

Search Dog Strategy: What's the Plan?

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Testing day.

The dog is a good searcher: ranges out ahead of his handler, scanning the air for scent. He never seems to tire, and he gives a strong alert, following up with a classic, unmistakable refind.

The handler can get around well in the woods; he's physically fit and can cope with emergencies. He's attuned to his dog and what the dog is telling him.

This test will be quick and easy.

Or will it?

That depends on more than a woods-wise handler and a motivated search dog. It depends on the handler's knowing how scent behaves in different terrain and weather conditions, and how to search a given piece of real estate, based on those variables of scent transport. And it depends on having a plan.

Search for missing persons is usually a tradeoff between time and territory. Too much territory, too little time. Search areas can easily encompass hundreds (or even thousands) of acres, and the difference between life and death of a missing child or a hiker overdue in bad weather may be a matter of hours. The key is efficiency: cover as much ground as quickly and as effectively as possible.

"What's your plan?" the testers are sure to ask the handler-candidate.

A good answer, for starters, might be a hasty search. Go to the place the missing person was last seen (PLS) and take a look around. Run trails and logging roads. Look for footprints while the dog casts for scent. At the same time, the handler will want to keep track of wind direction, to determine the prevailing breeze (if any), as well as vagaries caused by breaks in the terrain. This helps him plan his eventual search pattern. A hasty search can give him a good overview of the area.

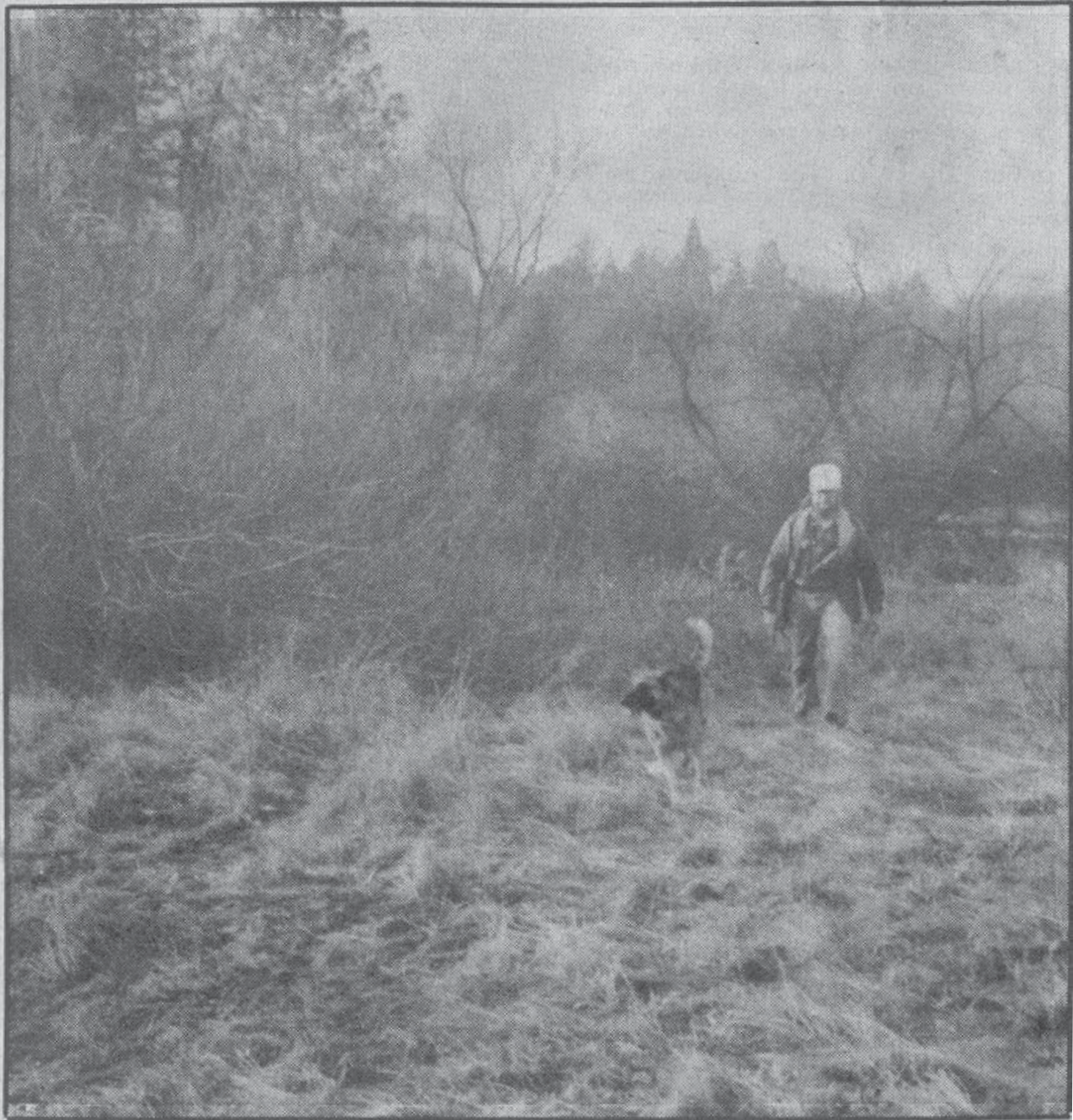
He may also want to check the perimeter of his assigned sector. This helps familiarize him with the boundaries and ensure good coverage of the margins — an area often missed. It gives him a chance to flag any confusing places (flat ridges, minor drainages, breaks in a fence) so he'll recognize the boundary on later sweeps. He can cut for sign to make sure the missing person hasn't moved out of (or into) his search area.

