

**Minutes of the Advisory Committee on Plants and Animals**  
**May 20, 2022, Meeting**  
Hawaii Department of Agriculture (HDOA)

I. CALL TO ORDER

Advisory Committee on Plants and Animals (Committee) Chairperson Mr. Darcy Oishi called the meeting to order on Friday, May 20, 2022, at 9:04 AM via Zoom meeting. He noted a memo dated May 13, 2022, from Board of Agriculture (Board) Chairperson Shimabukuro-Geiser designating him as the alternate chair should Dr. Helmuth Rogg not be available, such as today. He noted a copy of this memo will be filed in the meeting minutes.

Members Virtually Present:

Darcy Oishi, Committee Chairperson, Hawaii Department of Agriculture (HDOA)  
Dr. Maria Haws, Professor of Aquaculture, Pacific Aquaculture & Coastal Research Center, University of Hawaii at Hilo  
Robert Hauff, State Protection Forester, Division of Forestry & Wildlife, Hawaii Department of Land & Natural Resources (DLNR), Ex Officio Member Designated Representative  
Gracelda Simmons, Environmental Health Program Manager, Hawaii Department of Health, Ex Officio Member Designated Representative  
Thomas Eisen, Planner, Environmental Review Program, Department of Business, Economic Development and Tourism, Ex Officio Member Designated Representative  
Kenneth Matsui, Owner, Petland-Pets Pacifica

Others Virtually Present:<sup>1</sup>

Jodi Yi, Deputy Attorney General (DAG)  
Noni Putnam, Land Vertebrate Specialist, Plant Quarantine Branch (PQB), HDOA  
Jonathan Ho, Inspection & Compliance Chief, PQB, HDOA  
Chris Kishimoto, Entomologist, PQB, HDOA  
Stephen Dalton, IT Specialist, HDOA  
Kevin Salvador, IT Specialist, HDOA  
Becky Azama, Acting PQB Manager, HDOA  
Kailee Lefebvre, Coordinating Group on Alien Pest Species (CGAPS)  
Stephanie Easley, CGAPS Legal Fellow  
Povi Carisa-Abney, Wildlife Supervisor, Hyatt Regency Maui

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<sup>1</sup> The identification of the public members is based on their sign-in name but are not verified.

Others Virtually Present (cont'd):

Dr. Tracy Johnson, Research Entomologist, United States Department of  
Agriculture Forest Service  
Christy Martin, CGAPS  
Tara Yamashita, Acting Secretary, PQB, HDOA  
Sherylyne Namahoe, Secretary, Plant Industry Division, HDOA

II. INTRODUCTION AND COMMENTS

Chairperson Oishi introduced himself and disclosed that Stephanie Easley, CGAPS Legal Fellow, was in the room with him.

Chairperson Oishi asked Committee members to briefly introduce themselves, stating their name, title, and the agency. DAG Jodi Yi asked the Committee members to mention if there's anyone in the room with them.

Committee members Mr. Robert Hauff, Mr. Thomas Eisen, Ms. Gracelda Simmons, Dr. Maria Haws and Mr. Kenneth Matsui introduced themselves and indicated they were alone. Chairperson Oishi noted he had a letter dated May 19, 2022, from Dr. Elizabeth Char delegating Ms. Simmons as the DOH ex officio representative and requested it be included in the minutes.

III. APPROVAL OF MINUTES FROM THE December 10, 2021, MEETING

Committee Member Robert Hauff had a minor correction on page 8, third paragraph second sentence should read "LIVE plant", not "IVE plant".

Chairperson Oishi had two corrections, the first on page 6, second line, should read "facilities is risky, THE intent" not "THEY" intent. The second, on page 6, third paragraph, the word "that" should be removed in that sentence.

Committee Member Hauff made a motion to approve the minutes with the previously stated amendments. Committee member Haws seconded the motion. Chairperson Oishi asked if there was any additional discussion from the public or the members. Hearing no response, Chairperson Oishi called for a vote.

Vote: APPROVED 6/0. (Oishi, Eisen, Hauff, Haws, Matsui, Simmons)

Motion carries.

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

Chairperson Oishi noted that three pieces of testimony were received with one from DLNR provided by PQB. He noted that there were some errors with the [HDOA.PQ.testimony@hawaii.gov](mailto:HDOA.PQ.testimony@hawaii.gov) email address and was aware that testimonies from CGAPS and Mr. Patrick Conant were not received through that email. Chairperson Oishi noted that Committee members should have received copies of these testimonies.

Chairperson Oishi asked if there were any members of the public wishing to provide testimony. Mr. Kevin Salvador explained how to participate and noted Ms. Christy Martin with CGAPS with her hand raised. Chairperson Oishi asked Ms. Martin if she will be providing testimony for the submittals, and she confirmed she was. Chairperson Oishi asked Ms. Martin if it would be acceptable to hear her testimony during the actual submittals that she was interested in, and she was fine with that.

