

CANADIAN FIREARMS JOURNAL

SEPTEMBER/OCTOBER 2017

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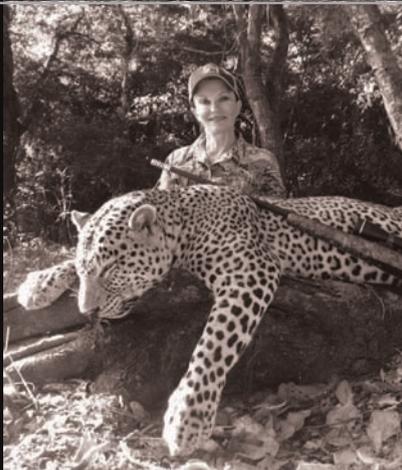


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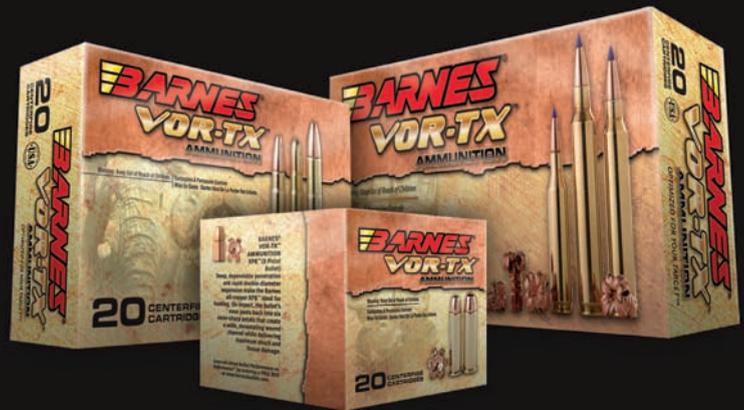


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MISSION STATEMENT

Canada's National Firearms Association exists to promote, support and protect all safe firearms activities, including the right of self defense, firearms education for all Canadians, freedom and justice for Canada's firearms community and to advocate for legislative change to ensure the right of all Canadians to own and use firearms is protected.

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On the Cover

Sabatti Rover Contest Winner

This issue's cover image originates from the contest we announced in the May/June issue of the *CFJ*. You'll recall it was a giveaway of a Sabatti Rover rifle in 7mm Rem. Mag. Readers were encouraged to send in a hunting photo, with the promise that the best photo would win the rifle and get a spot on our September/October cover. Turns out, the lucky winner was Barry Johnston of BC. While hunting last fall, he and his son became surrounded by clouds, and while waiting for them to clear, he snapped this photo. Well done, Barry! Looks like he gets a new rifle for his hunting adventures this fall. 



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From The Editor's Desk

Al Voht

Preparing For The Hunt

For many of us, the arrival of September marks the time to start thinking about upcoming hunting seasons. With that in mind, we've added an emphasis on hunting in this issue. As much as we all enjoy the hunt, preparing for it is also a lot of fun, and I'm hoping the content we've gathered for this issue of the *CFJ* will help you with that preparation.

Of course, we have some reviews of guns and ammunition. In particular, see Jeff Helsdon's review of the Tikka T3x. This is an update of a popular rifle that just seems to keep getting better. Look also for Brad Fenson's discussion about upgrading the optics on your favourite muzzleloader. He's been using some interesting products and you may find a new idea or two in his article. We've also got a quick look at Leupold's new LTO Tracker. This is a

compact thermal imager that will find blood trails in the dark and do other magical things.

But we all know it takes more than good gear to be successful on a hunt, so Duane Radford brings us some tips on how to shoot better in the field. He's got lots of tips, but I'd really like to emphasize a key one: Get off the shooting bench! It's rare to see anyone at a gun range shooting a rifle from a position other than on the shooting bench. But to build your skills, once the rifle is sighted in, you need to get off the bench. Do it!

Then, to promote safety, Bob Shell explains some of the mystery behind cartridge names, and encourages shooters to make sure the cartridges in the box fit the rifle in your hand. I've seen some nasty mistakes made in this area, so it's worth paying attention to Bob's words

of caution. And speaking of mistakes and safety, one of the mistakes I've made regularly is hunting without hearing protection. Lowell Strauss tells us why this will damage your hearing and how to prevent it. Of course, we all dream of the day when suppressors are legal in Canada, but that's not the case yet, so hearing protection is a must.

Speaking of suppressors, this summer I spent a week in the US shooting suppressed firearms. And what a treat it was to shoot firearms up to 300 Win. Mag without the violent muzzle blast hunting-type rifles subject us to. It certainly reinforced my belief that it's ridiculous to have suppressors listed as prohibited devices, thus making them unavailable to Canadian shooters. This is certainly one area where we need educate our lawmakers. So, if you get the chance, take a lawmaker hunting. 





President's Message

Sheldon Clare

Licensing & More

A few weeks ago, a new member of the firearms fraternity was showing me his new PAL, and told me that he could buy restricted and non-restricted firearms because he was now considered "safe." I pointed out to him that the PAL had nothing whatsoever to do with him being safe, and he looked confused. He was even more confused when I pulled out my PAL and asked him to compare the back of our two licenses. To his surprise, there were a number of categories on mine that were not on his. His question was, "How do I get those endorsements, 12(3) Converted Automatic, 12(5) OiC #13 and 12(6) Handgun, on my PAL?"

My response was simple: "You can't, and it has nothing to do with whether or not you are safe with firearms. It has everything to do with an artificial construct that is designed to gradually eliminate civilian firearms ownership. You see, at one time you didn't need a licence, or even a Firearms Acquisition Certificate, to purchase and own any of these firearms. Now, who may own them is severely limited by federal criminal law. You can't own them and there are fewer and fewer people who can." He seemed to get the message – the licence is a barrier to lawful ownership; it is neither a right of passage, nor a source of pride. That should be food for thought for anyone who still thinks that licenses are about keeping firearms out the hands of criminals, because it is pretty clear they are not.

The same applies to conversion of firearms. I recently had a rifle returned from the forensic lab in Ottawa where it had been for a few years awaiting inspection to ensure that it was incapable of fully automatic fire. To my horror, when I examined the firearm it was substantially different from how it had been

sent. There were a number of destructive alterations that went far beyond what was necessary for a rifle that was already converted to not be fully automatic. None of the changes involved consultation with, or information to me as the owner, nor were these changes at all necessary for a reasonable conversion.

It was the case for many years, that one could purchase and shoot fully automatic firearms in Canada, and again no licence was required. Conversion only exists because there were many fully automatic firearms around, and the government wanted to avoid the perception that it would take them away from people. Grandfathering of current owners was one aspect, and conversion was the other compromise to allow those firearms in businesses to continue to circulate. Converted fully automatics were usually non-restricted, and many people had them and enjoyed shooting them. Then the ratchet went another click, and in the Bill C-17 changes of Conservative Justice Minister (and temporary Prime Minister) Kim Campbell, converted automatics and many other firearms became prohibited.

The Possession Acquisition Licence was a creation of the subsequent Liberal government of Jean Chretien and his Justice Minister, Allan Rock. As terrible and draconian as Kim Campbell's gun grab was, that Liberal licensing scheme was worse. Many people bought the lie that the licence makes us safer, when it is clear that firearms licensing has had no effect on crime rates at all. It is certainly the case that licensed firearms owners are less likely to be involved in crime than the general population; however, that is not an effect of the PAL, but rather an indication of the sort of people who are members of the firearms community.

It is certainly the case that the reason that most Canadians own firearms is for

hunting; however, most people who are members of gun clubs are there because they need a place to shoot their handguns, and other restricted (and some 12(6) prohibited) firearms. Hunting is an activity that cuts across many political lines, and you will find people who hunt in every Canadian political party. However, the struggle we face is not about hunting – it is about firearms ownership at a basic level. Hunting has its own fights that many of us share. Even so, not all firearms owners hunt, and there are lots who don't. It is also the case that not all hunters own firearms – many are bow hunters or use other methods. Notwithstanding those situations, we all have a common interest in protecting the rights of each other in our chosen activities – it gives us strength in numbers and in advocacy for the benefit of all, including people who neither hunt, nor own firearms.

On the UN front, the NFA is intending to host a panel of experts on the negative effects of the *Arms Trade Treaty* at the first committee meeting during the general assembly in New York this fall. Our profile as an international player has been rising and we are fully engaged in assisting others with problems that we have faced, and continue to face, in Canada. Fortunately, our numbers continue to grow, and thanks to your commitment and efforts, we are still taking our message to politicians in Ottawa and the provinces. We are building connections and strengthening our alliances as we prepare for the next federal election. It is every firearm rights advocate's responsibility to engage with local politicians and to work towards electing pro-gun MPs. Let's make it happen.

Have fun this hunting season and make sure you make time to take someone shooting.

Message du Président

Sheldon Clare

L'émission de permis et plus...

Il y a quelques semaines un nouvel arrivant dans le monde des propriétaires d'armes à feu m'a fièrement montré son Permis de Possession Acquisition (PPA) en me disant qu'il pouvait dorénavant s'acheter des armes restreintes et sans restrictions, parce qu'il était maintenant considéré comme une personne "sécuritaire". Je lui ai fait remarqué que son PPA n'avait rien à voir au fait qu'il soit sécuritaire ou pas. Il a semblé être confus de ma réponse. Sa confusion augmenta lorsque j'ai sorti mon PPA et lui ai demandé de comparer les endos de nos deux permis. Il fût très surpris de constater qu'il y avait plusieurs catégories sur le mien qui ne se retrouvaient pas sur le sien: 12(3) Automatique modifié, 12(5) OiC #13 et 12(6) Arme de poing. Comment puis-je obtenir ces catégories sur mon PPA? Dit-il.

Ma réponse fût très simple - "Tu ne peux pas, et cela n'a rien à voir avec ton niveau de sécurité dans le maniement des armes à feu. C'est à cause d'un système arbitraire et artificiel qui a été créé avec l'objectif d'éliminer graduellement la possession d'armes à feu par des civils. Tu vois il fût un temps où on n'avait pas besoin de permis ni d'Autorisation d'Acquisition d'Armes à Feu (AAAF) pour acheter et posséder toutes ces armes à feu. Aujourd'hui la loi fédérale criminelle restreint sévèrement l'accès à ces armes. Toi tu ne pourras jamais en posséder et il y a de moins en moins de personnes qui le peuvent. Il a semblé comprendre le message - le permis actuel est une barrière contre la possession légitime d'armes à feu: Ce n'est pas un "droit de passage" ni une source de fierté. Ce fait devrait provoquer une mûre réflexion à tous ceux qui croient que les permis sont conçus pour garder les armes à feu hors de la portée des criminels, parce qu'il est clair que cela ne l'est pas."

Il en est de même pour les armes modifiées. Récemment, le Centre Médico Légal d'Ottawa m'a retourné une carabine qu'ils ont gardés pendant plusieurs années pour l'inspecter dans le but de déterminer si elle était capable de fonctionner en mode

automatique. Quel horreur! Quand je l'ai examinée elle était très différente que lorsque je leur ai envoyé. Plusieurs altération destructrices lui ont été faites, elles dépassaient grandement ce qui était nécessaire pour une carabine qui avait déjà été modifiée pour ne plus tirer en mode automatique. Ils ne m'ont jamais consulté ou informé, moi le propriétaire, avant d'altérer mon arme. De plus, ces changements n'étaient pas nécessaires pour y accomplir une modification raisonnable.

Pendant plusieurs années au Canada, il était possible d'acheter et de tirer des armes automatiques et ce sans permis. Les modifications de ces armes ont été faites seulement parce qu'il y en avait beaucoup en circulation et le gouvernement voulait éviter la perception qu'il voulait les enlever à leurs propriétaires - le gouvernement a donné des "clauses grand-père" aux propriétaires de l'époque et leurs modifications a été l'autre compromis pour permettre ces armes de circuler auprès des commerçants. Les armes automatiques modifiées étaient normalement des armes sans restrictions et plusieurs personnes en avaient et aimaient bien les tirer. L'engrenage a tourné encore d'une dent et la Ministre de la Justice Conservatrice (et Première Ministre temporaire) Kim Campbell nous a assommé avec son projet de loi C-17: Toutes les armes automatiques modifiées et plusieurs autres armes à feu, sont devenues prohibées. Le Permis de Possession Acquisition fût la création du gouvernement suivant, les Libéraux de Jean Chrétien et de son Ministre de la Justice Allan Rock. La loi terrible et draconienne de Kim Campbell était de la petite bière comparée au régime des permis conçu par les Libéraux. Beaucoup de gens ont cru le mensonge que ces permis augmenteraient la sécurité publique, mais la réalité est que l'émission de permis n'a aucun effet sur le taux de criminalité. Il est vrai que les propriétaires légitimes d'armes à feu ont moins de probabilité d'être impliqués dans le crime que la population en général. Par contre, ceci

n'est pas un résultat de l'émission des PPA's mais plutôt une indication du genre de personnes qui font parti de la communauté des propriétaires d'armes à feu.

Il est vrai que la plupart des Canadiens possèdent des armes à feu pour pratiquer la chasse, mais la plupart des gens qui sont membres de clubs de tir, le sont par obligation s'ils veulent pouvoir tirer leurs armes restreintes (et certaines 12-6 prohibées). La chasse est une activité qui est pratiquée par des membres de tous les partis politiques. Par contre, les difficultés auxquelles nous faisons face n'ont rien à voir avec la chasse - elles sont reliées avec la légitimité de la possession d'armes en soit. Beaucoup de luttes sont liées avec la chasse et plusieurs d'entre nous les partageons. Mais les propriétaires d'armes à feu ne sont pas tous des chasseurs. Et les chasseurs ne sont pas tous des propriétaires d'armes à feu - plusieurs d'entre eux utilisent des arcs et d'autres méthodes. Nonobstant ces autres situations, nous avons des intérêts communs à protéger nos droits dans chacune de nos activités respectives. Plus nous sommes nombreux plus nous sommes forts, ce qui aide le lobbying au bénéfice de tous, même à ceux qui ne possèdent pas d'armes à feu ou qui ne chassent pas.

L'ACAF a l'intention de présider un groupe d'experts qui viendront démontrer les aspects négatifs du Traité sur le Commerce des Armes durant la première réunion du Comité lors de l'Assemblée Générale de l'ONU à New-York cet automne. Notre influence sur le plan international grandit toujours et nous sommes pleinement engagés à aider d'autres qui font face à des problèmes semblables à ceux auxquels nous faisons face au Canada. Heureusement nous grandissons toujours et grâce à votre engagement et vos efforts nous continuons de transmettre notre message aux politiciens à Ottawa et dans chacune des provinces. Nous établissons des contacts et des alliances en préparation pour les prochaines élections fédérales. C'est la responsabilité de tous les défenseurs des droits en matière d'armes à feu de faire pression sur les politiciens locaux et de travailler pour élire des députés pro-armes. Il faut foncer pour y arriver.

Amusez vous bien durant cette saison de chasse et assurez vous d'emmener quelqu'un tirer. 🍗





Vice President's Message

Blair Hagen

Surprise! The Long Gun Registry Data Wasn't Deleted

The Liberal gun control legislation everyone knew was coming has arrived. The good news is it does not contain any new gun bans, confiscations, regulations or restrictions on firearms licenses, registrations or authorizations. The Liberals have apparently left that agenda to the RCMP firearms program. It does, however, set the stage for a return to universal firearms registration in Canada. Under Bill C-52, the Liberals wish to pass legislation paving the way to deliver the old long gun registry (LGR) data to Quebec.

With the impending end of the LGR nationally, after the passing of Bill C-19 in 2012, Quebec went to the Supreme Court in 2015 and sued to get the data that had been collected to date. The NFA intervened on that case, arguing Quebec had no business receiving that data from the feds to set up another gun registry, and the Supreme Court agreed. Quebec was denied the data.

