

## **Fine Tuning Your Falconry Training: *Lessons from a Lifetime of Training Birds***

So, there's your bird, sitting on a pole ignoring your calls, your swinging lure, and your sky-high flinging of the carcass from your bag. What's going on here? Is the bird too fat? Is she being stubborn, messing with your mind? Chances are good it is none of those things. Chances are most likely that the bird's behavior is a reflection of your training.

During my 40+-year falconry career I experienced almost every frustration, every challenge, and every mistake that all of you have experienced. Of course, these problems were never about my training abilities, they were always about the bird being the problem... sound familiar? *"It wasn't me being a poor trainer, it's the bird that's screwed up."* But when I started learning more about the science of behavior change principles, I started to become a better trainer. I started to understand the most important aspects of training animals. Today, I apply these principles to training most every animal species found in zoos and aquariums. Even so, falconry remains my passion. These are some of the most important lessons I have learned, shared with the hope you might find some nuggets of information that can shed some light on your darkest challenges.

### **The Bird is Never Wrong**

All my years spent blaming the bird (or the dog, or the weather, or the... fill in the blank) got me nothing but disappointment. Sure, there were plenty of good times that I can reminisce about now. But, man, I can also recall lots of anger, embarrassment, and frustration that ruined so many of my days in the field with my birds and friends. If you've ever had any of those moments, I'm here to say you can put all those negative emotions aside now because the science of behavior change principles will bring clarity and set you free. No longer do you have to blame your bird for those problem behaviors... because now you can blame yourself! Hmmm? It doesn't feel like being set free? Well, maybe not, but let me explain:

As trainers, all we do is arrange antecedent conditions and consequence conditions. Antecedents are pretty much everything related to the behavior *before* the behavior occurs. They set the stage for behavior to occur, but they do not cause it to happen.

Antecedents associated with flying a falcon at ducks on a pond might include the wind speed and direction, air temperature, the presence of other animals in the area, the types of ducks on the pond, and the location, size and structure of the pond. These are things we can't really control, but that still influence the falcon's behavior of catching a duck. Then, there are the antecedent conditions that we have some control over. These include things like the bird's weight, her history catching ducks, her physical fitness and health, her relationship with the trainer, the pitch and position at flush, etc.

Consequences are things in the environment after the behavior happens that are functionally related to the behavior occurring again. There are *always* consequences. There are never no consequences when a behavior occurs. Consequences have strong influence on increasing or decreasing the likelihood of a behavior occurring again in the future. For

instance, if a hawk gets kicked off a jackrabbit, it may be less likely to try and catch one in the future. But, if all goes well and the bird gets a nice feed off a jackrabbit it caught, it may be more likely to try and catch jackrabbits in the future. If your falcon takes a really high pitch and has success catching a grouse, it may be more likely to take a high pitch in the future. These are all examples of operant conditioning, i.e. consequences decrease (punish) or increase (reinforce) future frequency of behavior.

To help put this in perspective, keep this in mind: the bird's behavior is directly related to the conditions we create. We arrange antecedents to make the right behavior easy to do and we arrange the consequence conditions to make the right behavior worth doing again. Past consequences become future antecedents... when a falcon catches a grouse from a 100-foot pitch, the stage is now set for another 100-foot pitch to occur during the next flight. What happens today influences what happens tomorrow.

### **Accept Responsibility**

Once you accept that the behavior of your bird is influenced by the conditions we create, it is easier to accept shared responsibility for the bird's behavior. When you find yourself labeling the bird as lazy, nervous, unmotivated, dumb, messing with your mind, etc., rather than blame the bird for problem behaviors, it is more empowering to look at your own behavior and evaluate how it has influenced the bird's behavior.

Let's take a deeper dive on that.

A common behavioral problem for some falconers is associated with the bird not returning to the falconer promptly when called. This was one of my most frustrating problems when I was younger. Whether it was my red-tailed hawk, harris's hawk, or goshawk, there were always times when the bird did not return to my glove when I called. Heck, I can remember tying a rabbit leg on my leash, attaching it to a tree and backing away just to get my hawk to come down. Looking back, it is easy to see how I was the cause of the problem.