#### V. REQUESTS TO BE REVIEWED BY THE ADVISORY COMMITTEE

##### Entomology:

- (1) Request to: (1) Preliminarily Review the Currently Unlisted Beetle, *Syphraea uberabensis* (Coleoptera: Chrysomelidae) for Future Placement on the List of Restricted Animals (Part A) As a Biocontrol Agent of *Tibouchina herbacea* and other related species in the family Melastomataceae, by the United States Department of Agriculture Forest Service (USDA FS);
- (2) Determine If the Release of the Beetle *Syphraea uberabensis* as a Biocontrol Agent of *Tibouchina herbacea* and other related species in the family Melastomataceae, by the USDA FS Poses No Significant Impact on the Environment;
- (3) Provided the Beetle *Syphraea uberabensis* is Placed on the List of Restricted Animals (Part A), Allow the Release from Laboratory Quarantine of the beetle *Syphraea uberabensis*, by Permit, For Biocontrol of *Tibouchina herbacea* and Other Related Species In the Family Melastomataceae by USDA FS;
- (4) Provided the Beetle *Syphraea uberabensis* is Placed on the List of Restricted Animals (Part A), Allow the Importation and Release of the beetle *Syphraea uberabensis*, by Permit, For Biocontrol of *Tibouchina herbacea* and other related species in the family Melastomataceae, by the USDA FS; and
- (5) Provided the Beetle *Syphraea uberabensis* is Placed on the List of Restricted Animals (Part A), Establish Permit Conditions For the Importation and Release of the beetle *Syphraea uberabensis* As a Biocontrol Agent of *Tibouchina herbacea* and other related species in the family Melastomataceae, by the USDA FS.

PQB Entomologist Christopher Kishimoto provided a synopsis of the request.

Chairperson Oishi commented that there was an accidental deviation, going out of order from the agenda. He noted Mr. Kishimoto's presentation should have

been agenda item TWO not agenda item ONE. He asked DAG Yi if a motion is required to fix the adjustment to the agenda. DAG Yi said yes.

Chairperson Oishi made a motion to adjust the agenda to review the biocontrol agent for *Syphraea uberabensis* to item ONE for review instead of number TWO. The motion was seconded by Committee member Eisen.

Chairperson Oishi asked for any discussion or question by the Committee and from the public. Hearing no response, Chair Oishi called for a vote and the motion passed unanimously.

Vote: Approved 6/0. (Oishi, Eisen, Hauff, Haws, Matsui, Simmons)

Motion carries.

Chairperson Oishi said he would like to recuse himself from voting noting he was notified that he would be serving as the Chairperson of this meeting after he provided commentary as a member of the Advisory Subcommittee on Entomology. Chairperson Oishi noted the Plant Pest Control Branch (PPC) normally does not comment on biocontrol submittals from the U.S. Forest Service (USFS) as this proposal is deemed as a partner project as it relates to existing MOUs between the USFS and HDOA.

Committee member Matsui expressed concern that he may have to recuse himself. He said he presented his situation to the ethics commission, and Keith Campbell said that he probably did not need to recuse himself. He said his basis for concern is that this beetle attacks the leaves of the Catappa plant (*Terminalia catappa*). He said the Catappa plant is found around Oahu, especially Waimanalo, noting it surrounds the baseball field at the Waimanalo Park. He said it is in his friend's yard along the ocean in Waimanalo and it protects her yard from being consumed by the ocean. Mr. Matsui also said that he uses the Catappa plant as a water conditioner.

Chairperson Oishi asked for a motion.

Committee member Robert Hauff mentioned he wanted to ask a couple of questions to PQB and the applicant. Mr. Hauff asked about the requirement in condition 5 to rear out two generations, is it a standard condition or is it being applied to this specific organism because of its biology. Mr. Kishimoto said it is a standard condition with biocontrol agents that go into quarantine, but it also does vary on the biology. He said close attention is made regarding an organism's life cycle and will try to alter the condition if required.

Committee member Hauff had a question about Condition 1 and the intention that this project will eventually be implemented statewide. He didn't know how well this organism is going to disburse on its own and there will likely need additional efforts made to ensure it hits to populations of all the target species. He asked if the applicant would have to do all those releases and will they not be able to hand it off to partners. He said it's clear the initial releases will be conducted by Dr. Johnson, but as it becomes operational and could be used as a management tool, what does an agency like DLNR

or a partner or non-partner that might want to help to control a target weed need to do to be able to acquire the agent and release it.

Mr. Kishimoto said for permit condition #1, because HDOA is a partner agency and also have a quarantine facility of their own in Honolulu, they can help with the release. Regarding transfers to other partners like DLNR or other non-government agencies, we might have to ask our DAG for clarification as it wasn't requested in this permit request. He said maybe it is something that we can try and address before it gets to the Board. Mr. Hauff stated he was thinking about the long-term implementation – what will be done if this passes with the Board's approval.

Mr. Kishimoto said in the future, once the existing population is at a level where it can field collected, partner agencies outside of USDA and HDOA wouldn't be prohibited from collecting and redistributing those things throughout the state. He said HDOA has facilities statewide on all the islands and initial releases can be done by HDOA staff.

Committee member Thomas Eisen said the condition says that the transfer can be approved by the Board, so the Board would need to allow for it either at a future point or maybe as part of the current review to factor in the transition to allow the transfer to these other entities. Chairperson Oishi said the permit application is for the actual release into the environment and those releases will be conducted both by the USFS and HDOA PPC. He said the intent of the application is for field release into the natural environment and the permit is only governing the activities up until establishment. He noted this is the traditional interpretation of this permit condition for our prior biocontrol releases.

Committee member Matsui asked, once it becomes established, would it be considered on the Conditionally Approved list? Mr. Kishimoto said it will always be on the Restricted List. Chairperson Oishi said Restricted List placement means any new attempts to import this species would trigger this review process and ensures that not anyone can import this. Mr. Matsui asked if he picked a leaf that has a beetle on it, could he not use that leaf and have to leave it as it is. Chairperson Oishi said once it is considered established, it can be moved around. PQB Inspection and Compliance Section Chief Mr. Jonathan Ho said Mr. Kishimoto is correct that placement will be for Restricted A list and the intent is for release and once established it is still on the Restricted List. Placement on the Restricted List prohibits individual possession, however PQB does not take action against things that are established and widespread. He said the intent is to manage things that are controllable, with the focus on introduction and spread. This process is controlling how it is being done. Committee member Hauff said that was helpful.

