

Jack O'Connor

2013 Newsletter 4th Quarter

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CHAIRMAN'S REPORT CARD



By HOWARD ERDMAN,
CO-CHAIRMAN

Regretfully, after many years of service to the Jack O'Connor Hunting Heritage and Education Center (JOHHEC), Mike Thomason has resigned as Co-Chair and Board member. He will be missed.

At the September JOHHEC Board meeting, there was a very informative presentation by Will and Bev Hansen and their two daughters, Amelia and Kara, who are involved in the National Rifle Association's Youth Hunter Education Challenge program (YHEC) in Oregon. The presentation made it

crystal clear that this is an excellent youth program that will provide the next generation of hunters and leaders the skills necessary to enjoy the outdoors and preserve the hunting heritage.

Buck Buckner has been involved in the Oregon program for many years and serves as the state coordinator. Buck has been instrumental in the effort to bring YHEC to Idaho via the JOHHEC.

Thanks to Mike Butler, JOHHEC received a \$7,300 grant from Friends of the NRA to start an Idaho YHEC program. The grant has been used to purchase equipment for the program.

Mike has begun assembling a team of volunteer instructors-contact him if you want to volunteer. The target date for launching the program is January 2014.

This program offers JOCHHEC an opportunity to play a vital role in preserving the hunting heritage by providing training for our future outdoor leaders.

About the Co-Chair: Howard Erdman has been appointed to serve as Co-Chair of the JOHHEC for the remainder of Mike Thomason's term. He is an endowment member of the NRA and charter member of Friends of Jack O'Connor. An ardent fan of JOC since his mother gave him his first Outdoor

Life subscription in 1957, Howard has served on the Board since 2011. He is a Navy veteran, lives in Pullman, Washington and is the Director of

Institutional Planning, Research & Assessment at Lewis-Clark State College.

From the Director's Chair



By MIKE BUTLER, DIRECTOR

Folks that know me know that I am an avid turkey hunter but fewer know that I also love hunting early season doves. Being out on opening day of dove season is an annual ritual to kick-off hunting season. I love watching the sunrise on September 1st and bagging a few of those fast flying targets.

I enjoy close-up action with all forms of wildlife, be it turkey, dove, goose/duck, elk or deer. For me, luring a wild animal in close enough for a dramatic climatic

shot, be it with bow, gun, or camera, is what really takes the cake for me...!!!

Sometimes, I really have to wrap my head around why guys like to shoot at big game animals that are so far off in the distance you need a spotting scope, yardage and a wind speed meter to "guesstimate" and attempt the kill....or more than likely....the miss!

I spend a lot of my free time shooting rifles and perfecting handloads. I do my best to understand rifle accuracy, shooting form and the need to make as tight little groups of holes as possible on a paper target out to 400 yards. It reflects upon my seriousness as a rifleman and just how good my handloads are over factory ammo. I take great pride in trying to put this all together as a rifleman.

As I have become more versed in the rifleman's lore, it bothers me how nowadays "average and less than average" shooters think they are going to put the smack down on a massive bull elk, muley or a huge pronghorn at extreme ranges. Out at the rifle range that I frequent, it nearly brings a tear to

me eye to listen to guys that show me their 100 yard targets with inconsistent groupings of tiny holes spread all over the place proceed to tell me how their guns are capable of 700 yard kills on elk, deer or antelope. Before this hunting season, I sure hope those guys get hit with the reality stick and realize that their shooting abilities probably do not match up to the fine expensive rifles they like to brag about so often.

One of the "things" I need to work on is that I am a bit too polite to these kinds of guys and while I mostly shake my head in silent disgust, what I really need to do is be more blunt and matter of fact with them about their average shooting abilities and tell them their gun may be capable of extreme range accuracy but their sight-in targets prove their personal shooting abilities suck pond water and they owe it to that unsuspecting critter standing out there at 600-700 yards to limit their shots to what they are physically and ethically capable of pulling off (maybe 300-400 yards max). Usually, I turn my back to these types of tin horns as I do not need a sore jaw or a swollen eye to nurse just before hunting season. But I promise I will work on my diplomatic oration and matter-of-fact delivery when I encounter this behavior in the future.

My experience with big game hunting is that the action generally happens so quick that I do not have time to run ballistic calculations and windage

estimates in my head while shouldering my rifle. Most of my shooting has required me to know my rifle, my ammo, and react with my middle aged reflexes to the movement of the animal that is soon to be, hopefully, in the freezer.

This quarterly newsletter is dedicated to what is an ethical standard of long range shooting and big game harvest. The following articles from some seasoned veterans in this arena should help shed some light on this new phenomenon called long range shooting hysteria.....!

By The Way – Be sure and check out our website and forum area and chime in on the thread; hunting ethics and long range shooting. The website location is: www.jack-oconnor.org Archived newsletters are also located within.

