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DEPARTMENT OF AGRICULTURE
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June 8, 2021

TO: Advisory Committee on Plants and Animals

FROM: Lise Madson, JD

THROUGH: Jonathan Ho
Acting Manager
Plant Quarantine Branch
Hawaii Department of Agriculture

SUBJECT: Request to: (1) Remove the Vasa Parrot, *Coracopsis vasa* from the List of Restricted Animals (Part B), and add it onto the List of Conditionally Approved Animals; (2) Allow the Importation of One Vasa Parrot, *Coracopsis vasa*, by Permit, for Individual Possession as a Domestic Animal Companion, by Lise Madson; and (3) Establish Permit Conditions for the Importation of One Vasa Parrot, *Coracopsis vasa,* for Individual Possession as a Domestic Animal Companion, by Lise Madson.

I. Summary Description of the Request

PQB NOTES: *The Plant Quarantine Branch (PQB) submittal for requests for rule amendments, import or possession permits, as revised, distinguishes information provided by the applicant from procedural information and advisory comment and evaluation presented by PQB. With the exception of PQB notes, hereafter "PQB NOTES," the text shown below in Section II from page 2 through page 11 of the submittal was taken directly from Lise Madson's application and subsequent written communications provided by Ms. Madson. For instance, the statements in Section III beginning at page 3 regarding information in support of the request are the applicant's statements in response to standard PQB questions and are not PQB's statements. This approach for PQB submittals aims for greater applicant participation in presenting requests in order to move these requests to the Board of Agriculture (Board) more quickly, while distinguishing applicant-provided information from PQB information. The portion of the submittal prepared by PQB, including the Factual Background of the Petition, Proposed List Changes, Advisory Subcommittee Review, and Proposed Permit Conditions are identified as Sections II, IV, V and VI of the submittal, which start at pages 2, 13, 14, and 18, respectively.*

We have a request to review the following:

COMMODITY: (1) Vasa Parrot, *Coracopsis vasa*.

SHIPPER: Lise Madson, 26890 Sparta Lane, Baker City, Oregon 97814.
Phone No.: (541) 403-1063

IMPORTER: Lise Madson, 18-1989 Nau Nani Road, Mountain View, Hawaii 96771.

CATEGORY: The Vasa parrot, *C. vasa,* is currently on the List of Restricted Animals (Part B). Pursuant to Hawaii Administrative Rules (HAR) Chapter 4-71, *C. vasa* may be imported into Hawaii for private and commercial use, including research, zoological parks, or aquaculture production. Ms. Madson is requesting that this species be reviewed and considered for placement on the List of Conditionally Approved Animals (CA List), which is in Chapter 4-71, HAR. If the Board grants preliminary approval for future placement, pursuant to the rulemaking requirements of Chapter 91, Hawaii Revised Statutes, the CA List will be amended to include *C. vasa.* Organisms on the CA List are allowed for individual possession, businesses, government agencies, or institutions.

II. Factual Background of the Petition

In early 2019, Ms. Madson contacted the Hawaii Department of Agriculture (HDOA) PQB and inquired about importing a Vasa parrot, *C. vasa*, into Hawaii. PQB staff informed Ms. Madson that under Chapter 4-71, HAR, the PQB's Non-Domestic Animal Import Rules, the Vasa parrot is currently listed on the Department's RB List and therefore not allowed for personal use and/or individual possession, but is limited to certain purposes, such as private and commercial use, including research. Ms. Madson was informed that an amendment to Chapter 4-71, HAR would be necessary before the Vasa parrot could be imported for individual possession and she submitted a petition for placement it on the CA List. Ms. Madson's original petition is included as Appendix A.

At the Board's April 14, 2020 meeting, this petition was originally reviewed by the Board and denied. At that time, due to Governor Ige's COVID-19 emergency proclamation, to maintain public safety, members of the public were not allowed to attend the Board's meeting. Ms. Madson was informed of the Board's denial via email by PQB staff. However, due to the possibility that an email did not meet notice requirements, the PQB requested that Ms. Madson's petition be reconsidered for review. The Board, on its own

motion, re-heard Ms. Madson's request at its meeting on December 15, 2020. Ms. Madson was able to attend virtually and speak on behalf of her petition. The Board deferred her request and directed the PQB to complete the review so the Board could make a better determination at a future meeting. Because of the Board's directive, the PQB is requesting a complete review as part of the rulemaking proceedings, including establishing permit conditions.

On May 17, 2021, Ms. Madson served the Department with a formal complaint to immediately initiate rulemaking. The complaint is attached as Appendix B.

At the Board's May 25, 2021 meeting, the Board reviewed Ms. Madson's complaint and request to immediately initiate rulemaking. After review, the Board denied Ms. Madson's request without prejudice and again directed the PQB to go through the review process, then be brought back before the Board for possible future rulemaking.

PQB Notes: *Ms. Madson was provided with a draft version of this submittal for review. Using this, she has provided a separate submittal with differing points from what was provided by PQB, particularly with regards to information provided regarding the Factual Background Section. PQB did incorporate Ms. Madson's information in support of the application in its entirety below. The above referenced submittal has been included as Appendix C.*

III. Information Provided by the Applicant in Support of the Request

PQB Notes: *From here to the "Objective" section is copied from Ms. Madson's revised submittal, Appendix C.*

The vast majority of parrot species are already included in the list of Conditionally Approved animals, pursuant to HAR § 4-71-6.5:

FAMILY Psittacidae
Agapornis (all species in genus)
Alisterus (all species in genus)
Amazona (all species in genus)
Anodorhynchus (all species in genus)
Aprosmictus (all species in genus)
Ara (all species in genus)
Aratinga (all species in genus except~- nana astec)
Bolborhynchus lineola
Cacatua (all species in genus)
Callocephalon fimbriatum
Calyptorhynchus (all species in genus)

Cyanoliseus patagonus
Cyanoramphus (all species in genus)
Deroptyus accipitrinus
Eclectus roratus
Elophus roseicapillus
Enicognathus (all species in genus)
Eunymphicus cornutus
Leptosittaca branickii
Melopsittacus undulatus
Neophema (all species in genus)
Nymphicus [holandicus) hollandicus
Pionus (all species in genus)
Platycercus (all species in genus)
Poicephalus (all species in genus)
Polytelis (all species in genus)
Probosciger aterrimus
Psephotus (all species in genus)
Psittacula alexandri
Psittacula cyanocephala
Psittacula·cterbiana
Psittacula eupatria
Psittacula himalayana
Psittacula roseata
Psittacus erithacus
Purpureicephalus spurius
Pyrrhura (all species in genus)
Tanygnathus (all species in genus)

Ms. Madson is not a natural scientist by trade but has graduate degree in law and was a practicing judge. While she provided information she obtained from secondary sources about the basic biology, reproductive biology and behavior, geographic distribution, potential for invasiveness, and damage to the environment in her petition for rule-making, she prefers to rely on the information included in the technical report prepared by Phillip Greenwell, M.S. (Wildlife Management and Conservation) who has field experience in the management, control, and assessment of avian invasive species in island environments and is better suited to gauge the accuracy and relevancy of the information. (See Appendix C, [Ms. Madson's revised submittal, Exhibits] 4 and 5). Ms. Madson sought Mr. Greenwell's review largely to provide PQB with the technical information it admitted it was lacking during the April 14, 2020 Board meeting to enable it to move forward with her petition for rule-making.

Of note, Mr. Greenwell's review includes a risk assessment of invasiveness for *C. vasa* in Hawaii using guidelines provided by the World Organization of Animal Health (OIE).

The OIE guidelines for assessing the risk of non-native animals becoming invasive are the gold standard for evaluating the potential for a species' invasiveness around the world and are recommended for use in the Convention on Biological Diversity (CBD). Mr. Greenwell also draws elements for his review from the *Hawaiian Pacific Weed Risk Assessment*, which provides modified assessment protocols for alien plant species.

While key excerpts of Mr. Greenwell's review are provided below, PQB and the Board are urged to consider the review in its entirety. *C. vasa* is native to Madagascar [Africa]. There are no known feral colonies of the species outside its native range.

- Primarily the route of establishment is very restricted. There is a limited breeding population within North America, and there have been no exports of this species from its native habitat since 1993. It is highly unlikely sufficient numbers would be imported to found a potential feral colony.

- The pathway of invasion is strictly control[led] or restricted. All imports must pass through the Hawaiian Department of Agriculture for approval. It is possible to therefore limit both numbers and sex of the species to ensure a suitably biased demographic (i.e. all males). Health and security are also similarly governed so risk of accidental escape or the introduction of pathogens or parasites is also controlled.

- Unlike other parrot species (with the exception of one other species, the Eclectus parrot) Vasa parrots have a complex polygynandrous breeding system. To successfully rear young[,] females depend on multiple attending males to feed her intensely across the breeding season. Unless a large founding population is simultaneously introduced then it is unlikely that the correct sex ratio will be achieved in Hawai'i. It is possible that multiple males are required to help provide the nourishment to the rapidly developing chicks (one of the fastest development times in psittacines). Lack of food of suitable quantity or quality can stunt or limit growth during this critical development time. It has been proposed that food availability might be an ecological constraint, one which applied selective pressures towards this unusual reproductive system in *Coracopsis* species.

- Unlike the other psittacines established in the state vasa parrots are obligate secondary nest cavity users. This means that birds do not excavate nests or modify/enlarge existing holes, but must find appropriately sized cavities to nest in. The other species currently feral in the state (Cockatoos, Amazons and conures) are all adept at modifying existing cavities. No gnawing/chewing behavior has been observed in Vasa parrots, indeed they are generally a non-destructive species and one of the few larger species that may be maintained in planted flights in captivity. Therefore, suitable nest sites are likely to be a limited resource for this species (particularly given the number of other psittacine species in the state competing for the nesting sites).

- Unless a large consignment of birds is released simultaneously into the habitat then smaller localized escapes of individual are unlikely to establish viable populations, given the constraints of founder population dynamics. Genetic bottlenecks and inbreeding are likely to reduce fitness in species with low founder populations. Immigration of unrelated individuals is required to sustain genetic diversity and of course this would be controlled by import permits.

- Changes to the basal metabolic rate in this species requires a greater quantity and/or quality of food to accommodate for these changes. It is possible that these changes are associated with breeding and parental behaviors, particularly as the development of the young is fast, and again can be referred to the breeding system with multiple males delivering food to the female. Given the nutritional requirements for successful reproduction, it is unlikely that in a novel habitat with unfamiliar food resources that a foundling population will find sufficient material to meet calorific and dietary needs.

- Despite the rapid development of the young birds, Vasa parrots nest only once in their native habitat. Clutch size is also small, approximately 4 eggs.

- This species was intentionally released/introduced into an alien environment (Reunion Island) and the population failed to establish. It is unknown how many individuals were released, or the processes involved, but it is important to note that they have been purposely released without success of establishment.

Mr. Greenwell concludes that the introduction of the vasa parrot does not represent a threat of invasion in the state of Hawaii, in its own right, or, when compared to other Psittacidae members. *C. vasa's* low potential for invasiveness is based on its life characteristics and other attributes. Given the species' unusual breeding system, unique dietary requirements, and obligate cavity nesting needs, it appears unlikely that a wild population could become established, even in the unlikely situation where multiple birds were imported in the future. Indeed, a review of the literature shows that the species has not ever successfully established a feral population outside its native habitat of Madagascar, even when an intentional attempt to colonize *C. vasa* was made. In addition, the species is not particularly popular in the pet trade due to what many find an undesirable appearance, and as a result, it is imported into the United States in low numbers. These factors provide strong support for the State of Hawaii to transfer *C. vasa* from the "restricted animal" to the "conditionally approved" animal list, where the vast majority of Psittacidae—several of which have a greater potential for invasiveness--are placed. The reproductive biology, social structure and unique dietary requirements of *C. vasa* are similar to that of the eclectus parrot, which is on the "conditionally approved" list of Psittacidae, providing additional support of transfer of *C. vasa.*

In reviewing Mr. Greenwell's review as a whole, it does not appear there are any identifiable negative environmental consequences to importing this organism into Hawaii that are different from those associated with a large number of parrot species that are already on the Conditionally Approved list. There are no known negative potential impacts to native or endemic species given the quarantine requirements for all parrots. There is no evidence to suggest that the impact of importing the Vasa parrot is greater than that of the many Conditionally Approved parrots, and much evidence suggesting that the impact of importing the Vasa parrot would be less than that of many parrots that are already on the Conditionally Approved list.

OBJECTIVE: Ms. Madson intends to import her parrot as a domestic animal companion which will be housed at her abode.

DISCUSSION:

PQB NOTES: *In prior submittals, Ms. Madson indicated the following information.*

1. **Person Responsible:** Lise Madson, JD, 18-1989 Nau Nani Road, Mountain View, Hawaii 96771. (See Appendix C for Lise Madson's resume)

2. **Safeguard Facilities and Location:** Madson residence, 18-1989 Nau Nani Road, Mountain View Hawaii 96771.

3. **Method of Disposition:** Due to the uniqueness of the parrot, if the parrot were to die, it's body would be donated to the University of Hawaii at Hilo Biology Department for use or dissection and be kept frozen until use, and would be cremated after their use, to prevent any chance, however slim of spread of disease or contamination. If Madson was unable to keep the parrot for any reason, custody of the parrot will be transferred to my friend, Julie Bell of Boise, Idaho, or secondarily my sister, Karin Madson of Fort Collins, Colorado. If I am unable to make the arrangements to ship the parrot to Ms. Bell or my sister, I would designate someone to make the arrangements. The parrot will undergo routine veterinary inspections. If the parrot had to be humanely euthanized for any reason, it would be cremated without dissection to prevent the spread of any potential disease(s).

4. **Abstract of Organism:**

   a. Common Name: Greater Vasa Parrot; Scientific Name *Coracopsis vasa*.

   b. Organism's Life History

Biology:

The male is grey/black, more grey on upperparts; grey undertail coverts, shafts of feathers streaked black; outer webs of primary feathers blue/grey; brown/black tail, grey underneath. Bill pink/horn colored. Lores and eye ring bare. Eye dark brown. Female is the same in male but when breeding loses feathers from head to reveal yellow/orange skin and her feathers turn brownish during mating season.

Reproductive Habits:

Vasa parrots can reach sexual maturity at age three to nine. Cloacae extend in both females and males during breeding season. The males have control of the amount of eversion and can retract the cloaca back into the body. A fully extended cloaca on a male greater is about the thickness of a hot dog and can be up to 2 inches long. Hens do not normally evert but can do so when defecating. Breeding is sometimes done by joining cloacae while in a side-by-side position. Other times the male mounting the hen in a manner seen in most other birds.

During the breeding season the males and females undergo remarkable physical changes. The males' beaks may turn white during this time. The hens lose the feathers on top of their heads and the skin turns yellow. The skin on the male's head turns a very dark grey-black and he may develop a deep saffron to orange wattle under the lower beak. The female’s feathers are usually black to grey, turn brown without a molt during breeding season. In the male Vasa, grey feathers turn nearly black without a molt. This is caused by the redistribution of melanin, though the exact mechanism for this is unknown.

At the beginning of the breeding cycle, the hen's ovary begins to grow in size. The cloacae of both hens and cocks also enlarge. The male cloacae actually evert when they are ready to breed. Female aggression towards their mates has been noted in the breeding season - to a point where females even kill their male partners. This species requires (and deserves) spacious housing to thrive and do well. However, ornithologists in Madagascar believe that the female Vasa parrots requires more than one male to raise a family.

Female Vasa parrots have been observed burying their eggs and chicks in nesting materials, as typically seen in reptiles. The female hardly exits the nest during the incubation and early chick development. When she does exit, she calls continuously and loudly for the male(s) to feed her. While the female tends to the eggs and young chicks, the male(s) stands guard and provides food to the hen during incubation and during the feeding of the chicks. Hens

also develop a pouch under the lower mandible which fills with a clear fluid when feeding young. Males have been observed using a rock to grind up shells to feed to females as a calcium supplement.

Breeding attempts of Vasa parrots is more unsuccessful than successful. Five hundred Vasa were imported in 1983 and 1984. By 1993 only 200 of those remained. Only 33 chicks were successfully produced between 1983 and 1993, and 18 of those were from the same pairs. Most pairs were unsuccessful.

Temperature requirements**:**

Vasa parrots in Madagascar enjoy normal temperatures of 59 degrees to 79 degrees. However, at times, temperatures can dip to an unusual low of 32 degrees or as high as 97 degrees. Temperatures for Vasa parrots to be most comfortable should be kept between 59 and 79 degrees.

Natural Habitat & Native Range**:** Greater Vasa parrots' natural habitat is the dry deciduous forest of Madagascar. Vasa parrots inhabit the forests and savannah below 1,000 meters and are more abundant at lower altitudes. Vasa parrots are dependent on the evergreen forests above 300 meters and visit the open country to feed during the day in small groups of up to 10, returning to the forest to roost in much larger groups. In Madagascar they nest during the rainy season during October and November in hollow trees, normally several meters off the ground.

Growth Rate:

Vasa Parrots hatch and fledge in about half the time of other similar sized parrots such as African Grey Parrots. Their eggs hatch in 17 days and chick's eyes open in eight days. The[y] fledge in about seven weeks. Vasa chicks develop incredibly fast because of the great quantity of food they consume. The amount of available food for the chicks may affect the actual age of fledging. Greater babies fledge in 45 to 50 days, while cockatiels fledge in 40 days and African Grey fledge in about 84 days.

Biotic Potential:

The biotic potential of Vasa parrots in the wild is unknown. However, it appears that several factors suggest the biotic potential is quite low. Numbers are decreasing in the wild. Wild birds that are caught tend to be very hard to breed. Of the original 500 imported to the USA, only 30 chicks were produced in the first 10 years from those 500 birds. Additionally, breeders in the USA

report only being able to successful produce about one chick per year on average. Given that there are less than a half dozen breeders, it appears that Vasa parrots are growing increasingly rare.

Hand-raised males generally will not breed with females. Multiple males are needed for one female.

Size at Maturity:

50 cm (19.5 inches to the tip of tail). Weight up to 480 g. (16.8 oz)

Longevity**:**

One Vasa Parrot lived in captivity until age 52.

Dispersal Capabilities**:**

There are no reports of Vasa parrots dispersing. The University of Chicago's recent 15-year study of parrots in the USA observed every parrot EXCEPT the Vasa parrot in the wild. Worldwide, there are no known reports of dispersal. In addition to the challenges breeding Vasa parrots, it appears that the Vasa parrots once fed a commercial diet will refuse to go back to their native diet, to the point it appears they would rather starve than forage as they did before being captured. There is no current explanation for this behavior, but it suggests many factors may be involved in Vasa parrots not being observed after escape from captivity.

The vasa parrot feeds on berries, fruits, nuts and seeds and also on maize, millet and rice in its host range. Host and alternate hosts are not present in Hawaii. Fruit, nuts and seeds are available in Hawaii, but even wild caught Vasa parrots have been reported as unwilling to forage after captivity and being fed a commercial diet, which may explain why it is the only parrot not observed in the wild on the mainland.

