TECHNOLOGY *on the* TRAIL

Twenty-five years ago, trail cams were developed for monitoring deer activity. The author explains how game cameras, scouting cameras or whatever you may call them have become commonly accepted hunting aids for deer hunters.

BY ■ DR. JAMES C. KROLL

Perched atop a tripod strategically placed on the edge of an Alberta pipeline (aka, a "cut line"), the subzero temperature and 20-mph wind was doing a real number on my concentration. It was 10 a.m. and I had yet to see a single deer!

My neck ached from constantly turning my head, left, then right, like watching a tennis match. While looking left, I was worrying about what is happening to the right, and for good reason. Many a time I have looked from back from one side of my stand to the other, only to see the rear end of a buck disappearing into the bush.

Over a distant hill, I noticed a small dark figure coming toward me. It looked to be about a mile or so away. I was not sure if it was a deer, so now I had three ways to look!

The object kept coming toward me at a steady pace, increasing in size as it neared. I decided to take a chance and peeked through my binoculars. It turned out to be my hunting buddy, Dave Bzawy of Alberta Wilderness Guide Service. He was running full stride toward me through the deep snow. It was the early 1980s. Dave and I were much younger then. Running through deep snow was not that much trouble for two relatively young men. Today, at least for me, it would be out of the question.

Dave ran to my tripod, right up the steps of the 14-foot structure and stopped face to face.

"Seen anything?" he asked. I told him not a single deer had crossed the cut-line. "I have been on a 'reccy' and found a hot trail about two miles from here. We need to move the tripod."

It was normal procedure for Dave to conduct a reconnaissance (the "reccy") of the general area while I hunted. He was watching potential feeding areas for doe activity and studying trails for buck activity. In this case, he had seen a large number of does feeding in an alfalfa field. Adjacent to the field, he found fresh sign from a mature buck. Dave threw the heavy steel tripod over his shoulder. We both ran to the new location. I was sitting in the new location by noon. That evening I shot a great 10-pointer! Dave is a master at patterning whitetails!

TECHNOLOGY AIDS BIOLOGY

Twenty-five years later, things have changed a great deal.

First, the average hunter seldom has one of the greatest whitetail guides I ever have known working with him. Second, there now are technologies available that make the process a great deal more efficient. Game cameras, scouting cameras or whatever you may call them have become commonly accepted hunting aids to most of us.

When we first developed these devices in 1975 at the Institute for White-tailed Deer Management & Research (located at Stephen F. Austin University in Nacogdoches, Texas), we never considered how useful they would become. We knew the cameras were great for research; yet, we soon learned just how useful the devices could be for deer hunting.

