

DAVID Y. IGE  
GOVERNOR



CRAIG K. HIRAI  
DIRECTOR

GLORIA CHANG  
DEPUTY DIRECTOR

**STATE OF HAWAII**  
**DEPARTMENT OF BUDGET AND FINANCE**  
P.O. BOX 150  
HONOLULU, HAWAII 96810-0150

EMPLOYEES' RETIREMENT SYSTEM  
HAWAII EMPLOYER-UNION HEALTH BENEFITS TRUST FUND  
OFFICE OF THE PUBLIC DEFENDER

ADMINISTRATIVE AND RESEARCH OFFICE  
BUDGET, PROGRAM PLANNING AND  
MANAGEMENT DIVISION  
FINANCIAL ADMINISTRATION DIVISION  
OFFICE OF FEDERAL AWARDS MANAGEMENT (OFAM)

**WRITTEN ONLY**  
TESTIMONY BY CRAIG K. HIRAI  
DIRECTOR, DEPARTMENT OF BUDGET AND FINANCE  
TO THE HOUSE COMMITTEE ON WATER & LAND  
ON  
HOUSE BILL NO. 1931

**February 10, 2022**  
**8:30 a.m.**  
**Room 430 and Videoconference**

RELATING TO MOSQUITO CONTROL

The Department of Budget and Finance (B&F) offers comments on this bill.

House Bill No. 1931 appropriates an unspecified amount of general funds for FY 23 to establish one full-time Planner position in the Department of Land and Natural Resources to support development of mosquito control measures.

B&F notes that, with respect to the general fund appropriation in this bill, the federal Coronavirus Response and Relief Supplemental Appropriations Act requires that states receiving Elementary and Secondary School Emergency Relief (ESSER) II funds and Governor's Emergency Education Relief II funds must maintain state support for:

- Elementary and secondary education in FY 22 at least at the proportional level of the state's support for elementary and secondary education relative to the state's overall spending, averaged over FYs 17, 18 and 19; and
- Higher education in FY 22 at least at the proportional level of the state's support for higher education relative to the state's overall spending, averaged over FYs 17, 18 and 19.

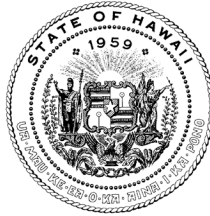
Further, the federal American Rescue Plan (ARP) Act requires that states receiving ARP ESSER funds must maintain state support for:

- Elementary and secondary education in FY 22 and FY 23 at least at the proportional level of the state's support for elementary and secondary education relative to the state's overall spending, averaged over FYs 17, 18 and 19; and
- Higher education in FY 22 and FY 23 at least at the proportional level of the state's support for higher education relative to the state's overall spending, averaged over FYs 17, 18 and 19.

The U.S. Department of Education has issued rules governing how these maintenance of effort (MOE) requirements are to be administered. B&F will be working with the money committees of the Legislature to ensure that the State of Hawai'i complies with these ESSER MOE requirements.

Thank you for your consideration of our comments.

DAVID Y. IGE  
GOVERNOR OF HAWAII



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

POST OFFICE BOX 621  
HONOLULU, HAWAII 96809

**Testimony of  
SUZANNE D. CASE  
Chairperson**

**Before the House Committee on  
WATER & LAND**

**Thursday, February 10, 2022  
8:30 AM**

**State Capitol, Conference Room 430, Via Videoconference**

**In consideration of  
HOUSE BILL 1931  
RELATING TO MOSQUITO CONTROL**

House Bill 1931 proposes to appropriate funds to the Department of Land and Natural Resources (Department) for the establishment of one 1.0 FTE position to support planning and implementation of landscape scale mosquito control efforts for the benefit of conservation and public health. **The Department supports this bill provided that its passage does not replace or adversely impact priorities indicated in the Executive Supplemental budget.**

Mosquito-borne diseases threaten human health and the continued existence of the remaining Hawaiian forest birds, with several bird species on the brink of extinction. *Aedes* mosquitos have the potential to spread throughout the islands and can carry diseases that can be transmitted to humans. Action is urgently needed to counter both native species and human threats, and capacity is needed to bring the program online as soon as possible. The proposed planner position will provide that capacity.

Thank you for the opportunity to comment on this measure.