Because of the difficulty in breeding Vasa parrots, their lack of survival in the wild after captivity, the rarity of the breed, and the requirement of multiple females for on[e] male, their unusual reproductive and hatching issues, and the requirement that males may need to supplement calcium with a highly specific way of grinding shells into calcium it is highly unlikely absent an intentional release of a very large number of vasa parrots that a colony could be established. With hundreds of birds imported in the late 1980s to the Mainland, even attempts to intentionally breed those parrots failed to produce

enough chicks was not enough to even maintain a captive population numbers, under ideal circumstances, leading to less Vasa parrots.

Vasa parrot does not have the potential to become established in Hawaii for the reasons stated in this template. It is the only parrot species that has not even been observed in the wild on the mainland and has not become naturalized anywhere outside its native habitat of Madagascar, for the reasons set forth herein.

The species is not highly domesticated, cultivated or cultured for commercial purposes.

The parrot does not have the potential to become toxic or pathogenic. It is subject to the same disease and pests associated with allowed parrots in Hawaii, no more or less than allowed parrots.

The parrot has no reported impacts to wild stocks, commercial species, aquaculture, aquarium or ornamental species, etc. in its' native range.

5. Effects on the Environment:

There are three species of vasa parrots. All are very hardy, the Lesser Vasa, Coracopis nigra, is considered a pest by the government. However, the Greater Vasa, *Coracopsis vasa vasa*, which is the subject of this permit, is not. The Coracopis nigra will feast on crops that overtake its native habitat. However, there are no reports of *Coracopsis vasa* vasa being damaging to the environment. Further, evidence suggest that *Coracopsis Vasa* is highly unlikely to form flocks that are able to reproduce as compared to other parrots such as the conditionally approved African Greys or any other common parrot.

There are no reports of Greater Vasa parrots forming colonies outside Madagascar. Factors that may impact this is that Vasa parrots are unpopular as pets, rare, difficult to breed even intentionally, and there are reports that even wild caught Greater [V]asa parrots, after eating a commercial diet, will refuse native foods and refuse to forage for native foods. It is unknown why reintroducing their natural diet is unsuccessful. Additionally, in order to reproduce, multiple males are needed for one female. Females are loud at night during breeding season.

In a 15-year study in the USA, all other parrots were observed as escaped or released from captivity, living in the wild. The only exception to this was the Vasa

[p]arrot. No [V]asa parrots were observed in the last 15 years in the USA outside captivity.

Male[,] hand-raised Vasa parrots are unlikely to breed, even [if] the[y] encounter a female Vasa parrot. Female Vasa parrots, if not enough males are available, are known to kill their mates.

Like all parrots, Vasa parrots can carry the same diseases as other parrots that are allowed. However, they have no unique threats. The same "no mosquito quarantine" prior to flying a bird to Hawaii, which is required of all conditionally approved parrots, is sufficient to address these risks.

[Ms.] Madson, the applicant[,] has talked to all the major [V]asa parrot breeders and parrot experts around the globe, as well as scientists, including at the Hawaii Department of Agriculture[,] and no one knows of any reason that the Greater Vasa [p]arrot would pose any threat to the environment of Hawaii.

Because of the above factors, the probability of establishment or spread of the requested organism, associated diseases and or pests is VERY LOW, much lower than other conditionally approved parrots.

There is a positive potential economic impact with regard to the above described project[ ]. There are no known negative environmental consequences to importing this organism into Hawaii. There are no known negative potential impacts to native or endemic species given the quarantine requirements of all parrots. Impact is the same or much less than [other] conditionally approved parrots. Parrot[s] must be quarantined and not exposed to mosquitoes prior to [importation] to prevent the spread of West Nile, but this is true of all conditionally approved parrots.

Biosecurity:

Biosecurity is described above. Applicant has never had a parrot stolen and has had extensive security experience as a court judge. There is not a high demand for Vasa parrots. They are not often stolen, unlike other[,] more commercially in demand parrots[,] such as Macaws. Risk of theft is low. They are not popular as pets.

6. Alternatives:

If a permit is not provided, the alternative is for [Ms.] Madson to sell her property in Hawaii and remain with [ ] the parrot on the mainland. [Ms.] Madson's

daughter and son-in-law live at the property with [Ms.] Madson[,] so it [would have] a devastating impact on the family.

7. References:

S AFA Watchbird Journal of the American Federation of Aviculture Vol[.] 20 No[.] 3 (1993) Dave Blynn "Greater Vasa Parrot Breeding Survey"

Phone Interview with Steve Garvin, June 28, 2019, Owner of The Feather Tree, Long Beach CA 90808 (562)429-1892 feathertslg@webtv.net

Text Interview with Laurella Desborough, June 29, 2019, Laurella Desborough is an aviculturist who is passionate about the health and welfare of all living creatures.

- Education: BA from SIU, MA from UCLA.
- Professional work: Teacher – High School and College.
- Volunteer activities: Board Member and President or CEO on five boards over 20 years: AFA, ABC, MAP, Avian Research Fund, & Fountainhead Gardens Homeowners Assoc. Aviculture Microbiology Foundation, Inc. Past Legislative Vice-President for the American Federation of Aviculture.
- Author: BBOnline monthly column, articles in Bird Talk, AFA Watchbird, Bird World, World of Parrots, ASA Journal, Avizandum, and Cage Bird Magazine. Laurella wrote the legislative column for the quarterly AFA Watchbird Journal.
- Co-Author: Guide to Eclectus Parrots.
- Consultant and Lecturer.
- Aviculturist: Thirty years of researching, studying and breeding exotic birds: amazons, greys, cockatoos, brownheaded parrots, hawkheads, mini-macaws. Specializing in eclectus and vasa parrots (*Coracopsis vasa*). Also raised and raced pigeons.

Private Email from Dr. Steve Pruitt-Jones, PHD, Associate Professor, Department of Ecology and Evolution, Committee on Evolutionary Biology, University of Chicago, June 3, 2019.

At The Forefront, UChicago Medicine, "Escaped Pet Parrots are now Naturalized in 23 U.S. States, Study Finds" published May 14, 2019 Written By Matt Wood.

US National Library of Medicine, National Institutes of Health, "A novel form of spontaneous tool use displayed by several captive greater vasa parrots (Coracopsis vasa)" Journal ListBiol Lettv.11(12); 2015 DecPMC4707702

Journal of Ornithology, "Status of naturalized parrots in the United States,"Uehling, J.J., Tallant, J. & Pruett-Jones, S. J Ornithol (2019). https://doi.org/10.1007/s10336-019-01658-7

The Cornell Lab of Ornithology, eBird.org data base showing no sightings of Vasa Parrots in the USA in the wild. July 1, 2019

Audubon Christmas Bird Count. Current and Historical Database Audubon.org showing no sightings of Vasa Parrots in the USA in the wild. July 1, 2019

IV. Proposed List Changes

Ms. Madson is proposing to change the placement of the Vasa parrot, *C. vasa, f*rom the List of Restricted Animals (Part B), and to be placed on the List of Conditionally Approved Animals. Ms. Madson is proposing the following amendments to achieve this:

1. Section 4-71-6.5, List of Restricted Animals (Part B)

   Removes Scientific Name: "*Coracopsis vasa"* and Common Name: "Parrot, Vasa".

2. Section 4-71-6.5, List of Conditionally Approved Animals

   Adds Scientific Name: "*Coracopsis vasa"* and Common Name: "Parrot, Vasa".

V. Advisory Subcommittee Review

This request was submitted to the Advisory Subcommittee on Land Vertebrates for their review and recommendations. Their recommendations and comments are as follows:

1. **I recommend approval ___ / ___ disapproval to remove the Vasa parrot, *Coracopsis vasa*, from the List of Restricted Animals (Part B), and add it onto the List of Conditionally Approved Animals.**

Dr. Allen Allison, Vice President/Assistant Director, Research and Scholarly Studies, Bernice Pauahi Bishop Museum: Recommends Disapproval.

Comments: "I think that it would set a very bad precedent to add a restricted species to the List of Conditionally Approved Animals simply because this is apparently the only way for someone to bring, what is in effect a pet, to Hawaii. I

can accept that *Coracopsis vasa* is unlikely to be invasive, etc., but there is still a risk and I think that it would be foolish to take that risk, just so someone can import a pet, however compelling the circumstances."

Dr. Sheila Conant, Professor/Chairperson (ret.), University of Hawaii at Manoa, Department of Zoology: Recommends Disapproval.

Comments: "The Board should not approve this petition because approval would set a precedent of making exceptions to our rules and regulations prohibiting importation of non-native animals. I realize this is an application from a pet owner for a single, pet animal. However, if it is approved, HDOA is likely to be deluged with similar applications.

Parrots are on the List of Restricted Animals because they have the potential to escape into the wild and damage agriculture and native ecosystems. Although this is only one bird, someone else might import another individual of the same species, but different sex. Both animals might escape and establish a population. As unlikely as this appears to be, it has happened before and may well happen again if this application is approved.

Protecting Hawaii's native biota and ecosystems is a serious responsibility of HDOA (as well as DLNR) and should take precedence over the desires of an individual to import her pet."

Dr. Fern Duvall, Ecosystems Protection and Management, Hawaii Department of Land and Natural Resources-Division of Forestry and Wildlife: Recommends Disapproval.

Comments: "I have read the analysis of Dr. Hart of UH and do agree that the species is perhaps among the least likely of even the conditionally approved parrots to become established in the wild. Nonetheless, I think setting a precedent for parrot species conflicts with Chapter 183D of the HRS and should not be permitted.

Under statutory authorities provided by Chapter 183D, Hawaii Revised Statutes, the Department of Land and Natural Resources maintains Hawaii Administrative Rules Chapter 124, which defines 'injurious wildlife' as 'any species or subspecies of animal except game birds and game mammals which is known to be harmful to agriculture, aquaculture, indigenous wildlife or plants, or constitute a nuisance or health hazard and is listed in the exhibit entitled 'Exhibit 5, Chapter 13-124, List of Species of Injurious Wildlife in Hawaii…'

Under HAR 13-124-3 (d), no person shall, or attempt to:

1. Release injurious wildlife into the wild;
2. Transport them to islands or locations within the State where they are not already established and living in a wild state;

Injurious Wildlife Export Permits
As authorized by the Board of Land and Natural Resources, the Division of Forestry and Wildlife may permit for export of injurious wildlife in certain situations. DOFAW will consider permit applications on a case-by-case basis, but general guidelines are as follows:

- **Research, educational display, or exhibition (e.g., universities, zoos, museums):** Project leaders should submit an export application along with a copy of a government-issued photo ID, and a letter on institutional letterhead describing the research and/or educational use of the exported individuals, along with a plan for safely collecting and transporting the individuals.

I point out that DOFAW Mr. David G, Smith previously did not find the research justified – so I think the Vasa parrot import should be denied for it would make unprecedented changes to the Chapter 183D HRS.

The current, official list of injurious wildlife in Hawaii can be found in HAR 13-124, Exhibit 5. Examples of injurious wildlife include:

- All species in the family PSITTACIDAE (Parrots)"

Dr. Isaac Maeda, DVM, State Veterinarian, HDOA-Animal Industry Division: Recommends Approval.

Comments: None provided.

Mr. Tom May: No response.

Dr. Carolyn McKinnie, DVM, Supervisory Veterinary Medical Officer, USDA, Animal and Plant Health Inspection Service-Animal Care: Recommends Approval.

Comments: "Based on the science and research submitted, it doesn't appear that the Vasa parrot would cause harm if accidentally released. It doesn't appear to be able to survive in the wild in the case of accidental release in its non-native habitat. The requirements for it to breed and nest are challenging and unlikely to occur in Hawaii."

2. Provided the animal is placed on the List of Conditionally Approved Animals, I recommend approval ___ / ___ disapproval to allow the importation of one Vasa parrot, *Coracopsis vasa*, by permit, for individual possession as a pet by Lise Madson.

Dr. Allen Allison: Recommends Approval.

Comments: "I am recommending that *Coracopsis vasa* not be placed on the List of Conditionally Approved Animals. However, if it is placed on the list, then there is no reason to deny a request to import a single individual."

Dr. Sheila Conant: Recommends Disapproval.

Comments: "See above comments."

Dr. Fern Duvall: Recommends Disapproval.

Comments: "Please see my comments and reasoning in #1. Above as the reasoning remains pertinent to the species and case."

Dr. Isaac Maeda: Recommends Approval.

Comments: "Conditional by permit should be OK."

Mr. Tom May: No response.

Dr. Carolyn McKinnie: Recommends Approval.

Comments: "Birds are regulated under the AWA though no standards have been set as yet. Currently we are in the process of developing bird standards so in the future birds will be regulated and inspected by USDA for exhibitors, breeders and dealers. However, any animal in private ownership would not be regulated. This applicant is not licensed with USDA.

Based on science and research, the likelihood of escape and surviving in the wild is low.

*In the application, housing and husbandry are not described if the parrot was allowed to be imported into Hawaii. It's housing, husbandry and feeding needs to be delineated."

3. Provided the animal is placed on the List of Conditionally Approved Animals, I recommend approval ___ / ___ disapproval to establish permit conditions for the importation of one Vasa parrot, *Coracopsis vasa*, for individual possession as a pet by Lise Madson.

Dr. Allen Allison: Recommends Approval.

Comments: "Again, I am not recommending that *Coracopsis vasa* not be placed on the List of Conditionally Approved Animals. However, I find the permit conditions reasonable if *Coracopsis vasa* is placed on the List of Conditionally Approved Animals and the request to import a single individual is approved."

Dr. Sheila Conant: Recommends Disapproval.

Comments: "See above comments."

Dr. Fern Duvall: Recommends Disapproval.

Comments: "See above in point #1. Also, research on a single Vasa parrot would not elucidate the research hypotheses generally for the species. It would provide only so much individual bird knowledge as was gleaned from Dr. I. Pepperberg's fascinating work with the single bird 'Alex,' and for which I believe has not been reproduced in research with any other gray parrots to my knowledge."

Dr. Isaac Maeda: Recommends Approval.

Comments: None provided.

Mr. Tom May: No response.

Dr. Carolyn McKinnie: Recommends Approval.

Comments: "N/A"

VI. Proposed Import Permit Conditions

Provided that the change in list placement for *C. vasa* is approved and the rulemaking process is completed, the PQB will utilize the proposed conditions listed below, as approved by the Board, for administrative permit issuance.

1. The restricted article(s), one (1) Vasa parrot, *Coracopsis vasa*, shall be used for individual possession as a domestic animal companion , a purpose approved by

the Board of Agriculture (Board), and may be bred, sold, given away, or transferred in Hawaii. Release into the environment is strictly prohibited.

2. The permittee, Lise Madson, 18-1989 Nau Nani Road, Mountain View, Hawaii, 96771, shall be responsible and accountable for all restricted article(s) imported, from the time of their arrival to their final disposition.

3. The restricted article(s) shall be imported only through the port of Honolulu, as approved by the Board. Entry into Hawaii through another port is prohibited.

4. Each shipment of the restricted article(s) shall be accompanied by a copy of the PQB permit and permit conditions for the restricted article(s), and an invoice, packing list, or other similar PQB approved document listing the scientific and common names of the restricted article(s), the quantity of the restricted article(s), the shipper, and the permittee for the restricted article(s).

5. The restricted article(s) shall be permanently marked with a unique identification code, e.g., metal leg band, metal wing band, computer chip, etc.

6. At least four sides of each parcel containing the restricted article(s) shall be clearly labeled in plain view with “Live Animals” and “This Parcel May be Opened and Delayed for Agriculture Inspection”, in 1/2-inch minimum sized font.

7. The restricted article(s) shall comply with all pre-entry and post-entry animal heath requirements of the HDOA, Division of Animal Industry (DAI).

8. The restricted article(s) shall be maintained at all times in a cage, aviary, or other enclosure that prevents escape into the environment.

9. The approved site, restricted article(s) and records pertaining to the restricted article(s) under permit may be subject to post-entry inspections by the PQB. The permittee shall make the site, restricted article(s) and records pertaining to the restricted article(s) available for inspection upon request by a PQB Inspector.

10. The permittee shall immediately notify the PQB Chief verbally and in writing under the following circumstances:

    a. If any escape or release involving the restricted article(s) under this permit occurs. If the restricted article(s) escape or are found to be free from confinement, the HDOA may confiscate or capture the restricted article(s) at the expense of the permittee, pursuant to the Hawaii Revised Statutes (HRS), §150A-7(c).

b. If a shipment of the restricted article(s) is delivered to the permittee without a PQB "Passed" stamp, tag or label affixed to the article, container or delivery order that indicates that the shipment has passed inspection and is allowed entry into the State. Under this circumstance, the permittee shall not open or tamper with the shipment, and shall secure as evidence all restricted article(s), shipping container(s), shipping document(s) and packing material(s) for PQB inspection.

11. It is the responsibility of the permittee to comply with all applicable requirements of municipal, state, or federal law pertaining to the restricted article(s).

12. In the event that the restricted article(s) are sold, given away, or transferred in the state, the applicant is responsible for informing the new owner that the restricted article(s) cannot be released into the environment and must be kept caged at all times.

13. The permittee is responsible for costs, charges, or expenses incident to the inspection, treatment or destruction of the restricted article(s), as provided in Act 173, Session Laws of Hawaii 2010, Section 13, including, if applicable, charges for overtime wages, fixed charges for personnel services, and meals.

14. Any violation of the permit conditions may result in citation, permit cancelation, and enforcement of any or all of the penalties set forth in HRS §150A-14.

15. A canceled permit is invalid and upon written notification from the PQB Chief, all restricted article(s) listed on the permit shall not be imported. In the event of permit cancelation, any restricted article(s) imported under permit may be moved, seized, treated, quarantined, destroyed, or sent out of State at the discretion of the PQB Chief. Any expense or loss in connection therewith shall be borne by the permittee.

16. The permit conditions are subject to cancelation or amendment at any time due to changes in statute or administrative rules restricting or disallowing import of the restricted article(s) or due to Board action disallowing a previously permitted use of the restricted article(s). The permit conditions are further subject to amendment to conform to more recent Board approved permit conditions for the restricted article(s), as necessary to address scientifically validated risks associated with the restricted article(s).

17. The permit conditions are subject to amendment by the PQB Chief to require disease screening, quarantine measures, and/or to place restrictions on import from certain points of origin, as appropriate, based on scientifically validated risks

associated with the restricted article(s), as determined by the PQB Chief, as necessary to prevent the introduction or spread of disease(s) and/or pests associated with the restricted article(s).

18. The permittee shall agree in advance to defend and indemnify the State of Hawaii, its officers, agents, and employees for any and all claims against the State of Hawaii, its officers, agents, or employees that may arise from or be attributable to any of the restricted article(s) that are introduced under this permit. This permit condition shall not apply to a permittee that is a federal or State of Hawaii entity or employee, provided that the state or federal employee is a permittee in the employee's official capacity.