You may ask yourself, "Wasn't this data supposed to be destroyed, as per Bill C-19?" and the answer would be, "Yes, it was." However, it now transpires that two electronic copies of the federal LGR data were secured by the RCMP for the federal information commissioner. Canadians thought that the government and the RCMP were being truthful when we were told this data had been destroyed, as per the legislation. It now appears this was not the case. This is the data the federal Liberals want to give to Quebec. Once Bill C-52 is passed, it will be legal for them to do so.

The existence of this data is a betrayal of the promise that the fate of universal firearms registration in Canada was decided once and for all with Bill C-19 and the end of the failed LGR. The Liberals campaigned in the 2015 federal election on a promise they would not attempt to re-impose universal registration nationally, as it was "too divisive." That deflected a lot of criticism from their firearms policies. The claim of no new gun registry worked,

and Liberals faced little controversy over firearms in the election because of it.

Quebec is a test case for the return of universal firearms registration in Canada. The Liberals hope to avoid the controversy of restarting it nationally, and what better way to do this than by facilitating it for the provinces? And since it is within the province's mandate to set up registries of property for taxation purposes, what better way to slip these programs in under the wire. If they use them in conjunction with the federal *Firearms Act*, it could set the stage for re-federalizing universal registration at some later date when the other provinces have been shown what a wonderful success the Quebec registry is, and have moved to establish registries themselves.

Many otherwise sensible taxpayers and voters might support such programs if told by government that the data already exists and the financial boondoggle of the C-68 registry will not be repeated. For those of you who think that with so many firearms changing hands, your long guns are safe because the old registry data is stale dated, incomplete and useless, I have to point out that it doesn't matter.

This is a political question, not one based on reality or public safety. One of the ways LGR was sold to Quebec voters was the claim it would not be pursued unless the federal data was received by Quebec. Many taxpayers not directly affected by the issue truly believed the controversy was over the financial bungling of the firearms program, and that the data collected is accurate and can still be used for some purposes of public safety.

Politics is not based in reality. It is a fantasy land, and if an economic case can be made to continue a failed government program, its supporters will use that as justification for continuing their agendas. This begs the question, "How many other copies of the gun registry data were secreted away by the RCMP, ministry of public safety or department of justice?" Certainly, there is evidence that registry

records were used in searching for and seizing firearms during the catastrophic flooding in High River, Alta., in June 2013. But, to date the RCMP have refused to address those allegations.

So far, no other province but Quebec has expressed an interest in revisiting the LGR. But what about five years from now, or 10 years from now? If provincial governments agree to impose such programs, this sets the stage for a simple transfer of data to Ottawa for the re-establishment of a national universal firearms registry, one of the key parts of the civil disarmament plan fostered by the 1995 *Firearms Act*.

Canada's National Firearms Association knew that when the previous Conservative government decided to introduce legislation to end the LGR, it was imperative that all the data, such as it was – faulty, incomplete and useless for any purpose of public safety – had to be deleted, expunged and destroyed. Any remnant would be used as justification to restart the program. That is why the NFA demanded the destruction of registry data be included in the legislation that would become Bill C-19.

The federal government and the RCMP clearly believe Canadians can still be bamboozled on the firearms issue. And believe the Liberal gun registry was controversial simply because Dad didn't get a registration after he sent his paperwork in, and that taxpayers were unimpressed after the firearms program went 500 per cent over budget.

Instead of further undermining confidence in national institutions, the Liberals and RCMP should have learned hard lessons and abandoned their civil disarmament agenda. Canada's National Firearms Association will shortly be returning to the courts in Quebec to stop the imposition of a long gun registry there, but it will be years before there is any resolution. Meanwhile, much needed firearms law reform is stalled for the term of this federal Liberal government. ❗

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Preserving Our Firearms Heritage

Gary K. Kangas

A Hunting We Will Go



A young Al,
with a recently
harvested deer.

Hunting is an integral component of Canadian culture and history, tracing its beginnings to First Nations peoples about 10,000 to 30,000 years ago. When the first European settlers began to arrive in the early 1500s, they introduced these settlers to hunting, survival and bush craft skills. The shared knowledge assisted the newcomers to adapt and survive in a game-rich land, however harsh and unforgiving. The Europeans and First Nations collaborated to organize the fur trade, a hunting-based economy that dominated Canada for 200 years. Today, hunting has evolved for most people from a subsistence and survival endeavour to natural food gathering and recreation.

Hunting is growing in popularity, and the number of young and female hunters is on the rise. In BC, hunting licenses bottomed out in 2003, then turned around and began to increase steadily. Their sale generates \$12 million per year in BC, with a large portion of this dedicated to conservation programs. Additionally, local hunters and hunting tourists generate about \$50 million in economic activity each year.

Ethical hunters enjoy the outdoors, pursuit of the game, eating the game and living an active, healthy lifestyle. Al Wilson, originating from Manitoulin Island, in Lake Huron, has been that kind of hunter from an early age. Manitoulin Island is the largest fresh water island in the world, and home to the Odawa (Ottawa) First Nation. The Odawa, in early times, were known as traders, dealing in corn meal, sunflower oil, furs, tobacco and medicinal roots and herbs. They are said to have migrated from the Maritimes and have considered Manitoulin Island as their homeland since the 1600s.

Al spent his early years in this hunter's haven, on the family's 600-acre farm. His father was an expert and avid hunter, so hunting and shooting were a natural component of everyday life. Al's mother participated too, defending their vegeta-



A grizzly bear once helped Al clean the back of this truck.



Al's Winchester '94 was produced the same year he was born.



Al favours a Remington 700 as his long-range big game rifle.

bles by shooting garden pests. Al began his hunting career pursuing squirrels and raccoons with a pellet gun. He also credits Boy Scout participation with enhancing his ability in the outdoors. Today, he says, "You spend a lot of time in the bush learning not to get lost."

At age 14, he graduated to a .22 rifle, a Remington Nylon 66 semi-auto, with which he bagged rabbits. He also acquired a 1894 Winchester lever-action, chambered for the popular 30-30 Win., and produced the same year he was born. In that era, you could get a hunting licence and buy firearms at age 14. So, Al harvested his first deer that year, with the Winchester which would become his hunting rifle for 30 years. He now contributed to the home menu, which consisted of venison and various upland game such as partridge and pheasants. With morel mushrooms, these were gourmet delights by any standard.

Al's memories of growing up in a hunting paradise are plentiful and varied, including wonderful adventures with his father and brother pursuing game. However, as always, real life intervened. Al joined the military and continued his education, becoming an aeronautical engineer, then getting married and having a family. His passion for hunting was placed on hold for 15 years. After his military career ended, Al's engineering skills brought him and his family to Calgary and the petroleum industry. There his joy of hunting was rekindled, as he was now able to return to his family home every fall and revel in doing what he liked most – spending time with his family tracking and harvesting wild game.

The year 1990 saw Al and family move

to Victoria, BC, where the proximity to Washington state opened the door to other exciting hunting adventures. By this time, Al had acquired another big game rifle, a Remington semi-auto chambered in 30-06 Springfield, which became his primary big game rifle. But a new passion, the pursuit of elk, unfolded. Al says he enjoys hunting elk the most as it requires a great deal of hunting and bush craft expertise. During this era, he acquired a long-range big game rifle, a Remington 700 chambered in 300 Remington Ultra Magnum with a left-hand bolt. Mounted on the receiver is a Leupold VX3 4-10 with a Boone and Crockett reticle.

In 2004, an additional hunting experience arrived, interior BC moose. Hunting moose in BC is stimulating and challenging, as the hunter not only has to be good at hunting, but must also be aware and wary of bears who are hunting for food too. Al's favourite moose hunting ground is north of Vanderhoof and south of Houston, BC.

As Al's hunting experiences have unfolded, there have been many exciting, memorable events embracing some degree of risk. Situations such as aiding game wardens in Washington state in apprehending elk poachers. On another

occasion, while hunting moose in BC, Al was mentoring a novice hunter. Al harvested a moose, after which they returned to camp, skinned, butchered and quartered the moose, and hoisted the meat high into the trees. Being a good woodsman, Al disposed of the offal four miles from camp. When they returned, Al instructed the novice to be on the lookout for bears, as he had to clean the residue from the box of his truck. The new hunting partner wandered away from camp and returned very quickly with a grizzly on his trail, forcing Al and the new hunter to seek refuge in the camper. Al had his shotgun loaded with slugs, however, the bear was far more interested in the blood and residue in the truck box. It took the bear four hours to lick it clean, and then he wandered off. Al had a "stimulating" conversation with the inexperienced woodsman, who now understood what the reality of being in the wild means and the importance of being aware of your situation and surroundings.

Al is a dedicated hunter and woodsman, as well as a champion cowboy action competitor. He is a trusted advisor and coach to new hunters and shooters and sets the standard for a person who is preserving our firearms heritage. 



Politics & Guns

Bruce Gold

How “Agency” Underlies The Gun Debate



By shifting agency to third parties or inanimate objects, he justifies treating gun owners as children or moral incompetents.

One of the issues underlying government policy in general, and gun policy in particular, is the issue of agency. “Agency” is the ability to act independently, instead of being controlled by our surroundings and circumstance. Marxism, ever popular with progressives, has deeply influenced the understanding of agency. Marxism and Cultural Marxism deny agency to individuals and restrict it to groups. Identity politics also restricts agency to the group insisting that everyone act and think according to their racial or other identity. Progressives believe that they have a unique degree of agency which, with their moral and intellectual superiority, gives them the right to impose their agenda on everyone else.

This all seems academic until one observes how assumptions about agency underlie political agendas. In Canada, we have seen the widespread adoption of the theory that criminals lack agency over their own actions, and are therefore passive victims of society’s failings. This “sensitive and respectful” approach robs criminals of their humanity. By denying them agency, the power to act, it diminishes them into beings that are incapable of reflection, discipline or acting on his or her own volition. Another example is the Weapons Effect theory, which argues that the mere presence of a gun causes or stimulates violence. Statistics Canada is a true believer in this Weapons Effect theory, insisting that a gun’s presence at a crime scene (even if

never used or even known to the actors) makes the crime firearms related. Another example is the move by some in the medical community to redefine guns or bullets as pathogens.

A classic case can be found in the article, “The Gun and the Sanctity of Human Life, or The Bullet as Pathogen” by L. Adelson. He begins with the declaration that he intends to “discuss the bullet as a pathogen in our ‘peacetime’ American society, a designation often considered a tragic joke.” This frames the issue as a problem common to all of society. It conceals the fact that the majority of gun crimes take place in the dysfunctional ghettos of America’s cities, and is restricted to relatively small populations and areas. This choice

of assumptions bolsters his anti-gun argument by focusing causation on the gun, not the culture or subculture. The “peace time” comment is a subtle reference to the dogma that America and its gun culture are uniquely violent in the world. Later, he emphasizes this by cherry picking low-gun, low-homicide jurisdictions like Japan and the UK as a comparison (93 countries have higher homicide rates than the US. The highest, Honduras, has a homicide rate almost 20 times the US rate of 4.7 per hundred thousand. Some 57 countries have rates more than twice as high as the US. The “horrific” US homicide rate is half the world average.)

With these simple rhetorical tricks, the author re-defines reality, making gun violence a society-wide problem where America, with its high gun ownership, occupies a unique position of shame. He continues his reality shifting by re-defining the medical term pathogen. As a recognized term, a pathogen is a living organism, such as a bacterium or virus that causes disease. Bullets, like guns in the Weapons Effect theory, now have agency and the ability to act on their own volition. Human actors are reduced to little more than pawns. Some examples of this in action (according to the author):

- “all too often a gun escalated the degree of violence to irreversible lethality”
- “bitter fruits of the tree of violence and availability of handguns fertilizes the soil for the growth of this malignant phenomenon” (physically and emotionally traumatic human behaviour)
- “a gun converts a spat into a slaying and a quarrel into a killing”

THE FACTUAL APPROACH

The author states, reasonably enough, that “if we are to discuss the complex subject of gun control, we must do so on the basis of solid information, not emotion and prejudice.” He then conducts a psychological examination of gun owners to create a strawman out of pure conjecture and bolster his argument. He warms to the task of finding “solid information” by noting how “some observers consider the gun to be a sex symbol” and some analysts believe that the opposition to the “threat of gun control springs from a castration complex.” He speaks of the “deep emotional drive motivating those who keep guns in their

homes, stores, or auto glove compartments for good or ill, man has always wanted to control his environment and the men around him. A gun gives him this ‘magical’ power.” He declares that “guns create feelings of self-esteem permitting even the least potent to join the Superman Club.”

He continues his description of the hapless gun owner stripped of all awareness and agency, helplessly dominated by the gun’s “magic powers.” The firearm “becomes a mechanism by which to compensate for feelings of inadequacy and represents a dangerous outlet for aggressive impulses.” This analysis, based on an assumption of uniform motives and behaviour across millions of people, reduces analysis to a talking point for dogma. On this shaky, dishonest foundation, the author asserts, “facile access to firearms . . . is an invitation to their wrongful use by the neurotic, the psychotic, the socially maladjusted.” One wonders what sort of chaotic violence the local weekend gun show would descend into if this were true and thousands of guns exerted their “magic power” over the helpless participants.

GUNS IN AMERICA

Dr. Adelson declares that America is the “only industrialized nation that does not effectively regulate private ownership of guns.” He compares the US with Canada and Australia. He attributes their low homicide rates to the absence of America’s gun culture. Attentive readers will note he has quietly changed his causation from “magic guns” to culture, completely undercutting much of his pathogen argument. Both Canada and Australia have high firearms ownership, well above the global average, which again undercuts his argument. A closer look reveals that these high gun ownership jurisdictions lack an entrenched, illiterate underclass in big city ghettos with their drug gangs and culture of violence. (One sees how an assumption – that the problem is uniformly distributed across society – acts as a barrier to analysis that would contradict his theory.) He goes on to assert, “where there are more firearms there is more firearm violence. Conversely, where there are fewer firearms, there is a decrease in this modality of injury and death.” A little fact checking exposes the falseness of this talking point. Some recent

statistics demonstrate how incorrect his assertions are. In the US, total firearms stocks increased over the 16-year period (1994 to 2010) by some 93,965,151 firearms. The number of handguns increased by 40,681,376. During this same period, homicides dropped by 37 per cent, firearms homicides dropped 36 per cent and handgun homicides dropped 47 per cent.

CONCLUSION

Dr. Adelson’s approach to the issue begins with a careful framing of the situation that allows him to argue based on an imaginary world of his own construction. By obscuring how high crime statistics in America are the result of an extremely violent subset of the population, he prevents the culture argument from gaining traction. He then builds his case by presenting high gun ownership America as a uniquely violent nation. Having set up his analysis he argues that bullets are living organisms (pathogens) that have their own agency. This argument piggybacks on the Weapon Effect Theory that gives agency to firearms.

Having established the “fact” that millions of people are incapable of making their own decisions, he opens the door wide to those who would make decisions for them. By shifting agency to third parties or inanimate objects, he justifies treating gun owners as children or moral incompetents. Totalitarian in purpose and intent he argues, “We need education and indoctrination in our schools, homes and houses of worship” to deal with the problem. With this prescription, he drops all pretexts of “magic guns” or pathogen bullets and moves to social engineering and culture war. This is the sort of research that underlies our gun laws, and sad to say there are many in Canada’s establishment who would have little difficulty agreeing with its conclusions or its method of analysis. 

