

Backtracks

By Deborah Palman, Maine Warden Service

Last fall, my dog and I somehow messed up a track and failed to locate a lost hunter who was later found by other wardens. The wardens fired shots which the lost hunter answered. The hunter was cold, but OK. The lost hunter could not tell us where he went. He had wandered on logging trails for hours at night. From the actions of my dog, the footprints we did locate and the layout of the area, I suspected that the hunter had come out to a house and backtracked nearly a quarter mile to take another trail that led him deeper into wild land areas. My dog never went on the backtrack but continued on past the house to loose the track on the roads beyond.

That same fall, a fellow warden told a story about a K-9 team from another agency that was tracking two suspects wanted for burglaries. The warden was accompanying the K-9 team as a back up officer. The K-9 was doing well, tracking the suspects for a mile or more until they came to where a snowmobile trail ended at the edge of a large field with a house. From the dog's previous work, it was obvious to the warden that the two suspects would move back into the woods whenever they came in sight of a house or other civilization. In this case, the snowmobile trail went across the field in plain sight of the house. The K-9 tracked up to the edge of the field and then stopped, circling. When the dog took up the track again, the dog wanted to go back up the trail the team had just come down. Instead of letting the dog backtrack down the trail, the handler told the dog, "No backtracking," and pushed to dog to work out into the field. The warden noticed that, because of a swamp on one side and open field on the other, the only way the suspects could stay out of sight without getting very wet was to go back the way they came on the trail and take another route on the other side of the swamp. Unfortunately, the handler didn't let the dog retrace the route. The warden said that from that point on, the dog did not pick up anything definite and they lost the track. Although he was not a dog handler, based on the dog's actions and the lay of the land, the warden was reasonably sure that the suspects had backtracked up the trail from the field.

Linear Tracking

These two incidents and other training problems I experienced got me thinking about how we and many other police K-9 teams train for tracking. The easiest way for humans to conceptualize tracking and give directions to tracklayers is to describe a linear track, that is, point A to point B to point C to point D, etc. Usually when a handler or trainer is describing a track to a tracklayer that both can understand, the points of reference are objects the two can see or objects or points the two are both familiar with. Describing and recording the tracks by these various points allows both to know where the track is or at least where it is supposed to be if they are both communicating well.

Anyone who has trained a tracking dog knows how important it is that the handler, or trainer, or coach who is accompanying the team know where the track is on a training track. The greatest sin would be to not allow the dog to track when the dog is right, and a lesser sin would be to allow the dog to leave the track to investigate

something the dog is distracted by and not communicate to the dog that leaving the track for unrelated distractions is unacceptable.

I know from watching dogs work in all sorts of practical and competition tracking exercises is that dogs develop certain searching and tracking styles and strategies. The “natural” or practical trained tracking dog casts and circles widely when it loses the track. The precise competition dog is taught to stay very close to the footsteps, move slowly and not to leave the track, searching for a corner in a very confined area without circling. Some dogs track by staying very close to the footprints and crushed vegetation while others seem to fringe the edge of the scent, regularly moving up to 40 feet off the tracklayer’s path and back again, depending on the wind and terrain. The point is that the dog searching in a manner that he has learned through training gains him the most success in following the track.

The problem with habitually doing linear tracks is that the dog learns to search for a lost track out in front of the general direction the team is moving. The dog will look left, right and straight ahead and continue to do this if the only tracks the dog has worked on are linear. The dog may also be habituated to looking in front of the handler or in the direction the handler is facing rather than looking everywhere.

Energy Burners vs. Energy Conservers

I’ve noticed the tendency to search only in front or to overshoot corners to be worse in dogs that are high energy and high drive. They aggravate the problem by trying harder and harder to search out in front, and if they have lost the track and somehow do search ahead off the track and discover a loop or turn of the track out ahead, they will learn that just working out farther and farther may allow them to re-acquire the track. I call this type of dog an “energy burning” dog. Their goal in life seems to be to burn as much energy as possible. The “energy conserving” dog is calmer and slower and doesn’t waste energy searching where the track is not. They simply stop, circle and work it out, or just quit tracking if they can’t.

The energy burning dog that has not learned to search backwards will show a loss of track when he first loses the track, then circle around and try to find the track again out in front of the team’s location where the dog lost the track. The energy burner may even stop for a second, but then he will lunge ahead, pulling the handler forward another lead length in a vain attempt to find the track again out in front. My dog used to do this, and he would go three and four lead lengths after he had already signaled a loss of track, pulling very hard. If the handler doesn’t recognize what is happening, the handler may think the dog has the track when he pulls hard and the handler will follow the dog too far. Pretty soon dog and handler are on a long walk to nowhere. Recognizing the energy burner’s “false” runs can be hard, but usually you can tell because the dog doesn’t give tracking postures and doesn’t work with his nose in a searching manner. He just pulls like a plow horse to bring his handler along. He just pulls rather than making choices based on using his nose.

