The Top 10 Australian calibres • Bumper summer edition





All you need to know to get started in Long Range Precision

The official publication of the Sporting Shooters' Association of Australia

Now 191,000 + members strong!

Proudly printed in Australia





Australia's most comprehensive firearms and accessories trading website



ssaagunsales.com

Handguns

Reloading equipment

Buy and sell new and used:

- Firearms, parts and optics
- Ammunition and reloading components
 - Knives and hunting products
- Camping gear, vehicles, boats and property



Easy and safe

Registration is free and only takes a minute or two and the SSAA gun sales website is easy to use. Importantly, you can be confident that ssaagunsales.



Cheap and convenient

Listings cost just \$10 for SSAA members, which is a \$10 discount off the non-member price. Choose up to six photos. The SSAA gun sales website works on tablets and smartphones, which means you can browse, sell and buy wherever you are.



Try it now!

Australia-wide

If you have something to sell or need to look for an item to purchase, ssaagunsales.com is an Australia-wide marketplace. It means your buying and selling experience is effective and almost immediate.



Enjoyable

If you're a firearms enthusiast, ssaagunsales.com is a great place to browse and see what's available. Not only are there products that are almost new, but of course you'll discover stuff that is hard to find and historically interesting - it's just good fun!



FIREARMS

- 32 Talbot on target! Single Action
- 40 Suppressors not quite the sound of silence
- 46 Twelve months with a 20-gauge
- 52 Gewehr 41, G41(W)
- 58 Winchester XPR Vias Sporting rifle
- 76 Browning's BLR Lightweight Monte Carlo rifle
- 102 Feelgood factor of a wellbalanced shotgun
- 109 The rebirth of the Savage 99

HUNTING

- 91 Easy to achieve a better hunting experience
- 106 Hunting a two-way partnership
- 112 An impromptu hunt

PRODUCTS

- 69 Uniden Guardian App Cam Solo+
- 74 Gamebore sub-gauge solution
- 80 The 3HGR Light Harness
- 87 E-Zee case trimming solution

- 88 Nikko Stirling's new Hornet ED 10-50x60 riflescope
- 105 Catch .22 ammo dispenser
- 110 Zeiss Victory RF 8x42 rangefinding binoculars
- 115 Maximum bang for your buck
- 117 Outdoor Edge ChowPal

AND MORE

- 24 Top 10 Austraian calibres
- 64 The .222 R case for the defence
- 70 Cerebral shooting
- 84 Introducing Long Range Precision shooting
- 94 The .223/25 wildcat
- 97 Covert? Tactical? Be careful what you wish for
- 98 Landowner link-up with SSAA cured feral pig carnage
- 101 Aussie knifemakers at the cutting edge
- 118 Nationals thwart Greens' Senate firearms manoeuvre

REGULARS

- 6 President's Message
- 7.8.9 Letters
- 7 Insurance Q&A
- 10 Open Season
- 12 Basic Ballistics
- 14 Reloading
- 16 Bushcraft & Survival
- 18 Clay Target Q&A
- 22 Top Shots
- 121 Gun & Knife Show List
- 122 Youth in Focus -Max Olufson
- 125 Competition News
- 126 SSAA Shop
- 129 Members-only Competitions
- 130 Jumbunna



Our February cover Talbot tames the west.

NEXT ISSUE



John McDougall has run the numbers on Fabarm's new .410 cal/36-gauge over and under shotgun which he says will "measure the skills of the best of shooters as well as the young and light-framed".

January brought with it the US SHOT Show in Las Vegas and North American correspondent Thomas Tabor was there for Australian Shooter to bring you the very latest on what the market has to offer.

The new Savage A22R Repeater rimfire rifle is new to the Australian market and we sent Royce Wilson into the field to give us his expert assessment.

(B) Bushnell

ANEW SPECIES RULES THE NIGHT.

FEATURES

APP ENABLED

Full feature control ability via WiFi. (zoom, record, photos)

DESIGN

Enhanced design for improved water resistance.

HD VIDEO

Full 1080P HD video for vivid playback.

USB PORT

For fast media upload.

IR ILLUMINATOR

Upgraded for long-range performance.

OPTICS

Outstanding optical clarity.

POWER

4x AA Batteries.



















зхзпмм



4.5X40MM

NEW EQUINOX™ Z2

MEMBERSHIP AND MAGAZINE INOUIRIES Phone: 02 8805 3900

Fax: 02 9832 9377

PO Box 282, Plumpton, NSW 2761 Email: mem@ssaa.org.au

EDITORIAL POLICY

To create a better environment and community understanding of all forms of hunting and shooting sports.

EDITORIAL INOUIRIES

Phone: 08 8272 7100 Fax: 08 8272 2945

PO Box 2520, Unley, SA 5061

Email: as@ssaa.org.au Web: www.ssaa.org.au

ABN 95 050 209 688

members strong as of November 2018

This magazine is owned and published by the Sporting Shooters' Association of Australia Inc. Opinions expressed herein are those of the authors and do not necessarily reflect the policy of this Association.

FDITORIAI

MANAGING EDITOR	Allan Blane
ASSOCIATE EDITOR	Thomas Cook
ASSISTANT EDITOR	Dave Rose
CHIEF OF STAFF:	Jennifer Martens
ART DIRECTOR	Mike Barr
PRODUCTION COORDINATOR	Judy Ward
GRAPHIC DESIGNER	Natalie Kuhlmann
WEBMASTER	Mark Fieldhouse
ADVERTISING REP	Karoline Minicozzi
COMMUNICATIONS OFFICER	Sam Talbot
ADMINISTRATION	Debbie Wing
SENIOR CORRESPONDENT	John Dunn
SENIOR CORRESPONDENT	Řod Pascoe

CONTRIBUTORS THIS ISSUE

lan Thompson, Barry Wilmot, Peter Bindon, Russell Mark, Scott Heiman, Ivo Dimitrov, Lionel Swift, Don Gilchrist, Allan Palk, Dick Eussen, Geoff Smith, Anthony Tammett, David Crofts, James Cheung, Grant Walterfang, Sam Garro, Chris Redlich, Leon Wright, Con Kapralos, Keith Pratt, Daniel O'Dea, John McDougall, Derek Nugent, Royce Wilson.

STATE CONTACT INFORMATION

For SSAA inquiries please contact your state SSAA office: NSW 02 8889 0400 WA 08 9497 7919 0419 849 452 Old 07 3281 3447 SA 03 8892 2777 ACT 0423 043 663 Vic 0418 734 008 NT 0402 013 918

NATIONAL CONTACT INFORMATION

SSAA National

Chief Executive Officer and Chief Editor Tim Bannister Wildlife Programs Matthew Godson PO Box 2520, Unley, SA 5061

Phone: 08 8272 7100

SSAA National Accounts Office PO Box 282, Plumpton, NSW 2761

Phone: 02 8805 3900 Email: accounts@ssaa.org.au

SSAA General Insurance Brokers

The Precinct, Suite 14, 539 Greenhill Road, Hazelwood Park, SA 5066 Phone: 08 8332 0281 Freecall: 1800 808 608 Fax: 08 8332 0303 Email: insurance@ssaains.com.au

Please mail all correspondence for the SSAA National Executive to SSAA PO Box 282, Plumpton, NSW 2761 Email: ssaa@ssaa.org.au

Geoff Jones Senior Vice President Paul McNahh Junior Vice President Denis Moroney National Secretary Kaye McIntyre Treasurer

Alf Bastian



Plenty in store as we contemplate what 2019 holds

earty greetings for the New Year to all our members and shooting enthusiasts everywhere. 2019 is shaping up as a stirring period for the SSAA and its everexpanding membership base which continues to grow at an impressive rate.

Last year we broke new ground in many areas from media evolvement, conservation initiatives, burgeoning junior and female recruitment as well as political engagements with various groups in Canberra. So we must keep that momentum going as we continue our exciting journey into 2019.

It seems to me there's so much going on in all these diverse spheres that you can't help but be upbeat about what this great organisation can achieve. Yet unfortunately, no matter what the situation, it seems politics drives and underpins everything. With the NSW state election scheduled for March 23 and the Federal election following hard on its heels on a date tipped to be in May, that will be the case even more so this year.

Let's just hope legitimate and law-abiding firearms owners across the country don't become the traditional whipping boys for the law-and-order lobby. Already there have been worrying signs that a twisted misinformation campaign has begun. Sometimes it seems perverted political ideology seeks to undermine the standing of firearms owners in general, regardless of the facts.

As the coming political engagements loom ever larger, we in the SSAA must stand firm and support those who support us and defend our legitimate freedom to pursue our passion. There may be stormy weather ahead but the shooting sports

are in a very healthy state. In keeping up with - and perhaps even skipping one step ahead of modern trends - we'll be aiming to increase our involvement using digital technology and social media.

And in print, just take the time to flick through the pages of this bumper issue of Australian Shooter and note the sheer range of its content. There seems to be something for everyone and the diversity of topics is a great sign for future developments. The media and publishing agenda remains an invigorating challenge and the SSAA has been making continued strides in this arena.

Aside from those commitments, we can cast our eyes towards the revised format for the SSAA SHOT Expo which will take place in Melbourne in October. This occasion acts as a showcase for all that's admirable in the shooting fraternity and always attracts plentiful and enthusiastic crowds wherever it's staged. It is with much anticipation we await the revamped 2019 version.

So there we have it plenty to look forward to as the year pans out. Rally round the SSAA cause and let's enjoy the journey together.

Geoff Jones **SSAA National President**



The 'modified' Ruger Ranch



I WAS MOST interested to read your review of the Ruger 7.62x39mm Ranch rifle by Con Kapralos (Australian Shooter, October 2018). I own the same model.

Back in the day before it was surrendered, I used a Ruger 44 self-loader for pig hunting, a nice short barrel rifle, so the Ranch seemed to offer a similar function in a bolt-action and better range. I changed the colour with brown liquid boot polish and added a red/green illuminated Sbedar scope I bought online for less than \$100.

The excellent features of the rifle are accurately described in Con's article. I've only used Hornady 123gr ammunition and it works well but the main issue is the bolt and magazine. I didn't realise the bolt was not supposed to close on an empty magazine and for my rifle this is not the case. I thought it was poor machine tolerance at first when it sometimes caught and I filed the plastic magazine stop a little. I have the original five-round and a

10-round.

Both bolt and magazine move 2-3mm, the bolt being the loosest of any rifle I've ever used, so I thought it was just made down to a price rather than up to a tolerance. It comes down to how you insert the magazine and throw the bolt.

Then I discovered that if you push the base of the magazine to the bolt handle side it will catch the insertion stop and the bolt will close on the empty magazine. It's a bit tricky until you get the hang of it. Who ever heard of a rifle where the bolt won't close on an empty magazine!

Idiosyncrasies aside, the rifle is nice and light with little kick and great in confined spaces. I tossed up whether to buy the Bushmaster version with the muzzle brake but settled for the 7.62 and am happy with my slightly modified choice.

Bruce McConachie, via email

A sign of the times

I THOROUGHLY ENIOYED Peter Bindon's Bushcraft and Survival column in your August edition, as I do all his columns. His comments on the SOS signal were spot on as any signal made with sticks and stones is risky (the signal needs to be both seen and understood).

In radio communication SOS should not be sent by voice. The correct terms are Mayday or Emergency although younger types than us are taught a system of colour codes such as Code Blue or Code Red. I suspect this is change for the sake of change!

The international distress signal, commonly but slightly incorrectly referred to as SOS, requires a transmitter capable of sending Morse code, a receiver capable of resolving Morse code and an operator who can read Morse code, and I fear these criteria are becoming harder to find.

Conversely, Morse code can be sent at night with ordinary hand torches, though car headlights would have a longer range, but of course both are dependent on a clear optical path (eg, hilltop to hilltop.)

SOS, Emergency and Mayday all mean the same thing - that human life is in actual or imminent danger while the signal for lesser problems is Urgent, Pan Pan Pan or, in Morse code, XXX. I agree with Peter the use of personal locator beacons is the way to go.

Barry Croker, via email

Insurance Q&A WITH TREVOR JENKIN

I'm a keen duck hunter looking at investing in a small motorboat for inland waters. Boat shopping I can handle but I want to make sure my new boat will be insured if anything was to happen. Do I need separate cover or can I include the boat on my home insurance? Chris

Chris, to ensure you get full cover without any limits that may apply to your home and contents policy (most insurers only cover watercraft up to a certain length, and those who do cover them don't require it to be registered), it is recommended you seek an individual boat policy.

SSAA General Insurance Brokers works with a number of specialist underwriters for marine pleasure-craft insurance, and regardless of size or use (personal or commercial) of the vessel, we'd be able to broker for you a competitive premium.

Another thing to consider are accessories such as skis, life jackets, radio equipment and GPS units. These need to be covered too and it's best to specify them under the pleasure-craft policy to avoid confusion if there's a claim.

SSAA General Insurance Brokers can guide you through this process. On our website (ssaaib.com.au) you'll find a boat insurance quote form you can complete and submit. Alternatively, give us a call on 08 8332 0281.

Send questions to: communications@ssaa.org.au

*The advice offered in this column is of a general nature and does not allow for individual situations. SSAAIB recommends that you obtain professional advice before proceeding with any insurance investment. SSAAIB accepts no liability for any actions by an individual to change their insurance plans without seeking professional advice.

Termites taking stock



SOME MONTHS BACK you published a letter from a reader with a rather neglected and corroded rifle he came across in northern Europe. It reminded me of the badly damaged stock on an Australian rifle which had been attacked by termites.

This particular one, a Brno .22 repeating rifle, had been in storage in the Top End of the NT some years ago, but termites managed to get into the storage area and the rifle ended up with a rather interesting pattern of termite damage to the stock.

I've included a photo of the damaged rifle you may be interested in publishing in your excellent magazine.

Peter Radtke, Canberra

Hydraulic Berdan solution

AN INFORMATIVE LETTER from Peter Tanner in August's Australian Shooter about ammunition for the 32-40 Model 94 Winchester mentioned the difficulty in using the RCBS tool to remove Berdan primers. I too encountered this when trying to remove primers from 8mm military brass. Because the primers were sealed

in and also crimped in about three places. I found the tool was too hard to use. If I remember correctly, the tool was useful on used reloaded cases because the original seal and crimps had been broken.

I found the hydraulic method the best way to remove Berdan primers from onceused brass. Fill the case with water then place a snug-fitting short round steel bar inside the neck of the case and hit the bar with a hammer. The water pressure on the primer forces it out of the pocket.

The base of the case must be supported in a blind hole in a piece of timber about 50mm thick. A short blind hole, slightly larger than the diameter of the case base, is drilled about 5mm deep then a smaller diameter hole right through the timber is drilled in the centre of the larger blind hole to allow the primer (and the water) to be driven out. It helps to first remove as much as possible of the crimps that hold the primer in the pocket.

Of course you have to be prepared to get wet and do it somewhere suitable to allow for the used water, which is going to flow.

Bryan Finlay, Tas

Absolutely no faith in the ABC

THE ABC'S FOUR Corners episode Big Guns which aired late last year was, as usual, a targeted anti-gun media campaign. They trotted out the usual suspects for the Gun Control Lobby - Philip Alpers and Roland Browne - even though both

'experts' have been proven to use false, misleading statistics and outright lying when it comes to gun control.

The examples of 'mass shootings' again tried to paint shooting organisations as the evil behind these, yet the two instances shown were NSW Police failures.

The ABC amply demonstrated its anti-gun bias yet again and I urge SSAA members to have no dealings with them. I still want the message of safe, responsible firearms owners, shooters, farmers and organisations to reach the public, but have no faith in the ABC to do that in an unbiased fashion. So much for the 'People's Broadcaster'

Dave Hobbs, via email

Solution to Howa stock issue

I WRITE IN reply to the letter by Daryl (Australian Shooter, October) referring to my review of the Howa HCR combo and the question he poses. Lightweight stocks for the Howa with a pistol grip is a tough one. The Talon your friend has is an excellent unit and the big plus is it's affordable. I've found that fore-end flex can be reduced by filling in the barrel channel with Devcon epoxy putty or similar - I've done this with a few Hogue stocks with good results. Other than that I don't know of any other non-chassis type stocks that have a pistol grip. A custom walnut stock by someone like Hatchers here in Australia could be an option but will be pricey.



The lightest stock I ever had on a Howa was a McMillan EDGE fill carbon fibre unit on a long action 30-06. The stock weighed around 800 grams and cost about \$800 from the US some years ago. Today, waiting times make ordering a McMillan direct from the US a very lengthy proposition.

My advice is go for the Talon if you can get one and try stiffening the fore-end - it may only add 100 grams to the stock so will still be great to carry.

Con Kapralos, SA

Let's raise blood donations

I WRITE REGARDING the article about the great work of our members donating so much valuable blood (Australian Shooter, September 2018). As a long term SSAA member (very proud) and a longer term blood donor (even prouder at more than 500 donations), I fully endorse any and all efforts to increase the flow of donated blood across our hospital system.

The fact is that one in three people will require blood or a blood-derived product in their lifetime but only one in 30 donates. The effort to donate is not great but the result is the direct saving of one or more lives each time.

So to all you SSAA members out there, roll up the sleeve and get into donating blood every 12 weeks or plasma/platelets every two weeks. All you'll feel is good!

Neil Creighton, via email

Disgust at eagle poisoning

I READ WITH disgust an article about the Victorian farm worker who admitted to the poisoning of 406 protected wedge-tailed eagles. His punishment? Two weeks in jail and a \$2500 fine. I would suggest that if any of our members used a firearm to shoot just one wedge-tailed eagle, anti-gun lobbyists would once again be baying for 'tighter gun laws'.

At least shooting them would have been a lot more humane, though I could never contemplate doing such a thing to a truly majestic bird. This criminal should have been made to pay the cost of rearing 406 wedge-tailed eagles and releasing them into the wild.

Peter Johnson, Qld

Spartan shotshells

I RECENTLY RE-READ with interest John McDougall's review of Spartan shotshells (Australian Shooter, October 2017). For many years I collected cartridges and around 1955 I picked up two 12g Spartans, one with an empty case and no primer. They could have been made for reloaders. The other one was N64 shot and both came with a dull vellow-green paper case.

I can't remember the head stamp as to where they were made and was just wondering if they could have been 'related' to the Spartans which John tested.

Ray O'Neil, via email

'Discriminatory venture'

AS A LONG-TIME SSAA member with a lifetime of firearms ownership. I was bemused and bewildered by the recent publication of Australian Women's Shooter as an adjunct to the established magazine. What possible justification (other than commercial opportunity) is there for this strange decision?

In a society which increasingly seeks to eliminate unnecessary gender discrimination in sporting/recreational activities it seems frankly silly, if not actually insulting, to engage in this exercise. Shooters do not discriminate on gender and I am sure that firearms have no particular preference in terms of ownership. A weapon is a tool! Do we design or shape other practical items with regard to gender as opposed to real parameters like size, weight and conformation of the potential user?

Does the female shooter of average size somehow have special needs over and above her male counterpart of similar size? Is she considered inferior by the editor(s)? Why can't articles involving (but not specially about) female shooters coexist with the usual material in Australian Shooter?

Let's stop this nonsense! A shooter is a shooter - full stop. So cut out the glamour and fashion crap and stick to the factual interest of firearms ownership, application and competence. If any doubt of my position exists, let me clearly state that I object to your discriminatory venture without any clear mandate from your subscribers.

Denis Dixon, Qld

Tan your own fox pelts

IN OCTOBER'S AUSTRALIAN Shooter there was a letter from Paul Featherstonhaugh regarding the preparation of fox pelts, what to do beforehand and where to take the fox to have the pelt done. My advice would be to have a go at doing it yourself. A little bit of time and elbow grease (and practice) and you'll be able to produce some quality skins for a fraction of the cost you'll find them on the market.

A taxidermist will no doubt do a flat skin for you but will probably charge more than \$100. A basic tanning kit for around \$65 can produce up to six fox pelts at once. Leder tanning kits make the skin side blue but produce very good quality leather. Pizzari's home tanning kit is another good one, available online, and leaves the skin its natural colour. Both of these kits come with instructions and tools are also available.

The most important step though, whether you're going to do it yourself or take the body or just the skin to a taxidermist, is to treat it like you're going to eat it. Get the body on ice or in a fridge as soon as possible. If the skin isn't kept fresh the fur can start falling out. If you take the skin off yourself, flesh it as best you can, give it a good layer of salt, roll it up and keep it in the fridge until ready for tanning.

Daniel Musgrave, via email

Sticking with the SSAA

Thanks for the great sticker gift that came with my Australian Shooter in December, much appreciated. The one on my ute was badly needing



replaced. Keep up the good work.

Peter Rumpf, Qld

Keep it brief please

Some of the letters we receive are too long for publication. We ask that letters be kept to a maximum of 250 words. Thanks this month go to Ian Morris of NSW for his thoughts on democracy and the shooting sports, and to Brian Jackson and Terry Walters of Queensland - Editor.

Ducks don't visit dried-up ponds

s I write this column we're entering the time of year when duck hunting seasons are being determined for 2019. Like 2017, last year was another below average one in terms of rainfall across a number of areas in eastern Australia.

The Weekly Times reported the Richard Kingsford-led Eastern Australia Waterbird Survey team had trouble finding waterbirds in many areas during their annual aerial survey. Although the journalist did his best to imply that a poor survey result would cast doubt on the next year's hunting seasons, there are other considerations taken into account. The first and most relevant is that ducks don't sit on dry ponds and generally use their wings to fly somewhere that has water and resources.

The article quoted Dr Kingsford as saying "I don't know where the birds are ... I think during these long dry periods a lot of them die." Such comments from someone whose work is relied on in part by agencies to help determine hunting seasons has raised many evebrows. With comments like that, hunters involved in on-ground bird counts and the season-setting process are even more determined to find better tools to predict wild duck populations for these processes.

The restricted nature of the Eastern Australian Waterbird Survey is only useful for providing a trend of waterbird observations in selected areas. If those areas are dry, waterbirds will take flight to other places, resulting in low observations. The main focus of this survey should be on the variables that can't move around and that is wetland condition.

I suggest a name change to the Eastern Australian Wetland Survey would be more appropriate and useful. Wetlands provide breeding and support areas for water birds so it makes sense to keep them in the best condition we can. A survey highlighting the poor condition of these natural resources should be used to seek improvements in infrastructure and environmental flows. Build habitat and they will come.

This is something that can be seen throughout rice-growing areas. As wetland conditions deteriorate these areas attract an influx of waterbirds, especially ducks. Of course these agricultural waterbodies are not included in Kingsford's survey, nor are private farm dams and open irrigation channels scattered across the country.

Australia has in excess of two million farm dams (Land & Water Australia, 2010) with approximately 450,000 in Victoria (DPI Vic. 2014). During dry periods these dams provide essential habitat for waterbirds when other natural wetlands or floodplains dry up. A journal paper by Hamilton et al (2017) on waterbird use of farm dams in Northern Victoria highlights a worthy point. Individual



farm dams are only ever likely to host a small number of waterbirds relative to much larger wetland systems, but the sheer number of them means their total contribution as habitat for waterbirds is highly significant.

This paper makes the bold assumption that if similar numbers of birds found in their study were found on farm dams throughout the Murray Darling Basin, the 710,539 farm dams in the Basin could collectively host 12 million water birds averaging 16.45 birds per dam. New South Wales also has more than 8000kms of open irrigation channel that water birds can be found using.

To address Dr Kingsford's quote in *The* Weekly Times, the waterbirds have not all died, they've moved from large dry wetlands to smaller water bodies such as farm dams and irrigation channels across the landscape.

Send questions to: wildlife@ssaa.org.au















Colour discrimination

hese days, any act of colour discrimination is considered, socially speaking, to be about as gross an action as can be imagined and rightly so. However, by contrast about a century ago the ballistic world was working frantically in this 'colour' field to replace the existing gun propellant (one that had been around for centuries and was as black as soot) with something that was more efficient, more effective, safer to make and to handle. Many materials had been tried but had all been found deficient in some major regard, often dangerously so.

This (so far mythical) new material was going to differ so greatly from the existing black powder that it was commonly nicknamed 'white powder' even though most ballisticians and shooters never really believed it would ever actually come into service, certainly not in their time at least.

Meanwhile, the English defence laboratories had identified the main problem with existing powders as being concerned with the charcoal that formed about 75 per cent by weight of the old propellants - it was the item that gave them (the powders that is, not the ballisticians) their sooty black appearance and that produced a large amount of the obnoxious end-product smoke.

This charcoal was made by the age-old process of roasting stacks of wood with restricted access to air, providing just enough air to allow only a small part of the cellulose and lignin in that wood to burn, so heating the rest of that material to char into charcoal.

Not just any old wood of course, but selected logs of dogwood (preferably) about 2" to 3" in diameter, freshly cut in early autumn and aged for at least three years. Unless this process was carefully set up and monitored, it could easily produce more ash and trash than charcoal - and all of this material (good, bad or indifferent) subsequently went into the next batch of propellant. The commercial powders were often considerably better than this since they were made in smaller, more closelycontrolled batches.

It had been known for years that larger grains of powder were preferable in many ways during the firing, but the old traditional powder was just too weak to hold together in such a form during handling and loading. However, if the charcoal under consideration had originally been charred at a lower temperature (ie, had been 'slack-burned'), it retained much of its original fibrous nature and the resultant powder was mechanically much stronger and could be moulded into the requisite 'much larger grains'.

But, and there's a 'but' or two of some kind, it was harder to ignite and less energetic, therefore requiring heavier charge weights. It was, incidentally, of a much lighter colour - something of a very dark chocolate brown - and earned itself the name of 'cocoa powder' which was as near as ballisticians ever came to their hoped-for 'white powder' by this whole process.

They did, of course, eventually produce powders that were really white when they got around to chemically nitrating the cellulose to give nitrocellulose but that was a couple of decades, and many nasty accidents ahead, and is another story entirely.

