

**Minutes of the Advisory Committee on Plants and Animals**  
**February 12, 2019 Meeting**  
Hawaii Department of Agriculture (HDOA)

I. CALL TO ORDER

The meeting of the Advisory Committee on Plants and Animals was called to order by Advisory Committee Chairperson Dr. Kevin Hoffman on Tuesday, February 12, 2019 at 9:05 A.M. at the Plant Quarantine Branch Conference Room, 1849 Auiki Street, Honolulu, Hawaii 96819.

Members Present:

Dr. Kevin M. Hoffman, Committee Chairperson, Hawaii Department of Agriculture (HDOA)  
Kenneth Matsui, Petland/Pets Pacifica  
Dr. Maria Haws, Director, Pacific Aquaculture and Coastal Resources Center, University of Hawaii Hilo  
Dr. Josh Atwood, Division of Forestry & Wildlife, Department of Land and Natural Resources (DLNR), Ex Officio Member Designated Representative  
Kenneth Redman, Retired Director of the Honolulu Zoo

Members Absent:

Dr. Sarah Park, Department of Health, Ex Officio Member Designated Representative  
Scott Glenn, Director, Office of Environmental Quality Control, Ex Officio Member  
Dr. Benton Pang, Invasive Species Team Manager, U.S. Fish and Wildlife Service

Others Present:

Jennifer Waihee-Polk, Deputy Attorney General  
Jonathan Ho, Plant Quarantine Branch (PQB) Acting Branch Manager, HDOA  
Trenton Yasui, PQB Acting Inspection & Compliance Chief, HDOA  
Lance Sakaino, PQB Plant Specialist, HDOA  
Techie Lancaster, PQB Acting Invertebrate and Aquatic Biota Specialist, HDOA  
Wil Leon Guerrero, PQB Micro-organism Specialist, HDOA  
Chris Kishimoto, PQB Entomologist, HDOA  
John Ueshiro, PQB Acting Land Vertebrate Specialist, HDOA  
Jim Thain, PQB Master Journeyman, HDOA  
Karen Hiroshige, PQB Secretary, HDOA  
Dr. John McHugh, Pesticides Branch Manager, HDOA

Others Present: (Cont'd)

Donald Heacock, Kauai Organic AgroecoSystems  
Joe Farber, Project Manager, Hui O Kuapa  
David Penn, Penn Law Center

## II. INTRODUCTION AND COMMENTS

Former Chairperson John McHugh introduced Dr. Kevin Hoffman as the incoming Chairperson for the HDOA Advisory Committee on Plants and Animals (Committee). Chairperson Kevin Hoffman gave a brief resume history. The other Advisory Committee members introduced themselves.

## III. APPROVAL OF MINUTES FROM THE FEBRUARY 13, 2018 AND NOVEMBER 14, 2018 MEETINGS

Chairperson Hoffman asked the Committee to review the minutes for the February 13, 2018 and November 14, 2018 meetings before fielding a motion to approve them. Committee member Redman stated that he was not present for both meetings. Committee member Matsui stated that he has not read the minutes from both meetings. Committee member Haws stated that she has read the minutes and made a motion to approve the minutes from February 13, 2018. Committee member Matsui seconded the motion. Chairperson Hoffman called to vote.

Vote: APPROVED 5/0.

Chairperson Hoffman inquired regarding the minutes for the November 14, 2018 meeting. Committee member Haws motioned to approve the minutes from November 14, 2018. Advisory Committee member Matsui seconded the motion. Chairperson Hoffman called to vote.

Vote: APPROVED 5/0.

## IV. COMMENTS FROM GENERAL PUBLIC ON AGENDA ITEMS (ORAL OR WRITTEN)

Chairperson Hoffman asked if there were any comments on any of the agenda items. Committee member Matsui said that comments from the public are normally taken after a submittal is presented. Chairperson Hoffman acknowledged.

