JOSH GREEN, M.D. GOVERNOR | KE KIA'ĀINA

**SYLVIA LUKE** LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA





# STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I DEPARTMENT OF LAND AND NATURAL RESOURCES KA 'OIHANA KUMUWAIWAI 'ĀINA

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ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

December 13, 2024

The Honorable Ronald D. Kouchi, President and Members of the Senate Thirty-Third State Legislature State Capitol, Room 409 Honolulu, Hawaii 96813 The Honorable Nadine K. Nakamura, Speaker and Members of the House of Representatives Thirty-Third State Legislature State Capitol, Room 431 Honolulu, Hawaii 96813

Dear President Kouchi, Speaker Nakamura, and Members of the Legislature:

For your information and consideration, I am transmitting a copy of the Budgetary and other Issues Regarding Invasive Species report as required by Section 194-2, Hawaii Revised Statutes (HRS), a copy of this report has been transmitted to the Legislative Reference Bureau and the report may be viewed electronically at: <a href="https://files.hawaii.gov/dlnr/reports-to-the-legislature/2025/FW25-Invasive-Species-Report-FY24.pdf">https://files.hawaii.gov/dlnr/reports-to-the-legislature/2025/FW25-Invasive-Species-Report-FY24.pdf</a>

Sincerely,

DAWN N.S. CHANG Chairperson

**Enclosure** 

# REPORT TO THE THIRTY-THIRD LEGISLATURE STATE OF HAWAI'I REGULAR SESSION OF 2025

# BUDGETARY AND OTHER ISSUES REGARDING INVASIVE SPECIES



# Prepared by:

# THE STATE OF HAWAI'I DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF FORESTRY AND WILDLIFE

Section 194-2, Hawai'i Revised Statutes

Honolulu, Hawaii

December 2024

# Purpose of this Report

Invasive species are non-native plants, animals, insects, and pathogens (microbes) whose introduction threatens or causes economic, health or environmental harm. Invasive species do not fall exclusively under the mandate or jurisdiction of any single state agency or sector. Recognizing this, in 2003 the State Legislature established the Hawai'i Invasive Species Council as an intra-governmental agency to address Invasive Species, (HISC, Act 85, Session Laws of Hawai'i 2003), stating that "the silent invasion of Hawaii by alien invasive species is the single greatest threat to Hawaii's economy, natural environment, and the health and lifestyle of Hawaii's people and visitors."

This document meets the reporting requirements of Section 194-2, Hawaii Revised Statute (HRS), to annually report to the Legislature on budgetary and other issues regarding invasive species. Established by Per Chapter 194, HRS, the HISC is an interagency board administered by the Department of Land and Natural Resources (DLNR), Division of Forestry and Wildlife.

#### Purpose & Composition of the Hawai'i Invasive Species Council

Chapter 194, HRS, requires that the Hawai'i Invasive Species Council (HISC; Council) be composed of the chairs, directors, or designees of the State Departments of Agriculture (DOA), Land and Natural Resources, Health, Transportation, Business and Economic Development and Tourism, and the University of Hawai'i as well as non-voting legislative members represented by one senator and representative from each county. The HISC's function is to coordinate and promote statewide action on invasive species prevention, eradication, control, outreach, and research.

The 2024 Legislative Session marked a renewed focus on invasive species and biosecurity with several bills being introduced that sought to better manage known pathways and increase funding. There were some big wins, but there is still much to do and the continued Statewide coordination that the Hawai'i Invasive Species Council provides is improving invasive species management and biosecurity in Hawai'i.

#### **HIGHLIGHTS**

#### Council Meetings

Three meetings were held involving approval of FY 2024 HISC funding awards, resolution on invasive corals and wildfires, and initiating action on HISC's proposed Administrative Rules.

# **HISC Funding**

\$4,102,008.25 in HISC funding was disbursed to Support Interagency Projects & Programs through the FY24 HISC Appropriation.

#### Number of Hawaii Risk Weed Assessments

53 Hawai'i Pacific Weed Risk Assessments were conducted in FY24.

# Pest Interceptions – Ports of Entry Monitoring Program

One new ant species was intercepted during regular monitoring through the Ports of Entry Monitoring (PoEM) Program by the Hawaii Ant Lab.

