

# **ON THE FOLLOWING MEASURE:** H.B. NO. 876, RELATING TO NATIVE POLLINATORS.

# **BEFORE THE:**

HOUSE COMMITTEE ON WATER AND LAND

DATE:	Tuesday, February 7, 2023	TIME:	9:30 a.m.
LOCATION:	State Capitol, Room 430		
TESTIFIER(S	): Anne E. Lopez, Attorney Gen Candace J. Park, Deputy Atto		neral

Chair Ichiyama and Members of the Committee:

The Department of the Attorney General provides the following comments.

The purpose of this bill is to require the University of Hawaii to create native pollinator habitats on campuses across the University of Hawaii system.

Section 6 of article X of the Hawai'i State Constitution gives the Board of Regents of the University of Hawai'i "exclusive jurisdiction over the internal structure, management, and operation of the university." Section 6 further provides: "[t]his section shall not limit the power of the legislature to enact laws of statewide concern. The legislature shall have the exclusive jurisdiction to identify laws of statewide concern." If the Committee decides to pass this bill, we recommend an amendment that adds a statement identifying this bill as a law of statewide concern.

Thank you for the opportunity to provide these comments.

#### OFFICE OF THE COUNTY CLERK

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COUNTY COUNCIL Mel Rapozo, Chair KipuKai Kuali'i, Vice Chair Addison Bulosan Bernard P. Carvalho, Jr. Felicia Cowden Bill DeCosta Luke A. Evslin



**Council Services Division** 4396 Rice Street, Suite 209 Līhu'e, Kaua'i, Hawai'i 96766

February 3, 2023

#### TESTIMONY OF FELICIA COWDEN COUNCILMEMBER, KAUA'I COUNTY COUNCIL ON HB 876, RELATING TO NATIVE POLLINATORS House Committee on Water & Land Tuesday, February 7, 2023 9:30 a.m. Conference Room 430 Via Videoconference

Dear Chair Ichiyama and Members of the Committee:

Thank you for this opportunity to provide testimony in SUPPORT of HB 876, Relating to Native Pollinators. My testimony is submitted in my individual capacity as a Member of the Kaua'i County Council and Public Safety & Human Services Committee Chair.

Food production and retention of native plants are very important to the resilience of Kaua'i. Kaua'i Community College has done an excellent job of focusing on pollinating bees and creating healthy queen bees. As well as keeping this introduced pollinator viable, it is equally important to keep our native pollinators strong. This effort helps support the interest in science coupled with the passion for *aloha 'āina* that is prevalent on Kaua'i.

*Mahalo* to the introducers of this bill for calling attention to a long-overlooked need in protecting a healthy ecosystem.

Thank you again for this opportunity to provide testimony in support of HB 876. Should you have any questions, please feel free to contact me or Council Services Staff at (808) 241-4188 or via email to cokcouncil@kauai.gov.

Sincerely, Elicia (ouden

FELICIA COWDEN Councilmember, Kaua'i County Council

AAO:jy



## House Committee on Water & Land

## Hawai'i Alliance for Progressive Action (HAPA) Supports: HB876

Tuesday, February 7th, 2023 9:30 a.m. Conference Room 430

Aloha Chair Ichiyama, Vice Chair Poepoe and Members of the Committee,

HAPA supports HB876 to support the revitalization of native pollinators by requiring the University of Hawai'i to create native pollinator habitats on campuses across the University system.

Hawaii's native pollinators are facing the threat of extinction. Decreasing populations of native pollinators have cascading impacts on Hawaii's environment and biological diversity. While nonnative pollinators are important, native species of essential pollinators- like the Nalo Meli Maoli (Yellow-faced Bees)- are able to cross-fertilize better with native plants that are facing similar threats of extinction. Nalo Meli Maoli, as well as other native pollinators, have very close plant associations, and display strong morphological and behavioral adaptations to native plant species. The loss of these native pollinators therefore further endangers native plants and ecosystems that are already vulnerable, and in a dangerous cycle, the loss of native plant habitats further impacts native pollinator populations.

Preserving native ecosystems is crucial for the perpetuation of Hawaiian culture, as flora and fauna play important roles in ceremony, medicine, food, and other cultural practices.

State institutions must play a role in nurturing ecosystems that support both native plants and pollinators. The University of Hawaii is well positioned to create these ecosystems on its campuses.

This work is aligned with the University's 2023-2029 Strategic Plan which highlights sustainability as a foundational principle and upholds the University system's "responsibility to the 'āina, to steward its natural resources, and to develop solutions to the complex challenges of sustainability, resilience, and climate change".

Pollinators are also vital to our local food security. According to the Xerces Society, "pollinators, including bees, flies, beetles and moths, help in the production of nearly 75 percent of crops and roughly 80 percent of all flowering plants.<sup>1</sup>"

<sup>1</sup> https://xerces.org/blog/value-of-protecting-

pollinators#:~:text=Economic%20Impact,to%20the%20United%20States%20economy.

The Hawai'i Alliance for Progressive Action (HAPA) is a public non-profit organization under Section 501(c)(3) of the Internal Revenue Code. HAPA's mission is to catalyze community empowerment and systemic change towards valuing 'aina (environment) and people ahead of corporate profit.



Please **support HB876** to assist the revitalization of native pollinators by requiring the University of Hawai'i to create native pollinator habitats on campuses across the University system.

Please support HB876.

Thank you for your consideration.

Respectfully,

Anne Frederick Executive Director





February 5, 2023

CleanEarth4Kids.org supports HB876 to require the University of Hawai'i to develop native pollinator habitats on all campuses.

Hawai'i's native pollinators like pollinators around the world are on the edge of extinction. Not only is this an immediate threat to Hawai'i's environment and biological diversity, it is also a direct threat to agriculture and food security. According to the EPA and FAO, pollinators are <u>"responsible for helping 90% of the world's flowering plants reproduce"</u><sup>1</sup> and nearly <u>75% of food crops</u>.<sup>2</sup>

The University of Hawai'i has the opportunity to protect pollinators and educate on their importance and threats to their very existence.

The greatest dangers to pollinators is use of synthetic pesticides which destroy their habitat and directly take their lives.

