

# SCOOP



# ING UP

## For North American Hunting

### OR SHOULD YOU SCOPE DOWN?

I started shooting in the late '50s and early '60s. Although I wish I could either take off a few years or at least extend my warranty, I think I live in a very interesting time for hunting and hunting-related equipment. Tags aren't as available, and access is becoming increasingly difficult, but almost across the board there is more big game in North America now than was the case a half-century ago. As far as equipment goes, basic hunting firearms haven't changed much (if any). But look at the materials now in common use: Synthetic stocks, stainless steel, titanium, rustproof finishes, and more. Look at how much more accurate modern factory rifles are, thanks to more precise manufacturing techniques. Look at the bewildering array of great hunting bullets that have come along. And, finally, our specific subject: Look at the wonderful optics we now routinely hang on top of our hunting rifles.

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B&C Professional Member  
*Photographs courtesy of author*



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**The idea behind a riflescope is to help you shoot better, and that's just what they do. When you check zero on arrival in camp, a group like this gives you a huge boost in confidence.**

I think I was fortunate in that I learned to shoot with open sights, because I believe starting with a scope shortcuts valuable lessons in sight alignment. I started with an Ithaca single shot .22, later "graduating" to a Winchester lever action. My first centerfire shooting was also with open sights, first a Winchester M94 in .30-30, then a surplus Springfield. I am, however, a solid member of the riflescope generation of hunters. My first hunting was done with a .243 topped with a 4X Unertl, and it was many years before I did any hunting at all with iron sights. Today I often use iron sights, both aperture and "express" open sights, almost for fun, for added challenge. I know I shoot better with a scope, and I've known that for 40 years.

To restate the obvious, you shoot better if you can see better. You see better with a scope. This is not just because of the magnification. That certainly helps as range increases, but it is not now and never was the primary advantage of the telescopic sight. Rather, the most important advantages are the riflescope's ability to magnify available light; and the fact that it melds the reticle and the target into one focal plane. The first should be obvious. You shoot better if you can see better. In the early morning you can see through a scope long before you can see iron sights. In the evening you can see through a scope long after you lose irons, and you can see better into a shaded hillside as well. The focal plane issue isn't obvious unless you've spent a lot of time with iron sights — and possibly not unless your eyes, like mine, are starting to age. For precise shooting with open sights (like a "v" rear and bead front), your eye must focus in three planes: rear sight, front sight, target. This is very difficult for everyone, and almost impossible as you get older. Aperture sights reduce this to two planes; you look *through*, but not *at* the aperture or peep, so you focus only on the front sight and the target. This is much easier. But a properly focused riflescope superimposes the reticle on the target, so all you're really looking at is the target, just one focal plane.

So, with a very few exceptions in the entire hunting world, an optical sight is definitely the way to go. There was a time when scopes were distrusted (probably

**Alaskan Master Guide Dave Leonard, right, with the author and a very good arctic grizzly, taken with a Kimber .325 WSM topped with a 2.5-8X Leupold. Another extremely versatile scope that is also compact.**

with reason) and this was hotly debated, but today scopes are in almost universal use in centerfire rifle seasons, and are increasingly common in shotgun-only areas and muzzleloading seasons as well. The real issue isn't whether you should use a scope, but which scope and how powerful it should be.

#### **FIXED POWER SCOPES**

When I started hunting, scopes were in widespread, but not quite yet universal, use. The most common scope back then was a fixed 4X. Variables were just coming into common use and were widely distrusted (as all scopes were just 20 years earlier). In those days variables did indeed change zero, often considerably, as you adjusted the power, so the simple, rugged fixed-power scope probably was the best choice. For close-range use we used 2.5X and

**At the bench you probably want to use all the magnification your scope offers, and you certainly want to zero your rifle at the highest magnification. Variable scopes are almost universal today, but, truthfully, most whitetail hunting can still be done with a simple, inexpensive fixed 4X. This Savage 110 in .30-06 is mounted with an inexpensive 3-9X scope. It worked just fine on this Colorado elk, as it would on most North American applications.**



3X scopes. The 4X was the all-around choice, while we used fixed 6X scopes for big game in open country (like pronghorn). Fixed-power scopes of 8X, 10X, and even 12X were common varmint scopes.