Good Hunting.....MB

About the Director: Mike Butler started his wildlife career in 1975 with the Missouri Department of Conservation. Mike recently completed a 30 year stint with the Federal Government as a wildlife biologist, mainly focused on wildlife habitat restoration. He is an Endowment member of the NRA, a Life member of the Rocky Mountain Elk Foundation, a supporter of Ducks Unlimited and The National Wild Turkey Federation and is also an NRA certified Range Officer. He is an avid turkey and elk hunter, and enjoys Alaska salmon fishing at least once a year.

Tech Corner



“Shoulda Considered That” Extreme Range Issue”

By ALLAN JONES

Volunteer Host, Jack O'Connor Hunting Heritage and Education Center

I recently bought the new two-volume set of compiled articles, *Hunting on Three Continents with Jack O'Connor* (now available through the O'Connor Center) to have reading material while recuperating from surgery to get a new knee. One thing I quickly noticed is that, when talking of shots approaching 400 yards, Jack got almost apologetic.

He wrote some of these articles near the end of his career when he was reviewing his notes on a lot of game shooting. It has become obvious that he took few shots over 300 yards.

I've always admired Jack O'Connor's ethical and practical approach to

hunting, so things he chose *not* to do really stand out for me. Extreme-range game shooting is one. I know the other skilled contributors have a superb collection of discussion points to this important area, so I'll simply add a technical issue that stands out to the bullet guy in me—the bullet.

In an abundance of disclosure, let me state that the longest shot I've taken on a game animal is under 250 yards. However, I've had two careers in which bullet design, performance, stability, and terminal ballistics behavior have filled many of my workdays.

Every expanding game bullet has a “velocity window of usefulness.” Drive the bullet too slow and it may not upset as designed, failing to produce enough damage to down the critter now. Drive the bullet too fast and it will shred itself rather than mushroom on impact. You get the same sad result—a wounded animal.

With current technology it is possible to make the window of usefulness wider in velocity than ever before BUT no bullet can do all things at all speeds. Bullet designers will look at 300-500 yards as the max range for most of their customers and design and test the bullet to work at those ranges.

Let's look at the specific issues of modern spitzer SP and HP game bullets at extreme range, which we'll call 700 yards. A good long-range cartridge is a 300 Winchester Magnum with a 180-grain bullet. We'll set muzzle velocity at 3150 feet/sec and the ballistic coefficient at 0.520. At 700 yards, that load will have slowed to about 1970 feet/sec, an “iffy” velocity range for many SP bullets.

At low impact velocities any spitzer soft point bullet can have its lead tip wiped off without having its jacket expand. At these speeds, the bullet finds itself in the awkward position of mimicking an FMJ military spitzer. The resulting effects are yawing and tumbling, either of which can cause the bullet to quickly deflect away from vital organs. If the bullet breaks up as it tumbles, penetration drops catastrophically,

To get some degree of straight-line penetration, the extreme range bullet must have the jacket roll back to at least bullet diameter while retaining a fair bit of length. Again, few if any bullets are developed with this in mind. You would have to set up your own expansion tests fired at these very long ranges to learn if a bullet stands half a chance.

So this little bullet is our entire interface between us and that elk 700 yards downrange. And that interface is unpredictable and not designed for working at extreme range. To me, that is the limiting factor that should make any of us think twice about taking the extreme shot.

Were it possible to design a bullet that gave proper terminal effects at extreme range, I doubt any major bullet maker would try to make and market it because the bullet would be a terrible performer if

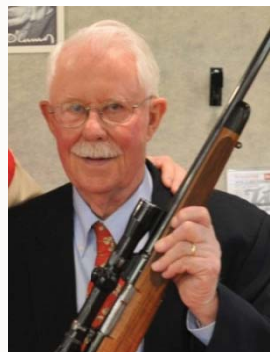
used on game at "normal" ranges of 300 yards and under. The bottom line is that the requirements for extreme-range stopping run counter to the rifle cartridges and bullet styles we have today today.

However, once there was a class of cartridges that did a good job at stopping large game in the 600+ yard playground: the big Sharps buffalo cartridges. The 45-105-500 Sharps launched a big, stable lead bullet at about 1400 feet/sec. The bullet retained a lot of energy at great ranges and was blunt and soft enough to deliver some retained energy to the long-range target with some useful level on stability and penetration.

But we declared such cartridges obsolete over a century ago, didn't we?

About the Author: Allan Jones had a 16-year career as a forensic firearms examiner before moving to Lewiston ID and taking over the roles of data developer and technical editor for Speer Bullets. He produced Speer Reloading Manuals 12, 13, and 14. He retired in 2007 and now volunteers at the Jack O'Connor Center and writes a monthly ballistics column for Shooting Times magazine.

