What's In It For Me?

Written by Steve Martin President, Natural Encounters, Inc.

Presented at the IAATE Conference Toronto, Canada 2004

What's In It For Me? That question drives most every decision you make. From the moment you wake up in the morning, "What's in it for me" is the subconscious mantra playing quietly in the back of your head. These five words help you choose what clothes to wear, what food to eat, what people to hang around with, what movie to watch, and so on. They also help you evaluate risks: do you dare walk across that fallen log, do you try to make that traffic light, do you ask for a raise, do you ask her out, do you get a Bald Eagle, do you find a new job, do I go on with these examples, do I write do I go on with these examples....?

What's in it for me is not always about what we will get, it is often about how we will feel. We are often inspired to do things for the feelings of pride, compassion, sharing, safety, security, thrill, excitement, etc. Our subconscious mind helps us make appropriate decisions based on our experience, motivation, and our prediction of the rewards and risks associated with our actions. In this regard, we are not all that different from the animals we train.

Animals also evaluate situations from the perspective of "What's in it for me?" They make decisions based on their experience, motivation and prediction of the possible consequences associated with their actions. As trainers, we have the ability to influence or even control some of these factors to help our animals learn to perform behaviors in our shows.

Experience

Experience is the way animals learn. Or put another way, learning is a change in behavior due to experience (Chance, P. 1999). Wild animals make countless decisions each day, each decision is an opportunity to learn about

their environment. They learn from their successes just as they learn from their mistakes. If they don't learn, they don't survive.

Experience, or past history, establishes confidence and skill with situations and just as easily establishes fear and distrust with situations. Experience prepares animals to deal with future situations. If a hawk was raised in a static environment where there was little change and few novel stimuli to experience, that bird may have a difficult time adjusting to a new amphitheater, or new trainers, or any new environment for that matter. However, if that same bird was raised in an environment where change was the norm, such as in a situation where the trainers took the bird to new environments every day, the bird would most likely be much more accepting of change and new environment.

If a parrot had its wings clipped during its first year of life, it very likely will encounter many negative experiences associated with trying to fly. Later in life, when the birds flight feathers have grown in and the trainer hopes for the bird to start flying, the punishing experiences associated with trying to fly in the past will have made a significant influence on the bird's motivation to fly later in life. For this bird to begin flying again it will need many positive experiences of short repetitions to build back its confidence and skill.

As trainers, our goal is to build relationships with our birds that are built on a solid foundation of positive experiences.

Motivation

For some, the word motivation is synonymous with hunger. This limiting belief is sure to inhibit a person's ability to train birds at the highest level. It may also create an environment that is unsafe and unhealthy for the bird. Anyone can reduce a bird's weight and create more motivation through hunger. However, this strategy often results in undesirable side effects like mantling, screaming, aggression, foraging, and possibly other health issues. Also, improved performance due to weight reduction is often only a temporary respite from problem behavior the trainer is trying to eliminate or correct. When a bird's weight is lowered to create motivation, most birds' bodies adjust to working at a lowered weight, which often leads to the motivation declining and the undesirable behavior creeping back into the bird's repertoire. Unfortunately, this is often when the process starts over again, and the bird's weight is reduced even more.

For years I have heard people talk of percentages of weight reduction when they consider creating motivation for birds. I have also talked in these terms, but generally only as an assessment of safe margins and not as a standard of practice. I do not encourage people to drop a bird's weight by a certain percentage to encourage performance. I encourage people to focus on improving their training strategies rather than reducing a bird's weight. Solid training strategies are far more important than weight reduction in a bird-training environment.

Our goal at Natural Encounters, Inc., is to fly all of our birds at their ad-lib weight. This is the natural weight or the weight they would be at if they were on free-feed. Many or most of our birds work at this weight, some work a bit lower and some a bit higher. However, one thing we have realized is that through good training strategies we can very often work birds well above their ad-lib weight.