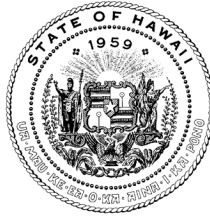
**SUZANNE D. CASE**  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT

**ROBERT K. MASUDA**  
FIRST DEPUTY

**M. KALEO MANUEL**  
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

DAVID Y. IGE  
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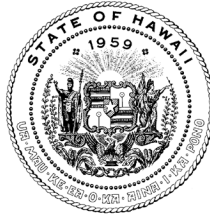
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**STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES**

POST OFFICE BOX 621  
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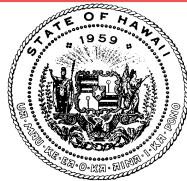
**SUZANNE D. CASE**  
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BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT

**ROBERT K. MASUDA**  
FIRST DEPUTY

**M. KALEO MANUEL**  
DEPUTY DIRECTOR - WATER

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BOATING AND OCEAN RECREATION  
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DAVID Y. IGE  
GOVERNOR OF HAWAII



ELIZABETH A. CHAR, M.D.  
DIRECTOR OF HEALTH

**STATE OF HAWAII  
DEPARTMENT OF HEALTH**

P. O. Box 3378  
Honolulu, HI 96801-3378  
doh.testimony@doh.hawaii.gov

**Testimony in SUPPORT of HB 1931  
Relating to Mosquito Control**

REPRESENTATIVE DAVID TARNAS, CHAIR  
HOUSE COMMITTEE ON WATER & LAND

Hearing Date: 2/10/2022

Room Number:

Videoconference

1 **Fiscal Implications:** The Department supports this bill provided that its passage does not  
2 replace or adversely impact priorities indicated in the Executive Supplemental budget.

3 **Department Testimony:** The Department strongly supports passage of HB 1931, which  
4 appropriates funds to establish one 1.0 FTE position to support planning and implementation of  
5 landscape scale mosquito control in both public health and conservation. Coordinated efforts  
6 between the Department of Land and Natural Resources and the Department of Health, along  
7 with other state, federal and private stakeholders require an individual dedicated to manage and  
8 monitor the various ongoing projects in mosquito control.

9 **Offered Amendments:** The Department respectfully requests adding the department of health  
10 in the purpose of the bill, found on Page 1, lines 14-16 as we have collaborated with DLNR on  
11 landscape mosquito control, focusing on public health. Secondly, to facilitate hiring a qualified  
12 individual, the Department respectfully requests amending page 2, lines 1-7 to substitute one-  
13 full-time equivalent planner to a program specialist position (SR22/24) in the department of land  
14 and natural resources.

15

16

17 Thank you for the opportunity to testify on this measure.



COORDINATING GROUP ON  
ALIEN PEST SPECIES

The House of Representatives  
Committee on Water and Land  
Thursday, February 10, 2022  
8:30 a.m., via Videoconference

### **Testimony in Support of HB 1931**

Aloha Chair Tarnas, Vice Chair Branco, and Members of the Committee,

The Coordinating Group on Alien Pest Species (CGAPS) **is in support of HB 1931, *Relating to Mosquitoes***. The aim of this measure is to provide funding for 1 FTE planner position within the Department of Land and Natural Resources (DLNR) to focus on mosquitoes.

From my early days as an environmental educator, one of the stories that resonated with students has been the story of the arrival of the first mosquitoes in barrels of drinking water on whaling vessels, and the spread of two diseases that were new to the islands—bird malaria and pox. Non-native Southern house mosquitoes—which despite their name, survive just fine in warm, low-elevation forest—feed on native and non-native birds, picking up and spreading these diseases through their bite. Even today, non-native birds like the zebra doves, mynahs, house finches, and white eyes are infected with one or both of these diseases and serve as a reservoir of disease, and native birds are limited to upper elevation forests where it has been too cold for the mosquitoes to thrive. With the warming climate, researchers are seeing the mosquitoes expand their range into upper elevation forests, where they can infect those remaining native birds. If we can break the disease cycle, native forest birds could expand into lower elevation forests and would have plenty of habitat.