# Public Reports Submitted to 643-Pest.Org

1,978 Public Pest reports were submitted and responded to by the 643PEST.org facilitators.

# Website Views – Hawaii Invasive Species Awareness Month

More than 1,200 Views for the 2024 **Hawai'i Invasive Species Awareness Month** webinar series.

# Interagency Memorandum of Understanding (MOU) for High-Priority Pests

In April 2024, leadership from the Hawai'i Department of Agriculture (HDOA), the Department of Land and Natural Resources (DLNR), and the University of Hawai'i (UH) signed the "Interagency Memorandum of Understanding for the Prevention, Rapid Response, and Control or Eradication of High Priority Pests," Together, these signatories are committed to tackling the threats posed by invasive high priority pests such as the coqui frog, little fire ant, and coconut rhinoceros beetle.

**Scope and Mutual Benefits** The scope of this MOU encompasses strengthening statewide coordination, communication, and collaboration among all involved partners. The agreement will be reviewed and updated annually to ensure it remains relevant and effective in addressing current pest management challenges. By pooling resources and expertise, the partners can work more efficiently, avoid duplicative efforts, and enhance their collective ability to protect Hawaii's diverse environments and communities.

**Key Agreements** To achieve the MOU's goals, several key agreements have been outlined. The partners will hold regular meetings on a monthly, quarterly, and annual basis to coordinate and evaluate their actions. They will develop action and response plans for each county within

specified timelines to address the threats posed by high-priority pests. Additionally, the partners will establish standards and protocols for data sharing and confidentiality, ensuring information exchange and effective pest management strategies. Consistent survey and treatment protocols will be implemented across the board to maintain high standards in pest control efforts.

More information about the MOU and a pdf of the signed MOU can be found at <a href="https://dlnr.hawaii.gov/hisc/info/policy/2024-mou-for-high-priority-pests/">https://dlnr.hawaii.gov/hisc/info/policy/2024-mou-for-high-priority-pests/</a>.

#### **COUNCIL MEETINGS**

The HISC's function is to coordinate and promote invasive species prevention, control, outreach, and research. In 2003, the Hawaii State Legislature, via Chapter 194, Hawai'i Revised Statutes (HRS), established the interagency HISC and defined its composition and responsibilities. Several key responsibilities of the HISC include:

- Advise, consult, and coordinate invasive species-related efforts with and between departments.
- Identify agency resource shortfalls with respect to invasive species. This is achieved by tracking the implementation of the Hawai'i Interagency Biosecurity Plan and HISC/CGAPS 2025 Joint Strategy.
- Coordinate and promote the State's position with respect to invasive species issues. This is achieved by adopting Council resolutions and testimony.
- Advise the governor and legislature on budgetary and other issues regarding invasive species. This is achieved through this report and contacts throughout the year.

The Hawai'i Invasive Species Council conducted three meetings during fiscal year 2023. Per HRS 194, the Council must hold at least two Council meetings during the fiscal year. Meetings continued to offer both a virtual and in-person option for Council participants and members of the public. Summaries of each meeting are provided below:

- August 23, 2023 Approval of the HISC FY24 Budget.
- December 19, 2023 Informational briefing on invasive corals and aquatic management in the Pearl Harbor Area and approval of a resolution "<u>Recognizing the Role of Invasive</u> <u>Plants as it Relates to Wildfire in Hawai'i & Supporting Recommendations for the</u> <u>Prevention & Post-Recovery Efforts to Mitigate Future Impacts</u>"

• May 29, 2024 – Approval to initiate rulemaking proceedings, including conducting public hearings to update HSIC's Administrative Rules to address invasive species on public and private lands.

For more details on the Council meetings and to sign up to receive announcements about future meetings please visit: <a href="https://dlnr.hawaii.gov/hisc/meetings/hisc/">https://dlnr.hawaii.gov/hisc/meetings/hisc/</a>.

#### Fiscal Year 2024 - HISC Budget

The Hawai'i Invasive Species Council received \$5.75M of general recurring funds for FY24. This funding supports interagency projects and programs that fill gaps between agency mandates or existing agency programs and advances our collective knowledge through research and development of new tools.

