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 Senate Committee on GOVERNMENT OPERATIONS

Wednesday, February 6, 2020 3:45 PM State Capitol, Conference Room 225

In consideration of SENATE BILL 2714 RELATING TO THE STATE SNAIL

Senate Bill 2714 proposes to designate pupu kuahiwi (*Laminella sanguinea*) as the official state snail. The Department of Land and Natural Resources (Department) supports this measure.

Hawaiian tree snails are known as the "Jewels of the Hawaiian Forest" due to their beautiful shells. They exist nowhere else on earth and help sustain healthy forest ecosystems. Many ancient Hawaiian tales refer to snails that sing in the forest. In Hawaiian custom, snails are the voice of the forest, and they embody the Polynesian oral tradition of passing on one's genealogy through singing, making them extremely important to the cultural practices of hula and chant.

The *Laminella sanguinea* has a particularly unique genealogy. They are part of the family Amastridae, which is the only family entirely composed of species found only from Hawai'i. Hawaiian snails represent one of the most stunning examples of species evolution in the world. Unfortunately, it is estimated that over half of the seven hundred fifty terrestrial Hawaiian snail species have gone extinct. Like many of the remaining species, *Laminella sanguinea* has a very small population and is now only known from a few remote locations.

The Department's Snail Extinction Prevention Program is breeding *Laminella sanguinea* in laboratories and protecting wild populations with small predator proof fences. These provide complete protection from rats, invasive predatory snails, and Jackson's chameleons. Inside these fences, the snail populations rebound naturally and provide hope for the future continuation of these species.

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

ROBERT K. MASUDA

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

This two-part strategy is part of the emergency multi-island efforts underway to save our tree snails 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.

The designation of the *Laminella sanguinea* as the official state snail will bring awareness to both the importance of these terrestrial snails, as well as the need to urgently save the remainder of the pupu kuahiwi.

Thank you for the opportunity to comment on this measure.

DAVID Y. IGE Governor

JOSH GREEN Lt. Governor



PHYLLIS SHIMABUKURO-GEISER Chairperson, Board of Agriculture

MORRIS M. ATTA
Deputy to the Chairperson

State of Hawaii **DEPARTMENT OF AGRICULTURE**

1428 South King Street Honolulu, Hawaii 96814-2512 Phone: (808) 973-9600 FAX: (808) 973-9613

TESTIMONY OF PHYLLIS SHIMABUKURO-GEISER CHAIRPERSON, BOARD OF AGRICULTURE

BEFORE THE SENATE COMMITTEE ON GOVERNMENT OPERATIONS

FEBRUARY 6, 2020 3:45 P.M. CONFERENCE ROOM 225

SENATE BILL NO. 2714 RELATING TO THE STATE SNAIL

Chairperson Thielen and Members of the Committee:

Thank you for the opportunity to testify on Senate Bill 2714, relating to the state snail. This bill designates pupu kuahiwi (*Laminella sanguinea*) as the Hawaii State Snail. The Department supports the intent of this measure.

Invasive species are a primary threat to Hawaii's agriculture and economy, and they have decimated the State's endemic land snail species. The Department concurs that designating a State snail will increase awareness of the imperiled status and cultural and ecological relevance of all Hawaiian land snails, help preserve their cultural and ecological significance, and encourage continued conservation of Native Hawaiian invertebrates.

Thank you for the opportunity to testify on this measure.





February 6, 2020

Senator Laura Thielen, Chair Senator Lorraine Inouye, Vice Chair Committee on Government Operations

Conference Room 225 Hawai'i State Capitol Honolulu, HI 96813

RE: Testimony on SB2714, Relating to the State Snail

Chair Thielen, Vice Chair Inouye, and Committee Members:

My name is Melanie Ide and I am the President and CEO of the Bishop Museum, Hawai'i's State Museum of Natural and Cultural History. Bishop Museum is **in support of SB2714**, which would designate pūpū kuahiwi as the official state snail.

Snails play a valuable role for Hawaii's native ecosystems. Snails also have been a significant feature in Hawaiian cultural practices like hula and chants. By designating pūpū kuahiwi as the state snail, we will bring awareness to its importance for the health of our environment while honoring its place in the history of our host culture.

Thank you for the opportunity to provide testimony and we urge you to pass SB2714.

Me ka ha'a ha'a.

