



Notes from Animal Rights Hawaii on last page*

Minutes of the Board of Agriculture

I. CALL TO ORDER

The meeting of the Board of Agriculture was called to order on August 25, 2015 at 9:07 A.M. by Board of Agriculture Chairperson Scott Enright, at the Plant Quarantine Conference Room, 1849 Auiki Street, Honolulu, Hawaii 96819.

Members Present:

Scott Enright, Chairperson, Board of Agriculture (Board)
Jerry Ornellas, Kauai Member
Mary Alice Evans, Department of Business, Economic Development and Tourism (DBEDT), Ex Officio Member Designated Representative
Dr. Maria Gallo, Dean of the College of Tropical Agriculture & Human Resources University of Hawaii (CTAHR-UH), Ex Officio Member
Glenn Hong, Member-At-Large
Michelle Galimba, Member-At-Large
Simon Russell, Maui Member
Clark Hashimoto, Member-At-Large
Suzanne Case, Chairperson, Board of Land and Natural Resources
Richard Ha, Hawaii Member

Others Present:

Joe DeFrank, Uluwehi Agronomics
Christy Martin, Coordinating Group on Alien Pest Species (CGAPS)
Teya Penniman, Maui Invasive Species Council (MISC)
Springer Kaye, Big Island Invasive Species Council
Lori Buchanan, Molokai Maui Invasive Species Committee
David Duffy, UH/PLSU
Lorri Crocket, Empty the Tanks Hawaii
Domingo Cravalho, United States Fish and Wildlife Service – Ecological Services
Ann Goody, Three Ring Ranch
Kari Bogner, UH Manoa – Department of Botany
Laura Russell, Dolphin Quest
Julie Rocho-Lavine, Dolphin Quest
Erin Bishop, Oahu Invasive Species Committee
Lorraine Garnier, Private Citizen
Lisa Keith, United States Department of Agriculture (USDA)/Agricultural Research Service
Josh Atwood, Department of Land and Natural Resources (DLNR)/Hawaii Invasive Species Council (HISC)

1 Joyce Wong, Hawaii Department of Agriculture (HDOA)/Agricultural Resource
2 Management (ARM)
3 Rob Hauff, DLNR/Division of Forestry and Wildlife
4 John Thomas, Animal Rights Hawaii
5 Alexis Thomas, Animal Rights Hawaii
6 Todd Low, HDOA/Animal Industry
7 Chris Kishimoto, HDOA/Plant Quarantine Branch (PQB)
8 Elton Mow, Orchid Growers of Hawaii (OGO)
9 Linda Murai, HDOA/ARM
10 Randy Barrett, HISC
11 Ken LeVasseur, Undersea Railroad
12 Susan Hamilton, Plant It Hawaii
13 Robert Hamilton, Plant It Hawaii
14 Kalysa Hamilton, Plant It Hawaii
15 Jamie Nahl, Plant It Hawaii
16 Noe Kalipi, Kohala Institute
17 Inga Gibson, Humane Society of the United States
18 Cathy Goeggel, Animal Rights Hawaii
19 Kirsten Ramirez, Private Citizen
20 Carol Kwan, Private Citizen
21 Johnny Gardines, Hawaii Floriculture and Nursery Association (HFNA)
22 Eric Tanouye, HFNA
23 Kent Dumlao, HDOA/PQB
24 Lance Sakaino, HDOA
25 Ken Redman, Private Citizen
26 Leonard Obaldo, HDOA/PQB
27 Keevin Minami, HDOA/PQB
28 Trenton Yasui, HDOA/PQB
29 Phyllis Shimabukuro-Geiser, HDOA/Deputy to the Chairperson
30 Janelle Saneishi, HDOA/Chairperson's Office (CHR)
31 Micah Munekata, HDOA/CHR
32 Andrew Goff, Deputy Attorney General
33 Mark Fox, Nature Conservancy
34 Natalie Parra, Keiko Conservation
35 Kayleigh Burns, Keiko Conservation
36 Michael Kumukauoha Lee, Kaue Hili Hui
37 Tori Cullins, Wild Dolphin Foundation
38 Michele Matsuo, Private Citizen
39 Samantha Rivera, Private Citizen
40 Neil Reimer, HDOA/Plant Industry Division Administrator
41 Andrew Porter, CGAPS
42 Flint Hughes, USDA
43 Jonathan Ho, HDOA/PQB
44 Delanie Prescott-Tate, Deputy Attorney General
45 Mary Ikagawa, Koolau Mountains Watershed Project

1 Amy Takahashi, HDOA/PQB Acting Manager
2 Wil Leon Guerrero, HDOA/PQB
3

4 **II. APPROVAL OF MINUTES FROM JULY 28, 2015 MEETING**
5

6 Chairperson Enright deferred approval of the minutes from the July 28, 2015 meeting to
7 the next meeting as they were not ready.
8

9 **III. COMMENTS FROM THE GENERAL PUBLIC ON AGENDA ITEMS (ORAL OR WRITTEN)**
10
11

12 Chairperson Enright stated that the Board will take public comments on agenda items
13 as they come up during the meeting.
14

15 **IV. INTRODUCTION AND COMMENTS**
16

17 There were no introductions or comments.
18

19 **V. COMMUNICATIONS FROM DIVISIONS AND ADMINISTRATION**
20

21 **A. AGRICULTURAL RESOURCE MANAGEMENT DIVISION**
22

- 23 **1. Re-Submittal – Request for Extension of General Lease**
24 **Nos. S-4741 and S-4913-A, Lot Nos. 42 and 6, Pioneer**
25 **HI-Bred International, Inc., Kekaha, Waimea, Island of**
26 **Kauai**
27

28 Note: Included with Board submittal, is a cover memo
29 to the Board Members and copies of General Lease Nos.
30 S-4741 and S-4913-A
31

32 Chairperson Enright deferred this item until the next meeting so that the tenant can be
33 present.
34

- 35 **2. Request for Consent to Sublease Between the Hamakua**
36 **Agricultural Cooperative and Lesili Sekona; Lot No. 3,**
37 **TMK 3rd Div/4-3-003:004 (por), Opihilala & Hauola,**
38 **Hamakua, Island of Hawaii**
39

40 Presentation made by Ms. Joyce Wong, ARM, as submitted. Staff recommends
41 approval. The sublease term is 18 years to expire on June 29, 2033 with a rental rate of
42 \$764.61 per year until June 29, 2018 (reopening date).
43

44 Chairperson Enright called for a motion to accept this request: Ornellas/Russell.
45

46 Vote: Approved, 10/0.

1 **3. Request for Consent to Waive Performance Bond**
2 **Requirement for General Lease Nos. S-4923 and**
3 **S-5516, Frank F. Sekiya; TMK 1st Div/4-1-035:011,**
4 **Waimanalo Agricultural Park, Lot No. 14; and**
5 **1st Div/4-1-027:030, Lot No. 25, Waimanalo Farm Lot**
6 **Subdivision, Koolaupoko, Waimanalo, Oahu, Hawaii**
7

8 Presentation made by Ms. Linda Murai, ARM, as submitted. Staff recommends
9 approval subject to provision that lessor has the right to reinstate the performance bond
10 requirement if necessary. Ag Park Lease was a DLNR lease transferred to DOA by
11 Governor's Executive Order on January 28, 1991. The Non-Ag Park lease was also a
12 DLNR lease transferred to DOA by Governor's Executive Order on September 17,
13 2008. Both leases were approved for assignment for Frankie's Nursery LLC on June
14 30, 2015. Lessee is original lessee on both leases and has made timely rental
15 payments and is in compliance.

