Evidence Search

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Need food treats, articles and dog to demonstrate with.

I. Introduction: Hopefully most of you are already using your dogs to recover evidence and “clues” at search and rescue scenes. For law enforcement people, SAR personnel call items or sign left by the lost person “clues” instead of evidence. They may become evidence later on if criminal activity is expected, so it pays for SAR personnel to learn about evidence search and the proper handling of evidence.

II. I favor the passive indication of evidence for two reasons:

   A. A passive indication is more likely to preserve the evidence and its location.
      1. If a dog picks up the evidence, it may damage it or destroy trace evidence (blood, DNA, etc.)
      2. If the handler does not see the dog pick up the evidence the original location of the evidence will be lost.
      3. Dogs which pick up evidence are also more likely to drop it and lose it.
   B. A passive indication is safer for the dog and handler.
      1. Loaded firearms.
      2. Ingestion of drugs and toxic substances.
      3. Dogs picking up sharp objects - knives, etc.

III. Warden Service has used passive indications for the last 12 years without any problems.

   A. If the dog can be motivated to work, it can be taught article search quite easily.
   B. WS K-9s are taught to indicate evidence on track.
   C. Our K-9s find lots of expended shells, items as small as a paper clip.
   D. Located expended shells under snow, water, shells which are weeks old.
   E. Very useful when you lose your own equipment - pagers, portable radios, watches, car keys.

IV. Training basic evidence/article indication.

   A. Teach the indication before you have the dog search.
   B. Searching will come if the dog knows what to do for an indication and knows he will be rewarded for indicating.
C. We teach evidence indication motivationally, initially with food.
D. Teach “down” with food, “hand” signal (demonstrate).
E. Add article with food.
F. Steer dog into position if needed.
G. Minimize signals and cues. Try to eliminate them as soon as possible so the dog does not become dependent on them.
H. Use a particular verbal command which is unique and add a hand signal.
I. Distance is critical - dog will not indicate at a distance because your presence is a significant cue. Increase distance gradually.
J. Generalize locations, articles, and scent on articles (stranger’s scents).
K. Back up a step or two if dog is not responding properly.
L. Add articles to tracks if working a tracking dog. This can be done with any breed which likes to eat, even bloodhounds.
M. When you add articles to tracks, beware of the “Balancing Effect” - you need to balance out the motivation to find evidence with the motivation to track.
   1. This takes time and constant practice. If you stop rewarding at the articles in training, the dog will stop indicating and want to skip the articles to follow the track, which is rewarding in itself.
   2. When starting with a dog who already tracks well, put food on the articles so the dog stops at the article. Then you can move up the tracking line, get the dog to down or indicate, then reward the dog for the indication.
   3. Use lots of reward to counteract the dog’s desire to skip the articles and continue on the track.
   4. Articles make good intermediate rewards on the track and help to keep the dog closer to the footsteps.
   5. Often on a real track, evidence will be the only thing you will find because the victim or suspect is gone or the track will be too hard to complete.

V. Search Patterns

A. Train the dog to work within a particular radius by making most of the practice finds within a certain distance of you.
B. Search by moving perpendicular to the wind and move my grid lines into the wind. This minimizes contamination by the team and helps to keep the dog out in front.
C. Dogs like to use the wind and will usually like to be up wind of the handler when searching off lead. I can usually tell which way air currents are moving just by watching how the dog searches.
D. Always approaching practice searches in this manner will condition the dog to stay upwind and in front of you.
E. Allow the dog the freedom to move to explore scent up wind. Don’t call them in unnecessarily. Rely on training to help the dog work close to you.
F. Use hand signal to indicate small areas to be searched - finger snap, point, circles. Condition this in training.
G. Extend search times slowly.
   1. Have long and short searches in training.
   2. Dogs in an intermediate stage of training often show “burn out” and quit searching or just run around like they are searching, but they are ineffective for some reason.
   3. Continuing to practice article searches in training and adding play and rest periods to long searches will cure this problem.
   4. Learn to recognize when the dog is working and when it is not, and how to fix the problem.
   5. Dogs look at the exercise as just searching. We tend to reward them for finding, not searching, when they are just working. It would be like being paid only when you convicted a deer poacher, and not for being on patrol looking for poachers. If there is nothing to be found, then the dog needs to be rewarded for trying, just like you are paid for being on patrol even when you don’t convict people.
H. Use areas of harder terrain - thick cover, difficult travel, etc. Encourage the dog to penetrate cover.
J. Use smaller and smaller articles, concentrate on items most important to you.
K. Do older and older searches, in good and bad weather.
L. Know how far the dog can smell a particular item of a particular age under particular conditions.
M. Put articles in areas above ground (shell on the twig story).
N. Develop search strategies and grid distances for particular conditions. On lead near roads, distances needed to detect the particular evidence you are looking for.

VI. Long distance indications. Definitely needed for SAR work.

A. Develop some sort of long distance indication, or at least be aware of what the dog will do if it finds evidence or clues out of your sight.
B. Air Scent SAR dogs will often do a find/refind if that is their way of indicating victims. Encourage this.
C. Police K-9s may pick up the evidence, leave it and follow the handler, bark at it.
D. A particular indication can be encouraged by having evidence the
dog cannot pick up at a distance and observing what the dog does,
and encouraging any efforts to get the handler's attention.
E. Encourage the dog to get your attention by pretending to ignore the
dog, or step behind a tree so the dog cannot see you. Often eye
contact by the handler is a cue to indication, so train and proof beyond
this stage.
F. At first, reward any attempts of the dog to get your attention. Then
ask for more obvious behaviors.
G. Go with the flow - the dog’s natural behaviors to get your attention
will work better in times of stress.
H. Add motion, and try to get the dog to tell you even if you are
walking away. Walking away will usually draw the dog away.

