

SB 2518

LINDA LINGLE
Governor



State of Hawaii
DEPARTMENT OF AGRICULTURE
1428 South King Street
Honolulu, Hawaii 96814-2512

SANDRA LEE KUNIMOTO
Chairperson, Board of Agriculture

DUANE K. OKAMOTO
Deputy to the Chairperson

TESTIMONY OF SANDRA LEE KUNIMOTO
CHAIRPERSON, BOARD OF AGRICULTURE

BEFORE THE SENATE COMMITTEE ON AGRICULTURE AND
HAWAIIAN AFFAIRS
FEBRUARY 5, 2008
2:45 P.M.

SENATE BILL NO. 2518
RELATING TO TARO

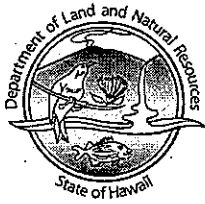
Chairperson Tokuda and Members of the Committee:

Thank you for the opportunity to testify on Senate Bill No. 2518. The purpose of this bill is to provide funding for taro research, laboratory costs, and outreach for the control of the apple snail. We support the intent of the bill. However, we do have a suggestion on the implementation of this bill provided that it not unduly or adversely effect the priorities of the executive biennium budget.

The department supports initiatives by the taro industry to find solutions to pest control problems. Most taro farmers agree that the apple snail is the most serious pest threat to taro production in Hawaii.

The consensus of the taro growers is that a Taro Task Force be established to provide guidance and support to taro initiatives. As such, the department supports this measures and other forms of initiatives as long as they are in concert with the Taro Task Force.

LINDA LINGLE
GOVERNOR OF HAWAII



LATE TESTIMONY

Laura H. Thielen
Chairperson
Board of Land and Natural Resources
Commission on Water Resource Management

Russell Y. Tsuji
First Deputy

Ken C. Kawahara
Deputy Director - Water

Aquatic Resources
Boating and Ocean Recreation
Bureau of Conveyances
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Conservation and Coastal Lands
Conservation and Resources Enforcement
Engineering
Forestry and Wildlife
Historic Preservation
Kahooolawe Island Reserve Commission
Land
State Parks

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

TESTIMONY OF THE CHAIRPERSON OF THE BOARD OF LAND AND NATURAL RESOURCES

on Senate Bill 2518 – RELATING TO TARO

BEFORE THE SENATE COMMITTEE
ON
AGRICULTURE AND HAWAIIAN AFFAIRS

February 5, 2008

Senate Bill 2518 provides a grant for taro research, laboratory costs, and outreach for the control of the invasive apple snail. The Department of Land and Natural Resources (Department) cannot support this measure as it would adversely impact priorities in the Executive Supplemental Budget request.

Unfortunately, there are large populations of apple snails on all of the main Hawaiian Islands. With current legal control methods apple snail populations can be suppressed. The Department supports the taro growers with their efforts to control apple snails statewide and because eradication is not currently feasible, agrees that an approach to control and contain this pest is the most appropriate. The Counties are the level of government best positioned to assist community control in this effort. The Department has concerns about starting up a community grant program for funding single species control efforts that is not distributed either competitively or as part of an agency partnership with appropriate oversight and accountability. We recommend that county efforts be implemented in coordination with a comprehensive statewide effort guided by the **“Statewide Strategic Control Plan for Apple Snail (*Pomacea canaliculata*) in Hawaii.”**

The Department also has concerns that the proposed research with an organic conditioner produced by Pacific Biodiesel will lead to the widespread use of this substance as an unlicensed pesticide - which may have implications for the aquatic environment and food safety. We recommend that the any testing and use comply with all state and federal regulations.

LATE



SB2518, RELATING TO TARO

Senate Committee on Agriculture and Hawaiian Affairs

February 5, 2007

2:45 p.m.

Room: 224

The Office of Hawaiian Affairs (OHA) **SUPPORTS, with amendment,** S.B. 2518, which would appropriate \$500,000 from the state's general fund for Fiscal Year 2008-2009 to E Kūpaku Ka ʻĀina - The Hawaiʻi Land Restoration Institute to develop apple snail control measures. The institute will use the grant-in-aid funding to cover laboratory costs, compensate taro farmers for their involvement in experiments and finance other activities relating to the development of organic apple snail controls.

Apple snails - an alien, invasive species - are devastating the kalo industry in Hawaiʻi, with reports claiming that the snail is responsible for up to a quarter of crop losses in kalo in recent years. Kalo is a sacred plant in Hawaiian culture, regarded as the elder brother of Native Hawaiians, and poi, made from the corm of kalo, serves as the staple food of the traditional Hawaiian diet. OHA strongly supports this effort that will both control one of the major threats to Hawaiian culture and ensure that kalo farmers will once again thrive in Hawaiʻi.

OHA requests that language be added to the bill to ensure that the activities funded by this legislation will not include genetic modification of kalo.

