

ALL ABOUT CLICKER TRAINING

WHAT IS CLICKER TRAINING?

"Clicker training" is the popular term for the training or teaching method based on what we know about how living organisms learn.

Research has shown that any creature—whether a dog, cat, dolphin, parrot, fish, horse, llama, or person—is more likely to learn and repeat actions that result in consequences it desires and enjoys. So clicker trainers provide consequences desired by their animals in exchange for actions or behaviors desired by their trainers.

We call these consequences "rewards," and the process is called "reinforcement." Clicker training, therefore, is a positive reinforcement-based system of training.

"Clicker training" is the most effective and ethical way to help animals learn. When you practice clicker training, animals learn without harsh corrections or other punishment, learning is fun, behaviors are reliable and resilient, and the human-animal bond is strengthened. Clicker training is deeply rooted in the science of learning and behavior change.

WHY IS CLICKER TRAINING EFFECTIVE?

When animals perform a behavior to bring about a desired consequence, as clicker-trained animals do, they are learning in a way that researchers call "operant conditioning."

Animals (and people) may also associate an action, event, place, person, or object with a pleasant or unpleasant emotion. The more a certain event or environment is paired with a pleasant or unpleasant result, the more likely a strong association will be created. This type of association leads to reflexive behaviors, and that type of learning is called "classical conditioning."

While clicker training initially employs the emotional association created by the regular pairing of the click with food, it quickly becomes operant conditioning as soon as the animal repeats an action to earn a reward. Training through operant conditioning results in purposeful behavior, while training through classical conditioning results in reflexive behavior.

The difference between an animal that behaves with purpose and an animal that behaves through reflexes is vast. Clicker-trained or operantly conditioned animals try to learn new behaviors. They remember behaviors even years later because they were aware of them as they learned them, rather than acquiring them without awareness. Clicker-trained animals develop confidence because they have control over the consequences of their actions. They are enthusiastic because they expect those consequences to be pleasurable.

HOW DOES CLICKER TRAINING WORK?

Clicker training works by providing a crystal clear system of communication between people and animals. When teaching a new behavior, the target behavior is usually marked with a sound (though other forms of markers (like light, for example) can also be effective in special situations). This short, distinct sound is used to "mark" or "click" the behavior, followed by delivering meaningful positive reinforcement. The well-timed click, combined with the reinforcement, is the secret sauce that communicates- yes! That's it!

While a bit of a simplification, in essence, any behavior can be trained with any animal by effectively executing three steps:

- Get the behavior
- Mark the behavior
- Reinforce the behavior

Clicking is like taking a picture of the behavior the trainer wishes to reward. After "taking the picture," the trainer gives the animal something it likes, usually a small piece of food, but sometimes play, petting, a favorite toy, or other rewards. It is the effective, safe, and humane way to teach any animal any behavior that it is physically and mentally capable of doing, and it creates enthusiastic learners.

WHY IS IT CALLED "CLICKER TRAINING"?

Clicker training is short-hand for a system of marker-based positive reinforcement training. Clicker training gets its name from the specific work of Karen Pryor and a colleague who popularized the use of the clicker and the term clicker training in animal training generally and in dog training in particular. The clicker often refers to a type of marker - an easy-to-use, low-cost piece of equipment that emits a short sound when pressed. But if you've been to a marine mammal show, you might have heard trainers use whistles. That's just a different marker, but most marine mammal trainers use a system of teaching that is based on the same principles. In fact, before becoming famous in the dog training world, Karen Pryor was a ground-breaking marine mammal trainer using "clicker training".

There are many differences between clicker training and what is often called "traditional training," which intentionally teaches a system of training that uses corrections (also called punishment) alone or corrections mixed with positive reinforcement. Clicker training does not introduce these corrections into its training system for many reasons ethical and practical.

The essential difference between clicker training and other reward-based training, sometimes called "treat training", is that clicker training uses a marker so the animal is told exactly which behavior earned it a reward. This information is communicated with a distinct and unique sound, a click, which occurs at the same time as the desired behavior. A reward always follows. The marker makes the learning process, among other benefits, efficient.

