

October 29, 2020

United States Department of Agriculture
APHIS
Animal Care
4700 River Road, Unit 84
Riverdale, MD 20737

RE: Docket No. APHIS–2020–0068-0001; Establishing AWA Standards for
Birds

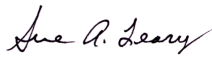
To Whom it May Concern,

The attached comments are submitted on behalf of the American Anti-Vivisection Society, Avian Welfare Coalition, Alternatives Research & Development Foundation, Humane Society of the United States, and the Humane Society Legislative Fund in regard to establishing Animal Welfare Act standards for birds. (Docket No. APHIS–2020–0068-0001).

We appreciate the opportunity to provide information and welcome opportunities to do so in the future. If you have any questions or need any further information or materials, please feel free to contact us.

Thank you for your consideration.

Sincerely,



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I. OVERVIEW

After almost two decades of promising to issue regulations pursuant to its mandate under the Animal Welfare Act (AWA or “the Act”), and under a court order as a result of an agreement in the case of *American Anti-Vivisection Society and Avian Welfare Coalition v. USDA* (Case # 1:18-cv-01138-TNM), APHIS is now in the process of rulemaking to establish standards for birds not bred for use in research who are otherwise covered by the AWA.

The listening sessions that APHIS has held, along with its own framing of the issues before it in adopting these regulations, raise certain legal issues that the agency should consider carefully in drafting its proposed regulations. While the agency has discretion in determining the specific language of the regulations, its discretion does not extend to adopting rules and regulations, final policies, or interpretations that are in violation of the purpose of the AWA, or that may be arbitrary and capricious, given the pressing need for bird-protective regulations. This has even been made clear by the agency’s own admission over the years of nonregulation that avian species need special consideration.

Congress designed the Act “to insure that animals intended for use in research facilities or for exhibition purposes or for use as pets are provided humane care and treatment.” 7 U.S.C. § 2131(1). Congress also saw the AWA as a means “to assure the humane treatment of animals during transportation in commerce.” *Id.* § 2131(2). The statute makes it clear “that it is essential to regulate . . . the transportation, purchase, sale, housing, care, handling, and treatment of animals” by people who “us[e] them for research or experimental purposes or for exhibition purposes.” *Id.* § 2131.

The AWA requires that private parties get licensed and register with APHIS before undertaking any business activities with respect to covered animals. *Id.* §§ 2134, 2136. And in addition to the licensing and registration requirement for those using animals, the Act also imposes requirements on the USDA and APHIS. The AWA states that “[t]he Secretary *shall* promulgate standards to govern the humane handling, care, treatment, and transportation of animals by dealers, research facilities, and exhibitors.” 7 U.S.C. § 2143(a)(1) (emphasis added). The Act lists several minimum requirements that the standards (regulations) must meet. *Id.* § 2143(a)(2)–(5). It is against the backdrop of this statutory minimum that the agency must draft its regulations. That is, while the input of stakeholders is important, APHIS cannot act contrary to the statute, no matter what any stakeholder wants.

The statutory overlay means that, in order to be valid, any exemptions must be in line with the limited statutory allowance for exemptions. But based on the statutory language, whatever the agency does, any effort to exempt large portions of the covered animals for reasons not already clearly recognized by Congress and the courts will likely be met with significant opposition by the avian welfare community. For example, there is no justification for any extension of exemptions to particular species of birds; this would be deemed to be in direct conflict with the intended scope of the statutory provisions. All exemptions should be restricted and closely aligned with any regulations

already in place for other covered animals, or be directly related to those regulations. *See, e.g.*, 9 C.F.R. § 2.1, 2.25. However, avian species should not inappropriately be placed into categories (such as “non-dangerous, pet animals”) to which they do not belong.

The parties that are signatories to these comments have been active in the science and the law of avian welfare for some time, some for decades. Because Congress, the courts, and APHIS agree that birds require special regulation and differential consideration under the AWA, the agency should very carefully consider the reason and need for regulation and enforcement in the bird community.

Nor is there, from the perspective of the general legal reason to oversee operations, anything that differentiates the regulation of birds from the regulation of other exotic or wild animals.¹ If anything, there is a greater need to regulate those involved with birds because of the decades they have gone unregulated despite inclusion in the AWA’s coverage. Thus, other than the kinds of exemptions already written into the regulations, no additional exemptions should be allowed for exhibitors, dealers, transporters, sellers, or breeders of birds covered by the AWA. And any *de minimis* rule should simply mirror those in effect, applicable only to very small numbers of animals. For example, since both dogs and birds are bred for eventual sale, and since the AWA is focused on ensuring humane treatment of such animals, no significant variation in terms of numbers of animals is supportable.

The differences necessary in regulating birds are related to their special physiological, behavioral, and psychological needs, which are distinct in many ways from mammals and are addressed in detail in these comments. But these differences relate solely to their physiology and behavioral natures, and should not in any way influence the proper scope of coverage. As for oversight by APHIS under the AWA, the need for adequate regulation is as essential for birds as for all other covered animals.

There is no supportable justification for exempting certain species of birds; this would be as misguided as exempting poodles or bloodhounds from coverage under the regulations related to dogs, or of exempting all long-haired cats. The concern of some breeders and exhibitors about regulation is based on two obvious motivations, both of which actually point out the problem with some stakeholders’ arguments against regulation. While it is not uncommon to hear objections from those about to be regulated, the need for regulation is pressing now because:

¹ For example, the suggestion that regulation of those involved in commercial activities involving birds would somehow violate the Fourth Amendment to the federal Constitution is a specious and absurd notion; if that were the case, then virtually all regulation under the AWA would be subject to the same constitutional insufficiency, as would the majority of government regulation of commercial activities. In short, by virtue of engaging in interstate commerce, businesses automatically render themselves subject to these kinds of minimal regulations governed by federal law.

1. Despite the Congressionally and judicially recognized mandate, bird exhibitors, dealers, and breeders have acted without oversight for decades. This regulatory void provides the optimum condition for practices to become careless and incompatible with good bird welfare; thus, regulation is key to ensuring that the treatment of birds is consistent with the AWA.
2. Opposition to regulation comes from those directly involved in hobbies and businesses that impact and implicate the use of birds in interstate commerce. The AWA provides no blanket exemption for groups of animals based on their species or other treatment and, as the detailed suggested regulations included here demonstrate, the treatment of birds requires specific and particular attention to the facts of avian behavior and physiology.

Additionally, the fact of regulation under other federal laws, for other reasons, does not in any way replace regulation under the AWA for any of the covered animals, nor does it in any way minimize the need for such regulation, with the Act's particular focus on humane treatment and conditions of confinement, nutrition, and enrichment. For example, coverage by the Endangered Species Act (ESA) does not exempt birds from the humane care standards of the AWA, even if compliance with the ESA might provide some of the same protections in a more general sense. (The ESA does not ensure humane care and treatment of listed species.) Nor are state laws written to protect birds (which are practically nonexistent) a substitute for the AWA – in fact, they are specifically recognized as *supplements to* but not substitutes for, the AWA. And even where there are applicable state laws, the federal law does not step aside.

Industry self-regulation is no substitute for detailed and particular bird-specific regulations and USDA compliance inspections. If it were, there never would have been a need for the AWA in the first place, and the litany of cases identifying the suffering of birds over the years never would have happened. The AWA serves an important function of ensuring protection for birds specifically because industry self-regulation has failed to prevent substandard care, welfare, and husbandry of birds. The AWA acts as a leveling tool, to ensure that – with or without industry standards – birds are given the protections mandated by Congress.

Industry standards should not be adopted as the norm for AWA regulations. The agency should consider all available science-based literature, but its guiding principle must be the humane, welfare-related purpose of the AWA, rather than any policies and procedures that may be influenced by other considerations outside the purview of the Act. In addition to the pet trade, popular bird-related commercial activities that involve breeding and selling birds, such as falconry or racing pigeons², are exactly the types of

² The homing pigeon industry, for example, is a hobby that has become a business, involving the housing, raising, breeding, and daily care for thousands of animals involved in a daily active practice, with estimates of over 10,000 Americans participating. Like falconry, the pigeon racing industry is one that cries out for AWA oversight and regulation, given the nature of the activity and potential for welfare concerns.

use of birds that the Act demands be governed by measurable metrics so that APHIS can provide the requisite guidance.

Further, any concern about inspectors disturbing breeding practices, or bringing in or spreading disease between flocks, suggests that APHIS is unable to handle the very job it has been directed to do. Given its expertise as well as its support base of scientists and animal care experts, this is a nonissue: the agency is well equipped to ensure that its inspections satisfy the role they are supposed to play without introducing new problems. APHIS and its experts can easily prepare for avian inspections, and can avoid the parade of horrors that objectors to regulations have put forth in order to prevent regulation. The objections themselves seem highly questionable, since the birds in question (1) are supposed to interact with human caregivers every day and (2) will often eventually be introduced into the community. – and so should be able to be protected from any inherent dangers that may come from human interaction.

USDA asked about mitigating inspection-caused stress leading to nest or egg destruction or abandonment. Inspection procedures by trained APHIS inspectors are no more intrusive than normal human-interactive behaviors in many situations where these birds may ultimately be homed. Birds experiencing good welfare in which they are able to express normal behaviors are better able to adjust to new stimuli or temporary changes in their routine. This includes the presence of visitors, including inspectors.

If birds are adversely reactive to visitors resulting in significant disruption to breeding or nesting behavior, this is abnormal behavior and should be a red flag to inspectors that there may be animal welfare issues. The notion that visitors of any type would cause such stress is an obvious attempt to avoid inspection, since well-maintained birds, like other animals, should be psychologically healthy enough to experience other humans besides their caregivers. If they are so fractious as to respond to any new humans with negative behaviors, this is a likely indicator of poorly adjusted birds who are experiencing poor welfare and are likely in need of improved living conditions. And of course this is exactly the reason that the regulations need to cover these animals, and why any exemptions would be contrary to the law.

It is worth noting that in the wild, parrots are not prone to destroy or abandon nests because of minor or even significant disturbance. Indeed, in the field, conservationists regularly climb active nest trees and even handle and weigh nestlings and return them to the nest where they continue to be cared for by their wild parents.

Finally, the current pandemic presents absolutely no basis for further delay in the rulemaking process and does not supercede the decades-long failure to draft and enact these regulations and the court order directing USDA to complete the rulemaking process for birds.