Mr. Ho noted that Mr. Matsui may have been disconnected. Mr. Ho commented that the high-level restriction is placed to manage risk and distribution to agencies whose mission is to do that work. He said once establishment occurs and the organism is widespread, additional agencies are free to do what is needed to be done.

Chairperson Oishi asked if the permit condition also relates to what Dr. Johnson can do with it prior to establishment, which is he cannot give it or transfer it or conduct

any of these activities without express permission from the Board? Mr. Ho said "correct."

Chairperson Oishi asked if there were any other questions? Mr. Hauff indicated he wanted to ask questions to the applicant, Dr. Tracy Johnson. Dr. Johnson introduced himself to the Committee members. Committee member Hauff asked Dr. Johnson if he felt the permit conditions were workable for implementing the project as they sounded like reasonable precautions to take but wanted to make sure if this project is workable and able to be implemented. Dr. Johnson noted that they were rearing a couple of generations and that there were corrections on whether it needed to go through Honolulu or not. He said he didn't think he had any problems.

Dr. Johnson commented on Mr. Matsui's comments about Catappa. He said Catappa is a common coastal tree and is not a viable host plant for this insect. He said in the testing there was some really minor feeding and when we put the insects on the plants for an extended period they can't survive. He said when we put the beetles on the plants, they can't survive on Catappa, so it's not going to be a host plant in real life and there is no real reason to be worried about any effects. Mr. Hauff said he had no additional questions.

Chairperson Oishi asked for additional questions from the Committee for the applicant or PQB. He noted that Mr. Matsui returned and asked him if he had additional questions.

Committee member Matsui asked to what extent will the leaves of the Catappa tree plant be removed. Dr. Johnson said so our expectation is zero removal of any leaf material by this insect on Catappa. Mr. Matsui asked why the report showed that the beetle did damage leaves. Dr. Johnson said the report shows that when you put insects in a small cage or container with a variety of different plants, sometimes the insects will take a bite to figure out if they can eat it, so you do get damage and that's common in this kind of testing. Dr. Johnson said the damage isn't sustained because the insects don't recognize the plant as one they can eat and they don't survive on it to be able live a long time and reproduce.

Committee member Matsui asked to what extent will the Catappa plant be decimated by their absence of leaves because the beetles are eating them. Dr. Johnson responded that basically the beetles are not going to eat the Catappa at all. Mr. Matsui said that is not what the research shows.

Chairperson Oishi explained that this is a no choice test which basically involves, will it feed on it or will it die. He said in some of these tests, sometimes the organisms will taste the leaves, which counts as feeding damage, but it's not impacting the plant and the insect cannot actually complete its life cycle. He noted in the natural environment, the beetle would be laying its eggs on proper hosts, not necessarily Catappa. Dr. Johnson said beetles are not going to eat the Catappa at all. Mr. Hauff noted the range of Catappa and the host plants do not overlap so you are not going to find these plants together anyway.

Chairperson Darcy Oishi asked if there are any other questions and concerns. Hearing none, asked if anyone would make a motion. Committee Hauff made a motion

to recommend that the Board approval of all parts of USDA's request. Committee member Haws seconded the motion.

Chairperson Oishi asked for any comments or questions from the public. Ms. Christy Martin, CGAPS, said she is in strong support of this proposal. She said Dr. Johnson's work has been stellar and his work and tests over the past several years show no impact to other species. She said the *Tibouchina* and other host species will continue to exist in the forest and this could give our native species some chance to compete. She urged the Committee to approve this.

Chairperson Oishi asked for any other public testimony or further discussion by the Committee. Hearing none, he called for a vote. He also reiterated that he would be abstaining from the vote.

Vote: APPROVED 5 (Eisen, Hauff, Haws, Matsui, Simmons), Abstention 1 (Oishi)

Motion Carries.

2. Request to: (1) Preliminarily Review the Currently Unlisted Moth, *Euselasia chrysippe* (Lepidoptera: Riodinidae) for Future Placement on the List of Restricted Animals (Part A) As a Biocontrol Agent of *Miconia calvescens* by the United States Department of Agriculture Forest Service (USDA FS);  
  
(2) Determine If the Release of the Moth *Euselasia chrysippe* as a Biocontrol Agent of *Miconia calvescens*, by the USDA FS Poses No Significant Impact on the Environment;  
  
(3) Provided the Moth, *Euselasia chrysippe* is Placed on the List of Restricted Animals (Part A), Allow the Release from Laboratory Quarantine of the Moth, *Euselasia chrysippe*, by Permit, For Biocontrol of *Miconia calvescens* by USDA FS.  
  
(4) Provided the Moth *Euselasia chrysippe* is Placed on the List of Restricted Animals (Part A), Allow the Importation and Release of *Euselasia chrysippe*, by Permit, For Biocontrol of *Miconia calvescens*, by the USDA FS; and  
  
(5) Provided the Moth *Euselasia chrysippe* is Placed on the List of Restricted Animals (Part A), Establish Permit Conditions For the Importation and Release of *Euselasia chrysippe* As a Biocontrol Agent of *Miconia calvescens*, by the USDA FS.

PQB Entomologist Christopher Kishimoto provided a synopsis of the request.