16
17 Chairperson Enright called for a motion to accept this request: Evans/Hashimoto.

18
19 Vote: Approved, 10/0.

20
21 **4. Request for Conversion of Revocable Permit No. S-7434;**
22 **Jill J. Mattos dba R.J. Ranch; Lot No. 007, TMK 3rd Div/**
23 **4-6-002:007 (por); Kawela and Papaki, Hamakua, Hawaii**
24

25 Presentation made by Ms. Joyce Wong, ARM, as submitted. Staff recommends
26 approval. Lease term is currently month to month revocable permit with lease rent of
27 \$480 per year. Jill Mattos is requesting a new 35 year non-ag park lease commencing
28 September 1, 2015, with rent reopening on the 10th, 20th and 30th years of lease term.

29
30 Chairperson Enright called for a motion to accept this request: Ha/Russell.

31
32 Vote: Approved, 10/0.

33
34 **5. Request for Consent to Sublease Between the Hamakua**
35 **Agricultural Cooperative and Lindsey Rose Thomas-Cypret;**
36 **Lot No. 11, TMK 3rd Div/4-6-003:003 (por), Honokaia Makai**
37 **Tract, Hamakua, Island of Hawaii**
38

39 Presentation made by Ms. Joyce Wong, ARM, as submitted. Staff recommends
40 approval. Sublease term will expire on June 29, 2033. Base rental rate is \$760.88 per
41 year until June 29, 2018 (reopening date).

42
43 Chairperson Enright called for a motion to accept this request: Russell/Evans.

44
45 Vote: Approved, 10/0.

46

1 Chairperson Enright called for a 5 minute recess at 9:20 A.M.
2 Meeting reconvened at 9:25 A.M.

3

4

B. PLANT INDUSTRY DIVISION

5

6 Chairperson Enright took Agenda Item 2 out of order.

7

8

Microorganism

9

10

2. Adoption of an Interim Rule to Prohibit the Intrastate Movement of *Metrosideros* (all species in genus) (Ohia) Plants and Plant Parts Including Flowers, Leaves, Seeds, Stems, Twigs, Cuttings, Untreated Wood, Log, Mulch, and Greenwaste; Frass, and Soil, All of Which are Hosts or Known Carriers of the Fungus, *Ceratocystis fimbriata*, Out of the Island of Hawaii Except by Permit.

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17

Presentation made by Amy Takahashi, HDOA/PQB Acting Manager and Wil Leon Guerrero, HDOA/PQB, as submitted. Staff recommends approval.

18

19

20

Chairperson Enright call for a motion to entertain this request: Russell/Ha.

21

22

Chairperson Enright opened the floor to questioning by the Board.

23

24

Board Member Evans: What portion of forest on the other islands is made up of this species of Ohia?

25

26

27

Mr. Guerrero: The forests on all major islands have roughly 50% Ohia.

28

29

Board Member Evans: How much of Ohia growth is vulnerable to this wilt?

30

31

Mr. Guerrero: A majority of the forests.

32

33

Board Member Russell: How much would the permit cost?

34

35

Mr. Guerrero: There will be no fee charged for an interisland permit.

36

37

Board Member Hashimoto: What effect will the interim rule have on local nurseries?

38

39

Mr. Guerrero: Those nurseries that use native soil from the ground will need to be tested to make sure the pathogen is not present. If the grower maintains best management practices they should be fine.

40

41

42

43

Ms. Takahashi: There are 180 nurseries that do not use soil from the ground. It is the non-certified nurseries that cause worry because they use different types of soil. The inspectors would need to test them.

44

45

46

1 Board Member Hashimoto: Is cinder considered soil?

2

3 Mr. Guerrero: Cinder is not considered soil.

4

5 Board Member Case: Who will be doing the testing?

6

7 Chairperson Enright invited Dr. Lisa Keith, USDA/ARS, to join the discussion.

8 Chairperson Enright stated that 89 soil samples have been taken on the Big Island and
9 5 were found to contain the disease. These 5 samples came from under dead trees.

10

11 Board Member Evans: Does this disease exist in different soils for different species of
12 Ohia?

13

14 Dr. Keith: It is more of a viability issue, whether the *C. fimbriata* is alive in the soil or
15 not.

16

17 Board Member Hashimoto: How long is the fungus viable in the soil?

18

19 Dr. Keith: Testing found viable *C. fimbriata* in soil after 1-2 months. Literature suggests
20 it may be viable in the soil for over a year.

21

22 Board Member Hong: What is HDOA's inspection regime for items to be shipped
23 interisland?

24

25 Dr. Keith: She uses a baiting technique. Fungus is applied to carrots. It takes between
26 1 to 3 weeks for the *C. fimbriata* to grow. If no fungus is present a permit will be issued.

27

28 Board Member Gallo: How long does the testing take and have there been any false
29 positives?

30

31 Dr. Keith: There have been no false positives. It takes about 2-3 weeks of testing to
32 see results.

33

34 Board Member Ha: What will the shipping process be under the interim rule?

35

36 Mr. Guerrero: The inspector would go to the site and take a sample of the designated
37 plant/soil. Dr. Keith will run tests to confirm sample is negative. If negative, item can be
38 shipped. Once a site is found to be free of the fungus, each farmer must consistently
39 utilize best management practices, with periodic testing, to continue shipping.

40

41 Board Member Ornellas: Is this pathogen related to the Dutch Elm Disease?

42

43 Dr. Keith: This strain of *C. fimbriata* is not the same as Dutch Elm Disease.

44

1 Board Member Gallo: Is this a mutant that became species specific; what was the
2 origin of the fungus; what spreads the fungus; and could it be spread by foot traffic?
3

4 Dr. Keith: She believes this is a new introduction that is species specific. Testing was
5 performed to compare this fungus with what was already on island and this strain of *C.*
6 *fimbriata* is genetically different. Foot traffic is a concern. Her crew has established
7 sanitation protocols to prevent the spread.
8

9 Board Member Ha: Can a pile of soil that may be used in the future be tested ahead of
10 time?
11

12 Dr. Keith: That is the hope; HDOA will do the testing to see where the fungus is coming
13 from.
14

15 Board Member Hashimoto: Expressed concern that hunters in the area may be
16 inadvertently spreading the disease.
17

18 Mr. Guerrero: Outreach has begun to educate the various stakeholders involved
19 including halaus, hikers and hunters.
20

21 Board Member Hong: Is there any antifungal solution; is there any natural selection
22 immunity for these trees; and, have any resistant trees been found?
23