Funds are disbursed via an intra-governmental granting process wherein state, county, and federal offices may submit requests for funding and meet to collaboratively draft a recommended budget for HISC review.

The total amount of requests received for FY24 funding was \$8,494,425 across 28 applications. The funding available through the HISC to support interagency projects and programs was \$4,102,008.25 after the restriction by the Department of Budget and Finance, overhead from the Division of Forestry and Wildlife (Forestry and Wildlife) as the administrative host of the HISC, and program support for HISC (See Table).

Appropriation – Includes \$5.75M recurring G-funds and	\$7,250,000
\$1.5M additional funds	
20% Legislative cut to LNR402	(\$1,506,382.04)
Total remaining after Legislative reduction (20%), B&F	\$4,686,081
restriction (10%), DOFAW operating overhead (5%)	
HISC Support, HBIN, WRA	(\$584,072.75)
Total Available Remaining	\$4,102,008.25

Because funding falls short of the requests/need by approximately half, most projects receive partial funding or no funding at all (See Figure below). Out of the 28 proposals, 24 projects were awarded FY24 HISC funding. You can see the full list of FY24 HISC Funded Projects: <a href="https://dlnr.hawaii.gov/hisc/fy24-call-for-proposals/">https://dlnr.hawaii.gov/hisc/fy24-call-for-proposals/</a>.



#### Hawai'i Ant Lab:

The Hawai'i Ant Lab, a project of the University of Hawai'i Pacific Cooperative Studies Unit, received a separate FY24 appropriation of \$500,000 through HISC. The funding was essential to supporting 11.5 FTE positions located on Hawai'i Island and O'ahu and provide statewide training, assistance, on-the-ground management and monitoring of little fire ant and other invasive ants. Unfortunately, additional funding was needed, and furloughs were applied to the Hawai'i Island staff that reduced their FTE to 50%.

Through HISC and Forestry and Wildlife, additional funding was secured that allowed staff to move back to full-time. The State is at a critical moment where little fire ant infestations are on the rise especially on Oʻahu and Kauaʻi. Without full support of programs like the Hawaiʻi Ant Lab, little fire ant will become established across the State and new ants like Red Imported Fire Ant could arrive without the regular monitoring provided by this program.

#### Ports of Entry Monitoring (PoEM) Program

The Ports-of-Entry Monitoring Program (PoEM) is an interagency collaboration coordinated by the HISC to survey for high-risk pests at airports and harbors. It began as a pilot project in 2016 to address gaps in surveillance at the airports where certain pests could easily be missed during regular inspections. Today, the program is an essential part of Hawaii's biosecurity, monitoring for mosquitoes, Coconut rhinoceros beetle (CRB), Africanized honeybees (*killer bees*), numerous invasive ants and Japanese Beetles at State airports and harbors.

The program is responsible for intercepting *Aedes aegypti* larvae at Kahului airport (OGG) (2017) and Honolulu Harbor (2021) which is the mosquito species that carries dengue fever and is only known to occur on Hawai'i Island. The first CRB detected on Kauai in 2023 was found in one of the traps at the Lihue Airport that the program manages.

#### For Fiscal Year 2024:

- There have been no new mosquito species introduced to the State.
- 12 bee swarms were collected and tested on Oahu, and one on Maui. All tested negative for Africanized bees.
- One CRB was found in a trap at Lihue Airport in June 2024.
- A new record of ant to the State was found at Honolulu Harbor November 2023. *Trichomyrmex sp. nr. Mayri*.

#### Looking Forward:

- HISC is in the process of hiring a new Research and Projects Coordinator. Dr. Leyla Kaufman left the position in April 2024 but continues to help and support the ongoing activities.
- A new five-year strategic plan for the program will be developed in FY25.
- The FY22 Congressionally Directed Spending that has supported the HISC program and allowed the expansion of targets and survey areas ran out in August 2024. Additional funds to support the program were secured through REPI and HISC until March 2026.

# 643-Pest.Org

The pest hotlines (643-PEST and 643pest.org) are the centralized clearinghouses for Hawai'i pest reports since 2005. The online hotline (643pest.org) is a collaborative effort of DLNR, HDOA, and UH. Pest reports submitted to 643pest.org are vetted by trained staff who direct reports to appropriate agencies for management actions and empower community members with the knowledge and tools needed to manage invasive species independently.

