

Improving Animal Welfare Through Training

Steve Martin
Natural Encounters, Inc.

Abstract

Some of the most challenging animal training activities at zoological facilities takes place in the bird shows and ambassador animal areas where restraint of some form is used to control an animal during presentations. Inherent to restraint are negative reinforcement and positive punishment and the associated detrimental side effects of escape/avoidance, aggression, apathy and phobias. Improving welfare through the most positive and least intrusive handling and training methods requires consistency in staffing and skillful application of the science of behavior change. This presentation will address strategies for improving consistency and developing strategies and skills to improve the welfare of bird show and ambassador animals.

The AZA Welfare Committee definition of animal welfare is:

Animal Welfare refers to an animal's collective physical, mental, and emotional states over a period of time, and is measured on a continuum from good to poor.

Explanation: An animal typically experiences good welfare when healthy, comfortable, well-nourished, safe, able to develop and express species-typical relationships, behaviors, and cognitive abilities, and not suffering from unpleasant states such as pain, fear, or distress. Because physical, mental, and emotional states may be dependent on one another and can vary from day to day, it is important to consider these states in combination with one another over time to provide an assessment of an animal's overall welfare status.

Introduction

How do we promote good welfare for ambassador and bird show animals while meeting the demands of program goals? That question should be on the minds of all animal trainers. We all deal with the pressure to get animals out of enclosures, into crates, transported to theaters, then perform reliably in the show and go back into crates only to do it again later in the day, every day. We rush to meet deadlines and focus on perfect behavior from our animals to deliver entertaining and inspirational experiences, experiences that will also enhance our status as animal trainers and show presenters. These pressures can blur our view of good welfare for our animals.

As we consider the many goals associated with producing an educational program, maybe we can do better by our animals if we operationalize these goals and add this sentence at the end; "while promoting good welfare." How do I train my animal while *promoting good welfare*? How do I get the animal in a crate *while promoting good welfare*? How do I transport my animal to the stage *while promoting good welfare*? How do I present three shows a day *while promoting good welfare*? With

this additional criterion added to all of our program goals, we may be able to improve the lives of the animals in our care.

The right tool for the job

A good place to start improving the welfare of animals is to begin with the right tool for the job. The animals we use in programs are a study of one. No two animals will be the same because no two training conditions are the same. However, we can help improve our ability to provide good welfare by choosing the best subjects for our training.

Corvids and owls are best suited as ambassador animals when they are hand-raised. Many keepers, educators and trainers have attempted to train parent-raised corvids and owls for use in their programs and have failed to provide the level of welfare that most of us want for our birds. Often these birds have come from rehabilitation projects and are non-releasable. Well-meaning curators, directors, veterinarians and others believe they are doing the birds a service by taking them from the rehabilitation facility and bringing them into their education department. However, these parent-raised birds rarely adjust well to life in an education program and often experience unacceptable levels of stress, even when handled by expert trainers. As these birds attempt to escape human contact some trainers might try to force the bird to sit on the glove by holding its jesses for extended periods of time, which often results in the bird bating repeatedly until it exhausts itself. Other trainers may try to encourage the bird to approach and eat from the glove by reducing its weight to unhealthy levels. Both of these strategies produce compromises to welfare that are most often avoided when using imprinted birds in programs.

To provide the best welfare for parent-raised birds in human care a trainer might consider working with the bird in an exhibit where the bird has more control in its environment. The bird can be taught to approach the trainer, either inside or outside of the cage, to receive food and participate in an educational program while free from restraints inside an exhibit cage.

Flight-impaired birds are also a challenge to train as ambassador animals if sitting on a gloved hand and restrained by jesses is the goal. Teaching a one-winged raptor to sit on the glove often involves many uncontrolled attempts to fly off the hand that can result in spinning out of control. At the very least this attempt at using punishment and learned helplessness to teach the bird to sit on the glove should be replaced by positive reinforcement to teach the bird to sit calmly on the glove. An alternative to holding the jesses of a flight-impaired bird on the glove might be to teach the bird to come out of a crate and sit calmly on a perch. Birds can certainly learn that sitting on a perch and going back into a crate will earn it high value reinforcers. However, this level of training is often best accomplished by an expert trainer and very often it is docents or volunteers who work only a few days each month who are the ones handling the ambassador animals.

