

DAVID IGE  
GOVERNOR OF HAWAII

JOSH GREEN  
LIEUTENANT GOVERNOR



## HAWAII INVASIVE SPECIES COUNCIL

1151 PUNCHBOWL ST, #325  
HONOLULU, HAWAII 96813

### VOTING MEMBERS

SUZANNE CASE  
DEPARTMENT OF LAND & NATURAL  
RESOURCES

PHYLLIS SHIMABUKURO-GEISER  
DEPARTMENT OF AGRICULTURE

KATHLEEN HO, D.Env  
DEPARTMENT OF HEALTH

NICHOLAS COMERFORD, Ph.D.  
UNIVERSITY OF HAWAII

MARY ALICE EVANS  
DEPARTMENT OF BUSINESS, ECONOMIC  
DEVELOPMENT & TOURISM

DAVID RODRIGUEZ  
DEPARTMENT OF TRANSPORTATION

### PUBLIC MEETING NOTICE

## Hawai'i Invasive Species Council

August 30, 2021; 1:00 PM

Considering the evolving COVID-19 situation, protecting the health and welfare of the community is of utmost concern. As such, the meeting will be held remotely, with Council members, legislative participants, and staff participating via online meeting software. We will attempt to livestream the meeting at:

[https://www.youtube.com/channel/UCFT6SAASZIUxd\\_XgZMCjGsQ](https://www.youtube.com/channel/UCFT6SAASZIUxd_XgZMCjGsQ)

Testimony may be provided in person or in writing, submitted electronically to [Leyla.V.Kaufman@hawaii.gov](mailto:Leyla.V.Kaufman@hawaii.gov). To give Board members sufficient time to consider written testimony, please submit the testimony no later than 24 hours prior to the Board Meeting. Any late written testimony will be retained as a part of the record, but we cannot assure that Board members will receive it with sufficient time for review prior to decision-making.

### AGENDA

1. Call to order
2. Introductions
3. Approval of minutes from June 9, 2021 meeting
4. Submittal: Requesting approval of a recommended budget for Fiscal Year 2022
5. Public Comments
6. Adjournment

The Council may go into Executive Session pursuant to Section 92-5(a) (4), Hawaii Revised Statutes, in order to consult with its attorney on questions and issues pertaining to the Council's powers, duties, privileges, immunities and liabilities.

Individuals requesting special accommodations (e.g., large print materials, sign-language interpreters) are asked to contact the staff below at least three days prior to the meeting.

#### **For information, contact:**

HISC Support staff: 1151 Punchbowl St, #325, Honolulu, HI 96813; Fax: 587-0160

Leyla Kaufman, Māmalu Poepoe Project Coordinator: [leyla \[at\] hawaii.edu](mailto:leyla@hawaii.edu)

Chelsea Arnott, Planner: [Chelsea.L.Arnott \[at\] hawaii.gov](mailto:Chelsea.L.Arnott@hawaii.gov)

Elizabeth Speith, 643pest.org Report Facilitator: [speith \[at\] hawaii.edu](mailto:speith@hawaii.edu)

## **Protocol for providing testimony for remote meetings of the Hawaii Invasive Species Council**

Testimony may be provided in person or in writing, submitted electronically to [Leyla.V.Kaufman@hawaii.gov](mailto:Leyla.V.Kaufman@hawaii.gov). To give Board members sufficient time to consider written testimony, please submit the testimony no later than 24 hours prior to the Board Meeting. Any late written testimony will be retained as a part of the record, but we cannot assure that Board members will receive it with sufficient time for review prior to decision-making. Written testimony will be acknowledged at the meeting.

To provide **live oral/video testimony** during the online meeting, email your request to [Leyla.V.Kaufman@hawaii.gov](mailto:Leyla.V.Kaufman@hawaii.gov) at least 24 hours in advance, with your name, phone number, email address, computer identification name (check your device settings), and the agenda item you would like to testify on live during the meeting. Once your request has been received, you will receive a Zoom link via which to testify. You will need a computer with internet access, video camera and microphone to participate. If you require access by phone only, please indicate that in your email request.

Public testimony will be taken when each agenda item is discussed. You can monitor meeting progress via YouTube livestream at this link:  
[https://www.youtube.com/channel/UCFT6SAASZIUxd\\_XgZMCjGsQ](https://www.youtube.com/channel/UCFT6SAASZIUxd_XgZMCjGsQ)

Testifiers will be called on by a co-Chair to offer testimony. Until that time, you will be placed in a “Waiting Room”. While waiting to provide testimony, you will need to mute your microphone and turn off your video. When it is your turn to speak, you will be given full access to the meeting. At that time, if you are watching the YouTube livestream, you will need to mute the YouTube livestream to avoid feedback.