24 Dr. Keith: Is hopeful that an antifungal solution will be found. She doesn't really know if
25 there are immune trees. Trees may look healthy for two years and then die suddenly
26 within three weeks. She has been doing inoculation testing. There is potential for
27 resistant trees.
28

29 Board Member Case: Is the disease movement around Hawaii Island because of
30 certain vectors?
31

32 Mr. Guerrero: Humans are the biggest concern. There must be outreach to each
33 group. Insects are a concern as they feed on the infested trees. This fungus is sticky
34 and can adhere to soil and to frass creating a potential for windborne spread.
35

36 Board Member Russell: Has PBARC or HDOA attempted to use beneficial micro-
37 organisms to compete with fungus?
38

39 Dr. Keith: They are investigating this, but this disease is vascular meaning the disease
40 attacks the inside of the trees.
41

42 Chairperson Enright: What we know about this fungus is dwarfed by what we don't
43 know. We don't know all the hosts. HDOA is being proactive to stop the spread.
44

1 Dr. Keith: We have made some progress in minimal time. There are many questions
2 that can't be answered right now.

3
4 Chairperson Enright: HDOA needs to develop protocols in reaction to this pathogen.
5 Thank you to Young Brothers and Glenn Hong for taking the forefront on this issue.
6 Chairperson Enright then called up Flint Hughes.

7
8 Mr. Flint Hughes, from Institute for Pacific Islands Forestry, a research institute for the
9 US Forest Service in Hilo, gave members of the Board a map of the distribution of Ohia
10 around the islands.

11
12 Mr. Hughes: Acreage of Ohia on the Big Island is 600,000 acres. Acreage across the
13 other islands is 250,000 acres. The map shows Ohia acreage throughout the
14 watersheds. Ohia across all the forests of Hawaii, both native and non-native species,
15 represents 50% of stems and trunks across the islands. *C. fimbriata* has only been
16 found on the Big Island. In areas where trees have succumbed to the disease there is a
17 26% mortality rate after 1 year. Different tree stands have different mortality rates. It is
18 unknown if it is due to disease resistance or if transmission of disease is different. 26%
19 mortality rate is quite high.

20
21 Board Member Evans: Evolution has provided a number of different species due to
22 geographic barriers of the islands. Is there any reason to believe that Ohia forests on
23 the other islands won't be affected by the Big Island fungus?

24
25 Mr. Hughes: We don't know. But we have no reason to believe that the fungus won't
26 affect Ohia on other islands.

27
28 Board Member Ha: How long did it take to spread once it started?

29
30 Mr. Hughes: Approximately 5 years ago they started to receive reports from Puna
31 District homeowners about their Ohia trees dying. Homeowners described the
32 phenomena of leaves turning from green to yellow to brown in a matter of weeks.
33 Reports showed large areas of spreading. Starting in May 2014 we began to look at
34 potential pathogens. *Ciratozystis fimbriata* was confirmed as the causal mortality agent
35 of these trees. We've been mapping the distribution from Puna and into Hilo. We are
36 seeing expansion of disease in Puna and new populations being established elsewhere.

37
38 Board Member Ha: Once the disease is in the wood how long does it take for the tree
39 to die?

40
41 Dr. Keith: Upon infection it can take a long time. The size of the tree may be the
42 reason why some trees die faster than others. Don't really know. Mature trees seem to
43 take longer to die. Mortality rate in seedlings is high. A 2 year old potted seedling had
44 gone 9 months without seeing anything, then rapid death.

45

1 Board Member Hong: There was an Ohia die off several decades ago. Is this die off
2 similar to what occurred then?
3

4 Mr. Guerrero: That particular issue was Ohia Rust, which is still occurring. Ohia Rust is
5 found on all islands. If your Ohia is dying, send samples to HDOA and they will
6 determine the cause.
7

8 Board Member Hong: Has the Ohia been able to rebound after the Ohia Rust?
9

10 Mr. Hughes: The particular rust being discussed did not cause mortality in mature Ohia
11 trees, but causes mortality of seedlings. They are in the process of monitoring that now.
12 Old mature trees died in the 70's and 80's. No primary pathogen was identified as
13 being responsible for that die off. It may have been stress induced mortality or the age
14 of the trees. Here, *C. fimbriata* is causing mortality of all trees, young and old.
15

16 There being no further questioning by the Board, Chairperson Enright invited the public
17 to testify on this agenda item.
18

19 Michael Kumukauoha Lee – Native Hawaiian Practitioner: A gelatinous substance that
20 is used for medicinal purposes is obtained from dead Ohia stumps. This substance also
21 has antifungal properties. This causes a concern for us. One of the things to look at is
22 endemic antifungals.
23

24 Eric Tanouye, HFNA: Offered testimony as submitted. Mr. Tanouye asked the Board to
25 defer this request until a poll of the HFNA members could be done.
26

27 Johnny Gardenas, Regulatory Chair for HFNA: Echoed Mr. Tanouye's sentiments.
28 Expressed concern for the treatments and the permitting process. There are concerns
29 for the neighbor islands. Mr. Gardenas asked if there will be testing on the outer islands
30 and if an outreach program will be established.
31

32 Elton Mow, President of OGOH: Testified about his concerns for cinder falling under
33 the definition of "soil." Some of the OGOH members do not sterilize their cinder media.
34 Mr. Mow asked the Board what will be the true definition of "soil," because cinder is
35 mined from the ground.
36

37 Rob Hauff, DLNR/Division of Forestry and Wildlife: Presented testimony as submitted,
38 in support of this rule.
39

40 Bob Hamilton, owner of Plant It Hawaii: Presented testimony as submitted, in
41 opposition to this rule. This rule will crush business that has been around for 35 years.
42 They have produced over 1 million trees over the past 35 years.
43

44 Kalysa Hamilton, Plant It Hawaii: Presented testimony as submitted, in opposition to
45 this rule. It will hurt 15 employees and her future. Eighty percent of their business is

1 from shipping trees out of the Big Island. Plant It Hawaii uses soil from the Hamakua
2 coast, which is nowhere near the area infested with Ohia fungus.

3
4 Jamie Nahl, Sales manager of Plant it Hawaii: Presented testimony as submitted, in
5 opposition to this rule. The permit process needs to be explained. Would like “soil” to
6 be removed from the rule. Research funding is needed.

7
8 Suzanne Hamilton, owner of Plant it Hawaii: Presented testimony as submitted, in
9 opposition to this rule. Take “soil” out of this rule. There is no true scientific evidence to
10 back this rule. The rule needs to be looked at much more thoroughly. Plant It Hawaii
11 ships 40,000 to 50,000 trees a year with no evidence of spreading this fungus. She
12 believes the Ohia Wilt has been spread by bull dozers and chain saws used to clean up
13 after Hurricane Iselle.

14
15 Chairperson Enright called for a 5 minute recess at 10:50 A.M.
16 Meeting reconvened at 10:55 A.M.