At one time I had rifles mounted with scopes in every single one of these power ranges. Interestingly, I no longer own even one single fixed-power scope! So I have embraced variables just like almost everyone else. Many modern variable scopes still show slight variations in point of impact as the power is adjusted, but this is no longer significant. This is especially true in big-game hunting, where the target area is fairly large. And of course, most of us zero at the highest power, and that's the power we usually use when the range is long and the utmost precision is called for. I like the flexibility and versatility of variables — but even though my last fixed power scopes went to eBay, I'm not certain you should ignore them. I do most of my hunting in areas where longer shots are possible, so a variable fits my needs. It may not fit yours, and you are not obligated to follow the crowd.

If most of your shots are close and you rarely have the need to reach beyond 200 yards or so, then a good old fixed 4X is still a fine choice. Why not have the flexibility of the variable even if you rarely need it? Because you have to pay for it. Variables are much more complex, and thus much more expensive, than a fixed-power scope. So you can get a fixed 4X for much less money than a variable-power scope of like quality. Or, better yet, you can get a premium-quality fixed-power scope for the same money you will pay for a medium-quality variable. With optics, when in doubt go for the highest quality you can afford, and if you must make compromises, you're better off with a higher-quality scope of lower magnification.

### VARIABLES

My first variable scope was a 3-9X Redfield, acquired in about 1976. It literally opened my eyes, and I will never forget it. That 9X upper end magnification seemed really powerful (comparatively, it was!), and suddenly difficult shots seemed quite easy. Today the variable scope is almost universal, and indeed they are wonderful. With a low-end magnification between perhaps 1.5X and 4X you're just fine for fast shooting at close range, but you can turn up the magnification for longer shots.

There may still be very slight differences in point of impact as you zoom up and down, but with any well-made scope this should not be significant in big-game hunting. There are really just two important

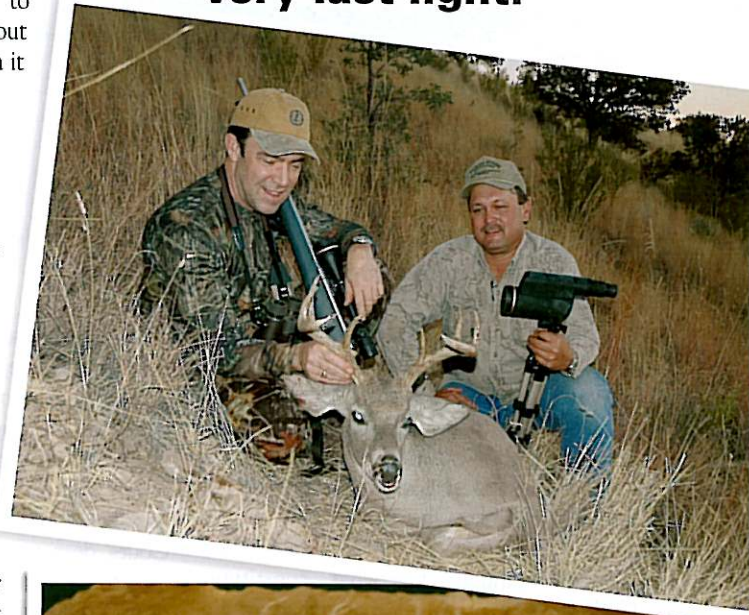
rules with variables. First, as mentioned earlier, zero at the highest power, so you're set up perfectly for the worst-case long shot. Second, carry the scope on a lower setting, only turning it up when making a conscious decision that you want the higher magnification. Even in the most open country a close shot is always possible, so by keeping the magnification turned up you are running the risk of throwing up your rifle for a fast opportunity and seeing nothing but hair through the scope. How low you should keep it depends primarily on the country and how you shoot. I shoot with both eyes open and I'm very comfortable with a scope. In open country I tend to keep my scope set at about 6X; in closer cover I'll turn it down to maybe 4X.