As a conclusion to this long involved tale, it's a pleasure to point out that the 'fickle hand of fate' which is so often used by historians to invoke some notable shortcomings does, in this instance, actually become a blessing.

By the time that all of the fiddling around had taken place, the ballistic 'clock' had ticked over to the stage that a new small arms cartridge system was being introduced into operation and the incoming 0.45" Martini Henry system was in an ideal position to take advantage of this cocoa powder. In fact, the new higher charge volume required thereby came out as being on the credit side, since the chosen cartridge case (a modified Snider case) was already slightly oversize and didn't need to be changed.

This new Martini Henry cartridge was the last one to come into general service using black powder and its new RFG (Rifle Fine Grain) powder was the best of its breed.







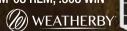
Introducing the VANGUARD® CAMILLA™

Named after the first lady of Weatherby - a women's rifle built from the ground up based on measurements and suggestions from women at all ends of the globe.

DESIGNED BY WOMEN BUILT BY WEATHERBY

- Short, slim forearm reduces weight and provides better over-all feel
- Cold hammer forged #1 profile 20-inch barrel
- Satin finish, Turkish A-grade walnut with rosewood fore-end and grip caps creates an elegant look
- Fleur-de-lis chequering pattern
- Pistol grip features trigger finger groove, right side palm swell, slim radius, and short grip-to-trigger reach for consistent trigger contact and increased control
- High comb provides optimal cheek weld and eye-to-scope alignment for faster target acquisition
- 13" length of pull reduces weight and overall length, creating a more compact balanced and faster-handling rifle that fits a wide range of women shooters
- Buttstock features a negative angle, reduced heel-to-toe dimension and toe angled away from the body to better fit woman's anatomy
- Assembled in California, USA.

AVAILABLE IN THE FOLLOWING CALIBRES: .223 REM, .243 WIN, 7MM-08 REM, .308 WIN





OUR MISSION: EMPOWER & INSPIRE

\$1550







It's about making the right projectile choices

he main function of a cartridge is to get the bullet or projectile accurately to the target or animal in question - it's the projectile that actually puts a hole in the 10 ring of the target or drops that trophy deer. The type of projectile we choose depends on many factors including the calibre of firearm we're using, the type of game we're hunting (small, medium or large), the distance we're shooting (close, medium or long range), or perhaps we're shooting at targets in which case accuracy is the prime concern.

There are plenty of local and overseas projectile manufacturers, some have been in business for many years while others have come recently into existence by catering for a niche market, and the projectiles they make represent the best proven designs available, the shooter ultimately choosing which type and make best suits his or her requirements.

Brand names like Silvertip and Core-Lokt have been made by Winchester and Remington for years and remain very popular, while relative newcomers like Barnes and Woodleigh have a good following among target shooters and hunters.

First up let's talk about hunting small to medium-sized game like rabbits and foxes. Usually a small calibre rifle such as a .22

If many of your shots are taken at what I call long range, 300m or more, I'd choose a boat-tail projectile.

Hornet, .223 Remington or the like would be employed, using 40 to 60gr projectiles. Now because these smaller animals are thin skinned the need for penetration is not an issue, so a projectile with a light copper jacket and exposed lead or plastic tip that expands rapidly, like the Nosler Ballistic Tip, is ideal.

If we're hunting larger game like kangaroos or goats the same cartridges could be used but it would be preferable to use heavier 55 or 60gr projectiles. I tend to increase the calibre of the rifle I use rather than the projectile weight, but I know lots of kangaroos and goats are shot to good effect with the lighter weight projectiles.

If many of your shots are taken at what I call long range, 300m or more, I'd choose a boat-tail projectile. These have a higher Ballistic Coefficient than similar projectiles of the same weight and calibre and, because they have lower air drag, retain their velocity better, meaning they have more energy at the same range and drop less. This is a distinct advantage at longer distances where we need the knock down energy to be at a maximum and where estimating the range is more difficult, so holdover is kept to a minimum.

Moving on to medium and larger-sized game like goats and pigs, because we want the projectile to penetrate these animals and not just blow up on the surface, a heavier and more robustly constructed projectile is required. The cartridges should also be heavier and the .243 Winchester, .270 Winchester and similar using 80 to 120gr projectiles are ideal.

Also popular for this type of game are even heavier cartridges like the .30-30 Winchester, .44 Remington Magnum and the .45-70 using round-nosed or flat-nosed projectiles in weights varying from 150 to 400gr. These heavy projectiles, although moving at only medium velocities, if placed right will put down any of these mediumsized animals. These same cartridges could also be used to bring down Australia's' heavy animals like red deer or water buffalo, but correct bullet placement would be needed to ensure a rapid and humane kill.



Quad Rest is an Australian gun rest designed by Smart Rest. Made from steel it's built tough. Great for shooting off Quad Bikes, Utes and UTV's. Quad Rest swivels, pivots and supports the rifle while you drive providing great accuracy and range. WWW.EAGLEYEHG.COM.AU

DEALERS LICENCE NO: 409564311 S P O P t S We aim to please

PH: 02 9882 2689

\$15 flat rate post

for all orders anywhere in Australia.

*Excluding firearms and



Leupold VX-Freedom



VX-Freedom 3-9x40 Rimfire.......\$365
VX-Freedom3-9x40 450 Bushmaster.\$440
VX-Freedom 3-9x33 EFR\$540
VX-Freedom 4-12x40 TRI MOA.....\$540

VX-Freedom 3-9x40 CDS Duplex \$530

VX-Freedom 3-9x40 AR mil TMR \$440

Leupold Thermals Leupold LTO Tracker

Leupold LTO Quest HD Thermal Leupold LTO Quest Thermal....



VX-6HD Scopes

VX-6HD 1-6x24	\$2090
VX-6HD 2-12x42	\$2180
VX-6HD 3-18x44	\$2575
VX-6HD 3-18x50	\$2735
VX-6HD 4-24x52 34mm	\$3220



VX-R Scopes	
1.25-4x20	\$845
2-7x33	\$845
3-9x40	\$845
3-9x50	\$1010
4-12x40	\$1095
4-12x50	\$1180



VX-5HD Scopes

VX-5HD 1-5X24	\$1180
VX-5HD 1-5X24 Illuminated	\$1290
VX-5HD 2-10x42	\$1180
VX-5HD 2-10x42 CDS ZL2	\$1290
VX-5HD3-15x44 CDS ZL2 SF	\$1450
VX-5HD3-15x44 CDS ZL2 SF Illum	\$1610
VX-5HD 3-15x56 CDS ZL2 SF Illum.	\$1775



Leupold LRP (Long Range Precision) All 30mm tube with Side Focus First Focal Plane Models Available (FFP)

VX-3i LRP 4.5-14x50 Second Focal Plane. \$1370 VX-3i LRP 4.5-14x50 First Foical Plane.....\$1530 VX-3i LRP 6.5-20x50 Second Focal Plane. \$1450 VX-3i LRP 6.5-20x50 First Focal Plane......\$1610 VX-3i LRP 8.5-25x50 Second Focal Plane. \$1530 VX-3i LRP 8.5-25x50 TMR Ret FFP\$1610

VX-3i - Includes Delivery

VX-3i 1.5-5x20	only \$675
VX-3i 2.5-8x36	only \$675
VV 3i 3 5 10v40	only \$675

VX-3i 4.5-14x50	only \$930



VX-3i 3.5-10x50	\$790
VX-3i 3.5-10x56 30mm Illuminated.	.\$1370
VX-3i 4.5-14x40	\$840
VX-3i 4.5-14x40 30mm Side Focus.	\$840
VX-3i 4.5-14x50 30mm Side Focus.	. \$1095
VX-3i 4.5-14x56 30mm Illuminated.	.\$1610
VX-3i 6.5-20x40 EFR TGT	.\$1175
VX-3i 6.5-20x50 30mm Side Focus.	\$1450

RANGEFINDERS Leupold RX-2800 TBR/W......\$840 Leupold RX-1600 TBR/W Camo......\$710 Leupold RX-1600 TBR/W Blaze Orange...\$710 Leupold RX-1300 TBR/W\$405 Leupold RX-1300 TBR/W Camo\$440

Leupold RX-650\$365



Federal Small Pistol Primer Special While Stocks Last \$69 per 1000. \$627 per 10000



RCBS Chargemaster Lite Limited stock at just \$429



B Bushnell

Bushnell Specials Bushnell 3500 3-9x40 Multi-X Japanese Made. Lifetime Warranty. Was \$380......Now Just \$265

Trophy Xtreme	2.5-10x44	.\$305
Trophy Xtreme	4-16x44	. \$345
Trophy Xtreme	6-24x50	.\$410





Bushnell Rimfire 3-9x40 BDC Turrets...\$235 Bushnell Rimfire 3-12x40 BDC Turrets.\$240 Bushnell Rimfire 6-18x40 BDC Turrets.\$250

Spotting Scopes)
	\$345
Trophy Xtreme 16x48x50 Kit)\$290
Sentry 18-36x50 Kit	\$220
Legend Ultra HD 20-60x80 Kit	\$810

Binoculars Trophy Bone Collector

Bushnell Fusion One Mile Arc10x42 Laser Rangefinding Binos Was \$1465 now \$1299





NEW GRS Bifrost	\$855
Available for Tikka, Howa/Vanguard,	
Savage 10 & 110, Rem 700 and Maus	er 98



GRS Berserk \$735
Available for Tikka T3 and T3x, Tikka CTR,
Savage 12 & 16, Rem 700 Short and Long
Action, and Howa Short Action.



GRS Sporter Stock	\$965
GRS Sporter Stock Blank	\$880
GRS Hunter Stock	\$965
GRS Hunter Stock Blank	\$880
GRS Hybrid Stock	\$1115
GRS Hybrid Stock Blank	\$1030
GRS Kelbley X-Eater Stock	\$1115
GRS Kelbley X-Eater Blank	\$1030





Pelican 1750 Case	\$470
Available in Black or Desert Tan	•
Pelican 1720 Case	\$395
Available in Desert Tan only	
	Available in Black or Desert Tan Pelican 1720 Case



HARRIS	M
Harris Bi-Pods Harris L or BR Bi-Pod Harris Swivel L or BR Bi-Po	- X

2 MONTH LAY-BY WITH A 20% DEPOSIT

.\$560 MON-FRI: 9am - 5pm SAT: 8am - 3pm PRICES SUBJECT TO CHANGE



10x42 M Series...

You can't do without it

was hunting in Europe recently with a couple of friends who live there. Despite the threat of bad weather which was forecast for later in the day, they thought it would be a good time to take a look at some of the remaining hedgerows in the region. One aim was to gather enough wild plants to make four different soups that were regularly cooked when the country was occupied by Axis forces during World War Two.

Another aim was to see what animals could be obtained to help feed the guerrilla forces living in the forest 10km away at the time of the WWII conflict. Our first walk along a thick hedgerow flushed out two Ring-necked pheasants. They'd been introduced into the country many years previously when the local population of Black Grouse declined due to over-exploitation. Unfortunately the only one of us carrying a firearm had brought a rifle



US (left) and French water bottles - the red paracord prevents the chain rattling against the bottle.

firing Winchester .308 as we thought there was a chance we might encounter a wild boar.

The birds flew off while we continued to pick young nettles, plantain leaves and a herb called berce. We were pretty well rugged up and, despite the cold and to my surprise, drank a lot of water during the walk. We each carried two ex-military aluminium French water bottles that hold a litre and although they're heavier than the more easily obtainable US versions have some other advantages, but mostly they can, with care, be placed straight on a small fire.

We had emptied five of the six we carried by the time our walk ended and had enjoyed a cup of hot tea at the spot where we turned back to the vehicle. In the afternoon we went to a forest, this time with a 12-gauge shotgun but, you guessed it, all we saw was a wild boar! However, herbs there were aplenty at the edge of the tracks so we wouldn't starve.

Then the snow came and luckily we each had a shelter/tarp, plenty of cord to rig it and lots of warm clothes if we were stranded. We returned to the vehicle through the snow and rigged up a couple of tarps, partly to test our cold weather skills but mainly to shelter beneath while we made a warm drink. Hot mugs of drinking chocolate soon produced smiles and we tackled the job of fitting chains to the wheels with a new burst of energy.

Not coming from a land where snow is a



Water bottles in their belt pouches - US bottle in an after-market Aussie pattern that lets you put a bit more gear in the pouch.

regular occurrence, I was pleased my friends had insisted the vehicle was well equipped and each of us carried enough gear to endure an uncomfortable but warm night in the forest if necessary. The bonus was that with the fresh snow and a small fire, we could produce water quite readily.

A news report from Australia later that night told of yet another tragedy in a remote area where a group was stranded without sufficient resources to ensure their survival. I thought of one of the TV shows I'd seen where a French chef said with tongue in cheek that when cooks were in doubt about a recipe they should

'add butter!' Perhaps for travellers and others in the world's driest continent, Australia, the adage should be 'add water'.





MIDAS TAC

CAPPED WINDAGE

30mm TUBE

ZERO STOP

FIRST FOCAL

UD GLASS

APRS2 FFP IR MIL reticle is designed for precision rifle series competition. Features a unique design of a fine .2 mil hash mark increments from centre to 6 mils to both left and right. The floating 0.003 centre dot draws a shooter's vision right on target. The total elevation travel of both scopes is 25 & 30mm.



4-16x44 SRP \$1,149 6-24x50 SRP \$1,249





A few people have coached me over the years and I've found I'm pretty much back to where I started 10 years ago. I shoot a variety of events I admit may stop me becoming a master of any, but I do enjoy being able to shoot at a variety of clay target venues around Sydney nearly every weekend.

My question is simple. Is there one piece of advice you can give that might change me? I'm realistic - at age 47 I know I won't be going to the next Olympics but feel I'm wasting time and money taking generic advice from professional coaches. Name and address supplied

As I've no way of knowing who has coached you, what advice you've been given or what skill level you're at, your question becomes almost impossible to answer in such a short space.

While 10 years may sound a long time, in competitive shooting terms you have time in front of you to achieve substantial goals in the sport. In clay target shooting, 47 years of age isn't even the minimum international veteran's age so please don't despair.

My simple advice is persistence. I'm in no doubt you'd have received some great advice over the past decade - the trick is sorting out the good from the bad. Helpful coaching tips will take time to

implement and often you won't know if a new technique has helped until you're put under substantial competition pressure. A 'never give up' attitude will take you a long way in clay shooting as consistency will always win in the end.

For many years I travelled the world with the Australian shooting squad and in the Skeet team for almost two decades was a guy called David Cunningham. When I first met him he was a very capable Sporting Clay competitor, but it would be fair to say David went on to become one of the country's best all-rounders having won national titles in American Skeet, Sporting Clays and being runner-up in a national DTL competition.

The lure of representing Australia at the Olympic Games was the motivating factor that saw David get involved with ISSF Skeet in the late 1980s. It would also be an honest assessment to say he wasn't the most gifted natural shooter I've seen as he had to work and train hard to achieve anything. But the one attribute I rated David Cunningham higher in than just about anyone I've ever met was his ability to grind out a competition to the bitter end.

Many times I know fellow competitors had written him off only to be left standing in the crowd at the trophy presentation listening to his acceptance speech. He ended up becoming a World Cup finalist and silver medallist as well as a dual

Olympian and went from Sporting Clay competitor to Olympian in less than a decade, finally retiring from international competition just shy of his 50th birthday. A true and loyal friend and I miss my travels with him.

I always cite David as an example to young shooters as it's this attribute of perseverance that can overcome any other advice you're given, not only in your sporting life but your working and personal life too. It's no surprise David went on to become a very successful businessman in the agricultural and farming community.

You can change your stance, guns, ammunition, recoil pad and about a thousand other things, but unless you're prepared to persevere over time and record in a training diary what you have and haven't tried, you may very well be going round in circles. Set some honest and realistic goals, surround yourself with positive people, take responsibility for your actions and, above all, persevere under the pressure of competition.

I know it may sound like more psychiatric rhetoric, but it's one of the cheapest and most practical pieces of advice you'll ever receive. Good luck in your shooting.

Send questions to: russell@goshooting.com.au



Full steam ahead for Melbourne 2019

AUSTRALIA'S BIGGEST GATHERING and celebration of the shooting sports is heading back to Melbourne. The premier event for the Australian sports shooting industry - showcasing shooting, hunting, outdoor trades and so much more - will be held at the Melbourne Showgrounds on the weekend of October 19-20

With more than 160 exhibitors displaying their finest wares, the SSAA SHOT Expo is one for every shooting enthusiast's diary. It will feature expert talks, new products, working gun dog demonstrations, activities for children, prize giveaways, Olympic Games shooters, an indoor range and much more.

Visitors will have the chance to get hands-on with the latest products and services in the shooting sports, safety and training, conservation, ethical

hunting, responsible shooting and shooter protection. Tickets are just \$20 for SSAA members and children under 15 are admitted free if accompanied by an adult.

As many will be aware, the SSAA SHOT Expo had to clear some unexpected hurdles after event organisers the Exhibitions Group (independent of the SSAA) went into voluntary liquidation. But the Association has kept the event alive and we're hoping to top the 15,000-plus crowd which attended the last Melbourne Expo.

You can follow the SSAA SHOT Expo on Facebook or visit ssaashotexpo.org.au for more information including exhibitors, prizes and other announcements over the coming months. Put the date in your diary now and we look forward to seeing you there.



Like the last Melbourne SSAA SHOT Expo, the 2019 event will be all smiles.



Remington

Whin a

783 JACKAROO Every month for 12 months

Exclusive to SSAA members.

Simply follow Raytrade on Facebook or Instagram, like our Jackaroo post and follow the prompts to be in the draw to win one of these fantastic new 783s every month for 12 months!



Calibres available - .223Rem, 6.5 Creedmoor & .308Win Includes Lucky 13 10-round magazine,
Oversized bolt handle and Picatinny rail
Retail value \$999

See Raytrade Facebook page for full details







27 Beaconsfield St, Margate, Qld 4019 Ph: 07 3883 1733 Fax: 07 3284 6611 Mobile: 0419 644 269

www.cleaverfirearms.com





BREAKTHROUGH Battlerope Pull-through cleaner Available in all cals NEW \$21.90



BREAKTHROUGH
Vision Series Rifle Cleaning Kit
Available in .17 cal, .22 cal, .243 cal, .25/6.5, .270/7mm, .30 cal & 12ga
NEW \$44.90



BREAKTHROUGH
Military Grade Solvent
6oz Pump NEW \$19.90
16oz Pump NEW \$33.90



BREAKTHROUGH
Purity Oil 6oz **NEW \$19.90**



BREAKTHROUGH Copper Remover 6oz NEW \$19.90





WILSON COMBAT 1911
40TH Anniversary, cased with two mags,
Available in 9mm or .38 Super
NEW \$5990



WILSON COMBAT 1911
Classic, 9mm, 10-shot, cased with two mags, stainless steel, adjustable sights
NEW \$6299



WILSON COMBAT 1911 XTAC Elite, 9mm, 10-shot, cased with two mags NEW \$6390



WILSON COMBAT Beretta 92G Brigadier, 9mm, 10-shot, cased with two mags NEW \$2395



WILSON COMBAT 92G Vertec 9mm, 10-shot, cased with two mags NEW \$2890



WILSON COMBAT 1911 Mags 9mm 10-shot **NEW \$79.90** .38 Super 10-shot **NEW \$69.90** .40 S&W 9-shot **NEW \$69.90** .45 ACP 8-shot **NEW \$59.90** .45 ACP 10-shot **NEW \$69.90**



WILSON COMBAT 1911 Vickers Elite, 9mm, cased, with two mags NEW \$6950



WILSON COMBAT 1911 CQB
Custom long slide 6", 9mm, 10-shot,
cased with two mags
NEW \$5690



BERETTA M9-92FS Inox 9mm, 10-shot, stainless steel, cased with two mags SPECIAL NEW \$985



BERETTA NEOS Inox .22LR, 10-shot, stainless steel, cased with two mags SPECIAL NEW \$449

BERETTA NEOS Black
.22LR, 10-shot, blued, cased with two mags
SPECIAL NEW \$379





SAUER \$100 Classic XT
Blued synthetic detachable mag,
most popular cals
NEW \$975



SAUER S100 Classic Blued timber detachable mag, most popular cals NEW \$1095



SAUER \$100 Ceratech Cerakoted grey ice finish, synthetic, detachable mag, most popular cals NEW \$1095



SAUER S100 Cherokee
Cerakoted tundra green finish,
synthetic camo stock, detachable mag, most
popular cals
NEW \$1225



LUCKY 13 Sauer \$100-101 10-shot magazine .223 Rem **NEW \$139** .243-308 Win **NEW \$139**





MDT Oryx Chassis
Includes stock and grip
The ORYX is an affordable aluminium
chassis that replaces your rifle stock
to help provide a more accurate and
ergonomic shooting experience.
Available for: Howa 1500 SA,
Howa Mini Action, Remington 783,
Remington 700 SA, Tikka T3 SA
Mauser M18, Ruger American SA
SPECIAL NEW \$549





LITHGOW LA102 Crossover
Titanium Cerakote, synthetic stock,
threaded muzzle, Pic rail,
detachable mag, .223 Rem, .243 Win,
6.5 Creedmoor & .308 Win
NEW \$1315



LITHGOW LA102 Crossover Black Cerakote, synthetic stock, threaded muzzle, Pic rail, detachable mag, .223 Rem, .243 Win, 6.5 Creedmoor & .308 Win NEW \$1315



LUCKY 13 Lithgow LA102 10-shot magazine .223 Rem **NEW \$129** .243/308 Win **NEW \$129**



MARLIN 1894SBL
Stainless steel, laminated stock,
XS Pic rail & peep sights,
16.5" barrel, big loop lever
Available in .357 Mag or .44 Mag
NEW \$1965



MARLIN 1894CST Stainless steel, black stock, XS peep sights, threaded muzzle, 16.5" barrel, big loop lever Available in .357 Mag NEW \$1965

Remington.



REMINGTON Model 7 Kuju .300 Black Out, 5-shot, Camo synthetic, 16.5" threaded brl NEW \$1229

SIGSAUER when it counts:



SIG SAUER P320 9mm, 10-shot, cased, with two mags, white dot sights SPECIAL NEW \$895





XS Ghost Ring Sight Sets Available for: Marlin 1894, 336 &1895 Marlin 39A Rimfire Winchester 94AE



XS Scout Pic Rail Available for: Marlin 1894, 336 &1895 Mossberg 464 Winchester 94AE **NEW \$89.95**

XS Full Length Pic Rail Available for: Marlin 1894, 336 &1895 NEW \$104.95



XS Ruger Gunsite
Full length Pic rail with
ghost ring rear sight
NEW \$154.95

www.cleaverfirearms.com \$\$\$ Monthly Prizes !!! See the specials first and subscribe today EXCLUSIVE WEB DEALS!

Got a question - ask our OP SHOTS



• John Dunn • Paul Miller • Greg Riemer • Geoff Smith • Barry Wilmot

email: edit@ssaa.org.au

The subject came up recently about the engraving on the .30-30 I have and my mate suggested the type of engraving I was talking about was on the Wrangler 94 which came out in .32 Special. The rifle is clearly stamped .30-30, chambers and fires this round and is stamped as a Wrangler. The lever has a large ring, as if for a gloved hand shooting in cold conditions. I've included some photos and wonder if you could help us out.



Kerry Wade







The original M1894 Winchester Wrangler was available from 1983-1985. First rifles were in .32 Winchester Special while those made in 1985 were also available in .38-55. The Wrangler was again made available in 1992, offered in .30-30 and .44 Magnum until 1998. In 1999 the .45 Colt was added to the list.

Standard engraving is a wagon train scene on the left side of the receiver and a gold panning scene on the right. As on most 94 rifles the calibre is stamped on the left side of the barrel while Wrangler is stamped on the right. Standard barrel length was 16" and all had the distinctive big loop lever together with a saddle ring on the left. Production is said to have been around 8000 rifles so I guess that makes them

something of a collector's item compared to other M94 variations.

Value of the rifle varies according to condition, with those in original condition attracting a premium price. I'm not a Winchester collector but would suggest a Wrangler in good to very good order would probably fetch around \$500 in the current market. Hope this helps.

John Dunn

I have a question about my Brno Model 2. It was my father's and is about a 1975 vintage with a 4-power Pecar scope bought at the same time. It has been a sub-MOA rabbit killer until about a month ago when I lined up a head shot and it did something that almost never happens. It missed. Out to the range and the group is about 200mm at 50m. I stripped the rifle and changed the scope to no avail. The barrel has never been cleaned. Any thoughts appreciated.

David Proctor, via email

We Aussies love our super-accurate Brno Model 2s don't we, especially when they have a family history like yours David. It's odd that your superb Brno/Pecar combination should suddenly lose its accuracy and start turning in such large groups at 50m. The obvious answer to me would be a change of ammunition or perhaps the mounts are loose. The other thought I had was the reticle in the Pecar coming loose, though that would be almost unthinkable from such a high-quality scope.

If the barrel has never been cleaned I suggest trying that, although rimfire rifles are nowhere near as sensitive to the need for barrel cleaning as centrefires. Mind you, if it really has never been cleaned there must come a time when accuracy drops off and the barrel needs a thorough overhaul. From memory I think Anschutz recommends cleaning their rimfire target rifle barrels every 4000 rounds.

If cleaning the barrel fails to restore accuracy and the scope and mounts are fine, I guess we're left with a bedding problem, if the barrel channel got unusually wet and

is bearing on some part of the barrel. The last possibility is you've lost the plot and become a trigger slapper like me from too many years of competitive shotgunning!

Step by step, remount the scope and ensure the mounts are rock solid, clean the barrel and make certain it is free floating and you should resolve this temporary hiccup and those rabbits will be in serious trouble again.

Paul Miller

A friend and I shoot metallic silhouette on our local 100m range and want to experiment with .44 calibres. While our .357s are adequate for 100m, we're concerned they won't knock the rams over when we shoot on ranges that have the proper 200m facilities.