Growing Up O'Connor



“Brad’s Pasta Recipe”

By BRADFORD O'CONNOR

Pasta Atomica

(Linguine with olive oil, garlic, parsley, pepper, clams and prawns)

10 servings

1 1/2 pounds of prawns (16 to 20 to the pound)

1 1/2 pounds of steamer clams (or one can chopped clams)

2-3 generous pinches red pepper flakes (more, if you like it really hot)

8-10 cloves of garlic.

1 bunch flat-leafed Italian parsley. Do not confuse with cilantro.

1 1/2 pounds of imported linguine.

salt

dollop of salted butter

roughly ½ pint extra virgin olive oil. The right amount of olive oil is what it takes to thoroughly coat each strand, but not leave an oil pool at the bottom of the serving dish.

Step 1. Finely chop garlic. In a pan, add garlic and slightly less than a pint of olive oil. On low flame, simmer until garlic just begins to change color. Above all, do not allow it to brown. At that moment, add pepper flakes and about half of the chopped parsley. Add dollop of butter, allow sauce to simmer about a minute longer, then remove from heat and set aside.

Step 2. In a large covered pot, steam clams for about three minutes after all clams have opened. Shuck and set aside meat and save nectar, discarding any clams that do not open.

Step 3. Shell prawns (no need to gut). Lightly sauté empty shells in remaining butter and olive oil, remove shells, and add prawns, dash of salt and a grinding of black pepper and then sauté only until all the prawns have turned reddish. Set prawns aside.

Step 4. Fill a large spaghetti pan two thirds of the way to the top with water (the rule is, at least a gallon of water per pound of pasta), add nectar. Bring water to a rapid boil, add 2 to 3 tablespoons salt, add pasta, stir and cook until al dente, usually 8 to 10 minutes. To check for doneness, start taste-testing strands after about 7 minutes.

Step 5. Drain (but do not rinse) pasta, plop it in bowl and add clams, prawns, garlic mixture (you may have to reheat at last moment), remaining parsley, then stir and serve. **DO NOT SERVE WITH GRATED CHEESE.**

Created about 1978 by Bradford O'Connor, inspired by Aglio e Olio, a Roman specialty.

About the Author: Bradford O'Connor was born in June 1933, in Flagstaff, Arizona. He moved with his family to Lewiston in 1948 and graduated from Lewiston High School in 1952. He served in the military as a policeman in

Korea 1953-1955. Bradford graduated with a BA in English and Journalism from the University of Idaho in 1959. He worked as a cub reporter for the Los Angeles Mirror-News 1959, copy and city editor for the Walla Walla Union-Bulletin 1960-1976, and last but not least, was the outdoor reporter/columnist/editor for the Seattle Times 1967-1991. Bradford has written several articles and provided numerous photographs for several publications, including Outdoor Life, Sports Afield, Petersen's Hunting, Road & Track and dozens of Associated Press membership newspapers. His hobbies and interests include photography, travel, food and wine, shooting, hunting, fishing and bicycling. Bradford married his high-school sweetheart (Anne) in 1953. They will celebrate their 60th wedding anniversary this year. The O'Connor's have two children (John in Denver; Pamela in Seattle) and six grandchildren.

Guest Writers

“Shooting Game at Excessive Distances is Flatly Unethical!”

By Valerius Geist
Professor Emeritus of Environmental
Science,
University of Calgary



With permission by the author.....

It is not only the *technical failures and problems* of shooting at excessive ranges that call for ethical conduct and sportsmanship, but such shooting is not *hunting* as Dan Pedrotti Jr has so eloquently argued. The blatant disregard for the inevitability of excessive

wounding and suffering is contrary to elementary decency towards living beings or other sportsmen, let alone towards a reverence for life. Bragging about shooting at excessive ranges degrades hunting to a childish, despicable blood sport, and fortifies those opposed to hunting. Moreover, this militarization of hunting merely encourages those opposed to the second amendment.

Would you allow a formula 1 racing car freed of any speed limit on a public highway? When I juxtapose placing a formula 1 racing car on a public highway versus shooting at excessive distances at big game, I need to point out a critical distinction: an ethical driver can drive a racing car safely on a public highway, while an ethical hunter and superlative long-range rifle shot *cannot* avoid the technical pitfalls that lead to wounding and loss of big game shot at excessive distances.

Therefore, I am going to list and elaborate on the TECHNICAL PROBLEMS, and then propose an EXPERIMENT to test the efficacy of shooting at excessive distances.

