



LEGISLATIVE REFERENCE BUREAU
State of Hawaii
State Capitol, Room 446
415 S. Beretania Street
Honolulu, Hawaii 96813

Written Comments

HB1040 HD1 RELATING TO INVASIVE SPECIES

Comments by the Legislative Reference Bureau
Charlotte A. Carter-Yamauchi, Acting Director

Presented to the House Committee on Finance

Friday, February 27, 2015, 11:00 a.m.
Conference Room 308

Chair Luke and Members of the Committee:

Good morning Chair Luke and members of the Committee, my name is Charlotte Carter-Yamauchi and I am the Acting Director of the Legislative Reference Bureau. Thank you for providing the opportunity to submit written comments on H.B. No. 1040, H.D. 1, Relating to Invasive Species.

The purpose of this measure is to:

- (1) Require the Hawaii Invasive Species Council to execute a contract with the University of Hawaii Economic Research Organization to establish an economic model formula that establishes the impact of and the cost to mitigate the most significant invasive species in the State.
- (2) Appropriate moneys to the Hawaii Invasive Species Council for the contract; and
- (3) Require the Legislative Reference Bureau, in coordination with the Hawaii Invasive Species Council, to update its 2002 study "Filling the Gaps in the Fight Against Invasive Species," by reporting on:
 - (A) Mitigation and eradication efforts for the invasive species identified in its report;
 - (B) Funding provided by the Legislature since fiscal year 2002-2003 to assist in mitigation and eradication efforts;
 - (C) The sufficiency of the funding; and

(D) The efficacy of the mitigation and eradication efforts.

While the Legislative Reference Bureau takes no position on this measure, we submit the following comments regarding the portion of the measure that directs the Bureau to update its 2002 study for your consideration.

When the Bureau conducted its 2002 study, one of its recommendations was to establish a state invasive species administrator/coordinator position to spearhead the State's invasive species mitigation and eradication efforts. In response to this recommendation, the Legislature established the Hawaii Invasive Species Council in 2003, pursuant to Act 85, Session Laws of Hawaii 2003, as an alternate means of coordinating interagency efforts to mitigate and eradicate invasive species.

According to section 194-2(a)(4), Hawaii Revised Statutes, some of the duties of the Council are to:

- (1) Maintain a broad overview of the invasive species problem in the State;
- (2) Advise, consult, and coordinate invasive species-related efforts with and between the Departments of Agriculture, Land and Natural Resources, Health, and Transportation, as well as state, federal, international, and privately organized programs and policies;
- (3) Identify and prioritize each lead agency's organizational and resource shortfalls with respect to invasive species;
- (4) After consulting with appropriate state agencies, create and implement a plan that includes the prevention, early detection, rapid response, control, enforcement, and education of the public with respect to invasive species, as well as fashion a mission statement articulating the State's position against invasive species;
- (5) Coordinate and promote the State's position with respect to federal issues;
- (6) Identify and record all invasive species present in the State;
- (7) Designate the Department of Agriculture, Health, or Land and Natural Resources as the lead agency for each function of invasive species control, including prevention, rapid response, eradication, enforcement, and education;
- (8) Identify all state, federal, and other moneys expended for the purposes of the invasive species problem in the State;
- (9) Identify all federal and private funds available to the State to fight invasive species and advise and assist state departments to acquire these funds;

DAVID Y. IGE
Governor

SHAN S. TSUTSUI
Lt. Governor



State of Hawaii
DEPARTMENT OF AGRICULTURE
1428 South King Street
Honolulu, Hawaii 96814-2512
Phone: (808) 973-9600 FAX: (808) 973-9613

SCOTT E. ENRIGHT
Chairperson, Board of Agriculture

PHYLLIS SHIMABUKURO-GEISER
Deputy to the Chairperson

**TESTIMONY OF SCOTT E. ENRIGHT
CHAIRPERSON, BOARD OF AGRICULTURE**

BEFORE THE HOUSE COMMITTEE ON FINANCE

February 27, 2015
11:00 A.M.
ROOM 308

**HOUSE BILL NO. 1040 HD 1
RELATING TO INVASIVE SPECIES**

Chairperson Luke and Members of the Committee:

Thank you for the opportunity to testify on House Bill No.1040 HD 1. This bill appropriates moneys to the Hawaii Invasive Species Council (HISC) to contract with the Economic Research Organization at the University of Hawaii (UHERO) to establish an economic model formula to establish the impact and cost of mitigating the most significant invasive species in the State. The measure also directs the Legislative Reference Bureau (LRB) to coordinate with the HISC and update its 2002 study to reflect costs and impact of mitigation efforts. The Department supports this bill provided that it does not adversely impact the priorities in the Administration's budget.