My choice is .44 Special as it has enough power and a reputation for being accurate. plus I'm not a fan of heavy recoiling handguns when attempting a number of shots accurately. However our research into readily available, good quality revolvers - to which we'd fit red dot sights - shows that while makers like S&W and Ruger list .44 Magnums in suitable versions, eg, barrel lengths in the 7-9 inch range, none appear to list .44 Specials any more. So I wonder whether .44 Magnums loaded down to .44 Special velocities are as accurate as .44 Specials?

If we use .44 Magnums we'd use .44 Magnum cases to ensure the positioning of the bullet relative to the throat is optimum. But there may be issues such as loading densities given the larger capacity Magnum case. We may have no choice but to go with .44 Magnums but I'd love to hear from someone who may have tested this or heard of someone who has, as to whether or not we're compromising accuracy.

John, via email

Great question John with a number of aspects to it. For starters it looks like you're set on this project and I don't want to discourage you from experimenting, however I do prefer using cartridges for which the gun is chambered rather than the shorter .44 S&W Special case, as in your question. I can't comment on the accuracy of the .44 Remington Magnum over the Special as I've had no experience loading either, but if you do go down this road, only experimenting will tell you. I don't believe powder load density would be an issue.

Secondly, the heavier .44 calibres are perfectly legal for the Metallic Silhouette discipline and will guarantee knocking over the rams every time. However, in terms of accuracy, most competition shooters believe the .357 Magnum with a 200gr gaschecked lead bullet will outshoot the .44 Magnum over 200m.

Thirdly, the .44 Remington Magnum, .44 S&W Special, .41 Remington Magnum and .357 Remington Maximum were indeed used almost exclusively in the 1980s and early '90s because of the heavy rams. Then the rule changed regarding the way the ram's feet were set on the rail at 200m to allow lighter loads to knock them over. The rule change came about because the recoil of the heavy loads were knocking both the guns and shooters around too much.

Finally, I'm not sure of what rulebooks you're looking at but neither IMSSU or IHMSA (the silhouette regulators in Europe and America) allow optics in the Big Bore Revolver match. Optical sights are allowed however, in the Field Pistol - Any Sight match at 100m.

Rod Pascoe

We have a firearm that has been in the family for well over 100 years. I believe it's from the mid to late 1800s and think it could be an English Bull Dog. The cylinder holds six rounds and the bore diameter appears to be about 8.5mm. The markings include an oval stamp with a crown above and the letters 'ELG' as well as the digit 7 with a star above. This is repeated on the barrel with an 'R' above the star. The grips appear to be made from hard rubber. I was wondering if anyone could shed some light on this.

Gerard Searl, via email



Your gun is definitely made in the Bull Dog style, which is a solid frame revolver loaded one round at a time via the side gate. It was (probably) designed by Henry, son of Philip Webley of Birmingham, England. The double action mechanism had previously been patented by Joseph Bentley in 1857 while the swivel ejector was a John Adams patent from 1872. The gun was a smaller, civilianised version of the Royal Irish Constabulary revolver which, once released, became an instant success and, much to Webley's consternation, very widely copied. It looks like your gun is a .32 calibre Belgian-made British Bull Dog-style revolver. Many thousands of these were made in the Liege area between 1880 and the early 1900s in calibres ranging from .22 through to .45 in both centrefire and rimfire. In his book The British Bulldog Revolver: The forgotten gun that really won the west! George Layman (Andrew Mowbray Publishers, USA 2006) gives a detailed description of the origins of this very interesting old gun, many thousands of which found their way to Australia. Yours appears to be a very nice example with the engraving on the frame and cylinder. More information can be found in my article in Australian & New Zealand Handgun No. 8. Geoff Smith

I have been a reloader for many years and always use good reloading manuals and equipment. I've been fascinated by the many notes and comments on the dangers of reduced loads causing excessive and even dangerous pressures in rifles.

In the ninth edition of the Hornady

Handbook of Cartridge Reloading on P.69, Item 11 under the heading 'Keep it safe', the advice is "Don't use reduced loads of slow-burning powders. Reduced loads can produce both high pressures and unpredictable results. Don't test your luck on the subject." A similar warning is on P.215 for the .243 Winchester cartridge.

An ordinary person might assume, apparently quite wrongly, that less powder means less pressure. Do your experts have an explanation for this apparently unusual occurrence?

Bill McKechnie, via email

The question of whether reduced powder loads in rifle cartridges can cause dangerous pressures has been with us for many years, mainly in an effort to find out the reason for mysterious 'blowups' of rifles that have occurred. After the event it's very difficult to ascertain the reason for the 'blow-up', as both the powder and projectile have disappeared.

The most common explanation is the projectile, as a result of the low powder charge, has not exited and become stuck in the barrel without the shooter realising it. The next cartridge is fired and this projectile is stopped momentarily by the blockage in the barrel, and the resultant high pressure either leads to a bulge in the barrel or, in the worst case, destruction of the rifle.

Unfortunately the development of this excessively high pressure using reduced loads has been unable to be shown under lab conditions, and in fact a ballistics lab in the US once offered \$100,000 as a prize to anyone able to demonstrate this phenomenon. The prize remained unclaimed for years.

So the question of dangerous reduced loads still remains unanswered but it appears to be prudent that, when reloading cartridges, always consult a reputable reloading manual and don't load less than 80 per cent of the recommended powder load.

Barry Wilmot

The Top 10 calibres across Australia

Scott Heiman

itting with mates around a campfire the conversation turned to the question of our firearm 'wish lists'. Given we were a group of people from similar personal or professional backgrounds, it probably wasn't a surprise there was a lot of commonality between our respective inventories. Many mentions were made of a jungle carbine or sniper .303 SMLE, others with their eyes on a heavy barrelled .308 Win. Then one of the group said he was considering a .45-70 Government.

As this bloke is seen among us as being a thoughtful individual, and we know he isn't a collector, we were a bit surprised. "What the hell for?" we asked. His answer: "Just because..." This simple response provoked conversation that kept us engaged well into the night and raises an issue around prioritisation. We can't have everything in life - so what criteria should we apply to a decision to buy a firearm?

Know your needs

The key reason we baulked at the mention of a .45-70 Government was we couldn't work out what need our mate was trying to satisfy. Our campfire consensus was this was a bone-crushing, slow-moving, heavy short-range cartridge. While we reckoned it would work well in close country when facing a grizzly bear or on horseback during a civil uprising, we agreed this was an unlikely scenario in the circumstances.

A situation closer to home would be the hunter operating in the north dealing with the prospect of buffalo or in the west with a camel at a stretch. For our mate, the best justification centred on the fact he lives on an escarpment area with a high population of deer and pigs within Gondwana-style wet sclerophyll forests. So yes, on reflection

we could see a situation where a shortbarrelled lever action might be just what the doctor ordered.

Look downstream

With broad justification for the .45-70 settled the issue turned to the downstream costs associated with the firearm. Dealing with a calibre that isn't conventional, ammunition can be expensive and hard to find in local gunshops. On hunting trips we've had trouble simply finding SG, SSG or solids for a 12-gauge or .410 shotgun, so we reckoned our mate could be up against it with the .45-70 Government.

And much as you'll have better luck servicing a Hilux in remote Australia than you would a BMW, there's a lot to be said for buying a firearm with a make and calibre that's popular enough to support widespread opportunities for repair and accessories. Failing that, if your choice is unorthodox it's a good idea to spend the money to buy a reliable piece of kit to minimise the need for aftermarket support and enough ammo to see you through the apocalypse, or at least before the price goes up (again).

So where does the collective wisdom of the blokes' campfire brains trust leave us? Well, as the light of dawn began to flicker on the horizon we reckoned we'd nailed it: Buying a firearm is a bit like getting married - sometimes commonsense isn't the main driver. But it's always best to take a leap of faith consciously rather than by accident. So start by knowing your own needs - and the potential consequences of choosing weird. If you do this you'll be well on your way to achieving a happy long-term relationship, regardless of what your mates think.

Top 10 calibre computations

The campfire discussion had us thinking about what would be the Top 10 calibres in this country. Suggestions went in and out of consensus like bees around a hive so when we arrived home we figured we'd bring some certainty to the issue. We took up the challenge to request every firearms registry across this great land to present their facts. Emails, phone calls and (for most states) Freedom of Information requests ensued.

Ultimately only three states (Queensland, NSW and Tasmania) actually answered the question we put to them: 'What are the Top 10 calibres in your state/territory?' Queensland and NSW were quick to respond and Tasmania eventually came up with the goods. While WA agreed it had the capacity to run reports on their Top 10 most common calibres, they actually provided their overall Top 20 most common firearms, which is not the same thing. ACT had a stab at the problem providing a list "that seem to



ask your dealer for a Bunny Buster today!













The Top 10 calibres across Australia

be more popular than others. We are unable to give you a breakdown."

Victoria directed us to the generic data available in their annual report (total number of firearms and licences but no breakdown on type) and we were surprised to be told by the Northern Territory the data wasn't available. The South Australian registry took our FOI fee months ago but are "still working on it" despite several unanswered prompts via email and phone.

It's interesting that NSW segregates .22LR and .22. We assume that '.22' is a combination of .22 short and .22 air rifle. The same applies to .223 and .223 Rem which are 'one and the same'. If looked at together the .223 Rem would increase in the popularity stakes in NSW. This could, in turn, bring the .243 into their Top 10 overall, which we think is realistic.

A further point of interest is the comparison of 2018 and 2016 data. It would seem no one in NSW owned a shotgun in anything but 12 and .410 gauges in 2016. Alternatively, the registry data was incomplete in 2016 which helps explain the changes in almost all categories between the two sets of data which makes them unreliable. Unfortunately we're also confused by the NSW data with the differing 12ga and 12-bore entries when they're the same thing.

Table 1(a) Top 10 calibres registered in **Queensland (2016-18)**

We weren't sure what to make of the fact our Queensland friends' preference in calibres didn't change at all over a three-year period. Perhaps readers have a view?

•		
Rank	Calibre - 2016	Calibre - 2018
1	.22	.22
2	12ga	12ga
3	.177	.177
4	.303	.303
5	410ga	410ga
6	.223	.223
7	.308	.308
8	.243	.243
9	.22 Mag	.22 Mag
10	.30-30	.30-30





Table 1 Top 10	calibres in Queensland,	NSW
and Tasmania	(2018 aggregated).	

Rank	Qld	NSW	Tas	Combined ratings
1	.22	.22LR	12ga	.22
2	12ga	12ga	.22 Rimfire	12ga
3	.177	.22	.22 Mag	.177 Air
4	.303	.177 Air	.177 Air	.223
5	410ga	410ga	.223	410ga
6	.223	.223	.243	.22 Mag
7	.308	.223 Rem	.303	.303
8	.243	.22 Mag	410ga	.308
9	.22 Mag	.303	.308 Win	.243
10	.30-30	.308 Win	.270 Win	.30-30

The results from these three firearms registries are compared to each other. Given that Tassie has less than two per cent of the country's population, we weighted the data by population density of the states.

Table	1/h	Ton	10	calibres	in	NICW	(2018)	
Iable	I (D	IOD	10	calibres	ın	INDAA	(4010)	

Rank	Overall	Rifle	Shotgun	Pistol
1	22LR	.22LR	12ga	9mm
2	12ga	.22	410ga	.22
3	.22	.177 Air	20ga	.22LR
4	.177 Air	.223	16ga	.357 Mag
5	410G	.223 Rem	40mm	.177
6	.223	.22 Mag	28ga	.357
7	.223 Rem	.303	10ga	9mm Luger
8	.22 Mag	.308 Win	9mm shotgun	.38
9	.303	.243 Win	12-bore	.44
10	.308 Win	.22-250	14ga	.38 Super

Table	1/61	Ton	10	calibres	in	NICW	(2016)	

Rank	Overall	Rifle	Shotgun	Pistol
ı	12ga	.22LR	12ga	9mm
2	.22LR	.177	410ga	.22LR
3	.177	.223		.177
4	.223	.303		.357
5	.303	.243		.38 Super
6	.243	.308		.38 Special
7	.308	.22-250		.357 Mag
8	410ga	.30-30		9mm Luger
9	.22-250	.222		.44
10	.30-30	.17 HMR		.45



Take a look at Adler's new AllO lever action shotgun.

Reliability is the key with lever action shotguns, and NIOA has torture tested this design with over 5000 rounds of mixed loads and it has proven to be very reliable.

The gun features a smooth cycling action, 5-shot tube magazine and a soft ventilated recoil pad. The quality Turkish walnut and rugged synthetic stocks have generously checkered grip panels to provide positive handling, and the hard chrome bore and chamber helps reduce maintenance. The synthetic model features a forend accessory rail for lights, lasers and other accessories, making it a really versatile performer.

The interchangeable chokes allow you to tailor your patterns for different cartridges and game. The 28" model is the perfect field gun for ducks, foxes and rabbits. The 20" model is tailor made for pig shooting from the bike, quad or ATV.

This lever action shotgun sets a new standard for the Australian market and is a must-have for any keen hunter.

Available in the following four models:

- 20" barrel with straight grip wood stock
- 28" barrel with pistol grip wood stock
- 20" barrel with straight grip synthetic stock
- 28" barrel with straight grip synthetic stock

Features:

- 12Ga 3" Chamber
- 5-shot magazine capacity
- Hard chrome bore and chamber
- 3 x internal screw in chokes
- Barrels feature ventilated rib with brass bead
- Alloy receiver with 3/8" dovetail rail for optics
- Forend accessory rail (Synthetic only)
- Ventilated recoil pad
- Turkish walnut or black synthetic stock
- · Sling swivels
- · Weight: 7lbs approx.



Adler Walnut & Synthetic are both available in

The Top 10 calibres across Australia

Top 20 most common firearms in WA Not surprisingly, the humble .22 dominated the charts in WA with eight of the state's Top 10 most common firearms of this calibre. Indeed, only eight other calibres appear anywhere else on the list. What's more, eight of the Top 20 WA firearms are single-shot. In terms of firearm numbers, of a total of 44,396 firearms registered in the Top 20, 27,931 of them are .22 calibre. That's 63 per cent of the total with a further 10 per cent being air rifles. This is data someone might like to share with the antigun lobby.

	T	4 0
// [IOD	

This list is apparently not in order, rather a best guess from around the ACT office.

Calibres	
.22	

.17 HMR

12ga

.223

.30-30

.243 .270

.303

.308

.22-250

Top 10 post-Apocalyptic calibres Go online and you'll find numerous 'prepper sites' (mostly American) listing the Top 10 calibres for surviving the apocalypse

whether the result of environmental disaster, societal collapse, war or zombie infestation. The underpinning theme is that, in any such event, you may need guns - and

Rank	Make	Calibre	Туре	Number of firearms
I	Brno	.22	Bolt-action	6341
2	Lithgow	.22	Single-shot	4340
3	Stirling	.22	Bolt-action	3643
4	Winchester	22	Bolt-action	3254
5	Lithgow	.22	Bolt-action	3025
6	Anschutz	.22	Bolt-action	2529
7	Gamo	.177	Air	1942
8	Marlin	22 Magnum	Bolt-action	1712
9	CZ	.22	Bolt-action	1630
10	Marlin	.22	Bolt-action	1592

guns need ammunition. While in Australia some of these calibres are not sufficiently common to make them particularly useful in an apocalypse, the common prepper lists usually look like this:

- 1 .22LR: The classic all-rounder heads the list with more bang for your buck, cheap ammo. It's quiet and light (so you can carry more of it) making it suitable for users who are small, tall, weak and strong alike. This ammunition is likely to be readily available whatever the circumstances.
- .38 Special: Its inclusion in the list is largely because it's a popular handgun and former police calibre. So availability is generally not an issue.
- 3 9mm Luger: Widely used around the world and one of the most common law enforcement/military cartridges. The larger capacity magazine makes it a popular inclusion in the prepper list. In Australia this calibre is common in the

- Browning Hi Power and Glock 17. A 9mm is generally cheaper than a .45 or larger calibres, has less recoil and higher velocity than a .45 ACP. It is chambered in handguns, sub-machine-guns and rifles and is the standard NATO handgun round.
- 4 12ga shotgun: The incredible variety of ammunition available for this most common shotgun bore makes it perhaps the most versatile of all calibres. Downside is the ammunition is large, heavy and loud with a short range.
- 5 .223 Rem/5.56mm NATO: This round is popular with small-medium game hunters and military/law enforcement which makes it commonly available before and after societal collapse. Also, it's safe to fire .223 through a 5.56mm chamber (but not recommended to fire 5.56mm through a .223 chamber).
- 6 7.62x39mm: This cartridge was developed in 1900 and must be doing something right as it's still the most common rifle cartridge worldwide. The AK-47 has made it into the Guinness Book of Records as the most widely spread firearm in the world, with 100 million Kalashnikov rifles currently in use. Some modern bolt-action rifles from, for example, Savage, Ruger, CZ and Remington also use this cartridge, proving its versatility.
- .410 Shotgun: Known as a 'snake gun' in Australia but its use is wide and varied. The .410 ammo is much lighter and smaller than the 12-gauge, has similar rounds and may prove to be preferred when noise is an issue.
- .45 ACP: On March 29, 1911, the Colt M1911 .45 ACP calibre self-loading pistol became the standard pistol of the US Army. Designed by John Moses Browning, it's known for stopping power. However this large, slow bullet does not penetrate armour to any great extent.
- .44 Magnum: Formerly "the most powerful handgun in the world" (Clint





OPEN 7 DAYS FOR YOUR CONVENIENCE

QLD GUN EXCHANGE

PHONE: 07 3393 0933 WITH 6 LINES FAX: 07 3393 0711





youtube.com/user/qldgunexchange







Francolin Arms S-16 TrapNew for 2019. Modern U/O sporting shotgun with

New for 2019. Modern 0/O sporting shorgun with a reasonable price tag. Steel receiver with white chrome finish, single selective trigger, 30" barrels with ventilated trap rib, 5 interchangeable chokes, Turkish walnut stock, hand oiled with adjustable comb.

Ideal for entry level clay target competition.

In store now - \$1299



Francolin Arms Laser 410ga

5-shot double action revolving shotgun, 3" chambers, exposed hammer, plunger extractor, 20" barrel w/ cylinder choke, adjustable rifle-style sights, chequered Turkish walnut stock.

In store now - \$1299

Not for sale in NSW, ACT or WA



Zastava Bunny Buster Package

The Zastava Bunny Buster Package is back. Precision CZ99 rimfire rifle, scope, mounts, spare mag, bipod and hard case.

.22LR, .22WMR and .17HMR - \$699



Zastava M70 Walnut

Mauser 98 action, walnut stock with cold hammerforged blued barrel and open sights. Free QGE gunbag and sling.

.22-250, .243, .25-06, .270, 7mm RM, .308, .30-06, .300WM, 9.3x62

- \$1199





Crossfire II 2-7x32 Rimfire \$266 Crossfire II 2-7x32 Plex \$245 Crossfire II 3-9x40 Plex \$303 Crossfire II 3-9x40 BDC \$308 Crossfire II 3-9x50 BDC \$347 Crossfire II 4-12x40AO BDC \$380 Crossfire II 4-12x44 Plex \$352 Crossfire II 4-12x44 BDC \$358 Crossfire II 6-18x44AO BDC \$457 Crossfire II 4-16x50AO BDC \$572 Crossfire II 6-24x50AO BDC \$613



Diamondback 2-7x35 Rimfire \$374
Diamondback 3-9x40 Plex \$391
Diamondback 3-9x40 BDC \$413
Diamondback 3.5-10x50 BDC \$501
Diamondback 4-12x40 BDC \$435
Diamondback HP 4-16x42 BDC \$737
Diamondback Tac 4-16x44 FFP MOA \$613
Diamondback Tac 4-16x44 FFP MRAD \$613
Diamondback Tac 6-24x50 FFP MOA \$676
Diamondback Tac 6-24x50 FFP MRAD \$676



Crossfire Binos 8x42 \$358 Crossfire Binos 10x42 \$380 Diamondback Binos 8x32 \$358 Diamondback Binos 8x42 \$409 Diamondback Binos 10x42 \$429 Diamondback Binos 10x50 \$472 Diamondback Binos 12x50 \$490





Rigby Highland Stalker

Traditional deerstalking rifle. English-style hand finished Grade 5 walnut stock.

.275 Rigby (7x57), .308, .30-06, 8x57, 9.3x62

All calibres now in store - \$12,999



Big Game PH

Double square bridge, lightweight 24" barrel, plasma nitride metalwork, Grade 2 Turkish walnut, colour case hardened grip cap with gold RR Logo, chrome finished bolt handle.

> .375 H&H and .416 Rigby Now in store \$14,130



Big Game

Double square bridge, lightweight 24" barrel, plasma nitride metalwork, Grade 5 Turkish walnut, colour case hardened, recoil bar grip cap, flame blued extractor, bolt release and magazine follower.

.375 H&H and .416 Rigby Now in Store \$17,699





Leica Visus Glossy Riflescope

The high-quality aluminium surface of each riflescope is painstakingly polished by hand for several hours to achieve the visual appeal and feel of elegant classic riflescopes. Perfectly matched to suit the Rigby rifle finish.

I-4 x 24 ill 4A Glossy \$2490 2.5-10 x 42 ill 4A Glossy \$2600

Queensland Gun Exchange & Fishing, 181-183 Wellington Road, East Brisbane, Qld 4169 PO Box 1223, Coorparoo, Qld 4151

Email: sales@qldgunexchange.com

Phone: 07 3393 0933 OPE Fax: 07 3393 0711 Mor

OPENING HOURS: Mon-Fri: 8.30am - 5pm Sat: 8.30am - 3pm Sun: 10am - 3pm

Website: www.qldgunexchange.com

Prices subject to change. Prices do not include freight.

ASUZIYJVV

The Top 10 calibres across Australia

Eastwood in Dirty Harry) there are also a variety of rifles in this chambering. 10 .308 Winchester/7.62 NATO: Being a standard NATO loading makes this calibre common across much of the world, including Australia. It's accurate and powerful with excellent longrange precision. The Winchester .308 cartridges are typically loaded to higher pressures than 7.62×51mm NATO cartridges so it's not recommended to fire .308 through a 7.62mm chamber.

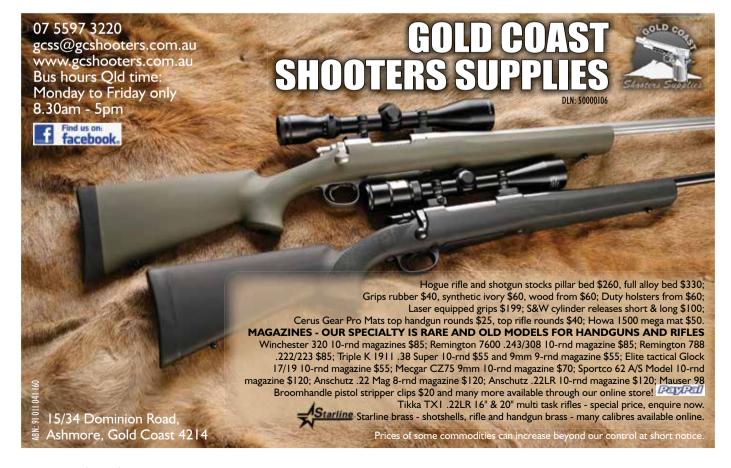
Most common calibres in the US The key difference between Australia and





the US is American gun laws are far more permissive than here. So the list includes calibres simply not common in Australia. But if you remove handguns from the list the US Top 10 would include six of Australia's leading 10 calibres.

DI.	116
Rank	US common calibres
1	9mm Luger
2	.223/5.56mm NATO
3	.45 ACP
4	12ga
5	.22LR





The new Mauser M18 condenses hunting to its fundamental form: pure, no-frills workmanship. It's not merely a hunting rifle, but something which Mauser has always symbolized: the ultimate gun for all men at all times. The Mauser M 18 is more than just another component; it is the whole package. It brings together all the essentials for hunting in the best possible way and does not include anything that isn't necessary in the field. The result is a genuine tool for genuine hunters with a sensational price-performance ratio. In other words: Mauser brings you: "The People's Rifle".



Available in: 243 Win, 6.5x55, 270 Win, 308 Win, 30-06 SPRG, 7mm Rem Mag & 300 Win.

Barrel Length: 56cm/22" Standard Calibres, 62cm/24" Magnum Calibres

Weight: 2.9kg Standard Calibres, 3.0kg Magnum Calibres

Magazine Capacity: 5+1 (4+1 Magnum)

Surface Finish: Matte Blueing

Stock: Polymer with Soft grip inlays, removable recoil pad with storage compartment







Find your local Mauser Stockist at: www.osaaustralia.com.au





DAS ORIGINAL



Talbot on target! Single Action

Yosemite Sam - or Communications Officer Sam Talbot - looks West on his latest mission to shoot the SSAA disciplines

photos by Jennifer Martens



owdy v'all. This month I travelled back in time to the Old West, an era where single action firearms reigned supreme. When cowboys kept their six shooters and lead plums on their hip and too much bellyaching or a leaky mouth could land you an 'invitation to a dance'. These were days when any shooter worth their salt went by an alias so, like any other good cowboy, you can call me Yosemite Sam. While the name may not sound intimidating, what I lack in Single Action experience I make up for with my ability to yarn the hours away.

Single Action

Single Action (sometimes called Cowboy or Western Action) is a fast-paced discipline that employs original or replica firearms commonly used between 1800 and 1899. These include single-action revolvers, lever-action and slide-action rifles, leveraction and pump-action shotguns as well as other shotguns without automatic ejectors.

Competitions consist of various stages which play out as scenarios and are explained beforehand, often involving elements of the Old West. Targets are generally reactive and vary in shape and dimension, sometimes placed in a complicated order requiring shooters to think on the move. Navigating courses and having the cunning to find the most efficient route can be just as important as technical firearm speed and accuracy.

In addition to shooting, Single Action participants also preserve, promote and respect the skills, traditions and pioneering spirit of the historic American Old West, often assuming a shooting alias appropriate to the era. Aliases represent a character or profession from the Old West or Western film genre, the social and historical aspects of Single Action considered as important as the actual shooting, with competitors more than happy to join in the spirit.