When testifying, please state your first and last name for the record. If you are testifying on behalf of an organization, please include the name of the organization as well.

Testimony will be limited to a maximum of three (3) minutes. You will be given notice when 30 seconds remain. If you continue to testify beyond your allotted time, a co-Chair will kindly ask you to complete your testimony.

If you have submitted written testimony and have also signed up to deliver it orally, the Chair will ask you to kindly summarize your points.

When you have finished testifying, you will be put back in the “Waiting Room”. Please stay there until your agenda item is complete in case Council Members have questions.

Staff will be monitoring people joining the Board meeting by video and will do their best to take each person in an orderly fashion. Please be patient as we continue to navigate this new platform.

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DAVID RODRIGUEZ  
DEPARTMENT OF TRANSPORTATION

## PUBLIC MEETING NOTES

### Hawai'i Invasive Species Council

June 9, 2021, 1:00 p.m

Considering the evolving COVID-19 situation, protecting the health and welfare of the community is of utmost concern. As such, the meeting was held remotely, with Council members, legislative participants, and staff participating via online meeting software and livestreamed the meeting

at: [https://www.youtube.com/channel/UCFT6SAASZIUxd\\_XgZMCjGsQ](https://www.youtube.com/channel/UCFT6SAASZIUxd_XgZMCjGsQ)

1. Call to order at 1:00 pm by Chair Suzanne Case
2. Introductions
  1. Voting Members Present: Suzanne Case (DLNR), Phyllis Shimabukuro-Geiser (HDOA), Nicholas Comerford (UH), Gracelda Simmons (designee from HDOH), David Rodriguez (HDOT), Mary Alice Evans (DBEDT)
  2. Legislative Members Present: Rep. Chris Lee, Rep. Nicole Lowen, Rep. Lisa Marten, Rep. Tina Wildberger, Brandon Kim/Sen. Kouchi, Ben Viernes/Rep. Nadine Nakamura
3. Approval of minutes from January 27, 2021 meeting
  1. Discussion: None
  2. Motion to approve: Phyllis Shimabukuro-Geiser/Co-Chair (HDOA)
  3. 2nd: Nicholas Comerford (UH)
  4. Unanimous
4. Submittal: Requesting approval of HISC Resources Working Group members (Chelsea Arnott (HISC Planner))
  1. Discussion: None
  2. Motion to approve: Mary Alice Evans (DBEDT)
  3. 2nd: Phyllis Shimabukuro-Geiser (HDOA)
  4. Unanimous (w/support of all legislators present)
5. Presentation: Hawaii's biological control programs, past and present, and future needs for building capacity in Hawai'i and the Pacific region through the coordinated efforts of the Biocontrol Working Group (Chelsea Arnott) - All presentations attached in pdf format
  1. Presenter 1: Mark Wright (UH CTAHR)
  2. Presenter 2: Tracy Johnson (USDA FS)
  3. Presenter 3: Darcy Oishi (HDOA)

4. Presenter 4: Nicholas Manoukis (USDA ARS)
5. Discussion/Q&A:
  1. Suzanne Case: Questions?
  2. Rep. Nicole Lowen: Is USDA ARS doing any work w/LFA?
    1. Nicholas Manoukis: Yes, but ARS is not focusing on biological control
    2. Darcy Oishi: In the realm of biocontrol, a fungus was examined in 1975 and not found to be effective. A parasitoid was found on the BI, but it was not feasible for effective biocontrol.
  3. David Rodriguez: How promising are the Albizia mite galls?
    1. Tracy Johnson: It's promising, but we don't have adequate biocontrol facilities in HI to accommodate these tiny mites.
6. Submittal: Supporting the Planning, Construction, & Operation of Pacific Regional Biocontrol Facilities and Committing Agency Engagement: Chelsea Arnott (HISC)
  1. Discussion:
  2. Suzanne Case: Questions or Comments?
    1. Christy Martin (CGAPS): oral testimony in support. Western Governors Association meeting is coming up. This is an opportunity to send a strong signal from HI and the Pacific. The suggestion is for the Council to brief the Governor on this matter.
    2. Andy Cullison (DOFAW): emailed late testimony in support (attached to notes)
  3. Motion to approve: Nicholas Comerford (UH)
  4. 2nd: Phyllis Shimabukuro-Geiser (HDOA)
7. Public Comments: None
8. Adjournment: at 2:00p by Chair Suzanne Case

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DEPARTMENT OF TRANSPORTATION

August 30, 2021

### SUBMITTAL

TO: Co-chairs and Members  
Hawai'i Invasive Species Council  
State of Hawaii

FROM: Robert Hauff, Chair Pro Tem, Resources Working Group and  
Chelsea Arnott, Planner  
Hawai'i Invasive Species Council

SUBJECT: Requesting approval of a recommended budget for Fiscal Year 2022

### Background

Since its inception in 2003, the Hawai'i Invasive Species Council (HISC) has disbursed funding to support interagency invasive species projects that:

- Fill gaps between agency mandates or existing agency programs, and/or
- Advance 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.

