

DAVID Y. IGE
GOVERNOR OF
HAWAII



**STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES**

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
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AQUATIC RESOURCES
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KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

**Testimony of
SUZANNE D. CASE
Chairperson**

**Before the House Committees on
ENERGY & ENVIRONMENTAL PROTECTION
and
WATER, LAND, & HAWAIIAN AFFAIRS**

**Tuesday, February 12, 2019
8:55 AM**

State Capitol, Conference Room 325

**In consideration of
HOUSE BILL 1548
RELATING TO RAPID 'ŌHI'A DEATH**

House Bill 1548 would appropriate funds for research, surveys, and outreach related to rapid ohia death and removal of hooved animals from fenced areas on Kaua'i and Hawai'i Island. **The Department of Land and Natural Resources (Department) supports this measure, provided that its passage does not replace or adversely impact priorities indicated in the Executive Budget request.**

Rapid 'Ōhi'a Death (ROD) threatens Hawaii's most important tree species that makes up 80% of the remaining native Hawaiian forests. It is caused by two recently arrived fungal species detected in 2014 and named and described by scientists in 2018. *Ceratocystis lukuohia* is an aggressive disease that quickly chokes off the supply of water to the tree canopy, and *Ceratocystis huliiohia* causes a slower death and requires multiple infections. While both diseases are capable of killing healthy 'ōhi'a trees, *C. lukuohia* is responsible for most of the mortality seen on Hawaii island.

The recent detections of both fungal pathogens causing ROD on Kaua'i in 2018 is an urgent concern for the Department. The Department is working closely with partner agencies including United States Department of Agriculture, the University of Hawai'i, the Kaua'i Invasive Species Committee, the Hawai'i Department of Agriculture, The Nature Conservancy, and others to respond to the detections. Hawai'i island-based project staff funded by previous appropriations from the Legislature have assisted Kaua'i managers with drone surveys, ground surveys, data

management, diagnostics, and other expertise. The Department has arranged for experts in forest diseases to visit Kaua'i and advise the Department and its partners. An outreach specialist was hired through University of Hawai'i and the Kaua'i Invasive Species Committee to conduct outreach to local communities on Kaua'i on how to prevent disease spread. Ongoing funding is needed to continue the effort.

Thank you for the opportunity to comment on this measure.

DAVID Y. IGE
Governor

JOSH GREEN
Lt. Governor



PHYLLIS SHIMABUKURO-GEISER
Acting Chairperson
Board of Agriculture

State of Hawaii
DEPARTMENT OF AGRICULTURE
1428 South King Street
Honolulu, Hawaii 96814-2512
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TESTIMONY OF THE DEPARTMENT OF AGRICULTURE
BEFORE THE HOUSE COMMITTEES ON ENERGY & ENVIRONMENTAL
PROTECTION AND WATER, LAND & HAWAIIAN AFFAIRS

FEBRUARY 12, 2019
8:55 A.M.
CONFERENCE ROOM 325

HOUSE BILL NO. 1548
RELATING TO RAPID OHIA DEATH

Chairpersons Lowen and Yamane and Members of the Committees:

Thank you for the opportunity to testify on House Bill 1548, relating to rapid ohia death. The bill appropriates funds to the Department of Land and Natural Resources to (1) continue studying rapid ohia death in the State; (2) survey and monitor new disease outbreaks and ongoing control efforts; (3) remove hooved animals from fenced areas on Hawaii island and Kauai to help reduce the wounding of healthy trees; and (4) conduct public outreach to communicate the cultural and environmental significance of ohia and to share best practices in reducing rapid ohia death. The Department supports the intent of this bill.

Funding for combatting invasive species such as rapid ohia death is critical to ensure appropriate responses can be implemented and maintained. Providing additional funds to DLNR for continued support in combating ROD is critical and much needed. The Department supports the many efforts in researching and mitigating ROD throughout the State.

Thank you for the opportunity to testify on this measure.





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February 12, 2019

HEARING BEFORE THE
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION
HOUSE COMMITTEE ON WATER, LAND & HAWAIIAN AFFAIRS

TESTIMONY ON HB 1548
RELATING TO RAPID OHIA DEATH

Room 224
2:45 PM

Aloha Chairs Lowen and Yamane, Vice Chairs Wildberger and Todd, and Members of the Committees:

I am Brian Miyamoto, Executive Director of the Hawaii Farm Bureau (HFB). Organized since 1948, the HFB is comprised of 1,900 farm family members statewide, and serves as Hawaii's voice of agriculture to protect, advocate and advance the social, economic and educational interests of our diverse agricultural community.

Hawaii Farm Bureau supports HB 1548, which appropriates funds to the Department of Land and Natural Resources to combat rapid ohia death in the State.

Watersheds are the lifeblood of our communities. It is important not just to agriculture but to our social and environmental health. The spread of rapid ohia death has been alarming and its' management before spreading to other islands is very critical. Many of the other islands depend on surface water for their drinking and irrigation needs. Loss of trees will severely impact watersheds.

Thank you for the opportunity to testify in support of this bill.