Volunteers provide extremely valuable services for zoological facilities, and many education programs have come to rely on them to maintain their current level of programming within their budget constraints. However, working a few days a month may be insufficient to the consistency required to establish trusting relationships and training skills that are the foundation of positive reinforcement training programs where animals experience the highest welfare.

The question for zoological facilities looking to improve the welfare of ambassador animals is far more complicated than asking if it is best for docents or full-time staff to handle and train the animals. Surely there are many docents and volunteers with better relationships and training skills than some full-time keepers or trainers. The most important question should be, "Does this particular person have the skills required to create a trustful relationship, and use the most positive, least intrusive form of training with this particular animal in these conditions and if not, how do we fulfill our program obligations without compromising the welfare of our animals?"

Directors, veterinarians, curators, and others often describe individual trainers as having expert skills. However, the criteria for what makes an expert requires education and experience to validly judge. How is a zoological manager able to judge a trainer's skills? Maybe it is easier to judge through the behavior of the animals? An animal that calmly and willingly approaches a trainer may experience a lower level of stress than one that frantically approaches out of hunger, or is chased around an enclosure and cornered before being picked up. There are many other indicators of a trainer's skill that managers should familiarize themselves with before assuming that the trainers on their team are operating at a high level of competency. Fortunately, a bird trainer's knowledge can now be evaluated through a certification program. A certified avian trainer has demonstrated a level of understanding that has enabled that person to pass a very difficult examination of knowledge associated with bird training and management at a professional level.

Improving knowledge and skill

A great step toward providing better welfare for your animals is to learn from experts. An expert mentor can not only help you learn better ways to train and manage animals, a mentor can help you avoid common challenges and pitfalls that they have experienced as they have grown in the field. The IAATE Professional Development Committee was formed to help members improve their knowledge and skills and is a great resource for all IAATE members.

The next step toward providing better welfare for our animals is learning more about the science of behavior change. As trainers learn how to shape behavior using the most positive and least intrusive strategies they learn how to replace unwanted behavior using positive reinforcement to train desirable behavior instead of trying to punish, or decrease, unwanted behavior. Where some trainers might ask "How do I stop my bird from doing a particular behavior" expert trainers ask, "What do I want the bird to do instead?" Using differential reinforcement of incompatible

behavior to replace unwanted behavior with desirable behavior is a tool used by expert trainers and a huge step toward providing better welfare for animals.

Choice and control

Empowering animals with more control in their environment often leads to improved welfare. Control is a primary reinforcer just like food, water, shelter, etc. We can improve performance and create more reliable behavior when we give animals more control of their environment. For instance, for several years now we have flown many of our birds directly out of their cages onto the stage and then straight back into their cages. We give birds the option to come out of the cage, or stay inside. It is their choice. If a bird does not want to participate in the show it does not have to. At the end of the bird's routine it flies back into its cage. We have found with this strategy we are able create more reliable behavior, increase bird's weights, and provide better welfare for our birds.

Many trainers take away control from animals by attaching leases and jesses to restrict an animal's movement. When a bird bates, or tries to fly off a trainer's gloved hand, the bird experiences a loss of control as it is caught up by the jesses. This punishment approach to teaching a bird to sit on the hand may lead to learned helplessness with the animal finally realizing no matter what it does it cannot escape the aversive stimuli, so it gives up and stops trying. However, the bating behavior will usually continue after time and very often trainers will end up labeling the birds as "The Bater," or "Nervous," "Wild," and many other labels that are generally created in an attempt to relieve the trainer of responsibility for the bating behavior and put the blame on the bird.

