

**LATE
TESTIMONY
SB 151 SD 1**



SB 151, Proposed SD 1, RELATING TO BIOPROSPECTING

Senate Committees on Water and Land,
and Agriculture and Hawaiian Affairs

February 12, 2008
Room: 224

2:45 p.m.

The Office of Hawaiian Affairs (OHA) **SUPPORTS, with amendments** SB 151, Proposed SD 1, which would create a permanent Bioprospecting Advisory Commission and appropriate funds to allow the Commission to fulfill its mandate.

This bill is a culmination of many months of intensive work, including statewide public meetings, by the Temporary Advisory Commission on Bioprospecting. Their accomplishments are to be commended, and OHA hopes that their labors will help move legislation on this important and controversial subject forward. This Legislation would set national precedence for bioprospecting regulation and definition, and Hawai'i should be the place where this precedence is set for a number of reasons.

The issues of bioprospecting and biotech development have raised great public concern in Hawai'i. Not only do they impact the State's public trust obligations, but they also touch the rights and interests of the Native Hawaiian community, higher education and research, business development, and public health, welfare and safety. If Hawai'i wishes to move forward in this arena, to assure fairness, Hawai'i must harmonize a budding industry with the State's constitutional mandates to conserve and protect the integrity of all of Hawai'i's natural resources, promote sustainable development, hold public natural resources in trust, and protect traditional and customary Native Hawaiian rights.

Hawai'i also is one of the richest places in biodiversity in the world. Its biological and genetic resources are the common heritage of Native Hawaiians, whose culture depends on these resources and has developed, and continues to develop, the use of these resources since before Hawai'i's

recorded history. It is possible that bioprospecting can occur in a manner that protects the integrity of the ecosystem, recognizes Native rights and secures a beneficial economic return for the State, but only with appropriate regulation.

Natural resources are not just tools to Native Hawaiians. Natural resources are cultural resources and genealogical links to Native Hawaiians' creation. Hawai'i cannot have one resource without the other. This is part of why the protection of traditional and customary Native Hawaiian uses and preservation of natural resources has endured into the western regime of private property through recognition in the Hawai'i Constitution, Hawaii Revised Statutes and caselaw.

Despite pressures to develop Hawai'i's biological and genetic resources for commercial uses, the State has an affirmative duty under the public trust to develop a basic framework to regulate bioprospecting in Hawai'i. By creating the permanent Commission described in this bill, under the parameters developed by the Temporary Advisory Commission on Bioprospecting, the Legislature would not foreclose the future development of these resources, but would ensure that such development would uphold the State's public trust obligations and the interests of all concerned rights- and stakeholders.

This legislation also takes into account the importance of "Prior Informed Consent." Biopiracy occurs when biological and genetic resources are accessed and taken without the free, prior informed consent of the rights holders of the resources: the indigenous peoples, and where applicable, the national or state government with jurisdiction over the take area. Thus, in Hawai'i, that would include Native Hawaiians as the rights holders and the State, whose jurisdiction covers public lands.

OHA's concern about any proceeds from bioprospecting on ceded lands originates from Attorney General Opinion 03-03, which was issued on April 11, 2003. That legal opinion suggests that the State must reserve title to biological and biogenetic resources on public lands, including ceded lands, when it allows lessees to remove those resources or transfers title to the land from where the biological and biogenetic resources are extracted. Thus, OHA further supports this proposed legislation's Subsection ____ - 2,

which includes a straightforward mechanism for the State to reserve title to biological and biogenetic resources.

Native Hawaiians' collective intellectual property rights are based upon the traditional, cultural knowledge developed over thousands of years and passed down from generation to generation. Much of the Native Hawaiian peoples' knowledge and plant, animal and human genetic resources were gleaned from Native Hawaiians without free, prior and informed consent. This must stop. Native Hawaiians' collective traditional knowledge and intellectual property rights require free prior informed consent before they can be legitimately shared. Native Hawaiians must always have the right to refuse to participate or to authorize the use of their intellectual property rights, and must be allowed to arrange their own benefit sharing agreements if they desire.

OHA's only concern, and suggested amendment to this bill, is with the language "and other peoples" after Hawaiians, to describe traditional and customary practices. This term is used three times in the document: in subsection (1) of the definition of "bioprospecting"; at the end of proposed Subsection ___-3, about the authority and responsibility of the State; and at the end of the proposed Subsection ___-5(2)(E), about the duties of the proposed Commission.

As the Legislature knows, no other peoples have the same rights as Native Hawaiians do in Hawai'i, nor should they. Native Hawaiians are the only indigenous peoples of this land, and the use of the internationally recognized term "peoples" in connotations of traditional and cultural rights in Hawai'i is disturbing at best. This could set a horrible precedent of seemingly bringing others (none of whom are defined) up to Native Hawaiians' level. This is counter to the Constitution, Hawaii Revised Statutes, State and Federal case and statutory law, international law, OHA's mandate, etc. The possibility that any "other peoples" could be recognized at the same level as Native Hawaiians in the connotations of the following is insulting and unconstitutional:

1. Receiving exemptions from bioprospecting regulations for "the taking of: (1) Biological resources from an area of land and water by Hawaiians *and other peoples* who have traditionally used the area of land or water in accordance with traditional customary practices"

- (Proposed Subsection __-1, definition of "Bioprospecting");
2. Having protected "traditional and customary practices of Hawaiians *and other peoples*" (Proposed Subsection __-3); and
 3. Being part of the duties of the Commission in establishing policy procedures to consider "The knowledge, innovations, traditional and customary practices of Hawaiians *and other peoples* will be protected." (Proposed Subsection __-5(2)(E)).
(emphasis added)

Therefore, OHA urges the Committees to PASS SB 151, Proposed SD 1, with the above concerns about the language "and other peoples" taken into account. Thank you for the opportunity to testify.

testimony

From: amdhawaii@aol.com
Sent: Tuesday, February 12, 2008 4:40 PM
To: testimony
Subject: OPPOSITION TO SB 151 RELATING TO BIOPROSPECTING

LATE TESTIMONY

MEMBERS OF THE COMMITTEE ON AGRICULTURE AND HAWAIIAN AFFAIRS

TESTIMONY BY DIETER MUELLER-DOMBOIS, EMERITUS PROFESSOR AT UH MANOA

AS A PROFESSIONAL FOREST ECOLOGIST I WAS CALLED FROM MY GOVERNMENT POSITION IN CANADA BACK IN 1963 TO TEACH FIELD BOTANY AT THE UNIVERSITY OF HAWAI'I AT MANOA. YOU ALL KNOWN IT AS HAWAII'S PREMIER RESEARCH UNIVERSITY.

MY TWO PRINCIPAL OBJECTIONS TO THIS BILL ON BIOPROSPECTING ARE:

(1) ALL FIED RESEARCH INVOLVING PLANTS AND ANIMALS IN HAWAI'I IS CONSIDERED "BIOPROSPECTING" IN THIS BILL. THIS IS COMPLETELY FALSE.

(2) NO QUALIFIED NATURAL SCIENTIST HAS BEEN INVOLVED IN THE DRAFTING OF THIS BILL. THE RESULT IS LACK OF A PROPER DISTINCTION BETWEEN TRADITIONAL RESEARCH ON HAWAIIAN PLANT AND ANIMAL POPULATIONS, THEIR COMMUNITIES AND ECOSYSTEMS AND WHAT IS NOW UNDERSTOOD AS BIOPROSPECTING IN THIS BILL.

I CONCLUDE THAT SENATE BILL 151, IF ACCEPTED IN ITS PRESENT FORM, WILL LEAD TO A TOTAL DISASTER.

THANK YOU FOR YOUR ATTENTION.