Testimony of The Nature Conservancy of Hawai'i
Supporting HB 1548 Relating to Rapid 'Ōhi'a Death
House Committee on Energy and Environmental Protection
House Committee on Water, Land, and Hawaiian Affairs
Tuesday, February 12, 2019, 8:55AM, Room 325

The Nature Conservancy of Hawai'i is a non-profit conservation organization dedicated to the preservation of the lands and waters upon which all life depends. The Conservancy has helped protect more than 200,000 acres of natural lands in Hawai'i and Palmyra Atoll. We manage 40,000 acres in 13 preserves and work in over 30 coastal communities to help protect the near-shore reefs, waters and fisheries of the main Hawaiian Islands. We forge partnership with government, private parties and communities to protect forests and coral reefs for their ecological values and the many benefits they provide to people.

The Nature Conservancy strongly supports HB 1548 proposing to provide an **additional \$2,003,000** to the Department of Land and Natural Resources to address Rapid Ōhia Death.

We appreciate the crisis situation that exists with respect to Rapid Ōhia Death as well as other pests of the environment, agriculture, and human health and well-being. We support a strong and coordinated response to this disease that is threatening the dominant native tree species in the Hawaiian forest—a tree that is central to the forests' ecological, cultural and watershed values statewide.

We also hope that providing the necessary and critical support for addressing Rapid 'Ōhi'a Death will continue to be additive. We are concerned about unintended financial impacts of a piecemeal approach to invasive species funding. For example, in Fiscal Year 2007 the Legislature's provision of specific funding for coqui frog control was really a shifting of existing funds from other important invasive species programs, which then caused layoffs in the Island Invasive Species Committees and a hiatus in the Hawai'i Invasive Species Council's research grant program.

The [Hawai'i Interagency Biosecurity Plan](#)—prepared by the Department of Agriculture with the support of its many government and non-government partners—addresses the full range of invasive species prevention, early detection, rapid response, control, research, and outreach priorities across the state. Beyond this bill's additive funding, we encourage the Legislature, the Administration and partners to enhance our collective attention and funding applied to the full range of pest issues across the islands as outlined in the comprehensive Biosecurity Plan.

Thank you for the opportunity to testify in support of this bill.

BOARD OF TRUSTEES

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UNIVERSITY OF HAWAII SYSTEM

Legislative Testimony

Testimony Presented Before the
House Committee on Energy and Environmental Protection
and
House Committee on Water, Land, and Hawaiian Affairs
Tuesday, February 12, 2019 at 8:55 a.m.

By
Nicholas Comerford
Dean, College of Tropical Agriculture and Human Resources
And
Michael Bruno
Interim Vice Chancellor for Academic Affairs
Vice Chancellor for Research
University of Hawai'i at Mānoa

HB 1548 – RELATING TO RAPID OHIA DEATH

Chairs Lowen and Yamane, Vice Chairs Wildberger and Todd, and members of the House Committee on Energy and Environmental Protection and Committee on Water, Land, and Hawaiian Affairs:

Thank you for this opportunity to testify on HB 1548 relating to Rapid Ohia Death (ROD). The University of Hawai'i at Mānoa, College of Tropical Agriculture and Human Resources (CTAHR) supports the intent of this bill to combat ROD, but opposes the matching requirement. ROD is a disease that is changing the natural landscape of Hawai'i on state and private lands. ROD is the greatest threat to our native forests, watersheds, and the endangered species that live there. Widespread ohia mortality would also be a severe loss for native Hawaiian culture.

A team of scientists from the U.S. Department of Agriculture, Agriculture Research Service, Pacific Basin Agricultural Research Center in collaboration with UH have:

- discovered the two new species of fungus that are attacking the ohia;
- developed molecular diagnostic tools to enable certain identification of the fungus;
- identified how the pathogen moves, both by human and natural means, in particular by boring beetles;
- shown that wounding of ohia trees allows them to become infected; and,
- UH Hilo has developed the drone methodology for detecting trees with ROD symptoms from the air.

The news that the fungus has reached Kaua'i demonstrates that this is a statewide problem, not just a Hawai'i Island problem. A recent detection of a virulent pathogen of ROD, *Ceratocystis lukuohia* indicates that there might be more ROD infected trees or the spread of disease would be rapid on Kaua'i. This bill addresses the state-wide need through research, prevention and outreach.

CTAHR strongly supports the effort expressed by this bill and is willing to assist in the mentioned outreach through the Hawai'i Cooperative Extension Service and the CTAHR Office of Communications.

CTAHR extension agents, while distributed throughout the state, all have a level of state-wide responsibilities to extending information to the community through a variety of educational platforms, including but not limited to, workshops, social media, print media, and video.

Since people are one of the major vectors, the University of Hawai'i, Department of Land and Natural Resources, and others have been conducting an extension program that has:

- given hundreds of community talks and events, reaching tens of thousands of local people;
- produced and distributed tens of thousands of brochures, produced radio public service announcements, websites, and social media that have reached hundreds of thousands of people;
- produced a half hour documentary film on ROD; and,
- shown that almost half of everyone in Hawai'i is aware of ROD, with 90% awareness on Hawai'i Island (this survey was done before the Kaua'i outbreak)

In summary, UHM/CTAHR is in support and is ready to cooperate in whatever form is needed to address the spread of this disease. This bill is also related to HB 230 and combining them may provide a more integrated approach to a state-wide issue.