Chairperson Darcy Oishi stated that he was notified of being Committee Chair after already providing comments as a Sub-Committee member and will rescue

himself from voting. He noted that this project is part of PPC and USFS. He then asked for comments from the general public.

Ms. Christy Martin, CGAPS, noted strong support for this proposal. She said she loved visiting the facility to see the work going on there. She said she was able to see the *Miconia* in captivity and is excited to see the biocontrol agent on the landscape. She said invasive species are one of the greatest threats to our economy and are the greatest driver of biodiversity loss in Hawaii. She said this is a great step in addressing one of our big invaders and appreciates the Committee's support for this proposal.

Chairperson Oishi asked the applicant, Dr. Tracy Johnson, if he had anything he would like to tell the Committee. Dr. Johnson said he did not and would respond to any questions from the Committee.

Committee member Matsui asked how plants are selected for testing, noting that *Catappa* was used for testing on the beetle from the prior request, but not tested on this insect. Dr. Johnson responded that they try to get representative samples of diverse plants species. He said the target plants and how diverse its relatives are factor in selecting the kinds of representative non-related species. Dr. Johnson said he thought *Catappa* was selected. Committee Member Robert Hauff said he saw it on the list, noting page 125. Mr. Matsui apologized for not seeing it. Dr. Johnson noted that everything cannot be tested because it is not realistic to test all plants occurring in Hawaii.

Committee member Hauff asked Dr. Johnson if he was OK with the permit conditions as they stand, as far as being able to carry them all out. Dr. Johnson said he did not have the conditions in front of him so couldn't confirm, but noted this insect is more difficult to rear through its life cycle. He noted that it is not easily reared through its complete life cycle inside our quarantine. He said the plan is to import eggs from Costa Rica, grow them up as larvae, get them to maturity, and then introduce them into the environment as adults. He said screening along all those stages would occur which would basically be examining and making sure there are no natural enemies present.

Chairperson Oishi asked how this impacts the permit conditions for screening of the predators, parasites, and parasitoids on permit conditions #5, since Dr. Johnson is saying he will not be able to execute rearing for two generations. Mr. Kishimoto said this is something that can be amended if it's okay with the Committee, PQB can indicate that for the Board and include a notation that it is very difficult to rear through its whole life cycle.

Chairperson Oishi asked if it is possible to carry out two generations in containment. Dr. Johnson said he has been unable to do so in his current facility, at least under the techniques he has tried so far. He said his plan was basically to release it into the environment inside a very large field cage. He noted that would be outside the containment.



Committee member Hauff asked if Dr. Johnson was confident in monitoring the parasites and parasitoids in the different life cycles, as he reared them out from eggs. Dr. Johnson said he is familiar with the organisms and natural enemies from Costa Rica, noting some in the eggs, some in the larvae, and there some in the pupae. He said monitoring for those along every stage of the life cycle is not a problem.

Chairperson Oishi asked if a large field cage could be an approved PQB containment facility. Mr. Kishimoto said assuming that as Dr. Johnson can adequately ensure that containment doesn't get breached and there's proper protocols in place, it would be agreeable with PQB. Chairperson Oishi said modifications could be made to permit condition #5 because the USDA approved insect containment facility would be referencing the actual brick and mortar containment facilities included in our USDA permits for both PPC and USFS. He said if we can allow screening in an outdoor facility that would facilitate us being able to meet the permit conditions while still allowing for screening of parasites, predators, and hypers. Mr. Kishimoto said we can agree with that as long as it is understood that this is not really consistent practice and is on a case-by-case basis based on the organism and its biology. He also requested that the changes be specifically laid out so the changes to permit conditions can be adequately reflected.

Chairperson Oishi asked Dr. Johnson if he has found any of these known predators, parasites and hypers in testing and evaluation process you use here. Dr. Johnson said yes because eggs are brought in and sometimes natural enemies are found in the eggs, so they are screened out immediately. He said they have only identified the natural enemies of the larvae and the pupae from Costa Rica where they are exposed in the environment. He said when we bring in the eggs there has not been a chance for those natural enemies to attack the insects. He said the parasite would need to lay their eggs inside the host egg and the parasites would have to emerge from the larvae and said he has not identified any from this butterfly but would be watching for that. He said he would definitely screen for that inside our maximum containment first before release into an outdoor large cage containment.

Committee member Matsui asked regarding the large outdoor cage, if Dr. Johnson is going to be looking for other foods that may complete the life cycle of the butterfly and if one is found that would cause reconsideration of release, would political pressure be so great that release occurs anyway. Dr. Johnson said the host testing has been completed already and the screening being discussed is prior to release screening of natural enemies on the butterfly. He said there is proposed additional testing of host plants beyond the testing we already done because all the testing done so far indicates there's only two species in Hawaii that we expect it to feed and reproduce on and it's *Miconia* and *Tetrazygia*, and only *Miconia* species is going to be eaten based on all of our testing.

Committee member Matsui asked about the need for a larger enclosure in relation to natural predators as it would seem would be harder to spot the butterfly and offspring in a larger enclosure or enclosure with multiple holes. Dr. Johnson said the large enclosure is not needed to screen for natural enemies but is needed if we are

going to mass propagate the insect under containment in the state. He said the reason for having a big cage area is so we can have it lay its eggs in *Miconia* trees under a big cage and collect those eggs and propagate them and transfer them from the big island to Maui. He said the butterflies need large spaces to reproduce and their behavior requires a very large space and particular lighting.