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UNIVERSITY OF HAWAI'I SYSTEM

LEGISLATIVE TESTIMONY



LATE TESTIMONY

SB 151, Proposed SD 1
RELATING TO BIOPROSPECTING
(Establishes a permanent bioprospecting advisory commission)

Testimony Presented Before the
Senate Committee on Water and Land
and
Senate Committee on Agriculture and Hawaiian Affairs

Wednesday, February 13, 2008, 2:45 p.m.

by
James R. Gaines, Vice President for Research
University of Hawaii System

Testimony Presented Before the
Senate Committee on Water and Land
and
Senate Committee on Agriculture and Hawaiian Affairs

by
James R. Gaines, Vice President for Research
University of Hawaii System

Wednesday, February 13, 2008, 2:45 p.m.
State Capitol, Conference Room 414

SB 151, Proposed SD 1 RELATING TO BIOPROSPECTING

Chair Hee, Vice Chair Kokubun, and Members of the Committee:

The University of Hawaii supports the intent of SB 151, Proposed SD 1, which would establish a permanent bioprospecting advisory commission. As a member of the Hawai'i State Temporary Advisory Commission on Bioprospecting (ACB), the University recognizes not only the complexity of the bioprospecting issue, but also the broad range of perspectives of the various stakeholders who participated in the commission's work.

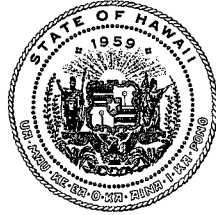
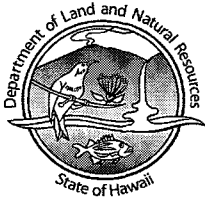
The recently released report from the ACB is the culmination of five years of legislative effort. As a result of that effort, we believe that the recommendations of that report, some of which are addressed in this bill, are only a starting point in directing public policy on this topic. More work is needed to develop policy that will balance any development and commercialization of Hawaii's biodiversity with scientific research and conservation efforts. Specifically, we will be challenged in developing administrative rules that will allow the University to address federal funding agency requirements for sharing of samples and data with researchers around the world if those samples originate in Hawaii.

We would suggest the following housekeeping changes for your consideration:

- In Section 2, subsection 6, *Administrative rules* (page 12, line 19), amend paragraph (1)(i) to read: "...involves any intent to use [~~and~~] the sample to produce a commercial product...."
- In light of the numerous collections of biodiversity housed at the University, many of which include samples collected from around the world, amend Section 2, subsection 6, *Administrative rules* (page 12, lines 9-13) to specify that regulations pertaining to material transfer agreements, reporting, transferring, and tracking apply only when the material requested originates in Hawaii.

The University of Hawaii applauds the Legislature's foresight in addressing the bioprospecting issue and beginning to form a legal framework whereby science and industry can access Hawaii's biodiversity for research and development purposes, while addressing the public land trust obligations of the State. Thank you for the opportunity to testify.

LINDA LINGLE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT K. MASUDA
DEPUTY DIRECTOR

DEAN NAKANO
ACTING DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
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CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING

FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

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

On Senate Bill 151 Proposed Senate Draft 1 – RELATING TO BIOPROSPECTING

BEFORE THE SENATE COMMITTEES ON
WATER AND LAND
and
AGRICULTURE AND HAWAIIAN AFFAIRS

February 13, 2008

LATE TESTIMONY

Senate Bill 151 Proposed Senate Draft 1 would establish a permanently funded Commission on Bioprospecting (Commission), and require the Department of Land and Natural Resources (Department) to adopt rules for obtaining permits to conduct bioprospecting. While the Department understands the motivations for this proposed measure, the Department nonetheless opposes the proposed Senate Draft 1 for the following reasons.

First, the bill as written appears to have an internal inconsistency. On Page 5, lines 7-19, state in part that "...bioprospecting" does not include the taking of...(4) Biological resources for any commercial or related noncommercial activity such as fishing for commerce or recreation..." However, on Page 6, lines 1-3, it is stated that "'Commercial use" means any use of biodiversity of genetic resources, their products, or their derivatives for monetary gain that includes selling in the market." Then, on page 7, lines 20-22, the bill states that "The State shall have the authority and responsibility to regulate bioprospecting and subsequent commercial use of the State's biodiversity..." As such the bill defines "bioprospecting" so as to exclude commercial use, then defines "commercial use" to include any use of biodiversity for monetary gain. This is circular, and it is unclear from this language what the bill is proposing to regulate.

Second, on Page 5, lines 1-3, the bill defines "biodiversity" to mean "...the total variety of life on earth, including genes, species, and ecosystems and the complex interactions among them." Later, on Page 7, lines 1-10, the bill states in part that "...ownership of, and right to, any biodiversity in, on, or under any lands located in the State of Hawaii, regardless of whether the lands are government lands or private lands, shall...rest with the State; and...Not be transferred by any lease, sale, right of entry, or other agreement, the ownership...being held by, and reserved to, the State." Although the above discussion specifically addresses lands, and not waters, and therefore avoids certain issues with commercial fisheries, the Department notes that the definition would include state submerged lands, and as such would render it illegal to continue commercially licensed fisheries for crustaceans and precious corals.

Third, given the broad definition of biodiversity employed, and the extension of the bill's provisions to private as well as state lands, this measure could be interpreted to imply that homeowners do not own their lawns, landscaping, pets, or any insects or microorganisms that might be present on their property because these constitute part of the "total variety of life on earth" pursuant to the bill's definition of biodiversity.

Fourth, the Hawaii State Constitution, Article 11, Section 1, states that the public resources are held as a trust for the benefit of all citizens of the State. The current composition of the Commission as proposed herein would appear to violate the spirit, and potentially the letter, of this section of the Constitution by favoring participation by a particular sector of the public, in the form of the Native Hawaiian community.

The Department wishes to make it clear that it does believe the State has a need to develop properly balanced statutes to regulate bioprospecting activities, and to reserve appropriate title and intellectual property rights for natural resources associated with its lands and waters. Although the current bill falls short of these goals, for the reasons noted above, the Department stands ready to work with the Legislature to rectify such deficiencies and produce a more appropriately crafted measure.

Thank you for the opportunity to testify.

testimony

From: Respiratory & Environmental Disabilities Assoc of HI [redahi@hawaii.rr.com]
Sent: Tuesday, February 12, 2008 5:57 PM
To: testimony
Subject: FW: SB 151 SD1;February 13, 2008; 2:45pm in room 414

Committee on Water and Land
Senator Clayton Hee, Chair
Senator Russell Kokubun, Vice Chair

Committee in Agriculture and Hawaiian Affairs
Senator Jill Tokuda, Chair
Senator Kalani English, Vice Chair

Hearing Date- February 13, 2008
Hearing Time- 2:45pm
Location- Room 414

My name is Bobby McClintock. I am from Honolulu, HI, and I **OPPOSE SB 151 SD1.**

Bioprospecting does nothing but help corporate interests. It does absolutely nothing for Hawaii and its people. Please do not pass.

LATE TESTIMONY

testimony

From: Robert Paull [robert.paull@hawaiiintel.net]
Sent: Wednesday, February 13, 2008 7:10 AM
To: testimony
Subject: Senate Bill 151 Testimony

LATE TESTIMONY

Please forward to the Senate Committees on Water and Land and on Agriculture and Hawaiian Affairs for the hearing 245 tomorrow

COMMITTEE ON WATER AND LAND
Senator Clayton Hee, Chair
Senator Russell S. Kokubun, Vice Chair

COMMITTEE ON AGRICULTURE AND HAWAIIAN AFFAIRS Senator Jill N. Tokuda, Chair Senator J. Kalani English, Vice Chair

Wednesday February 13, 2008

Opposition to SB 151 RELATING TO BIOPROSPECTING.

Dear Members of the Committee:

I am a Professor and Chairman of the Department of Tropical Plant and Soil Sciences. I am testifying as a private citizen.