II. PERFORMANCE, HOUSING, BEHAVIORAL AND WELFARE STANDARDS

As the USDA has long recognized, the general standards in subpart F are inadequate for birds and there is a need for specific standards that address the particular needs of birds under the AWA. While some of the AWA's existing licensing and regulatory requirements are appropriate for dealers, transporters, and exhibitors of birds, the unique physiology and behavior of avian species clearly necessitate special considerations not covered under the general regulations of Part 2 and Subpart F of Part 3.

Historically, birds have been kept in captive environments by humans for a variety of purposes ranging from companionship and entertainment to sustenance and commerce. Unfortunately, such endeavors have often failed to consider avian welfare (Engebretson 2006).

To varying degrees, captive birds are denied many significant aspects of avian behavior in the wild, such as flight, flocking, social interaction with conspecifics, and foraging on a variety of foods. Many species of birds show high levels of stereotypy in captivity, suggesting poor welfare (Sargent & Keiper 1967; Keiper 1969; King 1993; van Hoek & ten Cate 1998; Garner et al 2003; Meehan et.al 2003; Meehan et.al in press).³

Avian welfare may be improved by appropriate environmental enrichment and changes in the social environment of captive birds. Freedom to express normal behavior and freedom from distress appear to be inextricably linked in captive birds (Sargent & Keiper 1967; Keiper 1969; King 1993; van Hoek & ten Cate 1998; Graham 1998; Garner et al 2003; Meehan et.al 2003; Meehan et.al 2004).

Because species within the class Aves may differ greatly in size, morphology, diet, and social structure, care, and housing standards must necessarily vary to meet the needs of individual species or groups of species that share important characteristics.

In addition, there are a number of viral, bacterial, fungal, and parasitic diseases with which captive birds can become infected and, if transmitted, can cause serious and costly risks to human health, native wildlife, and especially, the agricultural poultry industry. Rather than being barriers to regulation, they are factors that must be considered in developing inspection practices.

While some in the aviculture community have expressed concern that USDA inspection of breeding facilities will facilitate disease transmission between facilities or

³ Stereotypies are abnormal repetitive, unvarying, and functionless behaviors that are often performed by captive wild animals and domesticated animals housed in barren or restricted environments. Such behaviors are mostly absent in the wild and are relatively infrequent in large, environmentally enriched enclosures (Field & Thomas 2000, Garner et al 2003).

that extreme biosecurity measures will be required for USDA inspectors, thereby resulting in detrimental disturbances to breeding birds, such concerns appear to be overstated. According to the USDA's "biosecurity guide for poultry and bird owners,"⁴ designed to avoid the spread of highly contagious Avian Influenza and Exotic Newcastle Disease, an appropriate biosecurity protocol for disease control includes the following: hand washing with soap, water, and disinfectant before entering the bird area; regular cleaning of cages, food, and water bowls; cleaning and disinfecting of car and truck tires if the vehicle travels between locations where other birds are present; quarantine for new bird arrivals or returning birds; and not sharing garden tools or poultry supplies with other bird keepers. While not mentioned in these USDA recommendations, many bird clubs, breeders, and bird rescue facilities use a disinfecting footbath to clean shoes prior to entering and exiting bird areas when concerned about potential disease transmission. As explained below, there is no reason to expect that any of these procedures will cause undue stress or disturbance to breeding birds or unreasonable inconvenience to the owners of inspected facilities.

Environmental enrichment programs including the rotation of enrichment objects can improve the welfare of captive birds and have been shown to prevent or reduce the development of behavioral vices, stereotypy, and fearfulness or fear of new things or people ("neophobia") (Fox and Milliam 2004). Moreover, neophobia may be a non-genetic trait passed on to offspring (Dingemanse et al 2002; Fox & Millam 2004), so aviculturists who focus on addressing these maladaptive behaviors in their breeding birds may improve the wellbeing of the offspring produced as well as the birds used for breeding.

It has also been erroneously argued by some in the aviculture and exhibitor community that regulation of birds under the AWA will harm conservation efforts by reducing trade and profitability of captive-bred birds commercially raised for the pet trade. The reality is that the vast majority of bird breeding in the United States contributes little or nothing to conservation efforts because most captive breeding is done outside of the parameters or structure of official species survival plans or other bona fide conservation efforts (Derrickson and Snyder 1992, Gilardi 2001).

Even if mutations are not specifically selected for, the moment the first generation is produced (F1 generation) a breeder has been involved, to one degree or another, in a process whereby "natural selection" no longer applies; thus selection factors begin to shift from factors that enable a bird to survive in the wild to factors that enable a bird to survive in captivity so that the release of captive-bred birds may reduce the fitness of wild populations. (Ford 2002). Official captive propagation and reintroduction programs are usually undertaken as a last resort at a cost of millions of dollars spread over many decades of effort and often take place in the species' range country. In parrots (the species most heavily bred for the pet trade) predator avoidance, foraging, and social interaction skills must be acquired, usually at a young age, to ensure a good chance of

⁴ https://www.aphis.usda.gov/publications/animal_health/2014/pub_bioguide_poultry_bird.pdf [Accessed 8/25/20].

survival in the wild. Moreover, nearly all other endangered species that are kept in captivity and bred as part of legitimate conservation efforts are regulated under the AWA and this fact has not hindered conservation programs; there is no reason to expect that imposing welfare standards for birds would be an exception. These claims of negative impact by inspections suggest a violation of the very essence of the AWA -- the inspection and oversight of birds in commercial settings.

III. RECOMMENDED REGULATIONS

In light of the above, we encourage the USDA to consider the following **key recommendations** for extending appropriate AWA protections for avian species held by dealers, research facilities, exhibitors, operators of auction sales, carriers, and intermediate handlers:

- Include some birds under the definitions of “exotic animal” or “wild animal” in Part 1, as detailed below;
- Include birds not bred for use in research in the Part 2 regulations;
- Require mandatory disease testing and health certificates;
- Create a new section providing specifications for the humane handling, care, and treatment of birds not bred for use in research under Part 3;
- Adopt species-specific requirements, including environmental enrichment; and,
- Prohibit the sale and transport of unweaned parrots in commerce.

Below we discuss these key recommendations in greater detail. Cited material is referenced at the end of the comments and the footnotes indicate existing regulatory standards that are in accord with our recommendations.

A. AWA Part I: Definitions (9 C.F.R. § 1.1)

By regulating birds not bred for use in research, several definitions need to be added here to clarify the proposed regulations discussed herein.

- (1) *Inclusion of some birds under the definitions of “exotic animal” or “wild animal”*

Pursuant to 9 C.F.R. § 1.1:

Exotic Animal means any animal not identified in the definition of “animal” provided in this part that is native to a foreign country or of foreign origin or character, is not native to the United States, or was introduced from abroad. This term specifically includes animals such as, but not limited to, lions, tigers, leopards, elephants, camels, antelope, anteaters, kangaroos, and water buffalo, and species of foreign domestic

cattle, such as Ankole, Gayal, and Yak.

Wild animal means any animal which is now or historically has been found in the wild, or in the wild state, within the boundaries of the United States, its territories, or possessions. This term includes, but is not limited to animals such as: deer, skunk, opossum, raccoon, mink, armadillo, coyote, squirrels fox, and wolf.

USDA previously included birds not bred for use in research under the definition of “animal”; therefore, under the current definition of “exotic animal,” birds would not be considered exotic. However, due to the wide variety of birds used and sold by exhibitors and dealers, it is scientifically inaccurate to exclude some species of birds from the definition of exotic animal. Birds commonly kept on display or traded as pets are often genetically, physically, and behaviorally indistinguishable from their wild counterparts—they are the native species of other countries, and, in some cases, of the United States. As such, they meet the definition of exotic animal. or wild animal. under the AWA.

Some bird species used in exhibits or traded in the pet industry were wild caught directly from their native habitats in their countries of origin, while others are only a few generations removed from the wild (Davis 1998; Graham 1998). In addition, many birds bred in captivity have not been selectively bred to express physical or behavioral traits that differ from those of their wild counterparts. While some birds (such as budgerigars, cockatiels, lovebirds, canaries, finches, doves, and pigeons) have been bred for several generations in captivity and are commonly hybridized or selectively bred to express color mutations and other physical traits that distinguish them from their wild counterparts, behaviorally they typically remain unchanged. In addition, these birds are still capable of transmitting disease (CDC 1998) and displacing native wildlife upon their escape or release from captivity. In Arizona for example, free-living peach-faced lovebirds appear to be competing with native birds for nesting sites in cactus cavities (Clark 1999).

For these reasons, as well as for the purpose of consistency and accuracy, we believe that all birds should be defined as “exotic” or “wild animals.” However, we recognize that the USDA must make recommendations based on a variety of considerations that may restrict its ability to include all birds under these definitions. At minimum, some birds should be considered as “exotic” or “wild” animals. To this end, we offer the following definition to accurately distinguish between “pet,” “exotic,” and “wild” bird species:

Bird means any live or dead animal that is either:

- (a) a pet bird, defined as any captive-bred member of the family *Columbidae* (doves and pigeons), *Estrildidae* (finches), *Fringillidae* (canaries), or birds of the genus *Agapornis* (lovebirds), *Nymphicus* (cockatiels) or *Melopsittacus* (budgerigars); or
- (b) an exotic bird, defined as any captive-bred or wild-caught bird not included in (1) above and not native to the United States; or

- (c) a wild bird, defined as any captive-bred or wild-caught bird not included in (1) above and native to the United States.

Adoption of these suggested definitions should also be reflected in the definition and subsequent regulation of “retail pet stores” in sections 1.1 and 2.1(a)(3)(1). The following is our recommendation for defining “retail pet store”:

Retail pet store means, any outlet where only the following animals are sold or offered for sale, at retail, for use as pets: Dogs, cats, rabbits, guinea pigs, hamsters, gerbils, rats, mice, gophers, chinchilla, domestic ferrets, domestic farm animals, **pet** birds, and cold-blooded species. Such definition excludes -

- (a) Establishments or persons who deal in dogs used for hunting, security, or breeding purposes;
- (b) Establishments or persons exhibiting, selling, or offering to exhibit or sell any wild or exotic or other nonpet species of warm-blooded animals such as skunks, raccoons, nonhuman primates, **birds**, squirrels, ocelots, foxes, coyotes, etc⁵;
- (c) Any establishment or person selling warm-blooded animals for research or exhibition purposes;
- (d) Any establishment wholesaling any animals; and,
- (e) Any establishment exhibiting or breeding pet animals in a room that is separate from or adjacent to the retail pet store, or in an outside area, or anywhere off the retail pet store premises.

