A BILL FOR AN ACT

RELATING TO HERITAGE BREED ANIMALS.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

1 SECTION 1. The legislature finds that heritage breed 2 animals historically were a vital resource for small-scale 3 farmers who often had to endure a changing climate and a growing 4 society. Although there is no agreed-upon definition of 5 heritage breed animals, heritage breed animals are generally 6 considered to be animals that are bred over time to be best 7 adapted to local conditions. Heritage breed animals are usually 8 bred for adaptation to specific regional environments, and this 9 allows heritage breed animals to adapt to changes in their 10 habitat over time. This adaptability also allows the animals to 11 be better suited for small-scale farmers rather than large 12 industrial producers.

According to the Livestock Conservancy, traditional, heritage breeds retain essential attributes for survival and self-sufficiency, such as hardiness, fertility, rapid growth rates, foraging ability, longevity, maternal instincts, ability to mate naturally, and resistance to diseases and parasites. Because heritage breeds are not officially recognized by the HB LRB 14-0687.doc

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United States Department of Agriculture, it is unknown how many
heritage breed animals are in existence in the State. However,
it is known that many heritage breeds face extinction
nationwide. For example, according to the Field Guide to
Heritage Cattle, it is estimated that one hundred ninety
livestock breeds have become extinct in the past fifteen years
and one thousand five hundred more are at risk.

8 It is believed that there are currently heritage breed 9 sheep and goats in Hawaii that have adapted to the unique 10 climate and terrain. The legislature finds that efforts should 11 be made to conserve Hawaii's unique heritage breed livestock by 12 identifying and studying them, and if possible, acquiring 13 examples of heritage breed species to breed and raise in 14 captivity. The legislature further finds that heritage breed 15 animals are an important livestock option for small farmers and sustainable agriculture, and as such, farmers and the community 16 17 will benefit from insight into their conservation.

18 Accordingly, the purpose of this Act is to direct the 19 University of Hawaii college of tropical agriculture and human 20 resources to conduct a study and inventory of heritage breed 21 animals in Hawaii.



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1	SECT	ION 2. (a) The University of Hawaii college of
2	tropical	agriculture and human resources is directed to conduct
3	a study a	nd inventory of heritage breed animals, specifically
4	those bre	eds that existed in Hawaii prior to 1778. At minimum,
5	the study	shall include the following:
6	(1)	A definition of the term "heritage breed animal" as it
7		applies in Hawaii and the identification of any such
8		species in Hawaii;
9	(2)	Identification of any causes or factors that may have
10		or are currently contributing to the decline or
11		extinction of heritage breed animals;
12	(3)	A survey of farmers that are raising heritage breed
13		animals;
14	(4)	An assessment of existing and potential future demand
15		in the State for products derived from heritage breed
16		animals;
17	(5)	An evaluation of the impact of hunting on populations
18		of heritage breed animals; and
19	(6)	An analysis of possible benefits of breeding heritage
20		breed animals in captivity.

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H.B. NO. 2633

1	(b) In carrying out the duties prescribed in subsection
2	(a), the University of Hawaii college of tropical agriculture
3	and human resources may consult with the following:
4	(1) The state archives;
5	(2) Conservation organizations;
6	(3) State historians;
7	(4) The United States Department of Agriculture National
8	Agricultural Statistics Service; and
9	(5) Any other person or entity it deems appropriate.
10	(c) The University of Hawaii college of tropical
11	agriculture and human resources shall submit its findings and
12	recommendations, including any proposed legislation, to the
13	legislature no later than twenty days prior to the convening of
14	the regular session of 2016.
15	SECTION 3. There is appropriated out of the general
16	revenues of the State of Hawaii the sum of \$ or so much
17	thereof as may be necessary for fiscal year 2014-2015 for the
18	study and inventory of heritage breed animals.
19	The sum appropriated shall be expended by the University of
20	Hawaii college of tropical agriculture and human resources for
21	the purposes of this Act.