Senate Bill 151 has a admirable goal, however, the Bill is overly broad in its scope and will do undue harm to research activities in the State of Hawaii.

A major problem with SB 151 is the failure of the Bill to confine its scope to native Hawaiian plants but includes all biological and genetic material within the state, even though these were not traditionally used by Hawaiians.

Further the Bill attempts to usurp the activities of other national and international bodies working on the protection of biodiversity and the ensure the free exchange of research findings.

The Bill sets up a review system that would probably never be able to reach a decision. The inability to present clear guidelines as to what is exempt from this Bill's scope will mean that much research will come to a halt.

I urge the committee not to pass SB 151. Thank you for this opportunity to testify.

Robert E. Paull
Tropical Plant & Soil Sciences
University of Hawaii
Honolulu, HI. 96822

LATE TESTIMONY

testimony

From: Russell Yost [rsyost@hawaii.edu]
Sent: Wednesday, February 13, 2008 7:19 AM
To: testimony
Subject: Please forward to the Senate Committee on Water and Land, and Agriculture and Hawaiian Affairs

Dear Legislators.
COMMITTEE ON WATER AND LAND

Senator Clayton Hee, Chair

Senator Russell S. Kokubun, Vice Chair

COMMITTEE ON AGRICULTURE AND HAWAIIAN AFFAIRS

Senator Jill N. Tokuda, Chair

Senator J. Kalani English, Vice Chair

Wednesday February 13, 2008

Opposition to SB 151 RELATING TO BIOPROSPECTING.

Dear Members of the Committee:

My name is Russell Yost, Professor of Soil Science in the Department of Tropical Plant and Soil Science, University of Hawaii'i at Manoa. I have worked 30 years in Soil Science and Plant Nutrition research and have developed techniques to recycle nutrients and reduce the excessive nutrients resulting from food production such as from waste products of swine, dairy, and beef cattle operations. We need, here in Hawaii, to better understand the genetic resources of plants from the tropics. All too often we are told how to manage our tropical lands, crops, plants, and soil by those on the mainland who have little if any experience with our resources. We need creative, original research to learn to characterize these resources and to identify the opportunities for win - win use of our tropical resources. Censoring research before it can bear fruit is like cutting down a tree because someone has hearsay that the tree is not good. Science needs to evaluate based on the true processes, the true reactions and the true behavior of natural resources, not hearsay. Management by hearsay was the legacy that we through off from the days of colonization by using the methods of science and logical thinking and analysis of the true behavior. Science is not at odds with the Hawaiian way of life and culture, in fact, we should be seeking ways to use science to enhance our understanding and appreciation of the Hawaiianness of our aina and of our plants, while deepening our respect for these wonderful gifts.

I urge you to not prejudge the valuable research that is needed to confront and manage the challenges that our current and future society faces here in Hawaii.

Thank you for considering this request.

In summary, I urge the committee not to pass SB 151. Thank you for this opportunity to testify.

--
Russell Yost
University of Hawaii'i at Manoa
Dep. Tropical Plant and Soil Sciences
3190 Maile Way
Honolulu, Hawaii'i
96822

Phone: 808-956-7066

LATE TESTIMONY

testimony

From: Pauahi Hookano [pauahi.hookano@gmail.com]
Sent: Wednesday, February 13, 2008 7:35 AM
To: testimony
Subject: sb 151 sd1

committee on water and land
 sen clayton hee, chair
 sen russell kokubun, vice chair

committee in ag and hawn affairs
 sen jill tokuda, chair
 sen kalani english, vice chair

strong opposition to sb 151

LATE TESTIMONY

1. Permanent Commission-

-----We do not support a permanent commission that would "enter into and enforce access and benefit sharing agreements related to proposed bioprospecting ventures" and to "establish procedures governing an access and benefit sharing agreement process".

-----SB 151 SD1 does not recommend policy to the legislature in the 5 areas as mandated by HCR 193 HD1 and we feel that it subsumes the legislative power and authority and transfers it to the new permanent commission and to DLNR.

-----We also do not feel comfortable with having the permanent commission serve as a clearinghouse mechanism especially if the Native Hawaiian members will be appointed by the Governor and will be a minority in this body.

2. Regulating Bioprospecting vs. Facilitating Bioprospecting-

-----It was never the purpose of the commission to facilitate researchers obtaining the States biodiversity and bio-resources. Native Hawaiians have always advocated for a process that regulates bioprospecting vs facilitating it and making it easier.

3. Establishing Ownership of Biological Resources-

-----we have always advocated for updating the definition of public lands to have the same meaning as used in section 171-2, including but not limited to, biological diversity or organisms, microbe or microbial genomes, genes, genetic material, or similar terms together found on the lands that have been given the status of public lands.

-----The State Supreme Court also recently ruled that the State cannot sell or transfer Ceded Land trusts assets because of outstanding native Hawaiian claims (OHA vs. Housing and Community Development Corp of Hawaii) January 31, 2008.

-----Native Hawaiians have and will always have an integral relationship with our biodiversity. It is a part of our genealogy and no one can take that away from us. We do not agree with any bill that will establish ownership of our biological resources to the State which will then allow the State to convey our resources away.

4. Definitions-

-----Many of these definitions suit the needs of the industry and researchers to obtain and sell bio-resources of the trust.

The Paoakalani Declaration provides the following internationally recognized definitions:

"Biogenetic materials: Biological and genetic resources, including plant material, animals,

microorganisms, cells and genes."

"Biological diversity (biodiversity): The total variety of life in all its forms. It includes many levels that range from the level of alleles to the biosphere. The major elements of biodiversity include alleles, genes, populations, species, ecosystems, landscapes and the ecological processes of which they are a part.";

"Free, prior and informed consent: Principle of fully informed consent after full disclosure and consultation. Full disclosure is of the full range of potential benefits and harms of the research, all relevant affiliations of the person(s) or organizations(s) seeking to undertake the research and all sponsors of the researcher(s)."

In previous bills we also supported the following recommendations regarding equitable benefit sharing and free prior and informed consent-

- Prior informed consent. Access to genetic resources or biological diversity from public lands shall be subject to the obtaining of prior informed consent:
 - o (1) From the general public, through the public comment process on affected lands by the department of land and natural resources; and
 - o (2) From native Hawaiians by the office of Hawaiian affairs after consultation with their beneficiaries.

The access to our biodiversity needs to include all beneficiaries and should be subject to prior and informed consent. This needs to be a collective decision on behalf of the State as well as native Hawaiians.

- Equitable benefit sharing. There shall be a system of fair and equitable sharing of benefits arising out of the use of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to those technologies. With regard to the system of equitable benefit sharing:
 - o (1) The department of land and natural resources shall consult with the general public through public hearings; and
 - o (2) The office of Hawaiian affairs shall consult with native Hawaiians.

--

Intellectual slavery masquerading as sophistication is the worst form of slavery. --Ngugi Wa Thiongo

aloha,
Pauahi



LATE TESTIMONY

Waikīkī Hawaiian Civic Club

President, Malia Nobrega
malianob@aol.com

E HUKI LIKE!

TESTIMONY IN OPPOSITION TO SB 151 SD1, RELATING TO BIOPROSPECTING

Submitted to the Water and Land Committee and the
Agriculture and Hawaiian Affairs Committee

Hearing Date: Wednesday, February 13, 2008

Time: 2:45 pm

Submitted by: Malia Nobrega, President, Waikiki Hawaiian Civic Club

Aloha. My name is Malia Nobrega and I'm here before you as the President of Waikīkī Hawaiian Civic Club and the Chair of the Association of Hawaiian Civic Clubs (AHCC) Bioprospecting Task Force.

