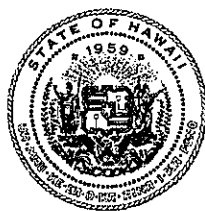
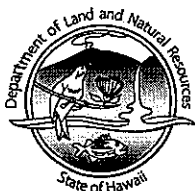


# SB3028

Establishes penalties for the destruction or harvesting of native sandalwood trees. Requires replanting for trees harvested. Bans the export of raw or unprocessed sandalwood timber. Establishes DLNR policies regarding sandalwood.

NEIL ABERCROMBIE  
GOVERNOR OF HAWAII



**STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES**

POST OFFICE BOX 621  
HONOLULU, HAWAII 96809

**Testimony of  
WILLIAM J. AILA, JR.  
Chairperson**

**Before the Senate Committees on  
WATER, LAND, AND HOUSING  
&  
JUDICIARY AND LABOR**

**Wednesday, February 15, 2012  
10:00 AM  
State Capitol, Conference Room 16**

**In consideration of  
SENATE BILL 3028  
RELATING TO CONSERVATION AND RESOURCES.**

Senate Bill 3028 proposes to establish penalties for the destruction or harvesting of native sandalwood trees; requires replanting for trees harvested; bans the export of raw or unprocessed sandalwood timber; and establishes the Department of Land and Natural Resources (Department) policies regarding sandalwood. The Department supports this measure, but requests that Senate Bill 3028 be amended to include other native forest resource that may in the future be similarly in need of conservation, in addition to sandalwood.

Over the past 200 years, there has been a steady decline of all native sandalwood species (*Santalum*) in Hawaii. The decline can be attributed to the harvesting of *Santalum* species for the high international demand for the sweet-smelling qualities of the wood, as well as impact by non-native mammals, insects, and diseases that limit regeneration and growth of the existing trees. While protection of *Santalum* is afforded on state lands and within the state conservation district, there is no regulation or oversight on the harvest, sale or destruction of *Santalum* on privately owned or managed lands outside of the conservation district zone

The Department agrees that additional protection is needed through regulatory controls. Rather than deal with regulating commercial exploitation on a case-by-case basis, the Department recommends the expansion of this measure to apply to native forest resources in general that may at some point be subject to a similar decline as *Santalum*. The Department feels that the regulation of the commercial harvest of sandalwood is the appropriate level of regulation at this time. Should the species need further protection in the future, the Department has the authority under Chapter 195D, Hawaii Revised Statutes - Conservation of Aquatic Life, Wildlife, and Land Plants to implement a more restrictive level of protection for the species.

WILLIAM J. AILA, JR.  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT

GUY H. KAULUKUKUI  
FIRST DEPUTY

WILLIAM M. TAM  
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
BUREAU OF CONVEYANCES  
COMMISSION ON WATER RESOURCE MANAGEMENT  
CONSERVATION AND COASTAL LANDS  
CONSERVATION AND RESOURCES ENFORCEMENT  
ENGINEERING  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

The Department offers the following amendments to Senate Bill 3028.

**Department of Land and Natural Resources Proposed Senate Draft1 for Senate Bill 3028**

1. Add new Part to Chapter 183.

**PART V**

**FOREST RESOURCES IN NEED OF CONSERVATION**

**§183-A Native forest resources deemed in need of conservation; duties.** In addition to duties listed in section 183-1.5, the department shall:

- (1) Support reforestation efforts throughout the state for all native forest resources deemed in need of conservation.
- (2) Support the sustainable management and use of native forest resources throughout the State;
- (3) Identify and protect native forest resources deemed in need of conservation for sustainable management and conservation of those species and ecosystems;
- (4) Establish rules for designating forest resources in need of conservation and establish rules regarding the issuance of permits for commercial harvest of forest resources deemed in need of conservation;
- (5) Provide incentives to local entrepreneurs to cultivate native species, especially those deemed in need of conservation, for reforestation programs or sustainable commercial operations; and
- (6) Provide support for programs that ensure the sustainability of commercial operations for forest resources deemed in need of conservation in the State.