V. REQUESTS TO BE REVIEWED BY THE ADVISORY COMMITTEE

Invertebrate and Aquatic Biota:

Request to: (1) Allow the Importation of Pacific Oyster, *Crassostrea gigas*, Kumamoto Oyster, *Crassostrea sikamea*, Eastern Oyster, *Crassostrea virginica*, and Manila Clam, *Tapes semidecussata*, Animals on the List of Conditionally Approved Animals, by Permit, for Aquaculture Production in a Hawaiian Fishpond, by Hui O Kuapa;

(2) Establish Permit Conditions for the Importation of Pacific Oyster, *Crassostrea gigas*, Kumamoto Oyster, *Crassostrea sikamea*, Eastern Oyster, *Crassostrea virginica*, and Manila Clam, *Tapes semidecussata*, Animals on the List of Conditionally Approved Animals, by Permit, for Aquaculture Production in a Hawaiian Fishpond, by Hui O Kuapa;

(3) Allow the Transfer of Pacific Oyster, *Crassostrea gigas*, Kumamoto Oyster, *Crassostrea sikamea*, Eastern Oyster, *Crassostrea virginica* and Manila Clam, *Tapes semidecussata*, Animals on the List of Conditionally Approved Animals, by Permit, for Aquaculture Production in a Hawaiian Fishpond, by Hui O Kuapa; and

(4) Establish Permit Conditions for the Transfer of Pacific Oyster, *Crassostrea gigas*, Kumamoto Oyster, *Crassostrea sikamea*, Eastern Oyster, *Crassostrea virginica* and Manila Clam, *Tapes semidecussata*, Animals on the List of Conditionally Approved Animals, by Permit, for Aquaculture Production in a Hawaiian Fishpond, by Hui O Kuapa.

Acting PQB Invertebrate and Aquatic Biota Specialist, Ms. Techie Lancaster, provided a synopsis of the request. The applicant and Project manager, Mr. Joe Farber, was in attendance and able to participate in this meeting.

Committee member Josh Atwood requested clarification on the differences between diploid and triploid oysters; the requirements for imports to be all triploids; and if the applicant also wanted to import diploid oysters as well. Mr. Farber said that he wanted the option to import diploids, but if there are concerns, he is willing to make the change. Committee member Maria Haws explained the issue of polyploidy and commented that it is complex. Dr. Haws said that a 10-year study has shown triploids perform better in warm temperatures, such as in Hawaii, because they will not be developing eggs and sperm, therefore do not spawn and will be fat year-round. She said that triploids are generally better here in Hawaii because diploid can spawn all year but will be also be thin all year. Dr. Haws explained that the difficulty is triploid seeds are a lot more expensive, difficult to produce, and are not readily available to smaller

farmers. She said that generally, triploid seeds are not usually sold to small farmers and if these seeds that are produced, are normally kept for their own use.

Dr. Haws said the question is the risk of having diploids in Hawaii. She said that diploids do spawn but a lot of reproduction is not seen because they do not reach complete reproductive condition. Dr. Haws explained that at the Pacific Aquaculture and Coastal Resources Center, they go through an elaborate procedure to sexually condition diploids and the process takes four months.

Dr. Haws said another issue is that there is not a lot of recruitment. She said oysters have historically been introduced since the 1860 and are likely not invasive due to predation by octopus and crabs. Dr. Haws said that it is not exactly true that triploids are sterile. She said that triploids do not spawn even in hatcheries but will develop eggs or sperm and that hermaphrodites are not reproductively sound therefore, they in theory are a lower risk. Dr. Haws said diploids had been in Hawaii for a long time in fishponds including Hilo Bay and she has not seen natural recruitment outside the few areas where they are established. She said the applicant has used oyster in their fishpond before and asked Mr. Farber if he has seen natural recruitment there. Mr. Farber said, "no".

Committee member Kenneth Matsui said that importation of live oysters and clams for retail sale is allowed, but the proposed permit conditions are imposing additional requirements for farmers. Ms. Lancaster said that retail stores are importing only for consumption and that aquaculture companies are maintaining the oysters in recirculating tank systems. Dr. Haws said there are diseases of concern for oysters, including those for live sale for consumption. She said that hatcheries have concerns regarding people buying and tossing potentially infected shells into the ocean and spread diseases. Dr. Haws said to import to the State of Washington, Alaska, California, and Oregon, all hatcheries must submit bi-annual disease testing via a certified lab. Mr. Matsui said even if the oysters are dead, they can still transmit diseases and ultimately could get into the environment. He also commented that UV sterilization does not work for sterilization in this case.