(2) *Adding a definition section for unweaned birds*

In Parts II and III described below, we recommend that selling, purchasing, handling, and transporting of unweaned parrots in commerce should be prohibited. To effectively implement those recommendations, we suggest the following definitions⁶ be incorporated in section 1.1:

- (a) "Hand-feeding" means the process by which a bird is manually fed by a human through the use of hand, spoon, or oral gavage.

⁵ USDA currently regulates exotic animals sold from retail pet stores. See 63 Fed. Reg. 3017 (1998) (explaining that it is USDA’s policy to regulate pocket pets sold at retail pet stores)

⁶ The proposed definitions are consistent with California law that has been in effect since 2004. Cal. Health and Safety Code 122320.

- (b) "Unweaned bird" means any Psittaciformes bird that requires hand-feeding or animal assistance to sustain at least 90 percent of its own weight for at least two weeks.
- (c) "Weaned" means a Psittaciformes bird that does not require hand-feeding or animal assistance to sustain at least 90 percent of its own weight following the time of sale or date of transport, notwithstanding any illness or injury.
- (d) "Time of sale" means the calendar date the purchaser removed the bird from the premises of the licensee following the sale of that bird.
- (e) "Date of transport" means the calendar date the bird is removed from the premises of the licensee for purposes of inter- or intrastate commerce.

B. AWA Part II: Regulations (9 C.F.R §§ 2.1 et seq.)

Regulations included in Part 2 of the AWA set forth the requirements and process for licensing and registration of dealers, exhibitors, research facilities, or operators of an auction sale. Several components of these sections should apply to birds not bred for research either by explicit inclusion of birds in existing regulation sections that currently only apply to dogs and cats or by incorporating into the regulations a separate subsection specific to birds.

Subparts A and B - Licensing and Registration

These subparts should apply to any persons operating or desiring to operate as a dealer, exhibitor, or operator of an auction for birds. Under section 2.1, "exotic birds," "wild birds," and, "pet birds" should be added (as defined above) to the retail pet store section. This addition exempts retail pet stores that sell pet birds but requires exotic and wild bird dealers to be licensed.

Subpart C - Research Facilities.

The requirements under this section should also apply to birds not bred for use in research, who are otherwise used in research facilities.

Additionally, birds used in field studies and field research should be protected under the AWA regulations. Please see the attached Exhibit 1, which explain these commenters' position on research on wild birds. All such research should be covered, since wild birds are not bred for use in research.

Subpart D - Attending Veterinarian and Adequate Veterinary Care

The requirements under this section are consistent with proper care and management of birds; dealers, exhibitors, or anyone requiring a Class A, B, or C license should be required to have an attending veterinarian and to provide adequate veterinary

care to all birds in their possession.

Subpart E - Identification of Animals

The identification of individual animals is an important component in controlling and preventing the spread of infectious disease, in limiting the acquisition and resale of illegally obtained animals, and in maintaining accurate animal care and inspection records.

While the use of identification neck tags described for cats and dogs under this subpart are inappropriate for birds due to the potential for injury or removal by the animal, the use of identifying leg bands could be appropriate.⁷ We suggest that a new section be added to Subpart E requiring the use of official leg bands for identifying birds not specifically excluded from coverage under the AWA. Specifically, we suggest the following language:

All live birds held on the premises, purchased or otherwise acquired; sold or otherwise disposed of; or removed from the premises for delivery to a research facility, an exhibitor, or to another dealer, or for sale through an auction sale or to any person for use as a pet or breeding animal, shall be identified by an “official leg band” obtained at the expense of the dealer or exhibitor and attached to the animal’s right or left leg. “Official leg bands” should include the letters “USDA” and numbers identifying the state and dealer, research facility, or exhibitor, and numbers and/or letters identifying the animal.

Procedures for obtaining leg bands, dealing with lost leg bands, and the removal and disposal of leg bands should be consistent with the regulations set forth under sections 2.52, 2.54, and 2.55, respectively, for official identification tags for live dogs and cats.

Subpart F - Stolen Animals

As currently written this section applies to birds not bred for use in research. We recommend no change.

Subpart G – Records

(a) Recordkeeping

The original Laboratory Animal Welfare Act was passed to deal with the inhumane treatment of animals sold to research facilities and to address the inadequate care of animals at research facilities.⁸ Congressional hearings discovered that many of the

⁷ Highly invasive marking methods such as toe-clipping or web-punching cause suffering and should be prohibited.

⁸ See Pub. L. No. 89-544, 80 Stat. 359 (1966)

animals sold to research facilities came from “random sources,” including auctions, pounds, “free to good home” ads, and pet theft.

Complete documentation of the sources and destinations of the animals helps to reduce illegal and inhumane activities. Because many species of birds traded are physically indistinguishable from their wild counterparts, and because legal trade in wildlife species has proven to exacerbate illegal trade and poaching, it is especially important that legally obtained birds are accurately identified. Additionally, birds used in research but not bred for research are acquired in a number of ways, such as from the wild, pet breeders, wildlife centers, or farms.

Record keeping is recognized by the Model Aviculture Program (MAP) as “important because it provides tracking information on the many different aspects of bird farm management and thus provides a basis for decision-making regarding all aspects of bird farm management.”⁹The proposed requirements under this section should not therefore pose an economic disadvantage to bird dealers and exhibitors since record keeping is already considered a normal cost of business in the industry.

Specifically, we recommend that birds be added to the list of animals for which dealers and exhibitors must keep records and forms that fully and correctly disclose certain information, consistent with section 2.75, 2.76, 2.77, 2.78, 2.79, 2.80 of the AWA, including but not limited to the following:

- The name and address of the person from whom a bird was purchased or otherwise acquired¹⁰, whether or not the person is required to be licensed or registered under the Act;
- The USDA license or registration number of the person if licensed or registered under the Act;
- The vehicle license plate number and state, and the driver’s license number and state if not licensed or registered under the Act;
- The name and address of the person to whom a bird was sold or given¹¹ and that person’s license or registration number under the Act;
- The date a bird was acquired or disposed of, including by euthanasia;
- The official USDA leg band number assigned to a bird under the Act;
- A description of each bird, including the species, sex, date of birth or approximate age, color and any distinctive markings,¹² and the identification of

⁹ Model Aviculture Program Guidelines, available at <http://www.modelaviculture.org/Downloads/Guidelines/Guidelines.pdf> [hereinafter, “MAP”].

¹⁰ Cal. Health and Safety Code 122355.

¹¹ See MAP *supra* note 6.

¹² See *Id.*

parents by USDA leg band numbers, or other USDA-approved means;

- The method of transportation including the name of the initial carrier or intermediate handler or, if a privately owned vehicle is used to transport a bird, the name of the owner of the privately owned vehicle;
- The date and method of disposition of a bird, e.g., sale, death, euthanasia, or donation.

In addition, we suggest that official APHIS forms for “Birds on Hand” and “Record of Disposition of Birds” similar to those available for dogs and cats be developed and required for use by each bird dealer and exhibitor. Such records should accompany each shipment of any bird purchased or otherwise acquired by a dealer or exhibitor as is currently required for dogs and cats. Bird dealers and exhibitors should also be required to keep and maintain records of any offspring hatched while in their possession or under their control.¹³

(b) Disease Testing and Health Certificates

The mixing of birds, whether wild caught or captive bred, from different geographical ranges, coupled with the close confinement and high stress levels associated with transportation conditions, increases the susceptibility of transported birds to infectious organisms.

Avian chlamydiosis (*Chlamydia psittaci*), commonly known as psittacosis or “parrot fever,” can be transmitted through the air from birds to humans. While psittacosis has the potential to infect any bird species, it is particularly common in parrots, pigeons, and doves (Flammer 1997). However, most cases reported to the Centers for Disease Control and Prevention (an average of 81 cases per year) result from exposure to pet birds (CDC 2000). The risks to the non-bird-owning community is quite low unless infected birds, who can be asymptomatic carriers for many years and intermittently shed the infectious agent, are housed for public display or sale. While most people who contract psittacosis respond to oral antibacterial treatments, the disease can cause significant illness, especially for people with compromised immune systems (CDC 2000).

In addition, parrots in the U.S. are susceptible to Exotic Newcastle Disease (END). END affects all species of birds and is considered one of the most infectious diseases of poultry in the world, and also one of the costliest. According the USDA Agricultural Research Service, “The two most devastating END outbreaks in the U. S. have occurred in Southern California. The first of those occurred during 1971-1974, was traced to the importation and release of infected exotic pet birds, and cost over \$56 million in Federal funds to eradicate. The second occurred during 2002-2003, started in back yard holdings of illegally imported game fowl, and eventually spread to commercial poultry. Over \$180 million in Federal funds was expended to eradicate that outbreak.” (USDA 2016) It seems reasonable that those who produce, distribute, and exhibit birds

¹³ See Id.

should also be required to follow biosecurity protocols and provide assurances that their birds are free of disease prior to transport in commerce.

While the Wild Bird Conservation Act (WBCA) has restricted the number of birds imported into the United States for the pet trade, demand for birds as pets continues to drive the illegal smuggling of wild-caught birds into the U.S. According to Interpol (International Criminal Police Organization), the illegal trade in wildlife is second only to that of drugs. As stated earlier, because many legally imported or domestically produced birds are physically indistinguishable from illegally obtained or wild-caught birds, legal trade facilitates illegal trade and smuggling. Pearson *et al.* (1975) found that that 25 percent of groups of birds tested in US quarantines prior to the passage of the WBCA tested positive for END. Parrots represented over 75 percent of the positive individuals.

Clearly, ensuring that birds are properly identified by an official leg band and are accompanied by health certificates is crucially important to protecting against infectious diseases that could adversely affect public health, agriculture, or native wildlife populations.

We suggest that, in accordance with section 2.78 of the AWA, all birds covered under the AWA should be accompanied by a health certificate executed and issued by a licensed veterinarian. Such health certificates should state the following:

- (1) The licensed veterinarian inspected the bird on a specified date which should not be more than 10 days prior to the delivery of the bird for transportation.
- (2) When so inspected, the bird appeared to the licensed veterinarian to be free of any infectious disease or physical abnormality that would endanger the animal's or the public's health.
- (3) The bird tested negative for Exotic Newcastle Disease and Avian chlamydiosis.

Subpart H - Compliance with Standards and Holding Periods

The requirements under this section should also apply to birds not bred for use in research.

Subpart I - Miscellaneous

The requirements set forth under subsections 2.125 thru 2.131 of this subpart should apply to dealers, exhibitors, operators of an auction sale, intermediate handlers, and carriers in possession of birds not bred for use in research. In addition, regulated entities shall not sell or purchase unweaned birds of the order Psittaciformes.¹⁴

¹⁴ See 9 C.F.R. § 2.130 and section on "Prohibition on the Transportation of Unweaned Parrots in Commerce," *infra*.