Pesticides like neonicotinoids are <u>toxic</u><sup>3</sup> to bees, insects, birds and other pollinators. A single neonicotinoid treated seed is enough to kill a <u>songbird</u>.<sup>4</sup> They are in <u>every part of a</u> <u>plant</u>,<sup>5</sup> from root to leaf to pollen to seeds, making the whole plant poisonous to insects. Neonicotinoid pesticides are the leading cause of harm to pollinators over the past 20 years which is a direct threat to <u>agriculture</u>.<sup>6</sup>

Recognizing the harms to health, pollinators, wildlife, aquatic life, water and the environment and realizing the economic and social cost of neonicotinoid pesticides, the European Union banned all outdoor uses of <u>neonicotinoid pesticides</u>.<sup>7</sup>

The US allows toxic pesticides banned in other countries. The US only bans 21 pesticides. China bans 54 and the EU bans 195. (For a list of pesticides banned in other countries, please click <u>here</u>.<sup>8</sup>)

<sup>&</sup>lt;sup>1</sup> <u>https://www.epa.gov/sciencematters/protecting-pollinators</u>

<sup>&</sup>lt;sup>2</sup> https://www.fao.org/pollination/background/bees-and-other-pollinators/en/

<sup>&</sup>lt;sup>3</sup> https://link.springer.com/article/10.1007/s11356-017-0341-3

<sup>&</sup>lt;sup>4</sup> <u>https://abcbirds.org/neonics</u>

<sup>&</sup>lt;sup>5</sup> <u>https://xerces.org/systemic-insecticides-reference-and-overview</u>

<sup>&</sup>lt;sup>6</sup> https://www.theguardian.com/environment/2020/jul/29/bees-food-crops-shortage-study

<sup>&</sup>lt;sup>7</sup> <u>https://friendsoftheearth.eu/news/eu-bans-bee-killing-neonic-pesticides/</u>

<sup>&</sup>lt;sup>8</sup> https://pan-international.org/pan-international-consolidated-list-of-banned-pesticides/

Neonicotinoid pesticides easily get into our water and can last for <u>years</u><sup>9</sup> in soil, contaminating the environment. As one <u>study</u><sup>10</sup> put it: "Neonics are persistent in the environment: They have been found in soil, dust, wetlands, ground water, nontarget plants and vertebrate prey, and foods common to the American diet, including wild and aqua cultured marine species".

For example, the neonicotinoid pesticide imidacloprid is <u>banned</u><sup>11</sup> in 28 countries, but is commonly used in parks, schools, golf courses, homes and farms in the United States. Imidaclorpid, like other neonicotinoid pesticides, <u>drifts</u><sup>12</sup> to surrounding areas. According to the <u>EPA</u>,<sup>13</sup> nearly 80% of all endangered species are likely to be harmed by imidacloprid and the critical habitats of 658 species are likely to be impacted.

Neonicotinoid pesticides are  $\underline{\text{toxic}}^{14}$  to all aquatic life with long term effects on the aquatic environment. The California Department of Pesticide Regulation (DPR) has detected neonicotinoid pesticides in  $\underline{92\%}^{15}$  of urban water samples in southern California,  $\underline{58\%}^{16}$  in urban areas of northern California, and  $\underline{94\%}^{17}$  in agricultural areas.

Neonics are neurotoxins that also harm children's developing <u>brains</u>.<sup>18</sup> Exposure to neonics at an early age alters/changes the correct "neuronal development" which means neonic pesticides harm the development of the brain. The inability of neurons to properly migrate is one cause of neurological disorders. Also, neonics decrease "neurogenesis" which means neonics harm the growth of brain tissue. Neonics induce "neuroinflammation", which means neonic pesticides inflame the brain. Neonics are systemic insecticides that also harm bees and other pollinators.

A child's life is priceless. Pesticides harm children's health and future. Neonicotinoid pesticides harm <u>children's health</u><sup>19</sup> even at low doses. Neonicotinoid pesticides are <u>endocrine disruptors</u><sup>20</sup> and can cause <u>reproductive effects</u><sup>21</sup> like <u>low birth weight</u>,<sup>22</sup> <u>preterm</u> <u>birth</u><sup>23</sup> and <u>loss of pregnancy</u>.<sup>24</sup> A <u>study</u><sup>25</sup> stated neonicotinoid pesticides "...can pose a risk to the integrity and functioning of the nervous system of different species of mammals,

<sup>&</sup>lt;sup>9</sup> https://www.sciencedirect.com/science/article/abs/pii/S0048969717324397

<sup>&</sup>lt;sup>10</sup> <u>https://ehp.niehs.nih.gov/doi/10.1289/ehp515</u>

<sup>&</sup>lt;sup>11</sup> https://pan-international.org/pan-international-consolidated-list-of-banned-pesticides/

<sup>12</sup> https://www.epa.gov/sites/default/files/2020-01/documents/imidacloprid\_pid\_signed\_1.22.2020.pdf

<sup>&</sup>lt;sup>13</sup> <u>https://www.epa.gov/endangered-species/draft-national-level-listed-species-biological-evaluation-imidacloprid</u>

<sup>&</sup>lt;sup>14</sup> <u>http://www.centerforfoodsafety.org/files/neonic-water-report-final-242016\_web\_33288.pdf</u>

<sup>&</sup>lt;sup>15</sup> https://www.cdpr.ca.gov/docs/emon/pubs/ehapreps/study 270 fy 17 18 mngt rpt.pdf

<sup>&</sup>lt;sup>16</sup> https://www.cdpr.ca.gov/docs/emon/pubs/ehapreps/report 299 fy17-18.pdf

<sup>&</sup>lt;sup>17</sup> https://www.cdpr.ca.gov/docs/emon/pubs/ehapreps/study 304 ag monitor rpt 2018.pdf

<sup>&</sup>lt;sup>18</sup> <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8395098/</u>

<sup>&</sup>lt;sup>19</sup> https://www.regulations.gov/document/EPA-HQ-OPP-2012-0329-0102

<sup>&</sup>lt;sup>20</sup> https://academic.oup.com/humupd/article/18/3/284/610048

<sup>&</sup>lt;sup>21</sup> https://academic.oup.com/occmed/article/56/8/521/1465431

<sup>&</sup>lt;sup>22</sup> https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0219208