1. An insurmountable technical problem is the bolting away or turning of big game animals between squeezing the trigger and the arrival of the bullet. I have personal experiences here. Twice, at ranges of only about 350 yards, a buck deer and antelope stepped forward between the shot breaking and the bullet arriving, resulting in gut shots. I killed the buck with a second shot after tracking him for almost a mile, as I was lucky to have fresh tracking snow. The wounded antelope buck, fortunately, stopped and I killed him quickly. Another

time at even greater distance, the white-tailed buck turned away 90 degrees and the bullet landed low between his haunches. By pure luck I intercepted and killed him half an hour later. There is no way to control for the game moving between the release of the shot and the bullet's arrival.

2. And then there is wind! Let's have some fun with this one. You are a responsible shooter. You know your rifles trajectory. You even know that at 10 mph your bullet will drift off by one inch at 100. And you also know that wind drift increases roughly as the square of the distance. A one inch drift at 100 yards is not three inches at 300yds, but about $3 \times 3 = 9$ inches. Clearly, a shot under 200 yards even without a little correction for wind will virtually hit true. However, you a responsible hunter, you also have a fine rangefinder. And ah, the elk is 635 yards off. There is a mild breeze blowing. Quick what is the square of 6.35? Do you carry a calculator? Do you carry pencil and paper to do it long-hand? By the time you calculated that your wind drift will be about 40 inches, and you have to hold off by almost three and a half feet, the bloody elk has moved and is now 723 yards away. The square of 7.23, please? And the wind has increase drift. What now? There are no "sighting shots" at big game! A bullets flight is a compound parabola, a resultant of gravity and wind. Even when distance and elevation to the target can be measure fairly precisely, as well as the local wind speeds, air currents down range are capricious. Your math won't hold up, for as distance increases, the bullets flight becomes less and less predictable. That's why reading wind and mirage is a demanding personal

skill, crucial for successful long range target shooting. Snipers on the western front probed wind conditions and even chanced detection by shooting at distant water puddles. As I noted, one cannot take "sighting shots" shooting at game animals. There is, consequently, a large residue of uncertainty of a first shot hit when shooting at extreme distances.

3. My friend Alex wrote the following: *I don't care which make of range finder is used; they are not 100% accurate. When range to target is past 400-500 yards, they will commonly range a nearby object due to their 7 or 8x magnification, if you are lucky to get a reading. The game could be 50 yards on either side of the object that provided the target. Now, for game within Maximum Point Blank Range of the rifle trajectory/load and slightly beyond, this error is inconsequential. Not true at those extreme ranges when even 20 yards could make a difference between a hit and wounding game. As an example, I ran the trajectory for the 168 grain high efficiency Berger bullet that many of these extreme long range shooters use in their 7 mm magnums. With a starting velocity of 2900 fps, the difference in bullet drop between 980 yards and 1000 yards is 14"!*

4. He added the following: *Most of these folks use custom dial-in turrets that are calibrated for where they have done their load development. Where they hunt, could be a lot colder/warmer and a lot higher/lower. I know they carry around little ballistic programs as an app on their iPods to compensate for the changes. However, those are ALL approximations and a small error in temperature, humidity, elevation, etc. affects the bullet path enough to warrant*

a miss or a misplaced shot at those extreme ranges.

5. Follow-up shots. And so you take a chance, "Bang", and the elk runs off on three legs, hind leg trailing. And you think you can apply follow-up shots? By how much do you have to lead at 723 yards? There is no way this side of heaven to know, and no time to calculate with your trusty pocket computer! And what about those calculations at 844 or a 987 yards? At 200 yards you can snap a shot at the departing elk's neck and very likely place a killing chest-shot. But at 700, or 800 or a 1000 yards?

6. Locating wounding site. Now, would you be able to locate the spot where the "target stood" before it ran off wounded? You are searching for cut hair and blood. It's a difficult task under normal circumstances, even with snow on the ground. If shot with the fine, accurate Berger bullet the entrance hole will be tiny and there will be no cut hair and blood to find. In German hunting circles, finding the place where the animal was hit, is rated so important, that it led to the design of a very special bullet - the H-jacketed bullet - which blows a large entrance hole, then penetrates through to create an exit hole, thus maximizing hair-cutting and blood loss and successful tracking down of the wounded animal. However, the H-jacketed bullet is such a miserable killer, with which I have had gruesome failures, I recommend highly NOT to use it!

7. Bullets failing to mushroom because of excessively low terminal velocity - or - fragile-bodied game. Alex pointed out his problem with the shooting of bull

moose at 1100 yds. Bullet design can address this problem - in - part, but what about run of the mill factory ammo? Or sheer ignorance? Even long-range bullets such as the Berger can fail on fragile game. On a small black-tailed buck the 140 gr 7mm bullet places just behind the shoulder blade at about 250 yards distance, penetrated the thoracic cavity without blowing up. It blew up on the off shoulder, which is why the buck dropped, allowing a follow up shot. The same bullet performed superbly on a big buck at about 150 yards -shredding the lungs, almost cutting the heart from the aorta, penetrating the liver. The buck was dead on its feet before it dropped!