C. **AWA Part III: Specifications For The Humane Handling, Care, Treatment, And Transportation Of Birds Not Bred For Use In Research**

As acknowledged by USDA/APHIS, the unique physiology and behavior of birds necessitate special considerations for their care and housing. Because the standards of care under Subpart F do not adequately meet the special requirements for birds, we recommend that a new subpart be drafted under the AWA to regulate the care and treatment of birds not bred for use in research. The USDA should adopt enforceable standards that don't rely solely on subjective assessments.

(1) **The Five Freedoms**

We recommend that in evaluating the components necessary for avian welfare, the USDA/APHIS consider using the concept of the Five Freedoms developed by the Farm Animal Welfare Council¹⁵ (1992) and used in the United Kingdom to evaluate animal welfare for many species in various settings. To our knowledge, this is the only systematic welfare evaluation criterion that has been successfully used in developing and implementing animal welfare regulations.

The Five Freedoms include 1) freedom from hunger, thirst, and malnutrition; 2) freedom from disease and injury; 3) freedom from physical and thermal discomfort; 4) freedom from fear, distress, and other negative psychological states; and 5) freedom to carry out most normal forms of behavior. The rationale and implications for considering each of these freedoms for birds are discussed below:

(a) Freedom from hunger, thirst, and malnutrition

This first freedom is further defined as the animal having “ready access to fresh water and a diet to maintain full health and vigour” (Farm Animal Welfare Council 1992). In order to achieve this goal, the nutritional requirements of the species must be adequately known and suitable foods be provided in adequate quantity to assure “full health and vigour.”

Given that it has been estimated that malnutrition accounts for up to 90 percent of all clinical conditions seen by avian practitioners (Harrison 1998), paying special attention to the quality and quantity of food provided to avian species is extremely important to ensure good welfare.

(b) Freedom from disease and injury

Adequate veterinary knowledge and the availability of veterinary care are necessary to fulfill this freedom. During the past 30 years, research by avian practitioners

¹⁵ The Farm Animal Welfare Council (FAWC) was established by the UK Government in 1979 to keep under review the welfare of farm animals on agricultural land, at market, in transit and at the place of slaughter; and to advise the Government of any legislative or other changes it considers necessary

and academics and the skills of avian veterinarians have improved considerably. Specialty avian practices have tailored diagnostic tests, emergency medical procedures, and anesthesia monitoring for birds (Flammer 1998, Altman 1998).

In addition, birds should not be subjected to potentially painful physical alterations for cosmetic or behavioral modification purposes that are of no direct benefit to the welfare of the bird. Such procedures may include but are not limited to pinioning, toe clipping, devoicing, and beak alterations.

(c) Freedom from physical and thermal discomfort

Meeting this freedom requires providing animals with environments that protect them from physical injury or weather extremes that could lead to considerable discomfort or illness. Like mammals, birds are warm-blooded and, as such, can regulate their own body temperature within a reasonable range. The feathers of a bird also serve a similar insulating function as fur on mammals. While it is advised that caretakers avoid extreme temperature changes and drafts (McCluggage & Higdon 1999), the requirements for accommodating the thermal needs of birds are relatively simple and not unlike the requirements for keeping cats, dogs, or small mammals such as guinea pigs or hamsters.

A more complex issue is determining appropriate cage size. Survival of the animal and successful breeding alone do not indicate that welfare is good; many animals are successfully bred under captive conditions that are found to have severe welfare problems (Fraser & Broom 1990). Graham (1998) reported that stress-related lesions in birds submitted for post-mortem examination are evidence of “a life beset by stress.” Graham further postulated that the stress seen in captive birds may be due in part to physical and behavioral restrictions imposed by standard captive environments. He wrote, “It would seem that the ideal enclosure for a captive bird is one of such size and equipped with such internal furnishings that the bird would have no awareness of its captivity. Anything less is a compromise and acceptance, on the part of the keeper, that the kept may or will be subject to the stresses imposed by a lesser or greater degree of restriction of its normal behaviors.”

(d) Freedom from fear and distress *and* freedom to express normal behavior

These freedoms require that animals be housed and treated in a manner that avoids mental suffering, which hinges significantly on their ability to engage in normal behaviors. Determining mental suffering in animals is difficult, although some mental distress is manifested physically, such as through self-mutilation or other outward displays of abnormal or stereotypic behavior, or by the stress lesions described by Graham (1998).

Distinguishing between normal and abnormal behavior is complicated because some behavior designated as “abnormal” in captive animals is actually derived from normal behavior that fails to serve a practical function in a captive situation. As previously mentioned, freedom to express normal behavior and freedom from distress

appear to be inextricably linked in captive birds (Sargent & Keiper 1967, Keiper 1969, King 1993, van Hoek & ten Cate 1998, Graham 1998, Garner et al 2003, Meehan et al 2003, Meehan et al 2004).

If an individual animal is having difficulty coping with his/her environment, or is failing to cope, then his/her welfare is poor; but if strongly preferred resources and opportunities for behavior are available, and normal behavior can be shown, then good welfare is indicated (Broom 1996). Stereotypic behavior is often considered an indicator of poor welfare (Mason 1991, Broom 1996). Stereotypies are abnormal repetitive, unvarying, and functionless behaviors that are often performed by captive and domesticated animals housed in barren or restricted environments but are mostly absent in the wild and are relatively infrequent in large, environmentally enriched enclosures (Field & Thomas 2000, Garner et al 2003).

Many captive birds exhibit stereotypic behavior as a result of inadequate environments. Our “species specific” recommendations below are designed to reduce stereotypy and other indicators of poor welfare by providing outlets for normal avian behavior.

(2) Recommended facility, operating, animal health, and husbandry standards for birds not bred for use in research

The following is the recommended language for a new subsection with specific recommendations for the humane handling, care, treatment, and transportation of avian species not bred for use in research under the AWA.

D. Housing facilities, general

- (a) For all accommodations, a notice containing a checklist of the key points relating to welfare must be prominently displayed at or near the entrance to each building or room and be amended accordingly. The checklist must include the following:
- (i) total floor area/cage size available to the birds and number of birds per enclosure;
 - (ii) total number of birds;
 - (iii) total number of drinkers and feeders per enclosure;
 - (iv) target air quality parameters for indoor facilities;
 - (v) lighting levels and regimes for indoor facilities;
 - (vi) emergency procedures, i.e., actions in the case of fire, flood, failure of automatic equipment, and when temperatures move outside acceptable limits; and,

- (vii) name and contact information for attending veterinarian.
- (b) The interior of any building, including the floor, to which birds have access must be designed, constructed, and maintained so that there are no sharp edges or protrusions likely to cause injury or distress to the birds.¹⁶
 - (c) Internal walls must be smooth, unobstructed, and constructed of a durable material capable of withstanding clean-out procedures.¹⁷
 - (d) Except where preservatives with an insecticidal role are used, birds must not come into contact with toxic fumes or surfaces from paints, wood preservatives, or disinfectants.¹⁸
 - (e) Flooring of cages or enclosures must allow for effective cleansing and disinfecting, preventing the significant build-up of parasites and other pathogens.¹⁹
 - (f) Provision must be made to ensure that birds have access to a thermally comfortable environment at all times so that heat/cold stress does not occur.²⁰
 - (g) The ventilation system and rate must be such to maintain the birds at a thermally comfortable temperature appropriate to their age and stage of growth.²¹
 - (h) Ventilation equipment must be maintained in good working order.²²
 - (i) Alarm systems must be installed where there is any risk of failure of ventilation equipment.²³

¹⁶ See RSPCA, Welfare Standards for Chickens (July 2017) [hereinafter “RSPCA”].

¹⁷ See id.

¹⁸ See id.

¹⁹ See id.

²⁰ See id.

²¹ See id.

²² See id.

²³ See id.

- (j) Provisions must be made to keep all birds active by enriching the environment.²⁴ (See species-specific requirements for Environmental Enrichment below.)
- (k) Unless otherwise directed by a veterinarian, birds are provided sufficient opportunity and space to move about freely and normally, and to exercise choice in location so as to reduce stress and maintain good physical condition²⁵.
- (l) For birds housed indoors on solid floors or in outdoor pens with non-earth flooring, floors must be completely covered in litter. Birds must have access to the litter area at all times.²⁶ The litter must
 - (i) be of a suitable material and particle size²⁷;
 - (ii) be managed to maintain it in a dry, friable condition (and replaced where necessary)²⁸;
 - (iii) be maintained at an average minimum depth of 5cm to allow for the dilution of feces²⁹;
 - (iv) allow birds to dust bathe if appropriate for the species³⁰;
 - (v) be topped up daily, if necessary, with fresh litter³¹;
 - (vi) be managed hygienically;³²
 - (vii) fresh litter must be stored indoors in hygienic, rodent-proof premises; and,

²⁴ See id.

²⁵ Global Federation of Animal Sanctuaries Standards for Birds (2019) available at <https://www.sanctuaryfederation.org/accreditation/standards/> [hereinafter “GFAS”].

²⁶ See RSPCA supra note 13.

²⁷ See id.

²⁸ See id.

²⁹ See id.

³⁰ See id.

³¹ See id.

³² See id.

(viii) be non-toxic.