### HOW MUCH POWER IS ENOUGH?

For many years now the most popular scope in America has been the good old 3-9X variable. In recent years there has been a shift toward significantly more powerful variables for hunting big game: 4-12X, 4.5-14X, even 6.5-20X. I think scopes in the latter class are too powerful for most big game hunting, but in general there is no great harm in having a more

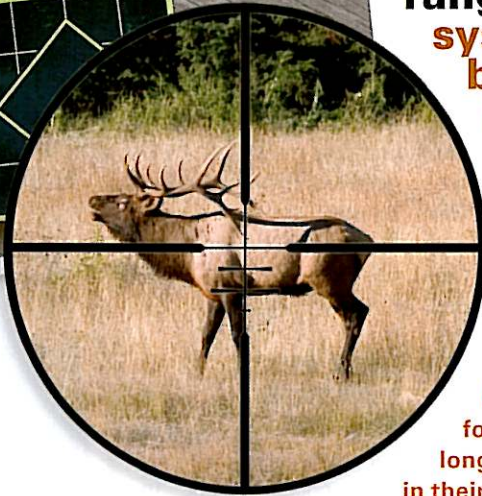
**MIDDLE PHOTO: The more powerful the scope, the bulkier and heavier it becomes, and 30mm scopes are considerably heavier than one-inch tubes — you need to think about how much scope you really need, need to pay for, and need to carry. BOTTOM: A nice Kentucky whitetail taken with a Thompson/Center .280 topped with a 3.5-10X variable. This is probably more magnification than this hunting application really calls for, but this type of scope is by far the most common and popular today.**

**The light-gathering capabilities of a good riflescope are actually one of its most important attributes. Below: Leupold's Mike Slack and outfitter Kirk Kelso with a fine Coues' whitetail taken at very last light.**





**Kahles' new "Multi-Zero Ballistic System" allows you to set and retain five separate zeros that can be dialed in as range increases. This system works well, but, like all range compensation systems, you must put in range time to make it work for you.**



**LEFT: Leupold's B&C Big Game Reticle offers a simple solution for taking the guesswork out of long-range shooting and is available in their new VX-L scopes.**

powerful upper-end magnification—provided you keep the scope on a much lower setting most of the time. On the other hand, if you really don't need the magnification, why pay for it? And why carry a larger and heavier scope than you need?

I tend to think that majority rule applies. There is, literally, no North American big-game hunting that can't be done with a good 3-9X variable. Even at the most extreme range, 9X is plenty of magnification; even in the closest cover, 3X shouldn't get you into trouble. One thing about scopes that is important to know: There is no industry standard for what constitutes "9X" (or any other X) magnification. So one company's 9X may magnify a bit more than this company's 9X, and a bit less than that company's 9X. This being the case, we should throw in with the 3-9X all the many scopes that are similar in magnification: 2-7X, 2.5-8X, 3.5-10X. All of these, including the 3-9X itself, are extremely versatile hunting scopes, suited for almost anything. Your choice among them should depend on brand preference, the ranges you typically shoot at, and the rifle you're mounting the scope on. For instance, if I have a trim, light, fairly short rifle then I like to top it with the smallest scope that will do what I need the rifle to do.

Sometimes less is more. If you're scoping up a rifle for bear hunting, or for close-cover use on elk or whitetail (or anything else), then you don't need a whole lot of magnification. Small variables in the 1.5-5X or 1.75-6X range are ideal.