References

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SOUND ADVICE

Hearing protection on the range & in the field

BY LOWELL STRAUSS

Two young hunters crawled on hands and knees to the edge of a prairie slough. Glistening greenheads bobbing on the water drew their attention, so they weren't thinking about what had been drilled into them at their hunter safety course. Shots rang out as the ducks burst from the water. One of the hunters winced, clasp his right ear in pain. He wasn't wearing hearing protection and his friend's muzzle blast was too close. Twenty-five years later, my right ear still rings and I have trouble hearing certain sounds in that ear. I suffered permanent hearing damage from a single shot.

HOW LOUD?

Sounds greater than 140 decibels (dB) can permanently damage hearing. Almost all firearms create a noise over 140 dB, including the benign, standard velocity 22 LR. Centrefire rifles, pistols and shotguns can produce sounds over 165 dB. Firing guns indoors or in a place where sound bounces off hard surfaces, such as barricades, baffles or walls, makes them louder.

The sound level at a firearm's muzzle may be as high as 165 dB, but the sound at the shooter will be lower. A short barrel firearm will be louder than a longer one. If you've ever had the chance to compare shots from a 357 Magnum pistol versus a rifle, you'll know what I mean. Adding a muzzle brake directs gas, and sound, back toward the shooter

and bystanders. It's one reason muzzle brakes are frowned upon or not allowed by most professional hunters in Africa.

HEARING LOSS

Theresa Schulz, PhD, Lt. Col. USAF (retired) is an expert in hearing loss and describes what happens (see her presentation on hearing loss at www.howardleight.com.) The inner ear contains tiny little hairs attached to nerve cells. When normal sound waves hit the hairs, they flex at a certain frequency, sending information about the sound to the brain. When exposed to loud sounds, these hairs bend or even break. While a single shot can do this damage, it's also cumulative. Now the electrical signals aren't transmitted properly, and hearing loss has occurred. Higher-pitched notes may sound muffled. Background noise may drown out words you are trying to hear. Age and heredity may increase your risk of this type of hearing loss. Either way it's bad news, as this type of hearing loss is permanent.

In my experience, hunters are the most careless when it comes to protecting their ears. On a recent waterfowl hunt with other outdoor/gun writers, five of the 10 didn't use hearing protection – and this is a group of professionals that rely on their hearing to communicate. I think wingshooters may use them more often than big game hunters because of the volume of shooting they do, but there is room for improvement with all

hunters. Excuses for not wearing hearing protection include "too hot to wear," "too bulky to shoot with," and "prevents me from hearing game animals."

PROTECTING YOUR HEARING

The good news is that people can prevent hearing loss and enhance their shooting/hunting experience by using appropriate hearing protective devices (HPDs), such as earmuffs or earplugs – often nicknamed "ear-pro."

The two types of HPDs designed for shooting sports are electronic and passive. Electronic HPDs amplify quieter sounds, while blocking louder noise. They can include earmuffs, in-the-ear plugs and behind-the-ear devices. Electronics are ideal for hearing range commands while target shooting, and hearing game or talking strategy with your buddies while hunting. The technology has come a long way in recent years and is worth a closer look.

Passive HPDs include earmuffs and earplugs. These products do a good job of protecting the user by reducing the intensity of sound reaching the ear. Foam plugs are the most economical option, and because of their in-the-ear design the Noise Reduction Rating (NRR) is one of the highest of all the hearing protection types. Foam plugs can also be used with other types of earmuffs to double-up the amount of protection for the loudest shooting environments. If there is a downside to passive HPDs, >



There is hearing protection for every budget, from foam earplugs to high-def electronic earplugs with Bluetooth.

it's that they dampen all sounds, both loud and soft. Important communication such as range commands may not be heard, and situational awareness is compromised.

Each HPD has an NRR, expressed in decibels, on the package. The higher the number, the more noise they block. The NRR for each product is calculated in a laboratory, from a 10-person average,

each with a different face and ear shape. Fine print on the package often reads "when used as directed," which means fit is critical. To achieve the maximum NRR the HPD must fit properly. For example, the correct way to insert a foam ear plug is to roll and compress it between your finger and thumb. The ear canal must then be straightened (wrap the opposite arm around the back

of your head and pull your ear up and back), insert the plug and then allow it to expand.

HEARING PROTECTION DEVICES

While most of the major brands of HPDs work well to reduce loud noises to a safe level, there are subtle differences between the models on the market. I've had the privilege of testing the follow-



ing brands and can recommend them all – but not for all situations. Below is a list to use as a starting point to help you decide which ones to choose. Just make sure you choose something!

Foam plugs are the simplest form of hearing protection. They are an inexpensive, disposable option that should be included in every shooter's range bag, tac-vest or hunting pack. Even if you

don't use them as your primary source of hearing protection, they are good to have as a backup, to double up on protection in extra loud environments or to hand to a buddy or new shooter who would like to join you at the range. NRR for foam earplugs can be as high as 33 dB.

Advancement in thermodynamic plastics have brought do-it-yourself,

custom-fit ear plugs to the consumer market. Flugz (www.flugz.com) debuted this unique new product at SHOT Show 2015. Custom fit, passive-protection, earplugs are readied in less than one minute by heating the plugs in water in the microwave. The warmed plug is malleable and can be pressed into the ear for a custom fit. The plugs can be reheated and re-formed as often as

Foam earplugs should be inserted deeply enough that when you look at yourself in the mirror, they aren't visible.



necessary to get the perfect fit. Flugz plugs have an NRR rating of 21 dB so are best with quieter firearms such as rimfire rifles. Available on the Flugz website for \$25 USD.

Decibullz (www.decibullz.com) are another brand of thermo-fit molded earpieces. The basic model is a passive ear plug with an NRR of 31 dB. Decibullz has taken this one step further and made a model designed for shooters, in their custom-molded percussive/impulse filter earplugs. Filters protect users from the sound of gun shots, suppressing it to safe levels with a NRR of 32. Voices and ambient sounds are easily heard when no ear-damaging noise is present. Because they're not electronic hearing protection, they don't need batteries to operate. The filtered earplugs are priced at \$75 USD.

Walker's (www.gsmoutdoors.com/walkers) has been an industry leader in hearing protection and enhancement. Their Razor series is a value-priced electronic earmuff, which I've tested in noisy range environments as well as in the field. Sound quality is excellent, allowing natural sounds to easily be heard. Their slim profile, clean sound,

sound amplification and fast reaction time are best suited to field situations. NRR of 23 dB, MSRP \$70 to \$80 USD.

Impact Sport electronic earmuffs from Howard Leight (www.howardleight.com) are a popular choice among target shooters. The muffs monitor sound levels, automatically reducing noise by 22 dB (NRR) when sound levels exceed 82 dB. A slim profile keeps the shooter's cheek close to the stock. Directional microphones amplify up to 4x, so low-level sounds such as range commands can be heard. They also include a four-hour auto shut off, a nice feature to save battery life. The Impact Sport BOLT is new for 2017. New features include 0.5ms reaction time and 5x sound amplification with directional sound in stereo. I've put the Impact Sport through its paces and it performed flawlessly in the field and at the range. MSRP for the Impact Sport BOLT is \$120 USD.

Peltor (www.3M.com/PeltorSport) released two new high-tech digital electronic hearing protectors in 2017, the Peltor Sport Tactical 300 (24 dB NRR) and 500 (26 dB NRR). Both have unique features, including: Dynamic Suppression Time measures gunshot energy



and echoes and adjusts suppression time accordingly; ClearVoice Tracking technology identifies voices and adjusts noise filtration to optimize communication; Safe Volume Control Technology measures noise exposure throughout the day and adjusts the volume level to keep audio dosage below acceptable limits. I test drove both models at the 3M Peltor booth at SHOT Show. In a sound booth, various types of gunfire were played to help me experience the technology. After only a few minutes

Hearing protection is critical shooting gear. It's important to have adequate protection for the type of firearm and shooting you're doing.



I was convinced these hearing protectors were some of the quietest I've ever encountered. Both are a bit bulky, as you would expect with earmuffs with 24 to 26 dB NRR, so they are better suited to the range than a day in the field. MSRP for the 300 series is \$150 USD and the 500 series is \$200 USD.

The GunSport PRO electronic earplugs are designed specifically for shooters by Etymotic (www.etymotic.com.) Their GSP-15 fits inside the ear and protects users from firearm blasts while allowing

natural hearing when no background noise is present. These plugs have two modes. Low setting allows natural hearing and protection from dangerous noise, while the high setting amplifies sounds by 5x. There's a lot of technology built into such a small package! GSP-15 have a 25 dB NRR. Included in the box are seven styles of ear tips for optimum fit. I put the GSP-15 earplugs to the test at the 2017 SHOT Show Industry Day At The Range. Amidst all the gunfire, these plugs kept my ears safe and still allowed

me to have conversations with industry reps. MSRP is \$299 USD.

I recommend any of these hearing protection products. Some are better suited to the range, while others shine in the field. The best one for you depends on your budget, product fit, intended use, and most importantly what you'll wear. My best advice to you is always wear hearing protection while shooting. Don't make a rookie mistake. Permanent hearing damage can happen with just one shot! 📌



CARTRIDGE CONFUSION

Matching ammunition to the gun is critical

BY BOB SHELL

In my vocation of dealing with obsolete rifles and ammunition, I have run across a lot of ignorance in regards to cartridge nomenclature. This is largely because many calibres have the same or similar name, but vary in dimensions. While ignorance may be bliss in some areas, it can be dangerous with firearms.

Part of what I do is to provide ammunition to customers online, and I have learned to question them thoroughly in regards to exactly what they want. For example, one guy I am presently dealing with has a nice Remington rolling block rifle that is marked 40-70. The problem is, there are at least two versions of the 40-70 – one is a straight case, while the second is a bottleneck. They are not interchangeable in any way.

WHAT CAN HAPPEN

Naturally, a problem arises when you shoot the wrong cartridge in a gun. Sometimes not much will happen other than a squib load or a split case. Other times, it can be extremely dangerous to fire the wrong ammunition. Blowing up a gun is pretty hard to do, especially a well-designed item such as the 98 Mauser. However, when a case ruptures, the gas can run through the action, and depending on design, can come back into your face or go down through the magazine, destroying the stock and other parts. If your anatomy is in the proximity, it too will be injured. That's why it's so important to use common sense and wear safety glasses when shooting old guns.

If you fire a 270 Win. in a 30-06 Spring-

field, not much will happen. The bullet will come out at about 1,900 feet per second and tumble, but won't harm the gun or you. However, if you could manage to chamber and fire a 30-06 in a 270, the consequences could be disastrous. You would be shoving a .30-calibre bullet into a .27-calibre barrel. To prevent situations like this, the 280 Remington was designed with the shoulder forward of the 270 Win. It won't fit in a 270 Win., even though to the naked eye they look identical.

If you have a cartridge that is difficult to chamber, do not force it. There is a reason it won't fit, so investigate thoroughly before doing something you will shortly regret. There have been documented cases of firing an 8X57mm in a 30-06. Without exception, the shooter quickly regretted that mistake. Hatcher's Notebook gives some excellent examples of firing an 8mm in a 30-06 and the consequences the shooters suffered afterwards. A 303 Savage will chamber and fire in a 303 British. Normally the case will split without injuring the shooter, but don't press your luck.

One question I've been asked a lot is, "Can you shoot a 30-30 Win. in the 303 Savage?" In a word: no. First, it probably won't chamber. But if it did, the smaller diameter of the 30-30 case will split, causing the gas to go through the action. When gas escapes from a ruptured case, it has to go somewhere. Rifle ammunition has working pressures of 40,000 psi and up, which is a lot in a confined space like a chamber. Some designs, like the Mauser 98, handle ruptured cases well, but other designs

have little or no provisions to deal with this event.

OLDER AMERICAN CARTRIDGES

Old American cartridges frequently had a designation that placed calibre first, then the amount of powder it contained. Sometimes the bullet weight was added. A good example is the 45-70-500, which is a .45-calibre rifle with 70 grains of black powder and a 500-grain bullet. Other confusing calibres are the 38-40 and 38-55. The 38-40 supposedly is a .38 calibre with 40 grains of powder, but the bullet is a true .40 calibre, while the 38-55 uses a .379 diameter bullet in the old guns. Go figure!

Some cartridges have similar names and it can confuse a shooter who isn't paying attention. A 32 Colt and a 32 S&W cartridge look similar, but the Colt is a few thousandths of an inch smaller in diameter. While the reverse isn't true, the Colt round will chamber and fire in a Smith & Wesson pistol. The consequences aren't generally severe, due to the low operating pressures involved, but it will split the case. Of course, accuracy won't be good either.

A 32-20 will frequently fire in a 357 Magnum, but the results usually aren't dramatic. A split case and an embarrassed shooter is the end result. A 41 Colt will probably fire in the 41 Magnum, but the downside would be a split case with likely no injury to the shooter.

Another good example of confusion is the 44-90. There are at least three variations, and they are all different. There are Remington versions with both straight and bottleneck cases, >



This is what happens when shooting a 6.5x50mm Arisaka in a 7.7x58mm Arisaka. Fortunately, there was no damage to the gun or shooter.

while Sharps shows a different bottleneck that isn't interchangeable with the Remington offering.

There are many similar examples with the older Sharps, Remington, Winchester, Ballard and other rifles of the period. You could spend a lot of time trying to figure out which is which. I found five 40-90 listings, all different. Good grief! There are two 32 and 35 Winchester rounds. The self-loading versions were chambered in the Model 05 semi-auto rifle. The other 32 and 35 Winchester rounds were chambered in the Models 94 and 95, respectively. There are also two different 25-20 rounds. One is an obscure round for single-shot target rifles, while the second and most common is for the Winchester 92 and other rifles. They are

not interchangeable, though the ballistics are fairly similar. Roam through the reference book *Cartridges of the World* for a while and you'll wonder how anyone ever managed to buy the right ammunition for their guns.

METRIC CARTRIDGES

Move into metric cartridges and the fun really begins. Metric designations generally go by bullet diameter and the length of the case. The problem with that is there are two or more cases with the same designation, but entirely different rounds. A good example is the 8X56mm. There is a rimmed round for the Mannlicher, which was a military round once used by Hungary, and a rimless version based on the 8X57mm case used for sporting purposes. There

is also an obscure 8X56mm that was shortened from the 8x60mm Guedes, which was known as the 8X60mm Kropatschek. The rimless version could conceivably be fired in the straight pull, but it would be a dangerous undertaking. The rimless case is about .030 inches smaller in diameter; hence, it wouldn't be properly supported in the larger chamber. Gas escaping from the ruptured case could injure the shooter.

There are no less than three 8X50mm rounds that were produced at one time. The 8X50mm Siamese Mauser, the 8X50mm Mannlicher and the 8X50mm Lebel are all obsolete, but there are rifles still available for them. They are the same length and use the same diameter bullet, but are not interchangeable. So, if you have some 8X50mm ammunition made from another case, better make sure it's the right one before attempting to fire. The original, in most instances, is too old to shoot, but make sure it's the correct round if you decide to fire it.

Then you have the 8X57 J and the newer 8X57 S. The J bore is for the Commission rifle and some of the older Mausers, and uses the .318-inch diameter bullet. The newer S bore, which came out in 1904, uses the .323-inch bullet and sometimes is loaded to higher pressures. If you fire American-made .323-diameter ammunition in the Commission rifle, you will probably get away with it because it's loaded pretty light, though I don't recommend it. However, firing some of the heavier-loaded military ammunition in it could destroy the rifle. Handloads in the older rifles should always employ the .318-diameter bullet and moderate loads. As a note, the Commission rifle doesn't have any provisions to allow gas to escape harmlessly.