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H.B. NO. 2433

SECTION 4. This Act shall take effect on July 1, 2014.

INTRODUCED BY:



JAN 2 3 2014



Report Title:

Heritage Breed Animals; Study; University of Hawaii; Appropriation

Description:

Directs the University of Hawaii college of tropical agriculture and human resources to conduct a study and inventory of heritage breed animals that existed in the State prior to 1778. Appropriates funds.

The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.



From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 03, 2014 3:54 PM
To:	HEDtestimony
Cc:	wekeis333@gmail.com
Subject:	Submitted testimony for HB2633 on Feb 4, 2014 14:01PM
Attachments:	HB2633 Holoholona Ho'oilina2.pdf



HB2633

Submitted on: 2/3/2014 Testimony for HED on Feb 4, 2014 14:01PM in Conference Room 309

12	Submitted By	Organization	Testifier Position	Present at Hearing
	Tony Sylvester	Holoholona Ho'oilina	Support	No

Comments:

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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Testimony from Holoholona Ho'oilina

Supporting H.B. 2633

COMMITTEE ON HIGHER EDUCATION

Rep. Isaac W. Choy, Chair Rep. Linda Ichiyama, Vice Chair

Relating to Heritage Breed Animals

Tuesday, February 04, 2014, 2:01PM

We respectfully request that this ACT be amended as such:

Under section 2, (a) specifically those breeds that existed in Hawaii prior to after 1778.

(5) An evaluation of the impact of hunting and eradication on populations of heritage breed animals; and

Holoholona Ho'oilina *supports HB2633* as we look forward to the opportunity to conserve our unique island livestock breeds in a domestic state. There are currently wild free ranging sheep and goats on portions of the island that possess valuable genetic and physical characteristics. These animals are found nowhere else in the world. They are excellent genetic representations of sheep and goat breeds from old world Europe that have adapted to living in Hawaii over hundreds of years. Due to their naturalized state these animals possess traits that make them suited to living in the climate and terrain of Hawaii. Some of these traits include hardiness, parasite resistance, fast growth rates, feed efficiency on low quality vegetation, and their unique appearance. The question then arises: "Is there a genetic resource here on the island that should not be lost forever?" We believe the answer is yes.

We realize that these sheep and goats are at risk of being lost forever, and there is currently no organization or effort to preserve these animals and their genetics. Our goal is to maintain some of these sheep and goats in captivity as heritage breeds for current and future generations. This can be accomplished through a

breed association of which we have formed and with guidance from the Livestock Conservancy and hopefully the University of Hawaii, College of Tropical Agriculture,

We have a group of private landowners who are interested in raising these animals for heritage and agricultural purposes on their own land. We find there is merit in preserving the genetics of these animals. Once they were gifts to Hawaiian Ali'i and now we would like to explore their use in the local agriculture industry.

It makes sense to us to raise animals in Hawaii that have already spent many years adapting to life here in Hawaii, instead of importing livestock for agricultural purposes who often do not fare as well.

Once we have some animals in captivity we can further study them through genetic testing and evaluate their best uses in local agriculture such as meat, dairy, wool, etc.

The Livestock Conservancy has expressed full support in this endeavor. They are a national organization that has supported similar successful efforts in the past to conserve wild populations of sheep and goats in captivity before they were completely lost from their wild environment; for example the Santa Cruz Sheep, San Clemente Island Goats, and Hog Island Sheep to name a few.

Whether for historical, cultural, genetic, or agricultural purposes, we believe the wild sheep and goats of Hawaii need to be conserved before they are lost forever.

For these reasons, Holoholona Ho'oilina support HB2633.