17
18 Domingo Cravalho, United States Fish and Wildlife Service – Ecological Services:
19 Presented testimony in support of rule. He thanked HDOA for taking steps to move
20 forward with the rule. Ohia is essential for native birds. Further spread to the neighbor
21 islands would be devastating.

22
23 Joe DeFrank, active 6 acre landscape farmer on the Island of Hawaii: Presented
24 testimony in opposition to the rule. A ban on soil will greatly affect his operations.
25 Nursery is on the Hamakua coast, away from the affected area. Requested that HDOA
26 use a soil test that will give quick results, like a shake test for coloration.

27
28 Christy Martin, CGAPS: Presented testimony in support of the rule. Science shows
29 that fungus is in the soil, maybe not all soil, but we just don’t know. Certification and
30 treatment of soil should be a priority for the plant industry. Clearly we do not have all
31 the science but we have a responsibility to future generations to act quickly.

32
33 Erin Bishop, OISC outreach specialist: Presented testimony in support of this rule. The
34 Ohia Wilt has already affected 15,000 acres on Big Island and if it moves to the other
35 islands, it will destroy the Ohia forests of the State. It is important to include soil in the
36 quarantine.

37
38 Springer Kaye, BIISC: Presented testimony as submitted, in support of this rule. The
39 Ohia Wilt interim rule was mentioned on KHON 7/28/2015; Civil Beat 8/14/2015; Star
40 Advertiser 8/16/2015; and on social media. Word has been spread. Money has been
41 provided to continue research.

42
43 Michael Kumukauoha Lee (2nd time), a Native Hawaiian Practitioner: Offered a
44 suggestion to the Board saying sea cucumber has anti-fungal properties that can be
45 used to address the fungus.

1
2 Mark Fox, Nature Conservancy: Presented testimony as submitted, in support of this
3 rule. Outreach should be prioritized. We need to move forward as quickly as possible
4 so that nursery and landscaping can get their soils tested now, so businesses will not
5 collapse.

6
7 Teya Penniman, MISC: Presented testimony as submitted, in support of this rule. This
8 is an extraordinary situation and extraordinary action must be taken. Ohia is our forest.
9 Have been looking for Ohia Wilt on Maui, but haven't found any yet. Ohia is more
10 important to the water shed than any other trees. If we want local Ag, and we do, then
11 we want Ohia.

12
13 Mary Ikagawa, Koolau Mountains Watershed Project: Presented testimony as
14 submitted, in support of this rule. Need to stop spread within the Big Island.

15
16 Carol Kwan, Private Citizen and certified arborist: Presented testimony as submitted, in
17 support of this rule. The industry has had this happen before, and they can bounce
18 back. We need to make sure permitting process is good. We need to act now.

19
20 Lori Buchanan, Molokai Maui Invasive Species Committee: Presented testimony in
21 support of this rule. The Ohia tree is the only tree in Molokai forests. If the Ohia dies
22 there will be no forest. The State and Counties have spent millions purchasing
23 conservation land, much of which is Ohia forests. We must protect our investment.

24
25 There being no further testimony by the public, Chairperson Enright reopened
26 discussion to the Board

27
28 Board Member Russell: How will the permitting process work?

29
30 Chairperson Enright: HDOA is ahead of the Ohia Wilt problem. At first, the intent was
31 to quarantine only Ohia logs and wood products. After further research it became more
32 expansive. We are out ahead of the practicalities. The staff is concerned about the
33 soil. Dr. Keith was asked to join the discussion.

34
35 Chairperson Enright: Is it appropriate to have flowers, stems, and leaves quarantined
36 for this rule?

37
38 Dr. Keith: Based on literature regarding *C. fimbriata* and similar diseases, it appears
39 that seeds and blossoms do not tend to spread the disease but she hasn't done any
40 testing on this. Large body of literature says the fungus is host specific. This strain of
41 *C. fimbriata* may be different than other strains. We just don't know at this time. Need
42 to conduct tests here on leaves, seeds and flowers to see if they are carriers.
43 Recommends soil testing as she knows soil contributes to the spread.

44
45 Chairperson Enright: Are we ahead of the science?

1
2 Dr. Keith: There is a host specific nature to this disease. Many *C. fimbriata* strains are
3 being called different species now. From our perspective, we are gathering as much
4 information from the literature that is known and trying to gather our own research to
5 confirm what's in the literature.

6
7 Chairperson Enright: What soil sampling has been done?

8
9 Dr. Keith: The positive soil samples came from underneath dead trees. The
10 expectation is that the disease would not be found in soil from the Hamakua coast.

11
12 Chairperson Enright: He is uncomfortable including "soil" at this time based on what is
13 not known. Believes soil is low risk since so few of the samples taken were positive.
14 We don't know that nursery soil is infected. He asked that the interim rule be amended
15 to put an effective date of January 1, 2016 on the inclusions of "soil" so they have time
16 to research. The issue of soil will be taken up on a monthly basis as testing results
17 come in.

18
19 Dr. Keith: She would feel more comfortable with including the soil testing. Soil can
20 serve as a spreading mechanism. We are getting started on testing this week and we
21 should have answers quickly.

22
23 Board Member Case: Agrees that certain soil sources may be a lower risk. But green
24 waste recycling, such as mulch using ohia, could serve as vectors. There is still high
25 risk if you utilize this green waste in your business. She would like to see a certification
26 process or protocol put in place.

27
28 Chairperson Enright: HDOA has made a promise to be proactive. We should move
29 forward prudently. The spread of disease through the nurseries has not been
30 demonstrated. Environmental community is supportive of quarantine. HDOA needs
31 time to put protocols in place.

32
33 Board Member Galimba: Is passionate about Ohia forests. This is a good first step.
34 We need help from the nursery industry to keep this under control. Putting them out of
35 business would cause other problems. She supports the Chair's proposal to delay
36 implementation of the soil ban to give time to come up with the practicalities.

37
38 Board Member Russell: Testimony regarding the spread of disease through the heavy
39 equipment used after Hurricane Iselle is alarming. How can we address that?

40
41 Chairperson Enright: That is what we are trying to do with this rule. This issue goes
42 across agencies and we will move forward together on it. It is a work in progress and
43 we need to figure out protocols as we go along.