History of Bioprospecting Legislation in Hawai'i

Let me share with you some of the history of the bioprospecting legislation here in Hawai'i since it is a direct result of the work that Waikiki HCC and the AHCC began in 2002.

2002: Waikiki HCC introduced and AHCC passed a resolution endorsing protection of native rights, interests in the biodiversity of Hawai'i;

2003: SB 643 Introduced. Establishes a moratorium on bioprospecting and a temporary bioprospecting advisory commission to address issues related to bioprospecting, including equitable benefit sharing; appropriates funds (SB 643 SD2) SB 643 died in committee.

SCR 55, HCR 196 Introduced. Requesting the establishment of a bioprospecting advisory commission to develop a comprehensive plan for the preservation and use of the biological diversity and biological resources of the Trust Lands; SCR 55 died in committee. HCR 196 died in committee.

2004: Various rights-holders and stakeholders gathered to discuss differences and tried to come up with an amended version that we could all agree on. SB 643 SD2 HD1 substantially reflected the agreement made among all parties; Bill died in conference.

SCR 167 Introduced and passed. Recognizing Native Hawaiians as traditional, indigenous knowledge holders and recognizing their collective intellectual property rights.

2005: Multiple bills introduced, including from the Sierra Club, restoring the moratorium and other language that was eliminated years ago. Multiple bills were also introduced to require a study on the issue.

HCR 146/HR 108 Introduced and passed. Requesting a Study on Bioprospecting. This resolution requested that the Legislative Reference Bureau (LRB) conduct a study of the multiple issues related to Bioprospecting and make recommendations to the Legislature regarding the development of public policy. LRB study available on their website.

2006: Once again multiple bills were introduced. HB3046 and SB2942. Creates temporary commission on biological diversity to assist in creating a regulatory framework to implement policies and make relevant recommendations to the legislature regarding access to genetic resources and biological diversity in Hawaii. Report to legislature. Appropriations. Repealed 6/30/2008. The purpose of this Act was to protect Hawaii's valuable biodiversity by

- o developing a public policy to regulate bioprospecting
- o to define biodiversity within the public land trust
- o to ensure that the rights of indigenous knowledge holders are protected, and
- o that benefits are shared fairly

Bills died in committee.

HCR 193 HD1 Introduced and passed. Requesting the Establishment of a Temporary Advisory Commission on Bioprospecting to make policy recommendations in 5 areas- Prior Informed Consent; Equitable Benefit Sharing; Biosafety protocols; A permitting and licensing process; Cultural Rights for the use of Hawaii's biodiversity;

2007: Governor completed appointments to the Temporary Advisory Commission; March 16, 2007 inaugural meeting of the commission; February 5, 2008 Commission issued a report.

Our Reasons For Opposition

1. Permanent Commission- In September 2007, we submitted a recommendation to the temporary commission that they should seek an extension of 1-2 years to give them the appropriate time needed to achieve their mandate as set forth by HCR 193 HD1. We do not support a permanent commission that would "enter into and enforce access and benefit sharing agreements related to proposed bioprospecting ventures" and to "establish procedures governing an access and benefit sharing agreement process".

SB 151 SD1 does not recommend policy to the legislature in the 5 areas as mandated and we feel that it subsumes the legislative power and authority and transfers it to the new permanent commission and to DLNR. Why would the legislature want to relinquish it's policy making authority and responsibility to a commission?

We also do not feel comfortable with having the permanent commission serve as a clearinghouse mechanism especially if the Native Hawaiian members will be appointed by the Governor and will be a minority in this body.

2. Regulating Bioprospecting vs. Facilitating Bioprospecting- SB 151 SD1, page 2 line 16 states that the “legislature finds that regulations governing prospecting would assist researchers in understanding the rules and the process ...making it easier for researchers... pursuing such a venture”. It was never the purpose of the commission to facilitate researchers obtaining the States biodiversity and bio-resources. Native Hawaiians have always advocated for a process that regulates bioprospecting vs facilitating it and making it easier.
3. Establishing Ownership of Biological Resources- SB 151 SD1, page 3 line 20 states that the purpose of the Act is to “establish ownership of biological resources”. Page 7 of this bill claims that all biodiversity “rests with the State” and leaves out that which is held in trust for the beneficiaries of the State- the general public and Native Hawaiians.

In our work here at the legislature over the last few years, in our presentation to the temporary commission, and in our community workshops we have always advocated for updating the definition of public lands to have the same meaning as used in section 171-2, including but not limited to, biological diversity or organisms, microbe or microbial genomes, genes, genetic material, or similar terms together found on the lands that have been given the status of public lands.

In addition, page 52 of the LRB report refers to legal opinion No. 03-3 dated April 11, 2003, the Attorney General opined that the State holds legal title to the biogenetic resources gathered from public lands.

The State Supreme Court also recently ruled that the State cannot sell or transfer Ceded Land trusts assets because of outstanding native Hawaiian claims (OHA vs. Housing and Community Development Corp of Hawaii) January 31, 2008.

Native Hawaiians have and will always have an integral relationship with our biodiversity. It is a part of our genealogy and no one can take that away from us. We do not agree with any bill that will establish ownership of our biological resources to the State which will then allow the State to convey our resources away.

4. Definitions- It is difficult for us to agree with most of the definitions contained in section 1 (pgs 4-6). We feel that many of these definitions suit the needs of the industry and researchers to obtain and sell bio-resources of the trust. The definitions in SB 151 SD1 ignore the findings and recommendations of the LRB report and do not address the problems discussed in the report.

For example, the LRB report examined the trust issues and set forth the legal basis of native Hawaiian rights and entitlements to biodiversity and bio-resources. The LRB also looked at the issue of competing demands for biodiversity and how the public, native Hawaiians and the State could share benefits from biodiversity research. This is the context of the LRB report.

SB 151 SD1 redefines these concepts and focuses on the State DLNR providing access to researchers and corporations for our biodiversity.

- Benefit sharing is redefined as the right of DLNR and researchers who provide materials in material transfer agreements to corporations and others.
- Free prior informed consent in SB 151 SD1 means administrative procedures for the state agency to grant access to our trust genetic resources on “defined” terms that are not defined in the measure. These are not the definitions of these critical terms.

The Paoakalani Declaration provides the following internationally recognized definitions:

“Biogenetic materials: Biological and genetic resources, including plant material, animals, microorganisms, cells and genes.”

“Biological diversity (biodiversity): The total variety of life in all its forms. It includes many levels that range from the level of alleles to the biosphere. The major elements of biodiversity include alleles, genes, populations, species, ecosystems, landscapes and the ecological processes of which they are a part.”;

“Free, prior and informed consent: Principle of fully informed consent after full disclosure and consultation. Full disclosure is of the full range of potential benefits and harms of the research, all relevant affiliations of the person(s) or organizations(s) seeking to undertake the research and all sponsors of the researcher(s).”

In previous bills we also supported the following recommendations regarding equitable benefit sharing and free prior and informed consent-

- Prior informed consent. Access to genetic resources or biological diversity from public lands shall be subject to the obtaining of prior informed consent:
 - (1) From the general public, through the public comment process on affected islands by the department of land and natural resources; and
 - (2) From native Hawaiians by the office of Hawaiian affairs after consultation with their beneficiaries.

The access to our biodiversity needs to include all beneficiaries and should be subject to prior and informed consent. This needs to be a collective decision on behalf of the State as well as native Hawaiians.

- Equitable benefit sharing. There shall be a system of fair and equitable sharing of benefits arising out of the use of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to those technologies. With regard to the system of equitable benefit sharing:
 - (1) The department of land and natural resources shall consult with the general public through public hearings; and
 - (2) The office of Hawaiian affairs shall consult with native Hawaiians.