VII. Environmental Effects
A. Anything which enhances the exchange of air and scent from the
article without diluting the scent too much will enhance searching.
B. Warm ground, cool air is best. Rain definitely inhibits the exchange
of scent. Cold mornings when the ground is cold are not good times to
search for evidence. Ground warmed by the sun is best.
C. Too much wind dilutes scent and washes it away. No wind or air
movement limits the distance the scent cone spreads.
D. Generally, the older the scene the less scent there will be, but
environmental effects will have a greater effect on search efficiency
than age.
E. Contaminating tracks and scents in the area are a real problem.
The dog is looking for human scent, so he has to investigate all the
scent sources out there, including tracks. If the only track there is
that of the criminal or victim, then searching along this track will
obviously enhance success.
F. If the tracks in the area are made by those other than the criminal
or victim, the dog will work much more efficiently if the scene is
allowed to rest. Track scents seem to fade faster than article or
evidence scents. Even waiting 15 minutes can make a big difference.
Otherwise, give the dog time to check out all the scents before moving
to a new area.
G. Educate fellow officers about contaminating the area. Wardens vs.
police officers.
H. Trained dogs usually work better than metal detectors.
J. Dogs trained on shells will indicate on wadding and sometimes
indicate on projectiles in objects.
K. Dogs trained on shells will indicate on the cone of powder residue
left in the area. This is especially true with rifles and shotguns, less
powder is left by handguns.
VII. Search Strategies
A. Look over your scene, talk to investigators and try to determine areas of highest probabilities. Search those areas first.
B. Observe the dog – he will usually follow the suspects’ tracks, officer’s tracks, scent in area as well as find evidence.
C. Work into the wind in a grid pattern once the dog does an initial search.

VIII. War Stories

A. Often a single piece of evidence makes the difference in a case. Moose hunters in Maine are allowed to shoot only one moose, but some mistakenly or intentionally shoot two or more because moose tend to hang out together during the fall. Every year during and after the legal moose season, Maine Wardens find more than a few scenes where two moose have been shot and one or both left. During the 1996 season, Sergeant Guay and his K-9 Reba were called to a scene where two moose were killed and left in a clear cut. Of course, before calling the K-9 team, four wardens searched for several hours with a metal detector for rifle shells without results. A witness had given the wardens a general description of a vehicle seen in the area. The K-9 team searched for a half hour and located one spent .300 Win. Magnum rifle cartridge at the bottom of a brush pile where a metal detector could not reach it. On a woods road on the route back to town, Sgt. Guay saw a truck parked beside the road which matched the description of the suspect vehicle. He stopped and talked to the occupants, a man and his wife, and did a routine check of the weapons (it is illegal in Maine to have a loaded firearm in a vehicle), finding that the rifle in the truck was a .300 Win. Magnum, Sgt. Guay told the man that he wanted to talk to him and took him to his warden vehicle. Sgt. Guay got in his truck with the man, looked at the man and said, “Now, don’t you have something you want to tell me?” The man began to cry and admitted to shooting the two moose by mistake. He and his wife had tried to load one, but when someone drove by, they became frightened and left, picking up all the shells they had fired but the one they could not find. That was the one the K-9 Reba located at the bottom of the brush pile.

B. On 11/13/99, Wdn. Dan Scott responded to a complaint of a bullet entering a house. The bullet had gone through a window and lodged in the mattress of a young girl’s bed. The complainant had not discovered the damage until five days after he heard the shot. Deciding to try to locate the casing involved, Wdn. Scott took a back azimuth based on the hole in the window and the hole in the bed. He slowly walked this line through the
woods, instructing Baker to search around him. After walking 200 yards through the woods, he broke out into a woods chopping. Walking another 100 yards through the chopping, Wdn. Scott was amazed to see K-9 Baker pawing at the ground. There he found a spent .30-06 casing. Wdn. Scott has been unable to locate a suspect so far. This scene was six or seven days old.

C. In 1995 I was called to find a single rifle shell in four large hay fields about 100 acres in total. The wardens involved (Durwood Humphrey and Kevin Adam) had apprehended two people night hunting on foot after they heard them shoot somewhere back in the fields. Luckily they had not searched the area themselves, probably because they knew how difficult it would have been, even with a metal detector. Starting from where the two were apprehended, I put my dog, Rica in her tracking harness and told her to track. She started tracking loosely through the fields. The scene was about nine hours old and an intense morning sun was warming the ground after a cold night. We tracked along about 200 yards or so through two fields and into the third field where she nonchalantly laid down, indicating on the rifle shell. Even I was amazed. Finding the shell took five minutes from the time I arrived at the scene, and that included giving water to the dog. In another five minutes the dog found the deer that was shot and left. After digging in the deer carcass for fifteen minutes, we completed the picture by recovering the spent bullet from the deer. As Wdn. Adam said when we pulled the bullet out - "Touchdown!"