Thank you for this opportunity to submit testify in support of HB 1548.



The House of Representatives
Committee on Energy and Environmental Protection
Committee on Water, Land, and Hawaiian Affairs
February 12, 2019
8:55 pm; Conference Room 325
State Capitol

Testimony in Support of HB 1548 Funding for Rapid ‘Ōhi‘a Death

Aloha Chairs Lowen and Yamane, Vice Chairs Wildberger and Todd, and Members of the Committee,

The Coordinating Group on Alien Pest Species (CGAPS) **is in support of HB 1548, Relating to Rapid ‘Ōhi‘a Death.** The aim of this measure is to provide funds to the Department of Land and Natural Resources to address Rapid ‘Ōhi‘a Death.

Rapid ‘Ōhi‘a Death is killing Hawaii’s most dominate native tree, ‘ōhi‘a (*Metrosideros polymorpha*), which comprises 80% of the native forests and plays an important role in generating freshwater for our islands. A recent aerial survey indicated that 135,000 acres are already impacted by the disease on Hawai‘i Island and now Kauai is being surveyed to understand the extent of the disease after the most recent detection in December 2018. DLNR plays a critical role in the response efforts to ROD which continues to spread and with the recent detection on Kauai, there is potential for it to be found on Maui and Oahu.

The funding this bill would provide will support ongoing programs for research that are essential to understanding the disease at its spread and communications/outreach activities that keep communities updated and proactive in preventing further spread. Funding will also support new initiatives like removing ungulates from fenced areas on Hawaii Island and Kauai where ungulates can wound trees and cause further spread of the disease. Funding will also support monitoring of new outbreaks like the one on Kauai and if there is ever a detection on Oahu or Maui. Great progress has been made with the multiagency rapid response, but there is still a lot to do. We ask that the committees please consider supporting this bill. Mahalo for your consideration.

Aloha,
Chelsea Arnott
Coordinating Group on Alien Pest Species

HB-1548

Submitted on: 2/11/2019 8:31:31 AM

Testimony for EEP on 2/12/2019 8:55:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Melodie Aduja	O`ahu County Committee on Legislative Priorities of the Democratic Party of Hawai`i	Support	No

Comments:

HB-1548

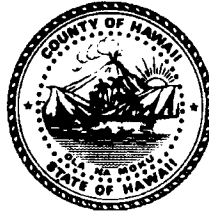
Submitted on: 2/8/2019 7:44:05 PM

Testimony for EEP on 2/12/2019 8:55:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
John R. Gordines	Individual	Support	No

Comments:

Harry Kim
Mayor



Wil Okabe
Managing Director

Barbara J. Kossow
Deputy Managing Director

County of Hawai'i Office of the Mayor

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February 11, 2019

Representative Nicole E. Lowen, Chair
Committee on Energy and Environmental Protection

Representative Ryan I. Yamane, Chair
Committee on Water, Land and Hawaiian Affairs



Dear Chair Lowen, Chair Yamane, and Committee Members:


RE: HB 1548 Relating to Rapid Ohia Death

The initial shock of the discovery of Rapid Ohia Death has passed, and therefore the media has largely moved on. But the devastation of ROD and the loss of Ohia in Hawai'i should not be ignored. Therefore, I am grateful to the authors of this bill, and to you and your Committees, for keeping this issue alive at the Legislature, and hopefully furthering the battle to defeat this terrible scourge.

I will defer to the scientists as to how much funding can be productively used, and urge that, at the end of the Session, there be sufficient money allotted to find an ROD cause and cure, or at least treatment.

With whatever amendments are appropriate, please approve funding to combat ROD.

Respectfully Submitted,


Harry Kim
MAYOR

County of Hawai'i
Council District 4 -
Lower Puna



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ASHLEY L. KIERKIEWICZ

HAWAII COUNTY COUNCIL – DISTRICT 4

Chair: Committee on Planning, and Committee on Government Relations & Economic Development
25 Aupuni Street • Hilo, Hawai'i 96720

LATE

February 11, 2019

**House Committee Energy &
Environmental Protection**
Rep. Nicole Lowen, Chair
Rep. Tina Wildberger, Vice-Chair

**House Committee on Water, Land, &
Hawaiian Affairs**
Rep. Ryan Yamane, Chair
Rep. Chris Todd, Vice-Chair

**RE: Support for HB1548
relating to Resources to Combat Rapid 'Ōhi'a Death**

Aloha, Representatives:

Thank you for the opportunity to submit testimony in support of HB1548, which would allocate funds to the Department of Land and Natural Resources to combat rapid 'ōhi'a death (ROD).

I fully support this measure as ROD is prevalent on Hawai'i Island, and has spread to Kaua'i. Thank you for recognizing the seriousness of ROD and considering investment of resources to address; 'ōhi'a are cornerstone to our native forests and key to maintaining healthy watersheds.

Mahalo nui loa,

Ashley Lehaulani Kierkiewicz
Hawai'i County Council, District 4