The five macaws that flew circles around the Toledo Zoo amphitheater, three times each day, in our shows this year, actually dropped between 100 and 200 grams when we put them on feed up after the show ended. A Harris hawk that worked at our Disney show was playing around in the tree and taking too much time, so we increased his weight (rather than dropped his weight) to see if that would have any affect on his behavior. We kept increasing his weight without any change in his behavior so we took him out of shows and fed him up. Before we started increasing his weight Scooter worked at about 640 grams. When we finally decided to take him out of shows he was at 850 grams! When we fed him up for a couple weeks he actually lost weight ... all the way down to 700 grams. We finally found that his normal weight is about 700 grams. We started training him again and put him in the show at 710 grams...he still played around in the tree, so we finally decided he was not the right bird for the show

We have many other stories of birds that work at or above ad-lib weight. I attribute this to our solid training strategies and talented, skilled staff. We use all the tools in our training bag before we ever decide to reduce a bird's weight. Weight reduction is simply one of the tools a trainer can use to produce motivation in their birds. The other tools are just as effective and often produce better long-lasting results.

Consequences

Behavior is a product of its consequences. What happens directly after a behavior determines if that behavior will occur again. If something positive happens, the behavior may likely be repeated. If something negative happens, the behavior may not be repeated. These consequences can reinforce or strengthen behavior or they can punish or weaken behavior.

Positive Reinforcement

Positive reinforcement is far and away the best tool to shape behavior. When people think of positive reinforcers they almost always think of food. However, there are many non-edible positive reinforcers in the lives of the animals in our care. Comfort, security, companionship, high perches, a scratch on the head, etc., are just a few of the many reinforcers available to bird trainers. When used appropriately, these secondary reinforcers can produce increased motivation without weight loss or hunger drive.

Negative Reinforcement

Bird trainers use negative reinforcement all the time, usually without even knowing it. Any time a bird performs an action to avoid something it does not like, negative reinforcement may be in play. In the bird training world, negative reinforcement is used in situations such as forcing a bird to step onto your hand, holding jesses to encourage a bird to stay on the glove, forcing a hood on a falcon, blocking a doorway to encourage a bird to take the right path, or even pulling at a creance to encourage a bird to fly to you.

Though the liabilities may not seem apparent at the time, negative reinforcement is a poor training tool to use in training animals. The scientific community has documented with species from cockroaches to whales several detrimental side effects that are often associated with negative reinforcement. These are things like escape/avoidance, anxiety, generalized fear of the environment, apathy or generalized reduction in behavior, retaliation, and aggression. Any one of these side effects makes the argument for why you should avoid using negative reinforcement when training animals.

Animals trained with negative reinforcement will only operate at the level necessary to avoid the negative reinforcement. An animal trained with positive reinforcement will look forward to the interactions and will be more creative about how to earn the reinforcement.

Punishment

Punishment is a strategy used in an attempt to stop or decrease behavior. It is a very poor training strategy for many reasons including: it is often confused with retribution or revenge, it is often associated with anger and aggression, it is too familiar and often used absent-mindedly and without question, it reinforces the punisher and often escalates, it produces similar side effects as negative reinforcement such as escape/avoidance, counter aggression, generalized fear of environment, apathy or generalized reduction in activity. Plus, punishment only tells an animal "what not to do" and rarely conveys information about what an animal "should do."

I believe there is little room for punishment in an effective animal training program.

Strategies for Success

Setting Them Up To Succeed

When I think of motivating an animal, I always try to look at it from that animal's perspective. I ask myself, "Why should he want to perform the behavior? What's in it for him?" I usually find there are many elements that will encourage him to perform the behavior and just as many elements that will discourage him from performing the behavior. Careful arrangement of the antecedents, or the environmental elements that come before the behavior and can affect behavior, will create the best possibility of him performing the behavior I am asking.