If an animal does not hear a click during an action, it may not connect the reward with that action or associate the reward with another unwanted action. With a click, a trainer can "mark" behavior precisely so that the animal knows exactly what it is doing. That's why clicker trainers call the click an "event marker." As the click bridges or connects the behavior and its reward, it is also called a "bridging signal."

The clicker itself is just a simple device that makes a clear, short sound. It marks the moment the animal performs a behavior the trainer desires, but there is no magic in the clicker. Some trainers use other types of markers, such as a whistle, a bell, or a musical tone. Selecting the marker type is often about ease of use, the marker's uniqueness to the environment, and the ability of the animal to perceive the marker. For example, a trainer working with a deaf dog that cannot hear a clicker might rely on a visual marker like a thumbs up or a tactile marker such as a distinct tap on the shoulder. Trainers who use these other types of markers often refer to their training as clicker training because they are using the same scientific principles.

WHY USE THE CLICK? WHY NOT JUST A WORD?

A click is more useful for training than a spoken word because it is not a sound the animal hears in any other circumstances. It means one thing only: a reward is coming because of what you did when you heard the click. A click can be produced instantly, and at the exact moment, a behavior occurs.

Unlike human voices, which can say the same word in different ways and express different emotions or meanings each time, the click sounds the same every time it is heard; its meaning never varies. Humans are highly verbal creatures, but our pets are not. It can be difficult for pets to pick out a single word from the stream of meaningless spoken words they hear every day. The click's meaning, however, is always clear. It is always directed at the animal, and it is always good news.

The clarity with which a click enables trainers to communicate with their animals has a profound effect on trainer-animal relationships. The level of interaction increases, and the trainer and animal become more interesting and fun for each other.

Experienced trainers may effectively use verbal markers such as "good" or "yes," but they usually understand the challenges described and find a way to compensate for those concerns. Beginners will often find a clicker or other mechanical sound to be a more effective marker.

HOW DO CLICKER TRAINERS ASK FOR BEHAVIORS?

Clicker trainers differ from traditional trainers in that they wait until the behavior is well understood by the animal before using a "cue." A cue is the name of a behavior, such as "sit," a hand movement, or another clear signal. Until the animal knows what the behavior is, any name for it would be meaningless.

When the animal has been clicked several times for a behavior and then repeats the behavior confidently, showing that it knows exactly what earns it a click and a reward, it is ready to learn the name of the behavior. Clicker trainers call this "introducing the cue."

To teach the animal the name of the behavior, or the cue, the trainer says or signals the cue just before the animal repeats the behavior. After several repetitions, the trainer begins to click and reward when the animal does the behavior, but only after the cue is given. No click is given if the animal does the behavior without being given the cue first. The animal quickly learns to listen or watch for the cue, which tells the animal: if you do this behavior now, you will get a click and earn a reward.

WHAT IF THE ANIMAL DOES NOT OBEY THE CUE?

Clicker-trained animals want to perform behaviors for which they have been rewarded in the past. If they understand the cue and desire the reward, they will perform the behavior.

If they do not perform the behavior, clicker trainers do not assume that the animal is "disobeying." Instead, the trainer asks the following questions:

1. Does the animal know the meaning of the cue?
2. Does the animal know the meaning of the cue in the environment in which it was first taught but not in the environment in which it was just given?
3. Is the reward for doing the behavior sufficiently desired by the animal?

After answering those questions, the trainer revises the training process to be sure that the animal knows the meaning of the cue in all environments, regardless of distractions, and feels rewarded for the behavior.

WHY DON'T CLICKER TRAINERS USE PUNISHMENTS AS WELL AS REWARDS?

A consequence of any behavior can be unpleasant or pleasant. So why shouldn't punishments follow unwanted behaviors, just as rewards follow wanted behaviors?

Research demonstrates that punishment decreases the frequency of an unwanted behavior but often produces another unwanted behavior. The results of punishment as a training method are difficult to predict and control.

In addition, punishment is not usually identified with an event marker. It almost always comes after the event and is rarely clearly connected with a specific behavior. In the animal's perception, punishment is a random, meaningless event. Therefore, it is less effective than the combined use of an event marker and positive reinforcement in changing behavior.