<sup>&</sup>lt;sup>23</sup> <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3279127/</u>

<sup>&</sup>lt;sup>24</sup> https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0219208

<sup>&</sup>lt;sup>25</sup> https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8395098

including humans." Neonicotinoid pesticides are <u>linked</u><sup>26</sup> to developmental/neurological problems and increased risk of <u>Type 1 diabetes</u>.<sup>27</sup>

Pesticides can <u>drift<sup>28</sup></u> miles, wiping out crops across state lines and harming children and families living <u>near agricultural fields</u>.<sup>29</sup>

The US is using toxic pesticides banned in many other countries. Legal does not mean safe in the US. Therefore, we must do everything in our power to protect children, public health and our environment! It is vital to transition to non-toxic methods like organic, regenerative organic, and permaculture! 99% of synthetic pesticides and fertilizers come from fossil fuels. The continued use of <u>these petrochemicals</u><sup>30</sup> are a direct threat to the climate and our world.

Regenerative and organic <u>agricultural practices</u><sup>31</sup> have shown poisons like neonicotinoid pesticides are not necessary. There are many cultural, mechanical and biological <u>solutions</u><sup>32</sup> that can be used for effective pest control in our homes, parks and farms.

Schools like <u>Adelphi University</u><sup>33</sup> and <u>Seattle University</u><sup>34</sup> are already managing their landscaping without toxic pesticides and are pollinator friendly.

Please take action to protect our children's health and future and pass HB876.

Sincerely,

Shrance the

Suzahne M. Hume S@CleanEarth4Kids.org (760) 518-2776 CleanEarth4Kids.org

<sup>&</sup>lt;sup>26</sup> <u>https://ehp.niehs.nih.gov/doi/10.1289/EHP515</u>

<sup>&</sup>lt;sup>27</sup> https://pubmed.ncbi.nlm.nih.gov/35902493/

<sup>&</sup>lt;sup>28</sup> <u>https://europepmc.org/article/AGR/IND20460440</u>

<sup>&</sup>lt;sup>29</sup> https://pubmed.ncbi.nlm.nih.gov/11097803/

<sup>&</sup>lt;sup>30</sup> https://www.ciel.org/reports/fossil-fertilizers/

<sup>&</sup>lt;sup>31</sup> https://cleanearth4kids.org/farming-regenerative

<sup>&</sup>lt;sup>32</sup> <u>https://cleanearth4kids.org/stop-pesticides#ipm</u>

<sup>&</sup>lt;sup>33</sup> <u>https://www.adelphi.edu/news/an-organic-campus-for-over-20-years-the-secrets-of-maintaining-adelphis-green-campus-arboretum/</u>

<sup>&</sup>lt;sup>34</sup> <u>https://www.seattleu.edu/grounds/sustainable-landscape-management-practices/</u>



# UNIVERSITY OF HAWAI'I SYSTEM 'ÕNAEHANA KULANUI O HAWAI'I

Legislative Testimony Hōʻike Manaʻo I Mua O Ka ʻAhaʻōlelo

Testimony Presented Before the House Committee on Water & Land February 7, 2023 at 9:30 a.m. By Kalbert K. Young Vice President for Budget and Finance/Chief Financial Officer University of Hawai'i System

HB 876 - RELATING TO NATIVE POLLINATORS

Chair Ichiyama, Vice Chair Poepoe, and Members of the Committee:

Thank you for the opportunity to provide testimony on HB 876, which requires the University of Hawai'i to develop native pollinator habitats to be deployed on all campuses in the University system. While the University of Hawai'i (UH) is supportive of the broad objective in this bill, in examining the science and mechanics that would be placed on the UH as an obligation, we find that this necessitates more time to consider implementation requirements.

For example, there already exists on some campuses native landscaping and exclusively native plants landscape areas. The UH has found that invasive or non-native plants that do not support yellow-faced bee species will need to be eliminated or managed in any habitat such that they do not adversely affect yellow-faced bee host plants. The habitats necessary for recovery in each geographic unit will require long-term management and protection in perpetuity.

Another example is the UH's bee research and academic program. Currently, UH Hilo has a 110-acre farm located in Pana'ewa that supports hands-on teaching, research and community outreach. The farm has a 3-acre area dedicated to honey bees that has supported the beekeeping courses and a certificate, walking tours and community outreach activities. While honey bees are essential to the pollination of agricultural crops and show the importance of the relationship of pollinators to food production, native pollinators, primarily the solitary Hawaiian yellow faced bee, are more selective towards the pollination of native plants. Regardless, the same relationship exists with both types of bees, without the pollinator, the plants would not thrive or possibly exist.

The honey bee area at the UH Hilo farm includes a 1-acre garden that demonstrates the resources for their needs such as water, food, and shelter. A similar area at the farm to promote resource needs for native pollinators including birds and insects would be a good fit and add even more understanding to the relationships between plants, animals, and humans for students and the community alike. In addition, UH Hilo is currently

transitioning to the use of more native plants on their main campus as part of their sustainability efforts.

UH would respectively request that this measure be deferred and UH will work with the introducer of the bill on drafting a concurrent resolution encouraging the UH to develop native pollinator habitats to be deployed on campuses in the UH system suitable for this purpose.

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

# HB-876 Submitted on: 2/2/2023 6:16:56 PM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Nancy Davlantes	Individual	Support	Written Testimony Only

Comments:

What a good idea! These campuses are ideal sites for outdoor classrooms, and these habitats would be just that.

# <u>HB-876</u>

Submitted on: 2/2/2023 9:43:59 PM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Ted Bohlen	Individual	Support	Written Testimony Only

Comments:

Pollinators are critical for our agriculture and our food security. STRONG SUPPORT!

#### HB-876 Submitted on: 2/3/2023 1:40:09 PM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Nanea Lo	Individual	Support	Written Testimony Only

Comments:

Hello,

My name is Nanea Lo. I'm born and raised in the Hawaiian Kingdom a Kanaka Maoli.

I'm writing FULL SUPPORT of HB876.

