



International Association of
Avian Trainers and Educators

POSITION STATEMENT

WELFARE OF HUMAN-REARED VS PARENT-REARED OWLS IN AMBASSADOR ANIMAL PROGRAMS

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BACKGROUND

Ambassador animals play an important role in delivering inspirational messages and experiences. Owls are some of the most charismatic of all animals participating in educational programs. Ambassador owls are typically presented either tethered to the gloved hand of a trainer/interpreter or trained to display natural free-flight behaviors in shows.

Ambassador owls are often acquired from rehabilitation centers as injured and non-releasable. Occasionally, these owls are raised by humans and cannot be returned to the wild because they are considered “imprinted” or otherwise too human-oriented to be released. However, most often the owls acquired from rehabilitation programs are parent-reared birds that have been injured in the wild and are not suitable to be released back into the wild.

When owls are raised by humans during the formative stage of their life (generally the first few months after hatching) they demonstrate increased levels of comfort around humans. Some may call this imprinting, but for the purposes of this position statement we will avoid discussions about the specifics of imprinting and focus only on the behavior of the bird. When raised by humans during the formative months, these human-oriented owls generally adapt well to life in human care and therefore make the best subjects for ambassador animal programs.

However, parent-reared owls rarely adapt well to life in human care, especially as ambassador animals where regular contact and handling is a program requirement. Parent-reared owls most often show escape behavior when a human approaches with a gloved hand. It is likely the majority of interactions between humans and parent-reared owls result in inescapable aversive stimulation for the owl, which can lead to a reduction in welfare.

POSITION

IAATE supports the use of human-reared owls in ambassador animal programs.

IAATE strongly discourages the use of parent-reared owls in ambassador animal programs.

IAATE recognizes an owl may experience poor welfare when force and coercion are routinely used for retrieving it from a perch, either in free-loft or tethered. Examples of force and coercion include using positive punishment/negative reinforcement to get the owl to step up by applying pressure with the glove to its legs or chest, chasing it from perch to perch, grabbing it by or pulling on its equipment, or catching it with a net. To maintain the highest level of welfare for an owl in human care, the bird should be given the choice to willingly step-up (foot raised, body forward, and stepping) on to a glove without force or coercion. This is generally achieved by an experienced trainer through shaping the step-up behavior with positive reinforcement.

IAATE recognizes every animal is an individual and exceptions to generalizations do occur, for example, a parent-raised owl brought into human care within its first year may adapt in ways





similar to a human-raised owl under the care of sensitive, experienced trainers. However, this position statement is focused on best practices generalized to all owls and levels of trainers.

IAATE recognizes the disparity in levels of competency in humans working with owls. Some trainers are more competent than others and will experience more successful training outcomes than other trainers. The skill level of the trainer is an important factor in working with any owl, i.e., a more experienced trainer may be more observant and responsive to the subtle body language that may be a precursor to escape behavior. However, even the most skilled trainer will likely struggle to train a parent-reared owl while still providing choice and control and a higher level of welfare that is more easily achieved when training a human-reared owl.

SUPPORT FOR POSITION

Owls are one of the most popular ambassador animals used in educational programs around the world. Whether flying in a free-flight show or sitting on the gloved hand of a skilled interpreter, owls captivate audience members and provide valuable opportunities to inspire people to care about them and their environment.

Close encounters with such a charismatic animal are made possible through training the bird to sit calmly on a gloved hand in a variety of circumstances and locations or fly from one location to another. Accomplishing this goal begins with how the owl is reared. Human-rearing is beneficial to the long-term welfare of the individual because the owl is in human care during the critical pre-fledge development phase. Thus, its human caretakers have the opportunity to expose it to a wide variety of conditions it may encounter later in life as an ambassador animal (crowds of people at close proximity, vehicles, buildings... etc.) while it is best equipped to learn it has nothing to fear from these situations and stimuli. It is critically important to take advantage of this development phase to gently and positively expose the young owl to novel stimuli in order for it to become a resilient and confident individual best suited for the role of ambassador owl. Human-rearing in an environment with no exposure to novel stimuli will most likely result in an owl that does not do well in ambassador situations. It is important to note, however, using forceful or coercive methods (see above section for examples of force and coercion in this context) while raising and training human-reared owls may result in an owl that poses a safety risk to inexperienced handlers. While parent-reared owls may be more likely to react to aversive training strategies by demonstrating escape behavior or exhibiting signs of learned helplessness and thus appear docile when in fact they are experiencing reduced welfare, human-reared owls exposed to the same aversive training strategies are more likely to exhibit defensive behaviors, potentially flying at human caretakers entering their space, and thus become dangerous to handlers.