For Fiscal Year 2022 (FY22), the legislature appropriated \$5,750,000 to the HISC. This amount is subject to a 7% expenditure restriction by the Department of Budget and Finance. The appropriation is also subject to fees or overhead from the Division of Forestry and Wildlife (DOFAW) at the Department of Land and Natural Resources (DLNR) as the administrative host of the HISC, the salary for the Invasive Species Coordinator, and a shortfall to LNR804. DOFAW overhead and shortfalls, salary, and the Budget and Finance restriction total \$1,038,145.

The amount of funding required for one year of core programs that the Council funds on an annual basis is \$499,756. This includes:

- The "HISC Support" project, includes two full-time temporary positions (HISC Planner and HISC Projects Coordinator that manages the interagency airports biosecurity project Māmalu Poepoe), one part-time Online Reporting Technician at 0.5 FTE. HISC Support Program budget also provides associated travel, supplies, and other costs associated with administration of the HISC and its supported projects.
- Intermittent support for programmers and administrators associated with online product development under a project known as the Hawai'i Biodiversity Information Network

(HBIN). HBIN manages the online pest reporting system 643pest.org as well as other invasive species products.

- Support for the Hawai'i-Pacific Weed Risk Assessment, which employs one weed risk assessor.

The remaining balance of \$4,212,099 is available for interagency project grants.

## Discussion

The preparation of a recommended budget for the HISC was accomplished via the following process:

- A call for proposals was released in April, with applications due by close of business on June 7.
- As described in the proposal guidelines, applications must demonstrate applicability to the funding priorities outlined in the “HISC & CGAPS 2025 Joint Strategy: In support of the Hawai'i Interagency Biosecurity Plan”.
- Members of the Resources Working Group (RWG), comprised of working group chairs and other agency representatives, evaluated proposals and assigned a quantitative score to each application based primarily on how well the application addressed the stated funding priorities. Applications also received points for interagency relevancy, the proportion of the overall project budget supported by non-HISC funds, projects that are considered multi-year, and those control projects that are part of an overarching management plan or strategy.
- On August 10th the Resources Working Group facilitated a public meeting that was held virtually to discuss applications and develop a balanced recommended budget. This meeting was open to applicants to attend through a Zoom link provided prior to the meeting and to members of the public where the meeting's entirety was livestreamed to the HISC YouTube channel.

Requests received for FY22 totaled \$9,127,749 across 51 applications. Ten applications were not recommended for funding and three proposals were withdrawn from consideration at the request of the applicants. One proposal for the Hawai'i Ant Lab was incorporated into their larger proposal request. In most cases this was due to a lack of resources available rather than a lack of project merit. For the 37 applications remaining, the Resources Working Group recommended partial funding based on the amount requested, application merit (e.g., score), and the overall amount of available funding. Applicants were asked at the time of submission to indicate whether their projects were scalable, indicating that a partial award would be useful in contributing toward the overall project budget.

Despite the diligence of the Resources Working Group to create a balanced budget, there was a significant funding gap to one of the priority programs supported by the HISC. The Big Island Invasive Species Committee (BIISC) left the meeting with a difference of \$275,000 between FY21 funding and what was recommended at the end of the Resources Working Group. The Invasive Species Committees and the Hawai'i Ant Lab have continued to be priority programs supported by the HISC. The Resources Working Group attempts to keep funding relatively consistent from year-to-year for each of these programs. Some years programs receive less funding than previous years, but the difference of funding between FY21 and what is recommended for BIISC's FY22 award is a significant gap that will impact the program's ability to maintain their current staff and continue critical projects for target pests.

To remedy this gap, HISC Support Staff is recommending a 2.5% reduction to each of the award amounts recommended by the RWG with the exception of BIISC and biocontrol funding for the Forest Service. This equates to \$86,041 of additional funding that would be redistributed to the Big Island Invasive Species Committee proposal for “Detection and Control of Invasive Species on Hawai‘i Island”. There is still a significant gap in the BIISC budget despite the additional funds, but HISC staff will work with BIISC to identify other sources of funding to support priority projects. HISC staff will continue to seek out additional sources of funding to support invasive species work across the state.