Sometimes, though rarely, more magnification is useful. A couple of years ago I sold a nice custom 7mm Remington Magnum to Peter Hunt, and he keeps me posted on where he hunts with it. The rifle has a 3.5-10X Leupold, and recently it accounted for a

monstrous Coues' whitetail. Peter emailed me that the rifle did just fine, but next time he wants a bit more glass. Yes, indeed, Coues' whitetail hunting is one of those places where high magnification can come in real handy. The several rifles I have that I might use for genuine long-range work, whether Coues' deer, pronghorn, sheep, or whatever, used to wear variables in the 3-9X or 3.5-10X range. Today they wear 4.5-14X scopes, and on longer shots I often turn the power up all the way. Maybe I don't really need that much magnification, but the larger image builds a lot of confidence. For me, I don't want much more power because I don't want the minimum magnification to be any higher. But, as I said, I know a lot of open-country hunters who use considerably more powerful scopes. They're welcome, but my limit lies somewhere around 4.5-14X or 4-16X.

### TUBES AND OBJECTIVES

Larger objective lenses tend to gather more light. This is misleading because quality of lenses and coatings is far more important than sheer objective lens size, but all things being equal, a larger objective is definitely brighter. Europeans have long favored really huge objective lenses, but keep in mind they don't have "shooting hours" like we do. In Europe, if you can see it you can shoot it—regardless of what the clock says. So maximum brightness is more important over there than it is here, but brightness, the "twilight factor," is definitely important. The question you must answer is how bright a scope you really need. If you hunt whitetails

in shadowed timber you need the brightest scope you can afford. If you hunt mountain sheep, brightness probably isn't a huge factor — by the time it starts to get dark you need to be headed back to camp.

Large objectives have gotten very popular in the U.S., but I think relatively few of us actually need them. So why not have their extra brightness "just in case?" Once again, why pay for it if you don't need it? With objectives there is yet another reason. Scopes with large objective lenses are obviously heavier and bulkier. Why carry it if you don't need it? And one thing more: The larger the objective the higher the scope must be mounted to clear the barrel. When you must go to "extra high" rings to clear the barrel you are probably radically altering the stock fit of your rifle, and you will probably have to lift your head in order to see through the scope. This not only changes the way you shoot; it also accentuates recoil.

The European standard scope tube diameter is 30mm, a bit more than 10 percent fatter than our standard one-inch (26mm) tube diameter. Like the larger objective, the larger tube makes for a brighter scope. They also allow for a much greater range of internal adjustments, so are far superior for long-range and "tactical" applications. Once again, however, not everybody needs the brightest scope out there, and additional clicks of windage and elevation are lost on most of us. The 30mm scopes are heavier, bulkier, and more expensive, so I recommend these factors be weighed before you jump on one just because it's supposed

to be “better.” But there is one more consideration: 30mm tubes have become very popular, especially in top-quality scopes, so many of the best, brightest, and latest scopes are available only in 30mm tubes.

### RETICLES AND TRAJECTORY COMPENSATION

We’ve come a long way from the plain old crosshair! My personal favorite reticle remains the thick outer wire with a finer center. This was pioneered by Leupold as their “Duplex” reticle, but most manufacturers offer some variation of the “plex-type” reticle. I think this is a wonderfully versatile hunting reticle, but there are other options. For close, fast work few things beat the ancient dot-and-crosshair. One thing that does beat it is the newer lighted reticles, also available from most manufacturers.

Perhaps the greatest recent development has been in trajectory compensation. There are many versions, and, again, most manufacturers have at least one—and some have several options. There are dial-in click/range adjustments, and there are many reticles with multiple aiming points. Leupold has its excellent “Boone and Crockett” reticle, Swarovski has its TDS reticle, and of course there’s the old standard “mil-dot” offered by multiple manufacturers. One of the newest options is Kahles’ “Multi-Zero Ballistic System,” which allows the setting of five different and independent zeros. There are just a couple of things to keep in mind. First, no system works unless you spend time at the range making it work for you. All of these systems work (provided you follow the directions), but all must be calibrated to your rifle and your load. Second, the more complex the system the more range time you need, not only to get it right, but to become absolutely familiar with it.