Contemporary trainers are now beginning to see the value in taking jesses off of raptors and create desirable glove-sitting behavior through positive reinforcement. When trainers take the jesses off of the bird and give it power to fly away, the trainer is limited to positive reinforcement to teach the bird to return to the trainer and sit calmly on the glove. With this approach to training they reduce stress, increase desirable behavior, improve relationships with raptors and improve welfare.

The IAATE Tethering Position Statement encourages minimizing the use of jesses to give birds more choice and control, and recommends the use of positive reinforcement to teach birds to sit on the glove or hand. It also supports tethering of raptors and recommends against tethering non-raptor species.

If jesses are not to be used on non-raptor ambassador animals, such as kookaburras, corvids, tawny frogmouths, etc., then how should these birds be presented in programs? The list of alternatives to jesses includes, but may not be limited to, exhibiting in a secure environment such as a cage, clipping wings, using a harness and teaching a bird to perform (e.g., station and recall behavior) free of restraints. Cages are unattractive, and clipping wings can be very dangerous as uncontrolled flight can result in crashes to the ground or other objects and cause injuries. A

harness may be safer than jesses, but requires a skillful trainer using positive reinforcement to teach the animal to voluntarily participate in donning the harness. Working with the bird free of restraints gives the animal more choice and control, but requires a highly skilled trainer to teach the animal to reliably enter a crate or other transport unit, plus remain with the trainer and not fly away where its welfare may be compromised.

When considering the use of jesses on a non-raptor bird, perhaps the most important question to ask is “Is this the right animal to have in our program considering the positive reinforcement training skills of our staff?” Also ask yourself if this bird is better suited for an exhibit where it can be taught to perform behaviors and participate in educational programs without a need for jesses to restrain the bird. These are also good questions to ask when working with any bird in your program, or thinking of acquiring a new bird.

A Reinforcing Future

The fields of animal welfare and animal training should advance together as practitioners improve their knowledge and skills to teach animals to willingly participate in educational programs and extend that training to husbandry and medical procedures. A commitment to the most positive, least intrusive training strategies, improves behavioral outcomes and welfare for animals in human care.

Where trainers once used force and hunger to motivate animals, trainers now create motivation by first forming trusting relationships and empowering animals with choice and control. Through two-way communication, trainers give their animals a “voice”, expressed through the animal’s body language resulting in voluntary participation in training and often higher working weights.

Animals once labeled “slow, obstinate, aggressive, un-trainable” and more now respond quickly to cues presented by trainers who have changed their behavior and maybe their lives through clear communication, antecedent arrangement and reinforcing consequences. Problem behaviors are opportunities for skillful trainers who understand that all behavior has function and that by changing conditions, we can replace problem behaviors with more appropriate behaviors.

Conclusion

The move toward more positive, less intrusive forms of animal training has empowered caregivers with management and healthcare tools that improve the welfare of their animals. However, the skill level of practitioners in this relatively young field of training in the zoological world varies greatly. To keep pace with the evolving technology, keepers and trainers should increase their knowledge and skills associated with the most contemporary animal training practices. Managers and supervisors should also expand their knowledge of the science and technology of behavior change and develop criteria with which to evaluate the skill levels of trainers at their facilities. Evaluation of trainers’ skills should be based on observable training behaviors in conjunction with knowledge of scientific principals.

Each animal brings to the training environment its genetic makeup and personal learning history. When considering an animal for inclusion in a training program, especially one that involves full contact handling, the animal should be evaluated as an individual instead of using species generalities. Considerations should also be given to the condition in which an animal was raised and how that may influence its ability to participate in educational programs.

Not everyone will become an expert trainer, and not every animal will be the best for every job. However, through a commitment to the most positive, least intrusive training methods everyone can contribute to improving the welfare of animals in their care. Avoiding the use of force and teaching animals to willingly participate in handling and training programs is the ethical compass that should guide the behavior of animal care professionals.