MILITARY AMMUNITION

With military guns, it's critical to make sure the correct ammunition is being fired. You can't count on the headstamp to inform you, as these can be ambiguous at best. Most show a date or arsenal location, but not the calibre of the round. Many times, it's up to you to correctly figure out what a headstamp means. Also, some countries loaded ammunition especially for machine guns and it may be too hot for most weapons. If you are unsure about the strength of the ammunition, it's best not to shoot it until you establish what it is.



The 8X56mm Kropatchek, the 8X56mm rimless Mauser and the 8X56mm straight pull. All have similar names and similar length, but they don't interchange.



The 348 Winchester can be made into such rounds as the 8X50mm Lebel and the 12.17X44mm. This is why you can't always trust what it says on the headstamp.

IMPORTANT STEPS

If there is any doubt as to whether a gun is safe to fire, take it to a gunsmith and have it checked out. Since many older American and European guns have no markings, the chambering has to be determined before making ammunition. The best method is to use Cerrosafe, which has a low melting point and is easy and safe to use. Clean the chamber, put a plug just in front of the chamber and pour. After a few minutes, tap out and you should have a chamber cast. It may shrink a little, so give it some time before measuring. To slug a barrel, use a piece of soft lead that is lubed and tap it down the barrel. There's even a kit available, with various sizes of lead slugs to aid you in that process. Making brass from a newer calibre is often required, thereby creating ammunition with the wrong headstamp. Such ammunition should be kept separate and clearly marked.

For me, making ammunition to fit and fire in an obscure weapon is fascinating and an enjoyable challenge. Taking a weapon off the wall and seeing it perform makes all the work worthwhile. Just remember to utilize all safety practices when engaging in this activity, and you will have many enjoyable hours perusing this hobby. 🍷

GETTING HITS ON GAME

Improving your field shooting skills

BY DUANE RADFORD





The longer the range, the more crucial a rifle rest becomes.

After cutting my teeth head-shooting ground squirrels and grouse as a youngster, I was fortunate enough to take the Canadian basic Army training course. In the military, we practiced shooting at paper targets at ranges up to 1,000 yards and pop-up targets at variable ranges to hone my shooting skills. Building on this foundation, I once had a streak of 12 consecutive one-shot big game kills. I've twice shot triples on pheasants and have several doubles on grey partridge and ruffed grouse, and have bagged lots of waterfowl. I attribute my success to repetitive practice, which has built my ability to shoot rifles and shotguns under a variety of field conditions.

GET ZEROED

Shooting well doesn't happen by ac-

cident, it's an iterative process. One of the keys is having confidence in your shooting ability, which is only achieved by constant practice.

But first, your rifle must have a good fit with your body or you're doomed. It should shoulder naturally so you can aim and fire quickly, if necessary. It goes without saying that you must be familiar with the action of your rifle to shoot well. You can't fumble and dally when a shot opportunity presents itself. Next, assuming you're shooting with a scope, the ocular (eyepiece) lens assembly must be properly adjusted so the scope's reticle is clear when you put the crosshairs on target.

Sighting in your rifle is an important next step. It should be a slow, deliberate process, done carefully under ideal conditions, with calm winds and good light.

The most common problem I observe at shooting ranges is people not using a solid rest when sighting in their rifles. I've watched hunters use pillows, sleeping bags and cushions as rests. But it's impossible to zero a rifle without a solid rest. Groups will not be tight enough to be sure a scope is actually aligned.

Another concern is that many people try to sight in their rifles when the barrel is heated. This can cause groups to expand and point of impact to drift, making it impossible to be sure of proper alignment. Allow adequate time for the gun barrel to cool between shots.

I prefer to sight-in my rifles two to three inches high at 100 yards, so they will be centred at about 225 yards. Of course, there are variations in this generalization, depending on calibre. If a rifle is sighted in for 225 yards, >



While a rest is important for zeroing a rifle, you won't become a competent shot if you always use a rest at the range.

some of the range estimation guesswork under field conditions will be eliminated. This results in no significant hold-over being necessary when shooting to 300 yards. Meaning, you should remember the saying "hold on hair" for the first shot. Don't hold high. Because most people have limitations estimating ranges, especially when light is poor or when shooting across a valley. Similarly, light-bodied animals, such as pronghorn antelope, may be perceived to be further away than they actually are.

GET OFF THE SHOOTING BENCH

While a rest is important for zeroing a rifle, you won't become a competent shot if you always use a rest at the range. Once your rifle is properly sighted in, it's time to put the rest aside, get serious and practice shooting from various positions. Start off by shooting in the prone position, the most stable position under field conditions, followed by kneeling, sitting, and finally shooting standing. The sitting position, especially, is one of the most often used positions while hunting and should be second nature to any big game hunter. Start by working to consistently put all your shots in a six-inch circle at 100 yards.

While I never leave home without a bipod on my hunting rifle, it's also important to learn how to use natural rests, such as fallen logs, boulders, tree stumps or fence posts when in the field. With a little imagination, you can simulate these at most shooting ranges. This kind of support is particularly important when the distances get longer. I once calculated the mean distance at which I shot a dozen big game animals.

The ranges varied from 75 to 325 yards, with the average being 238 yards. Seven of the shots were at 250 yards and the two longest shots were 325 yards. The longer the range, the more crucial a rest becomes.

RUNNING SHOTS

Shooting at running game can be a controversial issue and many hunters won't attempt them. Improper leads and poor shooting results in missed shots, or worse, wounded animals. You won't have time to think about proper lead when a deer bolts into an opening in front of you, heading for the nearest cover. Most likely you'll have to shoot offhand, which is why you must practice that position. A good rule of thumb I use is to lead a deer one body length at a range of 100 yards and two body lengths at a range of 200 yards. Adjust leads accordingly at other intervals, for example half a body length at 50 yards, one-and-a-half body lengths at 150 yards. The same leads apply to elk and moose. I don't recommend shots at running animals at distances greater than 200 yards because most hunters don't have the skill to connect. But take the shot only if you are confident of a good hit. Don't risk wounding an animal.

IN THE ZONE

To improve your field shooting skills, get in the habit of thinking strategically when hunting. Continually rehearse what you will do should you get a shot opportunity, because in most cases that opportunity will be fleeting. Mentally rehearsing your plans while you hunt will help you focus on making the right decision when an opportunity arises.

For example, think about what you should do if an animal appears as you walk along a trail or while you're on a stand.

- Confirm it's legal to shoot.
- Estimate the range.
- Configure your bipod, or search for a nearby rest.
- Chamber a cartridge.
- Shoulder the rifle, bringing the scope up to your eye.
- Pick your aiming point on the animal.
- Take a deep breath.
- Release some of that breath.
- Disengage the safety.
- Carefully squeeze the trigger.

These practices are the mantra of every successful big game hunter. Memorize them, so you intuitively go through a process to maximize your success by minimizing the risk of hurrying your shot or shooting from a less-than-ideal position.

FITNESS COUNTS

You should also learn to pace yourself so you are not winded if and when a shot opportunity arises. Being in good physical condition is a fundamental requirement to improving your field shooting skills. Get into a routine of doing daily exercises and keep your weight down. You need to build upper body strength by working out regularly and stamina by walking over uneven terrain.

Remember, good shots are not born, they're made. And Canada's hunting marksmen should use all the knowledge and skills at their disposal to be on target. This is where training and repetitive practice kicks in to pull off the tough shots. 🏹



FEDERAL PREMIUM EDGE TLR

BY BRAD FENSON

Manufacturers have perfected much of the equipment needed to shoot long range. Rifles, optics, calibres and ammunition have all been tailored to shoot long distances. However, we hunters have long needed a bullet that can perform properly on game at these extended ranges. Hunters need and want a tough bullet for big game, as well as a sleek, extremely accurate bullet for long-range shooting. A combination of these qualities in a single bullet has been hard to find.

To answer that need, Federal released its Premium Edge TLR ammunition at the 2017 SHOT Show. Edge TLR ammunition was engineered with a bullet that is extremely accurate, expands consistently, yet holds together and penetrates deeply. What separates this ammunition from other long-range bullets is its consistent performance on game at the lower velocities encountered at long range, as well as the

higher velocities at short and mid-range.

Justin Carbone, Federal's product engineer for rifle ammunition, explained the technology to me.

"Every aspect of the new Edge TLR bullet profile has been engineered to maximize ballistic coefficient. The 175-grain .30 calibre projectile has a .536 G1 BC, while the 200-grain .30 calibre bullet offers a .625 G1 BC."

He also said the bullet design has an extremely small meplat diameter (the flat or open tip on the nose of bullet), a secant ogive (provides reduced drag by its shallower curve), a groove around the shank to reduce barrel fouling and wear and a maximized boat-tail length with an optimized angle. The bullet weights are designed to be heavy for the calibre.

One of their engineering challenges was to come up with a polymer tip that could withstand the high temperatures air friction causes during a bullet's

flight. With a glass transition temperature of 434 degrees Fahrenheit, their new polymer formulation resists this extreme heat and pressure for consistent ballistics at all ranges. It's this tip that also helps ensure expansion at any distance, and especially at low velocities. Paired with a unique bullet nose design, which features a large hollow cavity, thin jacket and external skiving, it ensures the bullet expands instantly and reliably at extreme ranges and across a wide velocity spectrum.

Edge TLR also has robust bonding and a copper shank, which consistently provides 90 per cent weight retention for high-velocity, close-range impacts with deep wound channels. The result is a bullet that seamlessly blends match-accuracy, toughness and consistent performance at any range. The Edge TLR ammunition is currently available in 308 Win., 30-06 Spring., 300 Win. Mag., and 300 Win. Short Mag. 







A metal bolt shroud and larger ejection port are two changes seen on the T3x.

The TIKKA T3X

Updating a tried & tested rifle

BY JEFF HELSDON

The Tikka T3x is an update of one of the best-selling rifles in the world. It has replaced the T3 and remains the only firearm the company produces, with this new version addressing some of the criticisms people have leveled at the rifle, and introducing a few cosmetic changes.

For those not familiar with the company, Tikka has been building rifles in Finland since 1918. The company worked on a prototype project with Sako in 1981 and the pair of companies became one two years later. Then Beretta acquired Sako in 2000, and the Tikka brand with it.

The T3x is the best-selling rifle Stoeger Canada sells.

"It's the best performance for the value," said Spyros Chrysochou, general manager of Stoeger Canada. "It performs better than any gun at that price point."

And with models starting under \$1,000

and going up, it falls into a mid-price range. This puts it in the same group as the Remington 700, Winchester Model 70, Browning X-Bolt, Ruger Hawkeye and many others.

CHANGES

Chrysochou calls the improvements ergonomic and cosmetic. After all, the 'X' has the same action as the old version, with the same guarantee of three shots producing a one-inch group at 100 yards. He points to the modular pistol grip and forend as a completely new part of the gun, which allows customizing the gun to fit the shooter. For instance, the pistol grip can be changed to one with a different angle for bench shooting or a slide-on accessory creates a wider forend. Both come in four different colours.

"As people get it and understand changes, we expect to see orders grow," Chrysochou said of the stock's add-ons.

The stock itself has an improved grip surface, too. The grip pattern is a modified checkering on the forend, with a unique pattern on the pistol grip. The recoil pad has also been updated with a new version.

"We felt with where pads are today, the previous pad was fine, but this is just a nicer, better performing pad," he said.

The bolt shroud has been changed to steel and the ejection port enlarged to allow easier feeding.

"There was no functional issue, it was just a question of customer preference," Chrysochou said.

However, owners have reported the old synthetic version breaking, and replacement metal versions are available from aftermarket suppliers.

One of the criticisms of the T3 was the synthetic stock, which produced a hollow sound if, for instance, a hunter bumped it against a tree. ▶



The standard magazine holds three in most calibres, and four in some of the smaller .22 and .20 calibres. Both it and the trigger guard are polymer.

“By having a foam insert, it takes away from that sound,” Chrysochou explained of the update.

But, versions with an adjustable stock don’t have the foam insert. Additionally, the recoil lug has been switched to steel from aluminum. Chrysochou said there was some wear with aluminum in the larger calibres, but there were no issues or effect on the accuracy.

“It was, again, a perceived concern by shooters.”

Other ‘X’ improvements are a wider ejection port for loading single cartridges and more scope mounting screw holes for a picatinny rail.

A wide variety of calibres are available in the T3x, ranging from the tiny 204 Ruger up to the 338 Winchester Magnum. Chrysochou said the .30 calibres are popular in Canada, with the 300 WSM garnering a lot of interest. The up-and-coming calibre is the 6.5mm Creedmoor, especially in the TAC A1

and compact tactical models.

The rifle’s standard magazine holds three cartridges in most calibres, and four in the smaller .22 calibres. The polymer magazine protrudes below the stock, one of the only criticisms of the gun that wasn’t addressed in the update. Tactical models have larger magazines, which hold more rounds.

Barrel length is 20 or 22.4 inches in standard calibres, and 24.4 inches in the magnums. The barrel is a cold-hammer-forged Sako barrel, which is hand crowned and free-floating. The basic trigger is single stage, adjustable from two to four pounds, while the trigger in the TAC A1 is two-stage. The bolt has a 75-degree lift and features a Sako extractor. That bolt is Teflon coated on the TAC A1 model and features an oversized bolt knob.

The safety is on the right side of the bolt and is a toggle-type switch. It’s a two-position safety, and when engaged

blocks both the trigger and the bolt from operating. Weight of the gun varies depending on model. The T3x Lite Stainless I was sent for testing tipped the scales at around three kilograms, or 6.6 pounds.

The T3x is available in 22 different models, all with the same action. These include stainless steel barrel options, tactical models, varmint models, wooden stock options and the T3x Arctic, the Arctic being the civilian version of the Canadian Rangers’ new rifle. It is only available in 308 Winchester, has a laminate stock, iron sights and a three-position safety. While the military version is built by Colt Canada in Kitchener, Sako in Finland builds the consumer version.

“The Arctic is basically the compact tactical with a laminate stock, special iron sights and two-stage trigger,” Chrysochou said. “It has some unique features designed to survive the environment of the Arctic.”

The latest addition to the line up is the



Pistol grips are interchangeable by removing a screw.

TAC A-1, a gun built to military specifications with a folding stock, AR-style pistol grip, oversized bolt handle, two-stage trigger, 10-shot magazine and modular chassis. It's available in 308 Winchester, 6.5mm Creedmoor and 260 Remington.

OUT OF THE BOX

My test model arrived in 30-06 Springfield, and I immediately noticed how smooth the bolt operated. Slick would be a good word to describe it. Bolt removal is done by simply pushing a button on the left side of the action. I was also impressed with the trigger. The safety was easy to operate, but I admit to being a fan of three-position safeties, where the middle stage allows the bolt to be operated while the trigger remains locked. Still, this is a small criticism. I found the safety was average for noise when engaging or disengaging it.

The recoil pad does feel soft and isn't obtrusive. The stock has a nice feel to

it and the gun has good balance and pointability. Finish on the stainless model is matte, with no visible flaws in the finish, as in some less expensive rifles. A bore examination showed the rifling was clean and well executed.

AT THE RANGE

Since I knew the gun has a one-inch guarantee for three-shot groups, and this is a hunting rifle, not a target rifle, I tested it by shooting a trio of three-shot groups with an assortment of ammunition. I will preface my results by saying the day I shot the gun, like most days this spring in Ontario, was windy.