### EMERGING TECHNOLOGY

There’s a lot of cool stuff out there right now, and we’re going to see a lot more in the next couple of years. Perhaps the most basic “great idea” I’ve seen lately is Leupold’s VXL, a large-objective scope that, for the first time, allows low mounting because the forward objective has an elliptical cutout that fits around the barrel. Yes, the image is round!

Far up the technological scale is Elcan’s “Digital Hunter” scope, a sight that is not optical at all, but pure digital—what you see is actually a real-time digital display! Yep, it works, and it could well be the wave of the future. Before we get there on a widespread basis we will surely see a lot more optical scopes with internal laser rangefinders, and of course we’re just microchips away from scopes that will automatically compensate

**TOP:** Large objective lenses gather more light, but their inherent problem is they must be mounted high in order to clear the barrel. Leupold’s new VXL scope solves this with an elliptical cutout in the objective that wraps around the barrel. There is no impact on clarity or resolution, and the field of view remains round. **INSET:** One of the most interesting developments in recent year’s is Elcan’s Digital Hunter. It looks like a rifle scope, but it’s not a glass-and-metal scope at all.



the hold for the range (and perhaps the wind and the angle). When such devices become truly practical for hunting use I’m sure there will be heated discussion on the ethics surrounding their use in the field. I need some more time to think about that one.

### WHEN IRON SIGHTS ARE BETTER

Regardless of how much technology you have available, sometimes Old Man Weather has the final say. Last spring Dave Leonard and I stalked a grizzly on a kill in an open, snow-covered bowl. The light was flat and a stiff wind was blowing horizontal snow. Neither of us could accurately estimate the range, and the blowing snow stymied our laser rangefinders. All we could do was get as close as we possibly could, then take the shot, which is what we did.

There are a few special situations where iron sights are superior to scopes. These include any hound hunting, not only because the range will be very short, but if a bear, cat, or boar is fighting the dogs on the ground you do not want the “tunnel vision” of a scope when you’re trying to pick a clear shot as the dogs dart in and out. The universal situation where iron sights are superior, however, is in a driving rain or a serious snowstorm. Scope covers are fine, but if rain is coming down so fast that you can’t shoot before your objective is obscured, there isn’t much you can do about it. Too, the scope magnifies raindrops and snowflakes. Most of us don’t hunt in driving rainstorms or in blizzard conditions — but sometimes you get caught. If you do, then auxiliary iron sights (carefully sighted in) and a detachable scope mount provide the best answer.

Many believe that iron sights are faster for quick shots in thick cover, and thus superior if you must follow up a wounded animal — especially a dangerous animal like a bear. I do not believe this is true. There

may be extenuating circumstances, like a sodden alder thicket, but I believe that most of us will always shoot better and faster with a scope — even on moving game at very close range. The late Finn Aagaard, who wrote for NRA publications for many years, was one of few African professional hunters I’ve known who totally embraced scopes. Finn set out to prove this by running “stop-watch tests” on deer-sized silhouettes, iron sights against scopes. He conducted his tests over many months, claiming as his victims any experienced shooter who happened by his place near Llano, Texas. Nobody, but nobody, actually proved to be faster with iron sights—including shooters who truly believed they were faster with irons.

There are two caveats to this. First, the magnification has to be low enough so that you have an adequate field of view for a clear sight picture. This means different things to different people, but most of us can shoot even point-blank at about 4X. Second, shooting fast and close with a scope is greatly aided if you shoot with both eyes open. This allows peripheral vision and greatly reduces the “tunnel vision” effect of looking through a scope with just one eye. I’m fortunate in that I’m strongly left-eye dominant and I shoot left-handed; it’s easy

for me to keep both eyes open. If you are cross-eye dominant (shooting right-handed, but left-eye dominant, or vice versa) this may be impossible, but if you can learn to keep both eyes open you will be amazed how much more quickly you can get on target with a telescopic sight. ■