Hawaii's native pollinators are facing the threat of extinction. Decreasing populations of native pollinators have cascading impacts on Hawaii's environment and biological diversity. While non-native pollinators are important, native species of essential pollinators- like the Nalo Meli Maoli (Yellow-faced Bees)- are able to cross-fertilize better with native plants that are facing similar threats of extinction. Nalo Meli Maoli, as well as other native pollinators, have very close plant associations, and display strong morphological and behavioral adaptations to native plant species. The loss of these native pollinators therefore further endangers native plants and ecosystems that are already vulnerable, and in a dangerous cycle, the loss of native plant habitats further impacts native pollinator populations.

Preserving native ecosystems is crucial for the perpetuation of Hawaiian culture, as flora and fauna play important roles in ceremony, medicine, food, and other cultural practices.

State institutions must play a role in nurturing ecosystems that support both native plants and pollinators. The University of Hawaii is well positioned to create these ecosystems on its campuses.

This work is aligned with the University's 2023-2029 Strategic Plan which highlights sustainability as a foundational principle and upholds the University system's "responsibility to the 'āina, to steward its natural resources, and to develop solutions to the complex challenges of sustainability, resilience, and climate change".

Pollinators are also vital to our local food security. According to the Xerces Society, "pollinators, including bees, flies, beetles and moths, help in the production of nearly 75 percent of crops and roughly 80 percent of all flowering plants."

Please support HB876 to assist the revitalization of native pollinators by requiring the University of Hawai'i to create native pollinator habitats on campuses across the University system.

me ke aloha 'āina,

Nanea Lo, Mōʻiliʻili

# <u>HB-876</u>

Submitted on: 2/3/2023 1:49:10 PM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Darci Frankel	Individual	Support	Written Testimony Only

Comments:

Please support HB876 to assist the revitalization of native pollinators by requiring the University of Hawai'i to create native pollinator habitats on campuses across the University system.

Thank you for reading my testimony,

Darci Frankel, Hanalei, Kauai

HB-876 Submitted on: 2/3/2023 1:56:53 PM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
John & Rita Shockley	Individual	Support	Written Testimony Only

Comments:

Aloha!

We hope the legislature passes this important bill for our future Hawaiian eco-system.

#### <u>HB-876</u> Submitted on: 2/3/2023 2:05:25 PM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Molly Mamaril	Individual	Support	Written Testimony Only

Comments:

Aloha House Committee on Water and Land,

Hawaii's native pollinators are facing the threat of extinction. Decreasing populations of native pollinators have cascading impacts on Hawaii's environment and biological diversity. While non-native pollinators are important, native species of essential pollinators- like the Nalo Meli Maoli (Yellow-faced Bees)- are able to cross-fertilize better with native plants that are facing similar threats of extinction. Nalo Meli Maoli, as well as other native pollinators, have very close plant associations, and display strong morphological and behavioral adaptations to native plant species. The loss of these native pollinators therefore further endangers native plants and ecosystems that are already vulnerable, and in a dangerous cycle, the loss of native plant habitats further impacts native pollinator populations.

Preserving native ecosystems is crucial for the perpetuation of Hawaiian culture, as flora and fauna play important roles in ceremony, medicine, food, and other cultural practices.

State institutions must play a role in nurturing ecosystems that support both native plants and pollinators. The University of Hawaii is well positioned to create these ecosystems on its campuses.

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Pollinators are also vital to our local food security. According to the Xerces Society, "pollinators, including bees, flies, beetles and moths, help in the production of nearly 75 percent of crops and roughly 80 percent of all flowering plants."

Please support HB876 to assist the revitalization of native pollinators by requiring the University of Hawai'i to create native pollinator habitats on campuses across the University system.

Thank you for your consideration,

Molly Mamaril, Kaimukī, Oʻahu (UH Mānoa Almunae 2014)

# <u>HB-876</u>

Submitted on: 2/3/2023 2:15:28 PM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
j Williams	Individual	Support	Written Testimony Only

Comments:

PLEASE-PLEASE take this bill serious. Its a postive step to take toward the day when WE are not killing our desired plants. Hawaii's native pollinators are facing the threat of extinction. Decreasing populations of native pollinators have cascading impacts on Hawaii's environment and biological diversity. Also we need TO RID OUR HAWAII of pesticides such as Roundup to speed up a clean environment here. Preserving native ecosystems is crucial for the perpetuation of Hawaiian culture, as flora and fauna play important roles in ceremony, medicine, food, and other cultural practices.

HB-876 Submitted on: 2/3/2023 2:30:41 PM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Valerie Weiss	Individual	Support	Written Testimony Only

Comments:

Let's get a YES on this bill.

## HB-876 Submitted on: 2/3/2023 2:43:21 PM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Elizabeth Hansen	Individual	Support	Written Testimony Only

Comments:

Aloha - Pollinators are also vital to our local food security. Please support HB876 to assist the revitalization of NATIVE pollinators by requiring the University of Hawai'i to create native pollinator habitats on campuses across the University system.

Mahalo,

Elizabeth Hansen, Hakalau HI 96710

## HB-876 Submitted on: 2/3/2023 2:44:47 PM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Rodger Hansen	Individual	Support	Written Testimony Only

Comments:

Aloha - Pollinators are vital to our local food security. Please support HB876 to assist the revitalization of NATIVE pollinators by requiring the University of Hawai'i to create native pollinator habitats on campuses across the University system.

Mahalo, Rodger Hansen, Hakalau HI 96710

#### <u>HB-876</u> Submitted on: 2/3/2023 2:52:27 PM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Marilyn Mick	Individual	Support	Written Testimony Only

### Comments:

Hawaii's native pollinators are facing the threat of extinction. Decreasing populations of native pollinators have cascading impacts on Hawaii's environment and biological diversity. While non-native pollinators are important, native species of essential pollinators- like the Nalo Meli Maoli (Yellow-faced Bees)- are able to cross-fertilize better with native plants that are facing similar threats of extinction. Nalo Meli Maoli, as well as other native pollinators, have very close plant associations, and display strong morphological and behavioral adaptations to native plant species. The loss of these native pollinators therefore further endangers native plants and ecosystems that are already vulnerable, and in a dangerous cycle, the loss of native plant habitats further impacts native pollinator populations.

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Please support HB876 to assist the revitalization of native pollinators by requiring the University of Hawai'i to create native pollinator habitats on campuses across the University system.

