

The Electric Collar – An Analysis and Opinion

By Robert Milner -20 Feb 2008

Basic Principles of Dog Training

Dogs learn through encountering rewards or aversives (punishments) which alter their behavior.

Reward – Whatever makes the dog feel good. Could be praise, petting, retrieve, or a retrieving dummy. The individual dog determines what is a reward to him.

Aversive – Whatever makes dog feel bad. Could be scolding, shaking, direct threatening stare, hitting, mild electric shock (nick or tap) or heavier electric shock.

Dogs respond in a predictable manner to these two forms of stimuli.

Reward

When you deliver a reward to a dog the behavior that preceded the reward tends to be repeated. When you see or cause a behavior that you want, you follow it with a reward. Because the reinforcer follows the behavior you have total control over which behaviors are reinforced, by delivery or withholding of the reward.

Aversive

When you deliver an aversive to a dog several things happen.

1. The behavior preceding the aversive tends to not be repeated.
2. The animal develops an aversive association with the particular piece of ground(or water) where the aversive occurred. The dog also may associate the aversive with a smell, a sight, a noise.
3. The behavior that occurs immediately following the aversive is reinforced. That behavior tends to be repeated. To the dog the behavior that he performs immediately after aversive is a successful “escape response” that turned off the aversive.

The aversive works great for decreasing undesirable behavior because you have control of the timing. However, you also have to deal with the other 2 effects that occur, the aversive association and the escape response. Some of the commonly encountered retriever behaviors resulting from the aversive association are:

Balking at water – The dog is sent on a water blind (or mark) and stops at the edge of the pond. Typically this occurs after the dog has received a shock in the water and has a generalized aversive response to that particular pond. He doesn't want to go back into that water. The solution used is often to force him more on land so that the land becomes “hotter” than the water.

Bugging – The dog won't line up straight next to the handler. He leans out away from the handler and tries to move his head away from the hand that is trying to line him up. This behavior is built by shocking the dog while he is right beside the handler. This is usually done while forcing him to go on lines.

Balking or popping on land lining drills. The dog refuses to go when sent or goes a short distance and stops. Frequently this is caused by trying to send the dog across a "hot spot", an area that has become aversive because the dog received a shock there. It does not matter why the shock was delivered. It only matters that it was. This can also be generalized to a particular distance that the dog is from the handler.

Some common Retriever behaviors resulting from the escape response phenomenon are:

Freezing on birds- This is a classic escape response. The response is built by shocking a dog when he has a bird in his mouth. The shock causes the dog's neck muscles to contract, which causes him to clench his teeth. To the dog this is a successful escape response that turned off the collar. Do it enough times and you will have a dog that will not release the bird to the handler. Frequently it manifests itself when the dog is stressed, as when running in a field trial.

Frequently a new and unknowing dog owner will put the electric collar on the dog to stop him from running away. Frequently the first shock will be when the dog is 30 or 40 yards away. The escape response which occurs will have a 50/50 chance of being the desired one of coming to the handler. The other 50% will run directly away from the handler, and that is the behavior that will be trained.

The escape response is a very difficult way to try and train a dog. Since the reinforcement comes before the desired response, you must be able to predict in a particular dog what behavior is likely to follow a shock delivered in a certain setting and circumstance. Very few dog trainers have trained enough dogs to be really good at that prediction.

The Myth of the "nick"

Some trainers try to justify the collar by speaking in terms of "nicks" delivered at low intensity and brief duration. In terms of behavior modification, aversives are cumulative. A number of small "nicks" is equivalent to one big shock in terms of behavior modification. Small "nicks" also make it hard for the dog to focus on the task at hand.

If you disagree, here is a demonstration you might try. Have a helper strap a collar on your leg. Set it at the lowest intensity. Hand the transmitter to your helper and instruct him to go in the next room and deliver 20 "nicks" at random time intervals over the next 5 minutes.

Start a task requiring manual dexterity and concentration such as tying a small fly. See how well you are doing at the 4-minute mark.

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The three deal breakers for me are:

1. I think that through lack of knowledge and experience, many trainers create problems with aversives, which they then attempt to fix with more aversives. I think this produces conflicts and uncertainty in the dog and creates high anxiety levels. It would be interesting to measure the blood levels of corticosteroids in a dog during electric collar training.

2. The culture of and use of the electric collar puts the user in the mind set of “catch the dog doing something wrong and apply punishment”. I prefer the mindset of “catch him doing something right and reward him”. I have much more control over this process.

3. Because the behaviors immediately following a shock are reinforced, use of the electric collar always creates some undesirable behaviors which must be fixed.

Unfortunately the collar user generally tends to try to fix them with more aversive conditioning and thus continues to create more problems.