The Department is constantly grappling with invasive species and collaborates with its state, federal, and nonprofit sector partners to prevent, control, and, where possible, eradicate incipient invasive species. Despite these efforts, it is often difficult for the public at large to truly understand the impact and costs that an invasive can have on the economy, environment, and the community. The study done by the LRB in 2002 entitled "Filling the Gaps in the Fight Against Invasive Species", was an excellent barometer that estimated that \$50 million a year would be needed to finance all the invasive species programs in the State. Over a decade later, it would be beneficial to update the 2002 study to gain a better understanding of the invasive species problem facing the State now.

Thank you for the opportunity to submit testimony.



DAVID IGE
GOVERNOR OF HAWAII



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

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

**Testimony of
CARTY S. CHANG
Interim Chairperson**

**Before the House Committee on
FINANCE**

**Friday, February 27, 2015
11:00 AM
State Capitol, Conference Room 308**

**In consideration of
HOUSE BILL 1040, HOUSE DRAFT 1
RELATING TO INVASIVE SPECIES**

House Bill 1040, House Draft 1 proposes to appropriate an unspecified amount of general funds to the interagency Hawaii Invasive Species Council (HISC) to contract the University of Hawaii Economic Research Organization (UHERO) to expand upon an economic model describing the impact and cost to mitigate the most significant invasive species in the State. This measure would also direct the Legislative Reference Bureau to update its 2002 study, "Filling the Gaps in the Fight Against Invasive Species." **The Department of Land and Natural Resources (Department) offers the following comments.**

The Department is the administrative host of the interagency HISC, and is currently contracting UHERO to conduct a study on the economic impacts and mitigation costs for a list of 5-10 "top pests" that will be developed as part of the contract. The project dates for this contract are January 1-December 31, 2015. This measure directs the HISC to expand upon that economic analysis utilizing additional funding in Fiscal Year 2016 and report to the Legislature on the outcome no later than 20 days prior to the 2016 Legislative Session. Because the project period to produce the initial economic analysis extends to December 31, 2015 and funding made available by this measure to expand upon that analysis would not be available until July 2015, the Department suggests that the reporting requirement in this measure be extended to a later date.

With regard to SECTION 3 of this measure, directing the Legislative Reference Bureau to update its 2002 study, the Department supports this effort and notes that in 2014 the interagency HISC adopted Resolution 14-2: "Requesting a Legislative Reference Bureau Study to Update the 2002 Report Titled 'Filling the Gaps in the Fight Against Invasive Species'."

The Department appreciates the opportunity to provide these comments.

CARTY S. CHANG
INTERIM CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DANIEL S. QUINN
INTERIM FIRST DEPUTY

W. ROY HARDY
ACTING DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS



UNIVERSITY OF HAWAII SYSTEM

Legislative Testimony

Testimony Presented Before the
House Committee on Finance
Friday, February 27, 2015 at 11:00 am

By

Robert Bley-Vroman, Chancellor

And

Dr. Kimberly Burnett, Associate Specialist
University of Hawai'i Economic Research Organization
University of Hawai'i at Mānoa

HB 1040 HD1 – RELATING TO INVASIVE SPECIES

Chair Luke, Vice Chair Nishimoto, and Members of the Committee:

Thank you for the opportunity to submit testimony regarding HB 1040 HD1, which seeks to appropriate moneys to the Hawai'i Invasive Species Committee (HISC) to contract the University of Hawai'i Economic Research Organization (UHERO) to develop an economic model/formula to establish the impact and cost of mitigating invasive species in the State. As a co-director of UHERO's Project Environment Research Group, I offer the following comments on this bill.