Before I even take the bird to the training yard I have first evaluated his attention span by observing his body language. I have also considered his reinforcement history, and I have developed a plan for the training session. Once I get to the training area I first look for things that might distract the bird and discourage him from performing the behaviors I will ask of him. I consider the environment, including the wind direction, obstacles in the flight path, novel or scary objects that might concern the bird, and his relationship with me and the other trainers who may be watching. I also consider his history, including his flight skills and confidence, his preferred reinforcers, etc. All this time I watch his body language for signs of nervousness, aggression, excitement, etc. I do all this subconsciously and as a matter of habit. Only after I have carefully arranged the environment to set the bird up for success do I begin the training session.

Clear Communication

The best trainers understand the importance of a relationship with their animals that is built on clear, honest communication. If you ever find yourself trying to trick a bird into performing a behavior you could be setting yourself up for trouble. Trust is a key component of successful animal training, just like any other important relationship where communication is key. Without trust, you have a relationship that is destined to fail. If you show a bird a piece of food to encourage it to perform a behavior, you should give the bird that food when it performs the behavior. If you give the bird less than you showed, or don't give the food at all, what's in it for the bird to perform the behavior next time? I have seen many trainers withhold reinforcement to punish a bird for poor performance of a behavior. If the bird performs poorly, it is your cue to go back a step or two in the approximations to create better reinforcement history and confidence in the behavior. Punishing a behavior provides little information about contingencies for reinforcement, or what level of behavior is expected in order to earn a reward.

Clear communication goes both ways. When I train a bird I establish a two-way communication with that bird. I use clear cues to tell the bird what I want it to do and just as importantly, I watch the bird's body language to see if the bird wants to perform the behavior or even participate in the training session. The best trainers are the ones who have an innate ability to read an animal's body language. It is through reading this body language that a trainer can know when to proceed, when to back off, when to bridge, etc.

Short Window Of Opportunity

One of my favorite training strategies is a short window of opportunity to perform the behavior. It is easy for a trainer to give a bird a cue and wait for long periods of time for the bird to perform the behavior. Once the bird has performed the behavior, lets say flying to the glove, the bird is reinforced for making the flight. Unless you have established as part of your training plan that reinforcement is contingent on quick response, a bird may think it has all the time in the world to fly to the glove. This may allow the bird to become complacent and slow to respond to cues. Some trainers might deal with this latency by reducing the bird's weight and creating more drive. I think there are much better ways to create quick response.

When I try to increase response I look at the situation from the bird's perspective, what's in it for me? If the bird has all the time it wants to perform the behavior, it will take all the time it wants, unless the bird realizes there is a limited amount of time the food is available. Think of a hawk sitting in a tree watching a mouse in the meadow. If the bird takes its time, the mouse will go down the hole. The bird has a very small window of opportunity to perform the action of flying after the mouse. In your training environment your glove represents the mouse. If the bird will not respond in an appropriate amount of time, put your glove behind your back and let the hawk realize it just lost its opportunity to catch the mouse...it went down the hole. This one small step will increase motivation and improve performance of the behavior, without reducing a bird's weight.

Repetition Builds Confidence

The first, and one of the most important steps in training a bird is to establish a plan. This plan includes the final behavior you want to establish and all the small steps you will train individually as you work toward the goal behavior. These approximations become the reinforcement history for the behavior and are essential in creating confidence and skill in the bird. Each time a bird performs one step, or approximation toward the final behavior, it gains confidence in its ability to perform that behavior, and skill in the physical act of accomplishing the task.

Because of its inherent ability to create confidence and skill, repetition is a key element in creating motivation. Behaviors become easier for a bird to perform with each repetition, therefore decreasing the need for increased motivation through weight reduction or hunger drive.

People Are Animals Too

Most people grow up in an environment where negative reinforcement and punishment were the tools that influenced their behavior. Parents, teachers, siblings, schoolmates, etc. all use a myriad of negative reinforcers to force people to comply with wishes, rules and demands. They also punish people when they do not follow these rules or do not live up to certain expectations. Fear of punishment is a powerful motivator, but plagued with the problems I mentioned above.