Melanie Y. Ide President & CEO

SB-2714

Submitted on: 2/4/2020 12:35:03 PM

Testimony for GVO on 2/6/2020 3:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Kenneth Hayes	Individual	Support	No

Comments:

Hawaiian land snails have distinctive evolutionary, ecological and cultural legacies and are important in understanding biodiversity. These snails play an essential role in the decomposer food web and nutrient cycling in an ecosystem and many snails are also food for other animals like the Po'ouli and Hyposmocoma molluscivora (our endemic carnivorous caterpillar). And they are important culturally. For example, Hawaiian mo'olelo tell of snails singing in the mountains connected to good omen or love stories. The diversity and abundance of these snail species reflects the health of a forest and sadly, many are vanishing quickly. The Hawaiian land snail fauna is arguably the most diverse in the world in relation to land area: >750 recognized species in only 13 families. Unfortunately, habitat destruction and invasive species have drastically reduced the numbers of extant species, with some family extinction estimates as high as 95%, such as the Amastridae. The Amastridae is the only extant endemic family left in Hawaii. Once having at least 325 species, less than 25 species are left with several extinct in the wild and only existing in captive rearing facility. Designating a state snail, such as Laminella sanguinea – an amastrid species with only a few populations left, will hopefully garner attention to the extinction plight of Hawaii's land snails and increase public and conservation support for these disappearing jewels of the forest.

SB-2714

Submitted on: 2/4/2020 12:38:23 PM

Testimony for GVO on 2/6/2020 3:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Norine Yeung	Individual	Support	Yes

Comments:

Species are being lost in an incredible rate globally and this biodiversity crisis is well noted in Hawaii, the extinction capital of the world. The Hawaiian Islands host a spectacular radiation of land snails in the world, which are also the most severely impacted faunas in term of recorded extinctions. Unfortunately, the majority of Hawaii's land snails are not federally protected and many people do not understand or appreciate the important roles they play in a healthy ecosystem or to Hawaii's cultural heritage. We have only one remaining extant endemic family left in Hawaii - the Amastridae. We once had about 325 species in this family but only 23 species remain. These remaining species and many other Hawaiian land snails will likely go extinct within the next decade. What can we do? To start, designating a state snail, specifically Laminella sanguinea, an Amastridae species, will hopefully increase public knowledge and appreciation of these amazing animals. From Dr. Seuss The Lorax: "Unless someone like you cares a whole awful lot, Nothing is going to get better. It's not."

<u>SB-2714</u>

Submitted on: 2/4/2020 12:58:39 PM

Testimony for GVO on 2/6/2020 3:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing	
Lynette Williams	Individual	Support	No	

Comments:

Aloha,

I support the passage of SB2714, designating pÅ «pÅ « kuahiwi, Laminella sanguinea, as the state snail. As the bill states, this bill "will increase awareness of the imperiled status and cultural and ecological relevance of all Hawaiian land snails, preserve their cultural and ecological significance, and encourage continued conservation of native Hawaiian invertebrates." Naming a state land snail will aid in educating the public, especially children, about our native Hawaiian species, and the need to protect native biodiversity and our environment. Mahalo for your support!

Lynette Williams

Kaneohe, Hawaii

SB-2714

Submitted on: 2/4/2020 1:00:47 PM

Testimony for GVO on 2/6/2020 3:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Chris Hobbs	Individual	Support	No

Comments:

Snails, both in Hawaii and worldwide, provide essential ecosystem functions, such as nutrient turnover, facilitating plant health, and watershed quality. In Hawaii especially they are a huge part of the amazing culture of the islands. With the peril that many invertebrate and snail species are facing in light of habitat destruction, invasive species, and climate change, snails being recognised by the state, through designation of a state snail species, will be invaluable.

Accepting this bill will help raise awareness for the amazing diversity of snail species across the Hawaiian islands as well as the plight many of these species are threatened with, and will demonstrate the state's dedication to conservation of its native species. Additionally, as pupu kuahiwi is regarded as a critically endangered species by the IUCN, this is the first step in allowing legal protection for this species to be implemented. Therefore, I fully support this bill.

Dr. Christopher Hobbs

<u>SB-2714</u>

Submitted on: 2/4/2020 1:29:29 PM

Testimony for GVO on 2/6/2020 3:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Tricia Goulding	Individual	Support	No

Comments:

Hawaii is home to an incredible diversity of plants and animals, most of which are unique to the islands, and found nowhere else on earth. I support bill SB2714 to designate pÅ «pÅ « kuahiwi (*Laminella sanguinea*) as the state snail for Hawaii. This beautiful snail is critically endangered, and is one of the few living species left of a group of land snails endemic to Hawaii. Hawaiian snails are culturally significant, as well as an integral part of native ecosystems. Designating the pupu kuahiwi as state snail will increase awareness of the imperiled snails in Hawaii, and hopefully inspire people to learn more about Hawaii's biodiversity and how we can protect it.

<u>SB-271</u>4

Submitted on: 2/4/2020 4:14:36 PM

Testimony for GVO on 2/6/2020 3:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Nathan Yuen	Individual	Oppose	No

Comments:

I do not object to there being a State Snail. But I don't know whether this particular species of snail should be the State Snail. There are some 500 or so species of native snails. Other species of native snails figure more prominently in the hula, mele, and oli of Hawall. There are other candidates for a snail for Hawaii that in my opinion are more appropriate. I would suggest a process under which the selection is made to determine the official snail of the State of Hawaii. One that native Hawaii practitioners are involved in to make the final selection.

