

LINDA LINGLE
Governor



SANDRA LEE KUNIMOTO
Chairperson, Board of Agriculture

DUANE K. OKAMOTO
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 SANDRA LEE KUNIMOTO
CHAIRPERSON, BOARD OF AGRICULTURE

BEFORE THE SENATE COMMITTEES ON AGRICULTURE AND HAWAIIAN AFFAIRS
AND
EDUCATION
Friday, March 14, 2008
2:00 p.m.
Room 225

HOUSE BILL 935, H.D. 2
RELATING TO AGRICULTURE

Chairpersons Tokuda and Sakamoto and Members of the Committees:

House Bill 935, H.D. 2, appropriates funds to pay for the increased cost of, and to attract federal funding for, statewide technical assistance provided to the aquaculture industry through the University of Hawaii Sea Grant Extension Service. The department supports this bill. However, we have concerns about the possible adverse budgetary impact that this bill may have on the Executive Supplemental Budget request and defer to the Department of Budget and Finance as to the possible fiscal implication of this bill.

In the past five years, the local aquaculture industry has rapidly increased, however costs for materials, supplies and salaries have also increased, eroding the funds remaining for this program. Currently, University of Hawaii Extension Agents must seek outside research contracts to make up salary shortfalls, thus taking time away from their primary responsibility of providing direct assistance to farmers. These requested funds are needed to match and draw down Federal funds for extension services.

Thank you for the opportunity to testify.



Hawaii Aquaculture Association

To:

THE SENATE
THE TWENTY-FOURTH LEGISLATURE
REGULAR SESSION OF 2008

COMMITTEE ON AGRICULTURE & HAWAIIAN AFFAIRS

Sen. Jill N. Tokuda, Chair
Sen. J. Kalani English, Vice Chair

COMMITTEE ON EDUCATION

Sen. Norman Sakamoto, Chair
Sen. Jill N. Tokuda, Vice Chair

HEARING

DATE: Friday, March 14, 2008
TIME: 2:00 PM
PLACE: Conference Room 225, State Capitol
415 South Beretania Street

From: Ron Weidenbach, President, Hawaii Aquaculture Association
Phone: 429-3147, Email: hawaiiifish@gmail.com

Re: **HB 935, HD2, Relating to Agriculture**

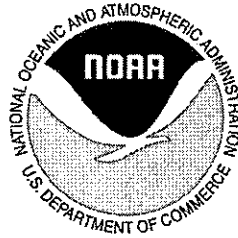
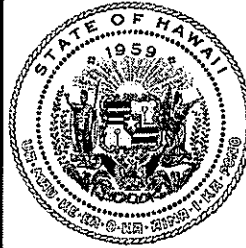
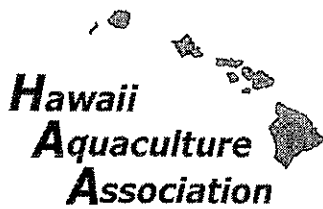
Chairs Tokuda and Sakamoto, Vice Chairs English and Tokuda, and Committee Members:

The Hawaii Aquaculture Association (HAA) strongly supports **House Bill No. 935, HD2**, which appropriates funds to pay for the increased costs of, and to attract federal funding for, statewide technical assistance provided to the aquaculture industry through the University of Hawaii Sea Grant Extension Service (UH/SGES).

Aquaculture is one the fastest growing segments of diversified agriculture in the State totaling \$21.3M in wholesale product value in 2006. Critical to this continued growth and diversification of aquaculture has been statewide technical assistance provided by the UH/SGES, with highly qualified aquaculture agents based out of UH-Manoa, Windward Community College, UH-Hilo, and Maui Community College. Funding for the program is through matching funds from the U.S. Department of Commerce and the HDOA/Aquaculture Development Program. However, over the years, the costs of materials, supplies and salaries have increased, eroding the buying power of the funds available. Currently, Extension Agents must seek outside research contracts to make up salary and operating expense shortfalls, thus taking time away from their primary responsibility of helping farmers on the farm. The negotiated UH salary increases for FY07-08 and FY08-09 have further reduced payroll funds, put a critical strain on the program, and operating funds for local and inter-island travel have been largely non-existent furthering limiting the ability of the extension agents to assist farmers.