44

1 Board Member Evans: Supports the interim rule with phased-in ban on soil. All
2 departments have worked to promote food self-sufficiency and if we wipe out a big
3 sector of that, then we will be taking steps backward.
4

5 Board Member Hashimoto: Supports the interim rule with phased-in ban on soil. The
6 nursery industry is probably the 2nd largest industry in state. We need to trust the
7 nursery industry to police themselves and institute good business practices. They
8 would not foolishly do something to hurt themselves. Phasing-in soil is the best way to
9 do it. Gives HDOA, CTAHR, and PBARC time to work on how to test.
10

11 Board Member Hong: It is important to take measures to protect our forests. He is not
12 supportive of soil deferral until January 1, 2016. The onus should be on HDOA to
13 develop reasonable protocols soon. He recommended that the Board discuss what
14 protocols are in place at every meeting.
15

16 Chairperson Enright: There are things that HDOA can do regarding protocols, but that
17 we must rely on others for the science.
18

19 Board Member Ha: This is everybody's problem.
20

21 Board Member Ornellas: This is the most important problem faced by the Board in
22 recent memory. Watershed is life and death situation. Protection of the watershed is
23 important. Watershed plants are primarily Ohia and Uluhe Fern. The State has spent
24 millions of dollars trying to restore watersheds. The water that we have in Hawaii is all
25 that we have.
26

27 Board Member Gallo: The gravity of the situation is enormous. We need to act quickly.
28 We need all hands on deck to develop this protocol as fast as possible.
29

30 Chairperson Enright: His expectation is that this is a work in progress that will be taken-
31 up each month.
32

33 Ms. Takahashi: It is envisioned that the permit process will include an interisland
34 compliance program. The interisland compliance program will have permittees start
35 testing and implementing best management practices to avoid the spread of the fungus.
36

37 Board Member Case: Urged that the timeframe to implement the "soil" ban be shorter,
38 and the permit be subject to nursery testing cooperation. The implementation of the
39 "soil" ban could be delayed if the nursery industry is cooperative.
40

41 Chairperson Enright called for a motion to amend the effective date of the interim rule to
42 January 1, 2016 for soil.
43

44 Motion made to amend the effective date of interim rule to January 1, 2016 for soil:
45 Ha/Hashimoto.

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Vote: Approved, 8-2.

Chairperson Enright called for a 5 minute recess at 11:50 A.M.
Meeting reconvened at 12:02 P.M.

Hearing no further comments, Chairperson Enright called for a motion to adopt the rule as amended.

Motion made to adopt the rule as amended: Evans/Ha.

Vote: Approved, 10-0.

Land Vertebrate

- 1. Request to: (1) Allow the Importation of Two Plains Zebra, *Equus burchelli*, an Animal on the List of Restricted Animals (Part B), by Permit, for Non-Commercial Purposes by Three Ring Ranch; and (2) Establish Permit Conditions for the Importation of Two Plains Zebra, *Equus burchelli*, an Animal on the List of Restricted Animals (Part B), by Permit, for Non-Commercial Purposes by Three Ring Ranch.**

Presentation made by Neil Reimer, HDOA/Plant Industry Division Administrator, as submitted. The Advisory Committee on Plants and Animals recommended that the name, address, and source where the zebras would be obtained, be provided before approval of the permit to ensure that the zebras were true rescues. The Advisory Committee voted 3 for and 3 against importation of the Two Plains Zebra.

Chairperson Enright called for a motion to entertain request: Evans/Hashimoto.

Chairperson Enright opened the floor to questioning by the Board and invited Dr. Ann Goody to join the discussion.

Dr. Ann Goody, Three Ring Ranch: Presented testimony as submitted, in support of this permit request. The goal is not to come back asking for additional permit approvals. Three Ring Ranch is a sanctuary that rescues these animals. When looking for a zebra, Three Ring Ranch will not go through auction or purchase from the canned hunt industry, but will offer life-time home to rescue animals. The zebras will be spayed/neutered; there will be no breeding; and disease free.

Being that there was no questioning by the Board, Chairperson Enright invited the public to testify on this agenda item.

Cathy Goeggel, Animal Rights Hawaii: Presented testimony in opposition to this permit request. Ms. Goeggel provided examples of animal cruelty and death at the Molokai

1 Ranch and the Kauai Lagoon. We should stop importing exotic animals not native to
2 Hawaii. We have the opportunity to stop any Molokai Ranches or Kauai Lagoons from
3 happening again.

4
5 Michael Kumukauoha Lee, Kaue Hili Hui: Presented testimony in support of this permit
6 request. Applicant has a two decade long track record. As long as we have a process
7 within HDOA and the applicant is responsible, there should be no problem. We can
8 judge applicant based on long history. Quarantine will address concerns about disease.
9 Mankind has an obligation to take care of animals.

10
11 Inga Gibson, Hawaii State Director of Humane Society of the U.S.: Presented
12 testimony in opposition to this permit request. Ms. Gibson noted that Three Ring Ranch
13 is the only accredited sanctuary in Hawaii. She is hopeful that no more exotic animals
14 will come to Hawaii. She urged Dr. Goody to look for zebras available in Hawaii. The
15 last resort is looking elsewhere for additional zebras. Ms. Gibson has been working
16 with Dr. Goody to make sure she gets a good animal from an appropriate location. She
17 hopes that the Board would expedite permit approval in the future if a zebra in legitimate
18 need can be located so the opportunity to rescue that animal is not lost.

19
20 Ken Redman, private citizen and former zoo director with 34 years experience:
21 Presented testimony in support of this permit request. Mr. Redman has brought in
22 zebras to the zoo. They are high stress animals. It is psychologically detrimental to
23 have a zebra by itself. There will be no environmental impact.

24
25 There being no further testimony by the public, Chairperson Enright reopened
26 discussion to the Board.

27
28 Board Member Gallo: Why the request for two additional zebras? Is it because of their
29 age and to address the solitary issue? What if one dies, then will be in same situation?

30
31 Dr. Goody: Looking for two young zebras. These zebras would help address the
32 stressed nature of the current zebra. She hopes to bond the new zebras with other
33 animals so no future zebra imports will be needed.

34
35 Board Member Ha: How long have you been working with animals?

36
37 Dr. Goody: She has always liked animals. When she came to Hawaii as a nurse she
38 started working with them.

39
40 Board Member Hong: Could just one zebra be imported?

41
42 Dr. Goody: It is better for emotional health during transport that two zebras be
43 transported together. Young zebras will bond with each other during transport and keep
44 them calm.

45

1 Board Member Hong: Can a zebra bond with a horse?

2

3 Dr. Goody: It is possible. Works best when animals are young.

4

5 Board Member Hong: Could the current zebra bond with other animals as well; and
6 what the current zebra's life expectancy?

7

8 Dr. Goody: She has unsuccessfully tried to get current zebra to bond with other
9 species. The current zebra is very stressed. Current zebra's mother was 27 years old
10 when she died. Life expectancy is hard to predict.

11

12 Hearing no further comments, Chairperson Enright called for a vote on the question.

13

14 Vote: Approved, 10-0.

15

16 IV. OLD BUSINESS

17

18 Invertebrate and Aquatic Biota

19

- 20 **1. Resubmittal of Request to: (1) Approve the Transfer of Possession of**
21 **a Bottlenose Dolphin, *Tursiops truncatus*, an Animal on the List of**
22 **Restricted Animals (Part B), by Permit, from Dolphin Quest Oahu,**
23 **Inc. in Honolulu, to Dolphin Quest, Inc., Waikoloa, Island of Hawaii,**
24 **for Commercial Use; and (2) Update Permit Conditions for the**
25 **Possession of Bottlenose Dolphin, *Tursiops truncatus*, an Animal on**
26 **the List of Restricted Animals (Part B), for Commercial Use by**
27 **Dolphin Quest, Inc., Waikoloa, Island of Hawaii.**

28

29 Presentation made by Jonathan Ho, HDOA/PQB, as submitted. The Advisory
30 Committee on Plants and Animals unanimously (5/0) recommended approval of this
31 request.