The supplied scope was a Burrell Veracity 3-15X. I mounted it and had bullets punching bullseyes easily. Then, starting out with Sako Hammerhead ammunition in 150 grains, accuracy averaged right on one inch, with the best group at 0.9 inches. Federal's Fusion in 150 grains produced an average

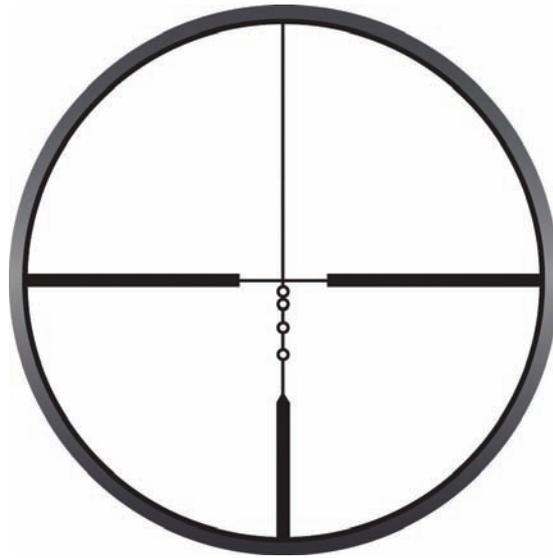
of 1.08 inches, with the best group at 0.9. My reloads, with 150-grain Hornady Interlock bullets, pulled an average just below an inch at 0.98.

I only had enough Remington Hog Hammer, with Barnes 168-grain bullets, to shoot one group and it finished at 1.3 inches. Barnes 180-grain TTSX produced good groups, averaging 0.89 inches, the best being 0.79 inches. My reloads with 180-grain TTSX and Super-performance powder really shone. They averaged 0.82 for three groups, with the best group at just 0.5 inches.

I came away impressed with the performance of the gun, and with the opinion it could do better on a calmer day. I also knew that the test I put the gun through paled in comparison to what the Canadian Armed Forces did when picking a new rifle for the Rangers. As we know, the T3x won that competition, telling me this is a great rifle for hunting in Canada. 🇨🇦



Designed for .50 calibre muzzleloaders using a 150-grain Pyrodex charge and a 250-grain bullet, Nikon's BDC 300 reticle provides aiming points out to 300 yards.



DOTS & CROSSHAIRS

Upgraded optics & sights for muzzleloaders

BY BRAD FENSON

A whitetail buck meandered along the tree line before cutting through a narrowing in the field to the other side. The natural funnel was an expected spot for deer to cross, and it was being watched. When the buck was 165 metres out, a hunter from my camp bleated, stopping the buck in its tracks. Seconds later, the deep, thundering boom of black powder echoed across the field. I watched as the hunter walked into the field to get a better look at her prized possession: a beautiful, mature buck.

Muzzleloader seasons are growing in popularity, and those looking to get into the field more are embracing the front stuffer. There are lots of great inline rifles that are easy to use and maintain; most are sold as a complete package, ready to hunt with. A package deal does get you on the range quickly, but the optics rarely allow a shooter to see or use the full potential of the firearm.

QUALITY SCOPES

Sure, the guns have the capacity to shoot incredible groups, with mind-boggling consistency, but lower-quality optics can prevent the shooter from seeing or experiencing those results. It isn't uncommon for centrefire rifle enthusiasts to pay more for their optics than they do for a rifle. After all, optics are ranked number one in items that have changed hunting and shooting the most. So, why would any muzzleloader enthusiast settle for low-quality optics? If you wouldn't use the scope on your favourite centrefire, why would you use it on any firearm?

One of my most memorable shooting experiences with a Traditions inline muzzleloader was when I mounted a Swarovski Z6(i) 1-6x24 with illuminated reticle. Putting the quality Swarovski scope on my muzzleloader tightened my three-shot groups enough to rival any of my premium centrefire rifles.

The proof was in the glass. I did get snickered at for putting a Swarovski on a muzzleloader, but I had the last laugh as I reveled in knowing how much it optimized my performance.

Today, the better the rifle scope on your muzzleloader, the farther you can shoot accurately and confidently. Although there is a wide range of powder and trajectory options for front stuffers, most hunters have chosen to simply use maximum or magnum loads. Using 150-grains of Pyrodex or Triple 7 powder and a 250-grain pistol bullet in a sabot is standard. There are several variations of a magnum load, but most are compared to Pyrodex or Triple 7, which is why several optics manufacturers have scopes calibrated, with direct-hold reticles, for these standard loads. These range-specific scopes usually have the reticle set in the second focal plane, meaning the scope must be on maximum power for the shoot-



ing system to work. Several companies, including Bushnell, Nikon and Leupold, offer reticles for .50 calibre inline rifles featuring a direct hold to 250 yards or more.

Bushnell was one of the first to identify the muzzleloader market and offer a product specific for inline hunters. The Trophy XLT 3-9x40 comes with a DOA 250 reticle. The DOA stands for Dead On Accurate and provides hold-over aiming points. The scope features an etched glass reticle on the second focal plane, with three dots below the main crosshair. You simply sight your scope dead on at 100 yards. The first dot under the crosshair is your aiming point for 150 yards, the second at 200 yards and the third at 250 yards.

The DOA reticle also works to estimate the size of a deer's antlers, with what it refers to as the Rack Bracket. The hash marks outside of each aiming point measure 17 inches, the average width of a whitetail's ears. The full width of the bar running through the aiming point is 24 inches. When lining up on a deer, it's easy to estimate its antler size with the reference marks.

Nikon's Prostaff line of muzzleloader-specific scopes features their Bullet Drop Compensation (BDC) reticle, giving hunters aiming points at a variety of ranges. The BDC reticle features see-through ballistic circles for greater visibility of the target. The circles will line up with most magnum loads for 150, 200, 250 and 300-yard hold over. The

crosshair is sighted in for 100 yards and the circles line up for specific loads with the distance calculated on the Nikon website or the iPhone app. It's a precise system for hunters who could face a shot anywhere from close range right to the outer limits of modern muzzle-loader capabilities.

Leupold's UltimateSlam Riflescope offers a Sabot Ballistics Reticle, which is a centre ring with a crosshair running through it. The top of the ring, or circle, is dead on at 50 yards, the crosshair at 100 yards and the bottom of the ring at 150 yards. There are two dots under the ring used as 200 and 250-yard aiming points. The top of the post on the duplex reticle is the hold mark for a 300-yard shot. Hunters using maximum loads



The better the sighting equipment is on your muzzleloader, the farther you can shoot accurately and confidently.

will simply set the scope to maximum power. But for shooters using only 100 grains of powder, the scope can be set to a specific magnification to line up the hold-over points. Leupold has made it easy and placed markers on the power adjustment ring, indicating two or three-pellet loads. The shooter simply adjusts the power setting to the load indicating 100 or 150-grains of powder. This scope can also be used with 12 and 20-gauge shotgun slugs for even more flexibility.

DOT SIGHTS

However, you should think beyond scopes, too. I started pondering some really different optic and sight options after watching my friend harvest her



Red dot sights are a great option for muzzleloaders, as they are free of parallax, have a wide field of view and feature adjustable reticle brightness.

buck that cold November morning. Her muzzleloader was topped with a dainty little optic that just begged me to ask her about it. Turns out it was an Aimpoint red dot.

Some people may think of AR-style rifles when you mention Aimpoint. But, in rough terrain, foul weather, poor light and moving targets, this sight shines in many ways. Tests have shown that the single red dot reticle is the fastest on target, providing the greatest hit probability with moving targets, which is why it's popular with military and law enforcement agencies. But, why wouldn't a hunter or shooter want the same advantage?

With an Aimpoint sight, the shooter doesn't have to worry about centering the dot inside the sight, because it's parallax free. Once you see the dot on your target, you're ready to shoot. They also allow you to shoot with both eyes open, a real advantage if you're a hunter or a competitive shooter, where these sights also see widespread use.

With unlimited eye relief and field of view, why wouldn't you want to use a red dot sight? As I considered this question, my mind raced with possibilities. I recently acquired a Sig Sauer Romeo 4c sight and couldn't wait to try it out. It was easy to mount on my new Traditions StrikerFire LDR Nitride. As you'd expect, there are adjustments for horizontal and vertical impact, but this unit also sports a solar charger to ensure you are never left in the dark.

Anyone who has trouble centering a scope will gravitate to a red dot. You can shoot them right or left-handed, on the same rifle, and mount them as far up the barrel as you want. If you suffer from near or farsighted vision, the red dot also provides advantages, allowing you to use both eyes when shooting. Age brings vision challenges that the

red dot can help alleviate.

Anyone considering red dot sights will also find great flexibility and options with the TRUGLO, Tru-Brite open red dot series. With an integrated Weaver mount, it can go on any muzzleloader, shotgun or rifle. The dot is adjustable in size from 2.5 to five minutes of angle (MOA). The user also has a choice of seeing just a dot or a centre dot, which looks more like a target. You can switch the dot from red to green, and it also has five brightness settings. There are several models to choose from, including a 2x42mm and a 30mm APG. All have a wide field of view, making it easy to find, track and lock on the target.

OPEN SIGHTS

If you want to, or need to, get away from an optic sight, you might want to try the Muzzle-Brite Xtreme open sight made by TruGlo. These sights have a Tritium Fiber Optic (TFO) notched rear sight and TFO standard front sight. They come with a universal mounting system for inline muzzleloaders, and have full windage and elevation adjustment. The front and rear sight diameters are .040 inches and .029 inches, respectively. I like the interchangeable rear ghost ring and notched rear sight/standard front sight – it is like using a peep with fiber optics to line up the point of impact with the front sight.

The bottom line, when trying to optimize your accuracy and consistency with a muzzleloader, is to use an optic or a sight that can perform as well as the firearm. A muzzleloader package may make economical sense, but certainly doesn't help the rifle or shooter reach their maximum potential. So, think about upgrading to a sighting system that will provide more accuracy on the range, and better shot placement in the field. ♥

ACCURACY IN A BOX

Eley ammunition is back in Canada

BY AL VOTH



Eley uses a unique nose shape, called EPS, on some of its target ammunition.



We all know the shooting sports are competitive. That's part of the attraction they hold for people. Of course, the industry which supplies those people is competitive, too. Just like the shooters, companies supplying the guns and ammunition are trying to beat the competition. Occasionally, a competitor has the skills to dominate a sport for years, and sometimes that's true of companies. It certainly is for Eley, the British makers of .22 calibre rimfire ammunition.

Eley can trace its history to 1828, when William and Charles Eley founded the company. While their first claim to fame came in 1837 when they developed the first waterproof percussion cap, the manufacture of .22 rimfire ammunition didn't get serious until the 1920s. After that, they slowly began to dominate competitive shooting. Today, they can claim Eley ammunition has been used to win more Olympic medals than all other brands combined.

SUPPLY

Back when I and the Earth were both young, I shot Eley ammunition in

competition. It was relatively easy to find, since most gun shops carried it. Eventually, something happened, and it became harder to locate. Supplies became scarcer, until it seemed to disappear entirely from store shelves. This situation settled into one of sporadic and unreliable supply, and it drove the target shooting community nuts. Then, in the last five years, I started to see changes. Eley began making a splash in the US market, and I heard rumours of them making a fresh move into Canada. Early this year, a formal announcement was made that Korth Group of Alberta would henceforth be the Eley distributor for Canada.

I knew this was great news for rimfire shooters, because Korth doesn't do anything in a half-hearted manner. If they get into a product, they go all the way, and I was hugely optimistic that Eley ammunition would once again be reliably available in this country. When I visited Korth's distribution centre earlier this year, my optimism proved to be well-founded. A sea can of Eley ammunition had recently arrived and there were pallets of the stuff all over the

warehouse.

"This is how it's going to be from now on," I was told. "Eley ammunition will be in stock here, and just a phone call away from any dealer in Canada."

WHAT THEY'VE GOT

Currently, Eley is producing 22 LR ammunition in three categories. Their largest is for the competition market, and includes 11 different offerings. I count three for pistol, two for biathlon and six for rifle and general use. The bottom rung of this ladder is occupied by their Sport brand, and the top is owned by the legendary Tenex. Unknown to many shooters, Eley also has a hunting category, although there are only two offerings in it now. They are High Velocity hollow point and Subsonic hollow point. Relatively new, at least from my perspective, is Eley's recreation category. This includes three choices: Force, Contact and Action.

I don't have room here to list all the specialized characteristics for each loading, so you'll have to fire up the Eley website (www.eley.co.uk) for that information. ▶

Eley hunting ammunition has a good sized hollow point and a brass case, oxidized to a matte black finish.



SHOOTING ELEY

I still have a small supply of Eley Club, which I've been hoarding for years, and which comes out of the vault whenever I need some accurate .22 ammunition. But I haven't had any Tenex for years, and haven't shot it since Eley redesigned their bullet nose configuration. So, when I received a small supply of half-a-dozen types of Eley ammunition, I made arrangements to hit the range with a friend who shoots some competitive rimfire events.

But before packing things off to the range, I thought I'd check this ammunition for some consistency metrics, particularly rim thickness and cartridge weight. Some of my friends who do serious rimfire competition spend their evenings checking all their ammunition for both of these parameters and then sorting for uniformity. I just pulled 10 rounds at random of each type, weighed and measured them, and then recorded the extreme spread. While I was at it, I pulled an assortment of ordinary 22 LR

ammunition from the vault and checked a random 10 rounds of those, as well.

Range day consisted of shooting 30 rounds of each brand, through two different rifles, producing half-a-dozen five-shot groups with each gun at 50 metres. The first group of five we used as sighters and foulers, while the last 25 rounds generated five five-shot groups. I had planned to record an average of all five groups, but we ended up fighting a fickle and switching breeze from 9 o'clock. We had wind flags downrange, but some groups still showed a horizontal spread we attributed directly to our inability to read the conditions. As a result, we discarded the two worst groups and recorded the best three 5-shot groups from each rifle. Conditions remained the same all day, and in the end, I think we got an accurate picture of how well we can shoot this ammunition in our guns. I have no doubt that a better shot, in better conditions with a more accurate rifle, could beat our averages. The chart that accompanies

this article shows the results of all the testing we did.

We shot ammunition from the big four brands (Remington, Winchester, CCI and Federal) as well, and since most people are familiar with the performance of this ammunition, I think it serves to give some context to the entire test.

INTERPRETING RESULTS

It took us hours to do this shooting and when the smoke cleared, we learned that Eley Tenex is the most accurate ammunition in both our guns. We weren't exactly shocked at that result. But to find the interesting stuff you have to dig a little deeper into the results chart, particularly the consistency metrics. Look at the extreme spreads for velocity, rim thickness and cartridge weight. This consistency is part of what you pay for when you drop \$28 Canadian for a 50-round box of Eley Tenex.

For non-competitors, it's hard to justify that cost, and this is where Eley's lower priced offerings shine. For us, Eley Club ▶

	Average Velocity (10 shots)	Extreme Velocity Spread	Rim Thickness Extreme Spread	Cart. Weight Extreme Spread	Average Group Size Six 5-shot groups 50 metres
Eley Tenex	1,105 fps	21 fps	0.001"	0.14 grains	0.38"
Eley Match	1,097 fps	25 fps	0.002"	0.32 grains	0.44"
Eley Edge	1,099 fps	25 fps	0.000"	1.02 grains	0.46"
Eley Club	1,084 fps	25 fps	0.002"	1.12 grains	0.40"
Eley Sport	1,062 fps	21 fps	0.001"	0.54 grains	0.51"
Eley High Vel. H.P.	1,197 fps	59 fps	0.003"	1.00 grains	0.56"
Win. Super-X Power Point	1,279 fps	63 fps	0.004"	0.46 grains	0.58"
Rem. High Vel. Solid	1,222 fps	37 fps	0.004"	1.24 grains	0.96"
CCI Blazer	1,280 fps	25 fps	0.003"	0.54 grains	0.85"
Win. T-22	1,162 fps	30 fps	0.002"	1.56 grains	0.59"
Fed. Gold Medal Target	1,112 fps	37 fps	0.002"	0.28 grains	0.44"

Rifles used were an Anschutz 54 Sporter and a Martini Mk II target rifle. Velocity data collected using a LabRadar chronograph from the Anschutz 54. Cartridge weight measured using an Ohaus Scout, laboratory-grade scale.