With the suspension of State aquaculture research funding more than a decade ago, Sea Grant's aquaculture extension agents have used their extensive networks of professional colleagues from around the world to help keep Hawaii's aquaculture farmers informed of technical advances developed by local researchers with Federal funds and by researchers in other countries so as to try and keep Hawaii's producers competitive in the face of world competition. This collaborative networking effort is typified by the upcoming Hatchery Technologies Workshop to be held March 20, 2008 at the UH Hawaii Institute of Marine Biology featuring both local experts and two guest researchers from Nagasaki University, Japan. Without a strong and dedicated Sea Grant aquaculture extension staff and program, such important workshops would not be possible.

The HAA therefore strongly requests the passage of HB 935, HD2, which will provide the additional funding (\$100K) needed to return HDOA/ADP's aquaculture extension support back the original 1:1 State:Federal dollar match needed to continue an effective program. Thank you for the opportunity to testify.



WORKSHOP ANNOUNCEMENT

WHEN: THURSDAY, MARCH 20, 2008 09:30 – 13:30

WHERE: HAWAII INSTITUTE OF MARINE BIOLOGY

WHY: Hatchery operations are of primary importance in the production of any aquacultured product and are one of the limiting factors in the development of any new potential species. An opportunity presented itself under the auspices of a National Oceanic Atmospheric Administration (NOAA) supported project in the development of hatchery technologies for the opakapaka to support the beginnings of a collaborative partnership with the University of Nagasaki, Graduate School of Fisheries. Two visiting scientists from Japan, that represent considerable expertise in live feeds production, fish larval behavior, and hatchery operations will be augmented with expertise available in Hawaii to provide an opportunity to learn more about the challenges and opportunities of developing and/or streamlining hatchery technologies for marine finfish.

SPONSORS: The workshop is being brought to you through a collaborative partnership with several institutions: Hawaii Aquaculture Association, UH Sea Grant College Program, HDOA Aquaculture Development Program and NOAA.

AGENDA:

0900 - 0930 Refreshments at HIMB
0930 - 0945 Welcome Dr. Clyde Tamaru
0945 - 1015 Dr. Petra Lenz
1015 - 1045 Dr. Charles Laidley
1045 - 1100 Coffee Break
1100 - 1130 Dr. Clyde Tamaru
1130 - 1200 Dr. Yoshitaka Sakakura
1200 - 1230 Dr. Atsushi Hagiwara
1230 - 1330 Lunch
1330 Honukai Departs HIMB

PRESENTATIONS:

"Live food production: comparisons between *Bestiolina similis* and *Parvocalanus crassirostris* - Dr. Petra Lenz.

Dr. Lenz is an associate researcher at the University of Hawaii's Pacific Biomedical Research Center, Bekesy Laboratory of Neurobiology and carries out investigations in various areas of copepod biology such as with their mechanosensory mechanisms, their escape behavior, bioluminescence just to name a few. Her work helps explain the extraordinary success of the copepod group in penetrating so many ecological niches in the aquatic environment. Dr. Lenz received her doctorate from the University of California at Santa Barbara.

"Copepod-based hatchery technology development for marine fish." Dr. Charles Laidley.

Dr. Laidley currently manages Finfish Research at the Oceanic Institute in Hawai'i, working on the aquaculture development of a range of marine ornamental and marine food fish species. He has worked with a broad range of temperate and tropical fish species, from both the freshwater and marine environments. Selected research activities: Examination of contaminant effects on fish growth and reproduction, interactions between stress and disease, the physiology of reproductive development and spawning in cultured fishes, live feeds development, larviculture, onshore and offshore growout systems, and aquaculture systems technology. Dr. Laidley received his doctorate from the University of Texas, Department of Zoology and Marine Sciences.