8. Was the animal hit? Bang - and the elk runs off. Was it hit or not? The field skills of the average hunter, unfortunately, are low. If the animal does not drop in sight, "it's missed!" I got my first lesson in this matter hunting deer in snowy November in Saskatchewan in 1956. I found three freshly killed deer. Every one of those deer had run away after being shot and dropped dead within 200 yds. The blood trails were massive! Had any of the hunters checked, they would have seen the startling red blood trails in the snow. Presumably, because the deer ran off they thought they had missed. One was a magnificent buck!

9. Inadequacy of (a) a heavy long-range rifle, (b) huge scope and © fragile bullet-design for following up a wounded animal. How many "living targets" move off wounded? And the heavy long-range rifles with their huge scopes are much too clumsy and ill-equipped for following up a wounded animal in cover. The long range target/sniper rifle is heavy, long and bulky, combined with big

magnifications of the scope, an impossible task to snap shoot at an elk or deer bolting from its wound bed in cover. And even if the shooter gets on target, the long-range bullet will likely blow up and not penetrate into the body. And what if a grizzly shows up? Does anybody think that these heavy rifles with their huge scopes and fragile bullets will be serviceable then? However, everyone is free to choose their own way of committing suicide!

10. A social problem! A friend shot a bull elk at about 350 yards which fell into a ravine. As my friend rose he heard a shot. When he arrived at the elk, there was a happy hunter claiming the elk, stating that the elk was only wounded and he finish it off. Therefore, it was now his!

11. A social problem. Wounding animals imposes on other hunters. On my last antelope hunt, before I was to leave Alberta, I was hoping for a fine trophy buck and had such in my glasses when a volley of shots behind me made me spin around. A pair of hunters in a half ton truck had opened up on a distant herd, then raced off without further ado. And limping behind the herd were two small bucks each with a dangling front-leg. When there is unclaimed wounded game it is imperative to put it out of its misery. And then there is no option but to tag it. I tried to hunt one of the two bucks, but he dashed off at ever increasing ranges till lost in the distance. Upon returning I flushed the second wounded buck who had taken cover in the sage. I dropped him. Those two hunters, if one could call them such, robbed me of my hunt for a trophy. That was nearly two decades ago and I have

not been able to return to pronghorn hunting since.

How much game do extreme long distance shooters leave behind? There is an EXPERIMENT to give us an inkling.

EXPERIMENT: Let us invite 50 experienced long distance shooters (I will defer on statistics to an expert!). Let them take ONE shot each at an elk-target at an unknown extreme range (800 yards?). Give them 5 minutes to do the task. Keep track of all hits in lethal areas and wounding areas as well as the number of misses. As a courtesy, let each shooter know where he/she hit at the end of the experiment. Report the number of hits in lethal areas, body shots, non-lethal broken bone-hits, as well as the number of misses. That will give a pretty good idea of the efficacy of extreme long range shooting.

Let us celebrate long range target shooting as a fine, challenging sport, but let us hone our skills hunting and not take unnecessary chances on living big game.

*About the Author: Dr. Valerius Geist is a professor emeritus of environmental sciences at the University of Calgary and needs no introduction to the hunting or the scientific community. He has authored sixteen books, written numerous papers/articles and is the recipient of several awards including the 2004 Olaus J. Murie award and the 2011 OL25 award presented to him by **Outdoor Life** and putting him as one of the 25 individuals in history to have made a difference in wildlife*

conservation. He is involved and consulted in all matters related to the wild sheep and wolves throughout the world. He currently resides on Vancouver Island with his wife Renate, where they enjoy the great outdoors in their back yard.

“The Wrong Shot”

Long shots test your marksmanship and your character. Short ones can, too.

By WAYNE VAN ZWOLL

With permission from Fair Chase, the Boone and Crockett Club and the author.....



Had I stayed with Danny, I'd surely have killed the elk. Well, almost surely. What we think, is commonly tempered by what we wish. No kill is certain until the eyes glaze.

But I took a parallel path a stone's toss down slope. Separated, we'd see more of the ridge.

Alas, it was my lot that day to choose the wrong track. Danny's whistle brought me scrambling. Through the trees I spied him crouched, his right arm raised, motionless. I stopped, chest heaving. A screen of conifers hid the meadow from me. Danny hissed: "Right there!"

In fact the elk was 300 yards off, at the far end of the meadow. Ivory tips on six long tines finally caught my eye through the boughs. The bull was staring at Danny.

Prone, it was a makeable shot. Heck, it was a cinch. But I wasn't prone, couldn't get prone or even sitting without losing the elk below the hump of the ridge. Offhand, the crosswire bounced crazily, on and off the chest.