Hawai`i's Biodiversity

Hawai`i's most valuable resource is our biodiversity. Of more than 22,000 known species that inhabit our islands, 8,850 are found nowhere else in the world. Rather than selling the exclusive rights to our natural resources, we should be using our unique biodiversity to our benefit in a

sustainable manner. Within our biodiversity, researchers are interested in everything from microorganisms that grow in deep sea vents of Lo`ihi to the medicinal properties in plants and animals that can only be found in the ahupua`a of Waipa on the island of Kaua`i or in the North Western Hawaiian Islands. This makes Hawai`i a prime spot for bioprospecting.

As a Native Hawaiian organization we recognize that the State of Hawai`i is in crucial need of bioprospecting legislation to regulate the research and industry and more importantly ensure protection of Native Hawaiian rights, as well as the rights and interests of the general public and the State.

We need sound policies in place to regulate bioprospecting and we don't feel that SB 151 SD1 does that. Therefore, we oppose SB 151 SD1.

Testimony on SB 151

LATE TESTIMONY

COMMITTEE ON WATER AND LAND

Senator Clayton Hee, Chair

Senator Russell S. Kokubun, Vice Chair

COMMITTEE ON AGRICULTURE AND HAWAIIAN AFFAIRS

Senator Jill N. Tokuda, Chair

Senator J. Kalani English, Vice Chair

Wednesday February 13, 2008

Opposition to SB 151 RELATING TO BIOPROSPECTING.

Dear Members of the Committee:

COMMITTEE ON WATER AND LAND

Senator Clayton Hee, Chair

Senator Russell S. Kokubun, Vice Chair

COMMITTEE ON AGRICULTURE AND HAWAIIAN AFFAIRS

Senator Jill N. Tokuda, Chair

Senator J. Kalani English, Vice Chair

Wednesday February 13, 2008

Opposition to SB 151 RELATING TO BIOPROSPECTING.

Dear Members of the Committee:

My name is Allen Allison and I am the Vice President for Science at Bishop Museum. I am, however, providing this testimony as a private citizen. I am currently in Australia on a business trip and apologize for not being able to present this testimony in person.

I am against SB151. This proposed legislation - which seems to have been developed without much input from scientists - is of great concern to the scientific community. It proposes a potentially large and costly bureaucracy to regulate a problem that essentially doesn't exist and would greatly constrain scientific activity in Hawaii. It also raises troubling constitutional issues over ownership of biodiversity and the public trust responsibilities of government agencies.

At a recent legislative hearing a member of the Temporary Commission on Bioprospecting reported that during the past few years there had only been only about ten or so studies identified as bioprospecting (presumably using the conventional definition of bioprospecting such as that in the Legislative Reference Bureau report by Peter Pan), that all these were at the University of Hawaii, and that none was being pursued for economic gain. So where exactly is the activity that needs to be regulated?

The premise that there is a fortune in bioprospecting is patently false. An example from Costa Rica may be appropriate. In 1991 the nascent Costa Rican Asociacion Instituto Nacional de Biodiversidad (INBio) with great fanfare signed a contract with Merck Pharmaceuticals to screen Costa Rican biodiversity for useful compounds. This set off squabbling between government agencies, other museums, etc. over benefit sharing. However, Merck eventually concluded that the exercise had been a waste of money and did not extend the contract. This has been the case elsewhere. Most pharmaceuticals are being developed through chemical manipulation of existing compounds.

SB151 expands the definition of biodiversity to include practically any research-related use of biodiversity in Hawaii. At the Bishop Museum we conduct numerous field surveys and often collect specimens to document the distribution of plants and animals and for taxonomic study. Under the definition in SB151 this would be bioprospecting. That is silly. We also loan specimens in our collections to researchers elsewhere for taxonomic and other scientific studies. Under SB151 we would presumably need to obtain a permit and to specially track each loan. This would cost us precious time and money and serve no useful public purpose.

I might also point out that Bishop Museum was designated as the Hawaii Biological Survey by state legislation in 1992. Under that legislation we have developed complete checklists of plants and animals - native and non-native - occurring in Hawaii and have made that information available on-line (<http://hbs.bishopmuseum.org/>). As a result of this work, Hawaii is the only state that has a complete inventory of its biodiversity. This information is proving crucial to efforts to identify and eradicate alien species and to understand, manage and protect native species.

In addition, we produced the definitive handbooks to the native and non-native plants and have produced similar treatments for many of the animal groups. Our scientists are internationally-recognized authorities on the biodiversity of Hawaii. There is no acknowledgement of any of this in the legislation and worse, the proposed legislation would do much to impair and constrain our great work.

It may be useful to also mention that when the Natural Areas Reserve System (NARS) deals with issues of potential concern to Native Hawaiians, it consults with OHA in deciding how best to respond. I believe other branches of DLNR employ a similar approach. This seems to be working fine and a similar approach could be expanded to deal with real bioprospecting ("searching for, collecting, and deriving genetic material from samples of biodiversity that can be used in commercialized pharmaceutical, agricultural, industrial, or chemical processing end products [Peter Pan report]).

I do, however, remain convinced that with broader public input, especially from the scientific community, and with proper legal guidance it may be possible to craft legislation that addresses important public trust issues relating to bioprospecting.

<c:\documents and settings\allison\application data\qualcomm\eudora\attach\Testimony on SB 151.doc>

I urge the committee not to pass SB 151. Thank you for this opportunity to testify.

With Aloha,

Allen Allison
2460 Halekoa Drive
Honolulu, Hawaii 96821

testimony

From: Roger Lukas [rlukas@hawaii.edu]
Sent: Tuesday, February 12, 2008 11:27 PM
To: testimony
Cc: rlukas@hawaii.edu
Subject: Testimony on S.B. 151

LATE TESTIMONY

Please forward to the Senate Committees on Water and Land and on Agriculture and Hawaiian Affairs for their joint hearing at 2:45 pm on February 13th.

COMMITTEE ON WATER AND LAND

Senator Clayton Hee, Chair

Senator Russell S. Kokubun, Vice Chair

COMMITTEE ON AGRICULTURE AND HAWAIIAN AFFAIRS

Senator Jill N. Tokuda, Chair

Senator J. Kalani English, Vice Chair

Wednesday February 13, 2008

Opposition to SB 151 RELATING TO BIOPROSPECTING.

Dear Members of the Committees:

I am Roger Lukas, a professor in the Department of Oceanography at the University of Hawaii at Manoa. I regret that I could not attend the hearing today, but my professional obligations to the University preclude my appearance.

I have been an oceanographer since 1981. In addition to my own ocean and climate research, I have been broadly involved with defining and coordinating basic and applied scientific research through a variety of national and international organizations, including numerous committees of the National Academy of Sciences. Most recently, I served on a committee that reviewed the draft Ocean Research Priorities Plan, written by the multi-agency federal Joint Subcommittee on Ocean Science and Technology. This document, now final, guides federal actions concerning basic and applied research as it applies to the Nation's coastal oceans, including their ecosystems and related issues of human health.

2/13/2008

I have carefully analyzed S.B. 151, S.D. 1., and believe that it is seriously flawed. As written, it will put substantial barriers in the way of conducting basic and applied research in the State of Hawaii, some of which is vital to the broad interests of the State.

There are several terms and phrases that are essential to the bill, and which are not adequately defined. It is not clear who will decide the operative definitions. I am very concerned that the debate over these definitions will delay some of the important research that would otherwise go forward. The terms that I have identified in my reading of the bill are "biological materials" (p. 4), "genetic materials" (p. 4), "harvest" (p.5), "derivatives" (p. 5), and "discovery" (pp. 14 & 15). I particularly note that scientists themselves often cannot agree on what constitutes a scientific discovery. I am very concerned that, given the variety of stakeholder perspectives, that the definition of discovery in the context of this bill will be very difficult. How are the "knowledge, innovations, traditional and customary practices of Hawaiians and other peoples" to be defined in the context of the proposed legislation? The process for defining this body of knowledge and practice is left unspecified. Further, what constitutes an "infringement" on this body of knowledge and practice?