#### Total Pest Reports Submitted in FY24: 1,978

The pest reporting system 643pest.org saw a significant increase in the volume of pest reports, continuing the upward trend from previous years. This includes 847 reports of coconut rhinoceros beetle (CRB) from O'ahu alone. Reports came from across the state, with the most frequent reports related to invertebrates, particularly CRB, coqui frogs, and ants.

41% of reports were for widespread invasive species that are beyond the early detection and rapid response phase, in which case location-specific science-based management strategies were shared. 47% of reports were forwarded to agencies (HDOA, ISCs) for further action. To date, 450 unique species have been reported and identified via the online pest hotline. More details on the use of this tool can be found at: www.643pest.org/Dashboard.aspx

The number of reports submitted to 643pest.org has steadily increased over the years, with 1,902 reports submitted in 2023 and 1,978 reports in FY24. According to trend analysis, pest reports are expected to double by 2026.

The role of the community in reporting and managing invasive species will become even more critical as this trend of increased pest hotline reports continues.

# Addressing Communication Gaps:

643pest.org filled critical gaps in community communication as other organizations diverted resources to statewide CRB detection and response efforts. Ensuring that Oʻahu residents felt heard and had the necessary information to address CRB independently has been vital for fostering trust and engagement.

#### Hawai'i Invasive Species Awareness Month

In 2024, the Hawaii Invasive Species Awareness Month was permanently moved to May. This year's theme was named "Who Protects Hawai'i? You Do. Invasive Species are Everyone's Kuleana," to reinforce the idea that protecting Hawai'i from invasive species is a shared responsibility. HISAM featured 12 webinars with a total of 322 live attendees and over 2,100 YouTube views.

The most viewed webinars included:

Battling the Beetle: Exploring New Tools and Technologies (278 views)

Safeguarding Hawaii's 'Ōhi'a Trees (151 views)

Navigating Rat Lungworm Disease (161 views)

Sniffing Out Solutions: Working Dogs in IS Management (128 views)

#### "Who Protects Hawai'i?" - Video Series & Storymap

Discover the faces of Hawai'i biosecurity through our "Who Protects Hawai'i?" interactive story map and video series, showcasing the diverse community members who safeguard our islands. From teachers and conservation workers to fishpond restorers and commodities inspectors, use the interactive map to see inspiring stories of local heroes playing pivotal roles in our state's biosecurity.

# Community Success Story: Pono Consumer Advocacy

A notable success story emerged from 643pest.org when Deborah, a concerned citizen, reported an online seed company selling invasive quaking grass seeds. This report sparked a broader initiative to support pono consumer practices. Deborah's advocacy led to the company adding a cautionary disclaimer to the product page, and a template letter was developed for consumers to request that companies stop selling invasive plants or seeds. This story highlights how empowered citizens can drive change in invasive species management.

Missed a talk? Watch them on <u>YouTube</u>. Check out <u>DLNR's website</u> and learn more about the <u>Awardees</u>.

# Hawai'i Pacific Weed Risk Assessment (HPWRA)

The HPWRA assesses a plant's risk of becoming invasive in the Hawaiian Islands. This non-regulatory system uses a science-based method to screen plants imported into and/or planted within Hawaii. The HPWRA is integral to state-wide prevention measures and is used by public and private entities and individuals to make informed planting and importation choices.

During FY24, 53 assessments were completed, including 28 novel species assessments and 25 revised assessments, updating information that was over 10 years old and providing a current evaluation of each plant's risk in the islands. All assessments are posted on the Plant Pono website (plantpono.org) along with other information on native and non-invasive plants. With the assistance of a Kupu 'Āina Corps intern, 214 unique species pages and assessment summaries were created for the Plant Pono site, providing information on invasive weeds and non-invasive plants in an easy-to-ready and user-friendly format.

Presentations on the HPWRA, Plant Pono, and plant identification were also given to students attending the NRCS 2024 Range Camp on Hawaii island and to the 2024 cohort of the statewide Master Gardener training program.