Costumes and classes

Even those only vaguely familiar with Single Action have no doubt seen the striking costumes that accompany the discipline. Single Action has some serious costume requirements and failing to abide by them can be grounds for disqualification - I didn't dress up as a cowboy for nothing.

An example of general costuming rules is everyone is required to wear a hat at all times. Additionally, there's a specific list of items competitors must wear at least five of, including chaps, spurs, pocket watch with full length chain, botas, sleeve garters or a knife. Many competitors wear more and I'm yet to see an experienced Single Action shooter who doesn't look the part.

My costume

The costuming rules span more than four pages in the rule book though beginners



MAX-GUARD ALUMINIUM LOCKABLE GUN CASES





AC-7072R \$139!





ID: 120cm x 31cm x 10cm (LxWxH)

AC-7072

5169!

ID: 120cm x 20cm x 10cm

(LxWxH)

EXTRA LONG DOUBLE RIFLE - 54"





SHOTGUN - 37"











Talbot on target! - Single Action

are not expected to be up to standard straight away, although making the effort will earn you respect from the posse. My outfit mostly came from a costume store, rented for about \$40, including a shirt, hat, neckerchief and vest along with my own jeans.

My footwear was an old pair of work boots which may have looked the part to the casual observer but are actually against the rules. All shoes in Single Action should be lug-less, flat and with no grip, just as they were in the 1800s.

And of course some of the categories in Single Action affect the specific firearms used. For example, the Frontier Cartridge category requires shooters to use black powder rather than smokeless powder in all firearms. Another example is the Gunfighter category, as shot by Miss Scarlett, whereby gunfighters use two revolvers at once when the stage allows, otherwise they shoot right-side revolver with right hand only and left-side revolver with left hand only.

Ace McKenzie and Miss Scarlett

As this was my first time using Single Action firearms I enlisted the help of Ace McKenzie and his partner, Miss Scarlett, to help get my quick draws up to speed ahead of the competition held by the SSAA Southern Drifters. For both warm-up and competition I used Ace's firearms which included two Bisley pistols, a lever-action rifle and side-by-side shotgun. Our ammunition was .38 special 125g loads, making recoil minimal and allowing for more speed while still powerful enough to register a satisfying 'ting' on the targets.

Most targets range from five to 10 metres



and are roughly the size of an A4 paper. After my first few shots it became clear the challenge of Single Action isn't hitting the targets, rather doing it very quickly. Scoring is simple and comes down to the fastest time winning while missing a target or committing a procedural error adds five seconds to your time.

My warm-up shots went smoothly and I hit every target. Ace's shotgun had two triggers which felt antiquated but such is the discipline and I became used to it after a few shots. Also, I barely noticed the costume and if anything adapting more into character and the Old West spirit proved an asset.

I didn't holster the pistols (the club requires a special licence for this),







BUSHNELL ELITE 1 MILE ARC 7X26 RANGEFINDER FDE \$829.00

We combine top brands and expert advice to deliver an experience that will help you tackle your next adventure. STEINER OBSERVER 10x42 \$535.00



BURRIS DROPTINE 4.5-14x42 B.Plex \$420.00



ZEISS CONQUEST V6 3-18x50 Ret 6 \$2055.00



BURRIS XTRII 5-25x50 SCR Mil \$1785.00



ZEISS VICTORY V8 4.8-35x60 T illum Ret 60 \$3910.00



STEINER GS3 3-15x56 4A Ret \$1520.00



LEUPOLD VX-FREEDOM 2-7X33 Matte Duplex



STEINER T5Xi 5-25x56 SCR \$2975.00



LEUPOLD VX-FREEDOM Rimfire 3-9X40



MEOPTA MEOPRO 6-18x50 BDC Ret \$795.00



LEUPOLD VX-FREEDOM

4-12X40 Matte Tri MOA \$530.00

Talbot on target! - Single Action

instead they were placed on the bench and I simply picked them up as necessary. My warm-up stage consisted of knocking over two targets with the shotgun, hitting two alternating targets twice with the rifle then two alternating targets twice with the pistols (five shots with each pistol). I completed the 22 shots in 51.18 seconds with no misses so Yosemite Sam was ready. Cue Western whistle!

The competition

The format separates shooters into small groups or posses, each posse heading to a stage where it's explained what targets in what order and with what firearms will be shot, along with any other instructions. The only real limit to a stage is the organisers' imagination and what equipment is available. As hosts of the 2016 and 2017 SSAA Single Action National Championships, the Southern Drifters have an impressive array of buildings and targets to choose from, the entire range a sight to behold with everything themed around the Old West.

While a standard weekend competition might consist of four or five stages, a championship competition can span as many as 12. My competition was four stages but I chose to focus on two in particular: Zee's Mine and El Vaguero Cantina.

Stage 1: Zee's Mine

To start the clock on this stage shooters had to declare 'This mine is mine!' Then they were required to hit two different targets, alternating every two shots for 10 shots with their rifle. They then had to run to the front of the mine and hit two targets with their shotgun, causing a separate target to start swinging. To finish, competitors had to use their pistols to alternatively hit the swinging target twice and another target twice for 10 total shots.

My final time for Zee's Mine was a respectable 55.17 seconds plus two missed shots (65.17 seconds). I found the swinging target particularly enjoyable, squeezing in a second shot before it swung out of view again and racing against the clock to take my shot was a highlight.

The one mistake I made was pushing down the hammer on the pistol after my fifth shot. This meant I had to pull the trigger again before putting it down and picking up the next pistol. Having just found the rhythm of 'hammer, trigger, hammer, trigger' I'd fired my five shots and was focused on speed rather than the fact I didn't need to hammer again. While not the most heinous safety crime it's important the hammer be left back when not being used. Overall it didn't waste much time as I realised the mistake immediately.

Shooting a lever-action rifle as quickly as possible is similar to shooting rapid fire in Field Rifle. With one arm you secure the butt of the rifle against your shoulder, leaving your other hand free to cycle the action and pull the trigger. After trying it out I can see the appeal to Lever Action over the more cumbersome Bolt Action.

Another interesting thing about Single Action is it arguably has the most people keeping an eye on safety I've ever seen. While many disciplines will have several shooters firing with one Range Officer, Single Action only has one active competitor and at least three or four if not more people keeping an eye on safety. Firearms are also always meticulously placed facing towards the gun range when in use and the safety standards in general are truly superb.

Having survived Zee's Mine it was time to saddle up and head for the Cantina.

Stage 2: El Vaquero Cantina (The Cowboy Canteen)

Before the clock started on this stage shooters had to roll a dice with black and red sides. Then with hands on hat we had to declare the colour we'd rolled to start the time. The Cantina began with 10 rifle shots at red, black and yellow targets, the colour of your dice was shot at first followed by the colour you didn't roll, before finishing with the yellow targets. This was followed by four shotgun shots at targets on the ground and 10 pistol shots at a closer version of the rifle targets.

Perhaps the most awkward task in all shooting disciplines is attempting to remove shells from a shotgun (without ejectors) at speed. A sort of lurching back





motion finishing with a jerk forward is required to displace the cartridges and I'm sure I could learn the movement over time, but after performing something similar to the Heimlich manoeuvre I found it usually best to just shamefully pull the spent cartridges out with my fingers. This timewasting procedure was magnified due to the four shots required at the Cantina.

Despite some awkward movements Single Action is very shooter-friendly. If there's any uncertainty about a target being hit the benefit of the doubt goes to the shooter, which I took as an invitation to try and go even faster in the hope of landing a spotter who wasn't paying attention - a common strategy (whisper it).

My total time was 69.12 seconds including a missed target with my final shot. The miss surprised me given how close I was and the size of the target but on reflection I realised I'd stopped properly aiming and took for granted I'd hit the target. No matter how easy the target it can always be missed and a five-second penalty quickly outweighs time spent making

















CONTACT

Email

info@gcpdarms.com

Phone

(+61) 02 6292 3498

Facebook

@australian.precision.rifles

Instagram

@gcpd_arms_australia

GC Precision Developments Pty Ltd

PO Box 5143 Chisholm A.C.T 2905 Canberra AUSTRALIA

ABN: 71 607 522 770 ACT Firearms Dealer Lic: N0010060D

- Invest in your future with absolute accuracy, total reliability and unparalleled refinement
- Custom and semi-custom rifle platforms for long range hunting, competition target shooting and extreme long range performance
- Turn-key rifle packages specifically tailored to your requirements
- Sales and fitting of match grade barrels, firearm sound suppressors and muzzle brakes
- Suppliers of Nightforce and March optics
- Long range marksmanship training an investment in your skills

What our customers say

"As for accuracy the rifle regularly shoots sub 1/3 MOA. First shot hits out past 1000m have been simple and repeatable."

Keiran, Qld

"I have always been impressed with the level of responsiveness, knowledge and quality of service."

Daniel, NSW

"I have received a most magnificent firearm that has already exceeded my expectations."

Richard, Qld









Talbot on target! - Single Action

sure the target is hit. It's a balancing act between accuracy and speed but also highly rewarding and enjoyable.

Conclusion

As someone who seems to prefer speed over accuracy, Single Action is right up my alley. There's part of me enjoys shooting for precision but it quickly turns to impatience

Firearm-based categories Frontiersman: Shooters use cap and ball revolvers shot duellist style and side-by-side double-barrel or leveraction shotguns; Wild Bunch: Based on popular Western movie, shooters use Colt 1911 pistols instead of revolvers, lever-action rifles and Winchester Model 1897 shotgun instead of doublebarrelled shotgun; Frontier Cartrid Using black powder rather than smokeless powder in all guns.

and I find myself tending to just hit any part of the target after a while.

Regular participants revel in the Old West elements but I can see why some may see this as a barrier. After telling my parents how much fun I had trying Single Action and how much fun I thought they'd have, they told me they "don't do dressups" which led me to think their reluctance could make them even better cowboys than they realise.

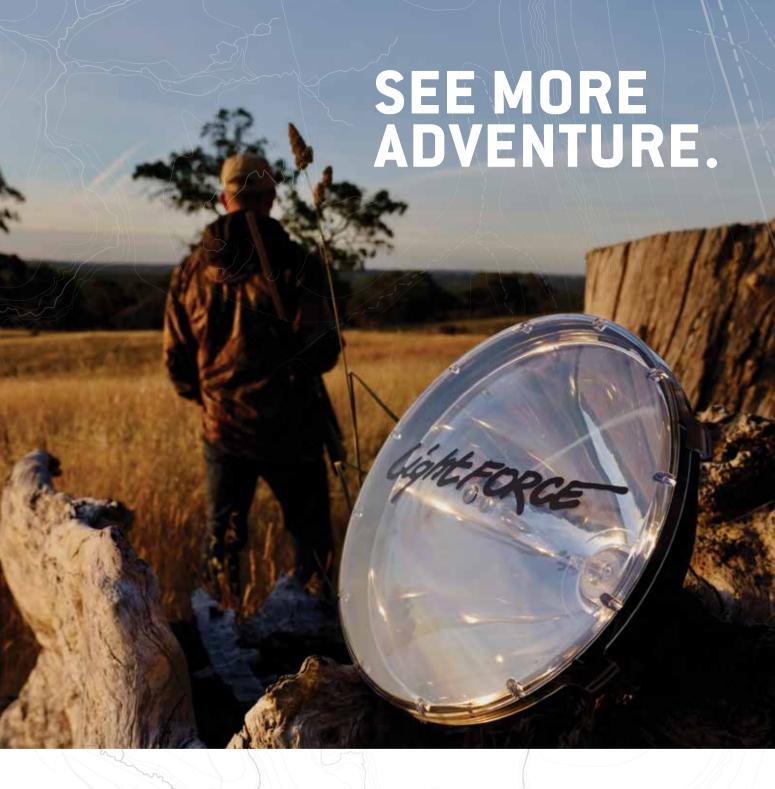
Single Action participants are extremely welcoming of beginners and go out of

their way to let new shooters join in while helping them bring their attire and equipment up to standard as soon as practical. During the competition I had more offers to try out someone's firearms than time would allow, which tells you everything you need to know about the camaraderie and social aspect. All of this and more makes Single Action one of the fastest-growing and most enjoyable disciplines presently available.

Well that's all she wrote so it's Yosemite Sam saying "so long pardners" and happy shootin'.







Whether you want to camp in the wilderness, hunt a predator, pull an all-nighter or off-road through rough terrain, Lightforce is there to light the way.









not quite the sound of silence

Daniel O'Dea

t's an unfortunate fact of life that many areas of the shooting sports and general gun ownership are surrounded by myth, ignorance, misinformation and, dare I say, even misguided hysteria. One area that frequently receives undue attention in this vein is that pertaining to the use of suppressors, more commonly and falsely referred to as silencers.

It would seem that somewhere along the line, authorities in Australia decided such devices were not in the public interest, hence they became highly restricted. At the same time many other jurisdictions throughout the world, some of whom dare I say have far more restrictive firearms regulations than Australia, have just about mandated the use of these devices.

I guess from the position of the regulatory bodies there's a fear or assumption such devices could appeal to the criminal element, however I'm not sure there has ever been any study or statistical evidence to support this.

First, let us dispel the greatest myth. When it comes to firearms there's no such

thing as a 'silencer'. No device completely silences a discharging firearm. The best you can hope for is the noise created on discharge be considerably 'suppressed'. In some cases, especially when employed in conjunction with subsonic ammunition, the level of suppression can be very effective. However, no device can do anything to suppress the sonic boom created when a projectile breaks the sound barrier, which is basically anything travelling faster than 1125 feet or 343 metres per second.

I would hazard an educated guess that upwards of 98 per cent of all centrefire sporting ammunition sold today produces velocities far greater than 1125fps, with some travelling more than three times that speed. Even the majority of rimfire ammunition would be high velocity or supersonic in nature.

Today however, noise pollution and specifically health risks to hearing, especially in the workplace, are a genuine concern and considered an occupational health and safety issue. At the same time there are valid reasons that it's in the

greater public interest to reduce the impact from firearms-related noise, especially in urban areas where well-established outdoor ranges are still present or in the case of urban sprawl in rural areas where safe, lawful shooting activities are conducted within earshot of residential areas.

The benefits of suppressor use have long been recognised in Europe, where bulging populations can mean rural and urban activities are conducted in ever-closer proximity. Even in Britain, where firearms regulations are very restrictive, hunters are encouraged to use suppressors to reduce noise which otherwise may cause concern to people not involved in or having knowledge of legal shooting taking place.

From an occupational health and safety position for farmers and those employed in primary production, a commonsense approach would deem that if best workplace practice would have you run a muffler on a noisy tractor, the same standard would dictate the use of a suppressor on one of the nosiest tools employed - a firearm.

Thankfully, although we may be some



The highly regarded Model 686 Series Revolver

Introduced in 1980 the Smith & Wesson model 586 and 686 family have become the mainstay of competition shooting in Australia. These superb target revolvers are available in barrel lengths from 4 to 7 inch with target features straight out of the box.



Grycol – Australia's only authorised Smith & Wesson distributor and warranty station.



Suppressors - the sound of (almost) silence

way off regulators in Australia allowing the use of suppressors for recreational hunting, it would seem some jurisdictions are more so today recognising genuine occupational health and safety concerns to issue permits where genuine occupational need can be established. It's also accepted that for professional shooters, primary producers and their agents, there are genuine economic arguments too, as the use of suppressors disturb targeted vermin less and provide longer engagement widows, giving the ability to despatch more pest animals prior to them dispersing.

Like other restricted firearms-related products, although state governments regulate ownerships, it is the Federal Government that controls import of suppressors. This can mean that even if you're granted a permit by your state regulator, you still have to apply to the Department of Home Affairs (previously the Attorney General's Office) for import permission.

Thankfully, Victorian-based Wedgetail Industries have invested heavily in research and development and offer a range of world class modern suppressors to authorised Australian end users, meaning permit holders no longer have to go through the sometimes arduous import process.

I had the chance to review some Wedgetail Industries suppressors for Australian Shooter. Being an appropriately licensed dealer, including for suppressors, I have experience with such, but this is my first time reviewing both modern rimfire and centrefire variants.

For review I received a Ninox 17, Wedgetail's rimfire variant designed and targeted towards the high velocity .17



HMR and .22WMR rounds as well as handling standard .22LR ammunition. I also received two variants for .224 centrefire calibres in the Ninox K and Ninox 556. and had use of a Ninox 338 while covering the GC Precision CWS rifle, also reviewed for Australian Shooter. For ease of review Wedgetail Industries supplied two new Lithgow Arms rifles with threaded barrels, an LA101 in .22LR and LA102 in .223 Remington.

There were three aspects I was interested in, firstly and most obviously sound suppression, secondly any effect on accuracy and lastly any effect on velocity, which in turn could affect produced muzzle energy or power. Unfortunately with no access to a SLM (sound level meter) we would have

to rely on quoted manufacturer's specification and my anecdotal experience for sound suppression. Accuracy was easy enough to test and I have a chronograph, so no problem with velocity.

Starting with the Ninox 17 fitted to the LA101 .22LR I tried several types of ammunition. The Ninox 17 is quoted to have a noise reduction rating of 35-41db (decibel), high velocity .22LR ammunition can run at about 140db on firing, which is akin to the noise of an operating jackhammer, and a 40db reduction would bring it down to about the same as maximum volume on an iPod. The best way to describe the suppression in practical terms is the suppressor seems to take away most of the initial muzzle blast, leaving just the sonic crack of the bullet breaking the sound barrier.

For accuracy as a non-scientific test I fired two 10-round groups using .22LR Winchester Super Speed with the Ninox 17 suppressor removed then fitted. There was no discernible difference in accuracy and only a millimetre difference in point of impact with the slightest of shifts. I then fired two 10-round groups, again with the suppressor on and off, with two breeds of .22 ammo (40 rounds total) over the chronograph to measure velocity.

Using the popular 40gr .22LR Winchester Power Points, the 10-round average velocity through the Ninox 17 suppressor was 1281fps, without was 1283fps, standard deviation was 40fps/41fps respectively. Using 36gr .22LR Winchester Super Speed produced 1316fps with and 1331 without suppressor, with a standard deviation of 33fps/36fps. With the differences in velocity (2fps and 15fps) both falling well within



HuntingSupplies

Sporty's Warehouse, 32 Strathaird Rd Bundall QLD p: [07] 5531 6511 fax: (07) 5504 5357 email: sales@nyati.com.au



www.nyati.com.au

RIDGELINE SALE

RIDEGLINE	Now	Was
Arapahoe Boots	145.00	169.95
Camlite Boots	170.00	199.95
Apache Boots	170.00	199.95
Stalker Pack Buffalo Camo	99.00	149.95
Ladies Alpine Pack	79.95	99.95
Top To Toe Pack	94.95	99.95
Little Critters Pack Buffalo Camo	79.95	99.95
Pro Hunt Fleece Jacket Nature Green	135.00	189.95
Pro Hunt Lite Jacket Nature Green	125.00	149.95
Pro Hunt Fleece Pants Nature Green	119.00	139.95
Torrent II Jacket Buffalo Camo	187.00	299.95
Mallard Jacket Buffalo Camo	119.00	139.95
Sable Airflow Long Sleeved Zip Top	63.00	74.95
Sable Airflow Long Sleeve Shirt	55.00	64.95
Sable Airflow Pant	63.00	74.95
Covert Air Flow Tee - Buffalo Camo	51.00	59.95
Hock Straps - Set of 2	16.45	29.95
Hydro Day Pack - Blaze Camo, 3L Bladder	89.00	104.95
Five Pocket Bum Bag, Buffalo Camo	49.95	59.95
Hydro Day Pack (Medium), Buffalo Camo	93.00	109.95

Gun Slinga Backpack - Buffalo Camo 110.00 129.95

ARCHERY

Airborne Compound Bow Package 495.00 325.00 Vulture Compound Bow Package **Falcon Compound Bow Package** 250.00 Falcon Bow Only 135.00 1 Doz Carbon arrows to 60LB 69.95 1 Doz Carbon Arrows to 70LB 118.90 Cobra All Adjust Release Aid 49.95 Tusker 125Gr Spirt Broadhead 6PK 29.95 Red Zone 2 Blade Broadhead 3PK 19.95 Red Zone 3 Blade Broadhead 3 PK



METAL DETECTORS

GARRET	Now	Was
AT Cold Detector	4 000 00	4 040 00
AT Gold Detector	1,099.00	1,249.00
ACE 300i Detector	450.00	499.00
AT Max International Detector	1,199.00	1,399.00
At Pro International Detector	999.00	1,099.00
ACE 200i Detector	315.00	349.00
ACE 400i Detector	549.00	649.00
Pro-Pointer AT Detector	239.00	259.00

BEST GPS DEALS AROUND



GARM	NIN	GPS
------	-----	------------

STALKER

PACK

Rino 750, GMRS/GPS Was \$770	705.00
GPSMAP® 64 Was \$369	339.00
eTrex 10 GPS Was \$160	145.00
Alpha 100GPS + T5 Collar Was \$1,099	999.00

NOW \$99

Was \$149



Old Timer Copperhead Linerlock	39.95
Old timer Blazer Stockman	39.95
Old timer sharpefinger	39.95
Old timer workmate	39.95
Old timer golden bear lock back	54.95
Old timer trapper saw cut	39.95



HORNADY
22 CAL .224 50 GR SP
22 CAL .224 52GR ELD MA
25 CAL .257 75 GR V-MA
22 CAL 224 55 GD SD W

NE\	N	3A (CK	PA	CKS







MULE Backpack NOW \$125 Was \$149

SABLE Airflow ong Sleeve Zip Top





Pant

Nas \$74.95

COLD STEEL Master Hunter Plus **NOW \$155**

Was \$225



LITTLE CRITTERS PACK



NOW \$79 Was \$99

1	8
CRKT K.I.S.S	69.95
CRKT P.E.C.K	55.00
CRKT Tanto Black	79.95
CRKT Spear Black	79.95
CRKT Desert tactical	119.95
Osprey Razorback Pig Sticker	45.00
Cold Steel Master Hunter Plus	155.00
Cold Steel SRK	99.95
Cold Steel Recon Tanto	99.95
CRKT M16 Tanto Black	79.95
CRKT M16 Spear Black	79.95
Spec Plus SP-5 Survival	89.95
Spec Plus SP-6 Fighting Knife	79.95
Spec Plus SP-1 Combat	79.95
Dark Edge Bowie	49.95
Dispatch Fixed Blade	39.95
Buff River Pig Knife Rubber Handle	69.00
Buff River Pig Knife Wood Handle	79.00
Buff River Slaughter Knife Set	85.00
Buff River Survival Skinner	39.95



Buff River Knife Roll

75.00

SCUPES	Ф
Zeiss Terra 3-9x42 Plex	425.00
Zeiss Terra 4-12x42 Plex	495.00
Hawke 3-9x40 Mil Dot	165.00
Hawke 3-9x40 Rimfire	245.00
Hawke 6-18x50 223-308	515.00
Hawke Laser/Torch	165.00
Nikko Stirling 4x32 Mount Master	49.00
Nikko Stirling 3-9x40 Panamax	99.00
Nikko Stirling 6-18x50 Panamax	205.00

25 CAL .257 75 GR V-MAX	48.25
22 CAL .224 55 GR SP W/C	770
BULK 6000	
270 CAL .277 110 GR VMAX W/C	55.60
22 CAL .224 73GR ELD MATCH	54.20
30 CAL .308 110 GR V-MAX	55.60
6MM .243 103 GR ELD-X®	77.15
25 CAL .257 110 GR ELD-X®	77.15
25 CAL .257 117 GR BTSP	53.55
6.5MM .264 123 GR SST	62.95
6.5MM .264 120GR ELD MATCH	71.80
6.5MM .264 123GR ELD MATCH	71.80
6.5MM .264 130GR ELD MATCH	71.80
6.5MM .264 140GR ELD-M	71.80
6.5MM .264 143 GR ELD-X	77.15
270 CAL .277 130 GR SP	53.45
270 CAL .277 130 GR SST	62.95
270 CAL .277 145GR ELD-X	90.25
30 CAL .308 150 GR SST	62.95
338 CAL .338 225 GR SP	75.70
338 CAL .338 230 GR ELD-X®	86.35
338 CAL .338 285 GR ELD-M	85.05
375 CAL .375 270 GR SP-RP	55.15
30 CAL .308 150 GR SP	51.15
30 CAL .308 160GR FTX (30-30)	65.30
30 CAL .308 168GR ELD MATCH	84
30 CAL .308 180 GR SST	68.35
30 CAL .308 178GR ELD-X	77.15
17 CAL .172 20 GR V-MAX	37.65
20 CAL .204 32 GR V-MAX	37.65
20 CAL .204 40 GR V-MAX	37.65
22 CAL .224 40 GR V-MAX	37.65
22 CAL .224 35 GR V-MAX	37.65
22 CAL .224 55 GR V-MAX	37.65
22 CAL .224 50 GR V-MAX	37.65
6MM .243 58 GR V-MAX	43.10

6MM .243 65 GR V-MAX

6MM .243 75 GR V-MAX

6MM .243 87 GR V-MAX

45.20

48.25

49.75

Suppressors - the sound of (almost) silence

the standard deviation, this would mean statistically there was no difference at all in velocity, hence muzzle energy with or without the suppressor fitted.

I repeated the above series of tests with the Lithgow Arms LA102 in .223 Remington with the Ninox 556 suppressor fitted. Again, accuracy was similar for the small sample of groups fired, there was a point of impact shift of about two inches with the non-suppressed rounds in this case printing higher. Average velocity likewise was only slightly higher without the suppressor fitted, in this case just 13fps (3106fps vs 3093fps) and again well within the standard deviation, meaning statistically no real difference.

In both rimfire and centrefire rifles tested velocity was not affected based on the results, however I understand that with some rifle, calibre, suppressor combinations velocity can actually increase in a phenomena called 'Free Bore Boost'. I assume this would be more prevalent in short barrelled rifles where the suppressor effectively extends barrel length and achieved velocity.