Planning for the *Birds, Not Mosquitoes* project is a multi-agency & NGO effort that could use additional agency support. As many of you know, this project aims to replace the gut biome of male Southern house mosquitoes with the gut biome from a different insect, which prevents the next generation of larvae from turning into biting adult mosquitoes. Dropping the population of mosquitoes can break the infection cycle, as has been shown by a growing number of cities and countries around the world in their public health programs. The work is important and deserves full-time focus and coordination by the State. Please consider supporting this bill. Mahalo!

Aloha,  
Christy Martin  
CGAPS

**Testimony of The Nature Conservancy  
SUPPORT FOR HB 1931, RELATING TO MOSQUITO CONTROL.**

**Committee on Water and Land  
February 10, 2022, 8:30 am  
Conference Room 430 & Videoconference**

Aloha Chair Tarnas, Vice Chair Branco, and Members of the Committee:

The Nature Conservancy (TNC) supports HB 1931, Relating to Mosquito Control, which appropriates funds for the establishment of one full-time equivalent planner position related to mosquito control in the Department of Land and Natural Resources (DLNR).

Hawai'i's native forest birds are facing an extinction crisis. Before the 1800s there were no mosquitoes in Hawai'i. Since then, a handful of mosquito species have become established in the islands. In the 1900s, exotic birds from regions where avian malaria was endemic were brought to Hawai'i. With both the mosquito vector and avian malaria parasite (*Plasmodium relictum*) present, the native forest bird populations were decimated. Because they evolved without natural exposure to avian malaria, native Hawaiian forest birds are extremely susceptible to this disease and many species went extinct, while others' home ranges contracted and their populations declined. In the past, forest birds residing in higher elevations that were too cold for efficient mosquito reproduction and parasite development were mostly spared. Now, as the planet warms from the climate crisis, these high elevation refugia have diminished; mosquitoes and the avian malaria they vector are killing forest birds at higher and higher elevations.

A significant interagency and inter-organizational effort is underway to develop mosquito control methods to prevent further extinction of Hawai'i's remaining forest birds. Currently, this is an additional effort on top of full workloads. Hawai'i's birds need increased staff and resources to ensure their survival, from DLNR to nonprofits and beyond. TNC manages multiple preserves throughout the state that provide habitat to the bird species facing extinction due to climate change and avian malaria and we are investing resources in this effort. The Conservancy is committed to working with DLNR and stakeholders on taking action to ensure these species' survival, but DLNR needs additional staff to ensure this work can be achieved.

The position established by HB 1931 will bolster DLNR's efforts to control mosquitoes spreading avian malaria. This support will go far in helping to save these iconic birds. Mahalo for the opportunity to provide testimony in support of HB 1931.

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*The Nature Conservancy of Hawai'i and Palmyra is a non-profit 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 nature preserves and work in over 50 coastal communities to help protect and restore the nearshore reefs and fisheries of the main Hawaiian Islands. We forge partnerships with government, private parties, and communities to protect forests and coral reefs for their ecological values and for the many benefits they provide to people.*

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*Bringing back the birds*

Testimony in Support  
Before the House Committee on Water & Land  
Thursday, February 10, 2022, 8:30am  
State Capitol, Room 430, via Videoconference  
In consideration of House Bill 1931, Relating to Mosquito Control

Aloha Chair Branco, Vice-Chair Tarnas, and Members of the Committee on Water and Land:

American Bird Conservancy (ABC) strongly supports HB 1931. This measure would allocate general revenue funds for one (1.0) FTE planner position at the Hawai'i Department of Land and Natural Resources to develop mosquito control measures.

Mosquitoes are not native to Hawai'i, but six biting species are now present in the Islands. Three of these carry and transmit harmful diseases to humans and animals. Avian malaria, transmitted by the Southern house mosquito, has contributed to the loss of many species of birds and is driving many of the remaining honeycreepers to extinction. Resource managers predict that without rapid intervention, four species will cease to exist in less than a decade.

The planner position to be funded by HB 1931 would support mosquito control efforts for both human health and bird conservation purposes. "Mosquito birth control," which uses a common bacteria to interrupt the mosquitoes' reproductive cycle, offers hope that our endangered birds can be saved, and that the same strategy could help prevent the spread of human diseases, such as dengue. This position could provide enhanced capacity at the state level to ensure compliance with local, state, and federal regulations and to advance coordination among the fifteen agencies and organizations involved in the Birds, Not Mosquitoes partnership.