ADVISORY COMMITTEE REVIEW: May we request your recommendation and comments at the next meeting of the Advisory Committee on Plants and Animals.

COPY

State of Hawaii
Department of Agriculture
PLANT QUARANTINE BRANCH
1849 Auiki Street, Honolulu, HI 96819-3100

July 15, 2019

Re: Madson/Vasa Parrot

Dear Madam or Sir,

Enclosed please find $2500.00 for the fee to ask that the Vasa Parrot, Coracopsis Vasa, be removed from the Restricted B List and added to the conditionally approved list.

I have inclosed the form provided from David Lingenfelser, Acting Land Vertebrate Specialist, Hawaii Department of Agriculture, Plant Quarantine Division.

My extensive research and interviews with Vasa parrot experts and scientist leads to the conclusion that Vasa parrots are less likely to have any destructive effect on any aspect of Hawaii environment, as compared to most on the conditionally approved list. Vasas are notoriously hard to breed, rare, not popular as pets (though very interesting to scientists and students), and in a 15 year study in the Mainland USA the only parrot type not observed in the wild was a Vasa parrot, again emphasizing that even if one did escape they are unlikely to survive in the wild. One specialist reported that after captivity wild caught Vasas nearly starved rather than going back to their "wild" diet.

Further, no scientist can point to any reason with today's scientific knowledge as to why Vasa parrots were on the Restricted List in the first place. I suspect there was not much known about them at the time the rule was written: That has changed, and as they are not destructive to Hawaii, I ask that this rule change be expedited.

If there are other forms I need to submit for this rule change request, please let me know as soon as possible.

Yours Gratefully,

Lise Madson

RECEIVED
JUL 22 2019
PLANT QUARANTINE BRANCH

Lise Madson [redacted] Vasa Parrot Permit Application

State of Hawaii
Department of Agriculture
PLANT QUARANTINE BRANCH
1849 Auiki Street, Honolulu, HI 96819-3100

Dear Hawaii Board of Agriculture,

I have submitted three applications to the HDOA, 1. I submitted my application to bring a Vasa Parrot to Hawaii for private and commercial uses. 2. I submitted another application July 1, 2019 to bring the vasa parrot in for private non-pet use as an Emotional Support Animal. And finally, after talking with the HDOA, I have also submitted $2500 and a request that Vasa Parrot, Coracopsis Vasa, be removed from the Restricted B list and be placed on the conditionally approved list.

For the reasons explained in this letter, I cannot return to my home in Hawaii until I get permit approval. After five years on this project, I do not want to give up my research, my passion, my parrot, or my home in Hawaii. I am asking for your help expediting this process. This is just one male, hand-raised Vasa parrot and in no way destructive or detrimental to Hawaii, as I will show, but rather a benefit to Hawaii.

I am a disabled retired person with a degree in Environmental Law. Throughout my lifetime, I have been active in animal rescue.

When I was young, I trained as a vet tech, and worked at the Colorado State University Vet Hospital including in their raptor and bird rehabilitation areas. It was there that I fell in love with learning more about birds and caring for them. Also, early in my life, I worked in the vet area of the Denver Zoo. I studied Animal Science at the University of Massachusetts as an undergraduate. I was rancher, raised and rescued dogs, cats, parrots, cattle and horses. I earned an degree in Environmental Law from Lewis & Clark College. I served as Justice of the Peace. After becoming disabled, I began an affliation with TTOUCH organization, founded by world famous Linda Tellington-Jones of Kailua-Kona, Hawaii. I competed in toward the 2012 Paralympics in Para Dressage, competed internationally in Para Reining. I run a social media site promoting the adoption of mustangs, and another for disabled riders, as well as promoting the TTOUCH organization.

Five years ago I rescued a vasa parrot. Grover, then named Groucher, had been hand-raised and therefore bonds to people, in particular, me, rather than other birds. He had not been out of his cage in four years, a very small cage, and he swore and bit. After five years, he has turned into a reliable and gentle creature; I used the TTOUCH methods to rehab this Vasa.

Linda Tellington-Jones has authored 22 books which have been translated into 13 languages. In association with Linda, I am writing a book on Vasa parrots and TTOUCH, and Grover in particular. Linda has worked with animals like Keiko the killer whale and helped animals from dressage horses, to tigers, around the globe.

After coming to Hawaii to help Linda with several seminars, I decided to sell my house in Oregon and move to the Big Island. After buying a property, I ran into difficulty getting a permit for Grover.

No one knows why Vasa Parrots are on the Restricted B list; it appears to be in error. Despite extensive research and consultations with scientists and aviculturalists around the globe, no one can identify any way that a Vasa parrot could be dangerous or harmful to the flora or fauna, the people or aquaculture, or the environment of Hawaii. As a matter of science, Vasas are less of a threat to the environment, people, flora and fauna of Hawaii than a common cockatiel. One thought is that since Hawaii does not routinely update their rules, which were written in 1990, and since Vasas were brought to the USA in the 1980s, that maybe just the newness of the parrot landed it on the restricted list. I believe the concern was that if large amounts of Vasa were imported they could establish a colony, like cockatoos in Australia (Cockatoos, despite this risk, are conditionally approved to come to Hawaii). The risk of the Greater Vasa proved, once more was known about them, unfounded.

The Greater Vasa parrot is less a threat than the cockatiel for the following reasons: Vasas are rare. They are unpopular as pets because they are plain grey parrots and the females loose their head feathers and look like vultures during breeding season. The male, also during breeding season, has external genitalia. And while the adaptations of the Vasa, which are from Madagascar, make it fascinating to writers and researchers, scientists and students of evolution, it makes in unpopular as a pet. Along with its rarity, the Vasa parrot has proven hard to breed. Of the first 500 to come to the USA, only 30 chicks were produced in near ten years. Only a half dozen breeders in the USA have successfully produced vasa chicks those average one chick per year; a number so low it appears Vasas are becoming more rare in captivity. The zoo at Salt Lake City tried to breed these parrots and also failed. Most people have never seen a Vasa parrot. According to the HDOA, apparently one has never been imported to Hawaii, nor has anyone petitioned as far as the employee in charge knows. Another reason that the parrot is not a threat to Hawaii is because while there are some Vasas on the mainland, in a 15 year study by the University of Chicago on observations of birds in the wild on the mainland, not a single vasa was observed; every other parrot was. This may be due to their lack of popularity, their breeding challenges, or to an inability to survive and adapt to any environment after captivity; there are reports that wild caught Vasas, after being fed a commercial diet, will refuse to eat the native diet, and appear willing to starve rather than go back to foraging. It takes three to four males to one female to breed vasas: a UK study recently found that the male vasas were observed using tools, rocks, to grind shells into a calcium supplement for the females.

Hand-raised vasas, like Grover, are imprinted on people and unlikely to be successful or happy in an institutionalized setting like a zoo. He has been habituated to people and for all practical purposes views me as his flock. Hand-raised male vasas are unlikely to breed with female vasas.

My research and writing addresses both TTOUCH in rehabbing animals but also the ethical and moral issues associated with hand-raising animals, from Vasa parrots to horses.

My research on Vasa parrots is centered on Grover, and stopping five years into my study of Grover is not an option. I attempted to have Grover cared for by others, but due to bonding issues he became overly vocal, started swearing again, and showed signs of stress. We have all seen parrots that suffer emotional and physical trauma when those they are bonded with desert them or die. This is one of the ethical issues I am addressing in my book: Parrots bond rather permanently with people if they are hand-raised, and will rip their feathers out, self-mutilate and scream, if bonds are broken.

Add to this that I, disabled, suffered a head injury and coma. This led to emotional regulation problems. Spending so much time studying Grover led me to return his bond. While perhaps not ideal for a "hard" scientist, with my degree in Environmental Law, Sociology and minor in Psychology, these are exactly the issues I am addressing in my work. Just as Grover gains support from me, I gain emotional support from Grover.

While I never wanted or intended to have an emotional support animal, which I view as a crutch and generally not needed, after my coma and head injury I found myself much better off with Grover than without. In fact, I would rather give up all my pets, my service dog and my horses, and my house in Hawaii rather than Grover. However, I am certain under the circumstances that the Board will reach the conclusion that Vasa parrots are not a threat to Hawaii, but rather can be beneficial for students to study, and enrich people's understanding of the unique ways animals evolve on islands.

Grover is not a pet. An emotional support animal is by definition, not a pet. It is more a medical or psychological device. As a research subject, Grover is also not a pet. However, I am also asking that ALL vasa parrots be reclassified as conditionally approved, under a separate petition. Because there is no reason that I can determine or that they should not be conditionally approved. Recent studies have shown that keeping parrots as companion animals may in some instances preserve a breed enough so that it can avoid extinction.

I am told that the Board takes six months to a year to process these applications. I ask that under the circumstances due to my home being in Hawaii and having to stay in a trailer, on a limited income, until the permit is granted, that it be expedited. I am optimistic that the Board will approve a permit because, frankly, there is no reason for this bird to be on the Restricted List B, scientifically.

Further, as an ESA, processing the application should be quicker and more streamlined than pet. To be clear I do not generally support exotics being ESAs. I think an ESA horse or monkey should not be allowed. However, parrots are often used for veterans with PTSD, and others with emotional regulations issues within there homes because

compared to a dog, they can be much different in there interaction with the person, and require less complicated care for a person who may not be able to venture out as often as another emotional support animal might require. As for me in particular, it would take years and suffering to transfer my emotional support to another animal. One reason parrots are ideal for this is because with excellent care, they can live as long as the human they are helping.

In this application I am asking that this Vasa be permitted for commercial and private purposes. Restricted list A is for exhibition. It would be, humbly in my opinion, arbitrary an capricious to ignore Restricted List B as a separate and broader category than exhibition. Indeed, private use is defined as "for non-commercial purposes, such as non-profit research, and does not include individual possession of an animal as a pet." Commercial purposes is not defined.

My using the bird as a medically prescribed emotional support animal is a private, non-pet use that should be recognized and permitted. Using the bird for research, even by a private individual, should meet the requirements; I believe "such as non-profit research" was intended in the admin rules as an example not as the only allowed private use, but in case of a more narrow interpretation, I am in the process of forming a non-profit corporation in Hawaii that will then clearly meet this definition. Using the bird for TTOUCH and the University of Hawaii at Hilo to teach students in the Tropical Bird Conservation and Environmental Studies programs should meet the letter of the law of the admin rules for commercial purposes, as should my writing a book.

I ask to be able to have the bird stay at my property in Mountain View, HI, and I ask to be able to use the bird at my location in Mountain View for University of Hawaii at Hilo's students, and also with TTOUCH, at the Mountain View address, including for social media, demonstrations and promoting TTOUCH.

I would as the Board to issue a permit promptly. Please ask your scientists. They will tell you what I have: A vasa parrot is less a threat than a cockatiel: they are hard to reproduce, carry no unique threats, they are merely a rare parrot of great interest to scientists and students, but unpopular as a pet.

In the meantime, in order to continue my research and because of my emotional reliance on Grover, I have a perfectly good home in Hawaii, that I am unable to live in (my daughter and her fiance live there with me so I can't just sell the house and move back to the mainland). Instead, I am living in a horse trailer in Oregon until this matter can get resolved. As a disabled person, with health issues, this is a huge burden.

I ask the the Board honors the objective of Chapter 150A of the Hawaii Revised Statutes with say that the objective is to restrict or prohibit importation of specific non-domestic animals that are detrimental to the agricultural, horticultural, and aquacultural industries, natural resources and environment of Hawaii. There is simply no scientific evidence that a Vasa parrot is detrimental. Indeed, the evidence is that by understanding the Vasa parrot, and using him for research and education that Vasas

would benefit science and understanding of natural resources and environments, directly benefiting TTOUCH students and University of Hawaii students, but also indirectly leading to better understanding of island's evolution of birds, both birds from Hawaii and other islands such as Madagascar.

I am asking that you expedite this matter because of this unusual situation.

Gratefully,

Lise Madson

STATE OF HAWAI'I CIRCUIT COURT OF THE FIRST ☒ CIRCUIT	**SUMMONS** TO ANSWER FIRST AMENDED **VERIFIED COMPLAINT**	APPENDIX B

CASE NUMBER
1CCV-21-0000578

PLAINTIFF'S NAME & ADDRESS, TEL. NO.
Emily A. Gardner #6891
Emily A. Gardner, Attorney at Law, LLLC
4348 Waialae Avenue, Suite 256
Honolulu, HI 96816
Tel: (808) 348-0929

PLAINTIFF	VS.	DEFENDANT(S)
Lise Madson		Hawaii Department of Agriculture, Phyllis Shimabukuro-Geiser, in her Capacity as Chairperson of the Hawaii Board of Agriculture, DOE Defendants 1-10,

TO THE ABOVE-NAMED DEFENDANT(S)

You are hereby summoned and required to file with the court and serve upon

EMILY A. GARDNER

First Amended Verified Complaint

plaintiff's attorney, whose address is stated above, an answer to the [redacted] which is herewith served upon you, within 20 days after service of this summons upon you, exclusive of the date of service. If you fail to do so, judgment by default will be taken against you for the relief demanded in the complaint.

THIS SUMMONS SHALL NOT BE PERSONALLY DELIVERED BETWEEN 10:00 P.M. AND 6:00 A.M. ON PREMISES NOT OPEN TO THE GENERAL PUBLIC, UNLESS A JUDGE OF THE ABOVE-ENTITLED COURT PERMITS, IN WRITING ON THIS SUMMONS, PERSONAL DELIVERY DURING THOSE HOURS.

A FAILURE TO OBEY THIS SUMMONS MAY RESULT IN AN ENTRY OF DEFAULT AND DEFAULT JUDGMENT AGAINST THE DISOBEYING PERSON OR PARTY.

DATE ISSUED	CLERK	CIRCUIT COURT CLERK
MAY 11, 2021	/s/ N. ANAYA	

The original document is filed in the Judiciary's electronic case management system which is accessible via eCourt Kokua at: http:/www.courts.state.hi.us

In accordance with the Americans with Disabilities Act, and other applicable state and federal laws, if you require a reasonable accommodation for a disability, please contact the ADA Coordinator at the Circuit Court Administration Office on OAHU- Phone No. 808-539-4400, TTY 808-539-4853, FAX 539-4402; MAUI- Phone No. 808-244-2929, FAX 808-244-2777; HAWAII- Phone No. 808-961-7424, TTY 808-961-7422, FAX 808-961-7411; KAUAI- Phone No. 808-482-2365, TTY 808-482-2533, FAX 808-482-2509, at least ten (10) working days prior to your hearing or appointment date.

Emily A. Gardner #6891
Emily A. Gardner, Attorney at Law, LLLC
4348 Waialae Avenue, Suite 256
Honolulu, HI 96816
Tel: (808) 348-0929
Email: egardner808@gmail.com

Attorney for Plaintiff
LISE MADSON

IN THE CIRCUIT COURT OF THE FIRST CIRCUIT

STATE OF HAWAII

Lise Madson, Plaintiff, v. Hawaii Department of Agriculture, Phyllis Shimabukuro-Geiser, in her Capacity as Chairperson of the Hawaii Board of Agriculture, DOE Defendants 1-10, Defendants.	CIVIL NO.: 1CCV-21-0000578 (Declaratory Judgment) **FIRST AMENDED VERIFIED COMPLAINT FOR DECLARATORY RELIEF**

FIRST AMENDED VERIFIED COMPLAINT FOR DECLARATORY RELIEF

COMES NOW, Lise Madson, ("Plaintiff") by and through her undersigned counsel , and brings the following allegations and claims against the State of

Hawaii Department of Agriculture and Phyllis Shimabukuro-Geiser, in her Capacity as Chairperson of the Hawaii Board of Agriculture ("Defendants"):

I.

JURISDICTION AND VENUE

1) This Court has jurisdiction and venue over the above Defendants under Hawaii Revised Statutes § 666-1(1) which provides original jurisdiction to hear and determine all claims against the State founded upon any statute of the State; or upon any regulation of an executive department.

2) Venue is proper before this Court under Hawai`i Revised Statutes § 603-36(5).

II.

PARTIES

3) Plaintiff Lise Madson is and was at all times relevant hereto a resident of the State of Hawaii who resides in Mountain View, Hawaii.

4) Defendant Hawaii Department of Agriculture is an executive department of the State of Hawaii.

5) Defendant Phyllis Shimabukuro-Geiser is the Chairperson of the Hawaii Board of Agriculture.

6) Plaintiffs have reviewed records that were made available to them in order to ascertain the true and full names and identities of all defendants in this action, but no further knowledge or information regarding the parties responsible is

available at this time and Plaintiffs are unable to ascertain the identity of the defendants in this action designated as DOE DEFENDANTS 1-10 ("Doe Defendants"). Doe Defendants are sued herein under fictitious names for the reason that their true names and identities are unknown to Plaintiffs except that they may be connected in some manner with Defendants and may be agents, attorneys, servants, employees, employers, representatives, co-venturers, co-conspirators, associates, or independent contractors of Defendants and/or were in some manner responsible for the injuries or damages to Plaintiffs and their true names, identities, capacities, activities and responsibilities are presently unknown to Plaintiffs or their attorney.

III.

FACTS

7) Plaintiff owns a Vasa parrot, *Coracopsis vasa*. She has owned the bird since 2014 but was unable to bring the bird with her when her family relocated to Hawaii in 2019 from Oregon because this species of parrot is presently listed on the Department of Agriculture's list of Restricted Animals. Plaintiff developed a strong bond with the bird as it served as her companion while she was recovering from a traumatic and serious physical injury.

8) There are roughly 350 species of parrots in the world. Of the roughly 350 species of parrots, only four currently appear on the Department of

Agriculture's list of Restricted Animals and require a private use permit for import into the State of Hawaii. The vast majority of parrot species are presently listed on the Department of Agriculture's list of Conditionally Approved Animals and do not require a private use permit for import into the State of Hawaii. Animals on the Conditionally Approved list may be imported into the State of Hawaii for individual or personal use, including for use as a pet.

9) When Plaintiff was preparing to relocate to Hawaii in 2019, she reviewed the Department of Agriculture's lists of Conditionally Approved Animals and Restricted Animals, pursuant to HAR § 4-71. Plaintiff was surprised to see that the Vasa parrot was included on the Department's list of Restricted Animals and thought it might have been a typo.

10) As a longtime owner of a Vasa parrot, Plaintiff knew the species was neither endangered or threatened and that it had certain physical and behavioral traits that make it difficult to breed, both in the wild and in captivity. The species is only found naturally in Madagascar but is sometimes kept as a pet due to the species' high intelligence. Deliberate attempts to colonize the species in other parts of the world have failed.

