

KO'OLAUPOKO HAWAIIAN CIVIC CLUB

March 13, 2009

To:

Rep. Ken Ito, Chair

And Members

House Committee on Water, Land & Ocean Resources

From:

Mahealani Cypher, President

Ko`olaupoko Hawaiian Civic Club

Subject:

S.B. 1, Relating to Opihi

Aloha mai kakou from the Ko'olaupoko Hawaiian Civic Club, working with nine ahupua'a around Kane'ohe Bay, moku Ko'olaupoko, O'ahu.

Our civic club supports this legislation, which would help protect our opihi resources around the island of O`ahu and throughout the state of Hawai`i.

We applaud the introducers of this bill and all of you for your kokua to support this important conservation measure.

Mahalo for this opportunity to share our mana'o.

P. O. Box 664 Kaneohe, HI 96744 Ph. (808) 235-8111 koolaupokohcc.org Christopher E. Bird, Postdoctoral Research Fellow Hawai'i Institute of Marine Biology P.O. Box 1346 • Coconut Island • Kāne'ohe, Hawai'i 96744-1346 Telephone: (808) 236-7471 • Facsimile: (808) 236-7443

March 13, 2009

SUPPORT for SB 1
RELATING TO OPIHI
House Committee on Water, Land, and Ocean Resources
March 13, 2009
10:00 a.m., State Capitol, Conference Room 325

I moved to Hawaii in 1998, and began my studies of opihi in 1999 at the University of Hawaii. Over the past 9 years, I have visited almost every coastline that harbors opihi in the Main Hawaiian Islands. In so doing, I have had the opportunity to speak with numerous opihi harvesters and citizens of Hawaii regarding opihi, cultural harvesting practices, and general ideas on what can be done to increase the numbers of opihi. I have conducted studies on the interaction of opihi with other species, the spawning patterns, larval development, adult growth, genetic population structure, population size, and commercial fishery statistics of opihi. I continue to work on opihi as a Postdoctoral Research Fellow at the University of Hawaii.

There is no doubt that opihi populations have declined in Hawaii over the past 108 years, and continue to decline presently. Bill SB 1 proposes to address the decline of opihi populations by putting limitations on the harvest of opihi in Hawaii waters. The proposed limitations on opihi harvest are driven by science, existing cultural practices, and common sense. Here I review SB1 section by section

Section 1 is factually correct, and emphasizes that the goal is to rehabilitate both opihi populations and the fishery. The most important point is that breeding adults must be protected to ensure that opihi populations will replenish themselves. This is a key issue in the science of fisheries management.

Section 2a is focused on protecting breeding adult opihi by establishing "no take" areas. This is a valid method for managing the opihi fishery. In the no take areas, opihi are allowed to breed throughout their entire lives. Adult opihi tend to stay in the same area, returning to their home scare periodically throughout the day, and are unlikely to leave the no take area, where they might be harvested. Opihi have free swimming larvae (earliest life stage) which can disperse from the no take areas into areas where harvest is legal. There probably need to be more no take areas for opihi, but the proposed locations (man-made shorelines, offshore islets, and State Managed Areas) are a good start.

Section 2b is focused on protecting the breeding adult opihi koele (*Cellana talcosa*) by banning their harvest below the low tide line, and is based on traditional Hawaiian practices. Opihi koele exists both above and below the water line. By making the subtidal environment a "no take" zone, a portion of the opihi koele population is allowed to grow old and breed. Some of the larvae of these subtidal "breeders" will settle above the water line, providing a stable source of opihi koele to shorelines. It is likely that this single measure will allow opihi koele to recover and remain a sustainable fishery species.

Section 2c is related to Section 2b because in order to harvest subtidal opihi koele, one would need a mask and snorkel and a tool to pick the opihi. I have no scientific opinion on this section.

Section 2d restricts the harvesting of all opihi to 6 months per year across the entire state. It is likely that this will reduce the harvest pressure on opihi because there will be 50% fewer days upon which opihi can be harvested.

Section 2e states that an opihi monitoring program be implemented to assess the response of opihi populations to the new harvesting restrictions. Monitoring opihi populations in response to the measures proposed in SB1 is very important. It may be difficult to divine a "seat of the pants" assessment of whether there are more or less opihi five years from the implementation of SB1. A monitoring program will ensure that a concrete answer can be given to the question of "Did SB1 help increase opihi population size?" This will surely drive future management decisions for opihi.