Hawai'i can be an innovator in using this technology for conservation, while building on its proven effectiveness for health applications. ABC thanks Chair Branco and Vice-Chair Tarnas for their leadership in introducing this important bill.

Thank you for this opportunity to testify and mahalo for your consideration,

Chris Farmer, Ph.D.  
[cfarmer@abcbirds.org](mailto:cfarmer@abcbirds.org)  
Hawai'i Program Director  
American Bird Conservancy  
808-987-1779

Teya Penniman  
[tpenniman@abcbirds.org](mailto:tpenniman@abcbirds.org)  
Birds, Not Mosquitoes Coordinator  
American Bird Conservancy  
808-280-1170

**HB-1931**

Submitted on: 2/7/2022 7:49:24 PM

Testimony for WAL on 2/10/2022 8:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Remote Testimony Requested</b>
Douglas Perrine	Individual	Support	No

Comments:

The risks to both humans and to native Hawaiian birds from diseases spread by mosquitoes will only increase as our climate warms, probably dooming some endemic birds to extinction without public intervention to control or eliminate those species of introduced mosquitoes which serve as vectors of disease. With new technologies it may be possible to reduce populations of the most dangerous mosquitoes to insignificant levels. I strongly support allocating funds to support this effort.

**HB-1931**

Submitted on: 2/7/2022 7:49:44 PM

Testimony for WAL on 2/10/2022 8:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Remote Testimony Requested</b>
Sam ?Ohu Gon III	Individual	Support	No

Comments:

Mosquito control is immediately needed to save our native birds, and the development of new tools will also have great utility as climate change allows more and more tropical diseases, spread by modquitoes, to reach Hawai'i and affect human health. I strongly support focusing attention at the DLNR level on this issue. Our native biocultural resources and our community health will both benefit.

**HB-1931**

Submitted on: 2/7/2022 9:52:04 PM

Testimony for WAL on 2/10/2022 8:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Remote Testimony Requested</b>
James B Friday	Individual	Support	No

Comments:

Aloha Chair Tarnas and Vice Chair Branco,

I would like to testify in support of HB1931, Relating to mosquito control. As a forester by profession, I work a lot to plant trees to restore habitat for our native forest birds. I also am president of the non-profit organization Friends of Hakalau Forest National Wildlife Refuge. All the habitat restoration we do will be useless if the mosquitos that carry avian malaria reach the upper elevations of our forests. Please support mosquito control and give our native forest birds a fighting chance. Mahalo!

Sincerely,  
J. B. Friday

Hilo, HI

**HB-1931**

Submitted on: 2/8/2022 1:54:10 PM

Testimony for WAL on 2/10/2022 8:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Remote Testimony Requested</b>
Keith Evans	Individual	Support	No

Comments:

Please approve and expedite this mosquito eradication program. Hawaiian native forest bird species are unique and precious, and are vital to maintain a healthy forest ecosystem. Yet, sadly, so many of these native forest birds have already gone extinct, and those that remain stand at the precipice. Mosquito-borne avian malaria is one of the prime causes of the decline in these birds and must be eradicated if they are to stand any chance of survival. Such Wolbachia programs have been effectively used elsewhere and offer a method to achieve rapid results with no negative impact to the environment. Time is of the essence, therefore I urge you to please rapidly approve this program.

**HB-1931**

Submitted on: 2/8/2022 5:54:24 PM

Testimony for WAL on 2/10/2022 8:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Remote Testimony Requested</b>
jessica middleton	Individual	Support	No

Comments:

Mosquito control should be a top priority to save our native birds. Absolutely support!

**HB-1931**

Submitted on: 2/8/2022 9:02:18 PM

Testimony for WAL on 2/10/2022 8:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Remote Testimony Requested</b>
Jessica Waia'u	Individual	Support	No

Comments:

Aloha,

Please invest in the future of our culturally and ecologically important native species and support HB1931. Any further delay in action will lead to greater extinction and further threaten the survival of Hawaiian cultural practices.

Mahalo nui,

Jessica Waia'u

**HB-1931**

Submitted on: 2/8/2022 9:55:07 PM

Testimony for WAL on 2/10/2022 8:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Remote Testimony Requested</b>
Bret Mossman	Individual	Support	No

Comments:

Without immediate action to address mosquitoes in Hawai'i we will likely lose at least 12 more Native Hawaiian bird species to extinction. Please support this bill and take action to save our native birds.