The Bill requires that UHERO contract with HISC to study the impact and cost of mitigating invasive species in Hawai'i. It would be inappropriate for UHERO to attempt to develop a general model or formula to estimate the impact and cost of mitigating invasive species in the State when such a general formula or model is not feasible. Individual models reflecting biological and economic realities should be developed for groups of species or individual species as appropriate. A single model or formula could not reflect the complexities in which non-native organisms interact with Hawaii's ecosystems, economy, people and environments. Such a formula would be incapable of capturing crucial population dynamics and other essential interactions happening between and among the invader and the invaded, a necessary part of calculating the total economic costs and damages to a system such as Hawai'i.

Furthermore, UHERO is currently (FY15) contracted by HISC to estimate the costs of invasive species in Hawai'i, for a group of the most significant threats. Because a comprehensive study of every invasive species statewide would be a difficult and prohibitively costly effort, a list of top pests (for which costs can be assessed in dollar terms) will be developed in collaboration with invasive species managers, the CGAPS steering committee, HDOA, DLNR, TNC and watershed partnerships on each island. Once the list is finalized, UHERO will interview individuals in affected sectors and review relevant existing reports to collect information on damage costs (e.g. value of crop losses) and mitigation costs (e.g. costs of treating affected products with herbicide/pesticide) generated by those top pests. Given the importance of invasive

species that do not necessarily generate easily quantifiable monetary costs, UHERO will also discuss non-monetized damages of such species in terms of lost ecosystem services (e.g. groundwater recharge).

We suggest amending HB 1040 HD1 to appropriate moneys to HISC to contract UHERO to periodically update the FY15 study we expect to complete by December 31, 2015. As an alternative, we suggest that continued funding be provided to HISC to contract UHERO to conduct future economic analyses of the impact and costs of individual or related species.



P.O. Box 253, Kunia, Hawai'i 96759
Phone: (808) 848-2074; Fax: (808) 848-1921
e-mail info@hfbf.org; www.hfbf.org

February 27, 2015

HEARING BEFORE THE
HOUSE COMMITTEE ON FINANCE

TESTIMONY ON HB 1040 HD 1
RELATING TO INVASIVE SPECIES

Room 308
11:00 AM

Aloha Chair Luke, Vice Chair Nishimoto, and Members of the Committee:

I am Christopher Manfredi, President of the Hawaii Farm Bureau (HFB). Organized since 1948, the HFB is comprised of 1,932 farm family members statewide, and serves as Hawaii's voice of agriculture to protect, advocate and advance the social, economic and educational interest of our diverse agricultural community.

HFB supports HB 1040 HD 1, which appropriates moneys to HISC to contract UHERO to establish an economic model formula to establish impact and cost of mitigating invasive species in the State and requires LRB to update its 2002 study on invasive species.

Invasive species have become one of the most devastating problems impacting Hawaii. Many invasive species are damaging Hawaii's environment and economy. Agriculture has a vested interest in this matter. Agriculture suffers when invasive species are introduced. Every year, numerous new pests are introduced into the State, such as the coqui frog, coffee berry borer, macadamia felted coccid, little fire ant, coconut rhinoceros beetle, small hive beetle and varoa mite, to name a few. Control measures take time to develop, leaving farmers and ranchers at risk. This is not consistent with the State's goal of increasing self sufficiency and sustainability.

Proper funding for HISC is critical for the protection of Hawaii's environment and economy and the health and lifestyle of its people through the support of invasive species prevention, control, research, outreach, and planning.

Thank you for the opportunity to comment on this measure.



Testimony of the O'ahu Invasive Species Committee
Supporting H.B. 1040 H.D.1 Relating to Invasive Species
House Committee on Finance
Friday, February 27, 2015 11:00 AM Room 208

The O'ahu Invasive Species Committee (OISC) supports H.B. 1040 that appropriates moneys to the Hawai'i Invasive Species Council to contract with the University of Hawai'i Economic Research Organization to create an economic model formula that will establish the impact and cost of mitigating the most significant invasive species in the State and directs the Legislative Research Bureau to update its 2002 study "Filling the Gaps in the Fight Against Invasive Species".