11) Plaintiff contacted the Department of Agriculture's Plant Quarantine Branch in early 2019 and inquired whether and how she might be able to import her bird

into Hawaii. Plant Quarantine Branch staff recommended that Plaintiff submit a petition to reclassify the bird from the Restricted to the Conditionally Approved Animal list, and import the bird for individual use/or, to apply for a private use permit to conduct scientific research with the bird as a Restricted Animal.

12) The Hawaii Agricultural Board administrative rules, HAR § 4-1-23(a), provides, in relevant part:

The adoption, amendment, or repeal of any rule of the board may be made by the board on its own motion, or by petition of any interested person or agency.

13) On July 15, 2019, Plaintiff, pursuant to Hawaii Administrative Rule (HAR) § 4-1-23(a), and the recommendation of the Plant Quarantine Branch, submitted a petition to Defendants through Defendants' Plant Quarantine Branch, to initiate rule making and rule amendment to Chapter 4-71, HAR to change the placement of the Vasa parrot, *Coracopsis vasa*, from the List of Restricted Animals (Part B) to the List of Conditionally Approved Animals. When and if the bird was reclassified from a Restricted Animal to a Conditionally Approved Animal, Plaintiff would be entitled to seek a permit to import the bird into the State for individual use.

14) Plaintiff submitted the requisite $2,500 processing fee to Defendants at the same time and along with her petition.

15) Defendants, through their Plant Quarantine Branch, acknowledged receipt of Plaintiff's petition on July 22, 2019.

16) Plaintiff's bank records establish that Defendants cashed Plaintiff's check for the $2,500 petition processing fee on January 17, 2020.

17) Defendants' Plant Quarantine Branch originally submitted Plaintiff's petition to the Agriculture Board on March 24, 2020. The submittal was signed by Jonathan K. Ho, Acting Manager of the Plaint Quarantine Branch, and stated that "Section 4-1-23(c) Hawaii Administrative Rules (HAR) requires after filing such a petition, the Board must either deny the Petition or initiate rule making." In his March 24, 2020 submittal to the Agriculture Board, Mr. Ho also stated that "Ms. Madson's Petition appears to conform to the[se] procedural prerequisites for Board consideration."

18) The Agriculture Board formally considered Plaintiff's petition to initiate administrative rule making at its April 14, 2020 meeting. The petition was presented by Plant Quarantine Branch staff. During the Board's consideration, Defendant Chairperson inquired why the Plant Quarantine Branch failed to provide a recommendation for action on Plaintiff's petition. Plant Quarantine Branch senior staff, Trenton Yasui, stated that the Branch was not able to make a recommendation due to a lack of technical information typically generated by advisory review.

19) The Plant Quarantine Branch stated that it lacked technical information to make a recommendation to the Agriculture Board for its' April 14, 2020 meeting despite the fact that the Plant Quarantine Branch had acknowledged receiving Plaintiff's petition more than eight months before and had cashed Plaintiff's check for the $2,500 processing fee, more than two months before.

20) Because the Plant Quarantine Branch failed to provide the Agriculture Board with the technical information it needed to properly consider Plaintiff's petition, the Agriculture Board voted to deny Plaintiff's petition, pending the completion of an advisory review by the Plant Quarantine Branch. Due to COVID-19, the Agriculture Board meeting was not held publicly, and Plaintiff was unable to attend.

21) Neither the Plant Quarantine Branch nor the Department, nor the Chairperson of the Agriculture Board provided Plaintiff with a written notice of its denial of Plaintiff's petition at its April 14, 2020 meeting and the reasons, therefore as required by Hawaii Revised Statutes § 91-6 and HAR 4-1-24.

22) Plaintiff's permit application to conduct private research on the bird and import it into the State of Hawaii as a Restricted Animal was considered and denied by the Agriculture Board during a subsequent meeting of the Agriculture Board on December 15, 2020. Plaintiff was provided with written notice of the

Board's decision to deny her research permit application which was dated January 15, 2021.

23) Plaintiff is not contesting the Board's decision to deny her permit application for research as a Restricted Animal. The time to do so has lapsed. Plaintiff notified the Department that she was not contesting the Department's denial of her research permit application on February 2, 2021.

24) Plaintiff had also submitted an application to the Department of Agriculture to import the bird as an emotional support animal as a Restricted Animal in July 2019. This permit application was denied by the Board Chairperson in writing on August 7, 2020. In its letter of denial, the Department stated that it viewed the use of an animal for emotional support to be "equivalent to individual possession or personal use of an animal." Plaintiff is not contesting the Board's decision to deny this permit application for use of a Restricted Animal as an emotional support animal. The come to do so has lapsed. Plaintiff notified the Department that she is not contesting the Department's denial of her permit application to import the bird as a Restricted Animal as an emotional support animal on February 2, 2021.

25) Plaintiff has notified the Department in writing that she is no longer pursuing her permit applications to import the bird as a Restricted Animal for the purpose of conducting research or as an emotional support animal, and, that she is only

continuing to pursue her petition to initiate administrative rule making and rule amendment to change the list placement of the Vasa parrot from the Restricted Animal List to the Conditionally Approved Animal list and import the bird for individual use.

26) During the December 15, 2020 Agriculture Board meeting, Plaintiff's petition to initiate administrative rule making and rule amendment to Chapter 4-71, Hawaii Administrative Rule (HAR) to change the list placement of the Vasa parrot, *Coracopsis vasa*, from the list of Restricted Animals (Part B) to the List of Conditionally Approved Animals was resubmitted to the Board.

27) Jonathan Ho, Acting Director of the Plant Quarantine Branch, notified the Agriculture Board that the Branch did not notify Plaintiff in writing within the 30-day timeframe that the Board had denied Plaintiff's petition, resulting in automatic rule making.

28) During the December 15, 2020 Agriculture Board meeting, Defendant Chairperson stated that the Board could deny Plaintiff's petition and direct the Plant Quarantine Branch to route the petition through the review process and come back to the Board at another meeting or could deny the petition consider it at another time.

29) Other Agriculture Board members expressed interest in deferring a vote at the December 15, 2020 Board meeting because there "is a lack of sufficient reasons for denial."

30) Jonathan Ho informed the Agriculture Board that the Plant Quarantine Branch could complete a full review in February 2021.

31) Upon learning that the Plant Quarantine Branch could provide a technical review in February 2021—nearly one year and seven months after it received Plaintiff's petition-- the Agriculture Board voted to further defer a decision on Plaintiff's petition to initiate rule making and rule amendment pursuant to HAR § 4-1-23.

32) Due to the Plant Quarantine Branch's repeated failure to provide an internal review of the Vasa parrot to serve as the basis for a recommendation to the Agriculture Board, Plaintiff commissioned a literature review of the species by a biologist holding a Master of Science in Wildlife Management and Conservation Biology who has significant experience in avian invasive species in island ecosystems. The biologist, Phillip Greenwell, opined that the Vasa parrot has an unusually low potential for invasiveness and posed no significant threat to the environment. On February 2, 2021, Plaintiff, through the undersigned counsel, provided the Plant Quarantine Branch with Mr. Greenwell's report to assist them with their internal review process with a letter

inquiring when Plaintiff's petition would again be considered by the Agricultural Board.

33) An Avian Ecologist and Professor of Biology at the University of Hawaii at Hilo who has been conducting research on the ecology and conservation of native Hawaiian forest birds for 30 years has reviewed Mr. Greenwell's literature review and support his conclusions that it is "highly unlikely that vasa parrots could successfully establish a breeding population in Hawaii," and "there is no good biological reason for the vasa parrot to have a 'restricted' listing while many other parrot species that have far greater potential for invasion are less restricted."

34) The Plant Quarantine Branch and the Defendant Chairperson have failed to resubmit Plaintiff's petition to the Agriculture Board, have failed to issue a letter of denial to Plaintiff, and have failed to initiate rule making and rule amendment. Defendants' actions in failing to act in a timely manner on Plaintiff's petition are not supported by Hawaii law.

35) Hawaii Revised Statutes § 91-6, Petition for adoption, amendment or repeal of rules, provides:

> Any interested person may petition an agency requesting the adoption, amendment, or repeal of any rule stating reasons therefor. Each agency shall adopt rules prescribing the form for the petitions and the procedure for their submission, consideration, and disposition. **Upon submission of the petition, the agency shall within thirty days either deny the petition in writing,**

stating its reasons for the denial or initiate proceedings in accordance with section 91-3

36) Moreover, the rules for the Agriculture Board's denial of a rule making petition , HAR § 4-1-24, Denial of Petition, provides:

> Any petition that fails to comply in any material respect with the requirements of this chapter or fails to disclose sufficient reason to justify conducting rulemaking proceedings shall not be considered by the board. **The board shall promptly notify the petitioner in writing of such denial, stating the reasons therefor**. Denial of a petition shall not prevent the board from acting on its own motion, upon any matter disclosed in the petition. The petitioner may seek judicial review of denial.

37) The language of Hawaii Revised Statutes § 91-6, Petition for adoption, amendment or repeal of rules is clear, unambiguous, and provides a specific time period within which a state agency must act.

38) The Hawaii Supreme Court has ruled that all state and county boards, commissions, departments and offices must conform to the Administrative Procedures Act when acting in a rule making capacity, and, that where language of a statute is plain and unambiguous that a specific time provision must be met it is mandatory and not merely directory. *Town v. Land Use Commission*, 53 Haw. 538.

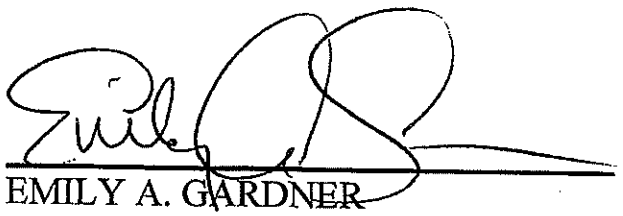
39) There is a lack of sufficient grounds to deny Plaintiff's petition, or, to continue to further defer action on Plaintiff's petition for rule making and rule amendment pursuant to HAR § 4-1-23.

40) Plaintiff is entitled to automatic rule making in accordance with the mandate of HRS § 91-6 and procedures set forth in HRS § 91-3.

WHEREFORE, Plaintiff prays for declaratory relief against Defendants and in favor of the Plaintiff as follows:

1. An order requiring Defendants pursuant to immediately initiate rule making and rule amendment to Chapter 4-71, HAR to change the placement of the Vasa parrot, *Coracopsis vasa*, from the List of Restricted Animals (Part B) to the List of Conditionally Approved Animals in accordance with the provisions of HRS 91-3;
2. Plaintiff's reasonable attorneys' fees and costs;
3. For such other and further relief as the Court may deem just and proper.

Dated: Honolulu, Hawai`i, May 11, 2021



EMILY A. GARDNER
Attorney for Plaintiff
LISE MADSON

VERIFICATION OF FIRST AMENDED COMPLAINT

I, Lise Madson, declare as follows:

1. I have personal knowledge of the facts alleged in the First Amended Complaint and am competent to testify to the matters in the First Amended Complaint.

2. I have read the First Amended Complaint in this matter and verify and confirm that to the best of my knowledge, information and belief, the factual allegations contained in the First Amended Complaint are true and correct.

I declare under the penalty of perjury that the foregoing is true and correct.

Dated: May 11, 2021

LISE MADSON
Plaintiff

DAVID Y. IGE
Governor

JOSH GREEN
Lt. Governor

PHYLLIS SHIMABUKURO-GEISER
Chairperson, Board of Agriculture

MORRIS M. ATTA
Deputy to the Chairperson

State of Hawaii
DEPARTMENT OF AGRICULTURE
1428 South King Street
Honolulu, Hawaii 96814-2512
Phone: (808) 973-9600 FAX: (808) 973-9613

March XX, 2021

Please Respond By:
March XX, 2021

TO: Advisory Subcommittee on Land Vertebrate Animals

PETITIONER: Lise Madson

THROUGH: David Lingenfelser, Noni Putnam
Land Vertebrate Specialists
Hawaii Department of Agriculture
Plant Quarantine Branch

SUBJECT: Request for the initiation of administrative rulemaking and rule amendment to Chapter 4-71, Hawaii Administrative Rules (HAR) to change the list placement of the Vasa Parrot, *Coracopsis vasa*, from the List of restricted Animals (Part B) to the List of Conditionally Approved Animals.

CATEGORY: The Vasa parrot, *C. vasa,* is currently on the List of Restricted Animals (Part B). Pursuant to Hawaii Administrative Rules (HAR) Chapter 4-71, *C. vasa* may be imported into Hawaii for private and commercial use, including research, zoological parks, or aquaculture production. Ms. Madson is requesting that this species be reviewed and considered for placement on the List of Conditionally Approved Animals (CA List), which is incorporated under Chapter 4-71, HAR. If the Board grants preliminary approval for future placement, pursuant to the rulemaking requirements of Chapter 91, Hawaii Revised Statutes, the CA List will be amended to include *C. vasa.* Organisms on the CA List are allowed for individual possession, businesses, government agencies, or institutions.

I. Factual Background of Ms. Madson's Petition for Rule-Making

In early 2019, Ms. Madson initially contacted the Hawaii Department of Agriculture (HDOA) PQB and inquired about importing a Vasa parrot, *C. vasa*, into Hawaii. She spoke with David Lingenfelser, who was the Acting Land Vertebrate Specialist for PQB. Mr. Lingenfelser asked Ms. Madsen what she would be using the parrot for. Ms.

Madson informed Mr. Lingenfelser that the parrot would primarily be for her individual possession. Mr. Lingenfelser informed Ms. Madson that the Vasa parrot was currently a "Restricted B" organism, and that under chapter 4-71, HAR, the PQB's Non-Domestic Animal Import Rules, importation would require a permit. Mr. Lingenfelser's initial recommendation to Ms. Madson was to seek a rule-amendment to reclassify the parrot as a "Conditionally Approved" organism, pursuant to Hawaii Revised Statutes (HRS) §91-6. Ms. Madson submitted a petition for rule-making and amendment.

At the time of Ms. Madson's initial inquiry, Mr. Lingenfelser also suggested that Ms. Madson could apply for a permit to import the parrot as a "Restricted B" organism and suggested that she provide as much detail as possible describing what the bird will be used for. Ms. Madson inquired whether the parrot could qualify as an Emotional Support Animal (ESA) and if ESA use would provide grounds to obtain a permit to import the animal under chapter 4-71 HAR. Ms. Madson has a past history of physical trauma and reports that she has developed a strong emotional bond with the parrot and that it has provided her with companionship. The bird had been incorporated into her treatment when recovering from a serious illness and in a coma. Mr. Lingenfelser relayed that ESA might potentially provide grounds for an importation permit. Based on advice she received from Mr. Lingenfelser, Ms. Madson submitted a permit application to import the parrot as an ESA under chapter 4-71 HAR in the event her petition for administrative rule-making was declined.

About the same time in 2019, Ms. Madson contacted Mr. Lingenfelser to inquire about the status of her petition for rule-making and her import permit application for ESA. Additional discussion was had regarding Ms. Madson's uses of the parrot. Ms. Madson relayed that because the parrot displays remarkable intelligence and has the ability to speak, she had been conducting anecdotal research with the parrot while it was in her possession (research involved the Tellington TTouch® Method, which seeks to increase understanding of the human-animal bond and has been recognized as an effective and valuable method to reduce stress in both humans and animals and is particularly useful in reducing stress in wildlife rehabilitation and enhance the well-being of animals in zoos. Some of Ms. Madson's research methods were modeled after Dr. Irene Pepperburg's work with Alex, the African Grey parrot). Ms. Madson further relayed that she had been receiving mentoring and advice from researchers affiliated with a commercial for-profit organization (Linda Tellington-Jones, Tellington TTouch Training) and university (Dr. Irene Pepperburg, Harvard University). Mr. Lingenfelser suggested that Ms. Madson might qualify for an importation permit for research. In his recommendation, Mr. Lingenfelser stated that "it would be best to include documentation or affiliation with a non-profit, commercial business, research group, etc., to clarify your eligibility to use the bird." Ms. Madson misconstrued Mr. Lingenfelser's recommendation to mean that she should establish her own non-profit research organization in order to obtain the importation permit for research. She later submitted an application for a permit for research using the "Vasa Project," a Hawaii-based non-profit organization that she created as her affiliated non-profit organization.

In September 2019, Ms. Putnam assumed the role of Acting Land Vertebrate Specialist for PQB and the supervision of Ms. Madson's petition for administrative rule-making, pursuant to HRS § 91-6; and her import permit applications for ESA and research, pursuant to chapter 4-71 HAR.

At the Board's April 14, 2020 meeting, Ms. Madson's petition for rule amendment and her permit applications for ESA and research were originally reviewed by the Board. At this meeting, PQB acknowledged there was a "lack of technical information typically generated by [an] advisory review" to properly advise the Board on the rule amendment request. On August 7, 2020, PQB informed Ms. Madson by letter that her permit request for the purpose of ESA was "disapproved". There was no mention in the August 7, 2020 letter from PQB regarding Ms. Madson's original request for a rule amendment or for her import permit application for research, pursuant to chapter 4-71 HAR. (Attachment 1).

Subsequently, Ms. Madson was informed of the Board's denial of her import permit application for research via email by PQB staff. The email failed to provide any mention of Ms. Madson's request for a rule amendment. At this time, due to Governor Ige's COVID-19 emergency proclamation to maintain public safety, members of the public were not allowed to attend the Board's meeting. Due to the possibility that an email did not meet administrative notice requirements, PQB requested that Ms. Madson's petition for research be reconsidered for review. The Board, on its own motion, re-heard Ms. Madson's request for a research permit at its meeting on December 15, 2020. Ms. Madson was able to attend virtually. The Board denied Ms. Madson's request to import an RB animal for scientific research at the December 15th meeting. (Attachments 2 and 3).

At its December 15, 2020 meeting, the Board expressly deferred action on Ms. Madson's request for rule-making to withdraw *C. vasa* from the RB animal list and place it on the CA list to enable PQB to complete an advisory review. Notably, Jonathan Ho HDOA/PQ represented that PQB would complete the technical review by February 2021 and also stated because PQB failed to notify Madson in writing of its decision on her petition for a rule amendment to reclassify *C. vasa* within the requisite 30-day timeframe, she had obtained the right to seek automatic rule-making on the matter. Indeed, HRS § 91-6, provides in relevant part:

> …Upon submission of the petition, **the agency shall within thirty days either deny the petition in writing, stating its reasons for the denial or initiate proceedings in accordance with section 91-3.**

Thus, the only request of Ms. Madson's which is pending at this time is her original petition for the initiation of administrative rulemaking and rule amendment to Chapter 4-71, Hawaii Administrative Rules (HAR) to change the list placement of the Vasa Parrot, *Coracopsis vasa*, from the List of restricted Animals (Part B) to the List of Conditionally Approved Animals. Significantly, Ms. Madson has not contested the Board's August 7th

and December 15th denials of her permit applications for ESA and research and does not desire additional consideration of these permit applications. Because PQB failed to act on her petition for rule-making in a timely manner (or at all) it is bound to initiate rule-making proceedings in accordance with HRS § 91-3.