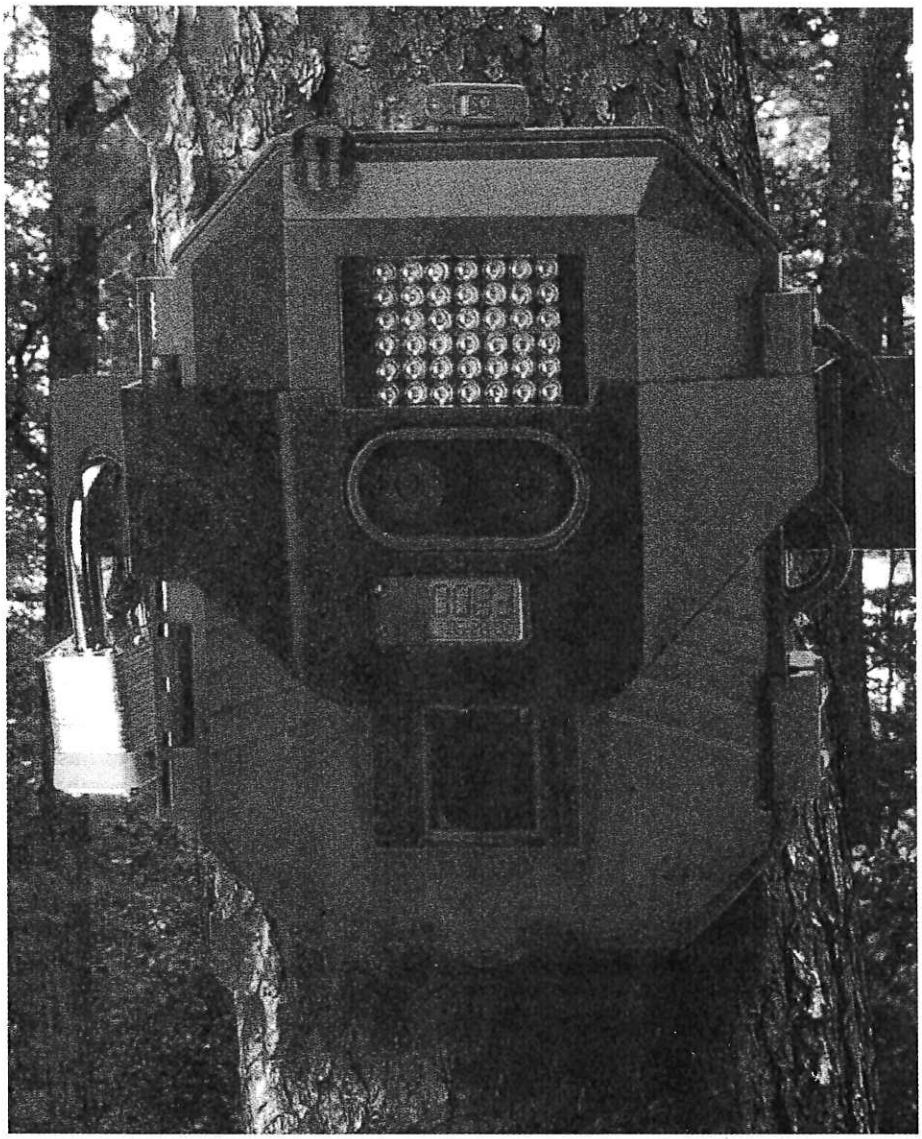
Years later, many deer hunters may use game cameras extensively, but maybe I can help you find some new ways to use them while you are hunting this season. Perhaps, your game camera — or the new one you've had your eye on this season — can be converted into your very own electronic version of Dave Bzawy!