OISC could use this research to explain to the public how damaging invasive species are. The findings could also be useful in raising money to leverage state funds and help OISC gauge whether the money spent on certain projects is appropriate. In order to ensure that funding remains intact for invasive species prevention, rapid response and management programs supported by the Hawai'i Invasive Species Council, we encourage the Legislature to *add* this funding to the funds proposed in H.B. 437 and not designate it as a portion of that funding.

The O'ahu Invasive Species Committee works island-wide to remove incipient invasive species from O'ahu before they become so abundant that they begin to damage ecosystems. OISC employs 17 people that conduct early detection, systematically survey and remove incipient invasive plants, educate the public about how special Hawai'i's biota is and how to protect it and assist the Department of Agriculture to survey and control for vertebrates and invertebrates.

OISC has benefitted from HISC funds for many years and we thank the Legislature for their continued support in the fight against invasive species. Thank you for the opportunity to testify

Sincerely,
The O'ahu Invasive Species Committee

Testimony of The Nature Conservancy of Hawai'i
Supporting H.B. 1040 HD1 Relating to Invasive Species
House Committee on Finance
Friday, February 27, 2015, 11:00AM, Room 308

For more than 35 years, The Nature Conservancy of Hawai'i has been working closely with government agencies, local businesses, private landowners, non-profit partners, and interested communities across the state to preserve the lands and waters upon which all life in these islands depends. The Conservancy is a private non-profit conservation organization that has helped to protect nearly 200,000 acres of natural lands in Hawai'i. Today, we actively manage more than 35,000 acres in 11 nature preserves on Maui, Hawai'i, Moloka'i, Lāna'i, and Kaua'i, and support 19 coastal communities seeking to co-manage marine resources in partnership with the State of Hawai'i.

The Nature Conservancy supports H.B. 1040 HD1. It has been a dozen years since the Legislative Reference Bureau issued its analysis on invasive species that resulted in the Legislature's establishment of the Hawai'i Invasive Species Council. It makes sense to revisit and update the economic impacts of invasive species, the sufficiency of funds provided, and the efficacy of efforts since that time to best understand the threat and make informed decisions about future allocations of State resources.

Invasive weeds, insects, diseases, snakes, and other pests are one of the greatest threats to Hawai'i's economy, agriculture, natural environment, and the health and lifestyle of its people. With favorable conditions and limited competition, non-native species arrive in the Hawaiian Islands to find an easy environment in which to thrive.

The Hawai'i Invasive Species Council (HISC) provides a comprehensive, statewide approach to invasive species policy and funding including prevention, early detection, control, research and education programs. This effort necessarily results in important coordination, collaboration, and prioritization amongst government agencies and partners based on a variety of issues including human health, safety and well-being, economic and agricultural harm, and the threat to the health and function of the natural environment.

We appreciate and support this measure requesting the LRB, with help from the UH Economic Research Organization, to update its 2002 assessment of the scope, status and costs of the problem.

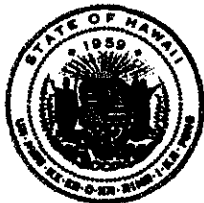
Thank you for this opportunity to offer our support for this bill.

BOARD OF TRUSTEES

Mark E. Agne Paul D. Alston Alan H. Arizumi Christopher J. Benjamin Anne S. Carter Richard A. Cooke III
Peter H. Ehrman Kenton T. Eldridge Thomas M. Gottlieb James J.C. Haynes III Mark L. Johnson
Dr. Kenneth Y. Kaneshiro Eiichi Kuwana Duncan MacNaughton Kathy M. Matsui Wayne K. Minami
A. Catherine Ngo James C. Polk Chet A. Richardson Jean E. Rolles Scott C. Rolles Crystal K. Rose
Dustin E. Sellers Dustin M. Shindo Nathan E. Smith Peter K. Tomozawa James Wei Eric K. Yeaman

Chair: Christopher J. Benjamin *Chair Emeriti:* Samuel A. Cooke (co-founder; chair 1980-1991),
Herbert C. Cornuelle (co-founder), Bill D. Mills (1991-1995), Jeffrey N. Watanabe (1995-2004),
David C. Cole (2004-2008), Duncan MacNaughton (2008-2011), Kenton T. Eldridge (2011-2014)

DAVID IGE
GOVERNOR OF HAWAII
SHAN TSUTSUI
LIEUTENANT GOVERNOR



HAWAII INVASIVE SPECIES COUNCIL
1151 PUNCHBOWL ST. #325
HONOLULU, HAWAII 96813

The HISC appreciates the opportunity to provide these comments.