PQB NOTES: *On February 2, 2021, Ms. Madson provided a technical review in support of her request to initiate administrative rule-making and rule amendment to reclassify the Vasa parrot entitled, "Review of the potential invasiveness of the Vasa parrot (Coracopsis vasa) as compared to other species within the Psittacidae family," by Phillip Greenwell, M.S., a wildlife biologist with field experience in avian invasiveness in island ecosystems and parrot biology and behavior. In addition to the information previously provided by Ms. Madson, the review provides literature-based references and personal field experience in drawing conclusions on the possibility of establishment and threat of invasiveness when compared to other parrot species. The review supports Ms. Madson's statements as listed below, while also mentioning the low possibility of invasiveness. Please see attachment 4 for Mr. Greenwell's Review and attachment 5 for his CV.*

II. Information Provided by the Petitioner in Support of the Reclassification Petition

The vast majority of parrot species are already included in the list of Conditionally Approved animals, pursuant to HAR § 4-71-6.5:

FAMILY Psittacidae

Agapornis (all species in genus)
Alisterus· (all species in genus)
Amazona (all species in genus)
Anodorhynchus (all species in genus)
Aprosmictus (all species in genus)
Ara (all species in genus)
Aratinga (all species in genus except~- nana astec)
Bolborhynchus lineola
Cacatua (all species in genus)
Callocephalon fimbriatum
Calyptorhynchus (all species in genus)
Cyanoliseus patagonus
Cyanoramphus (all species in genus)
Deroptyus accipitrinus
Eclectus roratus
Elophus roseicapillus
Enicognathus (all species in genus)

Eunymphicus cornutus
Leptosittaca branickii
Melopsittacus undulatus
Neophema (all species in genus)
Nymphicus [holandicus) hollandicus
Pionus (all species in genus)
Platycercus (all species in genus)
Poicephalus (all species in genus)
Polytelis (all species in genus)
Probosciger aterrimus
Psephot.us · (all species in genus)
Psittacula alexandri
Psittacula cyanocephala
Psittacula·cterbiana
Psittacula eupatria
Psittacula himalayana
Psittacula roseata
Psittacus erithacus
Purpureicephalus spurius
Pyrrhura (all species in genus)
Tanygnathus (all species in genus)

Ms. Madson is not a natural scientist by trade but has graduate degree in law and was a practicing judge. While she provided information she obtained from secondary sources about the basic biology, reproductive biology and behavior, geographic distribution, potential for invasiveness, and damage to the environment in her petition for rule-making, she prefers to rely on the information included in the technical report prepared by Phillip Greenwell, M.S. (Wildlife Management and Conservation) who has field experience in the management, control, and assessment of avian invasive species in island environments and is better suited to gauge the accuracy and relevancy of the information. (Attachments 4 and 5). Ms. Madson sought Mr. Greenwell's review largely to provide PQB with the technical information it admitted it was lacking during the April 14, 2020 Board meeting to enable it to move forward with her petition for rule-making.

Of note, Mr. Greenwell's review includes a risk assessment of invasiveness for *C. vasa* in Hawaii using guidelines provided by the World Organization of Animal Health (OIE). The OIE guidelines for assessing the risk of non-native animals becoming invasive are the gold standard for evaluating the potential for a species' invasiveness around the world and are recommended for use in the Convention on Biological Diversity (CBD). Mr. Greenwell also draws elements for his review from the *Hawaiian Pacific Weed Risk Assessment*, which provides modified assessment protocols for alien plant species.

While key excerpts of Mr. Greenwell's review are provided below, PQB and the Board are urged to consider the review in its entirety. *C. vasa* is native to Madagascar. There are no known feral colonies of the species outside its native range.

- Primarily the route of establishment is very restricted. There is a limited breeding population within North America, and there have been no exports of this species from its native habitat since 1993. It is highly unlikely sufficient numbers would be imported to found a potential feral colony.

- The pathway of invasion is strictly control or restricted. All imports must pass through the Hawaiian Department of Agriculture for approval. It is possible to therefore limit both numbers and sex of the species to ensure a suitably biased demographic (i.e. all males). Health and security are also similarly governed so risk of accidental escape or the introduction of pathogens or parasites is also controlled.

- Unlike other parrot species (with the exception of one other species, the Eclectus parrot) Vasa parrots have a complex polygynandrous breeding system. To successfully rear young females depend on multiple attending males to feed her intensely across the breeding season. Unless a large founding population is simultaneously introduced then it is unlikely that the correct sex ratio will be achieved in Hawai'i. It is possible that multiple males are required to help provide the nourishment to the rapidly developing chicks (one of the fastest development times in psittacines). Lack of food of suitable quantity or quality can stunt or limit growth during this critical development time. It has been proposed that food availability might be an ecological constraint, one which applied selective pressures towards this unusual reproductive system in *Coracopsis* species.

- Unlike the other psittacines established in the state vasa parrots are obligate secondary nest cavity users. This means that birds do not excavate nests or modify/enlarge existing holes, but must find appropriately sized cavities to nest in. The other species currently feral in the state (Cockatoos, Amazons and conures) are all adept at modifying existing cavities. No gnawing/chewing behaviour has been observed in Vasa parrots, indeed they are generally a non-destructive species and one of the few larger species that may be maintained in planted flights in captivity. Therefore suitable nest sites are likely to be a limited resource for this species (particularly given the number of other psittacine species in the state competing for the nesting sites).

- Unless a large consignment of birds is released simultaneously into the habitat then smaller localised escapes of individual are unlikely to establish viable populations, given the constraints of founder population dynamics. Genetic bottlenecks and inbreeding are likely to reduce fitness in species with low founder populations. Immigration of unrelated individuals is required to sustain genetic diversity and of course this would be controlled by import permits.

- Changes to the basal metabolic rate in this species requires a greater quantity and/or quality of food to accommodate for these changes. It is possible that these changes are associated with breeding and parental behaviours, particularly as the development of the young is fast, and again can be referred to the breeding system with multiple males delivering food to the female. Given the nutritional requirements for successful reproduction, it is unlikely that in a novel habitat with unfamiliar food resources that a foundling population will find sufficient material to meet calorific and dietary needs.

- Despite the rapid development of the young birds, Vasa parrots nest only once in their native habitat. Clutch size is also small, approximately 4 eggs.

- This species was intentionally released/introduced into an alien environment (Reunion Island) and the population failed to establish. It is unknown how many individuals were released, or the processes involved, but it is important to note that they have been purposely released without success of establishment.

Mr. Greenwell concludes that the introduction of the vasa parrot does not represent a threat of invasion in the state of Hawaii, in its own right, or, when compared to other Psittacidae members. *C. vasa's* low potential for invasiveness is based on its life characteristics and other attributes. Given the species' unusual breeding system, unique dietary requirements, and obligate cavity nesting needs, it appears unlikely that a wild population could become established, even in the unlikely situation where multiple birds were imported in the future. Indeed, a review of the literature shows that the species has not ever successfully established a feral population outside its native habitat of Madagascar, even when an intentional attempt to colonize *C. vasa* was made. In addition, the species is not particularly popular in the pet trade due to what many find an undesirable appearance, and as a result, it is imported into the United States in low numbers. These factors provide strong support for the State of Hawaii to transfer *C. vasa* from the "restricted animal" to the "conditionally approved" animal list, where the vast majority of Psittacidae—several of which have a greater potential for invasiveness--are placed. The reproductive biology, social structure and unique dietary requirements of *C. vasa* are similar to that of the eclectus parrot, which is on the "conditionally approved" list of Psittacidae, providing additional support of transfer of *C. vasa.*

In reviewing Mr. Greenwell's review as a whole it does not appear there are any identifiable negative environmental consequences to importing this organism into Hawaii that are different from those associated with a large number of parrot species that are already on the Conditionally Approved list. There are no known negative potential impacts to native or endemic species given the quarantine requirements for all parrots. There is no evidence to suggest that the impact of importing the Vasa parrot is greater than that of the many Conditionally Approved parrots, and much evidence suggesting that the impact of importing the Vasa parrot would be less than that of many parrots that are already on the Conditionally Approved list.

III. Proposed List Placement

Ms. Madson is proposing to change the placement of the Vasa Parrot, *C. vasa, f*rom the List of Restricted Animals (Part B), and to be placed on the List of Conditionally Approved Animals. Ms. Madson is proposing the following amendments to achieve this:

1. Section 4-71-6.5, List of Restricted Animals (Part B)

   Removes Scientific Name: "*Coracopsis vasa"* and Common Name: "Parrot, Vasa".

2. Section 4-71-6.5, List of Conditionally Approved Animals

   Adds Scientific Name: "*Coracopsis vasa"* and Common Name: "Parrot, Vasa".

IV. Advisory Subcommittee Review

May we request your recommendation and comments by **Friday, March XX, 2021.** You may fax your response to me at (808) 832-0584 or e-mail to: noniponimoi.k.putnam@hawaii.gov.

1. **I recommend approval ___ / ___ disapproval of the preliminary review of the vasa parrot, *Coracopsis vasa*, an animal on the List of Restricted Animals (Part B), for placement on the List of Conditionally Approved Animals for individual possession; Madson.**

Comments:

Signature:_____Date:_____

Print
Name:_____

DAVID Y. IGE
Governor

JOSH GREEN
Lt. Governor

PHYLLIS SHIMABUKURO-GEISER
Chairperson, Board of Agriculture

MORRIS M. ATTA
Deputy to the Chairperson

State of Hawaii
DEPARTMENT OF AGRICULTURE
1428 South King Street
Honolulu, Hawaii 96814-2512
Phone: (808) 973-9600 FAX: (808) 973-9613

August 7, 2020

Ms. Lise Madson
[redacted]

Subject: **Permit Application Disapproval**

Aloha Ms. Madson,

I regret to inform you that your import permit request received on July 10, 2019 for (1) Vasa Parrot, *Coracopsis vasa*, for the purpose of emotional support is disapproved.

The Plant Quarantine Branch considers the importation of an animal for emotional support to be equivalent to individual possession or personal use of an animal. The Vasa Parrot, *Coracopsis vasa*, is currently on the Hawaii Department of Agriculture's List of Restricted Animals (Part B). Per the Hawaii Administrative Rules (HAR) §4-71-6.5(b), individual possession or personal use are not approved purposes for the importation of an animal on the List of Restricted Animals (Part B).

HAR §4-71-6.5(b) states:

> "... the introduction of animals on the lists of conditionally approved or restricted animals is allowed as follows: ...(3) Animals on Part B of the list of restricted animals, for the purposes described in subsection (b)(2) herein or for private and commercial use, including research, zoolgical parks, or aquaculture production.... ."

This letter formally closes your application. If you have any questions or concerns, please feel free to contact our Land Vetebrate Specialist at (808) 832-0566.

Sincerely,

Jonathan K. Ho
Acting Manager
Hawaii Department of Agriculture
Plant Quarantine Branch

COPY

EXHIBIT 1

Department of Agriculture
STATE OF HAWAII

DRAFT
(Unapproved)

Minutes of the Board of Agriculture
December 15, 2020

CALL TO ORDER – The meeting of the Board of Agriculture was called to order on December 15, 2020 at 9:04 a.m. a.m. by Board of Agriculture Chairperson, Phyllis Shimabukuro-Geiser. The meeting was conducted virtually via Zoom due to the current risk of exposure to COVID-19.

Members Virtually Present:

Phyllis Shimabukuro-Geiser, Chairperson, Board of Agriculture
David Smith for Suzanne Case, Chairperson, Board of Land and Natural Resources, Ex Officio Member
Dr. Nicholas Comerford, Dean of the College of Tropical Agriculture & Human Resources University of Hawaii, Ex Officio Member
Mary Alice Evans, Ex Officio Member
Diane Ley, Hawaii Member
Vincent Mina, Maui Member
Fred Cowell, Kauai Member
Randy Cabral, Member-at-Large
Joe Tanaka, Member-at-Large
En Young, Member-at-Large

Others Virtually Present:[1]

18082697130
18085219500
18087571677
Adrian Kamali'i
Andrew Goff
Anonymous (2)
Arumugaswami
Becky Azama, HDOA/PQ
Brandi Ah Yo, HDOA/ARMD
Brian Kau, HDOA/ARMD
Bryan Yee, DAG
Calla
Chelsea Jensen
Cindy Evans
Darwin Inman
Dave Corrigan
Elisabeth
EO
Ferrell Daste
Gail and Clarence Baber

[1] The identification of the public members is based on their sign-in name, but are not verified.

EXHIBIT 2

George Nitta
Harrison Goo
Heath Williams, HDOA/Chair
James Tallman
James Toma, DOH
Janelle Saneishi, HDOA/Chair
Jodi Kimura Yi, DAG
Jonathan Ho, HDOA/PI
Joyce Wong, HDOA/ARMD
Kairee Lima
Keith Otsuka, HDOA/QAD
Kevin Hoffman, HDOA/PI
Kimberli Yoshimoto
Laksmi Abraham
Leo Obaldo, HDOA/QAD
Lise Madson
Michael Iosua
Mimi
Morris Atta, HDOA/Chair
Murakamiws
Noni Putnam, HDOA/PI
Patricia Tummons
Pegs Drewry
Peter Fay
Ray Maki
Roy Hasegawa, HDOA/ARMD
Sean Lester
Shaydee J
Shelley Choy, HDOA/QAD
Shirley Kinoshita
Stephanie Salmons
Thomas Walsh
Trenton Yasui, HDOA/PI
W Rudner
Yuki Lei Sugimura, Maui County Councilmember

II. APPROVAL OF MINUTES FROM 10/27/20 MEETING

Motion to Approve 10/27/20 Minutes: Mina/Cowell

Board Members Ley, Young and Smith were not in attendance at the 10/27/20 meeting and asked to be recused from the vote. Board Member Cabral was not in attendance when the vote was taken.

Public comments: None

Vote: Approved 6-0

III. INTRODUCTIONS

None.

IV. COMMUNICATIONS FROM DIVISIONS AND ADMINISTRATION

A. AGRICULTURAL RESOURCE MANAGEMENT DIVISION

1. Request for Consent to Assignment of General Lease No. S-6005; Vene Luangraj, Lessee/Assignor, to Thoune Hongphao, Assignee; TMK: 1st Div/5-6-006:033; Lot 5, Kahuku Agricultural Park, Koolauloa, Kahuku, Island of Oahu, Hawaii

Roy Hasegawa, HDOA/ARMD, presented testimony as submitted.
Staff Recommendation: Approval

Motion to Approve: Evans/Cabral

Public Testimony: None

Discussion:
Board Member Mina questioned whether 3% gross proceeds would be added to the current rent. Mr. Hasegawa answered that additional rent is only due if the gross proceeds is higher than the base rent. Board Member Mina voiced concern about the economic hardship on the farmer. Mr. Hasegawa said he has a young manager and the farm is up and running.

Vote: Approved, 10-0

2. Request to (1) Rescind Prior Board Action Approving Assignment of General Lease No. S-4877; Toshio Sugita and Kenneth Y. Ibara, Lessee/Assignor, to Gail K. Okimoto, Assignee; and (2) Consent to Assignment of General Lease No. S-4877; Toshio Sugita and Kenneth Y. Ibara, Lessee/Assignor, to Glory Herb Hawaii, LLC, Assignee; TMK: 1st Div/8-5-005:009, Puea, Waianae, Island of Oahu, Hawaii

Roy Hasegawa, HDOA/ARMD, presented testimony as submitted.
Staff Recommendation: Approval

Motion to Approve: Evans/Tanaka

Public Testimony: None

Discussion:
Board Mina asked and Mr. Hasegawa confirmed that Glory Herb is certified organic. Board Member Young questioned if procedurally, when a prior action is rescinded, an agreement with

the current assignee was required. Mr. Hasegawa explained that in 2014, staff drafted the assignment to Ms. Okimoto, however, an agreement on the consideration could not be reached. Currently, Mr. Ibarra wishes to assign the lease to Glory Herb and in order to proceed, the current assignment to Ms. Okimoto must be rescinded. before the lease can be assigned to Glory Herb.

Board Member Smith asked if the current lessee was selling their position to a new lessee. Mr. Hasegawa answered in the affirmative. Ms. Cindy Evans, former Hawaii Island State Representative compared the transaction to selling a spot at the boat harbor and asked whether the State would get anything from the sale and if there had been discussion on charging for transactions like assignments of lease. Ms. Linda Murai answered that the only charge for an assignment or any kind of documented action is a $30 fee per document if the transaction closes/records. The amount is set by administrative rules. Board Member Mary Alice Evans clarified that the consideration is for improvements that the prior lessee has invested in the lot and pointed out that the difference between the boat harbor slip and the ag lease is that the current lessee has invested sweat equity and cash and the monetary consideration is for improvements or inventory that is being transferred. Mr. Brian Kau added that the division does a consideration analysis and if it shows that the assignor has invested more or equivalent to the consideration fee, the department does not take advantage of any kind of participation. However, when the tenant makes a huge profit, the department will take part of the profit to discourage land banking.

Vote: Approved, 10-0

3. Request for Consent to Assignment of General Lease No. S-5501; Doris E. Naki and Naki Farms LLC, Lessor/Assignor, to Naki Farms LLC, Assignee; TMK: 1st Div/4-1-010:029, Waimanalo Farm Lots, Koolaupoko, Waimanalo, Island of Oahu, Hawaii

Roy Hasegawa, HDOA/ARMD, presented testimony as submitted.
Staff Recommendation: Approval

Motion to Approve: Cabral/Evans

Public Testimony: None

Vote: Approved, 10-0

4. Request for Approval to Sublease Between the Hamakua Agricultural Cooperative, Lessee/Sublessor, and Jason DeLuz, Sublessee; General Lease No. S-7008, TMK: 3rd Div/4-3-005:013(por), Lot Nos. W02, W03, W04, W06, and W07; General Lease No. S-7009, TMK: 3rd Div/4-3-005:014(por), Lot Nos. 15 and 18; General Lease No. S-7011, TMK: 3rd Div/4-3-0005:018(por), Lot Nos. W01 and W09, Hamakua Pohakuhaku and Kemau 1st, Hamakua, Island of Hawaii

Joyce Wong, HDOA/ARMD, presented testimony as submitted.
Staff Recommendation: Approval

Motion to Approve: Ley/Tanaka

Public Testimony: None

Discussion:
Board Member Mina asked who maintained the roads leading into Ag Park and if there were any issues going in and out of the area. Ms. Wong replied that she does not know of any issues and it is up to the Co-op to do the maintenance.

Vote: Approved, 10-0

5. Request for Approval to Sublease Between the Hamakua Agricultural Cooperative, Lessee/Sublessor, and Rose Cypret, Sublessee; General Lease No. S-5551, TMK: 3rd Div/4-6-003:001, 002, and 014(por), Lot 26, Honokaia, Hamakua, Island of Hawaii

Joyce Wong, HDOA/ARMD, presented testimony as submitted.
Staff Recommendation: Approval

Motion to Approve: Ley/Mina

Public Testimony: None

Discussion:

Board Member Cabral asked how the lease rent was determined. Ms. Murai replied that lease rents for the sublessees are determined by the Co-op and lease rents for the general leases are determined by an independent appraiser.