**§183-B Harvesting of native forest resources deemed in need of conservation.** (a) All commercial harvesting of native forest resources deemed in need of conservation on all lands shall be done in accordance with a harvest permit approved by the board, and in accordance with the provisions regarding conservation of aquatic life, wildlife, and land plants; and the provisions regarding environmental compliance.

(b) It shall be unlawful to harm, destroy or harvest any material of a forest resource, living or dead, deemed in need of conservation for commercial purposes without a harvest permit issued by the board.

(c) It shall be unlawful to export any material of forest resource, living or dead, outside of the State for commercial purposes except as granted under a harvest permit issued by the board.

(d) Native Hawaiian sandalwood, including all six *Santalum* species endemic to Hawaii, are hereby deemed forest resources in need of conservation.

(d) The department shall adopt rules pursuant to chapter 91 to effectuate the purposes of this section.

**§183-C Permits.** (a) Subject to chapter 91, the department shall adopt rules regarding the issuance of a permit to destroy, harvest or export for commercial purposes any material of a forest resource, living or dead, deemed in need of conservation, described in section 183-B(a). The rules shall establish the provisions for board approval of a harvest permit that is based on a harvest and reforestation plan:

- (1) Requirements to obtain a harvest permit;
- (2) Duration of a harvest permit;
- (3) Terms and conditions of a harvest permit; and
- (4) Disqualifications that will prevent the approval of a harvest permit.

(b) No harvest permit or license for the commercial harvest or exportation outside of the State of any material of a forest resources, living or dead, deemed in need of conservation shall not be issued by any officer or agency of the State without the prior approval and concurrence of the board. In determining whether to grant or withhold such approval, the board shall be guided by the standards set forth in chapter 183.

**§183-D Fees.** (a) The board shall establish a processing fee for permits issued for the harvest of forest resources deemed in need of conservation. Such a permit will require an approved harvest and reforestation plan by the Board of Land and Natural Resources. The process for the development and approval of plans and permits will be defined in the Rules. (b) Fees collected for permits shall be deposited in the forest stewardship fund established under chapter 195F-4 to support forest management and restoration.

**§183-E Criminal penalties.** Any person who violates section 183-B, upon conviction thereof, shall be guilty of a misdemeanor and shall be fined not more than \$2,000, or imprisoned not more than one year, or both. In addition to any other penalty imposed under this section, fines and penalties in accordance with sections 183-5 and 183-18 shall be levied for each individual forest resource illegally harvested under section 183-B. Fines collected pursuant to this section shall be deposited into the forest stewardship fund established under section 195F-4.

**§183-F Definitions.** (a) As used in this part, “native forest resources deemed in need of conservation” means those forest species identified by the board as currently in decline and in need of conservation.

(b) As used in this part. “Hawaiian sandalwood” means the *Santalum* species endemic to the islands of Hawaii including *Santalum ellipticum* (Maui, Lana‘i, Moloka‘i, Kaua‘i, O‘ahu, Hawai‘i); *S. freycinetianum* (O‘ahu); *S. haleakalae* var. *haleakalae* (Maui) and *haleakalae* var. *lanaiense* (Maui, Lana‘i, Moloka‘i); *S. paniculatum* var. *paniculatum* (Hawai‘i) and *paniculatum* var. *pilgeri* (Hawai‘i); *S. involutum* (Kaua‘i); and *S. pyrularium* (Kaua‘i).

2. Amend §183-5(c) to include Forest Resources Deemed in Need of Conservation, and to establish an adequate penalty for illegal commercial harvest of sandalwood.

(c) In addition:

- (1) A fine of up to \$10,000 per violation of section 183-17 may be levied for each destroyed or harvested koa tree, or portion thereof, larger than six inches in diameter at ground level; ~~and~~
- (2) A fine of up to \$10,000 per violation of section 183-17 and 183-C may be levied for each destroyed or harvested sandalwood tree, or portion thereof, larger than six inches in diameter at ground level; and
- (3) A fine of up to \$2,000 per violation of section 183-17 and 183- C may be levied for each destroyed or harvested tree or plant, other than koa and sandalwood, or portion thereof, larger than 6 inches in diameter at ground level.