YOUTH MEMBERS

CARTY CHANG
DEPARTMENT OF LAND & NATURAL
RESOURCES

SCOTT ENRIGHT
HAWAII DEPARTMENT OF AGRICULTURE

VIRGINIA PRESSLER, MD
DEPARTMENT OF HEALTH

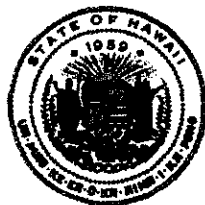
MARIA GALLO, PhD
UNIVERSITY OF HAWAII

LEO ASUNCION
OFFICE OF PLANNING, DEPARTMENT OF
BUSINESS, ECONOMIC DEVELOPMENT &
TOURISM

DAVID RODRIGUEZ
DEPARTMENT OF TRANSPORTATION

DAVID IGE
GOVERNOR OF HAWAII

SHAN TSUTSI
LIEUTENANT GOVERNOR



HAWAII INVASIVE SPECIES COUNCIL

1151 PUNCHBOWL ST., #325
HONOLULU, HAWAII 96813

VOTING MEMBERS

CARTY CHANG
DEPARTMENT OF LAND & NATURAL
RESOURCES

SCOTT ENRIGHT
HAWAII DEPARTMENT OF AGRICULTURE

VIRGINIA PRESSLER, MD
DEPARTMENT OF HEALTH

MARIA GALLO, PhD
UNIVERSITY OF HAWAII

LEO ASUNCION
OFFICE OF PLANNING, DEPARTMENT OF
BUSINESS, ECONOMIC DEVELOPMENT &
TOURISM

DAVID RODRIGUEZ
DEPARTMENT OF TRANSPORTATION

Testimony of HAWAII INVASIVE SPECIES COUNCIL

Before the House Committee on
FINANCE

Friday, February 27, 2015
11:00 AM
State Capitol, Room 308

LATE

In consideration of HOUSE BILL 1040, HD1 RELATING TO INVASIVE SPECIES

House Bill 1040, HD1 would direct the interagency Hawaii Invasive Species Council (HISC) to contract the University of Hawaii Economic Research Organization (UHERO) to establish an economic model describing the impact and cost to mitigate the most significant invasive species in the State. This measure would also direct the Legislative Reference Bureau to update its 2002 study, "Filling the Gaps in the Fight Against Invasive Species." **The Hawaii Invasive Species Council (HISC) supports this measure.**

The interagency HISC is the administratively hosted by the Department of Land and Natural Resources (DLNR), and has previously partnered with UHERO on a number of economic studies. In Fiscal Year 2015, the HISC awarded \$50,000 to UHERO to conduct a study on the economic impacts and mitigation costs for a short (5-10 species) list of "top pests" that will be developed as part of the contract. Because the total number of invasive species in Hawaii is not known, and each has a different set of economic impacts depending on its location, density, and natural history characteristics; a single, comprehensive model for all invasive species, would be both difficult to produce and would likely not describe any one species effectively. Therefore; HISC supports future funding be directed towards updating UHERO's analysis of impacts and costs on a regular basis - for a limited number of priority species.

With regard to Section 3 of this measure, directing the Legislative Reference Bureau to update its 2002 study, the HISC recognizes that the 2002 study, "Filling the Gaps in the Fight Against Invasive Species," was instrumental in shaping the State's strategy for invasive species prevention, control, research, and outreach. The HISC strongly supports updating this study and notes that in 2014 the interagency HISC adopted Resolution 14-2: "Requesting a Legislative

Reference Bureau Study to Update the 2002 Report Titled 'Filling the Gaps in the Fight Against Invasive Species'."