Which "Dillon" is Right for You?



Square Deal "B"

Dillon's Square Deal "B" was designed to produce large amounts of ammunition in the least possible time for just a little bit of money. At 300 to 400 rounds per hour, you can produce enough ammo for several pistol matches or practice sessions in just a few hours.



RL 550C

More RL 550s have been sold than any other progressive machine in the world, and for good reason: The RL 550C's versatility is almost unlimited. It will load over 160 different rifle and pistol calibers.



XL 650

Dillon's XL 650 resulted from several years of listening to our customers expressing their fondest wishes. We took every good idea we and our customers ever had, tested them extensively, and then incorporated them all into the design of the XL 650.



Super 1050

The Super 1050 is Dillon's commercial grade loading machine, featuring a frame and crank assembly that provides increased stroke to accommodate long rifle cartridges, yet the handle stroke is at a minimum, meaning less work for the operator.

www.dillonprecision.com • Call 800-762-3845 for a FREE catalog, ask for stock # L53-14690

Canadian shooters once again have a steady, stable supply of Eley ammunition.



seems to hit a sweet spot for accuracy versus cost. As I write this, it's available at Cabela's for \$12.99 a box. Eley Sport is the cheapest brand we tested, retailing at \$9.99 for 50 rounds. In non-Eley brands, Federal Gold Medal Target did the best. That wasn't unexpected either, as this is good ammunition. But it's \$20 a box, and serves to illustrate that if you want accuracy, you have to pay for it.

Space limitations prevent me from breaking down the data by rifle. But it's important to mention a couple of things. First, the accuracy difference between rifles ranged from 0.0 inches to 0.15 inches, across all 11 ammunition types. Eley High Vel. H.P. averaged exactly the same accuracy in each rifle, while Winchester's Power Point had the largest spread. This reinforces the practice of testing brands and lot numbers in your own rifle, when you're looking for maximum accuracy.

ELEY SERVICES

And if you're really looking for maxi-

imum accuracy, Eley has set up a testing facility in Winters, Texas, where they will test your rifle or pistol with up to 20 batches of their ammunition to determine definitively which shoots best in your gun. Of course, this is all done indoors, using machine rests, thus eliminating the human and environmental factors which plagued our testing.

Eley also offers an online lot analyzer, so you can determine the potential performance of any particular lot of Eley ammunition prior to buying it. Just look for the Lot Analyzer button on their website, type in the lot number found on the packaging and the site gives you accuracy, velocity, dispersion and trajectory information for the ammunition in your hand. I couldn't pull up data on all the lot numbers I tried, but some of it is there. The lot number of the Eley Match ammunition we shot is 1116-03041. Go to the US website, www.eleyammunition.com, and try it.

YOUR AMMUNITION?

There's no question that Eley ammunition is a serious contender for anyone who shoots competitively. They'll be scooping up Eley and testing it in their rifles and handguns to see if it can add points to their score. But what about the average plinker or hunter? Is there a spot on their ammunition shelf for this kind of quality? I think there can be, and it all depends on where your personal "sweet spot" is for accuracy versus cost.

I know there are shooters out there who don't care much about accuracy. They just want their guns to go bang every time they pull the trigger. Others, who don't shoot competitively, demand a certain level of accuracy from all their firearms. The renewed availability of Eley in Canada will be good news to them. It's certainly earned a place on my ammunition shelf and I'd encourage you to try some in your own rimfires. 🍀



LEUPOLD LTO-TRACKER

BY JEFF SMITH

For 2017, Leupold has introduced an interesting new tool called the LTO-Tracker. It is a handheld thermal imaging device capable of displaying the heat signature of animals or any other heat-producing object out to 600 yards. I've had the opportunity to test one over several months, but unfortunately not during hunting season. However, based on my testing, I'm particularly excited about the potential it has shown for game recovery.

Not having a warm blood trail handy, I used the next best thing: dog urine. During a night-time test, I allowed a 20-minute interval for the urine to cool, and found I could easily spot the urine trail's heat signature. So, I think it would be safe to assume that a blood trail would be visible also. I used the same parameters during the day with similar results, performing this test several times at varying temperatures throughout the spring out to 100 metres with successful results.

I also considered its potential as a security tool, both around the home and while in the bush. I had the op-

portunity to put it to the test while camping one weekend, when there was a commotion in the bush near our camp late at night. Instead of using a bright light, I grabbed the LTO-Tracker and pointed it towards the noise. The tool picked up a bear approximately 50 metres from camp. While the bear kept away from our camp, the LTO gave us the chance to prepare defences without the possibility of provoking a charge by shining a high lumen light at it. I also used it to watch family members move about the house and our yard at night without them detecting my presence. In a distance test, I clearly observed a herd of pronghorns out to 400 ranged metres while doing some wildlife photography on the prairie at 34 degrees Celsius.

A couple of important points to consider before using the LTO-Tracker: Because it picks up all heat sources, I suggest practice differentiating between animals, leaves and fluids. I found that leaves, especially green and on the branch, are notorious for holding heat well into the evening. As well, the 6X

zoom feature loses pixel definition or picture clarity at the higher settings, so zooming may not be as useful as you hope. Overall, it's a great tool, with some fascinating capabilities. Retail price is \$999.99 in Canada. 🇨🇦

Specifications

Effective distance: 600 yards (548.64 metres)

Operating temperatures: -4 degrees Fahrenheit (-20 degrees Celsius) to 140 degrees Fahrenheit (60 degrees Celsius)

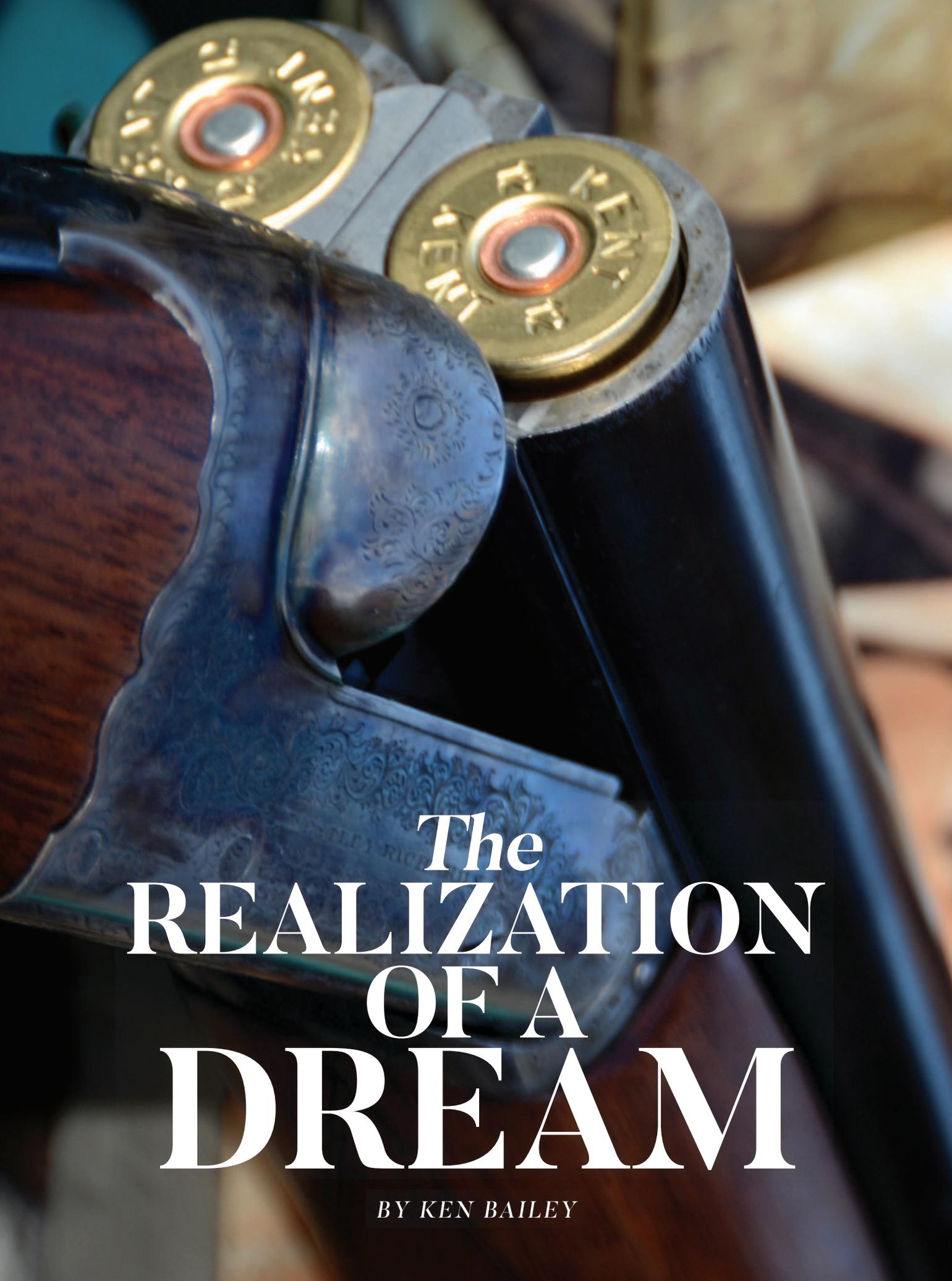
Length: 5.8 inches (14.75 centimetres)

Weight: 10 ounces (283.5 grams)

Zoom: 1.5 - 6X

Background colours: 6 (red, white hot, black highlight, green, black hot, white highlight)

Operating time: 10 hours on one CR123 battery



The
**REALIZATION
OF A
DREAM**

BY KEN BAILEY



I acquired my first firearms as a teenager. Both were hand-me-downs, a sporterized Lee-Enfield in 303 British and a single-shot H&R 12-gauge with a 34-inch barrel – a “goose gun” I was told. Rather pedestrian, but what I may have lacked in terms of fancy shooting irons I more than made up for in my dreams and aspirations.

I became addicted to hunting literature and soaked in every book and magazine article I could find, particularly if the story was of hunting Africa. There was something about the mysteries of “The Dark Continent” that resonated with me, and I hunted vicariously through the words of Hemingway, Ruark, Selous, Hunter and Capstick. As I stalked the savannas of my mind, invariably I was carrying double guns, both rifle and shotgun. The former for close-quarter buffalo, lion and elephant, the latter for stopping leopard charges and adding the odd guineafowl or sandgrouse to the stew pot. Growing up in a military household, and therefore being a good colonial boy, I guess it was inevitable that those doubles were of English pedigree.

The realities of adulthood have a way of snapping you into reality, and although I continued to yearn for an English double I quickly recognized the challenge, given my champagne tastes and beer budget. With time, I became an avid wingshooter, so the desire for a double rifle faded and visions of carrying a bespoke British smoothbore consumed me. For years I searched, hoping that somehow I’d stumble onto one of those closet finds; perhaps a widow looking to sell her husband’s gun to a deserving young man. Didn’t happen.

Over 30 years, whenever time allowed, I stopped at small-town gun stores or perused the Internet in my eternal quest. There was no shortage of fine English shotguns available, simply none I could afford. But as a wise man once said, “There are some people who live in a dream world, and there are some who face reality; and then there are those who turn one into the other.” And so it was that on another ordinary winter evening about six years ago as I stalked one of the sale forums of a popular firearms website, I stumbled upon an ad for a Westley Richards 12-gauge. The gun looked to be in good shape and the price, while beyond anything I’d ever spent on a firearm previously, was the best I’d seen for a shotgun of this quality. So just that fast, before fear and >



common sense prevailed, I turned my dream into a reality.

WESTLEY RICHARDS "O" GRADE

There were no surprises when my new shotgun arrived. It was in the excellent condition described in the ad and depicted in the posted photos. What stood out first was the stunning straight-grained English walnut of the buttstock and the splinter forearm, with its proprietary Anson push-rod forend latch. Each sported the fine and precise checkering one expects of an English shotgun. The blueing on the barrels was near immaculate and much of the case

colouring remained on the scalloped metal of the sleek Anson & Deeley boxlock double-trigger action and on the water table. As I inspected my acquisition more closely, the detailed metalwork became more apparent. The action, trigger guard and top lever were all adorned with finely engraved scrollwork, and the word "safe" was inlaid in gold on the tang safety. "Westley Richards" was engraved on both sideplates, as well as on the rib. Inscribed on the rib, too, were the words "Abercrombie & Fitch." This would become important as I conducted further research on the shotgun's provenance.

Now, I was under no illusion that this was a "best gun" by any means. It was an "O" grade shotgun, as close to a true production firearm as Westley Richards made at the time, but by the standards of today's production shotguns it was exquisite, and I couldn't wait to take it afield.

I'm a hunter, not a firearms collector or even much of a "shooter," and my plan was to hunt ducks and upland game with it. And it was clearly built as a hunter's shotgun – the ejector-equipped 28-inch barrels are an ideal compromise between the long barrels that help ensure the smooth swings and consistent follow-through that



Not proofed for steel shot, ammunition like Kent's Tungsten Matrix loads are a good option.



No hunt is as hard on firearms as waterfowling from a boat - but the WR was up to the task.

IN THE FIELD

As a passionate diving duck hunter, there was little doubt the first hunt with my English smoothbore would be out of a boat on the big water. That scenario is about as hard on firearms as you can find in a bird hunt, and while some might suggest I was crazy to subject a Westley Richards to that sort of treatment, I actually figured it would be crazy not to. My dream was to hunt with a fine British shotgun; owning one was merely a step along that path.

My partner on that first hunt would be a friend who also has a passion for vintage doubles and waterfowling. He brought along his A. H. Fox Sterlingworth and, together with a few boxes of Kent's Tungsten Matrix shotshells, safe for use in thin-walled shotguns not proofed for steel, we loaded up four dozen classic wooden decoys and boated out onto our favourite lake.

Shooting side-by-side doubles well takes a little practice. In fact, many who try say they can't hit anything whatsoever. A large part of the problem is the tendency to grasp the forearm when shooting, much as you do with shotguns of virtually every other style. But the splinter forearm on an English double is meant only to marry the barrels and receiver; they're not intended to be used as a grip. With a splinter, the barrels are intended to rest in your palm when shooting, otherwise you'll have an unusual crook in your elbow, robbing >

Westley Richards

Even among the legion of fine British gunmakers, Westley Richards stands out, acknowledged as a premier innovator of shotgun technology, as well as a maker of bespoke shotguns and rifles. Founded in Birmingham in 1812, Westley Richards' contributions to firearms design remain impactful to this day. The Anson & Deeley action, that allowed the fall of the barrels to cock the action, eliminated the need for external hammers, a significant leap forward in firearms design and production. Other in-house inventions included the doll's head action fastener, the Anson push-rod forend latch and a system of hand-detachable locks that allowed the user to carry an extra lock in the field in case of a mechanical problem.

Many celebrated hunters, including Selous, Roosevelt, Corbett, Hemingway and Ruark, owned and hunted with Westley Richards rifles and shotguns, as did countless African PHs whose very lives in an era of mediocre bullets often depended upon the reliability of their rifle. Today, Westley Richards continues to manufacture the finest double rifles and shotguns, along with bolt-action rifles. You can learn more at westleyrichards.com.

waterfowlers demand, and the quick-pointing, shorter pipes that upland hunters prefer. The barrels are choked a hunter-friendly modified and full, and, at a modest and sleek seven pounds, it can be carried all day long. Drop at heel is one-and-seven-eighths inches, drop at comb is one-and-a-half inches, and the length of pull is 14-and-one-half, which I found surprisingly lengthy for a shotgun of this vintage. It was well-suited for me, however, as I'm relatively long-armed and appreciate an extended LOP. Further, the gun has no perceptible cast, which, as a southpaw shooter, I appreciate.