Included in Attachment 1 are two budgets for the recommendations for each application. One column is the recommended budget determined by the Resources Working Group and the other column is the recommendation from HISC Support Staff with the 2.5% reduction and redistribution of those funds to the BIISC budget.

#### Legal Authority

- HRS 194-2 (a): Establishes the HISC for the purpose of cabinet-level coordination and planning among state departments, federal agencies, and international and local initiatives
- HRS 194-2 (a)(4): Directs the HISC to create and implement a plan for prevention, early detection, rapid response, control, enforcement, and education
- Act 5, SLH 2019: Provides \$5,750,000 in general funds to be disbursed by DLNR as directed by the HISC

#### Recommendations

1. That the HISC approve the FY22 budget for HISC support and an interagency project portfolio that is recommended by HISC Support Staff with the 2.5% reduction, and
2. That, should the Department of Budget and Finance make any changes to the restriction on expenditures, the HISC delegate authority to the HISC Support Staff to identify best way to apply additional restrictions to project funds, or to identify best uses of any released funds, and
3. That, if there are any changes in the scope or implementation of projects over the course of the year, the Council delegate authority to the HISC Support staff to make adjustments to project funds or reassign project funds from any project that does not proceed in a timely manner.

#### Attachments:

- FY22 Budget Recommendations of the HISC Resources Working Group & HISC Support Staff

Attachment 1: FY22 Budget Recommendations of the HISC Resources Working Group & HISC Support Staff

Table 1: Projects Recommended for Funding

Overall Ranking	Abbreviated Proposal Title	Total Requested	RWG Recommendation	HISC Support Staff Recommendation
1	Coordinating Group on Alien Pest Species	\$62,000	\$38,000.00	\$37,050.00
2	Hawaii Ant Lab core funds	\$296,581	\$296,581.00	\$289,166.48
3	Albizia Community Control Teams and Regional Eradication Efforts in the Ko'olau	\$170,899	\$68,000.00	\$66,300.00
4	Maui/Molokai Invasive Species Committees - Detection and Control of Invasive Species in Maui County	\$1,418,516	\$770,423.00	\$751,162.43
5	Maui Invasive Species Committee (MISC) - Outreach and Education in Maui County	\$197,421	\$89,183.00	\$86,953.43
6	Public Engagement in Invasive Species Control on the Island of Hawaii	\$293,262	\$196,472.00	\$196,472.00
7	OISC's Early Detection & Rapid Response on O'ahu	\$242,361	\$137,578.00	\$134,138.55
8	OISC's Landscape Level Control of High-Impact Invasive Species on O'ahu	\$841,797	\$459,820.00	\$448,324.50
9	Kauai Invasive Species Committee Early Detection, Rapid Response, and Control	\$823,843	\$506,189.00	\$493,534.28
10	OISC's Invasive Species Outreach & Education on Oahu	\$174,983	\$93,708.00	\$91,365.30
11	Detection and Control of Invasive Species on Hawai'i Island	\$479,903	\$256,580.00	\$342,621.15
12	Hawaii Ballast Water and Biofouling	\$90,560	\$80,000.00	\$78,000.00
13	Public Outreach and Education on Kauai	\$156,359	\$78,710.00	\$76,742.25



14	Mamalu Poepoe: Invasive Species Surveillance at ports of entry	\$299,000	\$147,312.00	\$143,629.20
15	Field Trials of Mongoose Toxicant Efficacy Under EPA Experimental Use Permit	\$65,960	\$32,497.00	\$31,684.58
17	Tibouchina Control and <i>T. Ovatus</i> Disbursal in the Ko'olau	\$91,676	\$40,000.00	\$39,000.00
18	Outreach and extension for management of Rapid Ohia Death on Hawaii Island	\$75,955.97	\$30,000.00	\$29,250.00
19	1. Detection and Management Strategies for the Control of <i>Prosapia bicincta</i> (Twolined Spittlebug) in Hawaii	\$421,322	\$189,528.00	\$184,789.80
20	Birds, Not Mosquitoes: Landscape-Scale Mosquito Control	\$117,618.47	\$30,500.00	\$29,737.50
21	Kauai Rapid Ohia Death Response	\$106,303	\$44,404.00	\$43,293.90
22	East Oahu Feral Goat Control and Surveys	\$15,383	\$5,602.00	\$5,461.95
23	Detection & Invasive Potential and population dynamics of <i>Arcte coerulea</i> ( <i>Lepidoptera, Noctuidae</i> ), a New Pest of Māmaki in Hawaii.	\$41,135	\$14,098.00	\$13,745.55
24	Natural enemies for biocontrol of albizia	\$191,800	\$65,737.00	\$65,737.00
25	Biocontrol of melastomes and other high priority weeds	\$185,680	\$60,000.00	\$60,000.00
26	Hawaii Island Albizia Hazard Mitigation Plan Project Thirteen: Kahakai Boulevard	\$281,448	\$84,405.00	\$84,405.00
27	Mosquito surveys and larval control on Kauai to further landscape-level mosquito control and protect endangered honeycreepers	\$102,182	\$30,644.00	\$29,877.90