Board Member Ley asked if there was a set percentage of pasture leases vs. vegetable and fruit crop leases. Mr. Kau answered that when the Hamakua leases were reviewed, the parcels were assessed for diversified or pastoral ability. ARMD determined the best use for the land. He added, if a person leases a diversified parcel and runs cattle, if approved, the tenant has made a choice and the division would not necessarily adjust the rent to a pasture rate if it had been determined the parcel could support diversified ag.

Vote: Approved, 10-0

6. Request for Approval of Settlement and Amendment of the Reopened Annual Rental for General Lease No. S-5586; Big Island Dairy LLC, Lessee; TMK: 3rd Div/3-9-001:0001 & 002, 3-9-002:007 & 0008, 4-1-001:006 and 4-1-005:001; O'okala, North Hilo, Island of Hawaii

Linda Murai, HDOA/ARMD, presented testimony as submitted.
Staff Recommendation: Approval

Motion to Approve: Evans/Comerford

Public Testimony: None

Discussion:

Board Member Evans questioned if the dairy was closed and if they would retain the lease until the 2028 rent reopening. Ms. Murai answered in the affirmative and added that they are in the process of selling the herd.

Board Member Ley questioned, and Ms. Murai confirmed that Big Island Dairy (BID) would continue to pay the lease even if they are no longer in business. She also questioned the nature of the disagreement on the claims. Ms. Murai answered one was the timeliness of the notice and the second was the amount of the new annual rent. She clarified the reopening amount started on 6/4/2018 but BID was not notified until 12/2019. The reason for the delay was that the appraisals are requested as a group rather than piecemeal as a cost saving measure. Board Member Ley asked about the concern over the new lease rent. Ms. Murai replied that they signed a letter of agreement which included the spreadsheet and made a payment to catch up on back rents.

Board Member Ley asked if the lessee was required to let them know that they are seeking to assign the lease. Ms. Murai explained that although not a requirement, the lessee usually informs the division that they are seeking to assign the lease. When they have a purchase agreement, the lessee will submit the application and purchase agreement to ARMD so that they can qualify the intended lessee/farmer and complete the assignment. In BID case, the division is in communication with the lessee.

Board Member Evans asked, and Ms. Murai acknowledged that BID had complied with Department of Health's Notice of Violation conditions.

Board Member Smith questioned the negotiations on the lease rents and asked why it took so long to figure out the increase. Ms. Murai again explained the appraisal process and that the result of the negotiations was the settlement which waived the lease rent. She added that delayed notification does not absolve the lessee from paying rent. Board Member Smith noted that they lost money trying to save money.

Vote: Approved, 10-0

7. Request for Approval to Award Leases to Various Awardees and Back-up Positions; TMK Nos. 1st Div/8-5-034:001, 3rd Div/1-5-116:011, 4th Div/1-9-002:001, 013, 020 and 045, Islands of Oahu, Hawaii, and Kauai S/B Big Island Dairy

Linda Murai, HDOA/ARMD, presented testimony as submitted.
Staff Recommendation: Approval

Motion to Approve: Cowell/Evans

Public Testimony: None
Discussion:

Board Member Young questioned the process for generating interest in the parcels. He voiced concern that there are so many displaced farmers and wondered why they would not want to relocate. Ms. Murai answered that they place a disposition ad in the newspaper as required by rules, which includes only the TMK. Soil analysis is not included; however, staff is available to answer questions. The division also maintains a database of interested farmers and farmers are informed when lots become available.

Board Member Young commented regarding the ARMD agenda, he respects the work done on the strategic plan document and would like to see what kind of progress is being made on the metrics per the strategic plan.

Board Member Ley acknowledged that big island staff has been helpful when connecting producers affected by lava flows with DOA staff by connecting those wanting to stop farming due to age and health with farmers who were affected by the lava flows. She encouraged looking into other sectors and to modernize communication by using press releases and social media to reach out into the community.

Board Member Mina stated that Sharon Hurd does a good job disseminating information. He also questioned the infrastructure, water meters and size of the lots. Ms. Murai was not sure but stated that the applicants must do their due diligence before signing the lease.

Board Member Young agreed with Board Member Mina and added that it should be easy and transparent for farmers to know what they are getting into. As to the designation of the lot, he said that there a lot of new containerized growing systems which do not need to adhere to the designations of pastoral or diversified ag.

Ms. Murai explained that during the award process, the applicant/awardee is given the right of entry for 6 months. They can go onto the lot and see if the conditions (water, soil, electricity) are favorable. They have no obligation to move forward with the long-term lease.

Vote: Approved, 10-0

B. PLANT INDUSTRY DIVISION

Plant Quarantine Branch

1. Request to: (1) Allow the Importation of One Vasa Parrot, *Coracopsis vasa*, an Animal on the List of Restricted Animals (Part B), by Permit, for Research, by Lise Madson; and (2) Establish Permit Conditions for the Importation of One Vasa Parrot, *Coracopsis vasa,* an Animal on the List of Restricted Animals (Part B), for Research, by Lise Madson.

Noni Putnam, HDOA/PQ, presented testimony as submitted.
Staff Recommendation: Based upon the recommendations and comments of the Advisory Subcommittee on Land Vertebrates, and the Advisory Committee on Plants and Animals' motion to move this request to the Board without a recommendation to approve or disapprove this request, in conjunction with the applicant's recent changes to the request that were not reviewed by either the Subcommittee or Committee, the PQB is not making a recommendation on this request.

Motion to approve the importation of one Vasa parrot to research purposes subject to proposed permit conditions. Evans/Smith

Public Testimony:
Ms. Lise Madson, resident of Mountain View, HI, Applicant

Discussion:
Board Member Evans asked whether the bird would be pinioned. Ms. Madson explained that pinioning is removing part of the wing including the bone and is illegal in some countries. She feels wing trimming is enough. Pinioning is done for birds who are loose. This bird is microchipped and will be kept in a locked double door system. There is a low risk of escape and no danger exists if it does escape.

Board Member Comerford asked the research value of a one animal experiment. Ms. Madson replied that it is an under-researched bird. When asked whether she would be a researcher or a research technician, she replied that under TTOUCH, she would work on a book directly in association with Linda Tellington-Jones, as a professional legacy. With Alex studies, she would collect data to be interpreted. Board Member Comerford said that it appeared she would be a research technician and when asked if she published anything, she replied, "no". Board Member Comerford asked how much is related to research and how much support animal. Ms. Madson replied 100% to both. Emotional support animal (ESA) was denied by PQB because ESA's are considered personal not private. Board Member Comerford voiced disappointment that the committee did not make a recommendation to the board.

Board Member Mina said that based on her passion and research, normally he would have a tendency to vote in favor of similar projects, but he was not supportive of bringing in an invasive species.

Board Member Tanaka asked why the animal was restricted. Mr. Ho replied that PQB was unable to find specific reference or any details as to why the bird was placed on the restrictive list Part B. Results of internet research found that the bird is rare in cultivation, does not seem to be established outside of its native range, is difficult to breed, and eats fruits and seeds in its native range.

Board Member asked how to un-restrict. Mr. Ho answered to make the change on the next request.

Chair referred to the submittal which stated that a letter/resume should contain information on the source of funding, be peer reviewed, be conducted by an approved institution, meet IACUC requirements. She questioned whether the criteria had been met. Mr. Ho replied that when the submittal was presented to committee, there was a lot of discussion regarding the research component and collaboration with University researchers.

Chair asked whether the subcommittee and review by P&A approved having research done in a residence vs. research facility. Mr. Ho said there were no specific concerns regarding the facility. Ms. Madson replied that research in a home environment provides greater security. If the animal is in a different facility, there is a need to safeguard against theft and it is cost prohibitive.

Board Member Young asked if the research would continue for the life of the parrot. Ms. Madson replied that with the Alex Foundation, the research would have to be completed, written, and peer reviewed. For the African Gray, the Alex Studies went for 30 years. When asked how long a parrot lives, she said probably 40 years. If something happened to her, conservationists would look after the bird, if not pinioned.

Board member Young commented that staff and subcommittees specialize in specific areas and asked if the Board is required to think about allowing research in terms of direct benefit to the agricultural sector. Mr. Ho replied that there is no requirement that the research be beneficial to agriculture.

Chair added that Dr. Sheila Conant stated if a bird is permitted to come in it would set a precedent for Division of Forestry and Wildlife (DOFAW). Mr. Smith commented that the DOFAW list restricts all parrots, so the entire family was put on list. He added that it looked like a pet parrot and questioned whether research was being asserted as a rationale to bypass the list banning the importation of parrots.

Board Member Mina said that he does not want to see precedent set to abuse the system.

Board Member Evans said that she did not believe that the importation of one parrot poses any threat to Hawaii agriculture.

Mr. Ho said that the DOFAW list restricts interisland movement of birds (movement of wild life). Ms. Madson's bird is not wild, therefore, they come before PQ for import purposes for research. A lot of the discussion in P&A was regarding whether the research was valid. Conditions that

PQ drafted for the Vasa Parrot would require that every other applicant come before the board for administrative approval.

Board Member Evans restated her motion: Motion to approve request to import one Vasa parrot for research purposes subject to conditions on 23-27 pages.

Vote: Failed, 2-7 (Chair did not vote)

DAG Yee advised that a motion to disapprove was required.

Motion to disapprove the request for import for research purposes: Smith/Tanaka

Board Member Young spoke in support of disapproval. He commented that it is up to DOFAW and DOA to gauge threat level of individual bird but felt that the department should be more proactive about research rather the reactive. If research is going to be allowed, the board should be able to make an informed decision by looking at the full research design and having the opportunity to look at the validity.

Board Member Smith said he is voted against the project because he felt the research component was not viable.

Vote: Approved, 9-1 (Motion to disapprove the request for import for research purposes)

2. Resubmittal of a Request for Review of the Petition from Lise Madson to Initiate Administrative Rule Making and Rule Amendment to Chapter 4-71, Hawaii Administrative Rules (HAR), to Change the List Placement of Vasa Parrot, *Coracopsis vasa*, From the List of Restricted Animals (Part B) to the List of Conditionally Approved Animals.

Jonathan Ho HDOA/PQ, presented testimony as submitted.

Staff did not make a recommendation as it was their understanding that the Board wants to conduct a full review and see everything going through the process before making a recommendation. Referring to Board Member Smith's prior question, ESA's are not allowed if on the restricted Part B list, however, if approved, ESA could be a conditionally approved animal—individual possession is allowed.

Board Member Evans questioned if the review had been completed and if not completed, she would recommend deferral.

Mr. Ho replied that the branch did not notify the petitioner in writing within the 30-day timeframe, resulting in automatic rulemaking. The board can initiate rulemaking immediately. The Board can deny and direct PQ to go through the review process and provide information.

Chair stated if the Board denies the petition, the Board could direct PQ to route the petition through the review process and come back to the Board at another meeting or could deny but

say the Board would consider if the petition is moved through the subcommittee and P&A review process.

Board Member Evans said she wanted to defer because there is a lack of sufficient reasons for denial.

Motion to defer making a decision and direct Branch to go through the review process and make a recommendation for or against at a subsequent Board Meeting. Evans/Tanaka

Public Testimony:

Ms. Lise Madson testified on the procedural history of her request as submitted. She encouraged moving from the Restricted Part B list to conditionally approved based on the time elapsed since initial request was made.

Board Member Cabral asked how long the review would take. Mr. Ho replied that the earliest would be February for a full review.

Vote: 10-0

V. OLD BUSINESS

1. Discussion and Decision Making on the Delegation of Authority to the Chairperson.

The Quality Assurance Division (QAD) was not able to present at the last meeting due to time limitations.

Leo Obaldo, HDOA/QAD, presented as submitted. QAD did not request any additional delegations to the Chair.

Board Member Mina asked if weights and measures of gas stations were included. Chair replied that Measurement Standards performs those duties. She added that many states consider weights and measures important to agriculture which is the reason why it falls under DOA. The farmers and consumers rely on the accuracy of the weight because it determines price.

Board Member Cabral said that he thought the discussion would be about placing items on the agenda as part of the delegation. He said he was asked by a Big Island constituent farmer for something to be placed on the agenda. Chair had indicated that it was the Chair's prerogative to approve the agenda item. The issue was whether it was in the Board's purview to place something on the agenda. Chair explained that the Board Members have the authority to request items be placed on the agenda. Sometimes, when the department is handling confidential information or is involved in a negotiation, the Chair can deny the item being placed on the agenda.

DAG Yee clarified that a Board Member can request an item be placed on the agenda. However, it is the prerogative of the Chair to approve placing the item on the agenda. Chair asked Board member Cabral if the item could be discussed at the next Board Meeting in Executive Session.

Board Member Evans said that she thought the agenda item would lead to delegating some items that were brought to the Board on a regular basis to the Chair. She questioned whether there would be a recommendation of items that could be delegated to the Chair. Chair answered that at the Board Meeting on October 27, 2020, motions to approve delegations were reflected in the minutes. For divisions that requested delegation, action was taken.

DAG Yee explained that the larger agenda items is whether items should be delegated. QAD is not recommending action.

2. Department of Agriculture's response to Coffee Leaf Rust.

Comments were made on the written report detailing the Department's response to Coffee Leaf Rust (CLR)

Board Member Cowell thanked the Department for enacting quarantine. Industry is still confused on how the quarantine is being done but they are working through it. The industry has questions regarding propagating rust resistant coffee grown in the State and will be going back to PQ. Another aspect industry is looking at is moving toward approval of systemic fungicides.

Board Member Cabral commented on the good work being done by the Department. Chair said updates would continue if Board desires.

Board Member Mina asked about research being done using beneficial fungicides. The beneficial fungal network provided by nature should be addressed and he would like the department to look at biological applications.

Dr. Hoffman said he has not heard about research using beneficial fungi but can bring it up to collaborators as an area to explore. USDA has formed a cross functional working group and they are working on mitigation strategies and guidelines on ways to respond to the disease.

Public testimony:
Mr. George Nitta Jr. (Shirley Kinoshita) testified on the benefits of Ethanol to kill the virus. He will provide contact information for staff to contact him.

3. Discussion regarding South Maui Gardens and hemp licensee updates.

Ms. Shelley Choy, HDOA/QAD presented the South Maui Gardens (SMG) Hemp Producer Update as submitted in the written presentation.

Mr. James Toma, Department of Health, Noise Section supervisor, reported on what he observed at South Maui Gardens. He stated that according to Chapter 46, Community Noise Control, allowable levels of noise control are based on the zoning of the property. The property is agriculture zoned therefore 70 db, 24/7 is allowed. Inside the property line, readings were in the high 50's. A second reading taken at night with fans running at 50% was in the low 50's; in both cases well within 70 db.

Mr. Toma said that for DOH to regulate noise, it requires specialized equipment, experience, and training. They take certification classes and the equipment must be ANSI certified, which is the standard that the industry uses. If the Department of Agriculture wanted to enforce noise rules, they would need to buy equipment and get training.

He also commented on low frequency noise and official standards to regulate noise. In reference to a statement that DOH rules are archaic, he said the rules work except when zoning is mixed or when the use of the land is not appropriate to the zoning. A lot of the information presented was based on residential zoning. There are no rules in the States regulating low frequency. The information presented was from Europe and he was not able to verify the numbers that were presented as there were no jurisdictions which enforced the levels. In terms of health effects, they have not found conclusive research that shows low frequency causes certain conditions. He said that at higher levels, 90 db+, physical conditions could result, but there is not enough research for DOH to act.

He acknowledged that the bill identifies hemp farms but stated that the reality is that if it is put into place, other people who have issues with ag may come forward and want their issues addressed. He gave the examples of coffee mills running 24/7 for months during harvest season and windmills on ag land. He stated that although the bill is specific, it might open the door for other issues in the future.

Chair reiterated that there would be no action or decision making at the meeting; information is for the board only.

Board Member Ley commented that it looked like the parties had come together to address concerns and asked if the Department could bring in mediation services.

DAG Bryan Yee asked that questions be restricted to Mr. Toma's presentation since public comments still needed to be heard.

Board Member Young asked if anything that the Department of Health regulated was also regulated by another state department. Mr. Toma said none that he could think of.

Public Comments:

Chair stated that approximately 69 written communications were received from the public.

Mr. Sean Lester, 31-year Maui resident, said he believes that SMG is not utilizing the land correctly. He voiced displeasure with Mr. Toma's comments and asked for a working group to find solutions.

Ms. Gayle Baber, hemp and food farmer in Kohala, stated that the land use issue between SMG and the neighbors is isolated and is creating an expense for existing license holders. She agreed with Mr. Toma about broader land use issues and farmers should not be penalized when most of the licensees are compliant. The Hawaii Hemp Farmers Association suggests a Hemp Advisory Board be created.

Maui Councilmember, Yuki Lei Sugimura said that the community is in her jurisdiction and she has had communication with the community and visited the site with Representative Kyle Yamashita. The community and SMG have not been able to find a solution. She asked if there was a mediator who could hear both sides. The neighbors feel sound decibels are agonizing. SMG provides jobs and must figure out how to live with the community. She felt a mediator could help.

Mr. Peter Fay commented that dbc is not regulated in Hawaii. It is regulated in England and Sweden. He stated that the 70 db limit for ag land is dba and there is no regulation for dbc noise. He added that Mr. Toma measured both dba and dbc levels. He said he believes that the community gave the board the science that they asked for.

Shaydee J, Kaneohe resident commented regarding amount of water being used for hemp.

James Tallman, Director of Hemp Division for SMG. He stated that experts were consulted as to design, rules and regulations before growing hemp. SMG grows in greenhouses as consumers want hemp grown without insects, contaminants and mold. They do not use pesticides or fungicides. Rule changes would put them out of business. They oppose 24" fans, and it would take 16-32 fans which would be louder. He could not find information on the 30 dbc frequency. Lowering db to 50 at night would cause mold issues and destroy crop.

Thomas Walsh, President of Operations, SMG was available to answer questions.

Ray Maki, President of the Hawaii Hemp Farmers Assoc., stated that it was one complaint that triggered the events. He requested that rules regarding nuisance be directly related to existing state laws.

Board Discussion:
Chair said the request for a mediator or working group would be taken up in January's meeting and that the Department would need to also consider the resource requirement.

Board Member Ley referred to the USDA funded, Hawaii Agricultural Mediation Program which could take the department out of the loop at no cost. She said they have a representative on Maui and are quasi housed under the department. Board Member Ley also questioned whether the department was planning to create a program now that USDA has superseded the State Program. Chair answered that the Board would be coming back in January because of a motion passed at the September Board Meeting. The motion stated that the Department work on addressing nuisance concerns and make recommendations to the board on any proposed changes to the interim rules adopted in September or whether to abide with the interim rules

passed in September. The request for the informational update was requested by Board Member Mina.