Clicker trainers also feel that their relationships with their animals are stronger and more rewarding when they focus on the positive rather than the negative. The difference in attitude and enthusiasm in an animal that works to earn rewards rather than to avoid punishment is vast.

CAN A DOG THAT HAS BEEN TRAINED "TRADITIONALLY" BE "CROSSED OVER" TO CLICKER TRAINING?

Absolutely. Crossover trainers are often amazed at the change in their dogs when they switch to clicker training. Previously hesitant and shy dogs become enthusiastic and creative learners. To try clicker training with a dog previously trained with traditional methods, don't begin with a behavior the dog already knows—try something completely new and fun.

HOW CAN CLICKER TRAINING BE USED TO GET RID OF BEHAVIORS?

Clicker trainers allow unwanted behaviors to disappear through a lack of reinforcement. If a behavior is not rewarding to the animal, eventually, it will disappear. If an unwanted behavior persists, clicker trainers study the behavior to understand why it is reinforcing to the animal. Sometimes, the behavior reinforces itself: a barking dog is less bored than a quiet dog. Barking is its own reward. In this example, the clicker trainer would provide this dog with an alternate wanted behavior to replace the unwanted behavior. The bored dog may simply need more activity. Or quiet resting for longer and longer periods may become a rewarded behavior. Then, the clicker trainer would teach the dog a cue for "silence."

DO CLICKERS AND TREATS NEED TO BE USED FOR EVERY BEHAVIOR FOREVER?

No. Once a behavior is learned and on cue, there's usually no need to click, as the animal understands the behavior. Clicker trainers can maintain the behavior by replacing especially good treats with occasional and less intensive rewards, including a pat or praise. Learned cues and behaviors are also maintained by real-life rewards. For example, sitting quietly at the door is rewarded by the door opening so that the dog can have a walk. Clicker trainers then save clicks and treats for the next new thing they want to train.

MY DOG ISN'T FOOD-MOTIVATED; WHAT DO I DO?

Food is the most popular reward, but anything your dog loves can be used. Throwing a tennis ball or playing tug are both highly motivating rewards. If you'd like to use food treats, be sure that your tidbits are especially yummy (bits of hotdogs, for example) and that your dog's meals do not immediately precede a training session.

WON'T MY DOG GET FAT IF I FEED THEM EVERY TIME I TRAIN THEM?

No. Tiny pieces of food are used as treats. Small is important because you want your dog to be able to eat it and be "ready to play clicker" some more. Clicker training is also good exercise and highly stimulating. Dogs work when they clicker train! You may also wish to substitute a clicker session for one of your dog's regular mealtimes.

CAN CLICKER TRAINING BE USED WITH ANY ANIMAL?

Yes. First widely used by dolphin trainers who needed a way to teach behavior without using physical force, operant conditioning (the scientific term for clicker training) can and has been employed successfully with animals of all sizes and species, domesticated and wild, young and old, and with all breeds of dogs and, cats, birds, leopards, rats, rabbits, chinchillas, fish, and more. With deaf dogs, substitute a light flash for the clicker.

Clicker trainers who learn the underlying principles have a powerful set of tools at their disposal that enable them to analyze behaviors, modify existing methods for individual animals, and create new methods where none existed previously. This flexibility lets the tools of clicker training be re-invented in new forms that work in a range of situations and for an infinite variety of animals.

The same principles have also been applied to training for athletes, dancers, skaters, and other people. Called "TAGteach," this form of training uses a click as a marker signal to teach precise physical motions quickly, accurately, and positively.

A FEW TECHNICAL NOTES

This article was written for a general audience to help explain the benefits of clicker training. It is not a technical description of clicker training, nor is it intended to be a how-to guide. Although the article refers to the science underlying clicker training, there are many terms that have been intentionally simplified to make it easier for the average reader to understand. If you delve more deeply into the science, you will find that “rewards” is an inaccurate term and that, rather than “rewarding behavior,” professional trainers will often refer to the process as “reinforcing behavior.” Concepts like classical conditioning and operant conditioning have been simplified here purposely to avoid confusion.