Haloa Aina (JAWMIN LLC)  
P.O. Box 1677  
Honokaa, HI 96727  
808-326-4888

Testimony on SB 1793  
Dear Honorable Senators

Thank you for the opportunity to testify on SB3028.

I am Wade C. Lee a managing member of JAWMIN LLC (dba Haloa Aina) owner of 3,000 acres of presently managed sustainable native sandalwood forest on the Island of Hawaii. This property belonged to our family Kawehiwehiokealiiokalanikamamalu before the great mahele and was sold to the Greenwell family by the Hawaiian Monarchy and we purchased it in 2010.

We do not support SB3028 (HB1793) as presently written. The current language in the bill defeats "sustainable forests" as defined by the international forest community. A sustainable forest sustains itself economically, environmentally and socially.

We have created a model for sustainable sandalwood forest on the island of Hawaii.

**Environmentally:**

- Regenerated over 150,000 new Sandalwood trees, over 50,000 Koa and the same amount of other native species which are the host trees needed for the sandalwood to survive. This has all been done in the last 2 years.
- We harvest the dead and dying Iliahi trees and processed them into a commercially feasible product. Incorporating the whole tree utilization approach (as an example we collect the sawdust) If we fail to complete the Timberstand Improvements the forest would continue to degrade.
- Reduce the fire fuel load (slash piles of dead wood) and created six new firebreaks.
- Remove ungulates (livestock, feral sheep, cows, horses) from eating native sandalwood seedlings.
- Rodent control from eating sandalwood seeds.
- Kukuyu Grass (nonnative exotic spp) management.

**Economic and Socially:**

- Created thirty new jobs of the island
- Supported multiple vendors (Trucker, bags supplied by the coffee industries, equipment rental companies, shippers, helicopters, luas, fuel suppliers, electricians, plumbers, mechanics, etc.)
- Revitalizing an industry started by Native Hawaiians

- Created a new tax base for the state

### **Issues and Concerns With The Bill:**

The bill is void in structure as to definition and procedures.

These are some of our issues and concerns but not all of them.

- “Native sandalwood” the list presently identified six species, because of the diversity in phenotype on our property; we believe there are more.
- “Destroy and replant” How do we address diseased sandalwood trees being allowed to die, How do we deal with the State of Hawaii bulldozing sandalwood trees putting in a highway, Developers bulldozing sandalwood trees for residential subdivision, Ranchers allowing cattle to graze on sandalwood trees. These situations are occurring today.
- Enforcement there are over 200,000 acres of sandalwood on the island of Hawaii
- “Unable to export raw and unprocessed” When does sandalwood go from raw to processed? Currently we process and use the entire tree also known as whole tree utilization with zero waste. The current definition of the bill would defeat the “sustainability” of the forest.
- The economic vagueness of the present language dealing with fees and permits would be detrimental to the economic viability of a “sustainable” forest and destroy the industry.

### **Conclusion:**

We have established a native sandalwood forest including Koa, Mamane, Naio and other native species. We are working with third parties including Dr. Danica Harbaugh-Reynaud of the International Sandalwood Foundation, Dr. Randy Senock from Chico State University on potentials certification processes for our industry.

The International Sandalwood Symposium of 2012, That will be held at the East-West Center, University of Hawaii, will bring the foremost stakeholders and experts of the International sandalwood industry will discuss scientific research, conservation, ethnobotany, commercialization and other aspects of sandalwood.

The bill creates no standards, definitions and/or procedures of a sustainable sandalwood forest. We recommend that this bill be tabled to allow the State of Hawaii, Land Owners, Scientific community and other sandalwood industry experts time to cooperate in developing standards and definitions to make this bill more effective.

**HAWAI'I FOREST INDUSTRY ASSOCIATION**

P. O. Box 66 ❖ 'O'ōkala, HI 96774

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February 11, 2012

**TESTIMONY ON SB3028  
RELATING TO CONSERVATION AND RESOURCES**

Dear Chairs Donovan Dela Cruz and Clayton Hee, Vice Chairs Malama Solomon and Maile Shimabukuro and Members of the Committees on Water, Land and Housing and Judiciary and Labor

Thank you for the opportunity to testify on SB3028 - Relating to Conservation and Resources. Hawai'i Forest Industry Association (HFIA) supports the overall goals of this legislation to increase the reforestation efforts through the State for all native sandalwood species. We support providing incentives to local entrepreneurs to cultivate sandalwood for reforestation or commercial operations.