Mahalo, Tony Sylvester, Founder Holoholona Ho'oilina Written Testimony Presented Before the House Committee on Higher Education

Tuesday, February 04, 2014; 2:01 PM

By

J. Kenneth Grace

HB 2633 RELATING TO HERITAGE BREED ANIMALS

Chair Choy, Vice Chair Ichiyama, and members of the House Committee on Higher Education, thank you for this opportunity to provide <u>comments</u> on HB 2633, which directs the University of Hawaii college of tropical agriculture and human resources to conduct a study and inventory of heritage breed animals that existed in the State prior to 1778, and appropriates funds for this purpose.

My name is J. Kenneth Grace, and I am Interim Associate Dean and Associate Director for Research in the College of Tropical Agriculture and Human Resources (CTAHR), University of Hawaii at Manoa. I am providing personal testimony today on HB 2633.

Although, as mentioned in the bill, there is no formal definition of a "heritage breed," this is generally considered to refer to an animal breed that has retained the same physical characteristics for many years through careful and selection through breeding to maintain these "ancient" characteristics. Heritage breeds are managed animals rather than feral animals, since feral animals breed opportunistically.

HB 2633 states that "it is believed that there are currently heritage breed sheep and goats in Hawaii that have adapted to the unique climate and terrain," and directs CTAHR to perform a study and inventory of them. However, I do not believe that there is a need to appropriate funds for this purpose, since:

- 1. Heritage breeds are animals maintained with certain characteristics over many years through careful selection and breeding, and are not found in feral animal populations;
- 2. No sheep or goats occurred in Hawaii prior to 1778.



From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 03, 2014 4:57 PM
То:	HEDtestimony
Cc:	voggymtn@yahoo.com
Subject:	*Submitted testimony for HB2633 on Feb 4, 2014 14:01PM*



HB2633

Submitted on: 2/3/2014 Testimony for HED on Feb 4, 2014 14:01PM in Conference Room 309

Submitted By	Organization	Testifier Position	Present at Hearing
Willie-Joe Camara	Individual	Support	No

Comments:

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

AMS Ohana Farm Hilo, Hawaii



Protect and Preserve Mouflon Sheep of Hawaii Island



Committee on Higher Education TUESDAY, FEBRUARY 3, 2014 2:01PM **SUPPORT** H. B. 2633 Relating to Heritage Breed Animals

I support HB 2633. We have a unique breed of mouflon sheep and various breeds of goats in Hawaii. They have adapted to life in Hawaii. These breeds are found nowhere else in the world. The original bloodlines of these animals are close to extinction.

Currently on Hawaii Island, these animals are being eradicated at an exceedingly alarming rate. They are deemed invasive and injurious. At the rate of the current eradication efforts, there will be no animals left in Hawaii.

Please help to save these animals. They are a part of our culture. This is how we can preserve our culture and traditions for the keiki of Hawaii.

Sincerely,

Michelle Sylvester AMS Ohana Farm Proprietor

From: Sent:	mailinglist@capitol.hawaii.gov Monday, February 03, 2014 5:41 PM
То:	HEDtestimony
Cc:	paul.bueltmann@gmail.com
Subject:	Submitted testimony for HB2633 on Feb 4, 2014 14:01PM



HB2633

Submitted on: 2/3/2014 Testimony for HED on Feb 4, 2014 14:01PM in Conference Room 309

Submitted By	Organization	Testifier Position	Present at Hearing
Paul Bueltmann	Individual	Support	No

Comments: I support HB2633 amended to breeds after 1778. These breeds have become a part of Hawaii's heritage, history, and culture.