ADVANCE YOUR USE OF GAME CAMERAS

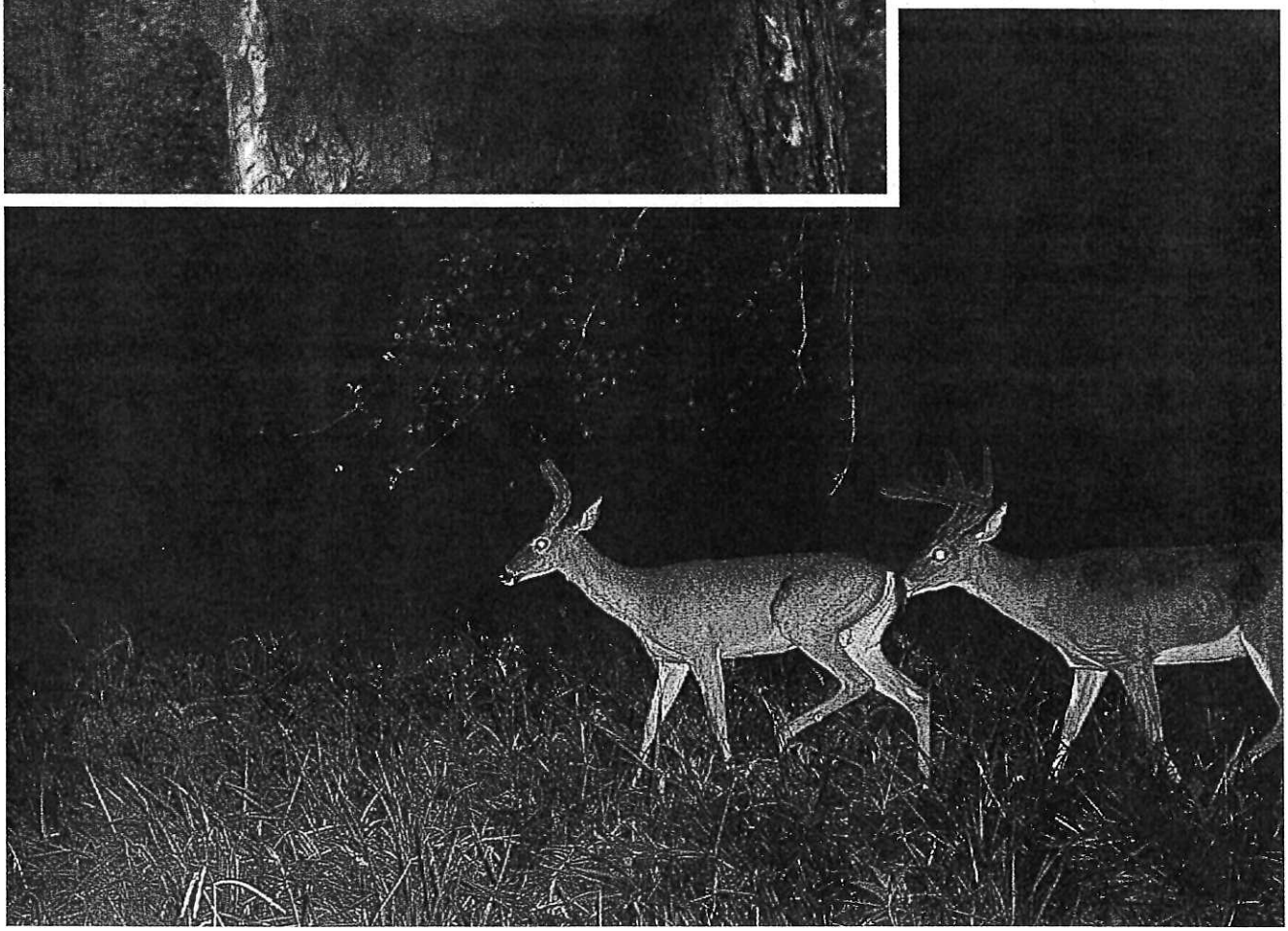
You probably already think you know how to use infrared-triggered cameras. Do you really? Many hunters use them at baited sites (where legal) or over scrapes. Their purpose generally is to get an idea of which bucks are using a particular area. Of course, this is useful information for sure, but let's go into the "advanced mode" in using game cameras.

During my 35-year career studying white-tailed deer, I habitually have found myself way out there on the cutting edge, writing about one of our new discoveries, then trying to convince hunters to catch up and use it!

When we first developed game cameras, our primary focus, as noted above, was for research. Our first study involved natural mineral licks.



Due to seasonal shifts in food availability, whitetails congregate in certain areas at certain times. When that happens, trail cameras are a great way to document bucks' presence and size. The pear tree shown below provided just such an opportunity.



We had discovered a place along a stream at Boggy Slough in east Texas where the deer literally were eating the dirt of a stream-cut bank. We wanted to know which deer were using the lick, how often they came, and how they used it over time.

As the potential for the cameras became obvious, my interest turned to the concept of patterning deer — the focus of the book, *The Art and Science of Patterning Whitetails*, co-written in 1994 by Gordon Whittington, executive editor for ***North American Whitetail***, and me. The cameras obviously were a useful extension of the radio-telemetry studies I was conducting on mature buck movements and behavior.

As Gordon pointed out in our book, most hunters think patterning is determining which buck will walk by which oak tree at exactly what time. Frankly, that's impossible!

What patterning is, however, is learning as much as possible about the deer residing in or visiting your hunting territory. Your goal should be to learn to anticipate what your deer are going to do as the hunting season unfolds.

Dave had learned early in his hunting career, the deer world tends to be a "moving party." What this means is, deer do not move randomly about the landscape, nor do they use every square inch of any property. Rather, they tend to congregate in certain areas for a certain period of time and for very good reasons before moving on to other areas, again for very good reasons.

My radio-telemetry research clearly showed, for most of the year, bucks and does might as well be different species! The sexes segregate and often have completely different habitat preferences outside the rutting period.

