



UNIVERSITY OF HAWAII SYSTEM

Legislative Testimony

LATE

Testimony Presented Before the
Senate Committee on Ways and Means
Monday, April 3, 2017 at 1:35 p.m.

By

Dr. Ruth D. Gates, Director
Hawai'i Institute of Marine Biology
School of Ocean and Earth Science and Technology
University of Hawai'i at Mānoa

HB 450 HD1 SD1 – RELATING TO CORAL

Chair Tokuda, Vice Chair Dela Cruz and members of the committee:

In my role as Director of the Hawai'i Institute of Marine Biology, I am presenting testimony in strong support of HB 450 HD1 SD1 on behalf of the University of Hawai'i, provided that its passage does not replace or adversely impact priorities as indicated in our Board of Regents Approved Biennium Budget. This measure allocates resources for the University of Hawai'i to examine the impacts of sunscreen products on corals.

I am a marine scientist who has studied the health of coral reefs for the past 25 years and Hawaiian reefs for the past 13 year, and I am the current President of the International Society for Reef Studies. My graduate students, post-doctoral researchers and I have conducted numerous studies on the influence of water quality on coral health. There is no doubt that coral communities in Hawai'i have been and continue to be exposed to increasing impacts from human use and that in some places they are degrading as a result. Work from other parts of the world has highlighted the detrimental impact of chemicals in sunscreen products on coral health and reproduction. No studies to date have explored their impact on Hawaiian corals however some Hawaiian reefs see heavy tourist traffic (e.g. Hanauma Bay and Waikīkī), and measurable concentrations of sunscreen chemical, a scenario that creates context for a detailed examination of the impact of sunscreen chemicals on the health of Hawai'i corals.

The bill will allocate resources to the University of Hawai'i to conduct a study and report on the effects of sunscreen used by ocean users on the coral reefs located in Hawaii waters and, if any are found, make recommendations for mitigating these impacts. The University of Hawai'i has experts who are appropriately trained in coral reef biology and analytical chemistry to conduct such a study. The compartmentalization of tourist traffic on Oahu makes the comparison of concentrations of sunscreen chemicals like oxybenzones in heavily trafficked versus rarely visited coral reef areas tractable and measurable. Facilities in the School of Earth, Ocean and Earth Science (SOEST), University of Hawai'i at Mānoa, possess world class capacity to expose corals to these measured concentrations of sunscreen chemicals in the laboratory and the experts to assess their impact on coral health, growth, reproductive output and on their offspring. The results from such studies will create information that can guide management actions to mitigate or minimize impacts of sunscreen products on corals and develop best practices for products and ocean use in Hawai'i waters.

Thank you for the opportunity to present testimony in support of the important HB 450 HD1 SD1.

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TO: Honorable Chair Tokuda, Vice-Chair Dela Cruz and Ways and Means Committee Members, 4-3-17, 1:35 p.m.

SUBMITTED BY: Keith Dane, Hawaii Policy Advisor, State Affairs, Humane Society of the United States, kdane@humanesociety.org, Tel: 301-312-1489; and Teresa M. Telecky, Ph.D., Director, Wildlife Department, Humane Society International, ttelecky@hsi.org, Tel: 301-258-1430

RE: SUPPORT for HB 450 HD1 SD1, Relating to Coral

The Humane Society of the United States (HSUS) and Humane Society International (HSI), support HB 450 HD1 SD1 which would, if enacted, appropriate funds and require the University of Hawaii (UH) to conduct a study on the effects of sunscreen on Hawaii's coral reefs and report to the Legislature. We thank the Committees for addressing this important matter that affects Hawaii's nearshore coral reefs.

Numerous studies have shown that oxybenzone in the marine environment can be harmful to coral reefs and marine life (Kim et al. 2014, Kim and Choi 2014, Tsui et al. 2014, Downs et al. 2015). These studies clearly indicate that oxybenzone poses a risk to fishes, through endocrine disruption and reproduction performance, for example, and to hard corals through bleaching. These threats are heightened in marine recreational areas frequented by beach goers, swimmers, snorkelers and divers whose sunscreen washes off when they enter the water.

It has been estimated that 4,000 –14,000 tons of sunscreen enters coral reef areas around the world annually (U.S. National Park Service, Downs, et al. 2015). Surveys around Hawaii's coral reefs found oxybenzone levels at concentrations 12 times higher than the level at which it impacts juvenile coral (Downs et al. 2015). To better ascertain the prevalence of sunscreen chemicals in Hawaii's coral reef ecosystems and understand their effects, in-depth, Hawaii focused studies are urgently needed.

The unprecedented coral bleaching events of 2014 and 2015 had devastating effects on Hawaii's corals. A 2016 report by The Nature Conservancy found 32 – 90% of bleached coral colonies died in some West Hawaii areas. Though oxybenzone may be just one of many stressors impacting Hawaii's coral reefs, the inevitability of future ocean warming events and subsequent coral bleaching makes it imperative to reduce the stressors to corals

and increase their potential to recover and survive.

HSUS and HSI sincerely thank the Committees for taking up this important matter. ***We urge the Committees to pass HB 450 HD1 SD1*** which will shed more light on sunscreen and oxybenzone pollution and its effects on Hawaii's coral reefs and wildlife.

Thank you for this opportunity to provide testimony.

LATE

From: mailinglist@capitol.hawaii.gov
Sent: Monday, April 3, 2017 6:57 AM
To: WAM Testimony
Cc: octopus@maui.net
Subject: *Submitted testimony for HB450 on Apr 3, 2017 13:35PM*

HB450

Submitted on: 4/3/2017

Testimony for WAM on Apr 3, 2017 13:35PM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Rene Umberger	For the Fishes	Support	No

Comments:

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COMMITTEE ON WAYS AND MEANS

Senator Jill N. Tokuda, Chair
Senator Donovan M. Dela Cruz, Vice Chair

AMENDED NOTICE OF DECISION MAKING

LATE

DATE: Monday, April 3, 2017
TIME: 1:35 PM
PLACE: Conference Room 211

TESTIMONY OF THE OCEAN TOURISM COALITION SPEAKING IN SUPPORT HB 450,HD1,SD1

Aloha Chair Tokuda, Vice Chair Dela Cruz, Members of WAM:

My name is James E. Coon, President of the Ocean Tourism Coalition (OTC). The OTC represents over 300 small ocean tourism businesses state wide. Most of these are family businesses which are locally owned and operated. Many of them have been in business for several decades and are an important and valued part of their respective communities.

The OTC has led the State in stewardship of our near shore waters. A healthy and vibrant reef ecosystem is vital to not only all the residents of our State, but necessary for our eco-tourism businesses as well. We support HB 450, HD1,SD1 which would fund a study of this important issue by the UH.

Please pass HB 450.HD1,SD1.

Sincerely,

James E. Coon, President