The decision was simple: fire offhand or try to reach Danny and a clear alley while prone. I declined the shot and crept forward. The bull turned and was instantly gone. I don't believe I've ever had better antlers in front of my rifle.

Long shots require precise shooting more than they beg powerful loads and optics. If you can't steady the reticle, shooting is simply an exercise in hope. Declining a shot, you reveal standards. Without them, the decision to fire depends only on how badly you want to kill.

Risky shots aren't all long. Once, still-hunting through thick lodgepoles, I caught a wink of russet color. In the Leupold it became an elk ear, 18 steps away. I was not gulping air; the reticle quivered, but in a tight, controlled way, like an eager shorthair anticipating the shot. Problem was, brush blocked the bullet's path to brain and spine. I could only guess where the shoulder lay. Seconds later, a breeze kissed the back of my neck. The ear vanished.

No one can specify a sure-kill distance for shots at big game, as no one can declare a safe maximum speed on a highway. Conditions matter. Hunters who boast of long shots may in fact be conscientious—a long lethal hit is no less legitimate than one taken up-close. Arguably, sniping from afar diminishes the thrill of the chase; and the cynical might say a habit of reaching beyond point-blank range indicates that you're lazy or inept. But neither long shooting nor fast driving is irresponsible of itself. Years before distant shots at game became fashionable, I rolled a deer at roughly 480 yards, judging by bullet drop. The hit—through the heart—followed two misses with my .30-06. The buck looked very small in my 4x scope, and I had to double my initial allowance for drift. The killing shot was a good one, intelligently engineered and well executed. It was also as reprehensible as the first two. These days, I fire only when 90 percent certain of a kill; that is, when under prevailing conditions I can expect to land a bullet in the vitals nine times in 10 tries.

Distance is only one of several factors that influence a shot. Of course your hardware has limits. But rifle, cartridge and optics seldom count for as much as shooting position and shot execution. Wind matters most at long range. Steep angles, quartering presentations and intervening brush can scuttle shots up close. So can other animals in the background.

"Anyone who says he wouldn't take a risky shot at a big bull on the last day is a liar!" A reader once posted me that note, after I had suggested that neither an animal's trophy value nor the likelihood of another shot qualify as conditions. If your aim is to kill, only variables that affect the probability of a lethal hit matter. Wishing hard that you'll kill doesn't justify a shot any more than wishing earns you a gold medal, a winning lottery number or a PhD.

Shooting when you're not sure of the shot is like poaching in this way: both events show you can't abide discipline. Hewing to standards in shot selection is like obeying game laws. You restrict yourself so that, whatever the outcome of a hunt, you will have acquitted yourself well.

Such high ground can be costly to hold. Pass a shot at a record-class animal, and you may have passed the only one you'll ever have. No shoulder mount. No accolades from pals. No listing in the book. "Your one chance to be a celebrity, and you turn it down—why? Because there's only a 50-50 chance of killing? Good grief! At least put a bullet

in the air! If the shot's off the mark, no one needs to know...."

Now, if you're with a guide or a partner, someone *will* know when you botch a shot. And remember, you might also confront the rule, increasingly common, that blood drawn is a tag filled. Guiding an elk hunter years ago, I spied a fine bull on a distant spine. Quickly we scooted closer. Setting up my spotting scope in a copse of aspens, I was startled by the blast of my client's .300. He had wanted that elk badly and opened up—offhand—at ridiculously long range. My objection was drowned by his second shot. Grimly, I trudged to where the bull had stood and found blood. We trailed the animal until the blood petered out. Then, because I could not dismiss the wound as superficial, we spent the rest of that week passing up other bulls to find the injured elk. We failed.

If you're alone, a "first blood" rule still makes sense. You're not afield to spray the scenery with soft points and hope something falls over. In its pure sense, sport hunting is testing yourself. It is not simply carcass collection.

Sometimes others in your party may test you too. A guide who really wants rid of your company or to visit his girl or attend Saturday night festivities at Billy Bob's will want you to shoot early. Ditto an outfitter looking to bump his success rate or spare the groceries or beat a storm. Resisting that pressure can make for a tense camp. But taking risky shots

to please your companions won't sit well in memory.

Once, in Africa, my professional hunter (PH) and his tracker led me on the long trail of an eland bull. We were all physically fit, but by mid-afternoon, sun, sand and thorn had exacted a toll. Then, suddenly, Kamati snapped his finger. I heard it: the faint click of eland hooves. We crept forward. The tufted face of a huge bull appeared 60 yards away. Slowly the crossed sticks rose, and I slid my rifle into place. But a screen of acacia loomed in the sight.

"Shoot," hissed the PH. "Your bullet will get through."

I shook my head. A second later the eland vanished. We began the long hike back in uncomfortable silence. As luck would have it, I killed an eland later that week, a fine bull that dropped to one bullet. All was forgiven.