Behavior is behavior no matter what the species. The human animal is influenced by the same behavioral rules that apply to other animals. You can force your staff to do things through negative reinforcement and fear of

punishment and hope they don't fall victim to the side effects science says might occur. Or, you can encourage them to do things through positive reinforcement. For humans, one of the best reinforcers is not more money, shorter workdays, longer vacations, etc. It is recognition. As the saying goes, "If you really want to help someone succeed, catch them doing something right." A little recognition, especially when handed out in public or in front of peers, is an incredibly powerful training tool for humans.

Imagine training a person like you would a bird, only using recognition as the reinforcer. You first visualize the final behavior, break it down into approximations, and then train each step one at a time. With this strategy there is no limit to what you can teach your staff. Staff members can become more efficient workers, more polite, more enthusiastic, etc. Bosses, can become more lenient, more supportive, more giving, etc. Just focus on the behavior you want to see and approximate the person's behavior in that direction. Use tiny steps, just like with birds, and use recognition as the reinforcer. You will be amazed at the results.

Fear Of Failure

What's in it for you if you are afraid that attempting something might lead to failure? Your experience, motivation and perception of the consequences all play a major role in the decision to try or not. If you don't fail you are not trying hard enough and you will not grow. Failure is simply an opportunity to start again with more information. People who are afraid to fail become mired in their tiny comfort zone and soon find themselves repeating the same mediocrity every day. Nothing changes if nothing changes. It takes a nurturing and supportive environment, and good self-confidence, for a person to embrace failure. No matter if you work alone, manage staff, or are part of a team of equals, celebrate failure for the lessons it can teach. And, learn those lessons or you will surely come to know the meaning of failure.

Honesty

The best relationships with animals, as well as humans, are built on clear, honest communication. We are very careful to help our birds understand exactly what we want them to do in order for them to earn reinforcement. However, we rarely practice this level of communication with our staff. Some people need to work on their communication skills, some need to work on their honesty, and most need to work on both.

It is difficult sometimes to be completely honest. Someone once said, "today I bent the truth to be kind and I have no regrets because I am far surer of what is kind than what is true." I have told my staff that if they are honest, and their intentions are right, they cannot fail in their communications. I believe this to be true. I know others will not always like what I have to say. But, if I say what I believe in the kindest way I can, and my intentions are to help rather than to hurt, then I have done my part. It is then up to the other person how they choose to take my communication. I believe the best we can ask is for people to be honest with us. Unfortunately, honesty is something we do not get enough of.

Happiness

You are the only one responsible for your position in life. No one, not your boss, your spouse, your teachers, your colleagues or your dog is responsible for making you happy. If you rely on other people to make you happy, you are destined to fail. Sure, other people can do or say things you don't like. But you have the power to decide how those things make you feel. If you don't like something, change it. If you can't change it, change the way you look at it. Find something good in it, or forget about it and go on with your day. Why would you give someone else the power to control your happiness? One reason could be the reinforcement you get from your friends when you complain about a situation, or another person. The big problem here is the reinforcement only leads to more complaining and doesn't solve the problem. Clear, honest communication solves problems, but is a bit more difficult than complaining.

Conclusion

Every animal views it's world from the perspective of what's in it for me? Experience, motivation and prediction of consequences are the three-legged foundation that behavior is built on. Every individual perceives the value of each of these three legs differently.

All animals, including humans, are uniquely adapted to their environment. We appreciate different experiences, and we are motivated by different consequences. That's the beauty of being us. We are unique. Yet, in so many ways, we are similar to the animals we work with. Our behavior is best shaped with positive experiences, and clear, honest communication sets the stage for lasting healthy relationships.

People come to our profession for many different reasons. Some people are motivated by the opportunity to perform on stage, some are passionate about working with birds, some pursue that dream of making a difference in the world, or maybe inspiring a new generation of conservation champions. Whatever our motivation to be here, we share amazing opportunities and important responsibilities in this profession.

One of our most important responsibilities is to the animals that rely on us for their every need. I am almost overwhelmed by the weight of this statement, a statement that has such varied meaning to so many different people.

What's in it for us to provide the best possible care, management and training for the animals in our care? There are about a thousand reasons. But the main reason is it's the right thing to do... and there should be no alternative.