Solving the Backtrack Problem

Since my “energy burning” dog showed this behavior of trying to search unproductively further and further out after missing a corner or losing the track, I decided to try to fix the problem by doing a number of back tracks. I hoped that backtracks would show the dog that searching for the track included searching back along the route the team had come as well as out in front.

I set up some simple back tracks that consisted of a track that went straight for 100 to 150 feet or so, backtracked on the forward track for 20 or 30 feet and then turned off at a right angle from the original track. We marked the tracks with stakes or had prearranged double back and turn points with markers like trees or bushes, etc. That way I could observe the dog’s actions when the track scent ended and when it turned off. We also did backtracks in snow where it was easy for the handler to see what was happening. A toy reward was placed at the end of the last leg after the turn, paying attention to the wind direction so that the dog could not solve the problem by winding the toy. If a person was used at the end, the problem was set up so that the dog could not solve the backtrack by winding the person from the initial leg. The backtrack was always placed on the straight ahead portion of the track to prejudice the dog to race ahead and encounter the backtrack rather than taking the turn before the backtrack.

My dog didn’t have a clue what to do on the first few backtracks. He consistently tried the pulling ahead in spurts even though he would indicate the loss of track where the backtrack started back along the original track and the tracking scent ended. I resorted to stopping him from moving forward and “suggesting” that he search in certain areas to the right, left and back along the track until he discovered the turn to the last leg. As with any detector work, it is essential that you not solve the problem for the dog by directing the dog to search right where the track is, but by having the dog search in the general area, or in a pattern that will bring the dog to the track so he can discover it on his own. The whole key to good tracking training is to know where the track is but never act like you know where it is. Dogs are expert readers of body language, and even the best of actors will subconsciously give off signals if they know where the track is. This is why the finishing stages of tracking training need to include having handlers run a track “blind” with a knowledgeable coach or trainer who knows where the track is.

After a half dozen or so simple backtracks, my dog began to get the idea, and his false runs beyond the end of the track scent diminished. After a dozen backtracks, he began to search back along the incoming path without help. After a few more, he began to give a head cast on the turn off point even though he almost always charged straight ahead down the backtrack portion and then returned rapidly to the turn he had noted earlier.

After teaching my dog backtracks, I noticed that his turns became better and he almost never overshot a regular turn any more. All his tracking improved because he learned to stop and work backwards when he lost the scent rather than to charge forward and really get lost. I’ve used these exercises on a number of teams and they have helped the high drive teams stay on track. Almost every dog that had worked on linear tracks showed the same inability to solve their first few backtrack problems without some help from the handler. Some of the lower speed teams solved the problems readily without much help. Other dogs like mine needed some help to prevent their becoming too frustrated with the problem.

Handler Training

Even better than teaching the dogs to solve backtracks, the handlers learned to recognize when their dogs were on a backtrack and solving the problem successfully. By doing only linear tracks, the handlers never saw the dog work out a backtrack and never saw that type of search pattern and body language in the dog. Sometimes handlers get so accustomed to linear tracks the handler won't "accept" the idea of a backtrack on a real track because they don't have the time to think about the problem while tracking, even though we know that backtracks exist in real life. Handlers need to experience backtracks just like dogs do to have the variation in their mental tracking experience "repertoire."

Tracking on Snow and Other "Visible" Terrain

I now consider backtracks to be an essential exercise for all tracking dog to learn, preferably early in their tracking experience. They are a great exercise to work in snow where the handler can see exactly where the track is and what the dog is doing in relation to the track. Snow is a great medium for practical tracking because it allows the handler to see how the dog solves tracking problems. Snow tracks can be made difficult with backtracks, splits, jump off, etc. Since I work regularly on snow with wardens who are very "track" conscious, I've had all sorts of tricks played on me. On one track, I came to a small knoll in the middle of the field. As I approached the knoll, I could see where the track I was following split three ways and all three seemed to disappear over the knoll. Two of the "tracks" were backtracks where the track laying warden had carefully walked backwards in his tracks for 100 plus feet over the top of the hill and then backwards in all his tracks. The third was the real track. On the same track, my visible "track" went down a woods road that was bordered by thick fir trees and simply stopped. I didn't know what happened, but my dog quickly back tracked fifty feet to where the warden had jumped three feet off the trail into the thick firs that concealed his foot prints on the ground.

Working in snow allows the tracklayer to do back tracks, circles, and giant snarls of tracks if needed that the dog can solve without the handler thinking the dog is wrong because the handler can see the tracks and the resulting dog behavior. Transitioning from snow to ice to pavement gives the dog practice on tracking from "soft" to "hard" surfaces and drastic changes in scent types. Instead of complaining about the weather, go out and train to take advantage of the ability to see the tracklayer's path. Use the opportunity to teach your dog backtracks.