DAVID Y. IGE GOVERNOR OF HAWAII





STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

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Testimony of SUZANNE D. CASE Chairperson

Before the Senate Committees on AGRICULTURE AND ENVIRONMENT and WATER AND LAND

Monday, February 11, 2019 2:45 PM State Capitol, Conference Room 224

In consideration of SENATE BILL 964 RELATING TO SPECIES CONSERVATION

Senate Bill 964 proposes to authorize the issuance of general obligation bonds and appropriate funds for the construction of an invertebrate and plant propagation facility and baseyard improvements on Oahu, a predator proof fence on Oahu, and a predator proof fence on Maui. The Department of Land and Natural Resources (Department) strongly supports this measure provided its passage does not replace or adversely impact priorities indicated in the Executive Budget request.

Hawaiian land snail species, found nowhere else in the world, are experiencing devastating levels of predation from introduced invasive species, driving many of them to extinction in just a few years time. Small predator-proof fences in the West Maui Mountains and Northern Koʻolau Mountains of Oʻahu would protect eight critically imperiled snail species, two of which are extinct in the wild and only exist in the Department's rare snail captive rearing facility. The proposed fences will provide complete protection from rats, invasive predatory snails, and Jackson's chameleons, and are a key component of extinction intervention. Inside these fences, the snail populations rebound naturally and provide hope for the future continuation of these species.

The proposed invertebrate and plant propagation facility and baseyard improvements on O'ahu would allow for the protection, stabilization, and eventual reintroduction of rare species into native ecosystems across the islands. These improvements would increase facility longevity,

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

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LAND
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create staff efficiencies, and mitigate the potential for damage from future natural disasters for these facilities that harbor the last individuals of their kind.

These projects are part of the emergency multi-island efforts underway to save our Kāhuli and ensure they remain on the landscape where they have lived for millennia. There is no other viable option for protecting wild populations of these species that once were a familiar and legendary part of the native Hawaiian forests.

Thank you for the opportunity to comment on this measure.

<u>SB-964</u> Submitted on: 2/10/2019 12:46:13 PM

Testimony for AEN on 2/11/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Mark Fox	Testifying for The Nature Conservancy	Support	Yes

Testimony Presented Before the
Senate Committee on Agriculture and Environment
and
Senate Committee on Water and Land
Monday, February 11, 2019 at 2:45 p.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

SB 964 - RELATING TO SPECIES CONSERVATION

Chairs Gabbard and Kahele, Vice Chairs Ruderman and Keith-Agaran, and members of the Senate Committee on Agriculture and Environment and Committee on Water and Land:

Thank you for the opportunity to testify on SB 964 relating to species conservation that authorizes the issuance of general obligation bonds and appropriates funds for the construction of an invertebrate and plant propagation facility and baseyard improvements on Oʻahu, a predator proof fence on Oʻahu, and a predator proof fence on Maui. The University of Hawaiʻi at Mānoa, College of Tropical Agriculture and Human Resources supports the intent of this bill and we respectfully provide the following information to substantiate our position.

We are supportive of actions to prevent extinction of Hawai'i's iconic and valued land snails, and are pleased to see continuing support of this effort through the appropriation of funds in SB 964.

In Hawaiian storytelling, when all was right in the world again the kāhuli would sing. In the last two years the remaining populations of kāhuli have precipitously declined from hundreds or thousands of individuals per population down to dozens or less. It is perhaps the most dramatic example of a rapid decline toward extinction in recent times. We have the tools available to prevent extinction of any more species in this group, but funding is needed to build predator-proof fencing and provide additional captive-rearing facilities, which provide a hedge against extinction.

Because of the precipitous declines in the wild, the Hawai'i Department of Land and Natural Resources' (DLNR) Snail Extinction Prevention Program (SEPP) has been evacuating many of the remaining populations to the captive rearing facility in Kawainui, and it is reaching capacity. It is necessary that new facilities for captive rearing, as well as in-situ predator-proof fencing, if the state wishes to prevent extinction of any more kāhuli. SB 964 would fund these actions, which are known to be effective in preventing extinction of these species.

Kāhuli provide important ecosystem services in the form of feeding on biofilms, composed of fungus and bacteria, on leaf surfaces. Other land snails help with decomposition of dead leaves and detritus on the ground, similar to the way earthworms function on mainland systems. In this capacity they help to keep our forests healthy. Unfortunately introduced predators such as rats, the Rosy Wolf Snail, and Jackson's Chameleons are eating them much faster than they can reproduce, leading to declines in population size. Extinction is forever. The actions funded under this bill will allow kāhuli to be enjoyed by future generations, and will allow them to serve their important role in Hawai'i's ecosystems.

In sum, the research funded under SB 964 will provide the required tools for the DLNR SEPP program to prevent extinction in any more of Hawai'i's iconic land snails. The one concern we have is to the future of the species and how, beyond fencing, the species will be promoted given the wide ranging nature of its predators.

Thank you for the opportunity to submit testimony in <u>support</u> of the intent of SB 964 provided that its passage does not replace or adversely impact priorities as indicated in our Board of Regents Approved Budget.



<u>SB-964</u> Submitted on: 2/10/2019 7:35:40 PM

Testimony for AEN on 2/11/2019 2:45:00 PM

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

<u>SB-964</u> Submitted on: 2/10/2019 2:17:56 PM

Testimony for AEN on 2/11/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing	
Andrea Quinn	Individual	Support	No	

Comments:

Dear Honorable Committee Members:

Please support SB964. Hawaii is called the endangered species capital of the world due in large part to invasive species. We must take measures to do what we can to limit the entry of non-native species to protect Hawaii's fragile ecosystem.

Thank you for the opportunity to present my testimony.

Sincerely,

Andrea Quinn

Kihei

<u>SB-964</u> Submitted on: 2/7/2019 6:48:15 PM

Testimony for AEN on 2/11/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing	
Erica Scott	Individual	Support	No	



<u>SB-964</u> Submitted on: 2/10/2019 6:34:52 PM

Testimony for AEN on 2/11/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Dain Christensen	Individual	Support	No