**HB-1931**

Submitted on: 2/8/2022 10:58:08 PM

Testimony for WAL on 2/10/2022 8:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Remote Testimony Requested</b>
Kimeona Kane	Individual	Support	No

Comments:

Aloha nui kākou,

Mahalo Chair, Committee Members, Public for the opportunity to share my thoughts on this Bill, HB1931. I think it is absolutely critical that this bill is pushed forward and passed, giving the unique but threatened species of our environment an opportunity to bounce back in population, range and health. Mosquitoes continue to be a very complex threat to the long term sustainability of our ecosystems. We know of their disastrous impact on our native birds, and if we do the bare minimum to nothing, as we have seen in years past, we will on amplify the impacts further. When these bird species go, the plant species will follow. The entirety of our native forests are largely dependent on our bird species and we cannot stand by to watch the destruction continue. Please pass this bill and get the funding, staffing, and education into the realms that are needed to protect the remaining fabric of our Hawai'i.

Mahalo nui,

Kimeona Kane

Kellen Apuna  
[redcoot22@gmail.com](mailto:redcoot22@gmail.com)

Aloha, I am Kellen Apuna, and I am testifying in **support** of HB 1931. As a birder (birdwatcher) who lives on the island of O‘ahu, I recognize that the forests of O‘ahu are mere remnants of what was once a true spectacle of avian ecology and evolution. Of the plethora of native forest birds originally described from O‘ahu, just three species remain to this day; mosquito-vectored diseases certainly played a large role in these drastic declines.

The relatively low elevation of O‘ahu has allowed for introduced (non-native) mosquitoes to penetrate all forests across all altitudes. These mosquitoes, namely *Culex quinquefasciatus*, the Southern House Mosquito, carry diseases like avian malaria and avian pox from bird to bird. Our native forest birds evolved in the complete absence of any avian diseases and have remained highly susceptible to their detrimental effects. In short, mosquitos have, and continue to, wreak havoc upon our native species. Other islands of higher elevation, like Kaua‘i, Maui, and Hawai‘i island, may have some mosquito-free areas, however, the removal of mosquitos would still remove tremendous amounts of pressure from these species, and allow them to return to their former lowland ranges.

As a current high school senior, I am fortunate to have not experienced a native bird extinction in my lifetime; however, if nothing is done to manage mosquito populations in the coming years, the Kiwikiu (*Pseudonestor xanthophrys*), ‘Akikiki (*Oreomystis bairdi*), and ‘Akeke‘e (*Loxops caeruleirostris*), each a critically endangered species under extreme pressure from mosquito-borne diseases, will likely face extinction. After that, more species, like the iconic ‘I‘iwi (*Drepanis coccinea*), may follow suit as climate change allows mosquitos to move into higher elevations.

I have listed several sources below which examine the issues posed by these mosquitos. Additionally, please refer to the work of *Birds, Not Mosquitos*, an organization dedicated to the eradication of mosquitos from the Hawaiian landscape. Several methods, all under intense scientific research, are described to achieve this goal.

The fate of our native species rests in your hands. I urge you to support HB 1931.

Mahalo.  
Kellen A

<https://www.birdsnotmosquitoes.org/>

<https://mauiforestbirds.org/avian-disease/>

<http://reviverestore.org/wp-content/uploads/2015/03/LaPointe-Atkinson-Samuel-2012-AnnNYAcadSci-ecology-conservation-biology-of-avian-malaria.pdf>

**HB-1931**

Submitted on: 2/9/2022 1:21:23 AM

Testimony for WAL on 2/10/2022 8:30:00 AM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Meredith Miller	Individual	Support	No

Comments:

***I am in support of HB 1931. I agree that a planner position at DLNR to help bring mosquito birth control to Hawaii should be funded. This will help save the forest birds from extinction.***

***Thank you for your consideration.***

***Meredith Miller, M.A.***

**HB-1931**

Submitted on: 2/9/2022 6:16:36 AM

Testimony for WAL on 2/10/2022 8:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Remote Testimony Requested</b>
Sharon Pollock	Individual	Support	No

Comments:

Please approve and expedite this mosquito eradication program. Hawaiian native forest bird species are unique and precious, and are vital to maintain a healthy forest ecosystem. Yet, sadly, so many of these native forest birds have already gone extinct, and those that remain stand at the precipice. Mosquito-borne avian malaria is one of the prime causes of the decline in these birds and must be eradicated if they are to stand any chance of survival. Such Wolbachia programs have been effectively used elsewhere and offer a method to achieve rapid results with no negative impact to the environment. Time is of the essence, therefore I urge you to please rapidly approve this program.