32

33 Chairperson Enright called for motion to entertain request: Hashimoto/Ha.

34

35 Chairperson Enright opened the floor to questioning by the Board and invited Laura
36 Russel, General Manager of Dolphin Quest Oahu, and Julie Rocho-Lavine, Manager of
37 Marine Mammals of Dolphin Quest to join the discussion.

38

39 Ms. Russel and Ms. Rocho-Lavine: Presented testimony as submitted, in support of
40 this permit request. It was clarified that Dolphin Quest meets all federal standards.
41 Dolphin Quest works everyday to bond with their animal family. Goal is to inspire others
42 to take action to care for dolphins and whales. Dolphin lifespan is similar to those in the*
43 wild.

44

1 There being no questions from the Board, Chairperson Enright invited the public to
2 testify on this agenda item.

3
4 Michael Kumukauoha Lee, Kaue Hili Hui: Presented testimony in opposition to this
5 permit request. There are various native chants that make reference to dolphins.
6 These dolphins are captives. He would have no problem if dolphins choose to interact
7 with people. There is a problem with imposing human goals on dolphins. Interaction
8 should be on dolphin's terms.

9
10 Inga Gibson, Hawaii State Director of Humane Society of the US: Presented testimony
11 in opposition to this permit request. There was an animal welfare act violation issued by
12 the USDA on January 15, 2015. Dolphin Quest has yet to make any corrections at
13 Waikaloa facilities. They need to be in compliance with the State, County, and Federal
14 Law. Dolphin Quest is transferring these dolphins for breeding purposes. They are
15 doing this to provide dolphins to other facilities outside of Hawaii. Deaths have occurred
16 during transport due to trauma. Animals are being subject to many diseases because
17 they are kept in captivity.

18
19 Alexis Thomas, Animal Rights Hawaii: Presented testimony is opposition to this permit
20 request. The transfer would be stressful to the dolphins. Misinformation is being
21 spread. Life expectancy of a dolphin is greater in the wild. Dolphin Quest is operating
22 under the guise of "conservation." The pools are not deep enough. Allowing this
23 transfer perpetuates wrongs against dolphins and would be taking a step backwards.

24
25 Cathy Goeggel, Animal Rights Hawaii: Presented testimony in opposition to this permit
26 request. The captivity industry is hand in hand with Dolphin Quest. Dolphin Quest
27 cannot bring in animals from the wild because it's illegal. So they must breed the
28 dolphins they have. These dolphins are not voluntarily in tanks. Dolphins can see and
29 smell the ocean but can't get to it. Need to close down dolphin prisons.

30
31 Board Member Evans left the meeting at 1:15 P.M.

32
33 John Thomas, Animal Rights Hawaii: Presented testimony in opposition to this permit
34 request. We owe our ohana the opportunity to see animals in the wild. Dolphins swim
35 hundreds of miles a day. Taking dolphins into captivity to conserve the species is
36 wrong. They are not endangered. It is good to teach our kids how they live out in the
37 wild, not in a small kiddy pool. Dolphins didn't volunteer to be in a cage.

38
39 Ken Redman, private citizen and former zoo director with 34 years experience:
40 Presented testimony in support of this permit request. He reminded the Board that the
41 issue at hand is the transfer of dolphins and what is the impact on the environment.
42 The ethics of keeping dolphins in captivity is not the question. He went to see Dolphin
43 Quest in Kahala. They provide a nice environment for the dolphins. The dolphins show
44 no signs of stress. The staff was great. Dolphins interacted well with them. Training
45 was done through positive reinforcement. Ethical issues are a topic for another day.

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Chairperson Enright called for a 5 minute recess at 1:20 P.M.
Meeting reconvened at 1:29 P.M.

Tori Cullins, Wild Dolphin Foundation: Presented testimony in opposition to this permit request. There are much more educational opportunities out in the wild. Interaction becomes unnatural when dolphins are in captivity. She stated that Dolphin Quest scoped the dolphins daily, claiming they were trying to find out what the dolphins were eating. Real reason was to find ulcers. The stress that dolphins in captivity experience compromises their immune systems.

Lorraine Garnier, private citizen, past employee of Dolphin Quest: Presented testimony in opposition to this permit request. A captive situation is not a healthy environment for dolphins. Transport can sometimes go awry. Human events, accidents or delays can cause problems. Transport and preparing for transport is hard on dolphins. She cited two examples where movement of dolphins on the mainland resulted in death.

Lorri Crocket, Empty the Tanks Hawaii: Presented testimony in opposition to this permit request. Substantial research shows that transport can cause serious repercussions. Stress of transport is a serious issue. Social situations play a big role in dolphin life. Changing pod structure is harmful. Dolphin Quest has not planned accordingly given the stress involved in transport. Dolphins should be quarantined before being placed in new setting.

Samantha Rivera, private citizen: Presented testimony in opposition to this permit request. She asked Dolphin Quest whether the water is filtered for disease and how do they know the dolphins at the facility are happy?

Ken LaVasseur, Undersea Railroad: Presented testimony in opposition to this permit request. Statistics of dolphin life in captivity do not include the transportation of the dolphin because it would skew the numbers. There will be a direct effect on the environment by approving anything from Dolphin Quest. The Dolphin Quest owner keeps Dolphin slaughter houses alive, by purchasing the dolphins for captivity. Feeding animals only after they do what you want them to by giving them basic food nutrients is just supporting a failed regimen. Put an end to captivity now.

Natalie Parra, Keiko Conservation: Presented testimony in opposition to this permit request. This is not the only way to interact with dolphins. Making money off of these animals is immoral. The environmental impact may not be immediate but it will be great. If approved, this request is pushing another generation toward the idea that you can do whatever you want with animals. We need to teach the next generation.

There being no further testimony by the public, Chairperson Enright reopened discussion to the Board and called Ms. Russel, Ms. Rocho-Lavine and HDOA Jonathan Ho up to the podium for questions.

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Board Member Hong: Have the USDA violations been cleared?

Ms. Russel: Dolphin Quest remedied the situation before the deadline. The USDA cycle to check Dolphin Quest is once a year.

Board Member Hong: Does Dolphin Quest breed dolphins?

Ms. Russel: Dolphin Quest has a successful and responsible breeding program. Preserving genetic diversity is very important.

Board Member Hong: Which is the better location, Waikaloa or Kahala?

Ms. Russel: Both offer a great location for dolphins. Pool space is four times the space required by USDA per dolphin. Per dolphin space is the same at both facilities.

Board Member Hong: Is Dolphin Quest perpetuating a domesticated strain of dolphins?

Ms. Russel: They are perpetuating facilities that create an opportunity for children and the public to connect with these animals.

Board Member Hong: What would happen if the animals are released back into the wild?

Ms. Russel: They are viewed as our own children.

Board Member Russell: What is the lifespan in captivity versus the wild?

Ms. Russel: The average lifespan at Dolphin Quest is 44.9 years.