Committee member Ken Redman asked what the impact to the environment would be if there was an escape. Mr. Farber said he was uncertain but noted that the recommendation is to constantly monitor the area as they grow. Mr. Redman said that he was in the "comfort zone" because most of the Subcommittee members have recommended approval. Mr. Matsui stated there is a risk but not a high one, noting his personal experience in the Waimanalo and Pearl Harbor areas that oysters were not out of control.

Dr. Atwood asked if any of these species requested established in any area. Dr. Haws responded that in the year 2000, a State working group conducted an extensive survey in the State. She said that some native species had disappeared and

noted that introduced species from decades ago are also not there anymore. She said that was due to habitat changes rather than competition.

Dr. Haws said she previously studied clams in Kaneohe Bay and is not as abundant now compare to then. She also commented that clams disappeared after soon after fisheries opened-up. She said that the hypothesis was that habitat degradation led to the demise of the clams but later discovered that the clams had established at the old sewage outfall resulting in high nutrient levels. She said clams need fairly high phytoplankton levels which is not very common in Hawaii, though is seen a lot on the coast, including fishponds. Dr. Haws said phytoplankton is not found in clear, oligotrophic water because it can't survive on those nutrient level, but those areas are where we see a lot of native species. She said a recent survey on West Loch of Pearl Harbor showed a lot of Eastern oyster, a little Pacific oyster, and a lot of native species, noting that the native species are the predominant ones on Oahu.

Committee Chairperson Kevin Hoffman stated that in summary all four of these species have been found here in Hawaiian water. Dr. Haws responded that all species had been found in Hawaii and are likely self-limiting because of nutrient availability and predation. She said even at the fishpond, they will probably out-eat themselves.

Dr. Atwood asked what can be done to mitigate the risk noting that surveying the fishpond is one. Ms. Lancaster said proposed condition #2 states that imported restricted articles shall originate from an area documented to be free of Oyster Herpes Virus and condition #10 where imported restricted articles shall be certified disease free. Dr. Atwood said that Condition #3 states that the applicant will be responsible for progeny and escape and asked if there a is bond. Ms. Lancaster said that currently no bond is required in the proposed conditions but can be added if needed. Acting Inspection and Compliance Chief Trenton Yasui said that applicant is responsible for escape. He said another recourse is revoking the permit and any enacting potential penalties or fines.

Mr. Matsui said a bond is not warranted for this request because shellfish in Hawaii gets eaten by everyone. Dr. Haws said the benefits outweigh the low level of risk. She said that monitoring the fishpond or other means of eradication are not going to do much because of the predators and the shellfish are desired by humans. Mr. Yasui mentioned condition #21 addressed any issue of eradication as the applicant would be liable for those cost. Dr. Atwood asked if that was sufficient means to recoup costs if eradication is needed. Mr. Yasui said, "correct".

Dr. Haws expressed concern with a 100 ppm bleach bath to remove external parasites because it is a high-level treatment that could end up killing the spat. She said Washington State requires 10 ppm for an hour to eliminate external parasites on spat.

Mr. Yasui said proposed conditions #7 and #8 stating 100 ppm refers to disinfecting water used for transport. He said that PQB did not have a requirement on treating the organism itself. Mr. Yasui said 100 ppm was recommended by Dr. Lei Yamasaki for disinfecting water for transport. Dr. Haws recommended adding a condition in the future to require treatment of organisms by exporter.

Mr. Redman asked where Condition #11 is, as it will be deleted. Acting Specialist Techie Lancaster answered that it is on Page 24.

Mr. Matsui suggested we allow local aquaculture farmers to import like mainland competitors can for consumption, and not put them at a significant disadvantage. Dr. Atwood said the condition allow for transfer for consumption, but we cannot stop the public from placing it in the water. He asked if the permittee will be responsible for escape and establishment. Mr. Yasui said it is the responsibility of the applicant to report intentional release, if they have knowledge of it, and that they need to be clear that the animals being sold live are only for consumption.

Hearing no further discussion, Committee member Redman made a motion to recommend that the Board approve this request with the deletion of Permit Condition #11. The motion was seconded by Committee member Matsui. Committee Chairperson Hoffman called for a vote.