E. Indoor Housing Facilities

Light quality and quantity are critically important for some species at certain times of the year for normal physiological functioning. Appropriate light/dark regimes for each species, life stage, and time of year should be known before animals are acquired. The following is the proposed language:

1. *Lighting Requirement.*
 - a. The lighting system in indoor bird housing facilities must provide in each period of 24 hours:
 - (i) a minimum period of 8 hours light, by the provision of either artificial light or access to daylight;³³
 - (ii) a minimum period of 6 hours and a maximum of 12 hours continuous darkness, except when the natural period of darkness is shorter.³⁴
 - b. Lighting patterns in all houses must be recorded and records must be made available to USDA inspectors. Daytime lighting levels must allow birds to see and be inspected without difficulty.³⁵ When possible, natural daylight should be provided. Full-spectrum lighting (UVB, UVA, visible light, and infrared) shall be used when natural lighting is not feasible.³⁶
2. *Air Quality and Thermal Environment.* Aerial contaminants shall not reach a level at which they are noticeably unpleasant to a human observer or are hazardous to the avian respiratory system. Ventilation systems, natural or force, must be designed to maintain air quality.³⁷

F. Outdoor Housing Facilities

- a. *Acclimation.* Only birds that are acclimated, as determined

³³ See *id.*

³⁴ See *id.*; MINN. STAT. § 346.40 (2019)

³⁵ Cal. Health and Safety Code 122351; MINN. STAT. § 346.40 (2019)

³⁶ See GFAS *supra* note 22

³⁷ See *id.*

by the attending veterinarian, to the prevailing temperature and humidity at the outdoor housing facility during the time of year they are at the facility, and who can tolerate the range of temperatures and climatic conditions known to occur at the facility at the time of year without stress or discomfort, may be kept in outdoor facilities.³⁸

- b. *Shelter from the elements.* Outdoor housing facilities for birds must provide adequate shelter from the elements at all times. It must provide protection from the sun, all forms of precipitation, wind, and cold, and any other weather conditions that may occur.³⁹ The shelter must safely provide heat⁴⁰ for the birds as directed by the attending veterinarian and in accordance with the needs of the species and generally accepted professional and husbandry practices.
- c. *Capacity: multiple shelters.* The shelter must be sufficiently large to comfortably provide protection for each bird housed in the facility. If aggressive or dominant animals are housed in the facility with other animals, there must be multiple shelters or other means to ensure protection for each bird housed in the facility.⁴¹

G. Primary Enclosures

Any enclosure in which a bird is housed or exercised must be constructed and maintained so as to prevent injury to the animal and to promote the health and safety of the animal and the public.

- a. All enclosure materials, including litter or substrate, must be non-toxic.
- b. Any enclosure in which a bird is housed or exercised must be constructed and maintained to provide protection from extremes of climate. Birds must have access to heated or cooled areas when ambient the temperature falls outside the acceptable range for the species housed.⁴²
- c. In all instances, any enclosure in which a bird is housed must

³⁸ See 9 C.F.R. § 3.78(a).

³⁹ See *id.* § 3.78(b).

⁴⁰ See *id.*

⁴¹ See *id.* § 3.78(c).

⁴² See GFAS, *supra* note 22.

provide sufficient space for the animal to experience normal body movements without having to make contact with the sides or top of the enclosure and without obstruction, interference, or impediment by the presence of food and water bowls. "Normal bodily movements" shall include the ability to fly, walk, climb, or otherwise move about. Each bird in an enclosure must be able to simultaneously and free from obstruction spread its wings and/or perch or stand in a normal position.⁴³

- d. Each enclosure shall have at least one form of enrichment appropriate for the species, above and beyond normal cage furnishings (such as perches).⁴⁴
- e. Any enclosure in which a bird is housed or exercised must be constructed and maintained to contain the bird and to prevent the entry of any other animal.⁴⁵
- f. If appropriate for the species, a variety of perch sizes of sufficient quantity, placement, and strength and texture shall be provided to allow all birds within the enclosure to simultaneously perch or roost above ground without difficulty due to crowding or social aggression.⁴⁶ Perches shall be placed so as to facilitate flight and other natural behaviors appropriate to the species.⁴⁷
- g. Unless otherwise directed by a veterinarian, birds are provided sufficient opportunity and space to move about freely and normally, and to exercise choice in location to reduce stress and maintain good physical condition.⁴⁸

H. Feeding

Feeding patterns of wild birds vary widely and consideration should be given to the nature of the food, the way in which it is presented, and the times at which it is made available. Diets that will meet the nutritional requirements of each species and promote natural foraging behavior should be researched and formulated before any animals are obtained. Part of the diet or additional treats

⁴³ See MAP, supra note 6; Cal. Health and Safety code 122350 & 122352.

⁴⁴ Cal. Health and Safety code 122352.

⁴⁵ See id.

⁴⁶ See id. And GFAS supra note 22.

⁴⁷ See GFAS supra note 22.

⁴⁸ See id.

should be scattered on the enclosure floor to encourage foraging wherever appropriate. Dietary enrichment benefits birds, so additions such as fruit, vegetables, seeds, or invertebrates should be considered where appropriate even if it is not possible to feed birds on their “natural” diet. Where new foods are introduced, the previous diet should always be available so that birds will not go hungry if they are unwilling to eat new foods.

As some species, particularly granivores, require grit to digest their food, these should be provided with appropriately sized grit. Birds will select grit of the size they prefer if material of various sizes is provided. The grit should be renewed regularly. Dietary calcium and phosphorus should also be provided for birds in an appropriate form and at an appropriate level for each life stage, to prevent nutritional bone disease. Food can be supplied in feeders that are either attached to the side of the enclosure or standing on the enclosure floor. Space occupied by floor feeders is not available to the birds and should not be included in calculations of pen area. Wall mounted feeders do not occupy floor space but should be designed and fitted with care so that birds cannot become trapped underneath them. Chicks of some species (for example, domestic turkeys) may need to be taught to feed and drink to avoid dehydration and potential starvation. Food for all species should be clearly visible and provided at several points to help prevent feeding problems. Recommended language is as follows:

- a. Birds must be fed a wholesome diet appropriate to their species that is fed to them in sufficient quantity to maintain them in good health and to satisfy their nutritional needs.⁴⁹
- b. Dealers, exhibitors, and research facilities must have a written record of the nutrient content of the feed, as declared by the feed producer, and make it available to USDA inspectors, and in the case of research facilities, to officials of any pertinent funding agency.⁵⁰
- c. All treatments, including medicated feed given to birds, must only be used under close supervision of the attending veterinarian and must be recorded.⁵¹
- d. Food must not be allowed to remain in a contaminated or stale condition.⁵²
- e. For birds housed in groups, there must be a minimum of 1” of

⁴⁹ See MAP, supra note 6 and GFAS supra note 22.

⁵⁰ See RSPCA supra note 13.

⁵¹ See id.

⁵² See MAP supra note 6.

feed trough space per bird⁵³ or as appropriate to the age, species, and strain to prevent competition and aggression.⁵⁴

I. Watering

- a. Birds must have continuous access to an adequate supply of clean, fresh drinking water, except when otherwise required by the attending veterinarian.⁵⁵
- b. Water must not be allowed to remain in a contaminated or stale condition.⁵⁶
- c. Where birds are kept in a flock situation, the minimum number of drinkers that must be provided are as follows:

Bell - 1 per 50 birds

Nipple - 1 per 10 birds⁵⁷

Cup - 1 per 28 birds⁵⁸

J. Compatible Grouping and Separation/Quarantine

- a. If birds are housed together, they must be compatible. Birds shall not be housed near animals that interfere with their health or cause them discomfort.⁵⁹
- b. As appropriate to the species, captive birds must be given physical or visual access to other birds except when they are temporarily maintained in isolation for such purposes as medical treatment or training and given special attention,⁶⁰

⁵³ See RSPCA supra note 13.

⁵⁴ See GFAS supra note 32.

⁵⁵ See id.

⁵⁶ See RSPCA supra note 6.

⁵⁷ See id.

⁵⁸ See id.

⁵⁹ See 9 C.F.R. § 3.133; and Cal. Health and Safety Code 122352. Most species of bird are social for at least part of the year and highly sensitive to family relationships, so the formation of appropriate, stable, harmonious groups should be given a high priority. As there are significant species variations, the optimal composition of groups, and at what stage in the birds' lives these should be created should be known before groups are formed and procedures are undertaken.

⁶⁰ See 9 C.F.R. § 3.109.

or where such access would be detrimental to the birds' health and well-being.⁶¹

- c. New birds arriving at a research facility, dealer, exhibitor's breeding facility, collection, or exhibit shall be quarantined for a minimum of 45 days⁶² in a distinctly separate area from birds presently in the facility/collection.⁶³
- d. Upon arrival, all birds shall undergo quarantine according to protocol as established by the attending veterinarian. All birds shall be tested for Exotic Newcastle Disease, avian chlamydiosis, and other avian diseases as recommended by the attending veterinarian.

K. Sanitation

- a. *Cleaning of primary enclosures:* Excreta and food waste must be removed from inside each indoor primary enclosure daily and from underneath them as often as necessary to prevent an excessive accumulation of feces and food waste, to prevent the birds from becoming soiled, and to reduce disease hazards, insects, pests, and odors. Dirt floors, floors with absorbent bedding, and planted areas in primary enclosures must be spot cleaned with sufficient frequency to ensure all animals the freedom to avoid contact with excreta, or as often as necessary to reduce disease hazards, insects, pests, and odors. When pressure stream or water is used to clean the primary enclosure, whether by hosing, flushing, or other methods, birds must be removed, unless the enclosure is large enough to ensure the animals will not be harmed, wetted, or distressed in the process. Perches, bars, shelves, and enrichment materials must be kept clean and replaced when worn.⁶⁴
- b. *Pest Control:* An effective program for control of insects and

⁶¹ Single-housing of birds for even short periods can be a significant stress factor. Therefore, birds should not be single-housed unless justified on welfare or veterinary grounds. Single-housing on experimental grounds should be determined in consultation with the animal technician and with the competent person charged with advisory duties in relation to the well-being of the animals.

⁶² See MAP supra note 6.

⁶³ See Id.

⁶⁴ See 9 C.F.R. § 3.84(a).

external parasites⁶⁵ affecting birds must be established and maintained so as to promote the health and well-being of the birds in enclosures.

- c. *Sanitization of primary enclosures and food and water receptacles*: Indoor primary enclosures must be sanitized at least once every 2 weeks, or more often if needed to prevent a disease hazard and an excessive accumulation of dirt, debris, waste, food waste, and excreta.⁶⁶ Hard surfaces of primary enclosures and food and water receptacles must be sanitized using one of the following methods:
- (i) Live stream under pressure;⁶⁷
 - (ii) Washing with hot water (at least 180 degrees F (82.2 degrees C)) and soap or detergent such as in a mechanical cage washer;⁶⁸
 - (iii) Washing all soiled surfaces with appropriate detergent solution or disinfectants, or by using a combination of detergent disinfectant products that accomplish the same purpose, with a thorough cleaning of the surfaces so as to remove all organic material and mineral build-up, and to provide sanitization, followed by a clean water rinse.⁶⁹

Primary enclosures containing material that cannot be sanitized using the methods described above, such as sand, gravel, dirt, absorbent bedding, wood, grass, or planted areas, must be sanitized by removing or replacing the contaminated material as necessary to prevent odors, disease, pests, insects, and vermin infestation.⁷⁰

L. Avian Health

- a. Dealers, research facilities, and exhibitors of birds shall have an attending veterinarian with expertise in avian medicine

⁶⁵ See *id.* § 3.84(d).

⁶⁶ See *id.* § 3.84(b).

⁶⁷ See *id.*

⁶⁸ See *id.*

⁶⁹ See *id.*

⁷⁰ See *id.*

who shall provide adequate veterinary care to assure all birds are maintained in good health and physical condition, and are free of pain and distress.