Committee member Hauff asked if we would be able to amend condition #5 to remove the two generations to inspecting through the various life stages and continued inspection in the outdoor containment, and if that solves this issue? Mr. Kishimoto said it can be done as long as the Committee explains how they want that language in permit condition #5 to read. Mr. Kishimoto asked Dr. Johnson if allowing just the import of eggs and no other stages of development would be acceptable to Dr. Johnson as the eggs seem to be the least risky of the life stages to import. Dr. Johnson said it is fine because realistically that is what is already being done. Mr. Hauff said that sounds like a good idea and would any condition have to be changed.

Mr. Kishimoto said it can either be put in condition #1 as the restricted articles, eggs of *Euselasia chrysippe*, or we can make it into an entirely new permit condition, maybe into permit condition #2. Committee member Hauff said maybe just simply saying only eggs will be permitted in additional permit condition. I think that might be the clearest and easiest way to do that and asked if the other Committee members were thinking the same thing. Chairperson Oishi said he agreed. Mr. Kishimoto said we can put that into permit condition #2.

Committee member Hauff asked if PQB wanted help in language for #5 beyond what was previously suggested. Mr. Kishimoto said that would be helpful. Mr. Hauff suggested, "upon entering into a PQB-approved containment facility, the restricted articles shall be screened for other species predators, parasites and parasitoids and hyperparasitoids throughout the various stages of its life cycle. Further monitoring for the organisms will occur when the butterfly has been taken to an outdoor of the containment to be massed reared." Mr. Ho said for that particular permit condition, the requirement that *E. chrysippe* be reared for a minimum of two generations needed to be removed. If the two generation requirement is removed and the permit condition is written to say that *E. chrysippe* shall be reared entirely within the containment facility up until butterfly emergence, another permit condition may be added to say "Should no other species, parasites, predators or diseases be found, the restricted articles may be transferred to a PQB approved rearing facility located at....." Provided there are no pests or parasitoids found, adult *E. chrysippe* can then be transferred into a PQB approved rearing site for production.

Mr. Ho also said permit condition #6 needed to be addressed because it basically says if *E. chrysippe* is parasitized, the entire shipment of *E. chrysippe* would have to be destroyed. Dr. Johnson's ability to screen for pests throughout the rearing process is good. Perhaps HDOA should require Dr. Johnson to just destroy the infested individuals or colonies; not the entire shipment. Should the adults potentially be infested, maybe then destruction should be required. Currently, permit condition #6 contradicts the process that he has been provided.

Committee member Hauff asked if Dr. Johnson had any comments. Dr. Johnson said that sounded reasonable. He said the insects are sub-contained in little containers within the containment facility. Each egg mass is in its separate container. Any natural enemies found in one egg mass would not be associated with another egg mass. He sub-divides everything carefully with each life stage of the insect. The same procedure would be implemented for the larvae. They would be on separate plants. If it came to adults being infested or infected, they would not use those at all. Dr. Johnson said that he knew of no natural enemies of adult *E. chrysippe*.

Chairperson Oishi said he was concerned that the condition would be extremely wordy and requested it be streamlined to reflect requiring it into a PQB approved facility following a standard operating procedure (SOP) that is reviewed and approved by the PQB. He said containment of some sort is important in this case and the process Dr. Johnson is following is more important in assuring that everything is free of parasites or hyper parasites. Mr. Ho said PQB does not want to prevent Dr. Johnson from doing his work. He said we don't want to make the condition so restrictive that there is no way to deviate from it, but at the same time we want to ensure the generally agreed upon safeguards are included. He believed the Committee wanted to ensure that they are no associated parasitoids and having the condition be a little wordy really is not going to affect anything. Committee member Hauff said as long as the condition is clear.

Chairperson Oishi said he wanted to see that there is a clearly spelled out SOP process that can accommodate both the safety and needs of the Committee and the Board while still allowing Dr. Johnson to execute his project in a safe and productive manner. Mr. Ho said condition #18 states providing a biosecurity manual. Chairperson Oishi said the manual is separate from the SOP. Mr. Ho said the condition is about introduction of pests, accidental escape, and spread of diseases of pest that are associated with the introduction and is a standard condition that is designed to be applicable to each request. He noted that PQB does not want to keep re-writing the permit conditions for every single import that happens. He said PQB can work with applicants and based off their particular scenario and situation, manage the manual. He said this is something that everybody agrees needs to be done.

Committee member Hauff asked if PQB would like proposed language for condition #6. He said he understands what Dr. Johnson is going to do and is comfortable with the protocol that was discussed. Mr. Ho said that PQB does not have any misconceptions in terms of what the Committee would look like to see the conditions look like. He noted the motion was amending of condition #1 for the eggs, condition #5 to insert language to allow for the importation of eggs to adults in the facility and accommodating rearing, and to adjust condition #6 to meet Dr. Johnson's current screening process. He said PQB can work on the actual conditions to meet the Committee's intent and does not need the actual verbiage, however, if the Committee wanted specific language, he could try to work on something right now.

Committee member Hauff said he was comfortable with including the intent in the motion. He asked for clarification that if something needed to be tweaked before the

Board, is there the ability to do so without the request brought back to the Committee, particularly if there was a minor detail where the Board wanted further clarification. Mr. Ho said “yes”, and the conditions can be changed until the Board ultimately approves them, where they would be finalized. Mr. Hauff said he understood.

Chairperson Oishi asked the Committee if they wanted a break before calling for a vote. Committee members Matsui and Hauff agreed. The Committee took a short break at 10:27 A.M. and reconvened at 10:34 A.M.