DAG Yee concurred that the agenda item was to present information to board for their consideration in January, to receive feedback, if any, and to inform the public of the information that exits currently. Action would be contemplated in January.

Chair noted that the Department has used Hawaii Mediation Program, sometimes at no cost, but if their budget is exhausted, then there is a fee for their services.

Board Member Mina asked if Mr. Walsh lived on the property. Mr. Walsh answered that he lives next to the greenhouse with the fans. Board Member Mina echoed the call for mediation services.

Board Member Mina questioned if the Board had until June to make changes. DAG Yee answered that the Board passed the interim rules which last for 2 years unless permanent rules are passed sooner. The January deadline for nuisance issues was self-imposed. He confirmed that the interim rules could be adjusted until June 2022.

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VI. NEW BUSINESS

None

VII. ADJOURNMENT OF MEETING

The meeting was adjourned at 1:49 p.m.

Respectfully submitted,

Jan Ferrer
Board Secretary

DAVID Y. IGE
Governor

JOSH GREEN
Lt. Governor

PHYLLIS SHIMABUKURO-GEISER
Chairperson, Board of Agriculture

MORRIS M. ATTA
Deputy to the Chairperson

State of Hawaii
DEPARTMENT OF AGRICULTURE
1428 South King Street
Honolulu, Hawaii 96814-2512
Phone: (808) 973-9600 FAX: (808) 973-9613

January 15, 2021

Ms. Lise Madson
[redacted]

Subject: **Hawaii Board of Agriculture Permit Application Disapproval**

Aloha Ms. Madson:

I regret to inform you that your import permit request, received on June 17, 2019, for (1) Vasa Parrot, *Coracopsis vasa*, for the purpose of research, was denied by the Hawaii Board of Agriculture (Board) at its meeting on December 15, 2020. A motion that was made to approve your request failed; 2 to 7 (Chair did not vote). A second motion to deny your request was made, and it carried; 9 to 1. The Board has discretion to allow research projects on a case by case basis, and in this instance the board determined that the proposed research plan was not sufficient to merit issuance of a permit.

The Hawaii Administrative Rules §4-1-33 allows a person whose application for the issuance of a permit that has been denied by the Board to file a written request for a contested case hearing, provided that the request for a hearing is filed with the Board within thirty days of the date of mailing of the letter informing the applicant of the denial of the application. If you wish to file a request for a contested case hearing with the Board, please mail your contested case hearing request with a return receipt request to:

Hawaii Department of Agriculture
1428 S. King Street
Honolulu, HI 96814

Also, on December 15, 2020, the Board on its own motion, rereviewed your petition received on July 22, 2019, to change the list placement of the Vasa Parrot, *C. vasa*, from the Restricted Animals List (Part B), to the List of Conditionally Approved Animals and deferred the request by a vote of 10-0. The Board directed the Plant Quarantine Branch (PQB) to go through the full review process and to bring the request back before

EXHIBIT 3

the Board to make a final determination. The PQB is currently working on your petition and will present its findings at a future Board meeting. We will keep you informed of the review progress, including the date and time of the Advisory Committee on Plants and Animals, and Board meetings, respectively, once they have been determined.

Sincerely,

Phyllis Shimabukuro-Geiser

Phyllis Shimabukuro-Geiser, Chairperson
Hawaii Board of Agriculture

Review of the potential invasiveness of the Vasa parrot (*Coracopsis vasa*) as compared to other species within the Psittaciadae family

By Phillip Greenwell[1]

Context. This review has been requested by L.M of Hawaii after her request to import one male vasa parrot (*Coracopsis vasa*) was declined, in part based on the risk of potential invasiveness of the species. Due to the author's experience across the disciplines of invasive species management and parrot biology and behaviour L.M requested a review of the Vasa parrot as a potential invasive species, particularly in comparison to other members of the parrot family (Psittacidae).

At present, in the State of Hawaii, the vast majority of parrot species are "conditionally approved" for importation under State administrative rules, Hawaii Administrative Rules §4-71-6.5 (2006), meaning they can be imported for individual possession, business, government agencies, or institutions. In contrast, the Vasa parrot, along with just three other species within the Psittacidae family, is listed as a "restricted animal" under HAR §4-71-6.5, and its importation into the State is subject to heightened restriction.

L.M. has requested a detailed analysis of the literature evaluating *C. vasa's* potential for invasiveness in its own right, and, as compared to other members of the Psittacidae family with an aim towards determining whether its current status on the Hawaii State list of restricted species is warranted, particularly when compared to almost all other Psittacidae members, which are "conditionally approved".

In performing this evaluation, the author has endeavoured to submit an unbiased review. Having worked directly with invasive alien avian species—particularly in island environments--monitored them in the wild and viewed the negative interactions first-hand, and then witnessed the subsequent reversal in the decline of endemic species once the removal of the alien avian invader is successful, he understands the need for stringent control and the use of a precautionary approach to managing potential risk species.

Upon analysis, the author finds that the Vasa parrot's potential for invasiveness is low when compared to many other parrot species (e.g. *Amazona* or *aratinga* species). As noted in detail below, *C. vasa* has been found to possess several unique reproductive and behavioral traits that would likely impede the establishment of wild populations. Significantly, and as borne out by the literature, there are no documented wild populations of *C. vasa* known to exist outside its native range of Madagascar. These findings strongly suggest that the species' potential for invasiveness is low and that heightened restriction is not warranted, particularly when

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EXHIBIT 4

compared to other parrot species. At present the eclectus parrot genus is on the conditionally approved list; this genus possibly closest matches the complexities of the vasa parrot in regards to a complex social structure, unique dietary needs and habitat similarities. To this author there seems to be insufficient grounds to justify placing one species on the conditionally approved" "animals list and not the other.

Methodology & Structure: What follows is a detailed literature review of the species followed by a response to a set of questions recommended by the OIE (World Organisation for Animal Health) in determining invasive potential of alien species.

While it is not a full-blow risk assessment, per se, elements of this report have been drawn from the *Hawaiian Pacific Weed Risk Assessment Risk Assessment* (itself derived from the Copp, et al. (2005). *Risk identification and assessment of non-native freshwater fishes: concepts and perspectives on protocols for the UK)* modified for alien plant assessments, frameworks developed by the International Union for the Conservation of Nature (IUCN) and its affiliated partners, World Organisation for Animal Health (*Guidelines for assessing the risk of non-native animals becoming invasive*), published peer-reviewed articles and material devoted to wild or captive research of the species.

Behaviours or traits deemed relevant by the author have been clearly separated and then discussed in context both of invasive potential, control of feral populations or in relation to other members of the parrot family currently permitted into the state of Hawai'i. Source material is also listed.

Evaluation of the literature research is then discussed in the context of attributes that may or may not support the vasa parrot becoming an invasive species, particularly in relation to other psittacines.

In addition to the foregoing, the author has also reviewed HAR § 4-71-6.5, and the lists of conditionally approved animals and restricted animals.

Ecological and Biological characteristics of relevance in the evaluation of the Vasa parrot (*Coracopsis vasa*) as a potential alien invasive species.			
Attribute	**Detail**	**Relevance**	**Sources**
Distribution	No export for past 28 years from country of origin No feral populations of this species recorded. Failed introduction attempt to Reunion Island.	There have been no exports of this species from its native country since 1993, according to CITES. Trade in many species increases the risk of establishing feral populations, and an increased captive pool for breeding. The restrictions in place on the export of C. vasa will likely ensure that no country will be able to import this species in quantity, thereby reducing the risk of invasion pathway. It is important to note that this species has no known feral populations existing, unlike many of the species listed on the conditionally approved list. Low export numbers (ergo founding populations), unique breeding strategy and nutritional requirements are likely to be limiting factors. Of equal importance to note C. vasa was intentionally released on the island of Reunion, outside of its natural distribution range. Though details are lacking it appears that an intentional release of this species failed, despite similar climate and within a similar geographic region from the original habitat. Many parrot (re)introduction attempts fail for multiple reasons, despite every effort from conservation planners. In general, the extant population is in decline, and listed as Least Concern on the IUCN Red List.	https://cites.org/sites/default/files/eng/com/ac/19/E19-08-4.pdf White et al. (2012) Psittacine reintroductions: Common denominators of success. Biological Conservation; 148. BirdLife International. 2018. Coracopsis vasa. The IUCN Red List of Threatened Species 2018
Social/ Group structure	Flock size is variable, noted as between 4-15 individuals	The majority of avian invasive species form flocks numbering hundreds of individuals. Three avian species feature in the IUCNs list of Top 100 invasive species, the Common Indian Myna, European Starling and the Red-Vented Bulbul. All three species	Foreshaw, J.M.(2006). Parrots of the World: an identification guide. Princeton University Press.

		show small body size/weight, opportunistic feeding regimes, are highly gregarious and form large flocks and roost communally. The red-fronted parakeet (*Aratinga erythrogenys*) also follows this trend, currently listed as an injurious species by the HDOA. A comprehensive review of alien psittacines in Europe showed that of the majority of the 12 species established across the union, only the ring-neck parakeet was documented having a negative impact. The other species were deemed to have a neutral impact. This list included the Red-fronted parakeet, currently a species listed as invasive in Hawai'i. However it is occasionally seen in larger flocks (up to 40 individuals) during feeding, though it is data-deficient in regards to numbers. Flock size depends on whether in breeding season or not, and appears to exhibit migration within its habitat, potentially in search of food resources. Though small flocks are observed in the day, larger groups may congregate at night, with 100s of individuals recorded. There is one doctoral theses suggesting the species may be an agricultural pest species on maize and wheat in its native habitat, though this information is deficient.	Safford et al. (2015) Birds of Madagascar. Bloomsbury Press. O Martin et al. (2014) Research and conservation of the larger parrots of Africa and Madagascar: a review of knowledge gaps and opportunities. OSTRICH, 85(3): 205–233 Global Invasive Species Database, http://www.iucngisd.org White et al. (2019) Assessing the ecological and societal impacts of alien parrots in Europe using a transparent and inclusive evidence-mapping scheme. NeoBiota 48: 45-69. Bollen, A. (2004) Fruit-frugivore interactions in a Malagasy littoral forest: a community-wide approach of seed dispersal. PhD theses, University of Antwerp
Mating system (wild)	Polygynandry	For a population to become invasive, a potential breeding population must live past the process of establishment and find suitable mates. The majority of avian invasive species (where the pathways of invasion are known) are monogamous and generally derived from either large-scale escapes/introductions/releases or a slower process of smaller numbers being released (i.e. pet or zoo escapes). The observed mating system of the vasa parrot is highly unusual amongst the aves taxa and even more so in the psittacine family.	Ekstrom et al. Unusual sex roles in a highly promiscuous parrot: the Greater Vasa Parrot Caracopsis vasa Clegg et al. Genetic consequences of sequential founder events by an island-colonizing bird. Proceedings of the

		Unlike the vast majority of the psittacine family, the Vasa parrot is a polygynandrous breeder. A breeding female (in this species the female is dominant to the male) will mate with multiple males. These males feed the female and clutches of young are of mixed paternity. It is possible that the quantity of food that is delivered to the female is required to sustain the fast growth of the chicks, one of the fastest developing of the psittacine family. Males will mate with, and feed, multiple females also. The unusual sex ration of this species may also have implications on founder population dynamics. Studies on founder populations in birds tend to look at monogamous species, and in addition studies have suggested that populations needed between 30 and 100 founding individuals to ensure sufficient genetic diversity of the new population. In populations based on single founding pair, it took many generations for a group to establish, and it is only through subsequent immigrants from nearby islands that prevented inbreeding and the loss of genetic diversity/fitness.	National Academy of Sciences Jun 2002, 99 (12) 8127-8132 Grant PR et al. A population founded by a single pair of individuals: establishment, expansion, and evolution. Genetica. 2001;112-113:359-82.
Breeding behaviour	Males play no role in the incubation or feeding of the young. The female solicits feeding from multiple males. Females are relative conspicuous at the nest, calling loudly.	Multiple individuals are required to successfully rear a single clutch in the wild, possibly due to the rapid development of the chicks in the nest (see below). This would enable control of a breeding propagule easier to manage than multiple pair-groupings. Males are not able to be caught using nest-site traps, which have been used to confine the female in the nesting cavity in the wild. However no female was able to escape from this capture method, ensuring a demographically imbalanced (i.e. male only/non-breeding) population could be attained if a free living population were established (upon identification of nesting locations).	Randrianaina A.L. (2004) Contribution a l'etude bio-eco-ethologique de perroquet *Coracopsis vasa drouhardi* pendant le period de reproduction dans la region de Morondava. University of Antananarivo, Madagascar. Wilkinson, R. & Birkhead T.R. (1995) Copulation behaviour in the Vasa parrots Coracopsis vasa and C. nigra. Ibis.

	The 'song' of the females is suggested to be an indicator of fitness in the species. Longer songs attracted more males than shorter songs. Playback of songs at different volumes attracted males to the area (louder broadcasts attracted more males).	During studies on this species, of which there are few, nest sites were located with relative ease by field researchers due to the loud vocalisations emitted by the female. Given the above information of nest attendance by multiple males, monitoring and control of the species would be easier than in monogamous species. It would appear that males are attracted by artificial broadcasting of the females song, the louder the playback the greater number of males attracted. This behaviour, albeit noted during the breeding period, would appear a relatively easy way to maintain breeding populations if a feral population were to become established. Nesting occurs almost exclusively in tree hollows. Suitable nesting cavities are required by the Vasa parrots, most commonly in trees (occasionally banks/cliffsides). It appears that existing hollows are utilised, with no observation of birds constructing their own hollows or making alterations to the site. Existing trees with cavities of an appropriate depth and width are a limited resource in most environments for large bodied obligate cavity nesting birds. Females broadcast their song from highest trees in vicinity of nest. Singing from a high and exposed position, in dead or living trees, aids in the attenuation of the song into the surrounding landscape. This behaviour would aide in the easy identification of the species, particularly during the breeding period and help identify nests within the vicinity of the broadcast tree. Breeding occurs once during the wet season in Madagascar, and only a single clutch is raised during the period, unlike some smaller psittacine species which may raise two or more broods in one reproductive season. Females defend territories around nesting sites from congeners. Territories are estimated, on average, to be 10,000m2.	de la Parra-Martínez, S.M., Renton, K., Salinas-Melgoza, A. et al. Tree-cavity availability and selection by a large-bodied secondary cavity-nester: the Military Macaw. J Ornithol 156, 489–498 (2015).

Incubation, Rearing and Weaning	Approximately 3-5 eggs are recorded in the wild, average 4 in captivity. Once chicks hatch attending males make multiple hourly visits to the female at the nest. Weaning is recorded as between 6-10 weeks.	The Vasa is considered to have one of the shortest incubation periods of all the parrot family, with estimates between 17-19 days. On average 165 feeding visits from males to female were recorded **each hour** once chicks hatched with between 3-5 males bring food. It would suggest that in respect to successful raising of young, and therefore subsequent population growth, multiple males are required to feed the female. The likelihood of achieving a suitably balanced feral breeding population in Hawai'i is unlikely given the low number of this species in captivity to provide the necessary founding population.	Jordan, R. & Pattison, J. (1999) *African Parrots.* Hancock House, Surrey, U.K. Randrianaina A.L. (2004) Contribution a l'etude bio-eco-ethologique de perroquet *Coracopsis vasa drouhardi* pendant le period de reproduction dans la region de Morondava. University of Antananarivo, Madagascar.
Behaviour	Birds fly high with a conspicuous slow and deep wingbeat, similar in silhouette of a raptor. Birds are noted to remain relatively calm and approachable whilst feeding in the wild.	The large size of the species, its distinctive colour and above-canopy flight make the species easy to spot in the field. Approachability in the field would ensure control measures and observations would be easier to undertake than 'flightier' species.	Foreshaw, J.M.(2006). Parrots of the World: an identification guide. Princeton University Press.
Morphology / Physiology	Breeding individuals are easily recognised in comparison to young or non-breeding individuals by the	Females lose the feathers on their head, beak colour changes from light to dark and prolapses may be observed from the cloaca in males.	Lovegrove et al. The allometry of parrot BMR: seasonal data for the Greater Vasa Parrot, *Coracopsis vasa*, from Madagascar. *J Comp Physiol B* **181**, 1075–1087 (2011).

	physiological changes that become apparent during the breeding season. Basal Metabolism Rate changes during breeding season.	During breeding the Vasa parrot, unique amongst its tribe, exhibits up-regulation of its basal metabolic rate, having the highest recorded BMR for a bird of any size to date. It is suggested that the costs of a high summer BMR may be met by the unusual cooperative breeding system, in which groups of males feed the female and share paternity. This may also be needed to meet the nutritional requirements of fast-developing chicks. In the context of invasiveness, without multiple males attending a female it is unknown whether sufficient calories can be transferred to the female and thereby the chicks. This is further compounded by the species environmental naivety, lack of knowledge/experience of food sources of varying nutritional quality and calorific richness of Hawaiian plants. In this regard it could be considered unlikely that vasa parrots would adapt with sufficient speed to the novel environment to permit rapid expansion through breeding, and would be less likely than most of other parrot species to succeed at establishment.	
Habitat	1.5 Forest-subtropical/Tropical Dry 1.6 Forest-Subtropical/Tropical Moist Lowland 2.1 Savanna-Dry 3.5 Shrubland-Subtropical/Tropical Dry	A lowland species with an upper elevation limit of 1000 meters. This species utilises a range of habitats and is not dependent on any single one, making it a generalist in regard to habitat use. Given the anthropogenic changes within the state for urbanisation and agricultural pursuits it could be considered that this mosaic of habitat structure lends itself to potential invasion by many alien species. Similar habitat types can be found within the state of Hawaii, ensuring that at a basic level the climate and habitat is suitable for the survival of members of the parrot family in general. Recorded as scare in rainforest areas and more common in degraded, plantation and cultivated areas.	BirdLife International. 2018. Coracopsis vasa. The IUCN Red List of Threatened Species 2018: e.T22685261A131279943. O Martin et al. (2014) Research and conservation of the larger parrots of Africa and Madagascar: a review of knowledge gaps and opportunities. OSTRICH, 85(3): 205–233 Safford et al. (2015) Birds of Madagascar. Bloomsbury Press.

