Weight Management Revisited

By Barbara Heidenreich, Former President IAATE President Barbara's Force Free Animal Training

The last issue of the IAATE Flyer included an article by Steve Martin that addressed his concerns with a topic I presented at the annual conference. I appreciate that the topic has generated much discussion and attention. Unfortunately many members that read the Flyer have not had the opportunity to read the paper and/or did not see the presentation. The article did not accurately portray the contents of my paper, nor my statements. For this reason I would like to take this opportunity to address the misstatements and misrepresentations of my words and also to elaborate, since many important points were omitted.

I also invite all members to read the entire paper "Weight Management in Animal Training: Pitfalls, Ethical Considerations and Alternative Options" which can be found at the bottom of this page http://www.goodbirdinc.com/barbaraheidenreich-bio.html (and also direct link here http://www.goodbirdinc.com/pdf/Heidenreich %20Weight%20Management ABMA 2014.pdf)

Health and Welfare:

The article states that the important foundation for this topic is health and welfare. I whole heartedly agree. My journey into exploring this topic was due to the discomfort I felt seeing birds in shows quite anxious or obsessed with food, and discovering that I did not need to have a bird in that state to get excellent presentation of behavior. I found myself not wanting to use weight management and asking myself why. This lead to my paper which explores how this motivational state is created using the specific practice of micromanaging weights and diets to create motivation for food.

However, the article incorrectly suggests I am implying the scale plays no role in animal care. Maintaining a healthy weight for an animal and using weight management to create motivation are two very distinct topics. As mentioned in the paper, I fully support weighing animals to monitor health. However micromanaging weights and diets to create motivation for food is not the same as weighing to monitor health or keeping animals at a healthy weight. This is an important distinction.

Birds that are poorly weight managed (i.e. kept too light) exhibit physical and behavioral issues that also bring into question health and welfare issues. These include:

- Frantic or anxious behavior when anticipating food or eating food
- Water gorging & food related stereotypies
- Stunted growth
- Persistent juvenile behaviors
- Other possible issues bone density issues, feather picking, seizures

When weight management is applied well, as in the bird is working at what is considered a high weight or for "psychological appetite", we see behaviors analogous to food hoarding behavior seen in humans. The animal becomes obsessed with food and will gorge when given the opportunity. My paper also questions whether this psychological state is good welfare for animals.

Weight management, whether done poorly or well, results in an animal that is seeking relief from an aversive state, not one that is seeking the pleasure of a desired outcome. In essence the training strategy has changed. The weight managed animal is working via negative reinforcement, not positive. In general you will see more frantic or anxious behavior in regard to food from the weight managed animal vs the one in which motivation is influenced by other means. This was especially evident in a video clip shown at the IAATE conference of parrots free flown by Dillon Horger and Hilary Hankey in Brazil. Their parrots' calm yet compliant behavior was indicative of birds working for desired consequences, whereas a clip of macaws flying at another facility were hopping frantically from person to person seeking food. These two very different motivating operations are the very heart of this discussion and why I explored the topic. Why do these two sets of birds look very different in their behavior towards food? Both present behaviors consistently and well, but their motivational states are not the same. There is a comfort level in the birds Dillon and Hilary fly that was not evident in the other birds. This too is a welfare question that deserves our attention.

Food and Non-Food Reinforcers:

It is stated many times in the article that I suggest people use secondary reinforcers *instead* of primary. This is a misrepresentation of my words. When animal trainers only use food and do not incorporate other types of reinforcers, as my paper suggests, they are removing a very useful tool in helping increase motivation that does not rely on micromanaging a bird's diet and weight. My paper supports using all types of reinforcers and taking advantage of this huge variety in reinforcers to help increase motivation. Below is a statement from my paper about other types of reinforcers.

"Bird training also needs to consider the role of nonfood reinforcers in animal training. This also leads to the opportunity to include a *variety of reinforcers* as a means of increasing motivation."

The marine mammal community has demonstrated that secondary reinforcers can play a very important role in training. In my opinion it is a disservice to animals to assume that a secondary reinforcer cannot be powerful. And as evidenced by the entire paper, I am in support of using both food and non-food reinforcers. The question I pose for trainers to consider is *how* motivation for food is created.

Feeding Up or Free Feed

In the article, Mr. Martin poses the question "How can we get birds to perform in our free flight shows without using food or weight management?" and makes the statement "Having food in front of any animal at all times is simply not natural." These quotes imply that my position is that all animals should be on free feed or feed up and not motivated to participate in training,

which is an incorrect interpretation. Below is excerpt from my paper in which I discuss how food management (not weight management) can be used successfully to create motivation for food.

"Many trainers already incorporate strategies that reduce or eliminate the need for weight management to create motivation for food. For example animals can be trained immediately preceding normal meal times, meal times can be staggered throughout the day to increase training opportunities, base diets can be provided at all times while preferred foods are saved for reinforcers to be offered during training, reinforcement schemes in which less preferred reinforcers are offered first and most preferred last, small pieces of food can be offered to allow for more repetitions before satiation, and/or the animals regular diet can be offered during training only. If any reduction in food provided is considered at all, the period is short lived. Once the learning has occurred, diets are quickly returned to levels considered typical for the animal. There are many examples in which the listed strategies for managing the delivery of food have proven to be successful in creating motivation for food reinforcers without compromising the health and welfare of the animal. These strategies have been used for birds in both free flighted/free roaming situations and/or more controlled environments."