When I was hawking, I sometimes called my hawk back to my glove by showing the bird a rabbit leg from a previous hunt. But of course, since I didn't want it to get too full on the food I provided, when my bird came to the glove, I only gave it one or two small bites (if that). Then I would pull the rabbit leg away, put it in my bag, and continue the hunt. I had no idea at the time that my behavior would influence the future behavior of my bird. What I missed was the appearance of a rabbit leg no longer represented a satisfying feed, it now only meant a small bite. The dishonest antecedent condition I created reduced the behavior of the bird coming to my glove and increased the behavior of sitting in the tree when I called her. Whether it was the hope of catching a rabbit, the view from the tree, or just avoiding me for some reason, the reinforcers for sitting in the tree out-competed the reinforcers the bird anticipated would be available when she landed on my glove. Life is full of these *competing reinforcers* and our challenge as trainers is to figure out how to out-compete the countless other reinforcers tugging at the behavior we want to see from our birds.

To fix the problem, I changed a few things about my own behavior. First, I stopped showing the bird what food she would get before she landed on the glove. Once she landed on the glove, I then opened my glove to reveal the food available. Then, I let the bird eat all of the food in the glove, which I was careful to vary in type and quantity... generally, around 10 to 20 grams of food including rabbit, mouse, quail leg, chick, etc.

Unfortunately, many people (like me when I was young) are inclined to reduce the amount of food they give the bird if it is slow to return to the trainer. This punishment strategy becomes the antecedent condition for the next time you call a bird to your glove. The tidbit you gave last time might not be worth the effort next time. It took me some time to figure it out, but I finally learned when a bird is slow to come to my glove my response should be to *increase* the type and/or the value of the food reinforcer. Seems counter-intuitive, doesn't it? But: *good trainers are always thinking about tomorrow's behavior*. If I want the bird to come to my glove tomorrow, I need to make today's reinforcer for that behavior worth the effort.

We live in a punishing society where we so often focus on suppressing or trying to stop problem behavior (in this case, sitting in a tree when you call). However, good trainers know the most productive approach to reducing problem behavior is to replace it with more desirable behavior. Instead of wondering "*how do I stop that behavior?*", the best question to ask is, "*what do I want the bird to do instead of that behavior?*" The answer to that question gives you a plan for teaching the bird to come quickly when you call. Best of all, this plan is accomplished through positive reinforcement rather than punishment, and positive reinforcement helps create strong relationships.

### **Build Trusting Relationships**

All of us have a trust account at the bank of relationships with our birds. When we do something the bird likes, we make a deposit into the trust account. When we do something the bird dislikes, we make a withdrawal from the trust account. For instance, picking up a bird off a perch with a tidbit of food makes a deposit into the trust account. Picking up a bird bating away at the end of its leash often creates a withdrawal from the trust account. Feeding a bird on a glove is a deposit, and a bate off the same glove is a withdrawal. Unfortunately, many falconers make more withdrawals than deposits, which can result in a bankrupt trust account—this is evidenced by the bird avoiding (or trying to move away from) the falconer.

I have seen so many hawks or falcons catch a small prey item, or snatch the food from a falconer's glove, and fly off with it. This was a common problem for my young falconer self. I later realized the reason my birds carried was the insignificant amount of food I provided, even after they caught prey. When the bird catches prey and only gets to eat a small amount of food, that consequence becomes a future antecedent that sets the stage for a bird to carry away food in hopes that it can get a larger, more satisfying feed. The bird learns not to trust the falconer will provide adequate food.