“Hatchery production of the opakapaka: past present and future” – Dr. Clyde Tamaru

Dr. Tamaru is an aquaculture specialist with the UH Sea Grant College Program and since July 2007 is the principal investigator of the NOAA supported project focused on the development of hatchery technologies for the opakapaka. In addition to conducting research he is responsible for the technology transfer of developed aquaculture technologies to appropriate end users statewide. Dr. Tamaru received his doctorate from the University of Tokyo, Faculty of Agriculture.

“Flow Field Control for Grouper Larviculture” - Dr. Yoshitaka Sakakura

Dr. Yoshitaka is an associate professor at Nagasaki University, Faculty of Fisheries where his current research interests are in studies of the ontogeny of aggressive behavior in fishes, behavioral studies on the improvement of fish quality for stock enhancement and on the biology on the mangrove killifish, the only known self-fertilizing vertebrate. Dr. Sakakura got his doctorate from the University of Tokyo, Faculty of Agriculture.

“Recent progress of live food research in Japan” - Dr. Atsushi Hagiwara

Dr. Hagiwara is currently a professor at the Graduate School of Science & Technology, Nagasaki University. Dr. Hagiwara spent some time as a research associate at the Oceanic Institute between 1986 – 1988. His research interests are in the physiology and ecology of the euryhaline rotifer *Brachionus* as well as the food environment for marine fish larvae in the rearing condition. Dr. Hagiwara received his doctorate from the University of Tokyo, Faculty of Agriculture.

Parking: Please note that the parking lot at HIMB is under construction and closed to the public. All participants will need to park on the second floor of the parking structure on Mauka Side of the Windward Shopping Mall (see figure 1). Workshop participants are encouraged to arrive at the parking lot early so that they may be shuttled to Lilipuna Pier. The shuttle can only take 6 passengers at a time.

Getting ON and OFF the Coconut Island: The Honukai will be waiting at Lilipuna Pier to take the majority of the workshop participants to Coconut Island at 0900. Allow yourself enough time to park your car at the shopping mall and for the shuttle ride to Lilipuna Pier. The Honukai will also be leaving Coconut Island at approximately 1330. There is a shuttle boat that runs continuously if you miss the Honukai or if you need to leave the island while the conference is going on. Please note that a shuttle van will take the participants to and from HIMB to the shopping mall.

RSVP: Because of limiting seating there is going to be a maximum of 40 participants. To make reservations contact Dr. Clyde Tamaru at ctamaru@hawaii.edu.

CHARGES: A 20\$ fee is being charged for each workshop participant to cover the costs of the refreshments Honukai rental and a bento lunch that is to be provided.



HB 935 HD2: RELATING TO A TECHNOLOGY MASTER PLAN

DATE: March 14, 2008
2:00 pm., Conference Room 225

TO: COMMITTEE ON AGRICULTURE & HAWAIIAN AFFAIRS
Sen. Jill N. Tokuda, Chair
Sen. J. Kalani English, Vice Chair

COMMITTEE ON EDUCATION
Sen. Norman Sakamoto, Chair
Sen. Jill N. Tokuda, Vice Chair

FROM: Lisa H. Gibson
President
Hawaii Science & Technology Council

RE: Testimony In Support of the Purpose and Intent of HB935 HD2

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

The Hawaii Science & Technology Council supports the purpose and intent **House Bill No. 935, HD2**, which appropriates funds to pay for the increased costs of, and to attract federal funding for, statewide technical assistance provided to the aquaculture industry through the University of Hawaii Sea Grant Extension Service (UH/SGES) and asks for your favorable consideration of this bill.

The Hawaii Science & Technology Council is a private tax-exempt 501(c)6 industry association with a 28-member board. The council serves Hawaii companies engaged in ocean sciences, agricultural biotechnology, astronomy, defense aerospace, biotech/life sciences, information & communication technology, energy, environmental technologies, and creative media.

Thank you for the opportunity to testify on this important bill.

Lisa H. Gibson
President