However, we would like to express our concerns regarding the sections of the legislation which are strong disincentives to the planting and growing of Sandalwood on private land. The current version of the legislation offers potential growers the prospect of criminal penalties; an unspecified value of the harvest going to the state and the Government regulating by an undefined permitting process, when a grower may harvest his trees. These are hardly incentives to grow sandalwood. We feel these conditions would be a major disincentive for a potential grower.

We are unclear as to the basis for DLNR's requirement of a permit to harvest and request clarification as to the purpose of the permitting. HFIA objects to DLNR's taking of a percentage of the dollar value of the sandalwood or sandalwood products harvested or sold.

No one knows how much sandalwood exists in Hawaii. A previous testifier suggested that there might be millions of dollars worth on one parcel of land. Clearly we do not know the present inventory or the re-growth rates so that DLNR can make informed sustainable harvesting decisions. Perhaps more funding of existing forestry programs such as the Forest Stewardship program would better achieve the goals of this legislation.

As presently structured, Hawai'i Forest Industry Association's view is that the legislative action as presently drafted will have the opposite effect of the stated goal and will be a disincentive, rather than an incentive to the growing of sandalwood in Hawai'i.



We understand that an international Sandalwood Conference is planned at the East West Center in October 2012. Might we suggest that this measure be deferred until after that conference so that a more thoughtful and effective piece of legislation can be drafted.

We appreciate the Committee's consideration of our comments on SB3028. HFIA is a non-profit Hawai'i organization, incorporated in 1989, which promotes a balance of forest land uses and sound management practices for all of Hawai'i's forests. Our industry generates an estimated \$30.7 million in business for the State. HFIA represents approximately 250 member companies and individuals. We have worked closely with the Division of Forestry and Wildlife (DOFAW) and the DLNR over the past 17 years to promote, foster and develop industry standards, initiate forestry research and development, and promote quality control and industry integrity in the State of Hawai'i.

Sincerely,

Lloyd Jones  
Legislative Chair



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**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Monday, February 13, 2012 8:05 AM  
**To:** WLH Testimony  
**Cc:** denisehayashi@hawaii.rr.com  
**Subject:** Testimony for SB3028 on 2/15/2012 10:00:00 AM  
**Attachments:** SB3028RelatingtoConservationandResourcesSandalwood.docx

Testimony for WLH/JDL 2/15/2012 10:00:00 AM SB3028

Conference room: 016  
Testifier position: Comments Only  
Testifier will be present: No  
Submitted by: Denise Hayashi  
Organization: Denise Hayashi Consulting, LLC  
E-mail: [denisehayashi@hawaii.rr.com](mailto:denisehayashi@hawaii.rr.com)  
Submitted on: 2/13/2012

Comments:  
Please see attached testimony for Lloyd Jones of Hawaii Forest Industry Association

**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Tuesday, February 14, 2012 1:25 PM  
**To:** WLH Testimony  
**Cc:** lwdoo4u@gmail.com  
**Subject:** Testimony for SB3028 on 2/15/2012 10:00:00 AM

Testimony for WLH/JDL 2/15/2012 10:00:00 AM SB3028

Conference room: 016  
Testifier position: Support  
Testifier will be present: Yes  
Submitted by: Leigh-Wai Doo  
Organization: Foundation Isl. of Harmony  
E-mail: [lwdoo4u@gmail.com](mailto:lwdoo4u@gmail.com)  
Submitted on: 2/14/2012

Comments:

We support SB 3028 and urge a SD 1 as a companion to HB 1793, HD 2. The DLNR and we are in concurrence. Note both drafts are to provide Section 183-E Criminal and Administrative Penalties. The SB 3028 protects Native Forest Resources in Need of Conservation Sandalwood. Hawaii's Iliahi was exploited 200 years ago and the remaining 2 percent is now being logged due to extraordinarily high international demand and there are no regulations on private land and inadequate penalties for poachers logging on conservation land. Iliahi trees a hundred years old, 500 years old, are now being cut and cannot be replaced once cut.