Thank you,

Marilyn Mick, Honolulu

#### <u>HB-876</u> Submitted on: 2/3/2023 3:21:30 PM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
tlaloc tokuda	Individual	Support	Written Testimony Only

Comments:

Aloha WAL Chair, Vice Chair & Committee,

I support HB876 because our polinators are dying and we can't just stand there and do nothing! Also its great that the Dept of Ag of all the UH campuses can be proactive in saving native polinators

Preserving native ecosystems is crucial for the perpetuation of Hawaiian culture, as flora and fauna play important roles in ceremony, medicine, food, and other cultural practices.

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This work is aligned with the University's 2023-2029 Strategic Plan which highlights sustainability as a foundational principle and upholds the University system's "responsibility to the 'āina, to steward its natural resources, and to develop solutions to the complex challenges of sustainability, resilience, and climate change".

Pollinators are also vital to our local food security. According to the Xerces Society, "<u>pollinators</u>, <u>including bees</u>, flies, beetles and moths, help in the production of nearly 75 percent of crops and roughly 80 percent of all flowering plants."

Please support HB876 to assist the revitalization of native pollinators by requiring the University of Hawai'i to create native pollinator habitats on campuses across the University system.

Mahalo for your Consideration,

tlaloc tokuda

Kailua Kona HI 96740

# <u>HB-876</u>

Submitted on: 2/3/2023 5:13:06 PM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Andrea Nandoskar	Individual	Support	Written Testimony Only

Comments:

Dear Committee and Chairs,

I strongly support! This is a fantastic idea!! Please support.

Thank you for your consideration.

#### <u>HB-876</u> Submitted on: 2/3/2023 7:56:33 PM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Jonathan Cender	Individual	Support	Written Testimony Only

### Comments:

Hawaii's native pollinators are facing the threat of extinction. Decreasing populations of native pollinators have cascading impacts on Hawaii's environment and biological diversity. While non-native pollinators are important, native species of essential pollinators- like the Nalo Meli Maoli (Yellow-faced Bees)- are able to cross-fertilize better with native plants that are facing similar threats of extinction. Nalo Meli Maoli, as well as other native pollinators, have very close plant associations, and display strong morphological and behavioral adaptations to native plant species. The loss of these native pollinators therefore further endangers native plants and ecosystems that are already vulnerable, and in a dangerous cycle, the loss of native plant habitats further impacts native pollinator populations.

Preserving native ecosystems is crucial for the perpetuation of Hawaiian culture, as flora and fauna play important roles in ceremony, medicine, food, and other cultural practices.

State institutions must play a role in nurturing ecosystems that support both native plants and pollinators. The University of Hawaii is well positioned to create these ecosystems on its campuses.

This work is aligned with the University's 2023-2029 Strategic Plan which highlights sustainability as a foundational principle and upholds the University system's "responsibility to the 'āina, to steward its natural resources, and to develop solutions to the complex challenges of sustainability, resilience, and climate change".

Pollinators are also vital to our local food security. According to the Xerces Society, "<u>pollinators</u>, <u>including bees</u>, flies, beetles and moths, help in the production of nearly 75 percent of crops and roughly 80 percent of all flowering plants."

Please support HB876 to assist the revitalization of native pollinators by requiring the University of Hawai'i to create native pollinator habitats on campuses across the University system.

Thank you for reading my testimony,

Your JONATHAN Cender, Koloa

## <u>HB-876</u>

Submitted on: 2/3/2023 8:52:48 PM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Kaleiheana-a-Pohaku Stormcrow	Individual	Support	Remotely Via Zoom

Comments:

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

My name is Kaleiheana Stormcrow, I live in Kapu'euhi (Mountain View) on Hawai'i Island, and I am writing in strong support of this measure. Native pollinator declines are a global issue, but here in Hawai'i we have an amazing adaptive radiation of plants and pollinators that exist nowhere else in the world, many of which are extremely specialized with morphological and behavioral adaptations. Native plant habitat and diversity supports our native pollinators as they rely on a specific native plants for pollen and nectar as well as host plants for their larvae. The loss of these native pollinators therefore further endangers native plants and ecosystems that are already vulnerable, and in a dangerous cycle, the loss of native plant habitats further impacts native pollinator populations, leading to what is known as an extinction vortex where both the plant and the pollinator go extinct because of these vanishing resources. Intentionally planting native plants can help to reverse this cycle and ensure the longevity of Hawaiian species biosidversity.

It is my strong belief that every landowner should be required to grow a certain percentage of native plants to support pollinator biodiversity. This bill is aligned with the University's 2023-2029 Strategic Plan which highlights sustainability as a foundational principle and upholds the University system's "responsibility to the 'āina, to steward its natural resources, and to develop solutions to the complex challenges of sustainability, resilience, and climate change".

Preserving native ecosystems is crucial for the perpetuation of Hawaiian culture, as flora and fauna play important roles in ceremony, medicine, food, and other cultural practices.

State institutions must play a role in nurturing ecosystems that support both native plants and pollinators. The University of Hawaii is well positioned to create these ecosystems on its campuses.

'O wau me ke aloha,

Kaleiheana Stormcrow, Kapu'euhi, Hawai'i

#### HB-876 Submitted on: 2/3/2023 8:59:05 PM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
JarraeTehani Manasas	Individual	Support	Written Testimony Only

### Comments:

Hawaii's native pollinators are facing the threat of extinction. Decreasing populations of native pollinators have cascading impacts on Hawaii's environment and biological diversity. While non-native pollinators are important, native species of essential pollinators- like the Nalo Meli Maoli (Yellow-faced Bees)- are able to cross-fertilize better with native plants that are facing similar threats of extinction. Nalo Meli Maoli, as well as other native pollinators, have very close plant associations, and display strong morphological and behavioral adaptations to native plant species. The loss of these native pollinators therefore further endangers native plants and ecosystems that are already vulnerable, and in a dangerous cycle, the loss of native plant habitats further impacts native pollinator populations.

Preserving native ecosystems is crucial for the perpetuation of Hawaiian culture, as flora and fauna play important roles in ceremony, medicine, food, and other cultural practices.

State institutions must play a role in nurturing ecosystems that support both native plants and pollinators. The University of Hawaii is well positioned to create these ecosystems on its campuses.