OHA urges the Committee to PASS SB 2518, with the above amendment. Thank you for the opportunity to testify.

HAWAII FARM BUREAU FEDERATION
2343 ROSE STREET
HONOLULU, HI 96819

FEBRUARY 5, 2008

HEARING BEFORE THE
SENATE COMMITTEE ON AGRICULTURE & HAWAIIAN AFFAIRS

TESTIMONY ON SB 2518
RELATING TO TARO

Chair Tokuda and committee members:

My name is Alan Takemoto, Executive Director, of the Hawaii Farm Bureau Federation, which is the largest non-profit general agriculture organization representing approximately 1,600 farm and ranch family members statewide.

The Hawaii Farm Bureau Federation supports HB 2518, which a grant for taro research, laboratory costs, and outreach for the control of the invasive apple snail. This measure is aimed to assist taro farmers to increase their production and viability. The apple snails have devastated the taro industry for years and have caused millions of dollars of lost revenues. Farm Bureau supports this effort to improve the taro farmer's ability to not only sustain themselves but also to expand and improve their long term success.

We urge this committee to approve the passage of this measure.

Thank you.

**Hawaii
Crop
Improvement
Association**

Paul Koehler, Past-President, Board Member
2111 Piilani Highway
Kihei Hawaii 96853
Phone: 808-879-4074 Fax: 808-879-0499

Testimony by: Paul Koehler
SB 2518, Relating to Taro
Senate AHW Committee
Tuesday, Feb. 5, 2008
Room 224: 2:45 pm

Position: Strong Support

Chair Tokuda, and Members of the Senate AHW Committee:

My name is Paul Koehler. I am a Maui resident, Past-President and sitting Board Member of HCIA. The HCIA represents seed production and research facilities operating in Hawaii. The HCIA is comprised of five member companies that farm an estimated 8,000 acres on four islands, valued at \$97.6 million in operating budget (2006/2007 HASS). We are proud members of Hawaii's diversified agriculture and life sciences industries.

Appreciation is expressed for this and other taro measures introduced this year. While HCIA member companies do not grow taro, nor do we plan to grow taro, we have and continue to support the preservation and protection of taro in Hawaii. As testified in other sessions, HCIA respects the cultural significance of taro, and supports the Hawaiian community's discussion of research and development for taro.

As pointed out in the bill, the preliminary SCR 206 report and its discussions with the Hawaiian community states that the apple snail is of greatest concern to taro farmers. As such, we support this measure.

Thank you for the opportunity to present testimony.



The Nature Conservancy of Hawai'i
923 Nu'uuanu Avenue
Honolulu, Hawai'i 96817

Tel (808) 537-4508
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nature.org/hawaii

Testimony of The Nature Conservancy of Hawai'i
Supporting S.B. 2518 Relating to Taro
Senate Committee on Agriculture & Hawaiian Affairs
Tuesday, February 5, 2008, 2:45PM, Room 224

The Nature Conservancy of Hawai'i is a private non-profit conservation organization dedicated to the preservation of Hawai'i's native plants, animals, and ecosystems. The Conservancy has helped to protect nearly 200,000 acres of natural lands for rare and endangered native species in Hawai'i. Today, we actively manage more than 32,000 acres in 11 nature preserves on O'ahu, Maui, Hawai'i, Moloka'i, Lāna'i, and Kaua'i and also work closely with government agencies and private landowners on cooperative land management projects.

The Nature Conservancy of Hawai'i supports the use of general fund revenue to address invasive species issues, including research and control for devastating pests like apple snails.

However, we hope that the necessarily strong response to apple snails will not prevent the State and its partners from also devoting appropriate attention to other pests that have become established in Hawai'i. We hope that in addition to S.B. 2518, you will also support continued funding in the State budget for the prevention, early detection, control, research, and education programs of the Hawai'i Invasive Species Council (HISC), and the State Departments of Agriculture, Health, and Land & Natural Resources.

In order to meet needs, the Legislature has found itself in the position of shifting existing general and special funds back and forth between various invasive species and conservation programs. In Fiscal Year 2007, this practice caused layoffs in the Island Invasive Species Committees and a hiatus in the Hawai'i Invasive Species Council's research grant program. Similarly, funds to support coqui frog control and some Hawai'i Invasive Species Council activities have been diverted from the DLNR's Natural Area Reserve Fund. This is an unsustainable practice that will soon put the important Watershed Partnership and other Hawaiian forest conservation programs at risk.

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LATE TESTIMONY

sb2518 Ag and Hawaiian Affairs

Aloha,

My name is Jim Cain, my family and I are full-time taro farmers and poi processors from Waipi'o Valley, island of Hawai'i. I support sb2518. The apple snail is public enemy number 1 for taro farmers all around the state, and is responsible for huge losses to the farmers crops (about 25%).

The projects outlined in sb2518 have huge potential for helping the farmers. I humbly ask for your support. Mahalo.