Shooting rifles suppressed is definitely a more comfortable experience. Over the years as both firearms dealer and writer I've shot just about everything from .22 Short to .50 BMG, and no matter how hardened you might be to heavy recoil and muzzle blast, it can affect your shooting.

This was the case when testing the GC Precision Developments CWS rifle in .308 Winchester fitted with a short 16" (406mm) barrel. In this configuration and fitted with a muzzle brake, the muzzle blast was extreme to say the least. The Wedgetail



suppressor tamed the whole experience and made it far more pleasant to fire.

For balance you might ask is there any down side to fitting a suppressor. Obviously fitment of a suppressor adds overall length. The Wedgetail range varies from 140mm to 255mm. Likewise there is the question of weight and the centrefire Wedgetail range averages around 548g or just over half a kilo. Lastly, suppressors tend to act as a heat sink and can reach in excess of 100C after 30 rounds of continuous firing. This would be unlikely for most shooters, but during testing I fired enough rounds that

heat mirage was visible through the scope.

There are plenty of scientifically-backed reports that demonstrate the tangible benefits to the protection of hearing of suppressor use over that of traditional hearing protection. In fact, the science is indisputable. Thankfully, it appears several jurisdictions already in Australia have moved to review regulation in favour of a fairer and more pragmatic approach to suppressor use for bona fide licensed shooters, with favorable outcomes for end users and public interest combined.

For more, visit wedgetailindustries.com.





Don't risk loss, damage or theft.

If you own a quad bike don't risk another adventure without having your quad insured. SSAA General Insurance Brokers can arrange flexible insurance policies at highly competitive premiums. What's more, coverage is obtained from one of Australia's leading insurance companies.

Off-Road Rider Insurance

This insurance provides cover for Quad bikes and kids fun motorcycles. SSAA General Insurance Brokers obtain great premiums, policy coverage and multi-bike discounts for families who enjoy their adventures together. Quotes for road registered bikes are also available.

Fire and Theft Cover

- Accidental Damage Cover -The insurer will pay up to 50% of the repair cost based on the motorcycle's market value. You will be required to pay the applicable excess(s).
- Transit Cover In the event of loss or damage whilst your motorcycle is being securely towed.
- Towing to the nearest repairer or place of safety.

Third Part Only Cover

• \$20 million Third Party Legal Liability Cover (rec registered).

Protect your toys, call SSAA General Insurance brokers for an obligation FREE quote.

Call: Greg Brown 0455 777 685 greg@ssaains.com.au

SA / WA / VIC / TAS & NT

NSW / QLD / ACT

Call: Bene Benic 08 8332 0281

bene@ssaains.com.au



SSAAGeneral
Insurance
Brokers















A SSAA member advantage





t has always amazed me that the 20-gauge is not as popular in Australia as it is in the UK and America. In the field it can duplicate the efforts of the 12-gauge in most hunting situations the average shooter is likely to encounter. To prove a point and satisfy my curiosity, I decided to use a 20-gauge for most of my field shotgun outings for 12 months. Over that time I covered 90 per cent of my shotgun shooting, using it from duck opening right through the year to the following duck season.

As I have done for years I used it for duck opening in Victoria. On the first morning I never miss hunting over decoys. I have a quiet little spot tucked away out in the bush which only a few locals know about and I can usually guarantee being the only one shooting over this hole.

These days the 20-gauge I use is a Beretta Silver Pigeon Classic and I'm quite partial to it. I have pattern checked it with the more open chokes to see which ones suit the steel shot best. I finally settled on the improved cylinder in the bottom barrel

and modified in the top barrel. For ducks I used No.4 and No.6 steel shot and found them ideal over decoys. When dam jumping and encountering a lot of wood ducks I use No.4 shot exclusively as I've found the old woodie can be a bit of a tough bird to put down at times.

With the opening of quail season in April I found the 20-gauge a blessing in disguise, because unless you go into a good paddock you've a fair bit of walking ahead of you and the weight of a light-framed 20-gauge, in addition to the lighter ammo, makes life a lot easier. I've often heard the old argument against its use, that the lighter framed gun kicks like a mule. My answer here is two pronged - firstly, if it worries you that much try a 20-gauge built on a 12-gauge frame, which will give you a bit more recoilabsorbing weight, and secondly use proper ammunition for it.

By this I mean don't make the mistake of buying a 20-gauge then trying to turn it into a 12-gauge by using 3" Magnum shells. Of course it's going to kick. An appropriate load in a 70mm shell is a much better

choice. I have tried for some time to acquire 65mm cartridges for my 20-gauge but to no avail. They seem to have disappeared off the shelves, which is a shame.

Hunting quail at times can be a bit dicey with a lot depending on how flighty the birds are. Most hunters operate with a dog and the pointing dogs certainly stack the odds in your favour. When shooting over the dog I have my 20-gauge fitted with the modified choke in the bottom barrel and the improved modified in the top barrel - I find No.8 or No.9½ shot perfect for taking them. A nice tight pattern with a relatively bruise-free bird at the end of a successful shot.

Towards the end of duck season we go targeting pheasants and while I usually use my 12-gauge for the morning shoot, we're quick to change to the 20-gauge for the afternoon. Once again, we hunt the pheasants over pointing dogs, so usually any shot taken would be relatively close, assuming the pheasants don't try to outrun the dog instead of taking to the air.

Once again I use the modified choke in the bottom barrel and the improved

PETER BROCK







Spectacular art of Brock in action

"05" zip pull

Easy-care, cotton-blend fleece

Front pockets, knit cuffs and hem

Chrome-look metal tippets on drawstring

Hoodie Sizes

Medium	Large	XL	XXL
38-40	42-44	46-48	50-52

Peter Brock knew how to get noticed. Whether it was on the Mountain, or advising his fans to be the best they could be, Brockie believed that to stand out is to stand proud. Now you can bring that same credo to your own personal style with the "Peter Brock Hoodie" only from The Bradford Exchange. This officially licensed men's hoodie has got winner written all over it. On the back, there's a dynamic montage of Brock triumphing at Bathurst. Even the "05" zip pull is a reminder of Brock's record-breaking racing career. Sleeve detailing and an embroidered Brock racing logo on the front bring more authentic touches to a design that's as awesome as the man who inspired it!

AFFORDABLE VALUE WITH A MONEY-BACK GUARANTEE

Available in four sizes, the "Peter Brock Hoodie" is yours for just 3 instalments of \$43.33 or \$129.99, plus \$14.99 postage and handling and backed by our 30-day guarantee. To reserve your hoodie, send no money now, just return the coupon or go online today at www.bradford.com.au/brock

For fastest delivery, order online:
www.bradford.com.au/brock

Quoting promotion code: 102974

PAY NOTHING NOW

THE BRADFORD EXCHANGE

Please Respond Promptly

YES! Please reserve the "Peter Brock Hoodie" for me as described in this advertisement. I understand I need pay nothing now. I have indicated my size below:

☐ M (38-40) ☐ L (42-44) ☐	XL (46-48) XXL (50-52)
Mr/Mrs/Miss/Ms First Name:	
Surname:	
Address:	
Phone:	
Email:	
Signature:	

- 1. ONLINE at www.bradford.com.au/brock quoting promotion code: 102974
- 2. MAIL no stamp required, to: The Bradford Exchange, Reply Paid 86369 Parramatta NSW 2124
- **3. PHONE: Toll-Free 1300 725 103 8am-5pm** Mon Fri

Please allow up to 10 business days for delivery. All sales subject to product availability and reservation acceptance. Credit criteria may apply. Our privacy policy is available online at <a href="https://www.bradford.com.au. You must be over 18 years old to apply. From time to time, we may allow carefully screened companies to contact you. If you would prefer not to receive such offers, please tick this box. https://www.docs.num.edu/may.gov/.

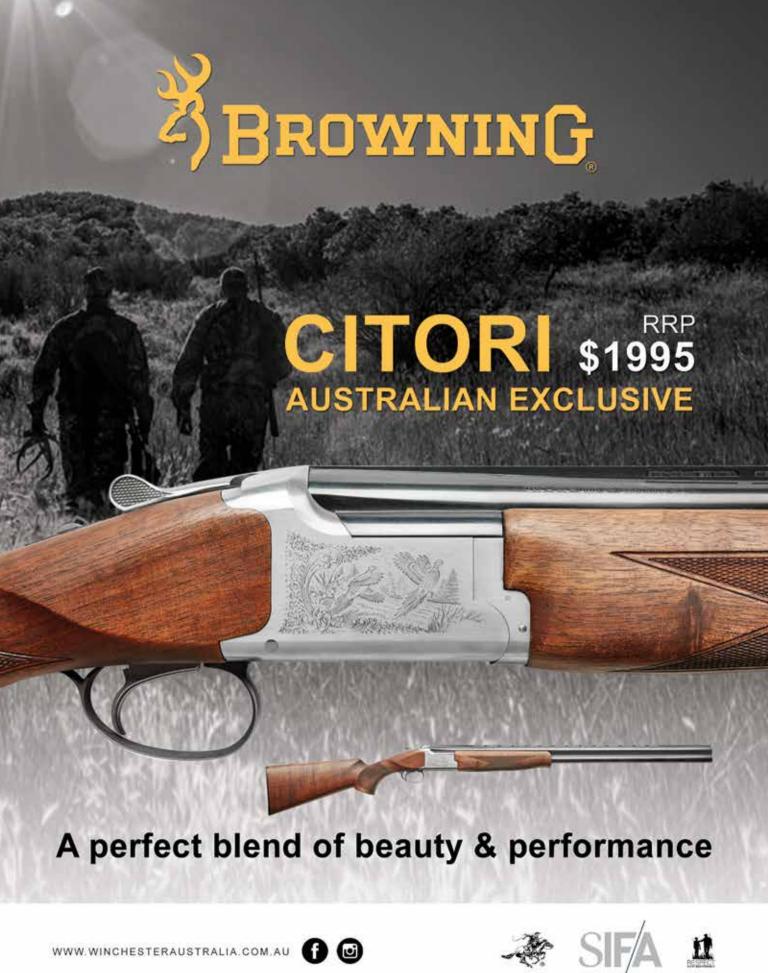
Twelve months with a 20-gauge

modified in the top barrel. Loads of 24 grams of No.5 or No.6 shot served the purpose with a healthy number of birds going down to the combination. I admit we were a little hesitant about using the 20-gauge on the pheasants as a cock bird is quite large, probably a fraction larger than a black duck. My mate Blake and I have been on several pheasant hunts over the years but, having erased any doubts on our first hunt, we wouldn't hesitate to use the 20-gauge on any future pheasant outing.

I'm lucky to have access to numerous properties for rabbit hunting. I'm a keen rabbit hunter and we've found bunny concentrations are at their highest from about September onwards. While the rabbits tend to be a bit scarce during the colder months they can still be hunted. This is where ferrets come into play and the 20-gauge is perfect for taking rabbits as they're pushed from their burrows. The standard load of No.4 or No.6 shot is perfect for such occasions and we've taken large numbers of rabbits this way.













Twelve months with a 20-gauge

Last year, due to good rainfall in the districts where we hunt rabbits, the grass had grown quite high. We soon reverted to the 20-gauge and a hand-held Nitecore MT40 LED flashlight. At 860 lumens enough light was generated to hunt safely through the high grass and we took dozens of rabbits at close range thanks to it. Instead of driving around the tracks trying to find rabbits in the open we could go in after them, so to speak, and it paid dividends.

Once again carrying the light-framed 20-gauge and lighter weight ammunition was a real treat. It's when hunting through thick cover at close range the 65mm shells would come in handy - if you can find them. I've tried numerous gunshops and, while I can locate 65mm 12-gauge shells, in 20-gauge they seem to be totally unobtainable. I remember being keen to try the 20-gauge on hares, and the perfect chance to do that presented itself while hunting rabbits on one trip.

For some reason there were quite a few hares about while chasing rabbits. I was lucky enough to be using No.4 shot for rabbits on this hunt and was totally confident using the same ammunition on hares, taking half a dozen, some of them quite large. Out of curiosity I paced the distance out on some of the hares taken and while most were about 20m, some were out to around 40m. What's more, they were on the move and taken cleanly.

I took the 20-gauge on an extended fox hunting trip to central New South



Wales. Our hosts had told us hares were building up and numerous sightings were a regular occurrence. The properties we were hunting over were mainly cropping concerns with thick wind-breaks lining the paddocks, all havens for hares. I had a ball with the 20-gauge, bowling over the hares as they bolted out of their hiding places on

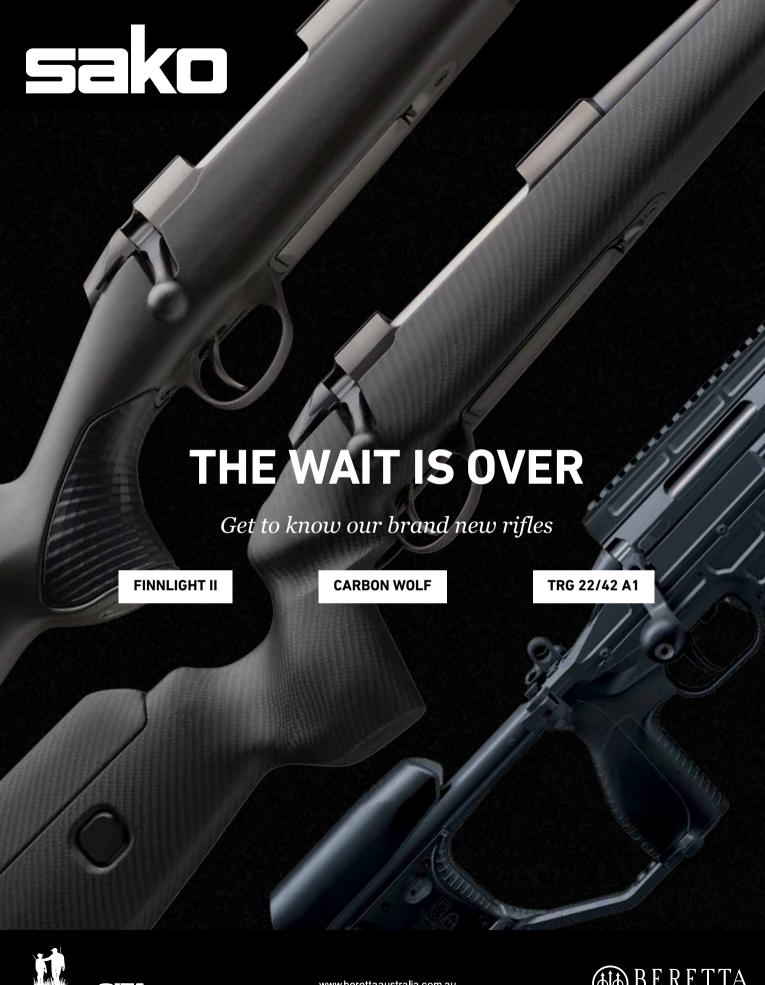
my approach. A simple stroll along the wind rows early in the morning or late in the afternoon always proved fruitful.

The first fox I took with the 20-gauge was a simple affair. I was wandering the fence line of a farmer's paddock seeking rabbits, when for some reason a fox broke cover 30m away and bolted across my path. In a more or less reflex action I brought the 20-gauge to my shoulder and snapped off a quick shot, dumping the fox unceremoniously beside a rabbit burrow.

Since then I've used the 20-gauge on numerous fox whistling ventures. While I was able to buy cartridges in BB shot I much preferred No.4 shot as most of my whistling is conducted during the warmer months, when foxes are young with summer skins. Foxes are the biggest critters I've tackled with the 20-gauge, but I have relatives in Tasmania who have no qualms about taking wallabies with their side-by-side 20-gauge.

Over a 12-month period I had the chance to hunt quail, rabbits, hares, foxes, ducks and pheasants with the 20-gauge and have grown quite confident with it. With all shot sizes available in lead and steel I'll continue to use it on a regular basis. If you find yourself with a bit of extra cash to spare you might consider, as I have, buying a 20-gauge and giving it a go. You may be pleasantly surprised.













Gewehr 41, G41(W) the Wehrmacht's first self-loading rifle

Ivo Dimitrov

v 1940 as the Second World War raged, it had become apparent to the German Army that some form of semi-automatic (self-loading) rifle with a higher rate of fire than the existing bolt-action model (the Karabiner 98k) was necessary to improve the infantry's firepower.

Retooling factories in the middle of a conflict is a difficult proposition so the idea was not necessarily to replace the 98k totally but to supplement it and gradually phase it out. That was the strategy the Wehrmacht initially adopted.

The Wehrmacht was the combined armed forces of Nazi Germany from 1935 to 1946. It consisted of the Heer (Army), the Kriegsmarine (Navy) and Luftwaffe (Air Force). The Army issued a specification to various manufacturers so Mauser and Walther both submitted prototypes for testing. However, The Heereswaffenamt (HWA), the main weaponry office of the Wehrmacht responsible for overseeing different inventions, testing and armaments, placed some restrictions on the design:

- No holes were to be bored into the barrel for tapping gas to operate the action;
- The rifles were not to have any moving parts on the surface;
- · In case the auto-loading mechanism failed, a bolt action was to be included.

The HWA was opposed to drilling and tapping the barrel for gas to operate the action, as it was felt it would produce erosion and affect accuracy.

Both models therefore used a





The front-barrel band and sight serial number.

BORN IN AUSTRALIA, MADE IN THE USA

UNSTOPPABLE FORCE
MEETS

IN IN OVABLE OBJECT

FIND YOUR LOCAL STOCKIST www.tasco.com.au/find-an-outlet





Gewehr 41, G41(W) - the Wehrmacht's first self-loading rifle

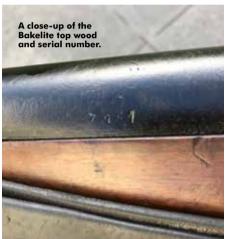
mechanism known as the 'Bang system' (after its Danish designer Søren Hansen Bang). In this system, propellant gases are captured by a cone-shaped gas trap at the muzzle, which in turn deflects them to operate a small piston that pushes on the operating rod that opens the bolt for extraction and reloading.

This method was in contrast to the more common type of gas-actuated system in which gases are tapped off from a hole in the barrel and push back on a piston to open the breech to the rear. Both designs possessed fixed 10-round magazines that were loaded using two of the stripper clips from the Karabiner 98k, utilising the standard German 7.92×57mm rounds.

The Mauser design, the G41(M), was the only one of the two that fully respected the criteria imposed and the end result was an overly complex rifle. It incorporated a familiar control arrangement to the standard Karabiner 98k rifle. The G41(M) was striker-fired, rotating-bolt locking and featured a traditional bolt handle/charging handle that automatically disconnected the bolt assembly from the recoil spring should the rifle be used in manual mode.

The Walther design, the G41(W), was more successful as the creators had simply ignored the last two restrictions listed above. However, both the Walther and Mauser versions suffered from gas system fouling problems of the Bang system, since gases at the muzzle cool down and deposit solid carbon fouling. These problems also seemed to stem from the muzzle











The safety and rear of the bolt receiver.





Euro IV 6-24x58

30mm tube & illuminated reticle



2.5-15x50 4-16x44

5-20x50 2.5-10x56

5-30x56 (Tactical 34mm tube)

Prices start from \$390



Gewehr 41, G41(W) - the Wehrmacht's first self-loading rifle

trap system becoming excessively corroded from the use of caustic salts in the ammunition primers. The muzzle assembly consisted of many tight-fitting parts and was difficult to keep clean, disassemble and maintain in field conditions.

Nonetheless the G41(W) entered service as Germany's first self-loading rifle. However, Mauser did introduce its design in 1942 in limited numbers which were also issued in the field, but examples of these are extremely rare.

G41(W) rifles were produced at two factories, namely Walther at Zella-Mehlis and Berlin-Lübecker Maschinenfabrik. Walther guns bear the AC code and WaA359 inspection proofs, while BLM guns carry the DUV code with WaA214 inspection proofs. These rifles are also relatively scarce and quite valuable in collector grade.

The G41(W) was redesigned in 1943 into the Gewehr 43 (G43) with the barrel finally drilled and tapped for gas to cycle the action and short-stroke piston, very similar to the Soviet SVT-40 rifle. The G43 also featured a detachable box but it did retain the bolt of the G41(W).

The example featured here was made by Walther and bears the AC code. Unlike Berlin-Lübecker Maschinenfabrik, Walther did not put the date on the receiver but



Check out the rear-sight serial number.

The Waffenamt 359 (Walther) stamp marked on the stock.

the serial number indicates it was made in 1942. It's fully matching and includes a walnut stock and Bakelite top wood, which was a trait utilised on these rifles. The Bakelite is also serial numbered to the rifle like all other components.

Interestingly, this rifle also boasts a rail underneath the rear sight to mount the ZF41 scope which was also mounted on the K98k. A small number of G41s incorporate that facet which makes the rifle even more valuable.





Forbes Wholesale Pty Ltd

PO Box 589 Eltham, Vic 3095 Phone: 03 9439 6111. Fax: 03 9439 7288. Mobile: 0419 376 624. Email: forbes@forbesws.com.au

Website: www.forbesws.com.au DLN: 407-000-00F

ABN: 91 006 005 465



Pedersoli 1886/71 Lever Action. The true American Express Rifle



- and also in .444 Marlin calibre with a 19" barrel.
- Special Pedersoli Match Grade barrel, air-gauged for accuracy, with 5 round magazine.
- · Solid steel locking lugs in a fast strong lever action.
- Ultra light Microcell memory buttplate 23mm (.511") thick, pistol grip with metal cap.
- Rear sight with elevation and windage adjustments.
- Tunnel front sight with brass insert.
- Weight 3.7 kilos (8.15lbs).
- Drilled and tapped for a Creedmoor tang sight.
- Optional integral rear-sight base to mount a long eye relief telescopic or fast target acquisition red dot sight.

Inquire for pricing and stock availability or see our website

Colour catalogues available - \$25 posted. Pedersoli website www.davide-pedersoli.com

Steyr Scout Ranger .308

Reduced to clear - amazing value
Normally \$3680

High round mag kit & 2x 10-rnd mags,

adjustable cheekpiece, muzzle brake, integral bipod, Manox or stainless barrel available - **Just \$2625**

THOMPSON/CENTER

Thompson Center Encore

Clearance

Pro Hunter model, stainless with fluted barrel, .243 and .30-06 only Was \$1755, now just \$1295

(N) BERETTA

Massive Beretta Cat C Sale Up to 65% off

B709 or AG permit required

Primary producers, pest controllers or

Cat C target shooters only.

Very limited stock

Beretta AL491 Tenkys Stonecoat 20g 26" or 28" barrels available,

adjustable chokes

Was \$2680, now just \$1340

Beretta AL491 Tenkys Stonecoat Slug 20g 22" smooth barrel with open sights and

cylinder choke.

Was \$2685, now just \$995

Beretta AL491 Urika II Gold Black 20g 26" barrel with 5 adjustable chokes

Was \$2850, now just \$1425

Beretta AL491 Urika II Gold Black Slug 20g

22" smooth barrel with open sights and

cylinder choke.

Was \$2850, now just \$995

Miroku MK70 Field

Massive savings - very limited stock 30" ejector with 3 adjustable chokes

Just \$1395

Bushnell Magnetic

This month just \$49

Bore Sighter

Magneto Speed

Chronographs

V3 Kit \$625

PH: 02 9882 2689

\$15 flat rate post on any order anywhere in Australia

Excluding finance and dangerous goods and some bulky items to remote locations

to please aim

Massive Bushnell Sale! Last available - now discontinued

Bushnell One Mile ARC Rangefinder Was \$825, now just \$595



Bushnell Trophy 4-12x40 1" tube and side parallax adjustment. Just \$219 while stocks last



Bushnell Elite 4500 6-24x40 Multi-X Japanese made, very compact scope. Was \$910, now just \$699



Bushnell Elite 3500 4-12x40 Multi-X Was \$470, limited stock at \$299



Bushnell AR 4.5-18x40 .223 or .308 BDC reticle \$165 6.5 Creedmoor \$199



First focal plane G2 reticle, 30mm Reduced to \$995

Bushnell TRS-25 red dot With Weaver/Picatinny mount just \$169



🍩 TAURUS

Taurus .44 Mag Clearance

Taurus RT44 .44 Magnum 212mm Stainless Was \$1185. now just \$695



Primos Proof 03 16MP Trail Cam Blackout LED Just \$220 while stocks last



Tasco 5mp Trail Cam Reduced from \$300 to just \$169



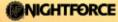
NITI

NiteSite Eagle RTEK Was \$1895 Very limited stock





Meopta Meostar 3-12x56 R1r RGD 4C Was \$1535, only \$999





Nightforce ATACR 1-8x24 F1 34mm FC-DM reticle .1mil adjustments \$3505



Nightforce NX8 1-8x24 F1 30mm FC-Mil or FC-MOA reticles \$2190



Nightforce BEAST 5-25x56 Mil-R, MOAR \$5135 Horus H59 or T3 illuminated \$5630



Nightforce	ATACR	5-25	5x56	SFP	 \$33'	75
Nightforce	ATACR	5-25	5x56	FFP	 \$38	80
Nightforce	ATACR	4-16	6x50	FFP	 \$31	30
Nightforce	ATACR	7-35	5x56	FFP	 \$45	05
O						

Nightforce SHV 4-14x50 FFP ill	\$1615
Nightforce SHV 3-10x42	\$1130
Nightforce SHV 4-14x56	\$1245
Nightforce SHV 4-14x56 ill	
Nightforce SHV 5-20x56	
Nightforce SHV 5-20x56 ill	

Nightforce Competition 15-55x52.. \$2995 Nightforce Competition Lightweight

12, just 587 grams		\$22
	90	

Nightforce BR 8-32x56	\$1660
Nightforce BR 12-42x56	\$184

SCHMIDT ⊙ BENDER Schmidt & Bender Sale

S&B Summit 2.5-10x42 A4 or A7 reticle, 1" tube Was \$2090, now just \$1695 Limited stock S&B Stratos 2.5-13 pic



FD7 flash dot reticle 1cm CW Reduced to \$2395 Limited stock

Schmidt & Bender Exos 1-8x24 FD7 flash dot reticle, 30mm tube

Was \$3395 Limited stock at \$2695



Schmidt & Bender Stratos 1.5-8x42 FD7 flash dot reticle Was \$2949 Limited stock at \$2299



Reduced from \$4490 to clear Schmidt & Bender PMII Ultra Short 3-20x50 FFP with illuminated MSR reticle Now just \$3690 Very limited stock

Schmidt & Bender PMII 5-25x56 P4FL2 illuminated reticle in the second focal plane, 1/4 MOA CCW clicks. **Just \$3149**

Schmidt & Bender PMII 5-25x56 with illuminated P4FL reticle in the first focal plane. .1 mil clicks. CW/DT/ST. Now just \$3790

S&B	PMII	5-25x5	6 MTC	LT RAI	8000	\$4495
S&B	PMII	12-50x	56 FFF	P4F		\$3490
S&B	PMII	5-20x5	0 Ultra	Short.		\$3950
S&B	PMII	1-8x24	Short	Dot CC	CQB	\$4195
S&B	PMII	High Po	ower 5	-45x56		\$6399
		O				



S&B Zenith 3-12x50 A7 reticle	\$1690
S&B Klassik 8x56 A7 reticle	\$1349
S&B Klassik 10x42 A7 reticle	\$1249
S&B Klassic 6x42 A1 reticle	\$1190



Zeiss HD5 Clearance



Zeiss HD5 5-25x50 locking target turrets & plex reticle, lust \$990. Limited stock.

