

on behavior

Getting Behavior ... With a Click and a Cluck

by Bob Bailey and Terry Long

Using a conditioned reinforcer to get behavior is not new. The science and technology of operant conditioning (OC) began with B. F. Skinner's laboratory experiments in the 1930s. Later, during World War II, Skinner took the technology out of the laboratory and applied it to a U.S. Navy project that involved training pigeons to guide missiles. Two of Skinner's graduate students who assisted with that project became so inspired that they went on to make their living applying OC—with the use of a conditioned reinforcer called a clicker—to animal training.

Keller and Marian Breland (later Bailey) were the first to apply the technology commercially when they founded Animal Behavior Enterprises (ABE) in 1943. Their company went on to train over 150 different species (15,000+ animals) with operant conditioning, using the clicker as the primary training tool. (See "The Science of Animal Training," Nov/Dec 2001, for more details about the history of animal training.)

In the last decade, Karen Pryor, Gary Wilkes, and many others accomplished what the Brelands could not in the 1950s: interest the dog training community in adopting the clicker to train dogs. Since then, many training teachers have been teaching dog trainers how to use the clicker, most using dogs as their primary vehicle for demonstrating and teaching behavioral technology. There is, however, a more efficient and effective method of teaching—and learning—precise training skills.

CHICKENS AS A TRAINING MODEL

Using chickens to teach trainers the skills required to train a variety of animals is not new, either. ABE first used chickens as a training model in 1947. All of the trainers who worked for ABE learned basic clicker skills by shaping behaviors in a chicken before they "graduated" to training other species.

Animal training, regardless of methodology, is mostly a mechanical skill, involving considerable hand-eye coordination. Operant

conditioning and the broader but less well-known behavior analysis are sciences and technologies for studying and changing behavior. Applied operant conditioning and behavior analysis, including what is popularly called clicker training, have both a theoretical base, or fundamental principles, which can be taught in the classroom, and practices or methods (the mechanical skills) that can only be learned by doing, i.e., hands-on experience.

Because the fundamental principles do not change from one animal to another, it is possible to teach the fundamentals using simple animals. Once the fundamentals are mastered with simple animals, it is possible to extend them to the training of more complex animals. Thus, dolphin trainers, primate trainers, dog trainers, horse trainers, parrot trainers, raven trainers, and any other kind of animal trainer, can well profit from training a simpler animal model: a chicken.

continued on next page



All photos by Terry Long

Bob Bailey (r) coaches students Frances Smith (l) and Glorene Hanson (m) at Legacy Camp 2002.



Student Glorene Hanson puts to work Bob Bailey's tips on strategic feeding position.

On Behavior

continued from previous page

Teaching with chickens can dramatically shorten the time it takes to teach the science-based principles and practices of operant conditioning and behavior analysis. Shaping behavior of chickens can also develop basic mechanical and timing skills needed for efficient training. With chickens, behaviors come and go quickly, and more or less in direct proportion to the skill demonstrated by the trainer. Behaviors happen swiftly because the chicken learns and moves quickly. *Days* of learning with a dog are compressed into minutes and hours of training a chicken.

Chickens are simple and cautious birds. While chickens may be limited in their range of responses, they are not stupid. Chickens, as a group, have coped with the world for millions of years. Chickens survived by learning what to do and what not to do. As trainers, we simply take advantage of the chicken's power to learn. The chicken's very simplicity makes it an ideal model for teaching students the skills needed to shape behavior. Most higher animals are complicated by many levels of social, investigatory, or play behaviors. Chickens, on the other hand, seem dedicated to eating, avoiding being eaten, and reproducing, with very few

diversions. This simplicity is a help when shaping behavior. The student can spend more time shaping behavior, and less time dealing with extraneous behavior patterns.

In addition, chickens are not only simple, they are **fast**. Though chickens are omnivores, eating both plants and animals, they have the speed and competitiveness of a true predator. It takes a quick and observant trainer to time the clicker correctly to coincide with desired behavior. In short, the ordinary chicken is probably the most ideal behavioral model available for teaching training skills.