At some point, though, he's going to have to decide how to search his assigned sector, methodically and as thoroughly as time permits. He needs a plan.

In relatively flat terrain, he'll probably choose a simple grid system. Beginning along the downwind boundary, dog and handler work across the wind, making parallel (and equidistant) passes through the entire sector, ending up at the upwind boundary. The object is to get the dog downwind and within scenting range of all

points within the sector.

The handler spaces his sweeps according to wind speed and variability, amount of convection, unevenness of the terrain, and density of vegetation (as well as his dog's ranging distance). On a cool, overcast morning in open woods, he can space his sweeps a lot farther apart than a sunny midday in June, in dense brush, or an area where cliffs cause eddies in the air currents. If his dog works fairly close to him, he'll have to make closer sweeps than if he has a wide-ranging partner. He should use his compass to ensure uniform coverage, with no gaps. Gaps could mean passing by that missing person.



The SAR handler must check the perimeter of his assigned sector to familiarize him/herself with the boundaries and other areas that will need special checking.

What about in the mountains? In steep country, there's generally an updraft breeze when the sun is on a slope, and downdrafts at night, during the early morning and late afternoon, or any time when the slope is in shadow. So, often, during the day, the handler will want to start at the top and make contour sweeps down. At night, on the other hand, he'll probably want to work up from the bottom. Similarly, hasty searches should take advantage of the air currents. Run ridgetops during the day, drainages and bottoms at night.

Search sectors are rarely homogeneous. A handler may have to adapt his strategy to include a system of ridges and drainages; maybe a flat marshy area, an edge of rimrock with tricky air currents, or clearings in otherwise dense woods. He may have to subdivide his sector into several parcels, with a different search pattern or grid spacing for each parcel.

He may even have to leave his search pattern, briefly, to check an abandoned building, a cave, pile of boulders or a logjam. If his dog alerts and takes off working a scent, he may want to follow the dog. In this case, he should mark where he left off his search pattern so he can pick up there if the alert doesn't pan out.

Sidetrips aside, he should stick to his plan.

If our candidate handler has been smart, he's followed more experienced dogs and handlers in the field and paid attention to how they searched under different conditions, and how weather and terrain affected the handlers' strategy and the dogs' effectiveness. He should certainly have noticed how his own dog performs in light wind as compared to a gale, or in dead-air. A glance through his training log should help him come up with some rules-of-thumb or guidelines on how to cope with a given situation.

(If our candidate handler is really smart, he'll realize these are things that even the most experienced handlers continue to learn about.)

When our candidate team comes back out of the field, the handler's job isn't finished. He should be able to mark his route of travel on a map and the location of the people he found. When he made the find(s), he should have been able to radio the location(s) in to search base.

If this is a simple test ("Find the two guys hiding out there"), of course he and his dog should have found them.

But what about the real thing, when he and his dog may search many sectors, and thousands and thousands of acres, before they're lucky enough to be assigned the area that contains a missing person? What does a handler report when he comes up blank?

He should be able to point out any gaps in his coverage; the location of any clues found, including alerts that the dog couldn't follow to the scent source. More than one missing person has been found on the basis of those alerts — marked on the base camp map and finally forming a pattern that led to the find.

The handler should also be able to estimate his probability of detection (PoD), based on the thoroughness of his coverage and how well he felt he and his dog were working. "I'm 80 percent sure there's nobody out there. We really went through that area, we had a good breeze and the dog was working great." (That area may not be re-searched again soon — if ever.)

Or, on the other hand: "The winds were squirrely, there were some places be-

low the cliffs that we just couldn't get into. The dog showed some interest in this drainage but couldn't follow through. I wouldn't give us better than 50 or 60 percent out there." (Maybe we need to send other searchers into that area next shift.)

The only way to give this kind of feedback is to have a plan and follow it.

Back to our handler-candidate. Even if he brings both these "victims" back out of the field, he still may not pass. His testers should be judging him not only on his dog's finds, but also on adequate coverage of the assigned searched area. Because only then can they have confidence that he'll find whoever's out there when it really counts.

The mark of a professional (and this goes for the paraprofessional volunteer, too) is the ability to work effectively within the variables – weather and terrain – and give a reasonably accurate estimate of how those variables affected his dog's (and his own) performance. Knowledge, experience and intuition all come into play here. And so does honesty. The missing person's life may depend on an honest answer.



Have a plan in mind before leaving to do the search.

Photos submitted by the authors.