Ms. Rocho-Lavine: Open ocean research suggests average life in the wild of 20 years. This is based on Sarasota, Florida research that has the longest ongoing health assessment project for the bottlenose dolphin. It is hard to come up with an average.

Board Member Russell: In Maui County it is illegal to hold dolphins/whales captive. How do you feel about that?

Ms. Russel: Everybody has a right to their own opinions. We have a common goal of love for these animals. Through display and educational facilities an opportunity is created to keep people engaged with dolphins, where there can be caring for these animals for generations to come.

Jonathan Ho, HDOA/PQB: He talked to Carolyn McKinny of USDA and confirmed that the previous violation was remedied. It was a minor violation and did not require a follow-up inspection. Inspection dates are computer generated. If a facility is in good

1 standing, inspections occur less often. Inspections are unannounced. Kahala Hotel
2 and Waikaloa welfare licenses were voided because they were duplicates, not because
3 they did anything wrong. Only one set is needed so the duplicate set was removed.
4

5 Chairperson Enright: HDOA's concern is biosecurity. HDOA looks at disease and
6 environmental degradation as required by the statute. In the same way we are looking
7 at lions, tigers, and bears, we must do the same with ocean animals.
8

9 Hearing no further comments, Chairperson Enright called for a vote on the question.

10
11 Vote: Approved, 6-2, with 1 abstention. Board Member Evans was not present.
12

13 **2. Resubmittal of Request to: (1) Approve the Transfer of Possession of**
14 **Two (2) Bottlenose Dolphins, *Tursiops truncatus*, an Animal on the**
15 **List of Restricted Animals (Part B), by Permit, from Dolphin Quest,**
16 **Inc., Waikoloa, Island of Hawaii, to Dolphin Quest Oahu, Inc., in**
17 **Honolulu, for Commercial Use; and (2) Update Permit Conditions for**
18 **the Possession of Bottlenose Dolphin, *Tursiops truncatus*, an Animal**
19 **on the List of Restricted Animals (Part B), for Commercial Use by**
20 **Dolphin Quest Oahu, Inc., in Honolulu.**

21
22 Presentation by Jonathan Ho, HDOA/PQB, as submitted. The Advisory Committee on
23 Plants and Animals unanimously (5/0) recommended approval of this request.
24

25 Chairperson Enright called for motion to entertain request: Galimba/Hashimoto.
26

27 Chairperson Enright opened the floor to questioning by the Board. There being no
28 questions from the Board, Chairperson Enright invited the public to testify on this
29 agenda item.
30

31 Ken LaVasseur, Undersea Railroad: Presented testimony in opposition to this permit
32 request. The Sarasota, Florida program is where they harass dolphins, which skews its
33 numbers on dolphin life expectancy. In the wild, research has shown consistently that
34 they can live to be 35-45 years old. All studies on captivity, marginalizes the numbers
35 and pads the numbers. It is a very rare dolphin that lives in captivity for 45 years.
36

37 Samantha Rivera, private citizen: They did not answer her previous questions.
38

39 Natalie Parra, Keiko Conservation: The Dolphin Quest website states that the average
40 lifespan of a dolphin is 25 years.
41

42 Chairperson Enright called up Ms. Russel and Ms. Rocho-Lavine and HDOA Jonathan
43 Ho to respond to questions.
44

1 Ms. Russel: Water at the Dolphin Quest Kahala facility is not filtered. The pools have
2 no contact with the outside ocean so no contamination occurs. There have been no
3 documented cases of disease transmission from dolphins to humans or vice versa.

4
5 Chairperson Enright: Are the dolphins happy or content?

6
7 Ms. Rocho-Lavine: They look for a lot of things, whether they are engaged or interested
8 in what they are doing. Interaction with dolphins shows they are happy. Everything is
9 done on a daily basis. We are simply asking the animals to do things. Some animals
10 have different behaviors. Dolphin Quest trainers are aware of that. None of the
11 programs are scripted. This allows trainers to look at animals, engage with them, and
12 design that program based on the health and well-being of the animals.

13
14 Board Member Russell: What about the discrepancy for the average lifespan?

15
16 Ms. Rocho-Lavine: The information on the website is the industry standard; the
17 average lifespan at marine mammal parks and aquariums is 25 years. For Dolphin
18 Quest the average lifespan is 45 years.

19
20 Board Member Russell: When was Dolphin Quest incorporated?

21
22 Ms. Rocho-Lavine: Dolphin Quest was incorporated in 1988.

23
24 Board Member Russell: How would you know the average lifespan of Dolphin Quest
25 dolphins is 45 years if they have only been around since 1988?

26
27 Ms. Russel: This information comes from an initial set of 6 animals.

28
29 Hearing no further comments, Chairperson Enright called for a vote on the question.

30
31 Vote: Approved, 6-3. Board Member Evans was not present.

32
33 **3. Resubmittal of a Request Based on New Information to: (1) Allow the**
34 **Importation of Asian Sea Bass, *Lates calcarifer*, an Animal on the**
35 **List of Restricted Animals (Part B), by Permit, for Aquaculture in**
36 **Above Ground Tanks, by KI Fish Company, LLC.; and (2) Establish**
37 **Permit Conditions for the Importation of Asian Sea Bass, *Lates***
38 ***calcarifer*, an Animal on the List of Restricted Animals (Part B), by**
39 **Permit, for Aquaculture in Above Ground Tanks, by KI Fish**
40 **Company, LLC.**

41
42 Presentation made by Jonathan Ho, HDOA/PQB, as submitted. The Advisory
43 Committee on Plants and Animals recommended (5/0, 1 abstention) that the Board
44 disapprove this request. This request was deferred from last Board meeting due to
45 confusion with documentation presented. There was uncertainty about the ultimate
46 proposal and what was actually going to occur at the facility. It was clarified that the

1 hatchery request was removed; Permit conditions were amended to remove references
2 to progeny; and a size restriction was implemented. The size of the fish is being limited
3 to 5 lbs. which would address the issue of maturity while also making the fish
4 distinguishable from brood stock.

5
6 Chairperson Enright called for a motion to entertain request: Hashimoto/Ha.

7
8 Chairperson Enright opened the floor to questioning by the Board and invited Noe
9 Kalipi, Kohala Institute to address the Board.

10
11 Ms. Kalipi presented testimony in support of this permit request, as submitted. The re-
12 submittal sought to address the Board's concerns from the previous meeting. Due to
13 concern with escapement of larvae, the hatchery was eliminated from the request.
14 They want one cycle of Barramundi for this request. Any further cycles would require
15 coming before the Board again. The fry they will be importing will be 1 inch in size.
16 This addresses the issue of escapement. The parabolic filters will catch 200 microns or
17 above. Since the fry will be 1 inch all chance of escapement is eliminated. Having
18 removed the hatchery and agreed to grow fish to 5 lbs. they will not have the fish in
19 tanks for more than 6-8 months. The security issues raised by the Board have been
20 addressed by fencing with 24-hour surveillance, and limited access to the growing
21 areas.