This work is aligned with the University's 2023-2029 Strategic Plan which highlights sustainability as a foundational principle and upholds the University system's "responsibility to the 'āina, to steward its natural resources, and to develop solutions to the complex challenges of sustainability, resilience, and climate change".

Please support HB876 to assist the revitalization of native pollinators by requiring the University of Hawai'i to create native pollinator habitats on campuses across the University system.

Mahalo,

JarraeTehani Manasas, Kailua-Kona, UH Hilo Alumni

HB-876 Submitted on: 2/3/2023 9:13:53 PM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Erik Meade	Individual	Support	Written Testimony Only

Comments:

I support pollinators.

#### HB-876 Submitted on: 2/3/2023 10:48:45 PM

Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Kapulei Flores	Individual	Support	Written Testimony Only

Comments:

Aloha,

I support HB876. Hawaii's native pollinators are facing the threat of extinction. Though nonnative pollinators are important, native species of essential pollinator, like the Nalo Meli Maoli (Yellow-faced Bees), are able to cross-fertilize better with native plants that are facing similar threats of extinction. Preserving native ecosystems is crucial for the perpetuation of Hawaiian culture, as flora and fauna play important roles in ceremony, medicine, food, and other cultural practices. State institutions must play a role in nurturing ecosystems that support both native plants and pollinators. We must prioritize taking care of our environment and natural resources before its too later.

Mahalo

# <u>HB-876</u>

Submitted on: 2/4/2023 6:38:32 AM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Marlies Lee	Individual	Support	Written Testimony Only

Comments:

Please find the reason why our pollinators decline here in Hawaii!

Is it all the pesticides we are allowed to use on our sacred land?

We need our pollinators otherwise we can't grow enough food here.

Really look at the pesticides and 5G antennas that can harm us and our animals.

Marlies Lee

#### HB-876 Submitted on: 2/4/2023 8:36:37 AM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Susan Stayton	Individual	Support	Written Testimony Only

### Comments:

Hawaii's native pollinators are facing the threat of extinction. Decreasing populations of native pollinators have cascading impacts on Hawaii's environment and biological diversity. While non-native pollinators are important, native species of essential pollinators- like the Nalo Meli Maoli (Yellow-faced Bees)- are able to cross-fertilize better with native plants that are facing similar threats of extinction. Nalo Meli Maoli, as well as other native pollinators, have very close plant associations, and display strong morphological and behavioral adaptations to native plant species. The loss of these native pollinators therefore further endangers native plants and ecosystems that are already vulnerable, and in a dangerous cycle, the loss of native plant habitats further impacts native pollinator populations.

Preserving native ecosystems is crucial for the perpetuation of Hawaiian culture, as flora and fauna play important roles in ceremony, medicine, food, and other cultural practices.

State institutions must play a role in nurturing ecosystems that support both native plants and pollinators. The University of Hawaii is well positioned to create these ecosystems on its campuses.

This work is aligned with the University's 2023-2029 Strategic Plan which highlights sustainability as a foundational principle and upholds the University system's "responsibility to the 'āina, to steward its natural resources, and to develop solutions to the complex challenges of sustainability, resilience, and climate change".

Pollinators are also vital to our local food security. According to the Xerces Society, "<u>pollinators</u>, <u>including bees</u>, flies, beetles and moths, help in the production of nearly 75 percent of crops and <u>roughly 80 percent of all flowering plants.</u>"

Please support HB876 to assist the revitalization of native pollinators by requiring the University of Hawai'i to create native pollinator habitats on campuses across the University system.

Regards,

Susan Stayton, Small farmer, Lawai, HI

#### HB-876 Submitted on: 2/4/2023 9:14:09 AM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
noel kent	Individual	Support	Written Testimony Only

Comments:

This is an urgent bill given the extinction of the pollinators we depend upon for our food supply. As a gardener, I try and support them in my very modest fashion. And as a longtime UHManoa faculty, I would be proud to see the UH campus being used as a habitat for these pollinators. There are some areas that would be absolutely ideal for this mission and students could be educated in the impoprtance of prserving the life which supports our own.

Mahalo. Noel Kent
Submitted on: 2/4/2023 11:12:06 AM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Makana Reeves	Individual	Support	Written Testimony Only

Comments:

State institutions like UH must lead through action toward stated sustainability goals. UH is wholly capable of creating designated native species habitats. Of utmost priority is helping our native bee populations. Please support HB876 in doing so on all UH campuses. Mahalo.

## HB-876 Submitted on: 2/4/2023 11:31:05 AM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Helen Cox	Individual	Support	Written Testimony Only

Comments:

**Please support HB876.** Hawaii's native pollinators are facing the threat of extinction. Decreasing populations of native pollinators have cascading impacts on Hawaii's environment and biological diversity. While non-native pollinators are important, native species of essential pollinators- like the Nalo Meli Maoli (Yellow-faced Bees)- are able to cross-fertilize better with native plants that are facing similar threats of extinction. Nalo Meli Maoli, as well as other native pollinators, have very close plant associations, and display strong morphological and behavioral adaptations to native plant species. The loss of these native pollinators therefore further endangers native plants and ecosystems that are already vulnerable, and in a dangerous cycle, the loss of native plant habitats further impacts native pollinator populations.

State institutions must play a role in nurturing ecosystems that support both native plants and pollinators. The University of Hawaii is well positioned to create these ecosystems on its campuses. As the former chancellor of Kaua`i Community College, I know there is great interest and support for creating such a nurturing infrastructure. The College has an apiary as well as an Hawaiian Studies Program firmly focused on the roles of flora and fauna in ceremony, medicine, food, and other cultural practices. Preserving a native ecosystem on campus is vitally important for both of these reasons.

This work also is aligned with the University's 2023-2029 Strategic Plan which highlights sustainability as a foundational principle and upholds the University system's "responsibility to the 'āina, to steward its natural resources, and to develop solutions to the complex challenges of sustainability, resilience, and climate change".

Pollinators are also vital to our local food security. According to the Xerces Society, "<u>pollinators</u>, <u>including bees</u>, flies, beetles and moths, help in the production of nearly 75 percent of crops and <u>roughly 80 percent of all flowering plants.</u>"

Please support HB876 to assist the revitalization of native pollinators by requiring the University of Hawai'i to create native pollinator habitats on campuses across the University system.