Vote: APPROVED 5/0.

#### Land Vertebrates:

Request for: (1) Preliminary Approval of Proposed Amendments to Chapter 4-71, Hawaii Administrative Rules (HAR), "Non-Domestic Animal Import Rules," that Include Amendments Changing the List Placement of Water Buffalo, *Bubalus bubalis*, and (2) Authorize the Chairperson to Schedule a Public Hearing and Appoint a Hearing Officer in Connection with the Proposed Amendments to Chapter 4-71, HAR.

PQB Acting Branch Manager Jonathan Ho passed out additional emailed testimony from Nicholas Reppun, Farm Manager, Kako'o Oihi. PQB Acting Manager Jonathan Ho provided a synopsis of the request.

Advisory Committee member Ken Redman asked why there were a number of Subcommittee members that did not respond and that he and members of the Committee use their technical expertise in making their recommendation. Acting Manager Ho said that the Subcommittee members are volunteers, that most of the members who responded were those that normally respond, and that PQB is looking to include additional Subcommittee Members.

Advisory Committee member Kenneth Matsui asked about the permit conditions, reporting requirements, and possibility of transfer should the water buffalo be put on the List of Restricted Animals, Part B (RB). Mr. Ho said that reporting for restricted list animals is done semi-annually and that because Mr. Heacock is requesting "domestic" status for the water buffalo; proposed conditions were not drafted. Mr. Ho said that transfer for RB animal could be approved by the Board of Agriculture (Board) assuming that the transferee could meet the use, containment, and permit conditions as approved by the Board. Advisory Committee member Josh Atwood asked about how containment requirements are enforced. Mr. Ho said that containment requirements are listed in the permit conditions as approved by the Board, with a many of the conditions being considered standard language for all permit conditions presented to the Board. Committee Chairperson Kevin Hoffman asked if reproduction is allowed. Mr. Ho said that the Board could make that determination to allow or disallow reproduction if they saw fit. Mr. Redman asked how breeding would occur if only heifers are imported. Mr. Ho said that Mr. Heacock would be bringing inseminated ones in. Mr. Redman mentioned that was not in the submittal.

Chairperson Hoffman said there are two races of water buffalo, Indian River and Swamp, but Mr. Heacock is only proposing to import Indian River. He said the way the rules are drafted, both would be eligible. Mr. Ho said that if there was a need for further differentiation, changes could be made to the proposed rules. Mr. Matsui asked if the water buffalo were to be considered domestic, would they be subject to the same requirements as domestic cattle. Mr. Ho said that the Division of Animal Industry (DAI) Hawaii Administrative Rules (HAR) Chapter 4-16, has a section for cattle, and that Mr. Heacock has proposed adding a new subchapter addressing water buffalo to HAR 4-16 and exchanging the words "cattle" and inserting "water buffalo". Mr. Ho said that based on the Subcommittee responses, that appeared to be adequate to address any disease concerns. Advisory Committee Member Maria Haws asked about the risk for import and disease transmission, and why there was a proposed "five-year" waiting period. Mr. Ho said the Advisory Subcommittees on Viruses and Bacteria member responses show that the risk for disease introduction is low, and the reason why water buffalo were likely on the List of Restricted Animals, Part A (RA) is due to disease introduction. Mr. Ho said that the Advisory Subcommittee on Land Vertebrate responses were due to the potential for damage to the environment if they were to become feral. Dr. Haws asked if there were metrics for making that determination. Mr. Ho said that there are no firm metrics, but that the Board could make that determination on a case-by-case basis depending on what the applicant was proposing.

Dr. Atwood asked if DAI rules have containment requirements because feral cattle are a big problem. Mr. Ho said that their rules are for prevention and surveillance for diseases. Mr. Matsui asked where they are a problem. Dr. Atwood said that they are a big problem on Hawaii Island and Maui, and that they are currently not considered a game animal for hunting.