Committee member Hauff made a motion to recommend the Board approve items #1 – #5 on the applications from USDA for the biocontrol of *Miconia* with amendments to the conditions including: the addition of a condition to require only eggs will be imported; to modify condition #5 by removing the requirement of rearing two generations and inserting that all life stages will be inspected for hyper parasitoids, predators, etc.; to include an amendment to condition #6 that specifies egg masses will be screened individually and any infected eggs masses will be discarded and destroyed, while uninfected ones will be acceptable to rear out to adults, and any predators or parasitoids found in later life stages will result in the destruction of the colony.

Chairperson Oishi asked for a second. Committee member Haws seconded the motion. Chairperson Oishi asked for any discussion on the motion, noting he would be abstaining.

Vote: APPROVED 5(Eisen, Hauff, Haws, Matsui, Simmons), Abstention 1 (Oishi)

Motion carries.

### 3. Land Vertebrate

Request to: (1) Allow the Importation of Four (4) African Black-Footed Penguins, *Spheniscus demersus*, an Animal on the List of Restricted Animals (Part B), by Permit, for Exhibition, by Hyatt Regency Maui Resort and Spa; and (2) Update Permit Conditions for the Importation of Four (4) African Black-Footed Penguins, *Spheniscus demersus*, an Animal on the List of Restricted Animals (Part B), for Exhibition, by Hyatt Regency Maui Resort and Spa.

PQB Land Vertebrate Specialist Noni Putnam provided a synopsis of the request.

Chairperson Darcy Oishi asked the Committee if they have any questions or concerns for Ms. Putnam or the applicant. Committee member Thomas Eisen had one point of clarification on the two last PQB notes that were referred to on page 13 that spoke to how the condition were amended. He said the notes refer to condition #14 but it appears to be condition #12. He wanted to make sure that it was correct or clear what was going on. Ms. Putnam acknowledged the mistake and indicated Mr. Eisen was correct, referring to be #12a and #12b, not #14a or #14b as on the submittal.

Committee member Robert Hauff said he had a question for the applicant. The applicant, Ms. Povi Carisa-Abney introduced herself to the members. Committee member Hauff asked about the origin of the birds. Ms. Carisa-Abney said we have three original penguins that we received from International Animal Exchange about 37 years ago. She said those were our three founding penguins, one lived to 25, one lived 27, and one lived to age 36. They had six offspring between the three of them and those are the current residents. Committee member Hauff clarified that he was asking about the origin of the imported penguins being covered by this permit. He asked what the origin of the penguins being brought to Hawaii was, noting the application doesn't say anything about the origin of the imported animals. Ms. Carisa-Abney said we are not 100% sure at this time. She said all facilities spoken to required having the permit in place before they willing to take the next step. She indicated contact with International Animal Exchange where the original free penguins were from and also a facility in Florida as well as SeaWorld in San Diego. She said the latter two facilities have an excess number of penguins that were born in captivity.

Committee member Hauff said the when the Committee weighs these issues, they often look at the risk, which can be difficult to really define in some the cases. He asked what are the benefits of bringing the penguins into the State, for the State of Hawaii? Ms. Carisa-Abney said the penguins 36 years ago were not considered to be an endangered species, but since then, the wild population had taken a nosedive. She said it's a fantastic opportunity, as from as education and conservation standpoint, to be able to explain to our guest what issues are occurring outside Hawaii and our facility. She said the goal is to keep this colony healthy and generations to come and to maintain the mental and social wellbeing of the penguins that we currently have. She noted a lot of these penguins we have are trying very hard on being parents but they are all too closely related, so they just don't have the opportunity.

Committee member Hauff noted that in other applications regarding sanctuary for animals that might be threatened, the question has been asked, why they can't these animals be protected somewhere else and is Hawaii an appropriate place for protected colonies of endangered ones. Ms. Carisa-Abney said because we have a similar landscape to the colonies back in South Africa, it provides a perfect well habitat for them. She noted the average life span in the wild is about 15-20 years and they have been able to keep penguins for 36 years, so all three penguins are well past their life expectancy. She said they also contribute, as far as science and research goes, by working closely with the Association of Zoos and Aquariums and other facilities.

Committee member Hauff asked if the applicant's educational efforts entail explaining to people that penguins are not native to Hawaii, the native bird species typically found in the habitats are extinct or endangered and what do you think of about native species. Ms. Carisa-Abney confirmed they do, and it provides an opportunity to explain how delicate our ecosystem is in Hawaii by talking about how delicate their ecosystem is in South Africa. She said it is "full circle" moment because it's such an unexpected animal to see in Hawaii does gain a lot of interest. She said they have a lot of people that come up and ask questions.

Committee member Hauff asked about the practicability of testing these birds for avian malaria following the comments from the Subcommittee as far as multiple PCRs test to ensure the birds aren't infected and also prophylactic treatment. Ms. Carisa-Abney said Dr. Reed's questions are very good and it is something that we could have the facility do before they are shipped out. She said they have their own contract Veterinarian and if this is something you would like in yearly reports, they can continue the testing. She said the goal is to be completely compliant and to protect any birds from outside their facility.

Committee member Hauff said he had some questions for PQB but would defer to other Committee members before starting his questions. Chairperson Oishi asked if other Committee members had questions for the applicant. Hearing none, told Mr. Hauff to proceed and commented that he also had questions.

Committee member Hauff noted restricted B use is for research through zoological parks and asked if there a definition or requirement for a facility to be considered a zoo? Ms. Putnam said she what not aware of one, but noted pursuant to HAR chapter 4-71, these can be for private and commercial use as well.