SENATOR JILL TOKUDA, CHAIR
AGRICULTURE AND HAWAIIAN AFFAIRS COMMITTEE

From: Robert H. Cowie, Ph.D.

Tuesday, February 5, 2008, 2:45 pm, conference room 224

Support of SB 2518, Relating to Taro

I am a University of Hawaii researcher. This testimony is my own personal testimony and does not necessarily reflect the views of the University of Hawaii, the Pacific Biosciences Research Center, or the Center for Conservation Research and Training. I support S.B. No. 2518, Relating to Taro, which would provide support for development of new measures for controlling pestiferous and highly invasive apple snails in wetland taro in Hawaii.

I am considered one of the world experts on these snails, which have become serious pests of taro in Hawaii. I have worked extensively on these invasive species in Hawaii, where I have documented their rapid spread into both taro and natural wetland areas throughout much of the state. I have also worked in Asia, where the snails have become major rice pests, as well as in their native South America. This research has been published widely.

No efficient and effective control methods have yet been developed, either in Hawaii or in Asia. Current measures primarily involve laborious and back-breaking hand-picking of the snails from infested lo'i or paddies, combined with biological control by ducks, which is not feasible in certain areas (e.g., Hanalei National Wildlife Refuge), and, at least in Asia, use of pesticides that are not permitted in Hawaii, may be dangerous to human health, and may have unwanted environmental impacts. Crop yield losses are high.

Development of environmentally friendly management options that do not impact human health is a crucial need in maintaining the viability of wetland taro farming in Hawaii. The effort to be implemented if this bill is passed is a valuable step towards this goal. I support passage of S.B. No. 2518. Thank you for this opportunity to testify.

COMMITTEE ON AGRICULTURE AND HAWAIIAN AFFAIRS

Senator Jill N. Tokuda, Chair

Senator J. Kalani English, Vice Chair

DATE: Tuesday, February 5, 2008
TIME: 2:45 PM
PLACE: Conference Room 224

Testimony by Gregory A. Koob, PhD (via email)

SB2518 RELATING TO TARO: Provides a grant for taro research, laboratory costs, and outreach for the control of the invasive apple snail.

Dear Committee Members:

I am writing in support of SB2518 as referenced above.

SB2518 requests funding for farmer-based apple snail control research.

The apple snail, *Pomacea canaliculata*, is on the list of the *100 Worst Global Invasive Species*. It is a major pest in more than 18 countries worldwide. The snail has been present in Hawaii for 23 years and it has infested taro patches, wetlands, streams, estuaries, ponds, springs, ditches and reservoirs on every island except Moloka'i and Kaho'olawe. Approximately 11,000 acres of wetlands and water bodies are at risk of or already infested with the snail; only 5% of those lands are taro farming lands - the rest are under private, state and federal jurisdiction.

Wetland managers have little, if any, means of controlling the snails at this time. Taro farmers use labor intensive hand picking or ducks; however these methods are currently not viable for managers of large wetland acreage, due to costs or the presence, as in Hanalei, of the Koloa. Mallard/Koloa hybrids are one of the major threats (genetic diffusion) to the endangered Koloa and the use of Mallards on taro farms, if not properly managed, may increase this threat if the domesticated Mallards breed with the endangered Koloa. An alternative to herded, trained Mallards for apple snail control is badly needed. This research has the potential to address this issue.

Once the snail gets into fallow taro areas or adjacent wetlands, it is almost impossible to remove. These types of sites are a constant source of reinfestation to active taro patches and wetlands. I am seeing more and more apple snail infestations in natural wetlands and abandoned taro lo'i where native, endangered waterbirds are attempting to feed and breed. The research under SB2518 represents some hope for these sites and for wetland managers.

In 2005, taro farmers throughout the state, in consultation with an extensive group of scientists, agencies and invasive species practitioners, collaborated to produce a statewide apple snail control plan. The plan, finalized in 2006, outlined recommended policy, agency, landowner, and

farmer action. SB2518 is an appropriation for the most promising practices based on this plan. I should point out, though, that there should be some allocation of funds for field monitoring and project management costs.

The public-private collaboration outlined in the bill has the potential to create an alternative source of funding for future control efforts. The farmer-based apple snail control project will provide a new model once the hurdles of expensive lab and field testing have been surmounted, and it has great potential for moving into self-funding.

I have worked in the horticulture and wildlife biology professions in Hawaii for more than 20 years. There is much that needs to be done to protect our agricultural way of life, as well as our natural resources. I have agreed to be on the review committee for this project as referenced in the Application for Grants and Subsidies submitted by E Kupaku Ka 'Āina – The Hawaii Land Restoration Institute for the same reasons I support this bill.

Please support bill SB2518. Thank you for your consideration.

Gregory A. Koob, PhD
1508 Keeaumoku B201
Honolulu, HI 96822

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