**HB-1931**

Submitted on: 2/9/2022 8:10:13 AM

Testimony for WAL on 2/10/2022 8:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Remote Testimony Requested</b>
Shaya Honarvar	Individual	Support	No

Comments:

Aloha members of the committee,

I strongly support HB 1931, relating to mosquito control.

This is a critical position for safeguarding the wellbeing of Hawaii's people, native animals, the tourism industry, and our economy.

**Please move this bill forward.**

Thank you for the opportunity to offer testimony on this measure.

Shaya Honarvar, Ph.D.

**HB-1931**

Submitted on: 2/9/2022 6:57:18 PM

Testimony for WAL on 2/10/2022 8:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Remote Testimony Requested</b>
Dylan Ramos	Individual	Support	No

Comments:

Aloha,

I support funding mosquito control as a public health measure and as an approach to handling invasive species and protecting native biodiversity. If we don't pay to manage mosquitoes now, we'll only pay more later. I will say, however, that I would also be supportive of complementary or alternative solutions. That is to say, adding this single planner position could be great, but only if it fosters an integrated pest mangement system, greater coordination across DLNR and public agencies, and other things we should be organizing regardless of this bill.

Mahalo,  
Dylan Ramos  
Honolulu

**HB-1931**

Submitted on: 2/10/2022 1:07:54 AM

Testimony for WAL on 2/10/2022 8:30:00 AM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Lorraine Waianuhea	Individual	Support	No

Comments:

Aloha kākou,

My name is Lorraine Waianuhea, I am a Hawaii resident and a PhD student at UH Mānoa studying mosquitoes. **I strongly support HB1931.**

As HB1931 states, mosquitoes and the diseases they transmit pose a huge threat to human health, wildlife health, economics, and tourism in Hawai‘i. In Hawai‘i, we are already exposed to mosquito species capable of transmitting diseases such as zika, dengue, chikungunya, and West Nile virus. *Aedes aegypti* (the Yellow Fever mosquito) is believed to only be established on Hawai‘i island, however some were caught at the Honolulu airport during routine monitoring in 2011 and 2012. This species is especially of concern because it is more aggressive at vectoring diseases, including dengue, than *Aedes albopictus* which is widely established across the State. Regular mosquito monitoring and control, especially at airports, harbors, and military bases, is critical to ensure that *Aedes aegypti* is not spreading, and that new species of mosquitoes (and the diseases they carry) are not being introduced to Hawai‘i.

HB1931 also mentions the devastation that avian malaria and avian pox spread by *Culex quinquefasciatus* mosquitoes have brought upon our native honeycreeper species. Landscape-scale mosquito control is absolutely critical in the next few years to help prevent the extinctions of honeycreepers species, especially those only found on Kaua‘i where Kaua‘i Forest Bird Recovery Project (KFBRP) has reported increased prevalence of mosquitoes and avian malaria in the core habitat for honeycreepers on the Alaka‘i Plateau. ‘Akikiki monitoring by KFBRP during the last breeding season found that the population had plummeted, prompting the capture of several ‘akikiki in December 2021 to be held at the Maui Bird Conservation Center. It is clear that our honeycreepers are quickly running out of time. We must begin mosquito control to stop the spread of avian malaria and pox as soon as possible.

Passing HB1931 to establish a full-time DLNR position dedicated to planning mosquito control will help to protect current and future generations of people in Hawai‘i from mosquito-vectored diseases as well as greatly help to prevent the extinctions of our native honeycreepers through the planning and execution of timely and efficient mosquito control at the landscape scale.

In conclusion, **I strongly urge the legislature to please pass HB1931.**

Mahalo nui for the opportunity to provide testimony,

Lorraine Waianuhe