‘i Conservation Conference, Honolulu.

7/25 Presentation (CM): “Draft ISAC white paper: Opportunities for improved marine

	<p>biosecurity", for participants and public attendees of the ISAC Summer Meeting, via videoconference.</p>
7/29	Presentation (CM): "ISAC 2024 white paper: Island Resilience is American Resilience", at the National Plant Board annual meeting, Honolulu.
7/30	Booth (AM, SE). Outreach booth on ROD, National Plant Board Annual Meeting, Honolulu.
8/20-21	Workshop (CM): multiple presentations at the Unomia Learning Exchange Workshop, Honolulu
8/27	Article (CM): Contributed to: " Leading experts convene in Hawai'i to combat marine invasive species ," article in UH School of Ocean and Earth Science and Technology News online.
9/4	CGAPS 3rd Quarter General Meeting (AM, AP, CM, SE)
9/4	Presentation (CM): "Adaptive management responses to the growing threat of marine aquarium releases", updated from HCC for CGAPS General Meeting, via videoconference.
9/9	Media interview (CM): " Greatest threat to Hawaii's reef: first-ever learning exchange focuses on invasive species Unomia, threatening coral reefs ," article in Spectrum News online.
9/9	Presentation (AP): "Stony coral tissue loss disease regulatory analysis and recommendations", at the ISAC Fall Meeting, via videoconference.
9/9-11	Presentation (CM): ISAC white paper final amendments and adoption: " Opportunities for improved marine biosecurity ", at the ISAC Fall Meeting, via videoconference.
9/11	Presentation (AM): "The importance of 'ōhi'a and ROD", Nuuanu Elementary School.
9/12	Presentation (AM): "The importance of 'ōhi'a and ROD", Kamaile Elementary School.
9/12	Workshop (CM): Early detection and reporting of marine invasive species and diseases workshop with USGS NWHC and Bishop Museum, Honolulu.
9/15	Presentation (AM): "The importance of 'ōhi'a and ROD", Kamaile Elementary School.
9/15	Presentation (SE): Guest lecture for the William S. Richardson School of Law, Legislation and Statutory Interpretation Class
9/16	Presentation (CM): "Partnerships to address invasive species in Hawaii", at the National Association of State Foresters Annual Conference, Waikoloa.
9/16	Presentation (AM): "The importance of 'ōhi'a and ROD", Mokapu Elementary School.
9/19	Presentation (AM): "The importance of 'ōhi'a and ROD", Waikīkī Elementary School.
9/22	Workshop (CM): Early detection and reporting of marine invasive species and diseases workshop with USGS NWHC, Hilo.
9/23	Media interview (SE, CM): " 'Historic' rules approved to protect Moloka'i from coconut rhinoceros beetle ," article in Civil Beat.
9/24	Presentation (AM): "The importance of 'ōhi'a and ROD", Nuuanu Elementary School.
9/30-10/1	Workshop (AM, CM, HC): Multiple presentations and facilitation, ROD Outreach Workshop, Hilo
10/1	Press release (CM): "October is Stop the Ant Month", co-produced with DLNR staff and distributed by DLNR.



Participants of the Unomia Learning Exchange Workshop visited the Waikīkī Aquarium to see live samples of Unomia and other species in holding tanks for a new exhibit on invasive marine aquarium species and "Don't Let it Loose" message.

10/2 Presentation (CM): “Legislation and policy for LICH”, at the Landscape Industry of Hawai‘i Annual Conference & Tradeshow, Honolulu.

10/7 Presentation (CM): “HPWRA and Plant Pono” for UH ARCH 634 class, Honolulu

10/8 Presentation (CM): “*Non-profits (and why to consider working with an invasive species NGO)* for the UH Marine Option Program class, O‘ahu

10/8 Presentation (AM): “The importance of ‘ōhi‘a and ROD”, Roots of Connection Program Workshop.

10/9 Media interview (CM): “[October is Stop the Ant Month](#)”, interview with Erin Bishop of OISC at KHON2.

11/1 Event with booth and presentation (AM, CM, HC): ‘ōhi‘a Love Fest outreach event with multiple booths, screening of Saving ‘ōhi‘a videos and Q&A, Honolulu.

11/8 Booth (AM): Care tips for ‘ōhi‘a and the background of ROD on Maui, Maui Nui Botanical Gardens Arbor Day Expo.

11/15 Presentation (AM): Presented on my participation in the Roots of Connection curriculum and outreach efforts for the future of Hawai‘i, Roots of Connection Curriculum/Wahine Freelance Alliance Ho‘ike Event.

11/29 Article (CM): Contributed to “[Overcoming barriers to build partnerships for managing plant invasions under global change](#),” a peer-reviewed paper published in *Conservation Biology*.

12/1 Article (CM): Contributed to “[Managing invasive species in a changing Pacific: survey of natural resource managers in Hawai‘i and the US-Affiliated Pacific Islands](#),” a Pacific RISCC Network survey report posted on Zenodo.

12/2 CGAPS 4th Quarter General Meeting (AM, CM, SE), Honolulu and via videoconference.

12/5 Presentation (AM): ‘ōhi‘a-Free Wreath Making Workshop. Presented on various wreath making techniques utilizing non-‘ōhi‘a foliage and materials.

12/8 Presentation (AM): ‘ōhi‘a-Free Wreath Making Workshop. Presented on various wreath making techniques utilizing non-‘ōhi‘a foliage and materials.

12/19 Presentation (AM): ‘ōhi‘a-Free Wreath Making Workshop. Presented on various wreath making techniques utilizing non-‘ōhi‘a foliage and materials.

12/23 Media interview (CM): “[Scientists are warning Florida about an invasive coral species](#),” story on WMNF radio in Florida.



ROD Outreach Workshop community restoration site visit at Keau‘ohana Forest Restoration.

This report was submitted by January 31, 2026 in partial fulfillment of multiple grant agreements. The report was drafted by CGAPS staff with HISC staff providing some information on progress towards the 2025 Strategy. Nothing in this document requires any agency to expend funds that have not been appropriated and allocated. For more information about this report, please contact Christy Martin at christym@rocketmail.com.