#### **2024 Legislative Outcomes**

There were over 60 invasive species-related bills introduced during the 2024 Legislative Session. Species specific legislation included multiple bills related to coconut rhinoceros beetle, little fire ant, rose ringed parakeets, and two-lined spittlebug. There was particular interest in mechanisms to prevent the movement of pests through high-risk pathways. Several appropriations bills sought to increase funding for the Hawai'i Invasive Species Council, Hawai'i Ant Lab, and the Hawai'i Department of Agriculture.

Bills to note that were passed during the 2024 Legislative Session include:

- HB 1800 The Legislative Budget bill which included the HISC recurring appropriation, and an additional \$3.8M to LNR172 to support Forest Health, some of which could be used to support invasive species projects, programs, and initiatives.
- HB 2619 Requires the Department of Agriculture to lead and coordinate the State's invasive pest control and eradication biosecurity efforts. Appropriates \$10M to HDOA for invasive species/biosecurity.
- SB 572 Authorizes and specifies conditions under which the Department of Agriculture may declare a biosecurity emergency.
- HB 2546 HDOA: Allows for the use of 'fine mesh nets" for the protection of native plants.

The HISC tracks invasive species and biosecurity related legislation each session. You can find the full list of bills that were introduced during the 2024 Legislative Session on the HISC webpage: https://dlnr.hawaii.gov/hisc/2024-legislative-session/

#### 2025 Legislative Recommendations

During the 2024 legislative session there was renewed focus and concern about invasive species that resulted in the passing of HB 2619, a \$10 million increase to the Hawai'i Department of Agriculture for invasive species and biosecurity. Testimony in support of the bill referred to HDOA as "the tip of the spear" because they are the Department that has the regulatory authority to carry out inspections and manage high-risk pathways that could introduce/move pests.

For the 2025 Legislative Session, biosecurity and invasive species needs to remain a priority. Funding for HDOA needs to be sustained because prevention is the most cost-effective management tool, and increased funding is needed for the HISC to support on-going management of existing pests and research into new tools and technology for prevention and management of invasive species in the State.

In Fiscal Year 2024, Coconut rhinoceros beetle made its way to Kaua'i, Maui, and Hawai'i Island after 10 years of being contained to O'ahu. Little fire ant infestations increased to 55 active sites on O'ahu and three new sites on Kaua'i with one site along the Wailua River that is still being assessed but has the potential to spread widely. Much of the work to survey and control pests that have the potential to greatly impact our communities and watersheds is carried out by the partner organizations like the Hawai'i Ant Lab and the Island Invasive Species Committees.

These programs are soft-funded and rely on HISC funding to support their basic operations. HISC has not had an increase in funding since 2019 even though there have been increases in pest infestations across the State and new discoveries like Two-lined spittlebug and Queensland longhorn beetle. If HDOA is the tip of the spear, these programs are the back-up when the spear misses it's mark.

Continued investment into research that can support new prevention tools and new ways to manage pests is a critical component of invasive species and biosecurity. HISC has supported many research projects over the years, resulting in the development of Herbicide Ballistic Technology (HBT) for treating remote *Miconia* trees, new monitoring devices for mosquitos, and biocontrol agents to control high-impact weeds. Research is how the spear becomes more effective.

For 2025 Legislative Session, HISC recommends:

- Continued and sustained support for HDOA's invasive species and biosecurity program.
- Increase to the HISC Budget that supports partner organizations and research.
- Additional extension and research positions with UH CTAHR with focus on invasive species and biosecurity.
- Investment into State containment facilities for biocontrol research on threats such as CRB.
- General recurring funds for the Hawai'i Ant Lab.

All these recommendations align with the actions identified in the 2017-2027 Hawai'i Interagency Biosecurity Plan.

Prevention is the most cost-effective way to manage invasive species and the recognition of that is the passing of HB 2619. More needs to be done.

This session, the tip is just one of many parts that makes up a larger system to help the spear hit its mark and sometimes the spear does miss its mark and pests end up in places outside the ports. This is where HISC funding comes into play. It supports much of the work and research to control and eradicate pests once they are detected by partner organizations like the Island Invasive Species Committee, Hawaii Ant Lab, and the CRB Response Team, all projects under UH Pacific Cooperative Studies Unit. These projects rely heavily on HISC funding to support their basic operations year after year.