But you're foolish to count on second chances. Not long ago, on assignment for a television show, I turned my ankle on a rocky hillside and fell so quickly I couldn't save my rifle from a bruising—a freak event. Our party spotted an elk barely an hour later, quartering away in a small window in dense alder. Range: just shy of 300 yards. Ordinarily I'd have bellied down and fired. But there was no divining how my tumble had affected my scope. The alders wouldn't show a bullet strike and would surely prevent a follow-up. "Sorry," I mumbled to guide, cameraman and company. The rest of that week was an exercise in public

relations, as no other elk appeared. The scope, by the way, had not lost zero. But conduct matters. A lucky hit on the heels of a risky shot simply means an animal died *in spite of* your judgment.

Shots at crippled game needn't meet a 90-percent-certain standard. I recall a partner hitting a grizzly not quite well enough. The bear roared, spun in a tight circle, then dashed for cover. We both let fly, though neither of us would have fired at a running grizzly that was unhurt.

Another time, I took an ill-advised poke at a Cape buffalo up close. Tense moments, a dash through thorn and several Winchester solids later, the animal died. It was not a neat kill, but once you commit, your task is clear. The time for deliberation is *before* loosing that first bullet.

No matter how confident you are of a lethal hit, be ready to follow one shot with another. Reaction to a hit in the paunch often mimics response to a heart or lung shot. Animals escape when hunters reload slowly or don't reload at all. Fast bolt work can give you a second hit.

Game that drops instantly worries me; the bullet may have clipped a spinal process, delivering shock that floors the beast but causes no lethal damage. A bullet severing the forward spine or breaking both shoulders yields the same result. You can't know exactly where the bullet landed, so be ready! Make a fast bolt throw part of your practice routine,

part of each shot afield. A handloader, I fight my habit of opening the action slowly to pluck and pocket the empty. Such a delay could one day cost me the chance to finish an injured animal.

The best place from which to fire a second shot is usually where you fired the first. You're in shooting position, you know the range, and you may still have a clear-shot alley. If you move forward to close the distance, odds are that a second chance will come quickly, when you're least able to capitalize on it. You'll lose time getting ready to shoot and taming your pulse. Terrain or brush may prevent a shot from a low position.

Finally, you risk alerting the animal to your location. A rifle's report and a bullet's strike give the game little information about you. Instinct tells it to identify a threat before committing to an escape tactic or direction. Stay still until there's reason to move! A pal once set up to shoot far at a big mule deer, then waited patiently for an hour for the bedded buck to get up and expose a shoulder. Eventually that happened. The bullet struck; the deer rolled out of sight. Wisely my amigo stayed put a few seconds. But that wasn't long enough. As he climbed through brush toward the bed, he heard the wounded buck scramble off. He never recovered it.

Once the animal is gone—down or out of sight—your best strategy is to stay still for *two minutes*. Watch and listen, rifle ready. This delay costs you nothing. The kill was nearly certain; why rush to a carcass? If the beast is ambulatory,

silence works in your favor. You can hear movement without revealing your position. Wounded game that thinks it is hidden will likely stay where it fell or bed nearby.

Long shooting is controversial partly because recovering distant game can be problematic. No matter how well you mark the spot, you can lose it after crossing a deep, brushy defile. Missing by a few yards, you may not see that buck. Besides, not all game dies close to the impact site. If you're nearby, you can hear hooves, twigs, a cough, a stumble. Far away, game that reaches cover in a jump gives you no clue as to its mobility, speed, direction. By the time you arrive, it may have changed course, found a hidden bed, or simply put so much distance behind it that you'll run out of daylight catching up.

Then there are dolts who don't check after a shot. They might stroll across a meadow. But lose a quarter-mile elevation and labor up the far side of an abyss and return? "Nah. Probably missed. Won't find blood anyway. Knees can't take that. Not enough time." I've found animals shot dead where recovery was probably not attempted.

Once, guiding a deer hunter, I spied a buck loafing just 200 yards away, but across a steep coulee. The fellow fired. The deer ran off. I suspected a hit. The hunter insisted he'd missed. I told him we were going to check anyway, and since I had no rifle, he'd have to follow me. Grumbling, he relented. We descended, then climbed to where the

deer had stood. Leaving my client to catch his wind, I tracked the deer into cover, where I found a tiny drop of blood. The buck lay dead a few yards farther on.

Now, it matters not to an animal whether a lethal bullet comes from 50 yards or 500. Nor does shot distance figure into wildlife policy. Harvest is harvest. Hunter motive is likewise immaterial to the animal and the biologist.