I hated it when my birds carried food, and I hated it when my birds mantled over food. But I loved my birds. Then, the realization hit me that my birds didn't love me... or, more

accurately said, they didn't *trust* me. There was something wrong with my relationship with my birds. The sport of falconry is supposed to be about developing a partnership with a raptor where the hunt benefits both parties. But, for me, there was more than just the hunt. In the beginning, my birds were almost more of a tool to catch game than a true partner in the form that I later came to embrace. My main goal was to catch quarry, lots of quarry. Then, I made the decision to not keep pace with the other falconers in my group who were focused on catching as many head of game as possible, but rather I would focus on creating a relationship with my birds that fulfilled both of our wants and needs. The first step was a feed-up on every kill.

Once I began letting my bird feed up on every kill, not only did my birds stop trying to carry (or even mantle over) prey, one of my falcons, Millie, caught a teal and circled back to land at my feet with it. What an awesome feeling that was. She also learned to step off of game she caught when I approached because she knew I would prepare the quarry and give her the heart and liver, then let her eat the rest of the animal on the way back to the car. For most of my falconry career, all of my birds stepped off of prey politely, and a goshawk I flew actually stepped off a bunny when I approached and the rabbit ran away. A loss in terms of game, maybe, but a huge win for our trust account as she still received a nice reinforcer from me for catching the rabbit! This feed-up strategy with every successful hunt created trusting relationships with every bird I flew. I was very happy to have a lower head count when the result was a bird with extraordinary manners and a true "partner" relationship with me.

### **Give the Bird a Voice**

One of the best ways to develop a true partner relationship with a bird is to start by giving the bird a voice through interpreting her body language. Expert trainers are usually ones who have come to recognize the smallest signs of emotions expressed through the most subtle body language. When a falconer approaches a bird from a distance, it is likely the body language of the bird will change slightly. The fluffed feathers around the body and head might slowly contract, the bird might quickly glance to the side (sometimes looking for an escape, signaling that the bird might consider the person to be an aversive stimulus) and the posture might change from straight up on the perch to very slightly leaning forward. The bird's 'voice', through the behavior of its body language, should be as strong and important as the signals the falconer sends through all of their interactions with the bird.

Unfortunately, many falconers fail to notice (or perhaps care) about the body language of their bird. They blunder in and pick up the bird off the perch, accepting that the bird will bate away like it does every other time. They rationalize the situation by calling the bird a "bater" and relieve themselves of responsibility. This is a common occurrence in the falconry world, and one that speaks volumes about the relationship between raptor and falconer. I learned long ago that if I wanted to have an extraordinary relationship with my bird, I had to be a good "listener" and consider every interaction an opportunity to put trust into my trust account with the bird. Stepping up a bird onto my glove was not just a goal accomplished at any cost to my trust account, it was part of the process of building trust. If the bird didn't want to step on my glove under the conditions I had created, I changed the

conditions. Sometimes this meant moving more slowly, crouching down lower, etc. But, most of the times it meant offering a tidbit when the bird stepped on to the glove, and another one if she stayed on the glove as I untied the leash. I often gave another tidbit when we got to wherever we were going.

Some falconers might say things like, “she knows how to step up on the glove” or, “she knows she’s *supposed* to step up on the glove.” Knowing and doing are two different things. If she does not voluntarily step up onto the glove, we can change conditions and find a way that she will step onto the glove without taking a withdrawal from our trust account. We should strive to break away from the tendency to be in control or be the alpha animal in the relationship if we want to have a true partner relationship.

Bating off the glove is often another sign of a low trust account and a compromised relationship, but it can also be associated with conditions we create after the bird is on our glove, such as trying to put the hood on, walking toward something that makes the bird nervous, etc. The good news is bating is a behavior you can change. Some falconers focus on stopping the bating behavior... but again, rather than stopping a behavior, we trainers have the opportunity to ask “*what do we want the bird to do instead?*” In this case, we want the bird to sit calmly on the glove. This is certainly a behavior you can train, usually in just a few minutes. Using tidbits of food, you can selectively reinforce increasing duration of the behavior of sitting on the glove. This idea of using positive reinforcement to replace unwanted behavior with desirable behavior can (and should!) be used with every unwanted behavior you experience with your bird.