Section 3 states that opihi harvesting will be temporarily banned on Oahu for 5 years. I think this section adequately reflects that opihi populations have been decimated on Oahu, relative to the other Hawaiian Islands, thus Oahu requires more drastic actions to rehabilitate its opihi populations. It is very telling that fish markets have not expressed much opposition to the stoppage of opihi harvest on Oahu, indicating that opihi sold in Honolulu markets is not harvested on Oahu. Oahu has the highest ratio of people to suitable opihi habitat, and it is likely that what has happened is that harvesting pressure is so intense that most opihi don't get a chance to reproduce on Oahu. Offshore islets with dense populations of opihi, such as Manana off the coast of Waimanalo where opihi harvesting is illegal, indicate that if harvesting is stopped, opihi populations can recover. Opihi grow very quickly, reaching reproductive age in as few as six or seven months. Opihi also have swimming larvae that disperse well within islands. Stopping the harvest of opihi on Oahu should allow some level of recovery and replenishment. The reopening of the opihi fishery on Oahu should be accompanied by aggressive harvest restrictions, implementing more "no take" areas than proposed in Section 1a.

Thank you for the opportunity to offer comment on this bill.

Sincerely,

Christopher E. Bird

March 11, 2009

FROM:

Debbie Gowensmith Hawaii Community Stewardship Network A project of Community Links Hawaii 1003 Bishop Street, Suite 2605 Honolulu, HI 96813 808-348-1694

TO:

Chair Representative Ken Ito, Vice Chair Sharon Har, and Committee Members Committee on Water, Land, and Ocean Resources

RE:

SUPPORT FOR SB1 SD1 Relating to 'Opihi To be heard March 13, 2009, 10 a.m. in Conference Room 325

Chair Ito, Vice Chair Har, and Committee Members:

The Hawaii Community Stewardship Network empowers Hawaii's communities to care for their environmental heritage. We work with more than 20 coastal communities around the State who are organizing the grassroots to mālama 'āina and practice their kuleana for ecologically, culturally, and spiritually important natural resources. They are motivated by the practices taught to them by their ancestors, who sustainably fed generations of Hawaiians, and by their hope that future generations will be able to feed their families from the abundance of Hawaii's natural resources.

The current state of 'opihi populations threatens this view of an abundant future where people are fed from the ocean. If we do not urgently address the decline of 'opihi populations on O'ahu and throughout the State, it is very unlikely that future generations will have the opportunity to practice their cultural ways of harvesting and preparing 'opihi. Because this bill supports traditional and customary gathering rights while restricting the free-for-all take of this important food resource, we support SB1 SD1 and urge you to pass the bill.

Mahalo nui for your consideration,

Debbie Gowensmith

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Robert J. Toonen, Associate Research Professor Hawai'i Institute of Marine Biology P.O. Box 1346 • Coconut Island • Kāne'ohe, Hawai'i 96744-1346 Telephone: (808) 236-7471 • Facsimile: (808) 236-7443

March 13, 2009

SUPPORT for SB 1 RELATING TO OPIHI House Committee on Water, Land, and Ocean Resources March 13, 2009 10:00 a.m., State Capitol, Conference Room 325

SB1 establishes a five year moratorium on the harvesting of 'opihi on the island of O'ahu, as well as establishing a ban on taking or harvesting 'opihi in protected waters statewide, subject to open and closed seasons and the traditional rights of certain ahupua'a tenants. My statements on this measure do not represent an institutional position of the University of Hawai'i.

I fully support this bill. In crafting these proposed regulations the best available science has been taken into account, as well as input from resource managers, and 'opihi harvesters; the proposed regulations draw on both the research done to date and traditional harvest practices still in place on some islands to establish guidelines for sustainable harvest of 'opihi. 'Opihi is a delicacy that is part of Hawaii's culinary culture, and as such there is universal agreement that the resource must be preserved for future generations to enjoy. SB1 seeks to restrict the overharvest of 'opihi Statewide and establish protected zones that will increase the local breeding population. These protected breeding populations will then be able to replenish the harvestable 'opihi in the surrounding areas to the benefit of all.

On the island of O'ahu, the 'opihi are so depleted that a complete ban on harvest for five years is needed to allow the breeding populations to recover prior to renewed harvest. Thus, the measures of SB1 are likely to succeed in the protection and continued harvest of 'opihi, the guidelines are enforceable, and the strength of protective measures are tailored to where the problem is most serious. The overall result is conservation efforts that will increase populations Statewide for future harvest and benefit of all.

I believe that SB1 establishes guidelines that are effective and sound, and address all primary concerns raised in opposition to previously proposed measures.

Thank you for the opportunity to offer comment on this bill.

Sincerely,

Robert J. Toonen