In addition to the inclusion of support for food management in my paper I also showed 14 video examples of birds trained using food management in the live presentation.

I also did not state that other animal training does not involve deprivation and/or food management. I did however state that it does not usually involve weight management. I did state that parrots do not need to be weight managed, and I do stand by that statement. (However I believe many other species do not need to be weight managed either.) This also is not the same as being on free feed or feed up. Food management, based on my extensive experience with parrots, is more than enough to create motivation in parrots sufficient to acquire high-end behaviors.

Deprivation:

The article states that I claim animals should never be deprived of food, and uses the fact that I reference the Five Freedoms as evidence. However what was omitted was the section of my paper that follows my mention of the Five Freedoms. Please see this paragraph from my paper.

"The five freedoms state that animal should have freedom from hunger. In the animal training world this leads to questions such as "at all times?" and is "any level of hunger acceptable?" Having measures of hunger and identifying ranges that are acceptable and not acceptable by the animal training industry, and why, gives animal trainers a guideline or at least a starting point to better evaluate hunger based on behavioral observations. This may in the future help address the questions raised by the first of The Five Freedoms. But more importantly it can potentially lead to improved welfare in animal training by helping trainers recognize when hunger is exceeding acceptable standards."

The main point of this section of the paper is that rather than focusing on the number on the scale to determine motivation, our industry should find a way to better help trainers learn to

evaluate motivation for food reinforcers. It was stated several times "the focus was getting rid of the scale", but it was not mentioned that my goal is for our industry to provide better modes for helping people evaluate motivation for food. Again using the scale to monitor weights for health was never questioned.

The article also states "The point was made that bird shows are the only field where people withhold food to create motivation for animals to perform and that mammals are not managed that way." The actual statement I made was that bird shows (and research environments) are the only fields that use *weight management* as a strategy to create motivation. This is a very important difference.

Training Examples:

The article makes a point of mentioning the examples I shared are unique, few or feature only skilled trainers and cannot be duplicated in shows. As one can imagine time and space limit how many examples I was able to share in the paper and presentation. I have collected many examples from trainers of many skill levels around the world. Since the IAATE presentation, I have also collected examples of birds in shows, including raptors being flown successfully without a reliance on weight management. (As an aside I would also like to mention that many of Chris Shank's free flighted birds are parent raised, live outdoors and in aviaries and do not have a "pet" like relationship with Chris. Instead Chris has employed the sound training strategies mentioned in the paper to successfully free fly birds on a daily basis.)

The article describes these examples as extraordinary and uncommon. However, many examples shared were routine and represented behaviors done on a daily basis. The kea and raven at the University of Vienna in particular have much higher behavioral demands in terms of required repetitions than most show animals due to their involvement in cognition studies.

I have no doubt there are countless more examples out there. The motivation to share such examples is to help people realize very successful training is possible without the use of weight management as the primary tool to create motivation for food. Suggesting these are unattainable by the average trainer is not supportive of helping the bird training industry progress. Rather than saying "no" to change, I encourage trainers to say "yes" to the possibilities.

Important Omissions:

Unfortunately a few very important elements of my paper were not mentioned in the article in the Flyer. These include why many bird shows must rely on weight management, and strategies that can be employed to help move away from micromanaging weights and diets.

Bird shows typically have animals presenting the same behavior or repeated flight patterns each show, with a predictable reinforcer waiting at the end. This is in stark contrast to a marine mammal show in which an animal knows many behaviors, doesn't know which one it will be asked to do, it also doesn't know which behavior will be reinforced and it doesn't know what the reinforcer will be. The strategies utilized by marine mammal trainers are very important to

increasing and maintaining motivation for behavior without a reliance on micromanaging diets and weights to get motivation.

Bird shows would benefit from including more:

Unpredictable behaviors
Variety of reinforcers
Different schedules of reinforcement

It is easy to see if a bird is trained to present a patterned behavior with a predictable reinforcer, that if it were to stray from its consistent path it might be difficult to regain its attention and focus without the use of elevated hunger. However with training strategies that include generalized behaviors, a variety of reinforcers, different schedules of reinforcement, and a variety of trained behaviors that are requested unpredictably, it is very possible that bird training for shows could reconsider the need for weight management as a primary means of creating motivation.

Loss of Birds:

The article implies that other training strategies besides weight management result in the loss of birds, as evidenced by the example of the free fed macaws lost in the swamp. However that same facility has also lost weight managed birds. Some examples include an Eurasian eagle owl that flew off during a show and was later found dead, as well as a raven and a falcon that flew off and were never found, to name a few. Free flying involves risk. There are many factors that can contribute to reducing risk. Whether weight management actually is an ethical way to reduce that risk is at question. For me we have other options that work equally as well to maintain motivation. The alternative is to keep animals in a state of hunger or seeking food due to a perceived food shortage for most of their lives.

Conclusion:

Thank you very much for taking the time to read this response and the entire paper. As a former president and board member of IAATE for a combined 12 years, and as a long-time industry professional, I hope that members are confident that this paper was written with the utmost care and consideration for the bird training industry and the birds we steward. I realize change can be challenging. What I propose in this paper is a change to what bird trainers have typically used to create motivation in their animals. However in reality, the fundamentals I share are not new to other animal training communities. I am more than happy to directly answer questions anyone may have on this topic and encourage you all to continue to challenge our industry to evolve. You are welcome to contact me at Barb@GoodBirdInc.com. I look forward to your questions and contributions.