Chairperson Oishi said it is clear the applicant intends to breed these penguins. He said he sees some issues with the permit conditions that could make it difficult for the applicant to allow them to breed the penguins. Ms. Putnam confirmed the applicant is intending to breed and asked which conditions were being referenced. Chairperson Oishi said permit conditions 6 and 12. He said it appears that importation and entrance are being used interchangeably where importation is by definition in HRS 150A-2, shipment to the state from any point outside of the state, and this becomes problematic because permit condition #12 is basically stating progeny are required to follow any of the pre and post entry requirements for the adult. He said he didn't see how the progeny can be checked 10 days in advance of being imported into the state. He said this needs to be cleared up and the simplest way would be to indicate the progeny have a different set of conditions that apply to them and do not have to adhere to the same prescreening entry requirements that the imported animals have to undergo. Ms. Putnam said it makes sense and normally the conditions are for the animals coming in and the progeny. We can try to make a condition that is. Chairperson Oishi asked how you could engage in health checks before importation if they are being born within the Hyatt facility. Ms. Putnam recommended possibly adding another condition that just talks about the progeny.

Chairperson Oishi referenced condition #8, noting these are birds which lay eggs, and you can't use an individualize marker that will stay with it since you're marking the shell. He asked why we're limiting the language to marking as his understanding is typically birds are banded to give them a unique identifier. Ms. Putnam said the condition is to mark with a unique identification code that is approved by the PQB chief. She noted there are different types of identifications that are approved, such as microchip, band, rings, etc. and the identification that is approved can vary for different birds.

Ms. Putnam asked if the addition of another condition indicating the requirements for progeny is needed. Chairperson Oishi said yes, because it makes the most sense because the screening requirements are for health issues of the parents and if the screening processes are appropriate and thorough enough the progeny should not have any issues. He said the requirements should be communicated to the applicant.

Mr. Ho said historically, PQB has the import conditions manage the progeny as opposed to creating two sets of conditions because two sets of conditions are normally used for transferring animals as opposed to a single facility having two sets of conditions, one for the imported animals, and one for progeny. He said condition #12 does seem to conflict with reality because the progeny are here before import, therefore to comply with the 10-day screening process prior to entry is impossible. He said the intent is for the imported ones. He said the progeny are not subjected to this because that is detailed with possession in of itself. He said striking the reference to progeny makes it very clear this is for imported animals not for those that are just in their possession. Mr. Ho then spoke about the idea of banding and issue with eggs. He said the potential movement of eggs is there for any bird species, but this requirement is gauged for the adults. He said if some random birds popped up in their facility without the required mark, they were either smuggled into the state or illegally transferred from another permittee that has the birds. He said there is also an inventory that allows PQB to follow up on this. He said the intent is for the permittee to import and maintain, but they can't transfer or give them away, at least within the State and if they wanted to transfer, would have to go to the Board and go through the review process to do that. He said PQB can go through the conditions because the term progeny is used throughout and make corrections on the clear conflicts for importation versus the possession.

Chairperson Oishi asked if there is a requirement anywhere, whether it the SOPS or biosecurity plan, that the applicant has to notify PQB if there are eggs and how do you track the eggs since they could "walk away". Ms. Putnam said condition #21 states the applicant submits semi-annual reports including the counts of restricted animals with the progeny. She said normally if there is some type or birth or death, she is notified through email. Chairperson Oishi asked what defines birth for a penguin, laying of the egg or hatching of the egg. Ms. Putnam said if eggs were present, they need to notify her. She said the applicant has mentioned when they are born, they have unique spots which can also be used to identify them as well. Ms. Carisa-Abney recommended after hatching as being when a penguin be counted. She said it is simpler because their penguins have laid infertile eggs because they are closely related. She said they try to take an egg to see if there is any life inside and noted some of the eggs don't meet maturity. She said they typically leave it up to parental care and the babies will be accepted in the colony if the parents raise them rather, and if they incubate the eggs, they are raised separately. She said as far as marking or moving the eggs, they try not to because it stresses the parents and generally, they only lay two eggs at a time, so it is easy to track. She said they have unique markings and generally stay in the same place in the nest so it is something they can keep an eye on and differentiate.

Committee member Kenneth Matsui asked if the current birds are banded and if there are infection problems related to the band. Ms. Carisa-Abney said they do not currently band their penguins because they have identifying spot markers, which is how they can differentiate them. She said the spots are very distinct so it's easy to tell them apart. She said there are other facilities that band their birds and have had different successes, but generally the colonies when they band them are 40-50 animals, so it is harder to differentiate. She indicated they only have six.

Committee member Matsui said in his observation when bird's legs are banded, like canaries, rate of infections at that point of banding seem to be higher. He said he wasn't sure if it would necessarily be appropriate for an endangered species to be put at additional risk by requiring banding. Ms. Carisa-Abney agreed with Mr. Matsui and noted the majority of birds are not banded because they don't want to add any risk to their health or mobility.

Committee member Matsui said he didn't agree with the idea that the penguins will starve to death if they were to escape. He said as a practical matter, penguins eat squid and crustations and we have those here. He didn't see where the penguins would necessarily suffer from that same problem because they are not in the cold water. Ms. Carisa-Abney asked if the question was directed to her. Mr. Matsui said it was because the submittal states the penguins would starve to death because they only eat cold water fish, but the documentation shows they eat squid and crustations as well. He said he had doubts they would only eat cold-water fish and surmised they could survive on local fish. Ms. Carisa-Abney said every penguin they have been has been born at the Hyatt, have only been fed certain kinds of fish, mostly sardines, and have never been introduced to squid or any other fish that we have available. She noted they never have gone after live bait and didn't believe they would survive in the wild based on their habits. She said they have live mosquito fish in the water and the penguins will just chase them but never eat them. She said they have tried introducing a variety of fish, but they are extremely picky and refused them, noting they are spoiled and also haven't had the opportunity to swim in the ocean to forage on their own. She said she has worked with dolphins that have been given the same opportunities and they don't readily adapt to foraging on their own and trying new fish.