Mr. Ho mentioned that the petitioner, Mr. Don Heacock was present for questions as well. Mr. Heacock said that water buffalo have been in the State for 129 years and confirmed Dr. Atwood's statement about feral cattle. Mr. Heacock said that Advisory Subcommittee member Dr. Fern Duvall stated in his comments that Water buffalo had feral status in Hawaii, and that he did an internet search and could not find anything regarding that. Mr. Ho said that he could explain Dr. Duvall's comment and showed Mr. Heacock a Bishop Museum publication citing the former feral status of water buffalo in Hawaii. Mr. Heacock referred back to Dr. Hoffman's comment regarding the different water buffalo races, saying that many European herds are a mix of both races and the individuals he plans to import are likely hybrids of them as well.

Mr. Heacock described that he has owned water buffalo in the past, that they are domestic animals, and that should there be an issue such as a fallen tree where fences are damaged, recapture would be easy as the animals are smart and would come when called. He also said that a gallon of water buffalo milk is about \$45.00 and that he has gotten animals through an import permit through the Department. Dr. Haws asked if there is any more risk for disease introduction. Mr. Heacock said that he is going to a "closed herd" that is free of diseases of concern and said that he submitted a veterinary disease certification to Mr. Ho. Mr. Ho confirmed the receipt and that it appeared to show disease free status. Dr. Haws said the importation of the animals is likely expensive and the product they produce is also highly valuable, so if there were an escape, there is a great incentive to recapture. She also asked if there would be any difference between an escaped water buffalo versus domestic cattle. Mr. Heacock said that domestic cattle would be much more destructive and that the water buffalo would likely return if called.

There was a discussion regarding the regulation and benefits of raw milk.

Mr. Redman said that the discussion was going off topic and that the focus should be on the potential affects to the environment should an animal escape. Mr. Ho said that what Mr. Heacock is proposing to do is likely to be of low risk, however, what the Committee is considering is a regulatory change that would allow everyone to import these animals, should they be considered domestic. Dr. Atwood asked what the benefit is to import these animals as domestic versus RB. Mr. Heacock said that one of the things he would like to do is to establish a water buffalo co-op across the State. Mr. Matsui asked if it was on RB would there be restrictions on selling the animals versus domestic designation. Mr. Ho said that RB designation would create restrictions through permitting and that if others would like to get animals from Mr. Heacock, that conditions would have to through review by the Committee and approval through the Board before transfer could occur. Mr. Ho said that similar requirements would not occur if they were considered domestic.



Mr. Matsui said that clearly Mr. Heacock is responsible, but how could we ensure that others are as responsible. Mr. Heacock said that he would only select responsible people for his co-op. Mr. Matsui said that if considered domestic, anyone could import. Mr. Heacock said that he is in discussion with the only water buffalo supplier in the US for exclusive importation rights for disease free animals into the State. Mr. Ho said that if considered domestic, if disease free water buffalo are found, they could be imported. Mr. Matsui said disease free certification is a moment in time from a randomly selected sample from the entire population, not disease free. Mr. Heacock said that the herd that he is proposing to import is certified disease free and are much lower risk for disease entry than domestic cattle.

Dr. Haws asked about what the definition of a "domestic" animal is. Mr. Ho said that there is no statutory definition and that DAI HAR Chapter 4-20 refer to animals normally maintained in the domestic state and that PQB HAR Chapter 4-71 defines non-domestic animal as "any animal including mammals, birds, reptiles, amphibians, fishes and invertebrates, other than the specific "domestic" species specifically listed in the definition. Mr. Ho said that PQB defines a domestic animal as those species listed in the definition.

Dr. Atwood asked for confirmation regarding water buffalos already being in the State and clarification on how Mr. Heacock was allowed to get them. Mr. Heacock said that PQB gave him an import permit for his water buffalo. Mr. Ho said that the HAR allow for the regulation of the importation and possession of non-domestic animals by permit, and in this case, because the animals were introduced into the State prior to the creation of the rules, to regulate them by permit would be difficult. Mr. Ho said based on the definition of non-domestic animal, if PQB were to regulate possession based purely on presence, then every animal in the State would require a permit, therefore PQB has been regulating possession based of animals that have been imported under permit. Mr. Heacock said if that was the case, then mongoose or bulbul could be moved interisland. Mr. Ho said that there are specific regulations that prevent that and that PQB issued Mr. Heacock a certification that allowed inter-island movement and that there was no import permit issued for water buffalo.