As the rut develops through pre-rut, rut and post-rut stages (forget all those other stages discussed by outdoors writers), bucks tend to adjust their movements to coincide with what the does are doing. This is the one time in the year buck and doe habitats generally overlap. Knowing this is why Dave follows the location of does, rather than bucks, on his hunting area. He is trying to anticipate where and when does are going to move to the next area — the so-called "moving party."

In the past, I have somewhat crassly referred to this as the "country-and-western-bar phenomenon." I have been happily married to my wife, Susie, for 30 years. My memories of dating are growing increasingly faint. However, as a young, single Texan I learned the best place to meet girls was near the bathroom or near the bar — the two most attractive places to the opposite sex. Contemplating this interesting fact on a lonely day-long sit in a tree stand led to my comparison of my younger days to deer behavior.

Later, I wrote several articles in ***North American Whitetail*** magazine about the application of the idea to hunting trophy bucks. In fact, that also is how I came up with the term, "staging area." Bucks tend to follow where doe groups are feeding and try to position themselves so the does have to go past them on their way to feed.

Dave has spent thousands of hours monitoring where doe groups were at any point in time. He also monitors the food supplies and availability. Since Alberta is snow country, he keeps an eye on trails and rub lines leading to staging areas for fresh buck sign, such as dark urine in large tracks or new scrapes.

How can the cameras replace Dave's efforts? Such an accomplishment would be historic, but I'm going to offer up the following primer on using infrared-triggered cameras for patterning deer while you are hunting this season.

Experience has taught me to select cameras that: 1) are digital, 2) use an infrared light or flash, 3) are not prone to a high number of falsely triggered events, and 4) very importantly, prove reliable for providing years of service.

ARMING UP

Truly, replacing one Dave Bzawy or my hunts would require a minimum of two cameras at each of my potential hunting locations. You're likely to need more than one camera at your sites, too, but there is a method for using one — and only one — camera effectively. More on that, later.

If numbers of cameras are in your game plan, you can bet that building your arsenal of cameras is going to be expensive. Despite the marketplace holding at least 130 models of "trail cameras," none are what I consider cheap! Make sure you get the most for your money. Experience has taught me to select cameras that: 1) are digital, 2) use an infrared light or flash, 3) are not prone to a high number of falsely triggered events, and 4) very importantly, prove reliable for providing years of service.

One of the most commonly asked questions we receive at the Institute is whether or not flash cameras spook deer, especially bucks?

So, we studied buck behavior related to the camera being triggered. The early cameras used film, flash and an autowinder. Using infrared-triggered video cameras we designed for the study, we discovered it was the sound of the autowinder (and in some models, a mechanical trigger) to which the deer reacted. It was not the flash.

More research strongly suggested mature bucks might shy away from a visible light flash, even without any sound from the camera. The new infrared light or flash cameras have reduced this possibility significantly, but we still use the normal flash cameras for our general surveys. The added benefit of a color image is worth the risk.

Remember, true infrared produces a black-and-white image. If you go with the infrared-light type cameras, make sure they produce enough light to fully illuminate the camera's field of view.

CAMERA POSITIONS & ANGLES

Next, learn where to place your game cameras and how to position them. Sometimes, it's obvious.

Learning to recognize last year's deer rubs is an art most hunters easily can develop. At the same time, you shouldn't have much difficulty identifying the potential fall feeding areas and get some idea what type and how much food will be available come October.

For example, one field may contain corn, which is harvested in September, leaving some residual grain on the ground only during the early season. This may be your initial hunting area during the pre-rut (if you are a bowhunter). Another field may hold soybeans, which may be harvested later in October, making it attractive later in the season. Since mature soybean plants themselves are not as attractive, deer (especially bucks) tend to wait until after harvest.

Lastly, if you have examined the stands of oaks for the potential acorn production, you can predict which stands will have the most and best acorns during November. Remember white oak acorns are most attractive to whitetails, followed by red oaks, black oaks and water/willow oaks in that order. Mixed stands generally are the most predictable acorn producers.

The trick to camera placement among the food sources is to know where the "moving party" will be located at any point in time.