Committee member Matsui said the six penguins appear to be very human-friendly and are the new imports going to be similarly imprinted? Ms. Carisa-Abney assumed so because the facilities they are working with are similar in nature where they do education and training programs. She said the training programs are really helpful as far as just taking care of the animals without stressing them out. She said they would never consider taking anything from the wild since their numbers are low. Mr. Matsui said if they did escape, they are not as likely to be hard to recapture because they will be friendly to their handlers. Ms. Carisa-Abney said correct, and noted they rarely take them out of their habitat. She said during shut down, they were taken out of their habitat and were very uncomfortable. They are very familiar with their surroundings and are not animals that really try to escape because everything they want is inside their habitat, their friends, their food. She said outside their habitat they do more of a freeze than a flight response and are not animals that startle or run. When



nervous, they just stop. She said she did not consider escape as an issue because of the number of people that are at the facility 24 hours, they have over 150 security cameras and have staff literally 10 steps away from the enclosure. She said the security monitors the entire property 24 hours a day and is confident that they can keep them safely.

Committee member Matsui asked if accepting pictures of the birds with their unique markings would be an acceptable alternative to leg banding. Ms. Putnam said that would be okay. Mr. Matsui said this is preferable because we don't want an infection problem with banding these birds when they are endangered.

Chairperson Oishi asked if there are other organizations that have the same species of penguins. Ms. Putnam said off the top of her head there may be two facilities that have the penguins. Ms. Carisa-Abney said the Honolulu Zoo has the same species and Sea Life Park has a different species. Chairperson Oishi asked if there were any other questions or concerns or comments from the public. He noted there was no submitted testimony. Without comments or testimony, Chair Oishi asked for a motion?

Committee member Hauff said he didn't necessarily want to make a motion but would support this with reservations. He said his main concern is avian malaria and if a condition was added that incorporated Dr. Atkinson's recommendations for the testing and prophylactic treatment, would support a recommendation with reservations. Committee member Matsui asked if avian malaria was already in the state. Chairperson Oishi said "correct". Committee member Hauff said "yes" but the concerns is different strains and genotypes. He noted that there was no way to guarantee that transmission wouldn't happen if they had an infection to another bird species. Mr. Matsui noted wild birds would probably fly in.

Chairperson Oishi asked Mr. Hauff if a modification or addition to permit condition #12 is needed. Mr. Hauff said wherever PQB staff thinks it would best fit, probably condition #12. Ms. Putnam asked for verification to include avian malaria, prophylactic treatment, and multiple testing on multiple days of the birds as recommended by Dr. Atkinson. Ms. Carisa-Abney said she would support a testing program on behalf of the Hyatt and whatever testing program should be put into place, they are more than happy to make the modifications. She said they can regularly test our penguins and any other birds you feel may be at risk and they have a fantastic vet. She said whatever standards you put into place they will 100% follow because they want to keep their birds safe and want to keep all of Hawaii's birds safe.

Committee member Matsui asked Mr. Hauff regarding avian malaria, if the sampling is concentrated in certain areas of the bird, whereas in other diseases it seems to be concentrated in the joints between the bones. Committee member Hauff said he was unable to answer that question. Mr. Matsui said in testing chickens they can miss because they are testing the blood and most often should be found in the joints. Ms. Putnam said PQB can work with Dr. Maeda and will include recommendations in the conditions prior to presenting it to the board.

Chairperson Oishi asked for a motion. Hearing none, Chairperson Oishi recommend approval of this submittal contingent upon modifications of the permit conditions to reflect the creation of separate permit conditions for progeny, cleaning up of the language throughout the permit conditions in the use of progeny to indicate that progeny will be held to different standards than the imported articles, changes to permit condition #12 to encompass Avian Malaria testing, and the housekeeping areas that Mr. Eisen noted relating to the permit condition. Mr. Matsui mentioned recording of the markings as opposed to banding if needed. Mr. Hauff asked if the prophylactic treatment along with the testing was included. Mr. Oishi agreed. Committee member Matsui seconded the motion.

Chairperson Oishi asked if there was any discussion on the motion. Committee member Hauff said he found the applicant's education goal admirable; but questioned whether a child from the Midwest who comes to Hawaii on vacation, then returns home and is asked by their teacher about their favorite thing in Hawaii and the response is seeing penguins at the resort. He said that was erasure of sense of place and found it a little bit concerning. Chairperson Oishi asked for any other comments or questions. Hearing none called for a vote.

Vote: APPROVED 6/0

Motion carries.

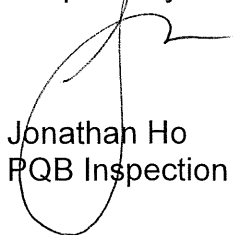
VI. ADJOURNMENT

Having no further business, Chairperson Darcy Oishi called for a motion to adjourn. Committee Member Matsui made the motion to adjourn. Committee member Eisen seconded the motion. Chairperson Oishi called for a vote.

Vote: APPROVED 6/0

Motion carries. Meeting was adjourned at 11:24 A.M.

Respectfully submitted,



Jonathan Ho  
PQB Inspection and Compliance Section Chief