### **What’s The Motivation?**

At the heart of all animal training is *motivation*. Motivation is created by a history of consequences, outcomes and effects that give animals reason to behave. Creating motivation is a skill needed by all falconers but is practiced at varying levels in the falconry world. Some falconers have a myriad of tools in their training toolbox to influence motivation. Other falconers have yet to learn the vast array of motivating operations available to them, and may focus only on weight management in their training program. Creating motivation is about far more than reducing a bird’s weight, which in itself is a complicated and sometimes dangerous strategy. There are many influences on your bird’s motivation... beginning, as mentioned above, with trust.

A trusting relationship between bird and trainer is more than a ‘nice thing to have’. It’s also an important influence on motivation. *Trust* can be defined as a level of certainty that interactions will result in good outcomes, so interactions increase. Trainers see varying levels of trusting behavior in birds, ranging from calm body language to solicitation of tactile interactions at the approach of a trusted person. Birds that lack trust in a particular individual may show behavior ranging from uncomfortable body language (like leaning away), to escape or avoidance behavior (like leaving the area!). The worst case I have seen was when a bird left quarry it just caught when the falconer approached. This is certainly the extreme form of a bankrupt trust account. The higher the level of trust a bird has in a falconer, the more motivation the animal has to participate in interactions with that person.

The current conditions and the bird's physical ability are huge influences on motivation. As a bird builds strength and endurance, the motivation to fly longer or harder increases. Like an athlete, building strength and endurance takes time, and is personal to each bird. A good conditioning program before hunting season will prepare a bird physically and create higher motivation when it is time for the hunt. Unfortunately, when birds are out of shape or weak from illness or even being low in weight, some falconers mistake *desire* with *ability* and actually drop a bird's weight when she performs poorly. This often leads to reduced welfare and can have serious -- even lethal consequences.

Skill is another important influence on motivation. Raptors learn valuable lessons as they succeed and fail in the hunt. Often the failures provide lessons which are just as important as the successes. The natural evolution of behavior on this planet involves taking action, and-- if something desirable happens -- to take that action again. If something undesirable happens, avoid that behavior in the future. Learning to hang on to a jackrabbit, take a high pitch, head-shoot a grouse, or approach under the tail of a duck are skills that some raptors have learned that help them later in life. But these skills are learned at a price. Birds get kicked off of jackrabbits, lose quarry from a low pitch, and crash into grouse in ways that hurt the falcon more than the grouse. However, as behavior is mastered, motivation to do that behavior increases. We should keep in mind the value failures have as learning experiences. Decreasing a bird's weight may make it try harder, but it won't make a bird smarter. Finding the balance between a bird's weight and all the other influences on a bird's motivation is part of the art of falconry. After I began to practice what I have been preaching here, I flew my hawks and falcons at roughly the same weight they molted at on feed-up. Motivation was associated with far more than hunger from a low weight.

## **Conclusion**

Anyone who has flown raptors at game for several years understand that falconry is so much more than just hunting with a hawk or falcon. It's a passion sport demanding of time, extraordinary commitment, and dedication to both the bird and the sport. With enduring tradition and world-wide patronage, practitioners embrace the sport of falconry from slightly different angles, but with shared goals and enthusiasm.

As contemporary falconers, we continue to evolve our knowledge and skills to enhance our falconry experience. We take notice of how *our* behavior effects the training and the relationship we create with our raptor partners. When we acknowledge that the behavior of our birds reflects our ability to train them, we accept our share of the responsibility and are empowered to find ways to replace undesirable behavior with desirable behavior. We stop blaming the birds and start changing ourselves, and by doing so create a stronger partnership and a better hunting team.

More than tools to catch prey, the birds in our care should be our partners as if in a romantic dance where lockstep performances result in extraordinary outcomes. This dance is perfected in practice as each participant's contributions create a dialog that informs the other of precise moves and builds trust that the other will perform as hoped and expected. In this mastered dance of hunter and hawk, the true essence of falconry is revealed.