28	Beekeeper organization and cooperation: Our "best shot" against Africanized Honeybees	\$91,000	\$25,000.00	\$24,375.00
29	Biocontrol of invasive Rubus	\$112,000	\$25,000.00	\$25,000.00
30	Detection and Control of Rapid 'Ōhi'a Death on Hawai'i Island	\$205,616	\$57,259.00	\$57,259.00
31	Eradication Of Devil Weed to Protect Agriculture On Hawai'i Island	\$55,862	\$25,000.00	\$25,000.00
32	Investigating management and competitive interactions between distinct yet related invasive algal species <i>Avrainvillea erecta</i> and <i>Avrainvillea lacerata</i> at different depth levels.	\$65,379	\$18,206.00	\$17,750.85
36	Project Support for DLNR and DOH Implementation of Incompatible Insect Technique using Wolbachia for control of three mosquito species	\$90,794	\$49,551.00	\$48,312.23
38	An economic analysis of LFA eradication on Maui	\$64,845	\$29,000.00	\$28,275.00
39	Environmental Assessment for the Suppression of <i>Aedes aegypti</i> , <i>Aedes albopictus</i> , and <i>Culex quinquefasciatus</i> Mosquitoes in Hawaii using Wolbachia-based Incompatible Insect Technique	\$160,000	\$80,000.00	\$78,000.00
41	Investigating infection levels and population dynamics of wild rats ( <i>Rattus spp.</i> ) to inform management and surveillance of rat lungworm in Hawai'i	\$89,749	\$18,000.00	\$17,550.00
47	Generating needed data to build a risk assesement framework for invasive algae in Hawai'i.	\$234,598	\$27,639.00	\$26,948.03

49	Animal Disease Diagnostic Laboratory Support for Shrimp Pathogens	\$119,026	\$11,473.00	\$11,186.18
	<b>Total</b>	\$8,532,817	\$4,212,099.00	\$4,212,099.00

Table 2: Projects Not Recommended for Funding

Overall Ranking	Proposal Title	Total Request	RWG Recommendation
16	Little Fire Ants early detection and response on Oahu	\$34,243	\$0.00
33	Is citric acid still an effective way to control coqui frogs?	\$35,495.17	\$0.00
34	Estimating the impacts of Hull Biofouling and in-water cleaning: an economic approach	\$64,845	\$0.00
35	Detector canine transport	\$25,000	\$0.00
37	Distribution of Strawberry Guava Biocontrol: Creating Reservoirs of <i>Tectococcus (Tectococcus ovatus)</i>	\$100,000	\$0.00
40	Developing a Landscape-scale Aerial Deployment Method for Biocontrol of Strawberry Guava	\$52,437	\$0.00
42	Development of mongoose control technology: refining the Goodnature A18 mongoose trap	\$50,000	\$0.00
43	Increasing adoption of surveillance and monitoring for Varroa destructor mites in honey bees on varroa-negative and -positive islands	\$25,186.34	\$0.00
44	A comprehensive survey for potential local biocontrol agents of coffee leaf rust	\$56,914	\$0.00
45	Evaluating the use of steam as a non-chemical means to control common and invasive weeds in urban areas of Hawaii	\$50,000.00	\$0.00
46	Spread and impact of <i>Orasema minutissima</i> , a potential adventive biological control agent of LFA	\$74,800	\$0.00

48	Develop and disseminate an invasive pest outreach program to the Hawaii community	\$13,750	\$0.00
50	Invasive Ecology of American Bullfrogs in Hawaii	\$4,963	\$0.00
51	Determining if Toxoplasma gondii can be detected in invasive terrestrial snails in O‘ahu, Hawai‘i	\$7,298.50	\$0.00
<b>Total</b>		\$494,121	\$0.00