The splinter forend as seen on fine British guns requires a slightly different shooting technique than the typical North American shotgun.

you of feel and a smooth, consistent swing. Another common complaint of side-by-side doubles is excessive recoil, a symptom of their relatively straight stocks. In my experience, there's really no alternative but to grin and bear it.

Over the course of that morning, we shot 12 ducks, a mix of scaup, canvasback and bufflehead. The Westley Richards performed admirably. It was clearly well balanced, translating to easy pointing and smooth tracking on passing birds. Getting accustomed to the double triggers took a little while, but after pulling the front trigger twice in succession a few times, my muscle memory began to evolve and I was soon shooting like a veteran. I think back on that day often, as it was truly under the cover of grey scudding skies on a remote boreal wetland that my lifelong dream of hunting with an English double-barrelled shotgun was realized.

PROVENANCE

I've hunted with my prized shotgun several times since then, both waterfowl and upland birds, and it remains as tight and shootable as the day it came out of the factory. Which, I discovered, was in 1959, making it a relatively youthful 58 years old. My research through Griffin & Howe revealed that the gun was built by Westley Richards for Abercrombie & Fitch's (A&F) New York store, at the time among

the most prestigious suppliers of fine firearms and hunting equipment in North America. Hunting luminaries from Hemingway to Ruark, including many of Canada's sporting elite, would turn to A&F to completely outfit their safaris to Africa and elsewhere. The records revealed that my shotgun, serial numbered 02009, was entered into A&F's inventory on Feb. 1, 1960, listed at a retail price of \$900 with a cost to A&F of \$480. Also in inventory at that time was a Westley Richards "best quality" shotgun selling for \$1,600. Today it would fetch \$75,000 or more. How times have changed.

What would eventually become my gun remained unsold for four years, so in 1964 A&F shipped it, along with a number of other fine shotguns, to Chicago to be displayed at their inaugural gun show, the September '64 Gun Fair. On Sept. 18, the opener of the eight-day show, it sold for \$750 to Weldon Gearhart of Harlan, Iowa. After that the trail goes cold. Mr. Gearhart died in 2001, but whether he retained the shotgun until his death I don't know. Nor do I know how it eventually made its way to Canada.

For now, that Westley Richards double will remain in my gun safe, except on the handful of days each fall when I carry it to the duck marsh or in the grouse woods. One day, however, this exquisite example of the gunmaker's craft, truly a piece of engineered art,

will find a new home. For as surely as it's lasted for near 60 years, it undoubtedly has another 60 ahead of it. And another lucky hunter will one day have their dream realized. 🦆

Griffin & Howe

Seymour Griffin began restocking rifles in 1910. In 1923, at the urging of Col. Townsend Whelan, he brought on James Howe, an accomplished metal worker. By 1925, they were building custom rifles under the Griffin & Howe (G&H) name. In 1930, the firm was purchased by A&F and for several decades were recognized as among the finest custom rifle builders extant. A&F sold G&H in 1976. They continue to build fine custom rifles and have expanded their services to include shooting schools, the importation of bespoke firearms and they offer a consignment/sales service for top-quality rifles and shotguns. G&H also houses all the sales records from 1900 to 1977 from legendary US gun dealers A&F and Von Lengerke & Detmold. For a small fee, G&H will provide a fascinating and informative history of new and used firearms that passed through those doors. Find more information at griffinhowe.com.

~ MEMORIAL ~

CLIVE MICHAEL LAW

1954 – 2017

BY JOHN L. PEROCCHIO

In the earliest days of the NFA, when I was representing Quebec and running daily office operations for the organization, I asked my friend Clive Law if he would volunteer to take on the task of creating a magazine to keep our growing membership informed. He thus became the NFA's first editor. It is fair to say that since he did all the layout work, he literally created the *NFA Journal*. The first edition came out in August 1978. On page three of that edition there's a picture of Clive in the *Collector's Corner* column, which he also wrote. His work for us would go on for many editions, ending with the February 1979 issue.

That was the essential Clive Law. He was always willing to help firearms owners and never asked anything in return. Whether it was facilitating registrations at the RCMP Registry Office or helping with the right import/export paperwork at External Affairs, he was there for us.

Most of you know Clive for his work as editor and owner of Service Publications. Through his company, Clive was able to bring together some of the finest studies done on Canadian firearms and militaria. His books *Canadian Military*

Handguns 1855-1985 and *Inglis Diamond, The Canadian Hi Power Pistol* remain the definitive works on these subjects. There were many other books on many other topics with a wide international following. Clive was recognized not only as a publisher, but also as an historian, and as such he was an active member of the Company of Military Historians.

In later years, Clive was also involved at different levels of government. He participated with the RCMP in their ongoing mission in Haiti as part of the UN Stabilization Mission, where he was responsible for developing monitoring of arms proliferation. While there, he was also instrumental in forming a local St. John's Ambulance Corp. One of his last projects was to redesign the shoulder insignia for the Canadian Armed Forces. Next time you see a very Canadian maple leaf on the shoulder boards of our military, you'll know it's thanks to Clive Law.

We laid Clive Law to rest at the Beechwood Cemetery in Ottawa on June 10, 2017. With his passing, the nation has lost a huge asset and Canadian firearms owners have lost an irreplaceable friend. 🇨🇦





Team NFA

Matt Neumann

Hunting For Gold



I'm constantly looking for ways to improve, and this year I am approaching shooting and ski technique with a "work smarter, not harder" mentality.

Most of you hunters are anticipating the fall season getting under way, and I too anticipate hunting for something. Yes, we all know what season is right around the corner, but the Pyeongchang winter Olympics are also in the near future and I have my sights set on an exciting prize for 2018. I've been involved in biathlon for 18 years, and competing at the Olympics has been my goal for every one of them! I came to the decision that this year will likely be my final year of competing as a full-time athlete. That being said, I concluded it would be a real feather in my cap to have a dream of this magnitude come true. I'll accept the result

either way, as I don't control all the factors. But in regards to everything I do control, I have made a full commitment to come out swinging.

As our beautiful Canadian autumn is winding down, Biathlon World Cup Trials will be starting in Canmore, Alta., mid-November. This gives an ample, yet narrowing, time window to fine tune specific skills, physically taper, prepare mentally and hopefully stay healthy as I prepare some more. I'm constantly looking for ways to improve, and this year I am approaching shooting and ski technique with a "work smarter, not harder" mentality. I think I can work as hard as anyone, and I

think my efforts are most productively spent working on areas with the most room for improvement. If you have a free second, use the search engine of your choice to look up "Pareto Principle," also known as the 80/20 rule. This was a real a-ha moment for me in my training. To summarize this concept in a sports setting, the majority of outstanding performance (about 80 per cent) come from a select percentage of the training (about 20 per cent.) As an athlete, I must identify these aspects with my coach, and concentrate my energy on these elements.

Still thinking about hunting? Well then, let me share a specific skill I've

been working on that I personally guarantee will improve precision. It changed how I approach shooting and I've put significant thought and practice into this aspect of marksmanship this summer. It's called trigger control, and I have seen a three per cent improvement in precision scores this spring with a new awareness for this mysterious concept. I have been working with a trigger pressure training tool this spring/summer that graphs my trigger pressure on a computer monitor while I shoot my rifle. As trigger pressure increases to a pre-set percentage, an audible ring increases in pitch simultaneously. In a perfect world, one would be capable of reaching 99 per cent trigger pressure instantly, before considering fine aim. Considering the heart rate factor involved in biathlon, I started training for a pre-load of 80 per cent trigger pressure. The audible ring stops once I have reached 400 grams and the quicker I can acquire this stage, the better. As per International Biathlon Union rules, the trigger

weight of competition .22 rifles must be a minimum of 500 grams. The ringing tone coming to a stop is the indication that the proper pre-load has been achieved, and it is now time to take a final breath and concentrate on fine aim. Just squeeze, breath and aim.

What does it all mean in the field? It achieves consistency. It decreases movement in the critical moment right before the shot goes off, which increases stability in the follow through. Reduced follow-through movement allows us to quickly re-acquire sight picture before another shot, and more importantly, hit where we aim! Not convinced? Get out there and give it a go. I have coached hundreds of young shooters over the years and simplify the explanation of pre-loading the trigger with "squeezing" in comparison to "pulling." I believe it is the single most important skill necessary while improving from good shooter to great shooter.

Ok, now we're ready for hunting. With Canada's 150 birthday celebrations

having a strong presence this summer, representing our country seemed like a relevant topic. I've talked with many people involved, or not associated at all, with sports. I hear many opinions and attitudes on how our tax dollars should be spent, and I can respect many of them. However, I'm clearly biased and the Olympics are a reminder to me of how overwhelmingly thankful I am to be Canadian. Through no effort or investment, we were handed winning lottery tickets just by being born in Canada. Again, I offer my biased opinion, but I honestly think Canada is the best country in the world. Between our three coasts, we have it all. To represent our vast, beautiful country at the Olympics would be such an honour, and reinforcement of how blessed I am to be Canadian. So, from one Canadian to another, I encourage you all to take advantage of our freedoms, rights and opportunity as firearm owners. Whatever you are hunting this fall, get out and enjoy the best country on the planet. Go Canada! 🇨🇦

ROBBING "CST. PETER" TO PAY "PAULSON"



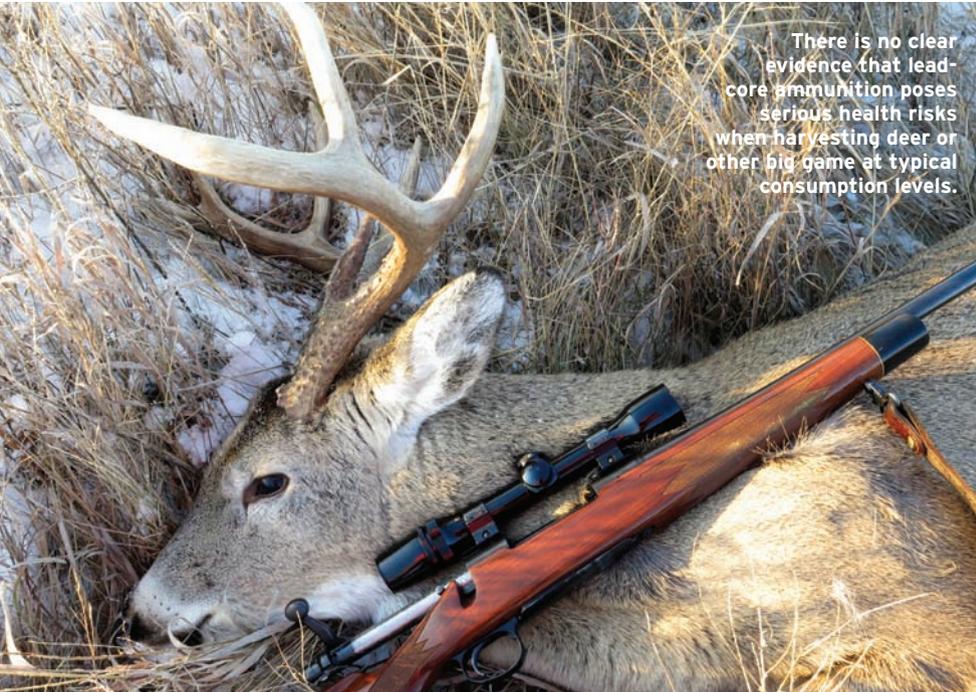
"THERE WERE TOO FEW SHOOTING RANGES IN CANADA BUILT TO HANDLE THE SHOOTING NEEDED FOR THE (RCMP) TRAINING"
 - JOANNE RIGON, DIRECTOR GENERAL OF LEARNING AND DEVELOPMENT OF THE RCMP - 2017



Point Blank

Gary Mauser

Should Lead-Core Bullets Be Banned?



There is no clear evidence that lead-core ammunition poses serious health risks when harvesting deer or other big game at typical consumption levels.

THE RESEARCH

Rather than just picking sides in this debate, I thought it would be useful to briefly consider a few key studies that buttress claims that harvesting big game with lead ammunition poses risks to human health. Because of space limits, I will not examine claims about health risks of harvesting birds with lead shot. Nor will I assess the implications of lead ammunition for raptors and other scavengers. There is no disagreement that lead is a dangerous neurotoxin, particularly for young children and fetuses. Low levels can harm children's developing brains, causing learning disabilities. The question readers need to ask is whether the research demonstrates that the risks of lead poisoning from eating game to be severe enough to require a ban on lead ammunition.

A key study in the US (Iqbal 2009) tested 736 people in North Dakota who lived in various locations in North Dakota, and held a wide range of occupations, from welder to refinery worker. Most had lived in the same household for over 10 years. Those who reported eating wild game were found to have 50 percent more lead in their blood than those who did not. The lead exposure was highest among people who consumed not only venison, but also birds and other game. Those who ate wild game meat had average lead levels of 1.27 micrograms per deciliter, compared with 0.84 for those who ate no game. Statistically, these differences were significantly different. This study was used to ban donations of game meat to food banks by generous hunters.

Comments: Despite finding higher BLLs in those who ate wild game, the BLLs of both groups were well below a CDC threshold of five micrograms per deciliter. Both groups were at or below the US national average of 1.6 micrograms per deciliter. Unsurprisingly, no deleterious health effects were reported for hunters or their families.

A study of Canadian Inuit is also important (Fillion, 2014.) Blood samples were collected from 169 Inuit who lived in communities where participants in the Inuit Health Survey in 2007 to 2008

Health Canada is encouraging bans on lead ammunition for hunting based on the radical claim that there are no known safe blood lead levels (BLLs) for neurotoxicity. The Centers for Disease Control and Prevention in Atlanta, Georgia, and the UK's Food Standards Agency have singled out game harvested using lead ammunition as exposing children and pregnant mothers to an unacceptably high health risk. Arguing "a conservative approach" is appropriate when characterizing risk, the Trudeau government is considering additional measures to further reduce exposing Canadians to lead. Lead has been banned from other products, including gasoline and paint. Is a ban on lead bullets and sinkers the next step?

Back in 2013, the Harper government called a halt to an earlier campaign against lead ammunition, but the antipathy to lead has been resurrected under the Trudeau Liberals. A blanket ban of lead bullets and shot would undermine civilian firearms ownership by making shooting increasingly expensive for many hunters and target shooters.

Outdoor organizations reject the

necessity of banning lead ammunition, arguing the health risks of lead are being exaggerated for political reasons and that individual hunters are well placed to make informed choices about what is best for them and their families.

"The use of traditional ammunition does not pose a health risk to human beings," said Ted Novin, director of public affairs for the National Shooting Sports Foundation. Novin added, "There has never been a documented case of lead poisoning among humans who have eaten game harvested with traditional ammunition."

In an abundance of caution, state wildlife agencies (such as Minnesota and Wisconsin) have made efforts to educate hunters about the best practices of preparing game that minimize the risk of lead poisoning. Typical tips are: always trim a generous distance away from the wound channel, and discard any meat that is bruised, discoloured, or contains hair, dirt or bone fragments. Hunters are also encouraged to consider higher quality (and more expensive) ammunition, such as copper or lead-core bullets, that feature high weight retention.

had the highest BLLs. The study found that participants most exposed to lead were those involved with hunting, living in houses undergoing repairs or remodeling or eating game harvested with lead shot.

Samples were obtained from game harvested with lead ammunition from at least two parts of the animal. Thawed samples were homogenized. No information was given if samples were taken from the wound channel or if visible lead fragments were removed before analysis.