Mahalo,

Helen Cox

Submitted on: 2/4/2023 9:17:45 PM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Lorraine Newman	Individual	Support	Written Testimony Only

Comments:

Aloha,

Please support this bill... and every other bill that assists the revitilization of our pollinators.

Mahalo,

Lorraine Newman

Kilauea, kauai

Submitted on: 2/5/2023 1:05:32 PM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Maria Walker	Individual	Support	Written Testimony Only

Comments:

Aloha,

I am writing to request your support for HB876. As a beekeeper here on Kauai, I am painfully aware of the dearth of native pollinators on our island. Creating habitat using native plants is one of the only ways we have to support our endangered pollintors, in concert with pesticide bans to protect native flora and fauna. Please support this important bill, and help our UH campuses to support the return of these vital pollinators in our island ecosystem.

Mahalo for hearing my testimony,

Maria Walker

HB-876 Submitted on: 2/5/2023 1:38:04 PM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Will Caron	Individual	Support	Written Testimony Only

Comments:

I support HB876.

## HB-876 Submitted on: 2/5/2023 2:01:25 PM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Francis Nakamoto	Individual	Support	Written Testimony Only

Comments:

Chair Linda Ichiyama, Vice Chair Mahina Poepoe and Members of the Committee on Water and Land

I support HB876 relating to Native Pollinator Habilitat.

The bill would require the University of Hawaii to develop native pollinator habilitats on UH campuses to increase the population of Hawaii's pollinators.

I have an extensive backyard vegetable garden that supplies fresh vegetables to dozens of my neighbors, friends and relatives. I have been gardening on a relatively large scale for over 40 years in Moanalua Valley, giving away over 95% of my harvest to others who need and enjoy farm fresh and healthy vegetables.

Over the course of four decades, I have noticed the steady decline in the numbers of pollinators, such as bees. My garden is organically grown so no pesticides are used which would harm the pollinators. This has made pollination of flowering crops from cucumbers, beans, tomatoes and eggplants less productive.

If it is our public policy to encourage more home gardening and local farming, it is critical to protect, if not increase, the numbers of native pollinators to assure the continuation and expansion of local produce growing.

I urge your support for this very modest but important effort to protect our local gardeners and farmers.

Francis M. Nakamoto

HB-876 Submitted on: 2/5/2023 4:36:22 PM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Dylan Ramos	Individual	Support	Written Testimony Only

Comments:

Strong support

Submitted on: 2/5/2023 7:19:26 PM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Sophia Gugliemelli	Individual	Support	Written Testimony Only

Comments:

I am in favor of limiting pesticide usage that is toxic and harmful to the environment in our future generations.

## <u>HB-876</u> Submitted on: 2/5/2023 9:48:12 PM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Melissa Barker	Individual	Support	Written Testimony Only

Comments:

Honorable Committee Members,

I respectfully ask that you support HB879 requiring the University of Hawaii to develop native pollinator habitats to be deployed on all University system campus.

Hawaii's native pollinators are facing the threat of extinction. Decreasing populations of native pollinators have cascading impacts on Hawaii's environment and biological diversity. While nonnative pollinators are important, native species of essential pollinators- like the Nalo Meli Maoli (Yellow-faced Bees)- are able to cross-fertilize better with native plants that are facing similar threats of extinction. Nalo Meli Maoli, as well as other native pollinators, have very close plant associations, and display strong morphological and behavioral adaptations to native plant species. The loss of these native pollinators therefore further endangers native plants and ecosystems that are already vulnerable, and in a dangerous cycle, the loss of native plant habitats further impacts native pollinator populations.

Preserving native ecosystems is crucial for the perpetuation of Hawaiian culture, as flora and fauna play important roles in ceremony, medicine, food, and other cultural practices.

State institutions must play a role in nurturing ecosystems that support both native plants and pollinators. The University of Hawaii is well positioned to create these ecosystems on its campuses.

This work is aligned with the University's 2023-2029 Strategic Plan which highlights sustainability as a foundational principle and upholds the University system's "responsibility to the 'aina, to steward its natural resources, and to develop solutions to the complex challenges of sustainability, resilience, and climate change".

Please support HB876.

Thank you for your courtesy and attention,

Melissa Barker

Kapaa, HI

## <u>HB-876</u> Submitted on: 2/5/2023 11:40:37 PM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Sherry Pollack	Individual	Support	Written Testimony Only

Comments:

I **support HB876** to assist the revitalization of native pollinators by requiring the University of Hawaii to create native pollinator habitats on campuses across the University system.

Pollinators are vital to our local food security. Yet Hawaii's native pollinators are facing the threat of extinction. State institutions must play a role in nurturing ecosystems that support both native plants and pollinators. The University of Hawaii is well positioned to create these ecosystems on its campuses.

Please support and pass this important measure. Mahalo!

Submitted on: 2/6/2023 12:10:57 AM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
pahnelopi mckenzie	Individual	Support	Written Testimony Only

Comments:

I support HB876 native pollinators are needed to be supported and encouraged

## <u>HB-876</u> Submitted on: 2/6/2023 2:11:09 AM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Robin Miyajima	Individual	Support	Written Testimony Only

Comments:

I think UH is equipped to provide habitats for native pollinators, and I think that would be an important conservation step.

Submitted on: 2/6/2023 1:11:45 PM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Momi Ventura	Individual	Support	In Person

Comments:

Hawaii's native pollinator's are facing threat of extinction. This will be a horrible loss, they are already in danger of loosing their habitation and need to be protected and cared for at all cost. While non-native pollinators are important, native species of essential pollinators like Nalo Meli Maoli or yellow faced bees are better Are Able to cross-fertilize better with native plants that are facing similar threats of extinction. The Loss of these pollinators therefore further endangers native plants and ecosystems that are already vulnerable, and in a dangerous cycle. Preserving these native species is imperative to Hawaii's ecosystems. Pollinators are also crucial to our food sources and the Hawaiian Culture. We need our flowering plants.. Please Support HB876 to assist the vital health of native pollinators by requiring the University of Hawai'i to create native pollinator habitats on campuses across the University system. Mahalomai and Thank You.