22
23 Board Member Russell: Is this particular fish essential to the operation?

24
25 Ms. Kalipi: It is. They wanted to do *Niloticus*, a species of Tilapia that the Board is
26 considering for rule change, and in the meantime they looked at the fish that are on the
27 restricted list that have similar growth rates with an issued permit in Hawaii and that's
28 how they chose this fish.

29
30 Board Member Russell: Will the operation be for the local market or export?

31
32 Ms. Kalipi: Both.

33
34 Board Member Gallo: What did the Advisory Board recommend after the changes were
35 made?

36
37 Jonathan Ho, HDOA/PQB: They recommended disapproval. Major concern was how
38 seasoned KI Fish Co. was. Contingency planning is only as good as those individuals
39 at the location, and the scientists at the location do not have experience with
40 barramundi.

41
42 Board Member Gallo: When are they considered experienced?

43
44 Mr. Ho: It took 3 years for the previous barramundi submittal to get permit approval.
45

1 Amy Takahashi, HDOA/PQB Acting Manager: The sub-committee vote was 3
2 disapproval, 1 approval, and 1 abstain. This request is just for the first round of fish and
3 would require another permit for further importation of fish.
4

5 Ms. Kalipi: The Advisory Board says that they are not experienced, but the project team
6 is very experienced, just not at this site. They have done this at other locations.
7

8 Board Member Hashimoto: Can you clarify the vote? Didn't the Advisory Committee
9 vote 5 disapproval and 1 abstain?
10

11 Mr. Ho: The other vote was the sub-committee vote.
12

13 Chairperson Enright invited Neil Reimer, HDOA/Plant Industry Division Administrator, to
14 the podium to give his impression of the advisory committee's biosecurity concerns.
15

16 Mr. Reimer: KI Fish has been putting in more and more security measures. But they
17 were not confident with experience of the staff in dealing with biosecurity issues. The
18 staff is experienced in fish culture but not in the biosecurity sense. The Committee saw
19 this fish as being problematic if it gets loose. It was critical that it never gets out. They
20 felt that KI biosecurity measures would be sufficient, but security is only as good as the
21 people that implement it, and they did not feel KI had that experience yet.
22

23 Board Member Hashimoto: Is there another facility that currently uses these fish?
24

25 Mr. Ho: There is another facility on North Shore of Oahu.
26

27 Board Member Hashimoto: What is the difference in this case?
28

29 Mr. Ho: The other facility had experience with the fish in conjunction with biosecurity
30 plan is what gained the approval. The individual had a track record that allowed him to
31 get an approval in 1999.
32

33 Ms. Kalipi: In the context of the contingency situation, if there was a large flood, how
34 would someone stop the fish? The answer is that there would be plans drafted. They
35 would agree to those plans in the permit conditions. In the context to their biosecurity
36 issue, it was not the day to day biosecurity but rather the extreme event situation.
37

38 Board Member Ha: Is the size of the fish an issue?
39

40 Mr. Ho: The issue was fish escaping through the filtration system. Now, the 1-inch fry
41 are far larger than the mesh size. By keeping the fish to 5 lb. size they would lack the
42 maturity to breed.
43

44 Board Member Ha: Contingency planning needs to occur first. You cannot wait until
45 something happens.

1 Mr. Ho: It's a catch-22 situation. You are expected to gain experience but you do not
2 actually have that fish. The concern was whether it was worth it for this species.

3
4 Board Member Ha: There is already someone using this fish.

5
6 Mr. Ho: Experience played a role for the other applicant. It was recommended that the
7 current applicant use a less potentially harmful species such as Niloticus. If that fish did
8 get out, they are already here. That was the issue.

9
10 Ms. Kalipi: The geographic location of the facility would not allow the fish to escape. If
11 there was flooding, they would end up in a macadamia nut field. Even in that scenario,
12 there is no way they would make it to the ocean.

13
14 Board Member Ornellas: There is lots of trial and error in aquaculture. You need to
15 take a look at the present operation that is growing this fish right now, and see their
16 successes and failures. Then you would be able to see the problems. That way,
17 something different could be done. There is an economic component as well.

18
19 Chairperson Enright: HDOA is developing protocols for biosecurity for aquaculture.
20 The industry has identified species of fish that are the future of aquaculture. This will
21 require permits and HDOA will be coming to Board with protocols to address this.

22
23 Board Member Ornellas: If a fish proves to be unfeasible could the Board pull that
24 permit?

25
26 Mr. Ho: He is not aware of that ever happening.

27
28 Board Member Case: When you talk about biosecurity KI Fish has done a great job on
29 that. The key to biosecurity is invasiveness of what you are bringing in. There is
30 potential for disaster. You need to look at the level of invasiveness needs. That will be
31 the initial safeguard.

32
33 Board Member Russell: How big can the fish get?

34
35 Ms. Kalipi: Asking for a permit to grow fish to 5 lbs. One round takes 6-8 months.

36
37 Board Member Russell: Ordering fish every 6-8 months is a waste of time. Would you
38 want to breed them?

39
40 Ms. Kalipi: They decided to come back for another permit later. They just want to do
41 this one grow. They can demonstrate the system and design works, while addressing
42 the issue of permit regulations and theft, to show we can do it. They hoped to move to
43 Niloticus after showing the success of their operation.

44

1 There being no further questions from the Board, Chairperson Enright invited the public
2 to testify on this agenda item.

3
4 Christy Martin, CGAPS: Presented testimony in opposition to this permit request. She
5 has concern for the importation of this particular species. We do not want it out in the
6 environment. We see a lot of fish being put in our streams. There is a big inventory list,
7 for example, in the Kohala streams. Those were the result of some escape. It is
8 impossible to have a biosecurity issue 100% addressed.

9
10 Brian Nelson, DLNR Division of Aquatic Resources: Presented testimony as
11 submitted in previous Board meeting. Although facility seems pretty secure with
12 regards to biosecurity, there is concern with theft from facility and result in smuggling.
13 This species is desired for aquaculture and recreational facilities that could lead to
14 unpermitted activities. This is a high risk species for Hawaii due to its high growth rate,
15 adaptability, and it is highly predatory. There is concern about striped mullet fishery in
16 Hilo area, less than 80 miles away from the location. The State spends millions on
17 invasive species a year. DLNR spends over \$600,000 a year on aquatic invasive
18 species management. We are in triage mode for managing invasive species in the
19 State. We need to transition to prevention rather than control, in order for it to be cost
20 effective. We want to see low risk species used in these facilities so that we do not
21 need another control plan down the line for a non-native species.

22
23 Hearing no further comments, Chairperson Enright called for a vote on the question.

24
25 Vote: Denied, 7-2. Board Member Evans not present.

26
27 VII. ADJOURNMENT OF REGULAR MEETING

28
29 Having no further business before the Board, Chairperson Enright called for a motion to
30 adjourn meeting: Hong/Gallo.

31
32 Meeting adjourned at 2:51 P.M.

33
34 Respectfully submitted,

35 

36
37 Micah K. Munekata
38 Board Secretary