- b. Dealers, research facilities, and exhibitors shall have a written Veterinary Care Program developed with their attending veterinarian and shall keep detailed records and health certificates for all birds in their possession.
- c. New birds arriving at a dealer, research facility, or an exhibitor's breeding facility, collection, or exhibit shall be quarantined for a minimum of 45 days⁷¹ in a distinctly separate area from birds presently in the facility/collection.⁷²
- d. Upon arrival, all birds shall undergo quarantine according to protocol as established by the attending veterinarian. All birds shall be tested for exotic Newcastle disease, Psittacosis (Chlamydiosis) and other contagious, disease-causing pathogens as recommended by a licensed (or the attending) veterinarian.
- e. No breeding or production method shall compromise the health, well-being, or normal development of any individual bird. Prohibited, potentially injurious practices include but are not limited to the following: excessive egg production, poor hygiene or disease control, insufficient monitoring of parents or offspring in a nest or nest box, forced weaning prior to the species' normal developmental weaning age, permitting reproduction by a pair in which one or both parents have known medical or behavioral conditions, or lack of sufficient nurturing or appropriate socialization of neonates, chicks, and juveniles.
- f. Birds shall not be subjected to potentially painful physical alterations for cosmetic or behavioral modification purposes that are of no direct benefit to the welfare of the bird. Such procedures include but are not limited to pinioning, toe clipping, devoicing, and beak alterations.

M. Employees and Attendants

- a. Every licensee subject to AWA regulations (9 CFR parts 1, 2, and 3) who maintains birds must have enough employees

⁷¹ See MAP supra note 6.

⁷² See id.

to carry out the level of husbandry practices and care required in this subpart. The employees who provide husbandry practices and care or handle birds must be trained and supervised by an individual who has the knowledge, background, and experience in proper husbandry and care of the species of birds on the premise to supervise others. The employer must demonstrate that the supervisor has the requisite qualifications to supervise said employees.⁷³

- b. Training of birds shall be done by or under the direct supervision of experienced trainers without physical punishment or abuse being used or inflicted upon the birds.⁷⁴
- c. The employees who provide husbandry practices and care, or who handle birds must be notified of the potential risks of transmission of avian zoonoses. Written notification of such risks must be posted in a designated employee notification area.

(3) Recommended species-specific standards for birds not bred for use in research

Species within the class Aves differ greatly in size, morphology, diet, and social structure. For this reason, it is impossible to present one set of minimum housing standards for all avian species. Below we have divided bird species into the following groups: 1) Terrestrial Birds, 2) Aquatic and Semi-Aquatic Birds, 3) Birds of Prey, 4) Arboreal/Perching Birds, and 5) Parrots. In this section, we have defined the minimum requirements for each group to ensure that the space and internal furnishings within their enclosures facilitate as much natural and normal behavior as possible.

We encourage the USDA to require that regulated entities develop, document, and follow a plan for environmental enhancement appropriate to the species to promote avian well-being. Enriching factors include, but are not limited to, environmental objects, dietary enrichment, social stimulation, weather improvement, cessation of stress and release from confinement (Fraser and Broom 1997). Furnishing enclosures with natural plantings can help reduce stress by providing opportunities for hiding, perching, and foraging behaviors (NWRA & IWRC 2000).

- **Terrestrial Birds:** Superorder Paleognathae (Tinamous, Rheas, Ostrich, Emu, Cassowaries, Kiwis), Order Galliformes (Chickens, Pheasants, Quail, Curassows), Suborder Pterocli (Sandgrouse), and Family Neomorphidae (Ground-Cuckoos).

This group contains terrestrial birds that typically occupy large home ranges in their native habitats and spend much of their time foraging for food.

⁷³ See 9 C.F.R. § 3.108.

⁷⁴ See Id.

These birds also perform dust bathing behavior as a form of bodily care in addition to preening (Fraser & Broom 1990). Through dust bathing, the bird is able to apply attention to plumage not accessible by the beak, by friction against a suitable environmental substrate (Fraser & Broom 1990). Some birds in this group, particularly those in the order Galliformes, also spend some of their time perching or roosting above ground. In order to meet the special needs of terrestrial birds, we suggest the following language:

Environmental enhancement to promote physical and psychological well-being for terrestrial birds

Dealers, exhibitors, and research facilities in possession of birds under this section must provide the following environmental enhancements to promote the physical and psychological well-being of terrestrial bird species: (a) *Flooring*. At least 50 percent of the enclosure space must consist of solid flooring of sufficient quality and placement to enable all birds within the enclosure to simultaneously stand free of contact from wire mesh or slated flooring. (b) *Perching structures*. When appropriate for the species, perches of sufficient quantity, placement, strength, and size shall be provided to allow all birds within the enclosure to simultaneously perch or roost above ground without difficulty due to crowding or social aggression. (c) *Substrate for dust bathing*. Birds must have access at all times to litter, sand, or other substrate of sufficient particle size, depth, and area to encourage and accommodate dust bathing behavior. (d) *Access to outdoors*. All bird species in this section shall have regular access to an outdoor enclosure or environment except when isolated for quarantine, transport, or medical purposes. (e) *Enrichment*. Enclosures shall be furnished with some sort of enrichment material that provides opportunity for hiding, perching, or foraging behaviors appropriate to the species.

• **Aquatic and Semi-aquatic Birds:** Orders Sphenisciformes (Penguins), Order Podicipediformes (Grebes), Gaviiformes (Loons), Procellariiformes (Albatrosses, Shearwaters), Pelecaniformes (Pelicans, Cormorants, Tropicbirds, Boobies), Anseriformes (Waterfowl), Phoenicopteriformes (Flamingos), Gruiformes (Cranes, Rails), Ciconiiformes (Hérons, Storks, Ibises), and Charadriiformes (Shorebirds, Gulls, Puffins) except Suborder Pterocli (Sandgrouse)

This group contains aquatic or semi-aquatic birds who spend much of their time walking or resting on land, or wading, swimming, or diving in large bodies of water. As such, the availability of clean water sufficient for bathing and wading is essential for the welfare of these birds as well as solid surfaces to prevent foot abrasions and discomfort (Ornithological Council 1997).

Preening is an important behavioral pattern in all birds and in most aquatic and semi-aquatic birds it involves immersion in water. Preening movements that remove foreign bodies from the feathers and distribute oil from the uropygial

gland above the tail often follows immersion in water. This activity is necessary for waterproofing and heat regulation in many aquatic and semi-aquatic birds. The key elements of bathing activities are the immersion of the head and wings in water and shaking water over the body (European Convention for the Protection of Animals, 1999).

Lack of access to water can contribute to ophthalmia, a low-grade infection in one or both eyes often called ‘sticky eye’ (Holderread D 1991). According to the UK government’s Ministry of Agriculture, if ducks cannot immerse their heads in water, “their eyes get scaly and crusty and, in extreme cases, blindness may follow” (Ministry of Agriculture UK 1986).

In recognition of the importance of water to aquatic birds, the European Union’s Standing Committee of the European Convention for the Protection of Animals for Farmed Purposes states: “Access to an outside run and water for bathing are necessary for ducks, as water birds, to fulfill their biological requirements. Where such access is not possible, ducks must be provided with water facilities...designed to allow water to cover the head and be taken up by the beak so that the duck can shake water over the body without difficulty. The ducks should be allowed to dip their heads under water.” (Council of Europe Standing Committee, 1999). The Ornithological Council also recognized the importance of water for aquatic birds in its “Guidelines to the Use of Wild Birds in Research”: “Maintenance of waterproof plumage is fundamental to the comfort and health of all aquatic birds and requires access to absolutely clean water. Aquatic birds must be allowed to bathe at least once a day. Diving or pelagic birds require cages or enclosures that allow swimming as well as exit from the water.”

Aquatic birds are highly susceptible to wounds and infections of the feet and legs resulting primarily from pressure sores developed when forced to stand for long periods on hard flooring (Ornithological Council). Wire flooring may cause abrasions, bruises, and tears in the hock and shank and the footpad that commonly result in painful staphylococcal and streptococcal joint infections (Scott & Dean 1991). Slatted floors are also implicated in increasing leg deformities (Scott & Dean 1991). Considering the above information, we suggest the following language:

Environmental enhancement to promote physical and psychological well-being for aquatic and semi-aquatic birds

Dealers, research facilities, and exhibitors in possession of birds under this section must provide the following environmental enhancements to promote the physical and psychological well-being of the aquatic and semi-aquatic bird species: (a) *Water sufficient for bathing*. Dealers, research facilities, and exhibitors must provide water sufficient for bathing and/or designed to allow water to cover the head and be taken up by the beak so that the bird can shake water over the body without

difficulty. Birds should be allowed to dip their heads under water.⁷⁵ Diving or pelagic birds require enclosures that allow swimming as well as exit from the water.⁷⁶ (b) *Solid Flooring*. Enclosure floors must be lined with some

resilient material, litter or other padding of sufficient quantity and placement to enable all birds within the enclosure to stand and move about comfortably and to prevent the development of foot sores and leg deformities.⁷⁷ (c) *Access to outdoors*. All birds shall have regular or seasonal access to an outdoor enclosure or environment except when isolated for quarantine, transport, or medical purposes. (d) *Enrichment*. Enclosures shall be furnished with some sort of enrichment material that provides opportunity for hiding, perching, or foraging behaviors appropriate to the species.⁷⁸

- **Birds of Prey:** Orders Falconiformes (Osprey, Hawks, Falcons, Eagles, New World Vultures) and Strigiformes (Owls)

This group contains birds of prey who spend much of their time perching and flying (except for burrowing owls) while hunting for prey. In order to meet the special needs of birds of prey, we suggest the following language:

Environmental enhancement to promote physical and psychological well-being for birds of prey

Dealers, research facilities, and exhibitors in possession of birds under this section must provide the following environmental enhancements to promote the birds' physical and psychological well-being: (a) *Perching structures*. A variety of perch sizes of sufficient quantity, placement, and strength shall be provided to allow all birds within the enclosure to simultaneously perch or roost above ground without difficulty due to crowding or social aggression. Perch type must be appropriate to the species and provide good footing. At least two perches should be placed in each cage, preferably at different heights and different angles. More than one surface substrate should be offered on the perches in each cage. Perches can be natural branches, wood doweling or plastic piping (or the equivalent) covered by ¼-inch-pile Astroturf™, hemp, cocomat, or indoor/outdoor carpeting. Perches should have some

⁷⁵ See Council of Europe Recommendations concerning domestic ducks and Ornithological Council, Guidelines to the Use of Wild Birds in Research [hereinafter "Ornithological Council"]

⁷⁶ See Ornithological Council.