Iliahi

is original Hawaii life, arriving over a million years ago and evolving into 6 endemic species unique to each island over tens of thousands of years. A Kini Akua spirit. Iliahi is very difficult to reforest as it is hemiparasitic, unique species in different environments, cutters/ poachers also take the roots which has the prized scented heartwood, and is very slow growing as well as difficult for seeds to naturally sprout. Hawaii has one third of the known species of Sandalwood worldwide and is likely the only location with sandalwood that has no specific regulation by government. An International Sandalwood Symposium at the East West Center will be held this October 21 to 24, 2012. Experts there will provide refinements and best practices for DLNR development of Rules pursuant to this legislation, SB 3028. Iliahi, as a symbol and as an example of Hawaii's history, is a very sad chapter of the past 200 years; please let our generation fulfill its filial duty to care for our ancestor- the original Hawaii, Kini Akua, ILIAHI. The land is our mother, she cared and nurtured us, now it is our turn to care for her.

Please respectfully adopt SB 3028 in SD 1 form creating a new chapter on Native Forest Resources In Need of Conservation which specifically identifies Hawaii's 6 endemic species. Iliahi.

Me Ka MAHALO ame ke ALOHA, leigh-wai Doo

## **RANDALL SENOCK, PhD**

**Associate Professor Geological and Environmental Sciences  
California State University at Chico  
400 West 1st Street  
Chico, CA 95929-0205**

My name is Randall S. Senock, PhD. and am thankful to the committee for the opportunity to submit testimony in response to H.B No. 1793\ S.B. No. 3028 Relating to Conservation and Resources.

I am currently an associate professor for the California State University at Chico in the Department of Geological and Environmental Sciences and director of the degree options in Applied Ecology and Atmospheric Science. Formally I was a research fellow with the University of Hawaii at Manoa in forestry and then an assistant professor of tropical forestry at the University of Hawaii at Hilo, College of Agriculture. My research on various forests around the world has always been directed towards understanding the ecology and sustainability of forest ecosystems.

The proposed legislation in its broadest context should be supported as a measure to aid in supporting sustainable land management in Hawaii. As proposed however, the legislation is too broad, over reaching and unsubstantiated at this part in time to ensure the sustainability of the forest ecosystem. There cannot be one single approach applied equally to the several Sandalwood species found throughout Hawaii. Each species in each of its own environments will likely require a different approach to ensure regeneration of the species for future generations to enjoy.

The current state of scientific knowledge, however concerning native Hawaiian Sandalwood species or their ecology is insufficient at this time to support legislation that would inadvertently restrict proper sustainable management of native forest containing sandalwood trees. What little is known is based on limited scientific information, antidotal observations and subjective interpretations.

What is currently known and generally accepted is that much of the Big Island dryland montane forest containing sandalwood trees (*Santalum paniculatum* and *S. ellipticum*) is in a state of severe continuing decline from several long term pressures that include deliberate land clearing, grazing animals, the introduction of non-native species, increased frequency and intensity of fires, climate change and not sustainable commercial harvesting of sandalwood.

What is also now currently known is that the dryland montane forests of the Big Island containing sandalwood can be revitalized using proper forest management techniques that involves active land management including tree harvesting. This statement is based on direct field observations of several dryland montane forests and empirical measurements of the Ha'Loa Aina forest mauka of Kealakekua.

Specifically my field measurements indicate that:

- 1) The majority of trees are less than 100 years old (based on counts of tree rings) and not “original old growth” as alleged in the local press.
- 2) The harvesting of a single *S. paniculatum* tree results in the roots coppicing generally on the order of 10 new sprouts per tree.
- 3) Un-harvested trees exhibit virtually no new sprouts.
- 4) The height and diameter growth of the root sprouts is much greater than that of planted Sandalwood seedlings.
- 5) The survivability of the new sprouts through low rainfall periods is greater than planted seedlings.

In conclusion any governmental legislation should provide incentives and motivation to private land owners to properly manage the Hawaiian forests containing sandalwood trees so that future generations of Hawaiian children will have the opportunity to enjoy native Hawaiian forests.

Mahalo