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From: Sent:	mailinglist@capitol.hawaii.gov Monday, February 03, 2014 6:29 PM
То:	HEDtestimony
Cc:	kohatsu_ryan@hotmail.com
Subject:	*Submitted testimony for HB2633 on Feb 4, 2014 14:01PM*



HB2633

Submitted on: 2/3/2014 Testimony for HED on Feb 4, 2014 14:01PM in Conference Room 309

Submitted By	Organization	Testifier Position	Present at Hearing
Ryan Kohatsu	Individual	Support	No

Comments:

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From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 03, 2014 7:12 PM
То:	HEDtestimony
Cc:	hawaiibowhunter@gmail.com
Subject:	Submitted testimony for HB2633 on Feb 4, 2014 14:01PM



HB2633

Submitted on: 2/3/2014 Testimony for HED on Feb 4, 2014 14:01PM in Conference Room 309

Submitted By	Organization	Testifier Position	Present at Hearing
Travis	Individual	Support	No

Comments: I strongly support this bill. This will allow an opportunity for wild animals of Hawaii to be further studied. Currently not much is known about wild sheep and goats in Hawaii other than the fact that they were released in the late 1700's. Over the centuries these animals adapted to living in Hawaii and are unique to our islands. Therefore I believe it is very important for them to be further studied. It may be found that they are genetically unique because of their long term isolation on the Hawaiian islands. If so, our animals will help in contributing to global genetic diversity. Thank you for your consideration. Sincerely, Travis Figueira Honolulu, HI

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From:	mailinglist@capitol.hawaii.gov
Sent:	Tuesday, February 04, 2014 4:03 AM
To:	HEDtestimony
Cc:	amartin@albc-usa.org
Subject:	Submitted testimony for HB2633 on Feb 4, 2014 14:01PM



HB2633

Submitted on: 2/4/2014 Testimony for HED on Feb 4, 2014 14:01PM in Conference Room 309

Submitted By	Organization	Testifier Position	Present at Hearing
Alison Martin	The Livestock Conservancy	Comments Only	No

Comments: As proposed in HB2633, identification and study of heritage breed livestock in Hawai'i, especially populations with histories pre-dating 1925, will set the stage for conservation of resources unique to the state. Many of the free-roaming heritage sheep and goats on the Big Island of Hawai'i, for example, have a long history of reproductive isolation, perhaps for more than a century. These sheep and goats, and perhaps some feral populations of cattle, donkeys, or even pigs, represent genetics found nowhere else in the world. They are unlike anything in domesticated animal populations. Not only have many of the breeds from which they descended disappeared, they have evolved and adapted over an extremely long period of self sufficient life in the Hawaiian Islands. Free roaming heritage livestock may conflict with conservation of native flora and fauna, and a plan must be developed for their management and conservation. Effective models for in situ conservation exist in other states, most notably the heritage wild horses of Shackleford Banks on the North Carolina seashore. If capture and removal are necessary, conservators and potential breed stewards in Hawai'i have expressed interest in exploring the agricultural possibilities of Hawaii's heritage sheep and goats. The research proposed in HB 2633 provides a means to focus conservation efforts solely on populations of genetic value, and explore the production value of these animals to the State's small holders and ranchers. The Livestock Conservancy (formerly The American Livestock Breeds Conservancy) is a national membership 501(c)3 organization for the conservation of genetic diversity in livestock and poultry. We work with more than 180 endangered breeds in the United States through research, education, promotion, and genetic banking when necessary.

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Support for HB2633

The proposed HB2633 is an important step in securing unique genetic resources that are present in free-roaming populations of what are usually considered domesticated livestock. Due to the settlement history of Hawai'i it is expected that several populations of free-ranging livestock are unique. These represent genetic resources that are found nowhere else on the planet. Most likely candidate populations include goats and sheep, followed by swine, donkeys, cattle, and horses.

Documenting various populations as to foundation, isolation, and phenotype will be an essential first step in assessing these populations as conservation priorities. While it is expected that few will pass all hurdles as meriting conservation action, those few have disproportionate importance due to their unique foundations and isolation history.

Further planning for conservation of these once domesticated genetic resources must take in to account needs for conservation of unique native flora and fauna. However, conservation of the livestock resources must not be ignored, as these also have importance as unique genetic resources. Final conservation measures may well involve capture, removal, and further maintenance in domesticated managed situations. This model has worked in the past to secure both native and introduced resources, assuring a sound future for both.