New Zeiss Models New Low Prices



Zeiss Conquest V4 Scopes

1-4x24 illuminated	\$1225
3-12x40	\$1225
3-12x40 ballistic turret	\$1345
3-12x56	\$1225
3-12x56 illuminated	\$1345
4-16x44 ballistic turret	\$1225
6-24x50 ballistic turret	\$1470
6-24x50 illuminated ballistic turret.	\$1590



Zeiss Conquest V6 Scopes



Zeiss Victory V8 Scopes

1.1-8x30 illuminated	\$2590
1.1-8x30 illuminated ASV	\$3155
1.8-14x50 illuminated	\$3035
1.8-14x50 illuminated ASV-H	\$3340
2.8-20x56 illuminated ASV-H	\$3395
4.8-35x60 illuminated ASV-H	\$3635

New Zeiss Victory RF Rangefinding Binoculars



Victory RF 8x42	\$3870
Victory RF 10x42	
Victory RF 8x52	
Victory RF 10x52	

Call for the best prices on all other Zeiss Products

19 Babbage Rd Roseville Chase NSW 2069

MON-FRI: 9am - 5pm

Like us on Facebook for Special Updates PRICES SUBJECT TO CHANGE

www.magnumsports.com.au

SAT: 8am - 3pm



he past 10 to 15 years has seen the range of camouflage patterns suited to outdoor applications sky-rocket. Every few months it seems some new item is released, initially in hunting apparel and accessories alike.

Firearm manufacturers soon follow suit with all manner of rifle and shotgun stocks and metalwork dipped in the relevant camouflage look. Kuiu is a relative newcomer to the outdoor apparel and accessory scene which has been taking the US by storm, with camouflage patterns in Verde and Vias two of its most popular.

Both have both been embraced by many firearm manufacturers, Winchester being one of them. Vias and Verde are now offered in the XPR range of centrefire rifles as well as other longarm models. The Australian Shooter received the XPR Hunter with Vias camouflage pattern in .270 Winchester for review, along with a Meopta MeoPro riflescope in 6-18x50 and a quantity of Winchester and Browning ammunition.

Barrelled action

The Winchester XPR Hunter Vias is a fullsized bolt-action repeater with the action identical to that on all XPR variants. It's a round-bodied unit made from a single piece of chrome moly steel, precision machined and heat treated for additional strength. The action is 245mm long x 35mm wide with the bolt-housing segment making up 165mm.

The generous ejection port measures 84mm x 19mm which accommodates the discharge of fired and unfired cases, while allowing single loading by hand.

The top section of the action has a scalloped segment running from the front of the ejection port to the rear and this flattened sector permits attachment of scope mounting bases, utilising the four drilled and tapped holes which accommodate 8-40 scope mounting screws (two holes per base).

On the left-hand side of the action the Winchester name is neatly inscribed into the metal, while the serial number is on the right, forward of the ejection port. Additionally on the left-hand side a



HORSLEY PARK AVAILABLE ONLY WHILE STOCKS LAST CUN SHOP

AVAILABLE ONLY WHILE STOCKS LAST
Mail Order Specialists Australia Wide



NOW YOU CAN SHOP ONLINE - www.hpgs.com.au



THE HPGS Wistmas SALE LASTS ALL FEBRUARY!



THE ALL NEW SAVAGE A22RF LATCHING REPEATER ACTION 22LR

WITH A GUNSLICK 22 CLEANING KIT, LYMAN FLIPPIN CRITTER WALKING TARGET, AND A FREE 3-9X40 SCOPE AND MOUNTS. **BE QUICK ONLY \$780 FOR THE LOT**.



RUGER AMERICAN 22LR RIFLE

WITH A GUNSLICK 22 CLEANING KIT, LYMAN FLIPPIN CRITTER WALKING TARGET, AND A FREE 3-9X40 SCOPE AND MOUNTS. **ONLY \$595 FOR THE LOT.**

DIANA 11 SYNTHETIC 177 AIR RIFLE	\$220 \$165
1320 FPS AIR RIFLE. DIANA K98 .22 850 FPS AIR RIFLE. STEVENS 301 SYNTHETIC SINGLE BARREL 410 SHOTGUN. GLOCK 17A GEN 3 9MM. GLOCK 17A GEN 4 9MM. GLOCK 17A GEN 5 9MM.	\$595 \$275 \$695 \$775

OPTICS

BUSHNELL PERMAFOCUS 10X42	
REALTREE CAMO BINOCULARS	\$125
BUSHNELL G FORCE 1300 DX ARC 6X21 CAMO RANGEFINDER\$	\$495
BUSHNELL TROPHY BONE COLLECTOR	
10X42 GREEN BINOCULARS	\$175
BUSHNELL ENGAGE 10X42 ED BLACK BINOCULARS	\$480
BUSHNELL ENGAGE 8X42 ED BLACK BINOCULARS	\$425
LEUPOLD RIFLEMAN 3-9X40 MATTE WIDE DUPLEX SCOPE	\$320
LEUPOLD RIFLEMAN 4-12X40 MATTE WIDE DUPLEX SCOPE	\$380
LEUPOLD RIFLEMAN 3-9X50 MATTE WIDE DUPLEX SCOPE	\$360
LEUPOLD RIFLEMAN 3-9X40 MATTE RBR SCOPE	\$320

ACCESSORIES

CALDWELL UNIVERSAL PISTOL MAG LOADER\$75
LYMAN FLIPPIN CRITTER PRARIE DOG WALKING TARGET .22 CAL \$38
LYMAN FLIPPIN CRITTER ROUND WALKING TARGET .22CAL\$38
GUNSLICK ULTRA .22CAL CLEANING KIT\$25 SUPER SPECIAL
SOG ENTRENCHING TOOL BLACK\$28
SOG HAND AXE\$60
SOG MINI PENTAGON KNIFE\$110
SOG SALUTE BLACK FOLDING KNIFE
SOG SALUTE MINI BEAD BLASTED FOLDING KNIFE

FEDERAL POWERSHOK CENTREFIRE AMMO

223 AMERICAN EAGLE 50GR TIPPED \$145/200 243 80GR & 100GR \$255/200 243 PREMIUM 75GR HP \$255/200 6.5 CREEDMOOR 140GR \$260/200 270 130GR \$280/200 308 150GR &180GR \$240/200 30/30 150 GR FN \$260/200	223 55GR	.\$165/200
243 PREMIUM 75GR HP \$255/200 6.5 CREEDMOOR 140GR \$260/200 270 130GR \$280/200 308 150GR &180GR \$240/200 3006 150GR & 180GR \$240/200	223 AMERICAN EAGLE 50GR TIPPED	.\$145/200
6.5 CREEDMOOR 140GR \$260/200 270 130GR \$280/200 308 150GR &180GR \$240/200 3006 150GR & 180GR \$240/200	243 80GR & 100GR	.\$255/200
270 130GR \$280/200 308 150GR &180GR \$240/200 3006 150GR & 180GR \$240/200	243 PREMIUM 75GR HP	.\$255/200
308 150GR &180GR\$240/200 3006 150GR & 180GR\$240/200	6.5 CREEDMOOR 140GR	.\$260/200
3006 150GR & 180GR\$240/200	270 130GR	.\$280/200
·	308 150GR &180GR	.\$240/200
30/30 150 GR FN\$260/200	3006 150GR & 180GR	.\$240/200
	30/30 150 GR FN	.\$260/200

SUPER SPECIAL

FEDERAL AMERICAN EAGLE 9MM 115GR TSJ SYNTECH JACKET AMMO



ONLY \$230/500

LIKE US

1848 The Horsley Drive HORSLEY PARK NSW 2175

PHONE 02 9620 1313 • 02 9620 1235 • 02 9620 1430 • 02 9620 1960 FAX 02 9620 1449 EMAIL sales@hpgs.biz

ABN 85 003 914 850 DLN 410 582 683 · ALL PRICES INCLUDE GST AND ARE SUBJECT TO CHANGE WITHOUT NOTICE





Winchester Hunter XPR

well-appointed bolt release button, also made from metal and measuring 35.5mm x 5mm, means it is easy to remove the XPR bolt.

This bolt is a stout affair indeed, crafted from chrome moly bar stock and heat treated. It's 165mm long x 22mm in diameter with the bolt shroud and cocking indicator adding an additional 40mm. The bolt gives a short 60-degree lift and is crafted as a full diameter unit with the three locking lugs providing a super strong lock-up when the bolt is closed.

A plunger-style ejector in the bolt face, mated up with a small claw extractor on the side, removes fired and unfired cases from the chamber and the entire bolt body is Nickel-Teflon coated. The one-piece bolt handle is sculptured to give a positive grip and the bolt can be field stripped in seconds without any special tool for cleaning and lubrication.

Located just behind the bolt notch the two-position safety - forward for 'fire' and rearward for 'safe' - is easily and quietly operated with the thumb of the firing hand. Positioned in front of the safety lever is the bolt release button which lets the action cycle unfired cases while the safety is engaged.

The MOA trigger system is the same used on the Model 70 rifle. It minimises take-up, creep and over-travel, imperative for improved accuracy. Being made of hardened steel components and all finely polished, the trigger comes from the factory set at 1.6kg, which my Wheeler digital trigger gauge verified. It's spot-on for a hunting rifle and one of the best on

The business side of the action with permacote grey coloured receiver.



the market. The alloy trigger blade is well proportioned with a curved profile.

The use of polymer in the triggerguard and detachable magazine box has become commonplace on many mass-produced rifles. The XPR Hunter Vias triggerguard/ magazine well is perfectly functional. The detachable magazine is also made from polymer and holds three rounds in .270 Winchester in a straight stacked, linear arrangement. The detachable magazine fits securely into the well and is held with two clips, front and rear. To remove the magazine a small tab, just forward of the well, is depressed and the magazine box falls out. Loading the long .270 Winchester rounds into the magazine is easy and when the loaded magazine is in place, the bolt picks up the rim of the cartridge and feeds the round into the chamber.

The barrel is one of the strong points, 610mm in length and of a Sporter profile. It's made from chrome moly steel, thermally stress relieved to ensure straight and true accuracy and button rifled to create a barrel that will handle a wide variety of bullet weights and types. In the .270 Winchester tested, the rate of twist is one in 10" with four grooves.

The barrel is attached to the action with a barrel nut, a process which allows precise head-space control during the manufacturing process and now a standard method of barrel and head-space adjustment. The barrel profile starts at 29.3mm at the knox form and tapers down to 15.8mm. At the muzzle, a recessed target-style crown helps protect the rifling from any unnecessary damage and assists in accuracy. The barrel is free floated along its entire length.

The permacote grey finish complements the tones in the macro Vias camouflage stock pattern perfectly and is durable and corrosion-resistant.

The stock

The polymer stock is designed around a straight American-style profile with no





PLEASE VISIT www.hermannsguns.com TO FIND YOUR NEAREST STOCKIST









Winchester Hunter XPR

cheekpiece. The standout feature is the Kuiu Vias camouflage pattern which is expertly applied in a dip-process.

For maintaining a secure grasp in the elements, areas of stippling around the pistol grip and either side of the fore-end give a positive hold. The pistol grip with its open radius is comfortable and gives good control of the trigger blade. Likewise. the fore-end allows a relaxed clutch while having enough surface area to accommodate shooting off sandbags or a rest.

The body of the stock and fore-end has several sculptured segments and recessed lines for aesthetics more than anything functional. At the end of the stock is a decent recoil pad in Inflex Technology. This has internal rib structures that redirect the recoil impulse, which in effect moves the comb down and away from the shooter's face. Pressing the pad with my thumb it felt quite soft.

Finally on the exterior, QD sling swivel studs are provided for attaching a sling or bipod. The action-to-stock bedding consists of a cross-mounted metallic recoil lug inletted into the base of the stock just in front of the forward action screw. This recoil lug, which is permanently fixed, mates up with a slot recessed into the underside of the action. The remainder of the action rests on what Winchester terms 'flat profile interface pads'. Some will love the stock set-up and for a hunting rifle it should be sufficient, but a bit more weight and rigidity would be advantageous.

The XPR Hunter Vias has an overall length of 1130mm and weighs 3.25kg bare. When fitted with the review scope it gave a working weight of 4.02kg. It's available in .270 Winchester (tested) as well as nine



Accuracy Testing -Winchester XPR Hunter Vias Sporter - .270 Winchester - 100m

Ammunition brand and projectile weight	Best group	Worst group	Average*
Winchester Deer Season XP 130-gr	16mm	39mm	27mm
Browning BXR 134-gr Expansion Tip	15mm	27mm	22mm
Sako Hammerhead 156-gr	22mm	35mm	27mm
Federal Power-Shok 130-gr Soft Point	18mm	40mm	27mm
*Average is calculated from five three-shot groups a	t 100m		

other calibres from .243 Winchester to .338 Winchester Magnum.

At the range

Winchester Australia supplied an excellent optic in the Meopta MeoPro in 6-18x50. Being a hunting rifle, also supplied were loads in the Winchester Deer Season XP and Browning BXC. I had loads in Federal Power-Shok and Sako Hammerhead which would be added to the range testing regime.

The usual procedure of five three-shot groups at 100m with a barrel clean between changes in ammunition was employed. I was expecting better than average accuracy from the 610mm (24") barrel and wasn't disappointed. The table lists the results of the range testing with the best, worst and average group sizes.

Off the bench the XPR Hunter Vias was a pleasure to shoot, functioning without any issues and ejecting fired cases cleanly. The MOA trigger contributed to the excellent accuracy figures obtained with the five ammunition brands. Recoil was manageable thanks to the Inflex recoil pad.

In summary

The Winchester XPR Hunter Vias follows the standard all other XPR variants exhibit.



Detachable polymer magazine with single-stack configuration held three rounds in .270 Winchester.

One of the many targets shot.

It's an excellent hunting rifle which not only looks the part but won't break the bank with a retail price of \$945. Being offered in the 10 popular hunting calibres, you owe it to yourself to check out the XPR Hunter Vias when searching for your next hunting rifle. For more, visit winchesteraustralia. com.au •

Specifications

Manufacturer: Winchester Repeating Arms (Browning Arms Company, Viana, Portugal)

Model: XPR Hunter Vias

Action: Push-feed bolt action finished in permacote grey

Trigger: MOA trigger system - Singlestage, fully adjustable set at 1.6kg from

Safety: Two-position safety with bolt release button

Barrel: Sporter weight, 610mm (24") in length, I in I0" twist (on test rifle in .270 Win.), recessed target style crown, finished in permacote grey. Barrel length ranges from 560-660mm (22-26") specific to calibre

Sights: None fitted. Action top drilled and tapped for scope mounting hardware using two 8-40 screws per

Calibres: .270 Winchester (tested). Also available in .243 Win., 6.5 Creedmoor, 7mm-08 Win., 7mm Rem. Mag., .308 Win., .30-06 Sprg,. .300 Win Mag., .300WSM., .338 Win Mag

Magazine: Single column polymer box magazine, capacity three or four rounds (dependant on calibre.) Review rifle in .270 Win. three rounds

Stock: Advanced polymer stock with Inflex Technology recoil pad

Distributor: Winchester Australia

RRP: \$945

Be part of the SOLUTION



Join a SSAA Conservation & Wildlife Management group in your state - ssaa.org.au/cwm





case for the defence

Lionel Swift

any satisfied users may wonder why this one time 'wonder cartridge' needs to be defended and I too believe, to paraphrase Mark Twain, 'the death of the triple-two has been greatly exaggerated'. For those satisfied owners no defence is necessary, but statistics show the long-beloved .222 R has been overshadowed by the .223 R for decades.

This means newcomers to our sport, and particularly those stepping up from the ubiquitous .22 rimfire, are almost invariably advised to buy a .223 R. Indeed a reply in *Australian Shooter's* Top Shots section (August 2018) advising a would-be .22 centrefire shooter, praised the 'excellent' 22 Hornet (circa 1932) then jumped to the .223 R and .22-250 R. Likewise, Wikipedia describes the .22 Hornet as 'filling the gap between the .22 WMR and the .223 R'.

So perhaps the .222 R does need a little defence as it seems to have become

invisible. The current choice for 'new shooter' will most often be a .223 R, influenced by those who already have one and are satisfied with it. Of course they're satisfied with it, as both calibres will do an excellent job, but the .222 R was doing an excellent job for decades before the arrival of the .223 R, so why has the latter so overwhelmed the 'original'?

The simple answer is the .223 R was originally a military calibre (5.56mm) and military calibres attract greater publicity, greater usage and greater availability of ammunition and brass for civilian use. Of course there can be serious pitfalls in using ex-military ammunition in many civilian rifles. The primers are harder and rounds can be 'over length' compared with the civilian specs and most military 5.56mm ammunition is loaded to higher pressure than civilian .223 R (more later.)

The military choice of the .223 R (5.56mm) was made after consideration

was given to the .222 Magnum which had already 'improved' the original .222 R, but the Magnum was thought a little more powerful than necessary for military purposes.

The .223 R was given slightly increased case capacity, a 5gr heavier projectile and 100fps more muzzle velocity - which increased range and terminal energy, and militarily was classified as the 5.56mm. The grounds for its selection as a military calibre were understandable but aren't necessarily reasons for hunting or target use over the original .222 R. These points take us naturally to the history of both and advantages of each.

History of the .222 R

It was developed by Remington design engineer Merle 'Mike' Walker in the late 1940s and went into production in 1950 in the Model 700 rifle also designed by Walker. As he was designer of one of the

Welcome to the Great Outdoors

Unlike other outdoors magazines, *Great Australian Outdoors* takes an in-depth look at issues affecting our continent's landscape, fauna and flora. We consult academics, environmental experts and custodians of the land and seas, be it farmers, fishers or those charged with protecting it for future generations. Take us on the road

Great Australian Outdoors is packed with practical touring tips, travel ideas, maps, technical information, even food and water safety for travellers. At last our big country has a big outdoors magazine – order your copy of GAO now to secure the SSAA member discount and free postage. It's the big new magazine for our big sensational country!



The .222 R - case for the defence

most successful cartridges and several very successful Remington rifles, here's a thumbnail sketch of his life.

Born in 1911, he was one of Remington's top design engineers for both rifles and ammunition for decades. His best-known rifle design was the Model 700, developed from the Models 721, 722 and 725. The 700 was one of the most successful and longest production run of any Remington rifle, despite becoming controversial due to an occasional trigger safety catch problem. Walker claimed this was because of an alteration in his design which saved the company 5.5c per rifle.

He resigned over this in 1975 and litigation against Remington by customers over accidental discharges continued until early this century. Walker died in 2013 aged 104, having been a witness in several court cases (against Remington) until 2011. However his undeniably greatest fame is associated with 'his' .222 R round.

With its vastly improved velocity and energy (typically 3200fps muzzle velocity and 1000 ft/lb with 50gr bullets), it quickly replaced the previously widely used .22





Hornet (2600fps MV and 700 ft/lb with 45gr bullets). Various specifications were tested, particularly using 40gr bullets at first, finally going into production with 50gr projectiles which became, and remains, the most popular weight for both hunting and target use, although 55gr ammunition is available.

Adoption by rifle manufacturers It was found to have exceptional accuracy and was adopted by several rifle manufacturers in the US (including Winchester and Ruger), plus from Europe, Brno, Tikka and Sako. Interestingly, many developed special lightweight models for the calibre, since its short length and light recoil meant short receivers and light barrels became common, without affecting the inherent accuracy.

Hunters and benchrest shooters adopted it throughout the US and the .222 R still holds some US benchrest records to this

day. Likewise, hunters in Australia took advantage of this new round for foxes, goats and medium-sized feral pigs. I've used the .222 R for goats, foxes and medium-sized pigs but for large boars both the .222 R and .223 R are borderline, requiring exacting bullet choice and placement.

Although various ammunition has been produced ranging from 36gr projectiles with a velocity of 3600fps to 55gr with somewhat lower velocity but retaining energy a little better, the 50gr remains the favourite among shooters worldwide.

Development of the .223 R

This started in 1957 as a military round in conjunction with the design of a new military firearm. Fairchild Industries did most of the development work using a prototype .223 Special by Remington. The rifle used in testing became the AR 15 by Armalite which was a division of Fairchild. The final production round was designated '5.56mm'

Win the 783 Jackaroo - SSAA members' exclusive

As you may have spotted in our December magazine, Australian distributor Raytrade is giving SSAA members the exclusive chance to win Remington's new 783 Jackaroo, with one of the rifles up for grabs every month from now until the end of the year. It's free to enter the competition and all you need do is follow Raytrade on Facebook and Instagram, like the Jackaroo posts and follow the prompts to earn a place in the monthly draw. Calibres available are .223 Rem, 6.5 Creedmoor

and .308 Win and the package also includes a Lucky 13 10-round magazine, oversized bolt handle and Picatinny rail. The retail value of the 783 Jackaroo is around \$1000 so why not give it a go?

The rifle won the approval of Australian Shooter Senior Correspondent John Dunn who reviewed it in the December magazine. John felt it would be a handy walkabout hunting rifle as well as a great little truck option. "Wherever it's used it will give a good account of itself," was his conclusion.



INTERNATIONAL COMMEMORATIVE ANNOUNCEMENT





Vietnam 55th Anniversary Commemoration

SAVE \$50.00 Yours for just

\$29.99_{+ P&H}

Limitation: 9,999 worldwide | Finish: Layered in Pure Gold | Quality: Proof | Edition: Uniquely Numbered | Diameter: 38.6mm

1962: Honouring those who were only 19... They were the forgotten diggers. A generation of young men who fought for Australia like their fathers before them. But they returned as outcasts, casualties of a war nobody understood. Yet time heals the injustices of the past. Now our Vietnam diggers are amongst the most revered heroes of the Anzac legend. 55 years after our first troop deployment, a new commemorative has been struck to honour the men whose bravery will never be forgotten. Struck to a high specification and layered in pure 24-carat gold, only 9,999 numbered issues will ever be minted.

The earliest applications will receive the lowest edition numbers. For this reason applications will be processed on a strictly first-come, first-served basis and are limited to one per Australian household. Successful applicants also qualify to view the next coin in the Veterans Remembered Commemorative Collection for only \$79.99 (plus \$9.99 postage and handling) sent entirely without obligation on our 14-day home approval service. Applicants may cancel at any time and all purchases are covered by The Bradford Exchange 14-Day Money-Back Guarantee.

SEND NO MONEY NOW - save \$50.00 - yours for just \$29.99 + P&H

The fastest way to own this historic tribute is to reserve online at www.bradford.com.au/coins or call free on 1300 725 103. Alternatively complete and post the application form below.

©2019 The Bradford Exchange Ltd.

A.B.N. 13 003 159 617

403-COM85 01



Limited Edition with Individual Numbering

Each commemorative is individually numbered, meaning no two are the same. Yours is the one and only issue of its kind - the ultimate collector's item.



Fully layered with Pure 24-Carat Gold

As befitting an event of such importance, the edition is fully layered with pure 24-carat gold.



Struck to match highest quality Proof finish

Expertly struck not once but twice onto a specially prepared mirrored surface reserved only for the most important commemorative issues.

Each issue is accompanied by a Certificate of Authenticity which is supplied, free of charge. An elegant presentation case to house the golden commemorative issues will accompany a future delivery and is supplied to you FREE, as part of your collection.





Reserve yours now: www.bradford.com.au/coins or call on 1300 725 103

Lines open Mon-Fri 8.00am-5.00pm Quote reference 102975

Title

YES, I wish to apply for the $\it Vietnam 55^{th}$ Anniversary Commemorative for just \$29.99 (plus \$9.99 P&H). I do not need to send any money now.

Order reference: 102975

Title	☐ Mr ☐ Mrs ☐ Ms ☐ Miss ☐ Other	
Name		
Address		

COMPLETE AND SEND THIS APPLICATION FORM IN AN ENVELOPE TO: THE BRADFORD EXCHANGE,

REPLY PAID 86369 PARRAMATTA NSW 2124 BRADFORD EXCHANGE

OFFICIAL DISTRIBUTOR

	Postcode	
Signature		
	Signature	

The .222 R - case for the defence

using a 55gr full metal jacket projectile. After wide military use it was introduced as the .223 R commercially by Remington in 1963 in their Model 760 bolt action rifle.