Dr. Hoffman asked if the contract with the supplier an exclusive one. Mr. Heacock said that he is in talks with his supplier to be an exclusive importer of the water buffalo, but that nothing has been finalized. Mr. Heacock said his buffalo have already been artificially inseminated and was struggling with the timing. He said that the animals would be originating from Arkansas and that he did not want to truck them through Texas during the summer months due to temperature.

Dr. Hoffman asked what the impact would be to Mr. Heacock's operation if water buffalo were placed on the RB list. Mr. Heacock said that the RB list is for wild animals, not domesticated ones. Mr. Ho explained how water buffalo are considered to be on the RA list. Mr. Heacock said that if that were the case, then all cattle would also be on

the RA list. Mr. Ho said that the definition of non-domestic animal in HAR 4-71 specifically exempts domestic cattle from the definition. Mr. Ho said that without a submittal and subsequent permit conditions, there would be no way to make that determination at this time, but if water buffalo were placed on the RB list, Mr. Heacock could likely complete all facets of his proposed petition assuming that the Board would approved permit conditions to allow transfer assuming that the commercial transferees were as responsible as Mr. Heacock. Mr. Ho said that a domestic classification would also accomplish the same goal.

Mr. Heacock said that his intent is to provide a gene bank for other farmers and that he had no problem with imposing additional restrictions limiting the animals to only Kauai for five years as per Dr. Duvall's comments. Mr. Heacock said that it will take him longer than that to establish his herd and that he is looking this as a long-term project. Dr. Hoffman asked if RB placement would be a problem. Mr. Heacock said that he did not think so, but because the animals are domestic, that placement was inappropriate in his opinion.

Mr. Redman asked when the next Board meeting was. Mr. Ho said in two weeks on February 26<sup>th</sup>. Mr. Redman said hopefully in the next two weeks there will be more subcommittee comments for the Board to review prior to making their decision and would like to move this to the Board.

Mr. David Penn, representing Penn Law Center, provided public testimony and began by stating that he is an employee of the Department of Land and Natural Resources and that he also provided written testimony. Mr. Penn commented on escaped animals, mentioning that the DAI rules require branding, so at least through the first generation, there would be a way to identify owners. Mr. Penn said that there is no definition of a domestic animal, though there is a definition of non-domestic animal and that the lack of Subcommittee responses was of a concern, suggesting that phone calls or text messaging be used in addition to emails as previously stated. Mr. Ho said that phone calls are also used in conjunction with emails, however, it is not the preferred method because it is difficult to document a phone call.

Dr. Atwood said that DLNR has a similar issue with terminology and definitions being used to identify characteristics of certain animals. He said that from his perspective, there should be additional controls, such as placement on the RB list, of hooved ungulates because of the impacts they cause to the environment. Dr. Atwood said that with regards to water buffalo, he did not see how they should be treated differently from the other domesticated hooved animals. He said that he would like to be able to find a way to provide additional clarity of wild, domestic, or feral in Hawaii. Mr. Heacock said that there were wild Bison running around in Hanalei after a storm in April. Mr. Ho said that the animals were under permit by PQB, that issues such as "acts of god" do happen, and to build or require a facility that would be able to withstand everything was unrealistic. Mr. Ho said because of that, escapes will happen, but the

intent of the rules is clearly to mitigate risk and the question being asked now is how the State would like to regulate these animals.

Mr. Matsui asked about the Federal regulation regarding importation of water buffalo into the US. Mr. Ho and Mr. Heacock said that it cannot occur. Mr. Heacock said that determination was discriminatory because cattle move between Canada and the US all the time, but water buffalo cannot. He said there is a water buffalo herd in Vancouver that is free of diseases, but the animals still cannot move. Dr. Hoffman asked if there were interstate regulations. Mr. Heacock said that there are none.

Mr. Penn questioned the rules were not done concurrently with DAI and PQB when the petition was first heard by the Board last year. Mr. Ho reiterated and also stated at the May Board meeting, PQB cannot amend DAI administrative rules. At the May Board Meeting, during the discussion, it was made clear that DAI was ok with the proposed changes as included in Mr. Heacock's petition. Mr. Matsui asked if the proposed changes to HAR 4-16 as discussed were what DAI was ok with. Mr. Ho said yes, but since that time, there has been administrative changes to both the Chairperson and DAI, and he has not had a chance to confirm if the proposed changes were still acceptable.