While the issues surrounding "bioprospecting" may seem pressing, the successful conduct of basic and applied research activities is equally pressing, and important for the State's economy and the health and welfare of its citizens. Many UH researchers are already challenged with unreasonably short periods, and inadequate facilities, in which to conduct funded research before the federal funds lapse. The bill as it currently reads, requires what is sure to be a lengthy process of consultation to determine that the research involving "biological or genetic materials" is "academic or scientific research that does not infringe on the knowledge, innovations, traditional or customary practices of Hawaiians." The permit applicant (p. 14) will be required to "meet with all parties in the community who are interested in the project and attempt to arrive at an agreement that will allow the project to proceed."

Imagine that the Ala Wai sewage spill of 2005 had occurred after the passage of S.B. 151. Would the University of Hawaii researchers who took samples of deadly microorganisms from the affected areas be subject to the permitting process as outlined in the bill? My reading of the bill says that they would indeed have to go through the lengthy process of obtaining a bioprospecting permit. At a time when the State Department of Health needed the expertise of University researchers to safeguard the health of Hawaii's residents and visitors, would we want a delay of even one day, let alone one week, or more likely, several weeks?

In summary, I urge the Committees not to pass S.B. 151. I believe that it will have a strong negative impact on the ability of the University of Hawaii to conduct basic and applied research that is of vital interest to the citizens of Hawaii.

Thank you for this opportunity to provide testimony.

Sincerely,

Roger Lukas

2/13/2008

testimony

From: Robert Cowie [cowie@hawaii.edu]
Sent: Wednesday, February 13, 2008 9:43 AM
To: testimony
Subject: Opposing SB 151, Relating to Bioprospecting

SENATOR CLAYTON HEE, CHAIR
COMMITTEE ON WATER AND LAND

SENATOR JILL TOKUDA, CHAIR
COMMITTEE ON AGRICULTURE AND HAWAIIAN AFFAIRS

LATE TESTIMONY

From: Robert H. Cowie, Ph.D.

Wednesday, February 13, 2008, 2:45 pm, conference room 414

Opposing SB 151, Relating to Bioprospecting

I am a University of Hawaii research professor in the Center for Conservation Research and Training. I am the Chair of the graduate program in Ecology, Evolution and Conservation Biology (EECB), which has 65 faculty and approximately 120 graduate students. For over 11 years before moving to the University in 2001, I worked as a research biologist at the Bishop Museum, one of whose major efforts is in the conservation of Hawaii's biodiversity. This testimony is my own personal testimony and does not necessarily reflect the views of the University of Hawaii, the Center for Conservation Research and Training, the Ecology, Evolution and Conservation Biology program, or the Bishop Museum.

I oppose SB No. 151, Relating to Bioprospecting.

Both I and most of the EECB faculty and graduate students undertake research on various aspects of Hawaii's unparalleled and marvelous biodiversity, much of which is seriously threatened if not already extinct as a result of human activities. Most, if not all, of the EECB faculty and students are committed to developing a profound understanding of Hawaiian biodiversity, and especially are strongly committed to its conservation.

"Bioprospecting", in the professional biological world is taken to mean the screening of organisms for compounds or other attributes beneficial to people and that may be commercialized. In this restricted sense, I would welcome careful oversight of bioprospecting in Hawaii.

However, this bill goes far beyond that and if passed would have numerous consequences that would seriously hamper if not cripple the academic research that is necessary for, indeed that should be the underpinning of conservation in Hawaii.

Among these consequences are the potential loss of huge revenues to the state. Grants from the National Institutes of Health and the National Science Foundation to the University of Hawaii, annually about \$60 million, would be in jeopardy as they require open sharing of information. \$60 million in grants translates into over \$200 million in total impact to the local economy.

Also, Museums, which are the repositories of the specimens on which most biodiversity research is based, and which serve the community by making those specimens available globally for research in perpetuity, would no longer be able to do so. They would likely refuse to accept specimens documenting Hawaiian biodiversity because they would be constrained from fulfilling their missions relating to the conservation and understanding of biodiversity.

Furthermore, the process involved in permitting, will become so lengthy and uncertain that in instances in which speed is of the essence, for instance the recent collecting wili wili seeds to preserve this iconic native Hawaiian tree species in the face of the sudden and rapid spread of an invasive species of wasp, would not have been possible, increasing the likelihood of its extinction. In general, the inability to react quickly to the introduction of an invasive species that has potentially serious impacts could do great harm to Hawaii's native biodiversity.

These are just some of the many negative consequences this bill could have on research and other activities that aim to understand and conserve Hawaii's wonderful native biodiversity. In fact this bill could cause serious harm to our biodiversity.

Therefore, while I am strongly committed to the conservation of Hawaiian biodiversity, I nevertheless am strongly opposed to this bill.

Thank you for the opportunity to submit testimony.

testimony

From: Paul K Luke [paulluke@hawaii.edu]
nt: Wednesday, February 13, 2008 10:08 AM
o: testimony
Subject: SB 151 SD1

LATE TESTIMONY

SB 151 SD1

Hearing date February 13, 2008

time:2:45

Committee On Water and land

Committee On Agricululure and Hawaiian Affarirs Testimony I just recieved email about this hearing so this is a short testimony, but I did want to say that I as a Native Hawaiian oppose this bill becasue I oppose the ownership and the selling of this land and all that comes from it. This land is not just material to be experimented on and sold but it's our ancestors, our mana. We are the caretakers/guardians/relatives of this 'aina, through our geneology. Therefore noone can own the land. The table needs to be open for everyone to discuss this not just the state or anyone else "on behalf of Native Hawaiians". That is all, again I have more to say but due to time constraints I wanted to at least give a brief opposition towards this bill.

Koa Luke

LATE TESTIMONY

February 13, 2008

LATE TESTIMONY

TO: 1. COMMITTEE ON WATER AND LAND

Senator Clayton Hee, Chair
Senator Russell S. Kokubun, Vice Chair

2. COMMITTEE ON AGRICULTURE AND HAWAIIAN AFFAIRS

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

FROM: Roger Fujioka, Ph.D.

Research Professor, Water Resources Research Center
Principal Investigator, Pacific Research Center for Marine Biomedicine

SUBJECT: Opposition to SB 151 RELATING TO BIOPROSPECTING.

I have been a faculty researcher and professor at the University of Hawaii since 1972. My research has been on determining the microbial quality of all sources of water in Hawaii. These include groundwater for drinking, lakes, streams and coastal waters for recreation, as well as non-point sources of land-based pollution such as storm drains, aquaculture facilities and the Ala Wai Canal. I am currently funded by two major federal agencies (National Science Foundation, National Institute of Environmental Health Services) to determine the pollution level of microorganisms and pathogens in coastal waters, which can cause infection and disease among people who use these waters. To address this problem of water pollution, we analyze water, seaweed, fish, sediments, sand, mollusks, crabs, marine planktons, and coral mucus.

I only learned about the proposed, Bioprospecting Bill (Senate Bill 151) on Monday and learned this morning that a hearing on this bill will take place this afternoon. I read the proposed bill and agree that the rationale for this bill is good because it will protect the aquatic resources in Hawaii. However, the proposed language in the bill is vague and can be applied to impede research, which is being conducted for the good of Hawaii and where there is no intent to exploit marine organisms. It is my understanding that scientists who are conducting research in Hawaii's coastal waters were not part of the Hawaii State Advisory Commission on Bioprospecting, who recently completed a final report entitled, "Report of the Hawaii State Advisory Commission on Bioprospecting". As a result, I recommend that the committees not pass SB 151 as written. I urge the committees to require more discussions and to provide time and input from research scientists who, have projects that involve Hawaii's coastal waters.