As mentioned, although the calibre is the same, civilian and military rounds can differ in specification, particularly in developed pressure. This is catered for in military weapons with a longer dimension between the seated bullet and commencement of the rifling. This space is called the 'leades' or throat. Not all commercial rifles have these specifications so military ammunition should not be used in commercial rifles without ascertaining the leades specification of their brand of rifle. Militarily, the 5.56mm virtually displaced the 7.62mm in military rifles and machine guns were soon designed for this ammunition.

In civilian hunting use the .223 R became popular, falling between the original .222 R and .222 R Magnum, and in the US it was more popular than both. World-wide it was slower to achieve the same popularity and, in some countries which prohibit ownership of military calibres for hunting, the original .222 R prevails.

Advantages of the .222 R: Almost no recoil; much less noise than the .223 R; inherently more accurate; available in many lighter rifles with (and because of) a shorter action; if sighted in 1" high at 100yds it will effectively be a '200-yd rifle'.

Disadvantages: Slightly less range than the .223 R (over a flat trajectory).

Advantages of the .223 R: Slightly more velocity and energy; slightly more range (over a flat trajectory); can retain an equally flat trajectory with slightly heavier projectile; ammunition more widely available than .222 R; if sighted in 1" high at 100yds it will effectively be a 225yd rifle.

Disadvantages: Noisier than the .222 R: slightly more recoil (but nothing to worry about); slightly less inherently accurate.

Conclusion

Typically the .223 R has a MV of 3200fps and energy of 1200 ft/lb with a 55gr bullet, compared with the .222 R's typical 50gr 3100fps and 1000 ft/lb energy. It seems appropriately sized game can't tell the difference between these calibres and succumb to either with correctly placed



shots. If you own or can find a bargain .222 R vou're lucky. If buying a new rifle you must consider both calibres very carefully.

Odd facts about the .222 R. .223 and '06'

The .222 R is almost identical in profile to the much-loved .30-06 in their most common projectile weights (50gr for the .222 and 180gr for the .30-06). They have almost the same included neck angle and case angle and are proportionally similar.

Considering this, I wonder if the .30-06 profile was the starting point for Mike Walker all those years ago when he initiated what became, for several decades, the world's most popular high power .22 centre-

While mentioning the .30-06, it was the basis for many smaller rounds such as the .308 W and .270 W as well as the larger .35 Whelan, while the .222 R became the basis for several larger rounds, notably the .222 Magnum and .223 R.

When a long-term favourite cartridge becomes the origin for other popular calibres, it shows how successful the parent round is. (Incidentally, the '06' as it's often known is the only calibre among thousands named after its year of origin!)

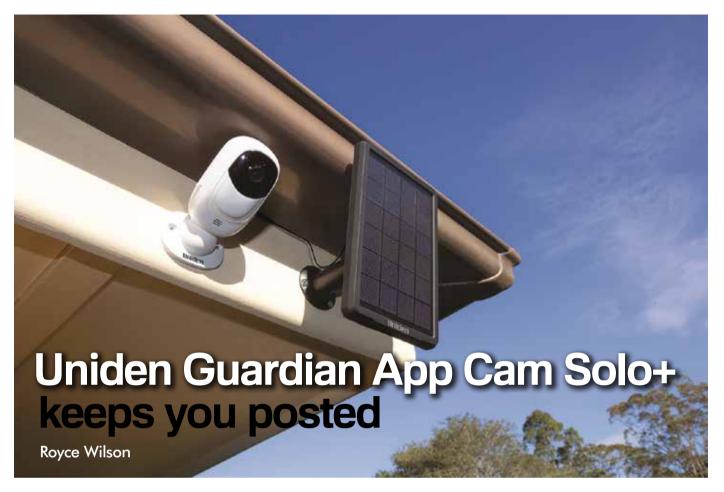


The profile similarity between the .30-06 with 180gr and .222 R with 50gr projectiles

Today the .223 R is the most popular .22 calibre centrefire by far and the .308 W the most popular mid-power .30 calibre. Owners of the latter correctly maintain the .308 W is 'almost as good as the .30-06'. Statistically the .30-06 creates about only 9 per cent more energy than the .308 W but has 19 per cent more recoil, so maybe the multitudes are right - they certainly enjoy a little more comfort.







our firearms are probably among the most important items in your home and securing them safely is not only a legal requirement, it's a key part of being a responsible gun owner. A suitable gun safe is the most important aspect but sometimes you may want a little extra security without going to the expense of installing a full alarm system.

That's where a security camera can come in handy, especially an Internet Protocolenabled one which lets you monitor the camera remotely via computer, mobile phone or tablet. Uniden offers the weatherproof Guardian App Cam Solo+ which does exactly that, and very well too, at \$279.95 for one unit, \$499.95 for two, \$749.95 for three or \$899.95 for four (at time of writing).

Setting the unit up was straightforward, though I will admit to having reasonable technology experience. Download the free app for Apple or Android devices, plug the battery in, use your device's camera to scan the QR barcode on the unit, enter your Wi-Fi details, let the camera scan the QR barcode the app displays and you're in business.

Power is provided by a detachable USB-rechargeable battery and an optional solar panel (\$79.95) can also be connected to provide power for units positioned in sunlight. For regular use - ie, not constant streaming - I found the battery easily lasted a week between charges and a MicroSD card (not included) stored plenty of video too.

Multiple cameras can be connected to cover different areas of your property and the App Cam Solo+ offers countless possibilities, perhaps the most of interest to shooters being as a security camera to keep an eye on the gun cabinet and as a game or predator monitor.

The 1080p high-definition camera has a 130-degree viewing angle and features motion and heat sensors as well as night vision. It can be set to continuously stream to a device or only record when it detects movement or heat, and can also send notifications to your phone or email.

If you want to keep an eye on your gun cabinet or have a visual record of everyone who has accessed it, the App Cam Solo+ has you covered. You can adjust the

sensitivity so it doesn't go off every time a moth hovers in front, and the sensitivity settings seem well adjusted. I found the washing on the line blowing in a breeze wouldn't activate the unit on 'medium' sensitivity but accessing the back door would.

As well as video it also has a microphone and speaker so you can hold a conversation with someone if using it as a door camera. The night vision aspects have a lot of promise as a predator or game camera, too. The visuals are excellent, albeit monochrome, and very clear, so if you suspected a fox was sneaking around the chook house or there's a wild animal bothering your pets, the Guardian App Cam Solo+ would be a good and affordable option. The visibility range at night was about 10m so would be best used in a targeted area where you expect something may happen.

I was most impressed with the Uniden App Cam Solo + finding it an affordable, versatile and effective piece of equipment that's easy to use and with lots to offer shooters and property owners alike. Visit uniden.com.au •



he shooting sports can be broadly divided into two disciplines which I'll characterise as primordial and cerebral and I want to explore their common origin and the differences they've come to define.

The primordial encompasses much, the most obvious being hunting which springs from the 'eat or die' necessity of averting starvation. This imperative has confronted all zoological life from year dot and humans are no exception. It seems the case in historical terms that humans are omnivorous and were obliged to eat whatever came their way: fruit, tubers, berries and, if lucky, meat. An evolutionary case can be made that because meat is such a nutrition dense food, its consumption has been fundamental in the evolution of Homo sapiens into what we are today.

Inevitably there was a trend away from consuming carrion towards organised-primordial hunting where wild animals were harvested as opportunity presented itself. We went from hunter-gatherers harvesting any animal accessible, to nomadic people

moving with the migrations of the wild animals they utilised, culminating in husbandry where livestock are cultivated for use in permanent settlements.

The 'eat or die' aspect of the primordial urge is self-evident and it's from here the hunter trait of the shooting sports can best be understood. On the other side is the cerebral which concerns itself with the question of why a projectile is caused to end up at one particular point and not another.

Success at any endeavour is pretty much dependant on organised applied training or practice. There's an educational axiom stipulating that 'being truly proficient at any complex task involves about 10,000 hours of conscientious, applied effort'. The great golfer Gary Player made a famous riposte to a fan's comment about a "lucky" shot, replying: "I find the more I practise the luckier I get!"

It seems to me the majority of publications about the shooting sports relate to the hunting side rather than target shooting. I can't speak for the joys of hunting as I've never done it, but I do understand the delights of being in the open air far from the suffocation of city life.

During a hectic phase of my working life I'd regularly put all I needed for a week into a backpack and go bushwalking in whatever wilderness took my fancy, and there are regular contributors to *Australian Shooter* who speak of the beauty and exhilaration of the hunt, even though there may not have been a shot fired.

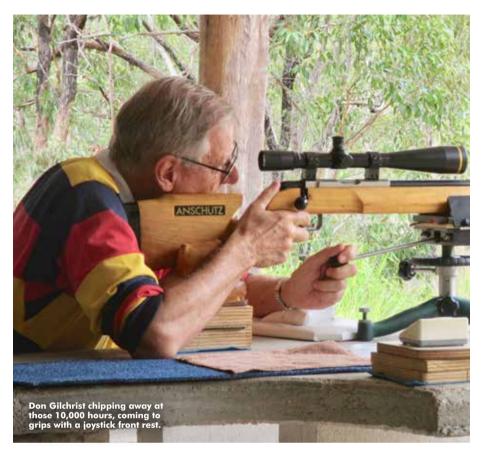
On the cerebral side there's a heartpumping surge as you build a tiny group of shots on a target at 200m. There's a thrill and satisfaction in making these tiny things fly through the air and all arrive at pretty much the same place through the wind and mirage - but to make this happen requires much effort.

There's procedural effort. The gun must be conceived, built and maintained and the components of the ammunition must be chosen, assembled with meticulous care and the results evaluated. And intellectual effort where these things can't be achieved without understanding, so this is where the science comes in. The physics of ballistics, the nature of explosive force, the vibrational harmonics of the barrel and, at the end of the day, all modulated by the application of mind and body control.

When all this comes together the shooter can take it to the range and compare results of like-minded souls in friendly competition but the main rivalry is always with yourself. With more care, study and understanding the cerebral shooter can become better, if just a little bit, next time, every time and doing it in company is a buzz. I don't know why humans love competition, they just do.

My interest is in benchrest rifle shooting and that, among all the other varieties of competitive shooting sports, is the only one I can comment on with any authority. I shoot mostly rimfire benchrest as this can be a family sport. Like me, my wife is competitive but doesn't like the blast, recoil and general violence of high-powered centrefire rifles. The machinery is heavier to hold and requires more aggression to operate.

She doesn't care to spend the time in analysis and production of handmade ammunition, so rimfire shooting takes all that away. Much time in rimfire is spent finding what kind of ammunition your rifle likes and once you've discovered its preferred diet just buy lots of it and start shooting.





Cerebral shooting

In benchrest shooting one of your main costs will be ammunition and it's just bad luck if you find your rifle will shoot like stink but only if you feed it Eley Tenex. A rimfire benchrest competition will consume at least 120 rounds for 50 scoring shots. In centrefire that comes back to 55 more expensive rounds.

In the case of the hunter, for a day in the field he might take a few shots to confirm his zero, carry 10 rounds and only take three or four shots at his quarry. Hunting shots are taken offhand or using improvised rests, often at targets that are moving intermittently within cover at ranges that can be tricky to estimate. Off a bench any decent hunting rifle is capable of 1 MOA but it's in field conditions the hunter's accuracy can blow out. The thing for a hunter is to have enough gun for his prey and sufficient accuracy to humanely despatch it.

For a benchrest rimfire shooter to compete they need their equipment to deliver about 0.8 MOA and in centrefire this comes down to 0.3. This sort of accuracy means many more shots are required to assess the wind, adjust the scope and have the gun warmed up and

shooting consistently. The hunter must have his gun at hunting accuracy for the first shot and if he stuffs that up there will unlikely be a second chance.

I suppose it's theoretically possible to shoot out a rimfire barrel but I've never heard of it being done. A top level 6PPC shooter will consider 600-800 shots of top accuracy to be quite reasonable barrel life before replacement. A .300 Win Mag could have an accuracy life as low as 1000 rounds. A .22-250 could be as low as 1500 rounds and a forgiving cartridge like a 6BR could have doubled that for top accuracy life. Even with these numbers it's highly probable that more barrels have their accuracy ruined by bad cleaning practices rather than excessive shooting. In the rimfire space my wife and I each put about 7000 rounds a year through our Anschutz target rifles and we bought them both secondhand at least five years ago. They still perform well enough to have us run a place in our admittedly small club, provided we shoot well.

And the sport is not that expensive. Australian catalogues list plenty of .22LR firearms perfectly capable of excellent club level performance. A top of the range kit of gun, scope and front-rest which would not be out of place in any competition in the world can be assembled for about \$8500 and for far less than that you can put together a rig and take it to any gun club in Australia without making a fool of yourself. It's way cheaper than owning a boat and going fishing.

Competitive club shooting is probably the best way to learn. In another life I was a reasonably adept sailor and many folks asked me how to get into sailing. My answer was always the same: turn up at your local sailing club on race day, go to the Race Office and offer your services to any boat that will give you a ride. Do any job, keep turning up and vou'll soon be a valued crew member on the sort of boat on which you can learn all about sailing. Racing condenses the learning experience, amplifying the lessons along the way. Being there and keen to learn will do the rest. Starting out on those 10,000 hours is the hard bit.

Shooters, like sailors, are generous with their time for those who want to learn. It's said yacht racing has all the ingredients of



a memorable time: a challenge of concentration, exertion against the elements and insecurity of tenure. I'm not sure how insecurity manifests itself in the shooting sports, perhaps it's the thrill of handling lethal force, but as regards the other two there's little difference.

A badly torn anterior cruciate ligament effectively ends the career of any AFL footballer. In benchrest shooting I've lost to a guy in a wheelchair. This is a sport you can do all your life with almost any level of infirmity and expect that, no matter how long you go on, you should be able to say with perfect honesty your best year's shooting was the last one. I started serious benchrest shooting 20 years ago and was strangely encouraged by the fact that most of the time I lost to people older than me.

These days I realise the mental side of things is at least as important as the equipment side and as you chip away at those 10,000 hours you become better in your head. You learn to read the wind, hold the gun properly, manage your point of aim and the sight picture. You just learn to shoot smarter.

> Sako Varmint rimfire using a front rest made from a disc brake rotor and car jack.





Gamebore your sub-gauge solution

John McDougall



load and the case was closed with a six-segment crimp. Ballistics data from Gamebore placed the load at 1375fps at the muzzle (399m/sec).

Firing the load through a 20-gauge Fabarm I had on loan was a delight. The 1oz load in the 20-gauge seemed to have a little more recoil than the same shot weight in a heavier 12-gauge shotgun but results from the combination of the Fabarm 'Tribore' barrel and parabolic chokes with the Gamebore premium Diamond Shot were devastating. It had been a long time since I'd fired a 20-gauge shotgun but the downrange outcome on the clays was emphatic.

Travelling at 1375fps and in a lighter gun there has to be an increase in recoil. although Gamebore advocates on its website their loads are low recoil. As I had no other brands to compare against I'd say they were around 10 per cent more in recoil than from a heavier 12-gauge gun, but after the first shooting round of 25 targets I was used to it. The effects were certainly seen at the muzzle end with velocity and pattern as targets were destroyed.

Pure Gold hunting cartridge in 28-gauge

Another premium load from Gamebore features their patented Diamond Shot in size six pellets for hunting (too large for legally shooting clay targets but ideal for birds and bunnies). This load is provided in a red 70mm (23/4") case with a high 15mm brass head and fired by the CX2000 primer with a 12.6gr load of Alliant propellant. A felt wad was used in this load for environmental reasons and the shot payload weighed 395gr (25.4g). A six-segment crimp was used to close the cartridge.

This was my first venture into firing 28-gauge loads and I used two guns for the exercise, a Miroku and a Fabarm. Both performed well with the cartridges as clays were broken with the shot load just shy of

the 28g of shot (at 25g) I would generally use in a 12-gauge. I was highly impressed with this load as it was significantly less in recoil than the 20-gauge I tested the same day in spite of the shot velocity travelling at a cited 1450fps. The patterns through both guns busted clays decisively and the Diamond Shot proved a winner.

Taraet cartridae in .410 calibre (36-aguae)

Assembled in a Gamebore 65mm redcoloured low brass case (8mm) and fired by a CX2000 primer, the Alliant black spherical propellant used for this load sent the 14g standard grade lead shot (in size nine only) hurtling along at 1400fps or 405m/sec., a plastic wad used to achieve this velocity.

The weights of the powder were consistent over several cartridges disassembled as was the shot load. The unique plastic wad appeared to be the same each end for the shot cup and the over-powder section with compression struts between.

Shooting these .410 calibre Gamebore Target loads was quite a challenge, using half the lead shot you'd normally use in a 12-gauge. The patterns were the same from the .410 calibre and recoil almost non-existent. Report from the gun was so reduced it was more a 'pop' than a 'bang' from the 12-gauge. I can't ever imagine the .410 calibre replacing the 12-gauge as the standard for clay target shooting but for a young shooter or a lady with a light build the .410 calibre would be ideal for training and competition.

For the seasoned shooter seeking an additional challenge from the reduced shot load there's an extra degree of difficulty in hitting further targets and also a matter of mastering a much faster and lighter sporting gun. I enjoyed the challenge shooting low teens with my first 75 targets of assessment and could only hope my scores would improve as I became more

used to the 'liveliness' of the gun. Recoil was obviously not a concern.

Hunting cartridge in .410 calibre (36-gauge)

Assembled in a 70mm red case with a 16mm brass plated head, this load was also charged with the CX2000 primer for consistent ballistic results. A drop of 11.3gr of a black Vectan spherical propellant was used for achieving a velocity of 1375fps. The shot load was cited to be 16g but my electronic scales showed only 14.7g, a few pellets less than cited.

Nevertheless, shooting this load I managed to crunch some bunnies with ease while leading them and striking them about the head and neck, and the size six shot proved lethal on vermin birds and pigeons. I was most impressed with the hunting load and wouldn't hesitate to recommend it. The slight lack of pellets seemed insignificant but the brisk velocity brought its targets to humane despatches.

Conclusion

There were many aspects of Gamebore loads that impressed, including the willingness to outsource a variety of propellants and not be stuck to one manufacturer. This seeks the optimal performance achievable with the quality of the componentry from the case, primers and wads to the specially prepared Diamond Shot for target and hunting loads. Finally a variety of loads are now available at a reasonable price.

Yes, there's a sacrifice for quality and that may be a few extra dollars. However, in my opinion as a gun writer of almost 40 years - and a dedicated ballistics man - the components used and the final product from Gamebore are second to none.

For those interested in pricing and availability, Danny Genovese has been accredited as Gamebore Australia and can be contacted at danny@ontargetproducts. com.au •



CENS DIGITAL

Electronic hearing protection continues with the CENS® Digital

electronic modules. Combining unique multi-softness silicone custom-fitted earpieces that amplifies the sounds around you but closes off when it detects sounds above 81dB. This unique design combines superb functionality and

comfortable custom noise suppression for today's shooter.



Class 5 Protection, work place approved - Agents located throughout Australia and NZ

Web: www.earmold.com.au Ph: (07) 3820 2533 Email: info@earmold.com.au Earmold Australia® custom "On The Spot" hearing protection offers the ultimate comfort in shooting protection. Shooters custom earmolds are made on

the spot & ready to use the same day. Designed for shooters; it will remove the crack from the shot and still give you situational awareness.

Visit our online shop today





Senior Correspondent John Dunn

hough I no longer own one, I'm a long-time admirer of Browning BLR lever-action rifles. As a hunter I know they're an eminently practical firearm, combining the versatility of modern cartridges and projectiles with a detachable box magazine in an easy-to-handle and fast-to-swing lever-action, ideal for a wide range of hunting situations.

I've owned three of them over the years so when *Australian Shooter* was offered a Lightweight Monte Carlo (MC) model, I was happy to accept the job. With its matte blued metalwork and oil-stained American walnut stock, the BLR Lightweight MC is a handsome rifle. Made for Browning by Miroku in Japan, it balances nicely between the hands and comes to the shoulder with ease. It's one of those firearms you feel you could shoot as soon as you pick it up.

The receiver

On all current production BLRs, the

receiver is made from an aircraft-grade aluminium alloy. While that may give some a heart flutter or two about the strength of the action it's not a matter for concern. The receiver is an unstressed component in the construction of the rifle so there's really no need for any stronger or heavier material to be used. The receiver's job is to bring the lock, stock and barrel together. It plays no part in the lock-up system like it does on most bolt-action rifles.

The top of the receiver is drilled and tapped to accept bases for scope mounting rings. The receivers are made in two sizes – small and large – according to the length of the cartridge an individual rifle is chambered for.

The bolt

The all-steel bolt has six circumferential splines, five of which slide in corresponding grooves machined into the receiver. The sixth and bottom spline is a component part

of the BLR rack and pinion system the rifle is famous for.

When the lever is worked a pinion (gear) in the lever assembly acts in conjunction with a rack (a series of teeth) cut into the bottom spline of the bolt to move it back and forward. The system provides a mechanical advantage that makes the action easier, smoother and probably faster to cycle than most other lever-actions.

The rotating bolt head has six locking lugs that align with the splines on the bolt body. The bolt face is recessed with an extractor located in one of the locking lugs at 10 o'clock and a plunger ejector at 4 o'clock.

As the lever approaches the fully closed position, a cam on the neck of the bolt acts with a pin through the body to rotate the head into lock up with a steel ring on the back of the barrel, fully enclosing the cartridge at the same time. When the rifle is fired, chamber pressures are directed in



a straight line back into the bolt which is locked into place by the rack and pinion mechanism. It's a very strong action, capable of handling the pressures generated by most of the modern magnum cartridges. Ejection of a spent cartridge is through a port on the right side of the receiver.

The hammer

When the loading lever is pushed down the bolt slides back, a bump on its underside contacting the hammer and pushing it back into the full-cock position. When the lever is pulled back up and the bolt moves forward again the hammer remains in that position and the rifle is ready to fire.

There is no safety catch on the BLR but it can quickly and easily be rendered safe. With the rifle pointed in a safe direction,



In the safe or half-cock position, the face of the hammer sits about 3mm short of the firing pin.

the hammer can be eased down into the safe or half-cock position by depressing the trigger and allowing the hammer to roll slowly forward. This leaves the face of the hammer some 3mm clear of the tail of the firing pin which protrudes from the back of the bolt. In this position the trigger can be slightly depressed but will not activate the hammer.

As a further safety measure the front of the hammer can be folded down so its face is sitting below the end of the firing pin . . . just in case the half-cock notch fails.

When the rifle is fired from full-cock the face of the hammer sits hard against the back of the bolt in the dropped position. The owner's manual advises against carrying the rifle with a cartridge in the chamber, even if the half-cock safety notch and folding hammer are engaged.

VOTE 1 LIBERAL DEMOCRATS **TO SUPPORT SHOOTERS' RIGHTS**



"Law-abiding shooters should not be persecuted because of a tiny minority who use firearms in crimes."

-Senator David Leyonhjelm

Show your support: Idp.org.au/shooters



Browning's BLR Lightweight Monte Carlo rifle

The triggerguard and loading lever The steel triggerguard and loading lever pivot on a screw near the bottom edge of the receiver. The gold-plated steel trigger has a striated face for grip and is mounted integral in the triggerguard portion of the loading lever. When the lever is opened the trigger moves with it, avoiding the possibility of a pinched finger when the lever is closed again. The trigger cannot be pulled unless the lever is locked up tight against the wrist of the stock, an important safety feature.

The lever lock is a spring-powered plunger that engages a notched latch when the action is closed.

Trigger pull on the review rifle was essentially two stage, breaking fairly consistently at a little under 3kg. While that's hardly conducive to benchrest shooting, it will work all right in the field.

The barrel

The button rifled chrome moly barrel has a length of 50.8cm (20"). Nominally of sporter weight it has a diameter of 21.2mm at the knox form, contouring down to 14.5mm at the muzzle which has a shallow, bevelled crown. According to the advertising, all Browning barrels are checked for interior finish and straightness and air gauged for uniformity. At the working end, the chamber is cleanly cut and polished. The external finish is matte blue and on the review rifle no sights were fitted.

The magazine

The BLR variety of rifles all make use of detachable, steel box magazines. Within the limitations of action length, that means the BLR can be loaded with modern cartridges using pointed bullets, unlike tubular magazine rifles that are generally best loaded with flat nosed cartridges for safety reasons.



The magazine sits flush with the belly of the stock, secured by a spring-loaded latch in the front of the magazine well. Magazine capacity is either three or four, depending on the length of the action and the cartridge the rifle is chambered for. On the review rifle - a .308 - it was four.

The stock

The two-piece stock is made from American black walnut. On the review rifle the wood was fairly straight grained but dense with a practical oiled finish. The buttstock has a straight grip with chequered panels on either side. The

Monte Carlo comb slopes gently forward to help control recoil and provide a comfortable cheek weld when the rifle is fitted with a scope. The butt has a soft polymer recoil pad with an impressed diamond pattern and black plastic spacer.

The buttstock is secured via a stock bolt under the recoil pad. This bolt engages the main spring tube that runs up the centre of the buttstock and is screwed into the back of the receiver.

Like the buttstock, the forearm has a panel of chequering on either side, cut at 18 lines per inch. The forearm is attached to the receiver by the screw through the front of the fore-end and a forearm tube that in turn screws into the front of the receiver. The forearm is tied to the barrel by a one-piece steel band that is held in place by a pin through the wood. No sling swivel bases are fitted to the woodwork.

Range testing

For testing, Winchester supplied a set of Recknagel bases, 30mm Recknagel QD lever mounts and a 1.5-6x42 RD Meopta Meostar R1 illuminated reticle scope. I consider this scope ideal for a rifle like the Browning. It's not overly powerful, it's quick to use and the illuminated reticle makes it perfect for early morning or late afternoon hunting when the light is low or looked through with both eyes open - the



Browning's BLR Lightweight Monte Carlo rifle

red dot in the centre pointing the way. At 6X it has enough magnification for shots to be confidently taken out to at least 300m. At the lower magnifications the sight can be effectively used at closer ranges in the thick stuff.