⁷⁷ See *id.*

⁷⁸ See GFAS *supra* note 22.

degree of “give” for landings.⁷⁹(b) *Access to outdoors*. All birds of prey shall have regular access to an outdoor enclosure or environment except when isolated for quarantine, transport, or medical purposes. (c) *Enrichment*. Enclosures shall be furnished with some sort of enrichment material that provides opportunity for hiding, perching, or foraging behaviors appropriate to the species.⁸⁰

• **Arboreal/Perching Birds:** Orders Passeriformes (Finches, Canaries, Corvids), Columbiformes (Pigeons and Doves), Coliiformes (Mousebirds), Musophagiformes (Turacos), Caprimulgiformes (Nightjars, Frogmouths), Apodiformes (Swifts, Hummingbirds), Trogoniformes (Trogons, Quetzals), Coraciiformes (Kingfishers, Hornbills), Piciformes (Woodpeckers, Toucans), and Cuculiformes (Cuckoos) except family Neomorphidae (Ground-cuckoos).

This group contains birds who naturally spend much of their time perching on trees and other above-ground structures, flying, and foraging for food. Many birds in this group are also highly social. Deprivation of these natural behaviors may lead to stereotypic behavior and poor welfare. In particular, birds in the order Passeriformes have been shown to exhibit a high level of stereotypic behavior in captivity (Keiper 1969, Sargent & Keeper 1967, Garner et al 2003).

“Spot picking” and “route tracing” are two common repetitive stereotypies in caged Passeriformes (Keiper 1969, Sargent & Keeper 1967, Garner et al 2003). In *spot picking*, a bird will repeatedly touch the tip or side of the bill to a particular spot - either an object or a body part. In *route tracing*, a bird will follow a precise and invariable route within its cage. This behavior is similar to “pacing” often seen in caged mammals (Sargent & Keeper 1967).

Sargent & Keiper (1967) found that stereotypy levels were significantly reduced in canaries who were provided opportunity for social interaction with other canaries, and that interaction with another species had no effect (Sargent & Keiper 1967), suggesting that deprivation of social interaction with same species can contribute to or cause poor welfare. Keiper (1969) found that canaries who were forced to work for food compared to those who had free access to food showed a reduction in spot picking behavior. Route tracing behavior was linked to the size of the enclosure, with significant reduction in the behavior achieved when birds were housed in an aviary. Interestingly, the housing of birds in flight cages, which measured more than twice the size of standard cages, did not significantly reduce route-tracing behavior (Keiper 1969).

In order to meet the special needs of the birds in this section, we suggest

⁷⁹ International Wildlife Rehabilitation Council and the National Wildlife Rehabilitators Association Minimum Standards for Wildlife Rehabilitation(3rd ed. 2000)., *available at* https://cdn.ymaws.com/www.nrawildlife.org/resource/resmgr/min_standards/minimumstandards3rdedition.pdf [hereinafter “Wildlife Rehab”]

⁸⁰ See GFAS supra note 22.

the following language:

Environmental enhancement to promote physical and psychological well-being of arboreal/perching birds

Dealers, research facilities, and exhibitors in possession of birds under this section must provide the following environmental enhancements to promote the birds. physical and psychological well-being: (a) Perching structures. A variety of perch sizes of sufficient quantity, placement, and strength shall be provided to allow all birds within the enclosure to simultaneously perch or roost above ground without difficulty due to crowding or social aggression.⁸¹ Perch type shall be appropriate to the species and provide good footing. To prevent slipping (splay leg) and/or bumblefoot it may be necessary to wrap perches with a non-abrasive, non-slip surface such as rope or cloth, not sandpaper.⁸² (b) *Regular access to water for bathing*. All birds shall be provided on a regular basis with water or water mist of sufficient quantity to provide the birds an opportunity to wet their feathers for enrichment and proper feather maintenance. (c) *Access to outdoors/natural light*. All birds shall have regular or seasonal access to an outdoor enclosure or be provided with regular access to natural light via outside windows, except when isolated for quarantine, transport, or medical purposes. (d) *Enrichment*. Enclosures shall be furnished with some sort of enrichment material that provides opportunity for hiding, perching, or foraging behaviors appropriate to the species.⁸³

• **Parrots:** Order Psittaciformes (Parakeets, Macaws, Amazons, Cockatoos, Lories, Lorikeets, Conures, Parrotlets, Lovebirds, Eclectus)

Parrots are a well-defined group of birds that are so distinctive (small to medium sized with stout, hooked bills and a moveable upper mandible) that their affinities to other bird taxonomies remain unclear (Gill 1990). Parrots are gregarious flock and flight-adapted arboreal birds (except for the flightless Owl parrot and Kakapo). Because of their taxonomic uniqueness, documented intelligence, and popularity in domestic markets, this group of birds requires special consideration under AWA regulations. We further assert that the transportation and sale in commerce of unweaned parrots should be explicitly prohibited under the Act. Justification for this suggested prohibition is discussed below under “Prohibition on the Transportation of Unweaned Parrots in Commerce.”

⁸¹ See Cal. Health and Safety code 122352.

⁸² See Wildlife Rehab supra note 75.

⁸³ See id.

Parrots are exceptionally social birds. In the wild, parrots typically travel in large flocks, flying miles a day in search of a wide variety of food, and may congregate into nightly roost of hundreds or even thousands of social conspecifics (Gilardi & Munn 1998). Stamps et al (1990) postulated that the formation and maintenance of social relationships within a flock may be as critical for survival as predator avoidance and foraging efficiency, and Birchall (1990) reported that wild parrots may use 90 percent of their time foraging for food and preening their partners.

The extent to which animals are positively or negatively affected by their captive environments may depend on their cognitive abilities (Held *et al* 2001). Parrots have been shown to have high-level cognitive abilities (Pepperberg 1999) and have been likened to primates and human toddlers in terms of their intelligence and their psychological and social needs (Birchall 1990, Davis 1998, Pepperberg 1999). These capabilities may be an important factor in the apparent high susceptibility of parrots to developing abnormal behavior in captivity (Birchall 1990).

a

Meehan *et al* (2003 and 2004) showed that environmental enrichment, appropriate foraging substrates, and increased physical complexity of the enclosure significantly reduced the development and performance of oral (feather-picking) and/or locomotor stereotypies in parrots. Meehan *et al* (2002) found that compared to solitary housing, the welfare of parrots caged in isosexual pair housing was positively affected by eliminating the development of stereotypy without jeopardizing the ability of parrots to relate positively with humans. In order to meet the special needs of parrots we suggest the following language:

Environmental enhancement to promote physical and psychological well-being of parrots

Dealers, research facilities, and exhibitors in possession of birds under this section must provide the following environmental enhancements to promote the birds. physical and psychological well-being: (a) *Perching structures*. A variety of perch sizes of sufficient quantity, placement, and strength shall be provided to allow all birds within the enclosure to simultaneously perch or roost above ground without difficulty due to crowding or social aggression.⁸⁴Perches shall be placed so as to facilitate flight and other natural behaviors appropriate to the species.

Perch type shall be appropriate to the species and provide good

⁸⁴ See Cal. Health and Safety code 122352

footing. Because long-term use of metal or plastic perches increases the incidence of bumble-foot due to slippage, it may be necessary to wrap perches with a non-abrasive, non-slip surface such as rope or cloth, not sandpaper.⁸⁵ Whenever possible, natural branches of different sizes should be used.⁸⁶(b) *Regular access to water for bathing.* All birds shall be provided on a regular basis with water or water mist of sufficient quantity to provide the birds an opportunity to wet their feathers for enrichment and proper feather maintenance. (c) *Access to outdoors/natural light.* All birds shall have regular or seasonal access to an outdoor enclosure or be provided with regular access to natural light via outside windows, except when isolated for quarantine, transport, or medical purposes. (d) *Social Grouping.* Special provisions must be made to address the social needs of species of parrots known to exist in social groups in nature.⁸⁷ (e) *Enrichment.* Enclosures shall be furnished with some sort of enrichment material that provides opportunity for hiding, perching, or foraging behaviors appropriate to the species.⁸⁸

- (2) Recommended transportation standards for birds not bred for use in research

It is well recognized that transportation is a stressful experience for animals, particularly if the animals are very young or have little or no experience being transported (Grandin 1997). Birds are especially fragile. Climatic changes and stress during transport can cause significant mortality even when transported carefully and legally (Knights and Curry 1990, MacCaluim *et al.* 2003). The following are recommended transportation standards:

N. Transport and Handling

- a. Birds may be transported only in containers constructed of a smooth, durable material. Containers must:
 - (i) be suitable for the species being shipped;
 - (ii) be constructed to prevent escape or chewing of the container by the bird that may be injurious to the health of the bird;

⁸⁵ See Wildlife Rehab *supra* note 75

⁸⁶ See GFAS *supra* note 22.

⁸⁷ See 9 C.F.R. § 3.81.