February 13, 2008

LATE TESTIMONY

TO: 1. COMMITTEE ON WATER AND LAND

Senator Clayton Hee, Chair
Senator Russell S. Kokubun, Vice Chair

2. COMMITTEE ON AGRICULTURE AND HAWAIIAN AFFAIRS

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



FROM: Grieg Steward, Ph.D.

Assistant Professor, Department of Oceanography
Investigator, Pacific Research Center for Marine Biomedicine
Investigator, Center for Microbial Oceanography Research and Education

SUBJECT: Opposition to SB 151 RELATING TO BIOPROSPECTING.

I have been a faculty member at the University of Hawaii since 2002. My research focuses on the microbiology of the coastal and open ocean. One major goal of my research is to understand how the community of microorganisms that live in the sea carries out all the important functions that keep the oceans healthy and productive and make our planet habitable. Another goal of my research is to understand the ecology of human pathogenic bacteria in coastal waters so that we can better mitigate the risks of infection that can result from seawater exposure.

I learned about the proposed, Bioprospecting Bill (Senate Bill 151) only recently and just yesterday learned that a hearing on this bill will take place this afternoon. I am unable to attend the hearing in person to provide testimony so I am writing to provide my perspective on the bill, which I have now read. I understand and support the rationale for the bill, but I fear that the proposed language in the bill is too vague, and the scope so broad, that here is a very great danger of creating a bureaucratic nightmare that will unnecessarily impede research that is beneficial to the people of Hawaii while failing to secure the intended benefits. I recommend that the committees not pass SB 151 as written. I urge the committees to solicit more substantive input from the very large community of scientists in Hawaii that conduct biological research on an incredibly diverse array of topics, all of whom will be affected by this bill, and very few of whom should be properly considered to be involved in bioprospecting.

SB 151, Proposed SD 1, RELATING TO BIOPROSPECTING
Senate Committees on Water and Land,
and Agriculture and Hawaiian Affairs

February 13, 2008
Room: 224

2:45 p.m.

Aloha, Chair Hee, Chair Tokuda, and members of the Committees. My name is Rowena Akana, and I am an at-large Trustee of the Office of Hawaiian Affairs.

I am writing to SUPPORT, with amendments, SB 151, Proposed SD 1, which would create a permanent Bioprospecting Advisory Commission and appropriate funds to allow the Commission to fulfill its mandate.

Hawai'i also is one of the richest places in biodiversity in the world. Its biological and genetic resources are the common heritage of Native Hawaiians, whose culture depends on these resources and has developed, and continues to develop, the use of these resources since before Hawai'i's recorded history.

While I support the provisions that will establish ownership of biological resources, define Bioprospecting, and establish a permanently funded commission on prospecting; I do not agree with housing the commission in the Department of Land and Natural Resources. Given the importance of the issues that the commission will be dealing with, I would like to suggest that it be placed directly under the governor.

Therefore, I urge the Committees to PASS SB 151, Proposed SD 1, with the above amendment. Thank you for the opportunity to testify.

COMMITTEE ON WATER AND LAND

Senator Clayton Hee, Chair

Senator Russell S. Kokubun, Vice Chair

COMMITTEE ON AGRICULTURE AND HAWAIIAN AFFAIRS

Senator Jill N. Tokuda, Chair

Senator J. Kalani English, Vice Chair

Wednesday, 13 February 2008

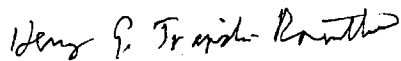
Regarding: SB 151 RELATING TO BIOPROSPECTING.

Dear Members of the Committee:

I am a scientist at the University of Hawai'i who is engaged in the study of the biological diversity of our state's marine environment. I applaud the legislature's intent to craft a bill that acknowledges the state's obligation to "...ensure the preservation and sustainable use and equitable sharing of Hawaii's biological resources." However, I do not feel that S.B. No. 151, as currently drafted, will provide adequate means of fulfilling that obligation. The structure of the proposed temporary bioprospecting advisory committee appears to me to be too unwieldy to accomplish the functions that are assigned to it. I urge your Committees to insist upon a bill that will better enable the state to achieve an understanding of the biodiversity over which it has jurisdiction.

Thank you very much for your work on this important subject.

Sincerely Yours,



Henry Trapido-Rosenthal, Ph.D.
Center for Marine Microbial Ecology and Diversity, and
Pacific Research Center for Marine Biomedicine
University of Hawai'i
1680 Ease-West Road
Honolulu, HI 96822
(808) 956-9418 phone
(808) 956-5308 fax
email address: rosenthl@hawaii.edu

LATE TESTIMONY



testimony

From: David Lorence [dlorenc@ntbg.org]
Sent: Wednesday, February 13, 2008 1:22 PM
To: testimony
Subject: SB 151

COMMITTEE ON WATER AND LAND

Senator Clayton Hee, Chair

Senator Russell S. Kokubun, Vice Chair

LATE TESTIMONY

COMMITTEE ON AGRICULTURE AND HAWAIIAN AFFAIRS

Senator Jill N. Tokuda, Chair

Senator J. Kalani English, Vice Chair

Wednesday February 13, 2008

Opposition to SB 151 RELATING TO BIOPROSPECTING.

Dear Members of the Committee:

My name is ~~David Lorence~~ and I am a researcher in systematic botany and plant taxonomy that has resided in Hawaii and studied the Hawaiian flora for 21 years. Virtually all of my research is based on herbarium specimens and living plant collections, without which it would not have been possible for me to name, describe and publish a considerable number of new Hawaiian plant species.

I believe the bill, as it is currently written, will adversely impact biological research in the Hawaiian Islands for a number of reasons:

1. All biological research would be considered bioprospecting. The basis for determining this is not clearly stated.
2. The permanent panel that would review "bioprospecting" has no scientist on the "review panel".
3. All research will be reviewed to see that it "does not infringe on the knowledge, innovations, traditional or cultural practices of Hawaiians".
4. If research is determined to be bioprospecting then the applicant must meet with all parties in the community who are interested in the application and when the commission has determined that all parties have signed onto a benefit sharing and access agreement, the commission will allow the

application to proceed. This will greatly impede bona fide researchers.

5. Our institutional herbarium has ongoing exchange programs with other museums and herbaria on state, national, and international levels. We currently comply with all state, federal, and international laws and regulations. The bill would require that international organizations or museums refer all requests for transfer of specimens acquired under the act to the commission for approval. The bill would add an unnecessary layer of complexity and administrative burden onto a system that already works perfectly well.

6. A permittee will have to periodically report the use and location of samples acquired under the act. This would prove to be complicated with duplicate specimens that have been sent on exchange to other institutions and also increase the administrative burden of our research and academic institutions which are already understaffed and underfunded.

7. This bill fails to explain how it will protect proprietary information while sharing it widely with an outside community. This is an invitation to litigation.

8. The bill would probably interfere with guidelines on informed consent by institutions such as the NIH, as Institutional Review Boards act at the individual, anonymous level, while Hawaiian decision making is typically public and communal and we will also have the State Sunshine Laws at work. NIH has a very low tolerance of violations of informed consent guidelines.

9. Most federal agencies require grantees to make their genetic data freely accessible within a reasonable time. If Hawaii researchers can't do this, OMB has made it clear the U.S. is not getting its money's worth and the agencies will have to defend further funding to researchers in Hawaii. Without funding from these agencies, critical research will not take place.

In conclusion, I believe the proposed bill SB 151 will have profound negative implications for the biological sciences and conservation in Hawaii and for Hawaii's reputation in the world. It will add a heavy burden on Hawaii's research and academic institutions and be difficult to enforce. For these reasons I urge the committee not to pass SB 151. Thank you for this opportunity to testify.