It seems to me foolish to measure hunting ethics in yards. I once killed an elk at just over 600—twice as far as any other I've shot in 35 years of hunting these creatures. My rifle was chambered to a mild round most hunters would think more suitable for deer, even at modest ranges. But it was an accurate rifle, with a scope whose elevation dial had been calibrated to my load. More importantly, I had time to sling up, settle into prone and confirm dead-still air. *Most* importantly, I had practiced with this rifle on targets at extreme range. My bullet lanced both lungs. Had the target been a cantaloupe, I'd have hit it.

Still, I'm not especially proud of that kill. I took the shot not because light was fading and a close approach nigh impossible, but because it was a 90-percent shot. A 30-yard hit after a long sneak would have been more satisfying; but conditions this time narrowed my options. I could fire or decline.

Those options are yours always, regardless of other opportunity. One

evening, hunting kudu, I came upon an old bull browsing in thick thorn. Wind and luck were with me as I edged close for a shot with an open-sighted .470 double. At 23 steps I fired. The animal reeled at the impact, then vanished. I could have fired my second barrel as the bull suddenly re-appeared, jetting through a gap; but I thought better of it. What if this was a second kudu and the first lay dead in the thicket? To my chagrin, the track showed only a trace of blood. In the failing light, I'd nudged the front sight too high in the notch, merely clipping the neck. Apparently 23 steps had been too far.

Another time, in Alaska, I stalked a black bear in tall coastal grass. When the wind turned abruptly, the bear loped toward cover. I rose, swung and fired. Forest enveloped the bear. My guide was not impressed. My .30-30 he considered marginal at best; now dusk was closing after a hasty shot. We hurried forward. Under dense canopy, the blood trail—indeed everything—got dark fast. We pushed through giant fern and found the bear dying. My bullet had struck its heart. I breathed a prayer of thanks, and an apology. Success aside, 90 yards had really been too far.

Launching a bullet is properly a weighty decision. Riflemen who shoot cavalierly or beyond sure-kill range boost crippling loss. They also color the public's perception of sport hunting. Sadly, declining a wrong shot is not as easy as

it is noble, because it means foregoing shots that *would* have killed.

About the Author: Wayne van Zwoll is a full-time journalist for the outdoors press. Wayne has published more than 2,500 articles and twice that many photos for more than two dozen magazine titles, including Sports Afield, Outdoor Life and Field & Stream. His Rifles and Cartridges column in Bugle has run for 23 years - longer than any other in the Rocky Mountain Elk Foundation's flagship magazine. Wayne has authored 15 books on hunting, shooting and history. He is a professional member of the Boone and Crockett Club and has served on the board of OWAA. Wayne has taught English and Forestry classes at Utah State University, where in 2000 he earned a doctorate studying the effects of post-war hunting motive on wildlife policy. Wayne lives in north-central Washington State with Alice, his wife of 36 years.

Classic O'Connor

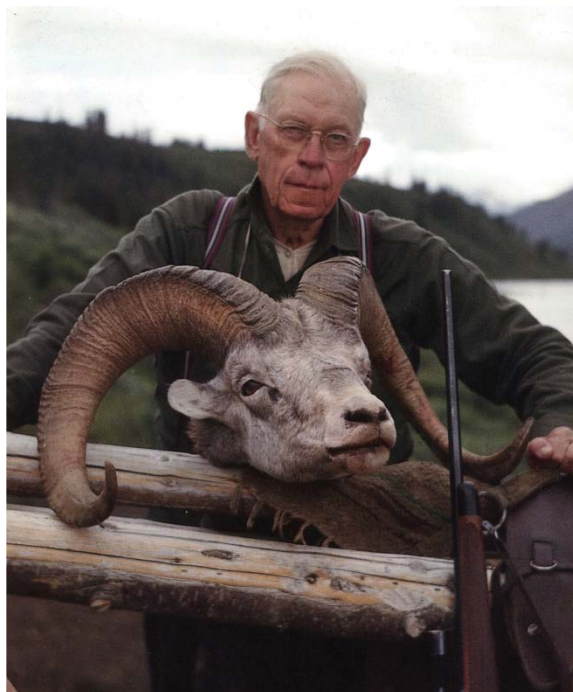
"Know Your Big-Game Rifle"

By Jack O'Connor- November 1965

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Not long before I gathered up my wife and young and fled Arizona's post-war population expulsion, I went on a 45-day hunt for Stone sheep and whatnot in northern British Columbia. One of the two rifles I used on the trip was an

To read more about "Know Your Big-Game Rifle" please refer to our Jack O'Connor Archives within our website location!!!!



About the Author: Jack O'Connor's first love, besides his family, was the outdoors and writing about hunting, firearms, and the natural history of big game animals. As the longtime firearms editor for Outdoor Life magazine, O'Connor hunted and collected trophies throughout the world, and introduced millions of readers to hunting and firearms. He is still considered the undisputed dean of outdoor writing and journalism. Please visit our website at www.jack-oconnor.org to learn more about Jack, his family life, career, and conservation legacy.