⁸⁸ See Wildlife Rehab *supra* note 75; GFAS *supra* note 22; Cal. Health and Safety code 122352

- (iii) have ventilation on only one side to prevent cross drafts;
 - (iv) provide enough space for the bird to stand up, turn around, and obtain necessary food, water, and roosting space;
 - (v) have fresh food and water available to the bird at all times if the shipping period exceeds four hours⁸⁹; and,
 - (vi) if appropriate for the species, provide a secure perching structure that allows all birds to perch in a comfortable position and provide at minimum a 1”clearance from the floor.
- b. *Temperature.* The ambient temperature in an animal holding area containing birds must not fall below 45 degrees F (7.2 degrees C) or rise above 85 degrees F (29.5 degrees C) for more than four consecutive hours at any time birds are present. The ambient temperature must be measured in the animal holding area outside any primary enclosure containing a bird at a point not more than 3 feet (0.91 m) away from an outside wall of the primary enclosure, and approximately midway up the side of the enclosure,⁹⁰ by the carrier, intermediate handler, or a person transporting birds who is subject to the Animal Welfare regulations (9 CFR parts 1,2, and 3).
- c. *Shelter.* Any person subject to the Animal Welfare regulations (9 CFR parts 1,2, and 3) holding a bird in an animal holding area must (a) provide shelter from sunlight and extreme heat; (b) provide shade to protect birds from the direct rays of the sun; and, (b) provide shelter from rain or snow to allow birds to remain dry during precipitation.⁹¹
- d. *Handling.* (a) Any person handling a primary enclosure containing a bird must use care and must avoid causing physical harm or distress to the bird. (b) A primary enclosure containing a bird must not be placed on unattended conveyor belts, or on elevated conveyor belts, such as baggage claim conveyor belts and inclined ramps that lead to baggage claim

⁸⁹ MINN. STAT. § 346.40 (2019)

⁹⁰ See 9 C.F.R. § 3.18 (d)

⁹¹ See id.

areas, at any time; except that a primary enclosure may be placed on inclined conveyor ramps used to load and unload aircraft if an attendant is present at each end of the conveyor belt. (c) A primary enclosure containing a bird must not be tossed, dropped, or needlessly tilted, and must not be stacked in a manner that may reasonably be expected to result in its falling. It must be handled and positioned according to the written instruction and arrows on the outside of the enclosure.⁹²

O. Prohibition on the Transportation of Unweaned Parrots in Commerce

Unweaned birds are at an even greater risk of succumbing to the stress and perils of transport than adult birds for the reasons discussed below. Because they lack mature feathers, unweaned birds have greater difficulty regulating and maintaining appropriate body temperature than adult birds. Young birds exposed to incorrect ambient temperatures are much more susceptible to bacterial and fungal infections than adult birds (Wissman). According to Margaret A. Wissman DVM, D.A.B.V.P, .Any infections that can cause disease in an adult bird can also do so in baby birds. Because young birds do not yet possess a fully functioning immune system, most diseases may cause more serious disease than that found in adults."⁹³ Dr. Wissman lists the following most common and serious diseases affecting baby birds exposed to stress or otherwise improper husbandry:

- Chlamydiosis (Psittacosis, Parrot Fever), caused by the organism *Chlamydia psittaci*, can cause serious disease in unweaned birds. Left untreated, it can result in permanent damage to the lungs, air sacs, and liver.
- Bordetella avium, a bacterium that causes an infection of the temporomandibular joint of a baby bird (most often seen in cockatiels), can result in a condition known as "lockjaw." When the jaw joints are affected, the baby bird may not be able to open its beak and may therefore starve to death, as he will be unable to eat.
- Psittacine circovirus (Cv1, Cv2), the organism that causes Psittacine Beak and Feather Disease (PBFD), can cause disease in unweaned birds. Many young birds exposed to this virus will mount an effective immune response and rid their bodies of this virus, never suffering feather abnormalities or disease. A small percentage of babies that acquire the PBFD virus will, however, develop feather abnormalities as the feathers grow in, and they will get progressively more ill due to suppression of the immune system. These sick birds will eventually succumb to the effects of this virus.
- Polyomavirus is very dangerous to unweaned baby birds. If exposed, most will

⁹² See id.

⁹³ Wissman M A. Exotic Pet Vet online, available at <http://www.exoticpetvet.net/avian/babies.html>

die after acute signs of illness appear, including bruising or excessive bleeding due to liver damage. While a vaccine is available that can prevent serious illness or death in unweaned baby parrots, the vaccines must be administered subcutaneously at five and seven weeks of age. Unweaned birds are not expected to develop full immunity until two weeks after the second vaccine.⁹⁴

Other transport risks to unweaned birds arise due to their special feeding requirements. Unweaned birds require diligent feeding from either their parents or from humans who are skilled and knowledgeable about hand feeding. As a result, meeting the nutritional needs of unweaned birds during transport, quarantine, or during a delay in transport, presents an unacceptably difficult welfare challenge that is realistically impossible to meet.

Problems associated with improper hand-feeding include aspiration pneumonia (from food inhaled into the lungs of the bird); burned or punctured crops, which result from forceful feeding or feeding formula that is too hot; and malnutrition and starvation, which result from feeding food of inadequate nutritional value or inadequate amounts (Romagnano 2003).

A study by Harcourt-Brown (2004) found that 44 percent of hand-reared African grey parrots (*Psittacus e erithacus*) suffered from a condition known as osteodystrophy, defined as a failure of the bones to develop normally. The clinical signs of this condition are distortion and enlargement of the bones, susceptibility to fracture, and abnormal posture and gait (Blood and Studdert 1988). Further studies by Harcourt-Brown (2004) suggest that limiting movement until bone growth is complete may reduce the incidence of bone deformities in hand-raised parrot chicks (Harcourt-Brown 2004).

While it is a commonly held belief that hand-reared parrots have greater pet quality (Wilson 1998), it has also been suggested in recent years that hand-rearing can also contribute to the later development of aberrant behaviors, such as stereotypy, feather plucking, and phobic behavior (Lightfoot 2002). Studies suggest that in animals with highly dependent young, parental care influences behavioral development after nutritional independence and results in better welfare (Nimon and Broom 1999).

Research also suggests that regular human handling of parent-reared chicks effectively produces tameness without the psychological or physical risks of traditional hand-rearing (Aengus & Millam 1999, Collette et al 2000). Aengus and Millam (1999) note that while continued handling of parent-reared chicks would likely be necessary to maintain tameness, neonatal handling of parent-raised parrots provides a low-labor and low- technology alternative to artificial rearing as a means of initially taming birds, thereby improving their adaptation to life in captivity.. This information further supports our recommendation that transportation of unweaned parrots in commerce should be prohibited.

⁹⁴ Id.

Hand-feeding is a labor-intensive procedure and thus there is an economic advantage to selling unweaned birds quickly, thereby ensuring the sale and effectively shifting the hand-feeding burden to the receiving party regardless of welfare costs to the young bird. Therefore, any costs associated with prohibiting the transfer of unweaned birds to a second party should result in a savings to the receiving party, thereby negating any net loss to the industry. An appropriate retail price point can reflect actual costs.

In 2004 California became the first state to regulate the sale of unweaned birds in retail venues. The law requires that hand-fed birds be weaned prior to removal from the retail venue, including pet shops, bird marts, and swap meets.⁹⁵ In 2016, California avian veterinarian, Dr. Nemetz wrote that since the passage of the new law his practice had seen a more than 95% decrease in baby birds presented with pediatric problems (Nemetz 2016) thus benefiting birds and their caretakers.

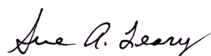
In recent years concerns about hand-feeding parrots have extended beyond their retail sale as more has been learned about the physical and long-term behavioral impacts of hand-feeding and deprivation of parental care (Engebretson 2006, Fox 2006) regardless of handler skill and knowledge. In 2014, the Netherlands prohibited hand-rearing of all parrots. Under the law bird breeders and private owners may not remove nestlings from their parents before the young are feeding on their own and otherwise independent.

Considering all of the above, at a minimum, unweaned birds should not be transported or sold in commerce. We suggest the following language:

P. Transport and Sale of Unweaned Birds in Commerce:

Carriers and intermediate handlers shall not transport a bird from the order Psittaciformes in commerce unless the bird is weaned.⁹⁶

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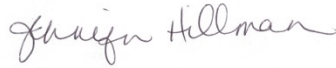
⁹⁵ Cal. Health and Safety code 122321.

⁹⁶ See Part I for the proposed definitions to pertain to this section.

Avian Welfare Coalition



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October 13, 2020

RE: Research Involving Free-Living Wild Species in their Natural Habitat—
Draft Policy

Document ID: APHIS-2020-0087-0002

Dear USDA Regulatory staff:

Thank you for the opportunity to provide feedback on the agency's new policy ("Policy"), "Research Involving Free-Living Wild Species in Their Natural Habitat." I am submitting these comments on behalf of the **Alternatives Research & Development Foundation** and the **American Anti-Vivisection Society (AAVS)**. While we appreciate that the GAO report issued in May 2018, called attention to the matter of confusion regarding the regulations exempting certain "field studies", we do not feel that the Policy addresses that satisfactorily.

1. Animal Welfare Act requires oversight

Most importantly, the proposed Policy appears to be in conflict with the nature and purpose of the Animal Welfare Act. The Policy makes reference to 7 U.S.C. § 2143, but the part of that section dealing with field research, (b)(3)(B), has to do with inspection practices and the potential impracticality of inspectors accessing certain field research study areas. It does not suggest that field research is not of concern. While the agency's regulations constitute the working definition of "field study," they also must be read to meet and embody the Congressional declaration of purpose of the Act: to provide "humane care and treatment" to animals in field research. (7 U.S.C. § 2131) There may be debate with respect to some field procedures and their "humane" nature. But the agency's suggestion that any amputations can be considered humane, regardless of the manner and procedures that are followed in accomplishing such mutilations, is one that we consider to be in direct violation of the Animal Welfare Act.

2. Basis for Definitions and Examples

Regulations state: "Field study means a study conducted on free-living wild animals in their natural habitat. However, this term excludes any study that involves an invasive procedure, harms, or materially alters the behavior of an animal under study." (9 C.F.R. § 1.1)

For most of the public, this definition of an acceptable field study would call to mind Observational studies. The Global Federation of Animal Sanctuaries (GFAS) addresses such research in its Standards(1), considering studies acceptable if the research does not

harm the animals; specifically, if it "does not interfere with the normal daily activities of individual animals" and "does not cause pain or distress." Considering that GFAS sanctuaries house animals who may be captive wildlife, they are relevant here.

By contrast, examples of activities that meet the definition of "field study" in the Policy, and therefore would be excluded from AWA oversight, include ear tagging, microchip or radio collar attachment, and taking samples of blood or tissue. We would contend that those activities certainly cause "harm" to a free-living animal. Capture of wild animals, in itself may cause harm; for example, Capture Myopathy is "an important cause of death in wild animals that are handled by humans." (2)

3. Interpretation and reporting

Since the animals under consideration here are covered by the AWA, it is incumbent on the agency to pay particular attention to whether they experience pain and distress and require accurate annual reporting / correct categorization. Also, if animals experience more than momentary pain and distress, which could certainly result from capture and restraint, the investigators must consider alternative methods and their institutional IACUC needs to ensure that they do. Training will be needed to aid IACUC members and inspectors since free-living animals may be more difficult to assess. Nonetheless, in order to advance alternative methods in all areas of research, it is important to collect accurate data.

4. Policy Manual

For a number of years, USDA made its "Animal Care Policy Manual" easily accessible to the public by posting it on its website. But since July 2018, the manual is no longer available online and the agency has placed it on "inoperative status." Once completed, USDA must make this field study policy readily available, preferably by making the complete "Animal Care Policy Manual" available online again.

(1) <https://www.sanctuaryfederation.org/wp-content/uploads/2019/07/Revised-Operations-Standards-2019.pdf>
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(2) <https://www.pgc.pa.gov/Wildlife/Wildlife-RelatedDiseases/Pages/CaptureMyopathy.aspx>
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