David H. Lorence, Ph.D.
Director of Science
National Tropical Botanical Garden
3530 Papalina Road
Kalaheo, HI 96741 USA

phone: 808-332-7324 ext. 223

fax: 808-332-9765

email: lorence@ntbg.org

The mission of the National Tropical Botanical Garden is to enrich life through discovery, scientific research, conservation, and education by perpetuating the survival of plants, ecosystems, and cultural knowledge of tropical regions.



Senate Bill 151: RELATING BIOPROSPECTING

DATE: February 13, 2008
2:45 PM, Conference Room 414

TO: Senate Committee on Water and Land
The Honorable Clayton Hee, Chair
The Honorable Russell Kokubun, Vice Chair

LIVE TESTIMONY

Senate Committee on Agriculture and Hawaiian Affairs
The Honorable Jill Tokuda, Chair
The Honorable J. Kalani English, Vice Chair

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

RE: Testimony in support of the purpose and intent of SB151.

The Hawaii Science & Technology Council supports the purpose and intent of SB151SD1. As a member of the Hawai'i State Temporary Advisory Commission on Bioprospecting (ACB), the Hawaii Science & Technology Council recognizes not only the complexity of the bioprospecting issue, but also the broad range of perspectives of the various stakeholders who participated in the commission's work.

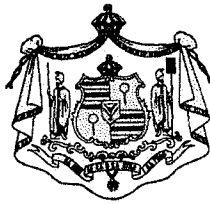
The recently released report from the ACB is the culmination of 5 years of legislative effort. As a result of that effort, we believe that the recommendations of that report, some of which are addressed in this bill, are only a starting point in directing public policy on this topic. More work is needed to develop policy that will balance any development and commercialization of Hawaii's biodiversity with scientific research and conservation efforts.

HiSciTech applauds the legislature's foresight in addressing this issue and beginning to form a legal framework whereby science and industry can access Hawaii's biodiversity for research and development purposes while addressing the public land trust obligations of the state. Thank you for the opportunity to testify.

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



Association of Hawaiian Civic Clubs
P. O. Box 1135
Honolulu, Hawai`i 96807

WIFE TESTIMONY

TESTIMONY OF LEIMOMI KHAN, PRESIDENT
IN OPPOSITION OF

S.B. 151, PROPOSED S.D. 1 - RELATING TO BIOPROSPECTING

**SENATE COMMITTEES ON WATER AND LAND; AGRICULTURE AND
HAWAIIAN AFFAIRS**

Hearing date and time: Wednesday, February 13, 2008

February 13, 2008

Aloha Chairs Hee and Tokuda, Vice-Chairs Kokubun and English, and Members of the Committees.

The Association is a growing national confederation of fifty-three Hawaiian Civic Clubs, located throughout the State of Hawai`i and in the States of Alaska, California, Colorado, Illinois, Nevada, Utah, Virginia and Washington State. It initiates and works to support actions that enhance the civic, economic, educational, health and social welfare of our communities, and in particular, the culture and welfare of the Native Hawaiian community.

Thank you for this opportunity to testify in opposition to Senate Bill 151, Proposed Senate Draft 1.

Before proceeding any further, I would like to acknowledge the Chair of the Bioprospecting Committee for the Association of Hawaiian Civic Clubs and the Waikiki Hawaiian Civic Club, whose members have been responsible for spearheading education and advocacy efforts on this issue within our membership for the past six years. Largely through these efforts, the Association passed Resolution 2002-08 on November 16, 2002, "Urging the State of Hawai`i to Place a Moratorium on All Bioprospecting Expeditions Currently Being Undertaken on Public Lands, Submerged Lands, and Natural Resources Under State Jurisdiction Until Such Time as an Appropriate Legislation Can Be Enacted".

In 2003, Association delegates passed related follow-up measures, Resolution 2003-13, "Urging the Legislature of the State of Hawai`i to Enact Legislation, in Consultation with Native Hawaiians; That Recognizes and Protects the Native Hawaiian Peoples' Collective Intellectual Property Rights" and Resolution 2003-38, "Urging Protection of Native Hawaiian Intellectual Property Rights".

In 2005, they passed Resolution 2005-23, "Urging the Hawai'i State Legislature to Enact Legislation to Protect Hawai'i's Flora and Fauna".

In addition to the foregoing, delegates passed several Resolutions that addressed related issues, including issues concerning patenting and licensing of Hawaiian genetic material; issues concerning education on genetics and the ethical issues surrounding genetic studies; and issues concerning labeling of products containing GMO substances.

As a result of these initiatives and many years of effort at the legislature, this legislature passed House Concurrent Resolution 193, House Draft 1 in 2006. That measure, a precursor to the one under consideration, established a temporary advisory commission on bioprospecting.

In 2007, Senate Bill 151 was introduced. This year, the legislature has substituted Senate Bill 151, Proposed Senate Draft 1. The Association has the following concerns with substitute Senate Bill 151, Senate Draft 1.

1. We have the overall impression that the good purposes of our early efforts and prior legislation have been co-opted and subverted by Senate Draft 1 in favor of researchers and commercial exploitation.
2. For example, the term "bioprospecting" in the original Senate Bill 151 means, "the collection, removal, or use of biological and genetic resources of any organism, mineral, or other organic substance found within the public lands of the State and the state marine waters for scientific research or commercial development.

Proposed Senate Draft 1 changes and undermines the purpose and intent of prior legislation by excepting "biological samples that are part of usual practices in crop cultivation, animal husbandry, and aquaculture" and "biological resources for any commercial or related noncommercial activity [emphasis added] such as fishing for commerce or recreation, collecting broodstock for, and harvesting of trees, plants, and flowers. The exceptions are unwarranted and overbroad. For example, current GMO experimentation begs the question as to what is meant by "usual practices in crop cultivation". It is precisely because of these exploitive commercial practices that Native Hawaiians have sought protections. Commercial exploitation is a major concern; yet the use of biological resources for any commercial or related noncommercial activity is specifically excepted from the definition of "bioprospecting" in Senate Draft 1. This is unacceptable.

We are also concerned that other terms in the definitions section do not comport with current international scientific practices and standards.

3. We are apprehensive of the "two-track" permitting system described in Section 6, administrative rules, which provides for fast-tracking certain applications. We feel one standard permitting process should be employed. The two-track system is reminiscent of what is occurring with burials found on lands being developed. Under the current "two-track" system administered by DLNR's Historic Preservation Division, no matter how egregious the circumstances, no matter how

many burials have been uncovered, large commercial developers are able to “fast track” burials disposition, resulting in the disinterment of mass gravesites. The Association strongly opposes this proposed fast-tracking permitting scheme. The commission should be left to promulgate appropriate permitting rules with public consultation pursuant to Chapter 91.

4. We agree with the Office of Hawaiian Affairs’ concern that this bill lumps together protections of the knowledge, innovations, and traditional and customary practices of “other peoples” with that of “Hawaiians”. We agree this is insulting and object to the inclusion of “other peoples” in sections clearly intended to apply to indigenous Hawaiians, their indigenous knowledge, their innovations, and their traditional and customary practices.

The Association acknowledges the work of the Temporary Bioprospecting Commission and supports its continuance for another two years to allow them to carry out their mandate with staff and funding, to include community meetings on proposed legislation; or the establishment of a permanent Commission via this Bill, but whose responsibilities will be initially limited to serving in an advisory capacity to the legislature, accomplishing the tasks envisioned by HCR 193 HD1. Until the issues expressed by our organization and others are resolved, it would be premature to place authority to “enter into and enforce access and benefit sharing agreements” in the hands of any department or commission.

Thank you for this opportunity to testify.

**LATE
TESTIMONY
SB 151 SD 1
(END)**