Because a human-reared owl grows up in close association with humans, it will often approach a trainer and is likely to perch calmly on a gloved hand after a few short training sessions. When these training sessions are associated with the bird's food, positive reinforcement will increase the likelihood the owl will continue to perch calmly on the glove and possibly fly to a perch near the





trainer in the future. This strategy works well with human-reared owls; however, it does not work as well with parent-reared owls.

When it comes to adaptability, parent-reared owls are unlike human-reared owls because they lack a history of positive affiliation with human caregivers and also lack positive exposure to the circumstances and stimuli encountered in the human world. Experience has shown time and again that parent-reared owls do not catch up to their human-reared counterparts in terms of the necessary or desired husbandry, medical, and program behaviors. Parent-reared owls tend to persistently show behaviors that may indicate a welfare concern (bating or trying to fly off the glove, concealment posture/sitting tall with feathers slicked, beak clacking, hissing, flying away from or at trainers, ducking and flinching, flaring wings, raising hackles) and are overall less successful learning with contingency-shaping procedures. As a result, getting a parent-reared owl on the glove, into a crate for transport, and presentation-ready in novel locations often involves a level of intrusiveness, force, and coercion that exceeds current standards of ethical training and welfare.

Because parent-reared owls generally exhibit a high rate of escape behavior, training is most often accomplished through flooding with aversive stimuli, which has a high likelihood of resulting in learned helplessness (apathy and lack of escape behavior when escape is available) or improperly used counterconditioning methods, which may result in unhealthy weight reduction.^{1, 2}

Flooding is one form of so-called exposure therapy used to suppress extreme fear of items, events, or conditions that are actually not harmful. With flooding, the full strength aversive stimulus is presented under inescapable conditions. For example, a person with a fear of spiders may be locked in a room with spiders and this inescapable exposure may result in a suppression of fear of spiders. Working with owls, flooding often includes forcing an owl to sit on the glove while blocking its escape and ignoring its struggling, with the misguided intention that the owl will eventually become comfortable sitting on the glove. However, we have seen this technique often does not achieve the desired outcome as parent-reared owls may continue to show high frequency and intensity of escape behaviors for years, even their entire lives, creating a lifestyle of reduced welfare. In cases where the desired outcome is achieved, it is due to the owl learning no matter what it does, it cannot avoid the aversive stimulus (the human and/or the gloved hand) and thus it stops trying to escape. This is a phenomenon known as learned helplessness. Learned helplessness is exhibited by many owls and includes detrimental fallout such as apathy, a lack of active behavior, even when the possibility of escape is restored.

Counterconditioning is a training approach that can work well with many species of animals, especially individuals demonstrating a low rate of escape behavior in the presence of humans. However, it is an extremely challenging strategy to use with parent-reared owls without compromising their welfare. Counterconditioning, often combined with systematic desensitization, involves non-contingent pairing of food, or other appetitive stimuli, to change the negative value of the fear eliciting stimuli to a positive value.³ The strategy may involve a trainer approaching and retreating to gradually decreasing distances from an owl while offering food if the owl does not show escape behavior. The goal is for the human to be closer to the owl each time s/he offers the food. In this way, the food is paired with the human in progressively closer proximity. However, parent-reared owls often have such an intense fear of humans, and struggle





to escape them with so much determination, they will go several days without eating if a human is anywhere near their enclosure when food is available. The resulting reduction in food consumption risks loss of weight, often to extreme levels, and thus compromised health and welfare as trainers attempt to get the unwilling owl to eat in their presence.

References

Pierce, W. D., Cheney, C.D., 2013, Behavior analysis and learning, Fifth edition, Psychology Press, Page 484

Chance, P., 2009, Learning and Behavior, Sixth Edition, Active Learning Edition, Wadsworth, Cengage Learning, Page 390, 394-395

<https://www.fws.gov/forms/3-200-10b.pdf> The U.S. Fish and Wildlife Service is mandated to enforce specific laws and regulations in regards to the imprinting of native owls. For this reason, it often requires patience to find a native, imprinted owl appropriate for use in ambassador animal programs.

Definitions:

¹**Learned Helplessness:** (Pierce and Cheney - glossary p. 484-485). This involves exposing an animal to inescapable and severe aversive stimulation (shocks). Eventually the animal gives up and stops attempting to avoid or escape the situation. Next, an escape response that under ordinary circumstances would be acquired easily is made available, but the animal does not make the response. The organism seems to give up and become helpless when presented with inescapable aversive stimulation.

²**Counterconditioning:** (Paul Chance - glossary p. 390). The use of Pavlovian conditioning to reverse the unwanted effects of prior conditioning.

³**Systematic Desensitization:** (Paul Chance - glossary p. 394-395). A procedure for treating phobias in which a person imagines progressively stronger forms of the frightening CS (Conditional Stimulus) while relaxed. It is a form of counterconditioning.