Mr. Penn said that his testimony requested that the Committee recommend to the Board to process this request with expediency and that there is a provision in HAR 4-71 to do the changes without public hearing notices, and that same action can be taken here. Mr. Ho said that he disagreed with that interpretation as the provision clearly allows for additions and deletions to the lists. Mr. Penn said that the list would be amended by addition of an exclusion of water buffalo to the RA list. Mr. Ho said that if that route was taken, the list could be changed, but the definition would not be eligible for change, therefore the RA list would show an exception, but the definition of non-domestic animal would still include water buffalo.

There was a discussion regarding potential placement options, RA, RB, Conditionally Approved or domestic. Mr. Ho explained each of the scenarios and said that whether or not the animal is "domestic" or not isn't the issue and that everyone is getting hung up on the term. Mr. Ho said a simpler way of looking at it is who should regulate the water buffalo, PQB or DAI. Dr. Haws said as far as she is concerned, these are domestic animals and how would a motion be made to show that. Mr. Ho said that if the Committee would like to go that route, a motion could be made to accept the proposed changes, however if the Committee would like to go a different route, that can also be done and provided some proposed language. Deputy Attorney General (DAG) Jennifer Waihee-Polk recommended that the recommendation be broken down into two separated motions because PQB is asking two separate things. She said that PQB is asking for a determination if water buffalo should be considered domestic and if considered a domestic animal, are the proposed changes to 4-71 appropriate to

effectuate that change. She recommended making a motion to determine if water buffalo be domestic or not, then move on from there.

Dr. Hoffman said there is no question that water buffalo are domestic, but what affect could they do the environment, and how should they be regulated. Mr. Heacock said that the FAO (Food and Agriculture Association) shows that small numbers of water buffalo in a controlled area are shown to increase waterways and reduce invasive plants, therefore are beneficial to the environment. He also reiterated the value the animals have themselves and the product they produce, should they escape, would be recaptured quickly.

Dr. Atwood said that he would be personally fine with not allowing another hooved animal, but in the context of the rules, if pigs are considered domestic and are terribly destructive to the environment, he could not justify singling out water buffalo as an exception. DAG Waihee-Polk said that whether the rest of the US considers water buffalo to be domestic or not is not the issue, but rather should it be considered domestic in Hawaii. She said that due to Hawaii's unique environment, the rules were likely designed to be conservative and that what level of regulation the Committee feels is appropriate for this animal in this instance is what is being decided.

Mr. Heacock said that in his original petition that he did not use the term domestic and that PQB staff is the one that included that terminology and was wondering why there is all this discussion about a domestic animal being considered "domestic." Mr. Ho said that whether or not the animal is actually "domestic" or not is not what is being requested. He said that the amount of regulation for the importation of these animals is what is being determined. Mr. Ho said that by deeming water buffalo as "domestic" would require less restrictions and that not deeming it "domestic" would have more restrictions. Mr. Ho said that there are other animals such as ferrets which could be considered "domestic" but are prohibited and that the definition ultimately creates the amount of regulation that the State would like to impose.

Hearing no further discussion, Dr. Haws made a motion that the Board consider the Asian Swamp Buffalo / Indian River Water Buffalo be considered a domestic animal. Mr. Redman seconded the motion. Dr. Hoffman called for a vote.

Vote: APPROVED 5/0.

Dr. Hoffman made a motion to accept the proposed changes to HAR 4-71 to include exemptions to the definition of non-domestic animals for water buffalo, *Bubalus bubalis*, and for amendments to the RA List for the animals in the family Bovidae that are listed as exceptions to the definition of non-domestic animals, including water buffalo. Dr. Haws seconded the motion. Dr. Hoffman called for a vote.

Vote: APPROVED 5/0.

VI. ADJOURNMENT

Hearing no further discussion, Committee member Redman called for a motion to adjourn. The motion was seconded by Advisory Committee Chairperson Hoffman and was unanimously approved. The meeting was adjourned at 12:00 P.M.

Vote: APPROVED 5/0.

Respectfully Submitted,



Karen Hiroshige  
Advisory Committee Secretary