For some reason, deer appear to be genetically programmed to not feed too long in any one place. We probably will never know why. I have theorized this behavior happens because deer do not want to overuse a food source — call it "natural rotational grazing." Perhaps, the behavior prevents predators from patterning them.

Whatever the reason, the "moving party" exists. Deer hunters have to be aware of it and prepared for it. Therefore, you combine your knowledge about food availability and the location of last year's rub lines so you can strategically place your infrared-triggered cameras. Thus, you have yourself a potentially deadly tactic!

Where do you place the cameras and what is the best way to use them?

Since the idea is first to find the "moving party," place one camera within one potential food source you are not currently hunting. This is the equivalent to Dave scouting the alfalfa field while I was in my original location.

Place a second camera along — not directly in — the rub line leading to the staging area. Placement in the rub line creates too much disturbance. The best place is within 100 yards of the staging area along a fresh rub line. Remember how your summer scouting and mapping identified these areas and trails? Check to see if they are active by confirming fresh rubs. Set the trigger delay at about three minutes for the feeding area camera. Less than three minutes will result in excessive events and unnecessary photographs to study. Use no delay on the camera placed along the rub line. On the rub line, however, you want every event to be recorded so you can establish which bucks browsed the area and the time of their activity.

Further, I suggest you use a camera that can take two photographs in rapid succession, or one camera that offers video capture. This will allow you to catch a doe coming down the trail, perhaps, with a buck behind her — a sure sign the buck will be there for up to 36 hours.

On my camera, I adjust the settings to record at least one minute of video after triggering. That allows me to get a doe and buck or more than one buck moving along the rub line. I also can study their behavior.

Place as many camera pairs as you can afford within the feeding areas you identified during pre-season scouting. If you have more areas than cameras, prioritize the camera locations according to what you have learned regarding food availability. For example, a stand of red oaks may not have produced as many acorns as one dominated by white oaks. So, the stand of white oaks would receive higher priority. If all the corn is gone from a field, there is no use in wasting equipment or time. At any rate, these cameras will serve as your electronic "Dave," monitoring activity while you hunt a current hotspot.

Check your cameras in the feeding areas during the middle of each day to monitor activity; doing so reduces your disturbance of the deer herd.

When the number of does using an area suddenly increases, that is the time to check your camera on the rub line. Otherwise, stay away from this camera. If you have only one camera, use it first to monitor feeding activity, then move it to the rub line (again in the middle of the day) when feeding activity increases.

I often have found camera placement like this to prove a deadly technique. But I must point out that just because doe feeding activity shifts, this behavior may not mean the bucks will follow, especially in areas where deer herds consist of skewed buck-to-doe ratios. The number of receptive does may far outnumber the bucks to service them. That is another reason for using the rub line camera. It confirms bucks have shifted activity to that staging area.

MAKE YOUR BEST MOVE

Lastly, once your camera (or cameras) has helped you identify your new hotspot, it becomes critical to your success to evaluate several factors when approaching your hunting site.

For example, too many hunters fail to consider the wind in setting up for a hunt. Your approach should always find you in a position where the buck will travel upwind from you. And your approach path should be established ahead of time to minimize disturbance of the habitat.

Even though mature bucks tend to come to the staging areas late in the day, I strongly recommend you get on stand way before first light (at least two hours) or make your hunt late in the morning. The normal behavior of bucks is to stay around the staging area all night, then travel back to their sanctuary beds just before daylight. If you go in right at daylight, your chances increase for disturbing the buck. Use the camera's feature that records the event time to establish the timing for your hunt. When you get on stand, stay until well after dark. If the wind changes, the best move is to get out of the area quickly and hunt the next day in a "wind appropriate" location.

OUT WITH THE OLD, IN WITH THE NEW

It has been a few years since I hunted with Dave in Alberta. My plans are to rejoin my old hunting buddy in the near future. New technologies such as infrared-triggered cameras have increased our hunting efficiency, and I will bet you Dave is using them to make better use of his efforts.

Perhaps no piece of gear will ever totally replace a Dave Bzawy. But scouting cameras are a huge help. ■