Submitted on: 2/6/2023 3:13:07 PM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Meredith Cross	Individual	Support	Written Testimony Only

### Comments:

Hawaii's native pollinators are facing the threat of extinction. Decreasing populations of native pollinators have cascading impacts on Hawaii's environment and biological diversity. While non-native pollinators are important, native species of essential pollinators- like the Nalo Meli Maoli (Yellow-faced Bees)- are able to cross-fertilize better with native plants that are facing similar threats of extinction. Nalo Meli Maoli, as well as other native pollinators, have very close plant associations, and display strong morphological and behavioral adaptations to native plant species. The loss of these native pollinators therefore further endangers native plants and ecosystems that are already vulnerable, and in a dangerous cycle, the loss of native plant habitats further impacts native pollinator populations.

Preserving native ecosystems is crucial for the perpetuation of Hawaiian culture, as flora and fauna play important roles in ceremony, medicine, food, and other cultural practices.

State institutions must play a role in nurturing ecosystems that support both native plants and pollinators. The University of Hawaii is well positioned to create these ecosystems on its campuses.

This work is aligned with the University's 2023-2029 Strategic Plan which highlights sustainability as a foundational principle and upholds the University system's "responsibility to the 'āina, to steward its natural resources, and to develop solutions to the complex challenges of sustainability, resilience, and climate change".

Pollinators are also vital to our local food security. According to the Xerces Society, "<u>pollinators</u>, <u>including bees</u>, flies, beetles and moths, help in the production of nearly 75 percent of crops and <u>roughly 80 percent of all flowering plants.</u>"

Please support HB876 to assist the revitalization of native pollinators by requiring the University of Hawai'i to create native pollinator habitats on campuses across the University system.

Thank you for reading my testimony,

Meredith Cross, Kapa'a HI

Submitted on: 2/6/2023 3:19:08 PM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Navin Tagore-Erwin	Individual	Support	Written Testimony Only

Comments:

Aloha,

Hawaii's native pollinators are facing the threat of extinction. Decreasing populations of native pollinators have cascading impacts on Hawaii's environment and biological diversity. While non-native pollinators are important, native species of essential pollinators- like the Nalo Meli Maoli (Yellow-faced Bees)- are able to cross-fertilize better with native plants that are facing similar threats of extinction. Nalo Meli Maoli, as well as other native pollinators, have very close plant associations, and display strong morphological and behavioral adaptations to native plant species. The loss of these native pollinators therefore further endangers native plants and ecosystems that are already vulnerable, and in a dangerous cycle, the loss of native plant habitats further impacts native pollinator populations.

Preserving native ecosystems is crucial for the perpetuation of Hawaiian culture, as flora and fauna play important roles in ceremony, medicine, food, and other cultural practices.

State institutions must play a role in nurturing ecosystems that support both native plants and pollinators. The University of Hawaii is well positioned to create these ecosystems on its campuses.

This work is aligned with the University's 2023-2029 Strategic Plan which highlights sustainability as a foundational principle and upholds the University system's "responsibility to the 'āina, to steward its natural resources, and to develop solutions to the complex challenges of sustainability, resilience, and climate change".

Pollinators are also vital to our local food security. According to the Xerces Society, "<u>pollinators</u>, <u>including bees</u>, flies, beetles and moths, help in the production of nearly 75 percent of crops and <u>roughly 80 percent of all flowering plants.</u>"

Please **support HB876** to assist the revitalization of native pollinators by requiring the University of Hawai'i to create native pollinator habitats on campuses across the University system.

Mahalo,

Navin Tagore-Erwin, UH Office of Sustainability, Kahalu'u, O'ahu

Submitted on: 2/6/2023 3:57:32 PM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Jessica Kuzmier	Individual	Support	Written Testimony Only

### Comments:

I am thrilled to hear that the state legislature is seeking to enact protections for native pollinators. The provisions of HB876 are exactly what is needed to begin this process of doing what we can to ensure biodiversity for the long run.

I believe implementing this program in the state's public universities is a great start, and hope that this will be the beginning of a statewide program to create a sustainable biosphere ecosystem here in Hawaii. I also like how the state is looking to start with its own backyard on public land and institutions first, where they have the most jurisdiction and agency.

Like you, I am very concerned about how lack of habitat, climate change and other factors are eliminating pollinators world-wide, potentially creating devastating impacts on the world's food supply.

Here in Hawaii, this is a dire threat as well. Like the rest of the world, Hawaii's native pollinators are facing the threat of extinction. Decreasing populations of native pollinators have cascading impacts on Hawaii's environment and biological diversity.

I am glad that the legislative body is considering to protect and increase native species of essential pollinators- like the Nalo Meli Maoli (Yellow-faced Bees). These pollinators are able to cross-fertilize better with native plants that are facing similar threats of extinction. Nalo Meli Maoli, as well as other native pollinators, have very close plant associations, and display strong morphological and behavioral adaptations to native plant species.

The loss of these native pollinators therefore further endangers native plants and ecosystems that are already vulnerable, and in a dangerous cycle, the loss of native plant habitats further impacts native pollinator populations. Preserving native ecosystems is crucial for the perpetuation of Hawaiian culture, as flora and fauna play important roles in ceremony, medicine, food, and other cultural practices.

State institutions must play a role in nurturing ecosystems that support both native plants and pollinators. The University of Hawaii is well positioned to create these ecosystems on its campuses.

I believe that beginning with the UH is a wonderful idea, and hope that this objective can extend to other state institutions and lands such as DLNR lands, state parks, and state government campuses.

Mahalo for your service to this important and vital program.

Submitted on: 2/7/2023 2:08:58 AM Testimony for WAL on 2/7/2023 9:30:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Chelle Galarza	Individual	Support	Written Testimony Only

Comments:

Please support HB876 and allow the University of Hawai'i to assist the revitalization of native pollinators by allowing them to create native pollinator habitats on campuses across the University system.

This work is aligned with the University's 2023-2029 Strategic Plan. It upholds the University system's "responsibility to the 'āina, to steward its natural resources, and to develop solutions to the complex challenges of sustainability, resilience, and climate change". The plan also highlights a foundational principle as sustainability.

Sincerely, Chelle Galarza, Haiku