RELEVANCE TO DOG TRAINING

Many dog trainers express the opinion that training can be taught only by training dogs. Understandably, a dog trainer must eventually train dogs to learn canine peculiarities. However, for teaching the basic principles of operant conditioning and the skills of training, it is far better and faster to work with a simpler subject, where behavior can be shaped and molded depending on a trainer's new-found skills, rather than arising unpredictably from some highly specialized genetic predisposition.

As APDT member Mel Bussey observed of her workshop

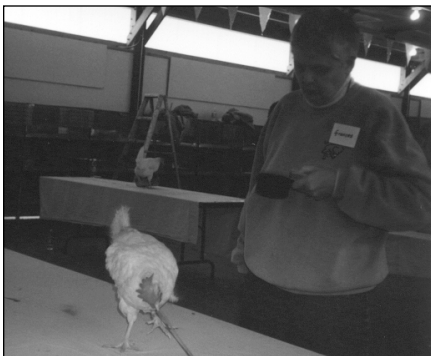
experience using a chicken, "Upon returning home, I discovered the extent to which my training skills had improved. I was able to split the dogs' behaviors into smaller increments, and be more specific in defining my criteria. And I was much more aware of my rate of reinforcement, allowing me to increase my criteria at the appropriate time. I also found that my timing had improved tremendously. This resulted in much more accurate and efficient training because my communication with the dogs was much more clear.

"I was also able to apply what I had learned to teaching my human students. Breaking down the students' behaviors into small steps, as the Bailey's had done for us, increased the rate of learning for the human side of the handler-dog teams as well. As their mechanical skills of timing, criteria, and rate of reinforcement improve, their dogs' skills improve as a result."

STUDYING BEHAVIOR OF MANY SPECIES

Training chickens is less forgiving of a trainer's mistakes than training dogs. Mistakes produce their effects quickly in a chicken. A dog, because of its higher general intelligence, may sooner or later learn what is wanted. Thus, in spite of a trainer's failure to select the proper behavioral criteria and to reinforce at the proper time, a dog will eventually "get it," although perhaps slowly and imperfectly. A chicken, under the same circumstances, would simply appear not to learn, or the behavior would be so slow in coming that it would be painfully obvious that there was a problem in the trainer's technique.

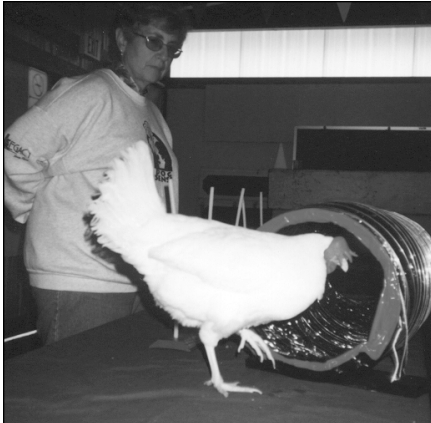
Dog trainers, like ethologists, can learn from studying the behavior of many species. And, in the case of



Student Frances Smith shapes the non-discrete (duration) behavior of rubber band pulling in her chicken behavior model.



Legacy Camp instructor Terry Ryan gets ready to click for action and feed for position to speed weave pole competency in her chicken.



Terry Ryan adapts the location of her clicker and food reward to better ensure her chicken's focus on the tunnel instead of the trainer.



An unidentified chicken demonstrates the one-step weave pole method.



Legacy Camp instructor Cheryl S. Smith prepares to deliver food after clicking at the apex of the A-frame.

learning the mechanical skills necessary for our craft as trainers, chickens are a likely training model. After all, if we can get a chicken to do an agility course, what next?

Getting behavior is what it is all about, isn't it?

Bob Bailey began training in the late 1950s and was a pioneer in the open ocean use of dolphins while he was the director of training for the U.S. Navy. He, and his late wife, Marian Breland Bailey, PhD, began teaching dog trainers in 1996, using chickens as

behavioral models. For more information go to www.hsnp.com/behavior.

Terry Long is the former managing editor of the APDT Newsletter and a professional dog trainer and writer in Long Beach, CA. She can be reached at dogpact@aol.com. 🐾