	4.5 Grassland-Subtropical/Tropical Dry 14.1 Artificial/Terrestrial-Arable Land 14.3 Artificial/Terrestrial - Plantations		
Diet	Recorded as granivorous & frugivorous; a possible seed disperser (*C. nigra*) and seed predator.	There is little documented in the way of the wild diet of the Vasa parrot other than a mix of grain, fruit and flowers. A study in 2004 suggested that a close relative, the lesser vasa (or black parrot) Coracopsis nigra, showed dietary flexibility and was able to sample fruits that were not at a palatable stage to other species. Both species exhibited a mixed frugivorous and granivorous diet depending on season and habitat. Despite the study recording this behaviour in the congener of the Vasa, there were no documented observations of the Vasa engaging in similar behaviours. In fact when both species were observed there appeared to be no competition between the two species for food items.	Bollen, A. (2004) Fruit-frugivore interactions in a Malagasy littoral forest: a community-wide approach of seed dispersal. PhD theses, University of Antwerp Tella et al. (no date) Parrots as overlooked seed dispersers. The Ecological Society of America Randrianaina A.L. (2004) Contribution a l'etude bio-eco-ethologique de perroquet *Coracopsis vasa drouhardi* pendant le period de reproduction dans la region de Morondava. University of Antananarivo, Madagascar.
Captivity	Rarely kept and bred in the USA, low stock	The vasa parrot has always been an avicultural rarity. Its sombre colour and low price (during the period of mass exports of parrot	Silva, T. (1991) Psittaculture: Breeding, Rearing and

	in Europe. No export from country of origin.	species) resulted in low interest by breeders and pet owners, thereby curbing the current availability of captive bred birds. Birds bred in the USA command high prices due to this rarity. The scarcity of Vasa parrots in Northern America suggests it would be highly unlikely that the vasa parrot would be imported into Hawai'i in numbers sufficient enough to cause concern of establishment. Certainly wild exports are unlikely to recommence. Anecdotal evidence suggests that vasa parrots do not readily revert to wild-type diets once raised on a commercial feed type (in the submission by LM, who spoke with breeders/owners of the species). However, Silva (1991) records that in captivity they will readily eat anything offered, with one specimen surviving for 52 years from 1830 in London Zoo, a time when parrot needs were poorly understood	Management of Parrots. Silvio Mattacchione & Co., Canada

Guidelines for assessing the risk of non-native animals becoming invasive

(from the World Organisation of Animal Health)

Prior to exploring the parameters used to develop our understanding of potential invasiveness, it is worthwhile to discuss pathways of invasion for this species. Evidently there is no risk of natural dispersion to the archipelago, nor from the mainland United States due to geographic isolation and distance from potential sources. Intentional import appears to be the sole route for this species to arrive in the state. This pathway is naturally well regulated with processes in place to prevent escape during transit, to ensure animal health and security, to reduce opportunities of escape etc. Given that the HDOA can decline or dictate import requests, it seems entirely feasible that further requested imports could be single-sex groupings only to further reduce the risk of establishment and colonisation. Species that have become invasive generally have done so through an initial large founder colony event (i.e. mass imports at one time), or a slower influx of new members (escape or release of individuals). Small founder groups are inherently at risk of loss of genetic diversity and therefore fitness.

a) Biological factors: What are the feature of the animals that may affect the probability of establishment and spread of the animals?

– history of invasiveness elsewhere; ***Coracopsis vasa*** **has not been documented as a feral or invasive species in any country. Indeed, attempted release of a non-native propagule of this species failed on the isle of Reunion, which is climatically and geographically close to the natural habitat.**

– number and size of releases or escapes (propagule pressure); **Imports are likely to be very low, within the single figures, due to the scarcity, expense and lack of interest in this species. Therefore propagule pressure can be considered very low.**

– reproductive biology and capacity (fecundity, age of sexual maturity, breeding frequency, gestation length, etc.); **In the opinion of the researcher, it is the reproductive biology of the species that limits its potential as an invasive species, requiring an unusual sex ratio for successful reproduction, appropriately sized nesting cavities, a single breeding attempt per season in its natural habitat and high dietary needs for chick development. Full-nest mortality has been observed in the wild due to lack of food resulting in starvation (cause unknown) and also stunted growth and development in captivity when protein-poor diet was accidentally withheld from a colony.**

– diet; **The vasa parrot is considered predominantly frugivorous or granivorous depending on the habitat. A congener, the smaller *Coracopsis nigra*, is able to utilise underripe fruits and tolerates high tannin levels in food items, though this has not been observed in *C. vasa*.**

– whether the animals under consideration are wild or domesticated; **As with the majority of parrot species *C. vasa* is considered a non-domesticated species, and retains much of its wild-type behaviours.**

– whether the animals under consideration are generalist or specialised species; **Based on the life history and biological traits it could be determined that *C. vasa* is a generalist species, utilising a range of habitats in the native range.**

– range of tolerance and adaptability to environment and climate; **The vasa parrot is uniquely a species of the tropics, and associated habitat structures, including dry forest and moist forest. As a large bird this species is adapted to move across different biomes but within the constraints of <1000 meters and within the associated temperatures and humidity of the tropics.**

– dispersal mode and capacity; **Able to transverse large areas across biomes to large wing span and deep flight pattern, exhibits a degree of migration in native state.**

– longevity; **Data deficient for wild individuals. In captivity several decades are feasible. No record of predator species observed feeding on this species.**

– density dependence. **Unknown/ Data deficient, though dependent on pre-existing cavities for nesting**

b) Receiving environment: What are the features of the receiving environment that may affect the probability of establishment and spread of the animals? Examples of the kind of inputs that may be required are:

– climate match with the species native environment; **Using the IUCN biome index Hawaii has several biomes that match that of *C. vasa*, though it is unknown whether humidity, precipitation etc. are also compatible. Given that other tropical parrot species have established feral populations within the state it is reasonable to assume that climate would not be a limiting factor in establishment.**

– presence of suitable food source; **Unknown, though *Coracopsis nigra* and *Coracopsis vasa* have been noted as being an agricultural pest of cereals (maize and wheat) in the natural habitat.**

– presence of suitable breeding sites; **Unknown, though with no native cavity-constructing species in the state and the fact that tree hollows are a limited natural resource in general then this may be a limiting factor in establishment success.**

– geographical and environmental characteristics; **Unknown**

– presence of predators, competitors, parasites and pathogens. **Unknown, though documented that chick mortality has been due to heavy parasite load in one observed instance in the wild.**

c) Containment factors: What are the management factors that may affect the probability of establishment and spread? **All the following suggested questions have been issued in the request to import submission by L.M, giving detail the management of the individual upon arrival. In the case of further requests then similar caveats can be placed accordingly .**

Examples of the kind of inputs that may be required are:

– security capacity for housing, handling and transportation;

– intended use of the imported animals (e.g. pets, zoological collections, live food or bait, research etc.);

– the nature and frequency of human-assisted animal movements;

– live animal disposal practices (euthanasia, release, rehoming, etc.).

Review and Evaluation

Factors that may hinder the establishment of the species in the state of Hawai'i

There are several factors that are likely to reduce the risk of vasa parrots from establishing a feral population and therefore potentially becoming an invasive species, particularly in relation to other parrot species which are either on the Conditionally Improved list or that have feral populations in the state. These are as follows:

- Primarily the route of establishment is very restricted. There is a limited breeding population within North America, and there have been no exports of this species from its native habitat since 1993. It is highly unlikely sufficient numbers would be imported to found a potential feral colony.
- The pathway of invasion is strictly control or restricted. All imports must pass through the Hawaiian Department of Agriculture for approval. It is possible to therefore limit both numbers and sex of the species to ensure a suitably biased demographic (i.e. all males). Health and security are also similarly governed so risk of accidental escape or the introduction of pathogens or parasites is also controlled.
- Unlike other parrot species (with the exception of one other species, the Eclectus parrot) Vasa parrots have a complex polygynandrous breeding system. To successfully rear young females depend on multiple attending males to feed her intensely across the breeding season. Unless a large founding population is simultaneously introduced then it is unlikely that the correct sex ratio will be achieved in Hawai'i. It is possible that multiple males are required to help provide the nourishment to the rapidly developing chicks (one of the fastest development times in psittacines). Lack of food of suitable quantity or quality can stunt or limit growth during this critical development time. It has been proposed that food availability might be an ecological constraint, one which applied selective pressures towards this unusual reproductive system in *Coracopsis* species.
- Unlike the other psittacines established in the state vasa parrots are obligate secondary nest cavity users. This means that birds do not excavate nests or modify/enlarge existing holes, but must find appropriately sized cavities to nest in. The other species currently feral in the state (Cockatoos, Amazons and conures) are all adept at modifying existing cavities. No gnawing/chewing behaviour has been observed in Vasa parrots, indeed they are generally a non-destructive species and one of the few larger species that may be maintained in planted flights in captivity. Therefore suitable nest sites are likely to be a limited resource for this species (particularly given the number of other psittacine species in the state competing for the nesting sites).
- Unless a large consignment of birds is released simultaneously into the habitat then smaller localised escapes of individual are unlikely to establish viable populations, given the constraints of founder population dynamics. Genetic bottlenecks and inbreeding are likely to reduce fitness in species with low founder populations. Immigration of unrelated individuals is required to sustain genetic diversity and of course this would be controlled by import permits.

- Changes to the basal metabolic rate in this species requires a greater quantity and/or quality of food to accommodate for these changes. It is possible that these changes are associated with breeding and parental behaviours, particularly as the development of the young is fast, and again can be referred to the breeding system with multiple males delivering food to the female. Given the nutritional requirements for successful reproduction, it is unlikely that in a novel habitat with unfamiliar food resources that a foundling population will find sufficient material to meet calorific and dietary needs.
- Despite the rapid development of the young birds, Vasa parrots nest only once in their native habitat. Clutch size is also small, approximately 4 eggs.
- This species was intentionally released/introduced into an alien environment (Reunion Island) and the population failed to establish. It is unknown how many individuals were released, or the processes involved, but it is important to note that they have been purposely released without success of establishment.

Factors that may aid in the establishment of the species in the state of Hawai'i.

Though it is far from certain the following may aid in the species becoming invasive, it could be hypothesised that there are factors or attributes that could enable them to do so. These are as follows:

- Birds have large wingspans, cover large areas and are known to locally migrate in search for food sources, similar to many macaw and cockatoo species.
- Like many parrot species, they have been observed eating agricultural crops (wheat and maize) in their native range, with a degree of dietary plasticity depending on the habitat.
- Similar habitat types are likely to exist in Hawai'i, ensuring a suitable environment and climate, applicable to most of the parrot family.

Factors which would aid in the control of an established feral or invasive population

It is in this context that the vasa parrot is present several attributes that would make control of this species relatively easy, particularly in relation to the other species currently in feral or invasive populations in the state.

- Females are very easy to find, observe and trap at suitable nest sites.
- Males can be lured with playback of female song.
- Tame and approachable when feeding.
- Sit in exposed situations in during the day.
- Roost communally at night
- Very readily identified by silhouette, flight and size.
- The species is often caught either as a caged bird or as a food item in its native habitat, suggesting that trapping or hunting does not pose great difficulty in this species.

Conclusion

It is in the opinion of this researcher that the introduction of the vasa parrot does not represent a threat of invasion in the state of Hawaii, in its own right, or, when compared to other Psittacidae members. *C. vasa's* low potential for invasiveness is based on its life characteristics and other attributes. Given the species' unusual breeding system, unique dietary requirements, and obligate cavity nesting needs, it appears unlikely that a wild population could become established, even in the unlikely situation where multiple birds were imported in the future. Indeed, a review of the literature shows that the species has not ever successfully established a feral population outside its native habitat of Madagascar, even when an intentional attempt to colonize *C. vasa* was made. In addition,

the species is not particularly popular in the pet trade due to what many find an undesirable appearance, and as a result, it is imported into the United States in low numbers. These factors provide strong support for the State of Hawaii to transfer *C. vasa* from the "restricted animal" to the "conditionally approved" animal list, where the vast majority of Psittacidae—several of which have a greater potential for invasiveness-- are placed. The reproductive biology, social structure and unique dietary requirements of *C. vasa* are similar to that of the eclectus parrot, which is on the "conditionally approved" list of Psittacidae, providing additional support of transfer of *C. vasa*.

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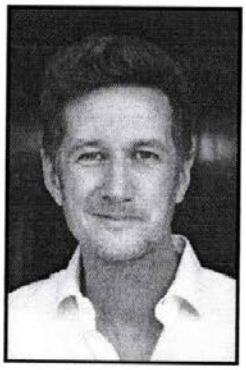
Phillip John Greenwell



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Publications & Reviews

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Reviewer for the *Journal of Veterinary Behaviour*, 2018 on psittacine husbandry and welfare in zoological collections.

Education

2015 Bristol City College **Certificate in English Language Teaching (CELTA)**	Modules: -Developing teaching skills and professionalism -Planning and Resource management -Language analysis and awareness
2012-2013 University of the West of England **Postgraduate Certificate in Education (HE)**	Modules: -Learning and Teaching in Higher Education -Investigating Academic & Professional Practice in Higher Education -The Practice of Teaching in Higher Education
2008-2009 Reading University, Berkshire **MSc Wildlife Management & Conservation**	Modules: Vertebrate Pest Management; Ex-Situ Conservation; Mammal Conservation; Species & Habitat Conservation Thesis: ***Aviculture, the Pet Trade & Conservation.***
2003- 2006 Bishop Burton College, E. Yorkshire **BSc (Hons) Animal Behaviour & Training** **FdSc Animal Management & Behaviour**	Modules: Counselling & Behaviour Modification; Animal Communication, Advanced Animal Training. Dissertation: ***Plumage Maintenance and Preening Behaviour.*** Major Project: ***Impact of Introduced Rainbow Lorikeet on native flora & fauna in Western Australia.*** Project undertaken in conjunction with Dept. Environment & Conservation, Western Australia.

EXHIBIT 5

Employment

2018- Farmer of Speciality cut-flowers, St. Georges, France

-Providing sustainable, locally grown and seasonal specialty cut flowers to businesses in the Toulouse metropolitan area. Undertaking wedding and event work.

2015-2018- English Language Teacher, Self-employed, Toulouse, France

-Teaching English to business professionals. Maintaining training programmes and developing varied lesson plans and course evaluations.

2011-2015- Higher Education Lecturer & Programme Manager in Animal Behaviour & Welfare, Hartpury College campus, University of the West of England

-Programme Manager for FdSc Animal Behaviour & Welfare Students. Lecturing students in practical and theoretical skills, including: *Animal Behaviour, Management of Zoological & Aquaria Collections, Ethics & Welfare* and *Companion Animal Training & Behaviour*. Preparation of course modules, exam writing and module evaluations.

2010-2011- Higher Education and Further Education Lecturer, Askham Bryan College

-Teaching and supporting students across a range of programmes. Leading modules such as *Wildlife Management and Conservation*, *Animal Behaviour*, *Aquatics* and *Animal Training*. Preparation of course modules, exam writing and module evaluations.

2010- Environmental and Conservation Officer, Green Island Foundation, Seychelles (Contract)

-Project manager: mynah bird eradication. Assisted Seychelles Flycatcher Project Officer in monitoring and habitat surveys. Managed rat re-invasion protocol. Monitoring & supplementary feeding of Endangered Seychelles Magpie Robin. Stakeholder liaison and facilitation of conservation workshops.

2007-2008- Higher Education Lecturer, Bridgewater College

-Lecturing HE BSc students in Animal Management. Subjects include *Animal Nutrition, Biodiversity and conservation, Applied Animal Husbandry & Habitat, Aquatics* and *Environmental Enrichment*. Preparation of course modules, exam writing and module evaluations

2000-2003- Bird Section Leader, Wingham Wildlife Park

-Feeding, management, aviary landscaping and maintenance of a wide range of species, predominantly Psittaciformes and Passeriformes.
-Organising volunteers and staff, delivering education talks to visitors, school and university groups.

1997-1999- General Keeper, Penscynor Wildlife Park, South Wales

-Assisting in the husbandry of a mixed collection at a local wildlife park. Involved with zoological horticulture and design of exhibits.

References on Request

April 21, 2021

To whom it may concern

I am an Avian Ecologist and Professor of Biology at the University of Hawaii at Hilo. I have been conducting research on the ecology and conservation of native Hawaiian forest birds for the past 30 years (please see attached CV for a list of research projects and publications). It was recently brought to my attention that the vasa parrot (*Coracopsis vasa*), native to Madagascar, is listed as a "restricted animal" under HAR 4-71-6.5 whereas all other parrot species except for three are listed as "conditionally approved" for importation into the state of Hawaii. While I am not generally in favor of importing non-native bird species to the state, I do believe that there is no good biological reason for the vasa parrot to have a "restricted" listing while many other parrot species that have far greater potential for invasion are less restricted.

Philip Greenwell recently conducted a comprehensive literature review of the potential invasiveness of the vasa parrot relative to other parrot species. I have read his review, along with many of the articles he cited, and agree with his conclusion that the vasa parrot represents a far lower threat of becoming invasive in Hawaii than practically any other parrot species. There are a number of reasons for this, including 1) the vasa parrot has never been observed to have established a feral population outside its native Madagascar, 2) it is an obligate cavity nester so would be very unlikely to find suitable nest sites, 3) it has an unusual polygynandrous breeding system that would make it difficult for any escaped individual to successfully reproduce, 4) they are primarily found in disturbed and fragmented habitats so would have extremely low potential to invade any of our remaining forested areas, and 5) these parrots are generally not favored as pets and thus are relatively rare outside their native habitat. Taken together, these factors make it extremely unlikely that vasa parrots could successfully establish a breeding population in Hawaii and provide strong support for the state to move this bird from the "restricted animal" to the "conditionally approved" category.

Sincerely,

Patrick Hart
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RESEARCH INTERESTS

Greater Vasa Parrots, including tool use, and evolution; TTOUCH for rehabilitation of Vasa Parrot; Bonding between Vasa Parrots and people; The Effects of the long term well-being of animals that are hand fed or bottle raised, including Vasa parrots, other parrots, horses, dogs and cattle.

EDUCATION

CERTIFICATE, University of Reno, Courts of Special Jurisdiction, 2000
JURIS DOCTOR, ENVIRONMENTAL LAW speciality, Lewis and Clark College Northwestern School of Law, 1993
BACHELOR OF SCIENCE, University of Wyoming, Major in Sociology, Minor in Psychology, 1990.
Attended University of Massachusetts, Animal Science classes, 1983-1984
Attended Bel-Rea Institute of Animal Technology, 1987

PROFESSIONAL EXPERIENCE

Assistant to Linda Tellington-Jones, TTOUCH.com, 2016 to present
Co-founder World Para-Reining, a non-profit in Texas, 2014 to present
Writer and Media: Adopt Oregon Mustangs, World Para Reining, contributor to TOUCH media 2009 to present
Justice of the Peace, 2006 to 2012, Baker County, Oregon.
Lawyer, 1993 to present.
Teaching Assistant and Instructor, University of Wyoming, 1989-1991
CSU Veterinary Teaching Hospital, 1980-1981
Denver Zoo, Volunteer, 1987

HONORS AND AWARDS

Honors Student at the University of Wyoming

Many Scholarships, including for first year of Law School

Kentucky World Para Reining Champion 2014

USPEA Paralympic Selection Trials ranked 19th overall, 2012

MEMBERSHIPS AND AFFILIATIONS

Oregon State Bar, 1993 to present
Federal Bar, 1995 to present
United State Para Equestrian Association 2009 to present
TTOUCH Community Member 2017 to Present