The study first examined the lead levels in game meat, house dust, paint chips and types of ammunition used by study participants. They found that wild game did not exceed the guidelines for lead levels, and was not likely the major source of lead exposure for this population. Nevertheless, BLLs were highest among those who ate birds shot with lead pellets.

The study next assessed the isotopic profiles of each possible source of lead in the participants' blood samples. Analyses found that the lead in house dust, paint chips and ammunition had similar isotopes to those found in the blood, while differing from those found in wild game. This suggests that exposure could have come from the mobilization of old paint, decrepit walls in the houses, or direct from the ammunition somehow, but not from consumption of wild game.

Comments: Even though this study selected participants who had the highest BLLs in the earlier Inuit Health Survey, the results showed that their high BLLs were not influenced by the consumption of game harvested using lead ammunition. Instead, the most important contributors to BLLs were identified as house dust and paint chips. Researchers didn't know how to interpret the isotopic similarity of ammunition and participants' blood, because neither of these chemical profiles resembled the lead in the harvested game. The small size of the sample and the wide diversity among the participants (particularly in housing quality and game consumption patterns) made interpretation difficult. Nevertheless, this study is cited as supporting the dangers of consuming game harvested using lead ammunition.

Meat preparation is a key determinant of the amount of lead residue found in game meat, but handling practices are uneven and inadequately reported. In some studies, the researchers deliberately left visible lead shards in the meat, while in others such fragments were removed before analysis. Some researchers analyzed samples from commercial



Traditional outdoor organizations are well placed to educate hunters about the best practices for butchering game harvested using lead ammunition, or to help them decide if they wish to use non-lead ammunition.

butchers who may not have removed visible lead residue. Best-practice information ensuring lead is removed from game is available from Minnesota Department of Natural Resources, Countryside Alliance and Lead Ammunition Group in the UK.

CONCLUSION

The vulnerabilities in the claims about the dangers of lead bullets identified here imply that concerns about lead may have been exaggerated. The case against lead bullets remains inconclusive. Despite agreeing that lead is a dangerous neurotoxin, and that even low levels can harm children's developing brains, there is no clear evidence that lead-core ammunition poses serious health risks when harvesting deer or other big game at typical consumption levels. Risks are reduced by proper butchering and meat-handling techniques.

Hunters have long recognized that hunting entails a variety of threats and have learned to "adapt and overcome." Clearly, outdoor activities are more dangerous than playing video games or watching television. Education, not bans, is the most appropriate way to deal with the threats facing hunters – from wilderness survival, to possible CWD, to lead toxicity. To the extent that lead contamination poses a threat to those who eat game harvested with lead ammunition, hunters need to understand they should take reasonable precautions. Traditional outdoor organizations are well placed to educate hunters about the best practices for butchering game harvested using lead ammunition, or to help them decide if they wish to use non-lead ammunition. Groups willing to throw the ammunition baby out with the supposedly toxic bathwater reveal their true purpose is opposition to hunting and not concern for the welfare of hunters or their families. 🗡️

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Legal Corner

Guy Lavergne, Attorney at Law

The Long Gun Registry: Is It Dead Or Alive?

Our politicians appear to believe that terrorists, pedophiles and sexual predators have privacy rights, but law-abiding gun owners do not.



In early June 2017, Canada's Public Security minister, the Honourable Ralph Goodale, filed Bill C-52 in the House of Commons. The content of Bill C-52 and what it purports to achieve came as a surprise to many Canadian firearms owners (albeit, not to yours truly.)

Indeed, Bill C-52 purports to authorize the transfer to Quebec of the remaining data of the defunct Long Gun Registry, data that was supposed to have been eradicated and destroyed upon the coming into effect of the *Ending the Long Gun Registry Act* (formerly known as Bill C-19.) So, how can that be, and why should we care? To understand the underlying issue, and how this situation came to be, a bit of legislative history is in order.

LEGISLATIVE & JUDICIAL HISTORY

The Canadian Long Gun Registry (LGR) was created as a result of the passing of the Firearms Act (the infamous Bill C-68) in 1995. Universal registration of long guns became mandatory in 1998.

In 2012, Parliament passed Bill C-19, also known as the *Ending the Long Gun Registry Act*. Section 29 of this act mandated the destruction of the LGR data "as soon as practically feasible."

Almost immediately after the *Ending the Long Gun Registry Act* was passed, the Quebec government launched a constitutional challenge of Section 29 before the Quebec Superior Court. Quebec was initially successful in obtaining an injunction that maintained the LGR in operation for Quebec gun owners, while the constitutional challenge moved through the court

system. In March 2015, the Supreme Court of Canada rejected Quebec's challenge. The NFA was an Intervener before the Supreme Court of Canada, successfully arguing that the data represented personal information of the individuals concerned and that neither government could claim it as property.

That decision by the Supreme Court of Canada should have resulted in the immediate destruction of the remaining LGR data. However, it did not, and we found out about it a few months later, as a result of a court order obtained by the federal information commissioner.

The RCMP has taken the position that it could not selectively delete LGR data from the Canadian Firearms Registry without risk of compromising the remaining data, since all information about various classes of firearms

(i.e. restricted, non-restricted and prohibited) was kept in a single database. For that reason, in early April 2015, following the Supreme Court decision, a back-up copy of the entire Canadian Gun Registry database was made prior to the “eradication” of the LGR data. However, even after this operation had taken place and the remaining data was found to be uncompromised, the back-up copy remained in existence. It was not destroyed!

HERE COMES MR. CLENNETT

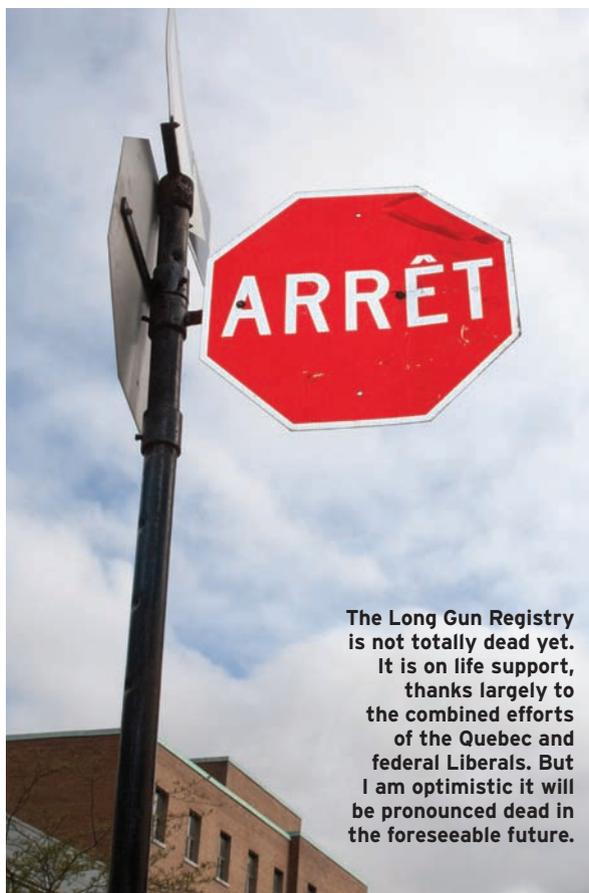
Meanwhile, a well-known activist named Bill Clennett made an access to information application to obtain a copy of the LGR data. For those to whom Mr. Clennett’s name may seem familiar, he is the man who rose to fame when he was involved in an encounter with former Prime Minister Jean Chrétien known as the “Shawinigan Handshake” incident. Such an access to information request, although unusual, is not unheard of. Mr. Clennett’s request was initially denied, because of the aforementioned Section 29 of the *Ending the Long Gun Registry Act*. A complaint by Mr. Clennett to the information commissioner ensued. The latter promptly applied for and obtained an interim injunction to preserve the “back-up copy” of the LGR.

The federal government responded by introducing legislation purporting to bypass the *Access to Information Act*, as part of its 2015 *Economic Action Plan* legislation (i.e. the federal budget.) That legislation was promptly challenged by Mr. Clennett and the information commissioner before the Ontario Divisional Court. The rationale of the Clennett’s challenge is that the *Access to Information Act* has “quasi-constitutional” status, and thus supersedes ordinary legislation. It is worth noting that the *Privacy Act* enjoys similar “quasi-constitutional” status.

THE GOVERNMENT CHANGES

In the meantime, the Conservative government called an election and was defeated by the Liberal Party in the fall of 2015. The newly elected Liberals made very little, if any effort, to defend the

legality of the predecessor government’s legislation. They even made overtures towards Quebec about transferring the LGR data. And a new formal request for the transfer of the data, in the form of a letter to Minister Ralph Goodale, was indeed sent by Quebec’s Minister of Public Security in May 2016. Meanwhile,



The Long Gun Registry is not totally dead yet. It is on life support, thanks largely to the combined efforts of the Quebec and federal Liberals. But I am optimistic it will be pronounced dead in the foreseeable future.

Quebec passed legislation purporting to create a provincial long gun registry.

THE NFA FIGHTS BACK

Immediately after the Quebec legislation was passed, the NFA launched a constitutional challenge of that legislation. As a result of the NFA’s initiative, the Quebec government has yet to implement the legislation, although it will likely never admit as much, essentially for political reasons. The NFA’s constitutional challenge of the Quebec legislation is scheduled to be heard before the Quebec Superior Court on Sept. 5 and 6, 2017.

WHY WE SHOULD BE CONCERNED

Bill C-52 is a convoluted piece of legislation, purporting to remove legal obstacles to the transfer of the LGR data

to Quebec, or at least those obstacles arising from federal legislation. In essence, Bill C-52 amends the *Ending the Long Gun Registry Act*, so as to repeal the provision mandating the destruction of the remaining data, as well as the disputed provisions of the *Economic Action Plan*, purporting to supersede the *Access to Information Act*.

If passed without amendment, Bill C-52 will authorize the federal government to settle the Clennett challenge and provide the requested LGR data to Quebec. Most importantly, it will do so by removing the gun owners’ personal information from the protection afforded by the federal *Privacy Act*.

The latter is most certainly the most questionable aspect of Bill C-52. In essence, since the inception of firearms registration in Canada, gun owners have been forced, under pain of criminal prosecution, to provide their personal information to the federal government. In turn, the federal government assured gun owners that their information was safe, as it was protected from disclosure to third parties by the provisions of the *Privacy Act*. Well, the times are changing!

As mentioned earlier, the *Privacy Act* enjoys quasi-constitutional status. Privacy rights also stem from the Canadian *Charter of Rights and Freedoms*. Privacy rights are the reason why the

government and police organizations cannot freely engage in surveillance of alleged terrorists, in the review or search of computer data of pedophiles and/or listen in on conversations of sexual predators and other criminals. So, our politicians appear to believe that terrorists, pedophiles and sexual predators have privacy rights, but law-abiding gun owners do not.

If Bill C-52 is indeed passed, the sole remaining obstacle to the transfer of the LGR data to Quebec will be the NFA’s constitutional challenge of the Quebec gun registry legislation.

To summarize, the LGR is not totally dead yet. It is on life support, thanks largely to the combined efforts of the Quebec and federal Liberals. But I am optimistic it will be pronounced dead in the foreseeable future. 🚩



NFA Book Shelf

Bill Rantz

Blood On The Leaves

Authors: Rod Slings, Mike Van Durme and B. Keith Byers

Title: Blood On The Leaves: Real Hunting Accident Investigations – And Lessons In Hunter Safety

Publisher: Lyons Press 2015

ISBN:

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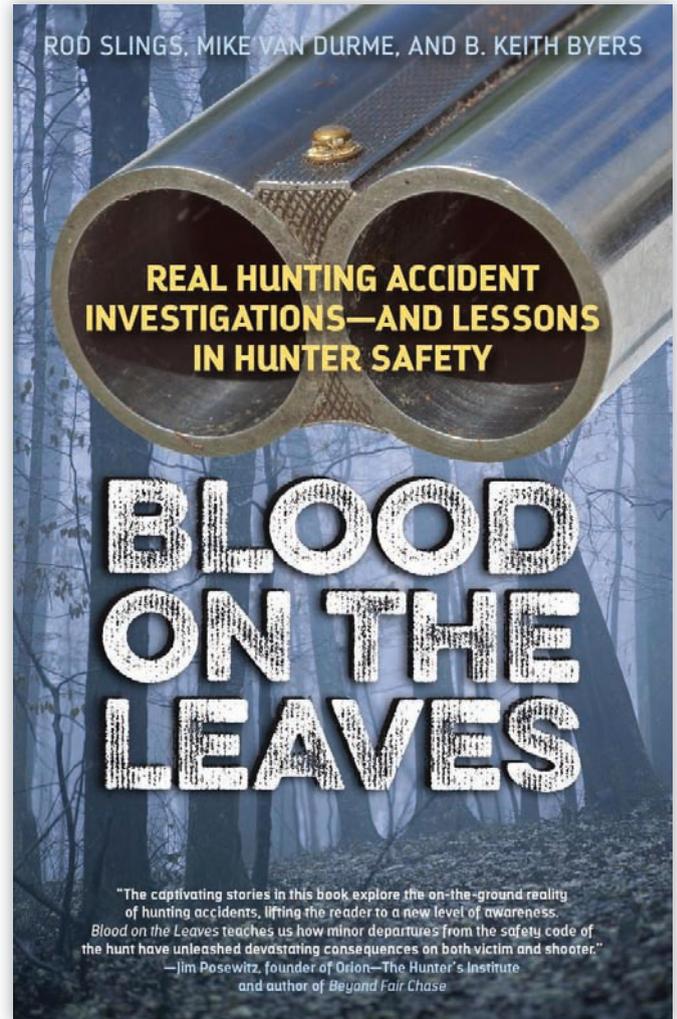
Blood On The Leaves is a book about real hunting accident investigations conducted by three of the United States' most experienced professional hunting incident investigators. Combined, the authors Rod Slings, Mike Van Durme and B. Keith Byers have over 75 years of law enforcement service, and more than 60 years of experience investigating hunting incidents. After retiring, the three joined forces to create Hunting and Shooting Related Consultants, LLC.

The intent of *Blood On The Leaves* is to allow the reader to understand actual events and to learn potential life-saving lessons from each. Sharing this information is intended to help increase hunter safety. Between its covers, this book provides 30 examples of hunting-related incidents in individual chapters. Each describes, in detail, the events leading up to an injury or death. In many cases, the investigators relied extensively upon evidence provided by forensic sciences to determine exactly how the incident occurred. Concluding each chapter, the authors have provided a summary, called "Lessons Learned," which reinforces how the lives of

many people can be changed forever in just seconds due to one bad decision.

Blood On The Leaves includes summaries of incidents that occurred while hunting various game animals, ranging from frogs, coyotes, deer, ducks and gamebirds. The book relates tales of individuals who have been wounded or killed due to mishandled firearms, careless shots and even slips and falls. One unfortunate soul was using a tree stand that he had found already constructed in the forest. It collapsed due to a single broken bolt and death was caused by metal piercing his head. The authors indicate that the number one cause of hunting-related incidents is falls from elevated stands or failure to properly use a haul line or safety harness.

Slings, Van Durme and Byers indicate that collectively they have only investigated two cases that they concluded were accidents. One involved a bullet entering a deer, deflecting almost 90 degrees off a major bone, bouncing off a tree and hitting another hunter in the hand.



Blood On The Leaves is thought provoking, and the term "accident" will no longer immediately apply to hunting-related injuries or deaths. The authors hope this insight will help readers avoid becoming the cause or the victim of a hunting injury or death. Those who love to spend time in the woods, whether a new member of the hunting fraternity or a hunter safety instructor, will find reading *Blood On The Leaves* time well spent. It may be located online for a reasonable amount, but please support your local firearm retailer if possible. 

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