Two lots of test ammunition were also supplied - Browning BXR Rapid Expansion 155gn and Winchester Deer Season 150gn loads. To that I added a packet of Federal Vital Shok 130gn HP. Of the three, only the Winchester ammunition was to the Browning's liking - a perfect example of how individual rifles have their own preferences for particular loads. In my No.1 Ruger the Federal load consistently shoots sub-MOA groups.

At 100m the Winchester load easily grouped into 50mm and while that's hardly benchrest accuracy it's more than enough for most hunting situations. The light barrel heats up quickly and consequently has a tendency to walk its shots. At the shorter distances the rifle was designed for, that's unlikely to be a problem. Cycling the action was easy and I had no feeding difficulties.





Overview

As I wrote earlier, I'm a long-time fan of the BLR rifles and the Lightweight Monte Carlo has done nothing to diminish that. It's a very handy rifle available in an array of useful calibres suitable for all game. It's a hunter's rifle and I have no doubt that's where it will find its following.

Subscribe to the **Australian Hunter**

\$29 for four issues (Member price only)

of the Australian Hunter including postage

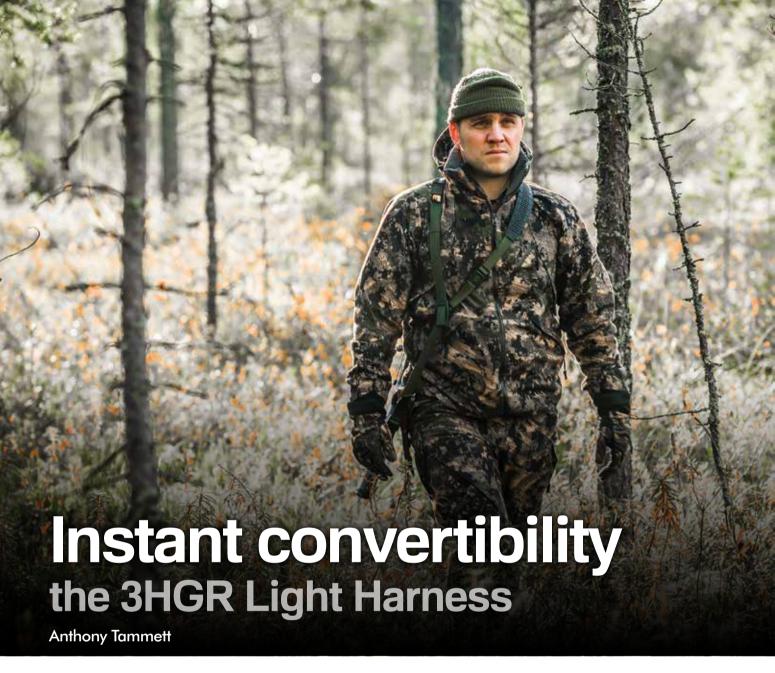
What's inside

Australian and international hunting stories, advice, firearm and product reviews, recipes and much more. No wonder the Australian Hunter is Australia's favourite hunting magazine!

Also available as a digital subscription for your chosen device.



Order online at ssaa.org.au or call 02 8805 3900



inland has long been the source of some of the finest firearms in the world and adding to this distinction, from the home of manufacturers like Sako and Tikka, comes the ingenious 3HGR Light Harness.

This three-positional harness combines a traditional two-point sling with the ability to instantly convert it to a harness that can spread the weight of your rifle across both shoulders or alternatively secure it solidly to the back - leaving both hands free - in a lightweight and convenient array.

Sling design has changed little over the decades except for occasional variations offered by some manufacturers which are often inconvenient or awkward to use. The choice is usually restricted to two-point slings in either leather or webbing, with narrow or wide straps and varying degrees of shoulder padding.

One variation, which is useful in some niche situations, is the two-point quick-adjustable sling, but many people find the long loose end needed for swiftly varying the adjustment troublesome and distracting. The single-point sling is mainly useful for military application and usually of little interest to sporting shooters.

For specialised applications such as biathlon, an event in which skiers combine cross-country skiing and rifle shooting and which Nordic countries dominate in international competition, an elaborate harness is available which spreads the weight across both shoulders. It's a good solution for carrying a heavy rifle long distances but is too bulky for hunting and doesn't have the convertibility to a traditional sling. As for three-point slings, sometimes used by police forces, they're an awkward spaghettilike mess almost certain to become tangled.

While an essential rifle accessory - much consideration is given to choosing scopes and mounts - the sling is almost an after-thought and the choice during purchase is usually made on the limited choices available in a gunshop.

The 3HGR Light Harness followed the original 3HGR which was a bulkier, four-positional sling with the added option of being able to attach a secondary sling around a tree for support to steady the rifle. Although the company now makes other variants such as the 3HGR Driven Sling, popular with brown bear and moose hunters in Finland, it's the 3HGR Light Harness that's likely to appeal most to Australian hunters and shooters.

Inventor Lauri Kakkonen, who not surprisingly has a background in the Finnish military and border guards and takes justifiable pride in his products,



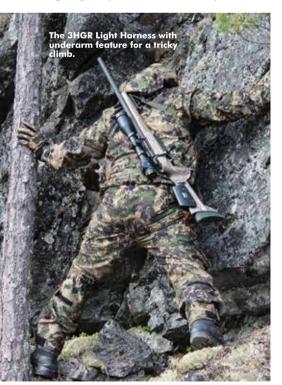
Instant convertibility - the 3HGR Light Harness

described its development thus: "In 2011 the idea came to me of a sling that could be used as a harness and an improvised gun-rest. Originally I had no intention of marketing it, I just wanted a prototype for my own use. But the Finnish Invention Association kept pushing me and things got a bit out of hand. About a year later I realised I have a company to run and a need to develop slings.

"I had no experience in product development and started from scratch. Luckily I was able to work with talented professionals, one of whom had worked for Sako for a long time. I wanted a genuinely madein-Finland product but sewing a normal shoulder padding on a sling would have been way too expensive.

"So one of the guys came up with the idea of making an injection mould which at first didn't work at all. With minor modification and new material we finally had it working. All other parts are made with our own moulds and the webbing was developed for the Finnish Defence Forces, so it's top quality."

Given the Finnish climate and topography, the popularity of biathlon and having watched old newsreels of highly mobile, hugely outnumbered Finnish ski troops surrounding and destroying invading Russian units during the Winter War of 1939-40, there's little doubt the genesis of the 3HGR is the cross-country ski rifle harness, albeit brilliantly modified to be light, quickly convertible and easy to use.





One of the first things you notice about the 3HGR, even when using it as a traditional two-point sling, is the rubber shoulder padding really sticks to your shoulder and doesn't gradually slide off like most other sling-padding materials. This is not by chance and was the result of experimentation and perseverance by the manufacturer in finding the right rubber material.

Once the correct lengths are set for the primary and secondary sling straps, changing from a traditional sling to the harness takes seconds and is simple due to snap fasteners which quickly and smoothly lock into position. When reverting to the traditional two-point sling, the secondary strap snaps into place and 'stores' neatly over the top of the primary strap, causing no inconvenience or distraction.

While the process is so simple it can be difficult to conceptualise initially, even with photographs, and to illustrate it a short video is available on the importer's website at berettaaustralia.com.au.

For long hunts or difficult terrain the second harness option is used, spreading the weight across both shoulders and leaving both hands free. This makes the burden of carrying a heavy rifle, especially across rough ground, infinitely easier and you can almost forget at times you're carrying it. The third option involves channelling the secondary sling underarm, which really locks the rifle to your back and is ideal for climbing steep terrain or crawling during the final stages of a stalk.

The 3HGR Light Harness, complete with locking metal swivels, weighs just 192g - a mere 48g more than the sling it replaced on my favourite deer rifle, a Sako Finnlight in .270 Win. For the few extra grams you obtain infinitely more desirable and convenient features, coupled with excellent quality materials and workmanship.

The positioning of the fixed, black-rubber

shoulder padding on the primary sling webbing is perfect and cushions the pressure point on the shoulder really well. The secondary-sling shoulder padding is by necessity narrower and shorter, but for some reason comes positioned high on the sling and close to the swivel. The result is that when the harness is deployed to spread the weight across both shoulders the secondary sling padding ends up behind the shoulder, where it's of little use, rather than at the pressure point on the shoulder, something I've mentioned to the manufacturer.

Although the secondary sling shoulder padding is moveable, I found it difficult to slide down, as it needs to be about 10cm lower and meets an obstruction where two layers of webbing overlap. Consequently, care is needed not to force it lest the rubber keepers on the padding are ripped. However once positioned correctly, the same webbing thickness keeps it in place.

I've used the sling on three hunts and find the more I use it, the more I appreciate its functionality. To further 'road test' the durability and reliability of the plastic buckles and locking snaps, I shouldered the Sako one evening while moving around the house, climbing stairs, constantly changing the harness position, locking and unlocking the snaps of the secondary sling, all to the amusement of my wife! All worked well and without any glitches.

I've ordered another 3HGR Light Harness for my rifles and found the current retail prices on the internet to be between \$100 and \$129. Although this is well above the price of most slings, it's a relatively small extra expense when compared to the cost of a rifle, scope and mounts.

The convenience, versatility and quality of the harness makes the cost well worth it, and as the founder of Gucci once said: "Quality is remembered long after price is forgotten." Amen to that. •



Protecting our wildlife and surroundings

The CWRT Grants Program provides scholarships up to \$5000 to honours or postgraduate students...

Matthew Godson

he Conservation and Wildlife Research Trust is passionate about protecting Australia's wildlife and natural surroundings. The Trust was set up in 2010 and raises money via its Public Fund to develop and support environmental projects.

One of the projects the CWRT is investing in is the eastern barred bandicoot recovery program at Phillip Island Nature Parks. Another key funding initiative is the Trust's student grants program which provides an opportunity for university students to access research funding. Such studies hope to ultimately improve the

understanding of wildlife and their habitats.

The CWRT Grants Program provides scholarships up to \$5000 to honours or postgraduate students engaged in environmental sciences, wildlife sciences and management, and zoology projects at Australian universities.

In the CWRT case, grants are on offer for research projects that delve into methods of correcting or reversing negative impacts of native and exotic species of wildlife, addressing or altering decline in habitat, and other applied wildlife conservation research in Australia. Grants may be used for the purchase of equipment and



consumable items, travel expenses related to field research, and attending a conference at which a student is presenting their work.

Interested parties are invited to complete an application and successful applicants will be informed once the assessment of their application is complete. Now that the CWRT has an online presence, people who care for the environment can spread the word to any of their friends who want to financially support or engage in research that would qualify them for some assistance. For more on the Conservation and Wildlife Research Trust, visit cwrt.org.au



ports shooting is continually evolving and in recent decades many SSAA shooters have turned their focus to the long range discipline. Naturally, we weren't satisfied with simply shooting out to a further distance than what might seem easily achievable, but soon we were demanding greater and greater accuracy at such expanses.

Today, long range shooting is one of the most popular reasons for new shooters taking up the sport. A good majority of new or prospective shooters I meet ask: "How do I get into long range shooting?" Thankfully, the SSAA has the answer: Long Range Precision.

The discipline is somewhat limiting in terms of what you can bring to the table and use in competition, but it's a good place for new shooters to start or for shooters who don't have a lot of equipment specifically geared towards long range shooting but want to try it for size.

At its core, Long Range Precision shooting is about developing and encouraging long range competition shooting to achieve extreme accuracy in firearms, ammunition, equipment and methodology, in order to make your shots connect at a distance most would consider the maximum they'd comfortably take a shot at both game and static targets.

Rifles are separated into different categories, the minimum distance being 400m and for some classes the maximum can be up to 2500m. Although there are few facilities that offer such extended ranges, generally shooting will be done out to 900m or 1000 vards (the 2017 National Championships in South Australia included courses of fire out to 900 yards).

The core matches for Long Range Precision require shooters to use a factory rifle with limited modifications and deliver five precise shots from a cold barrel, just as they would in a normal in-the-field

situation. For long range hunters this is a great simulation of how the rifle and shooter would behave for a cold bore shot on possibly the hunt of their life.

To increase the potential for cross-overs into real life field shooting, competitions are shot in the prone position with no benches (other than in certain categories) and no wind flags. To be successful competitors must learn to read the wind and other conditions without the aid of embedded wind flags, and possibly other electronic means, and to understand their firearm and its ballistic performance on an intimate level.

What do you need?

Equipment used in Long Range Precision shooting is largely based around factory spec rifles with minimal modifications. This seems to contradict the mission statement of the discipline, being that it's to promote long range competition shooting

An introduction to Long Range Precision shooting



and to achieve extreme accuracy in firearms, ammunition, equipment and methodology, but there is some merit to these restrictions.

The use of high-end custom rifles removes some of the shooter's shortcomings from the equation and can mask inadequacies in fundamentals and technique. There are only a handful of factory rifles that are great Long Range Precision items out of the box, therefore shooters compete on a relatively level playing field.

This discipline seeks to strike a balance between being equipment driven and performance driven. Factory rifles aside, to successfully shoot out to 1000m and beyond shooters may use sophisticated equipment

to measure atmospherics, wind speed and direction, ballistic calculators to predict the bullet's trajectory and perhaps other equipment to suit their shooting style.

Kestrel weather meters are perhaps the most popular devices used to measure atmospherics and wind, while ballistic calculators can range from free software such as JBM Ballistics to premium products like Applied Ballistics. Of course, all this technology is then married to the shooter's innate abilities in order to shoot out to extreme distances.

What goes into Long **Range Precision?**

There are numerous factors to consider

This shooter gets down to business, taking shots from the prone position.

when shooting to such distances and one of my favourite acronyms to use on the firing line is 'WTF', courtesy of Frank Galli from Sniper's Hide. WTF stands for Wind, Trajectory and Fundamentals of shooting. Basically this is a checklist for shooters to mentally tick off when engaging long range targets. Do you know what the wind is doing? Do you know your bullet's trajectory? Are your fundamentals good to go? Once you've ticked off all these boxes, Long Range Precision shooting becomes less of an art and more of a science.

The wind is the most important variable in Long Range Precision and affects the bullet's trajectory the most. It's also a non-determinable variable, meaning you can never know exactly what it's doing at every point along the bullet's flight path. One of the first things a long range shooter will do when they go on a firing line is try to figure out what the wind is doing, by observing the surrounding terrain features and looking for signs of the wind affecting objects in vicinity.

Swaying grass, trees, rising dust clouds and how the wind feels on your body are all taken into consideration. Shooters with access to Kestrel weather meters or similar equipment can use them to measure wind speed. As the wind changes so does the shooter's hold over or wind adjustments. To succeed at long range shooting you must be able to read or measure the wind accurately and have the confidence and flexibility to change your wind hold on the fly, as you feel the wind shift or see wind indicators (not wind flags) alter downrange.

The next most important variable in Long Range Precision is the bullet's trajectory as this will determine what elevation

An introduction to Long Range Precision shooting

adjustment you need to make on your scope in order to achieve a hit. There are a few critical variables in determining the trajectory of a bullet: range to the target, the bullet's ballistic coefficient, muzzle velocity and whether or not our ballistic calculator is trued.

Once all of these variables are locked down and verified, the trajectory is a given. Most ranges in Australia are known distance venues, meaning the gap to the target is always known to the shooter. Nevertheless, it won't hurt to confirm for vourself the expanse to the target using a laser range finder. As with all optics (especially electro-optics) you get what you pay for.

Measuring muzzle velocity accurately and precisely is not always easy and there are only two commercially available and affordable products which measure muzzle velocity to a high degree of certainty: the Magnetospeed and Labradar chronographs. The Magnetospeed uses magnetic interferometry to measure muzzle velocity, while the Labradar is a personal, portable Doppler radar.

Precisely measuring your muzzle velocity means you can use a manufacturer's quoted ballistic coefficient (a measurement of how much drag a bullet experiences) to calculate a firing solution. Testing the firing solution at long range will reveal whether or not the quoted ballistic coefficient (BC) of a bullet is correct and, if not, you can then true the data by changing variables to bring the predicted firing solution in line to match the real firing solution.

Finally, we have the fundamentals of marksmanship. It may seem counter intuitive to some readers but the fundamentals



are not the most important aspect of Long Range Precision shooting. They matter to a great degree but the best fundamentals in the world won't mean anything if you don't know how to read the wind and don't know your bullet's trajectory.

Putting it all together

So you want to get into long range shooting? It's a wonderful, challenging and ever-evolving world. Some clubs offer Long Range Precision shooting as a discipline but even for those that don't you can still try shooting prone, with your factory rifle, with a suitable scope and ammo, and practise your wind reading, memorising your trajectory and working on your fundamentals.

Long Range Precision shooting is a growing aspect of our sport and the skills learned in this discipline feed nicely into others such as Practical Shooting, which is gaining a strong interest and following among Precision shooters across the country. Hopefully this article has given curious and prospective shooters a glimpse into the long range world, what's involved and how to get started. Keep your powder dry - get out there and shoot! •



SECURE Your Gun SECURE Your Sport

Firearm registries contact details

For current regulations for storing and transporting firearms, please contact your state or territory's firearms registry.

Phone: 02 6133 2122 Fax: 02 6133 2188

or 02 6670 8590 Fax: 02 6670 8558

NT Phone: 08 8922 3543 Fax: 08 8922 3540

Old Phone: 07 3015 7777 Fax: 07 3015 7788

SA Phone: 08 7322 3346 Fax: 08 7322 4182

Fax: 03 6230 2765

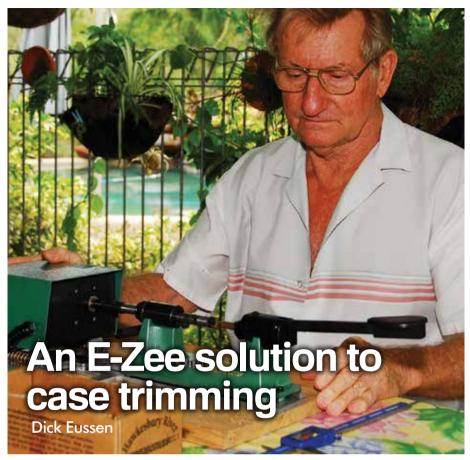
Vic. Phone: 1300 651 645 Fax: 03 9247 6485

WA Phone: | 300 | 7 | 0 | | Fax: 08 9454 1522

PROMOTING GUN SAFETY

The Sporting Shooters' Association of Australia Inc.





f vou're a reloader it's important to check all fired pistol and rifle cases on a regular basis, not only for cracks and deformed primer pockets, but also the length. Generally, a case length check is done with a set of calipers but an easy way is with the Lyman E-Zee Case Gauge.

Trimming cases is often ignored by handloaders. Brass flows when exposed to high temperature and repeated firings, making it too long to headspace properly when not trimmed back to the correct length.

It's important all cases are the same length as the case mouth must be parallel, so when it enters the resizing die the mouth must pierce the neck sizing constriction at the same bevel for consistent concentricity, important when shooting long distance and especially in benchrest competition.

Another reason is that all bullets must be seated at the same neck section to help accuracy, especially when crimping, while case length must be also be correct for proper head spacing. Proper crimping and consistent bullet seating are impossible when lengths vary from case to case.

I prefer to check my cases after they're resized, because when full length resizing the case is stretched and pushed back into

its original form. This will slightly lengthen it and it may be too long after the neck is pushed and stretched a little during resizing.

The E-Zee Case Gauge makes checking cases quick and simple. The gauge is machined to maximum case lengths as recommended by SAAMI - all you do is place the fired case inside the marked laddered section. If it doesn't fit inside the chosen calibre you need to trim it and don't forget that after trimming cases you must chamfer and deburr the mouths before priming, powering up and seating the bullet.

After trimming the cases check them routinely after every firing - regular trimming is recommended for magnum rifle cases and when using hot loads. There's no hard and fast rule for this but it's something you should be doing at least every three reloads when reloading your own ammunition.

The Lyman E-Zee Case Gauge is a simple and accurate instrument to measure case length for both unfired and fired shells. It offers quick visual checks, making it easy to sort individual cases out that require trimming, and it accurately measures up to 70 different calibres of the most popular cartridges.





The back has more case length

Made from steel plate it measures 125 x 265mm, is fitted with a nail hole and has both metric and imperial measures with white letters highlighted against a black background on both sides. My dealer's price was \$40. More at lymanproducts.com or nioa. com.au •



long-range value

Daniel O'Dea focuses in on the new Hornet ED 10-50x60 riflescope

ikko Stirling has been around for more than 60 years and has a unique Australian connection in that it was Malcolm Fuller, of Fuller Firearms, who founded the Stirling Scope Company in Tokyo in the mid-1950s.

One of their claims to fame is that Nikko Stirling's origins rest purely in hunting and shooting, unlike other riflescope brands that are essentially divisions of related optics factories whose primary business is in items such as microscopes and binoculars. From the start Nikko Stirling was about manufacturing affordable riflescopes for export to the hunters and sports shooters of Europe, Africa and Australasia.

In Australia, Nikko Stirling has been

considered among the budget conscious end of the market. Although many might aspire to own a prestigious German or Austrian piece of glass to ride atop their favourite rifle, the reality is for most the cost simply doesn't allow for such extravagance. When I set out to buy my first riflescope my only income was an after-school paper run backed by a little pocket money from chores around the house and, as such, my first scope was a Nikko Stirling.

In the 1970s and '80s the Shooters Journal was full of advertisements promoting the latest rifle, scope and mounts 'package deal' from Fuller, be it a for a Stirling .22, a sporterised Swedish Mauser or a new Tikka. It was likely to be mounted with a Nikko

Stirling scope which was probably the first optic of many an Australian shooter.

Recently I was given the chance to take a look at one of Nikko Stirling's latest offerings in the Hornet ED 10-50x60. This is a fully featured high magnification variable scope geared towards long-range centrefire and target disciplines. The packaging was befitting a premium model as the scope was neatly secured by inletted foam rubber that included spaces for all accessories and the

Included in the package was the scope, sunshade, 100mm side wheel for parallax adjustment, fitted metal lens covers for both ocular and objective lens housings, removal keys for same, a lens cloth and



both a manual and reticle instructions. Unpacking the Hornet revealed a scope of massive proportions. Weighing in at just under a kilo (980g), its 30mm diameter tube measures 458mm in length, increasing to 558mm or just over half-a-metre with the shade cover installed.

The Hornet ED has a huge 60mm objective lens which holds this diameter for the front 70mm of the scope before tapering neatly over the next 100mm or so to the 30mm tube diameter. A squared-off housing about two-thirds down the length mounts adjustment turrets at 12 and 3 o'clock while the parallax adjustment knob sits at 9 o'clock offset to the front.

A large power change ring at the front of the ocular housing is clearly marked at various increments to show the variable magnification setting. The increments line up with a small arrow positioned to the right of the illumination turret. This holds the battery and provides both on, off



and dimming controls for the illumination system and is offset about 15 degrees to the left so vision of the vertical adjustment turret remains unimpeded.

Lastly, at the end of the ocular housing is a focus ring for diopter adjustment and corresponding plus, minus and arrow markings. Despite its size the scope looks sleek and stylish and appears well sorted out ergonomically.

Adjustment-wise it offers a full 45 MOA (45" at 100 yards) of both vertical and horizontal adjustment. The turrets include markings at 1/20 MRAD representing 5mm at 100m per click, with 3 MRAD or 300mm at 100m per full rotation. The turrets also include full rotation markings out to four rotations. For sighting-in, the turrets are spring-loaded for a lift and turn to re-zero once sighted in and when adjusting the clicks are both positive and audible to easily confirm what you are dialing in.

The side adjustable parallax knob is rather stiff by virtue of the mechanics and as such an optional 100mm wheel is supplied. This is easily fitted via two small hex screws which are provided with the corresponding hex key. Fitting the wheel provides a simple mechanical advantage making turning the adjustment knob far easier to rotate. Parallax adjustment is from 9.1m (10 yards) out to infinity with markings at 10m, 25m, 50m, 100m, 200m, 500m and infinity.

Eye relief is listed at 95mm for both high



and low power setting and field of view is tight as expected of a target scope with numbers of 0.8m at 100m at the high power setting (50x) and 3.8m at 100m at the low end (10x). Lenses are multi-coated and feature 'ED glass - Extra-low Dispersion'. The scope is also credited as being shockproof, waterproof and nitrogen filled.

For testing the Nikko Stirling Hornet ED was fitted to a Lithgow LA102 chambered in .308 Winchester mounted in an APC Aussie Precision Chassis stock. The rifle



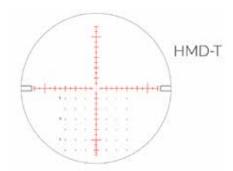
Nikko Stirling's long-range value

had been supplied for testing along with the scope by Australian distributor Outdoor Sporting Agencies so a quick zero was performed at 100m before I jumped straight into testing for tracking. Basically I fired a round and then, maintaining the same target hold, walked the point of impact around a 30 x 30 click square ending back where I started.

So referring to the image shown, I fired at the bullseve of the top right-hand target circle. Shot 1 was one of the two shots in the nine-ring at 3 o'clock. I then adjusted the vertical turret 30 clicks to bring the point of impact down and while maintaining aim at that top right-hand target, I fired shot 2. Impact was on the bottom right-hand target.

Repeating this process I walked the point of impact 30 clicks to the left (shot 3), impacting the bottom centre target, then 30 clicks up (shot 4), impacting top centre target and finally 30 clicks right to end up back at the start (shot 5), which just about impacted in the same hole as shot 1. As previously indicated the adjustments are measured 1/20 MRAD which equals exactly 5mm at 100m so 30 clicks in adjustment equalled 15cm.

The SSAA target as shown has six circular targets exactly 15cm apart centre to centre both vertically and horizontally. The Hornet ED performed superbly in this basic test. Reviewing the impacts on target if superimposed you would find shots 1, 2, 3 and 5 all in a tight clover at the 3 o'clock position between the 9 and 10 rings. Shot 4 landed approximately 15mm higher. This



The HMD-T reticle features 1/2 and 1 MRAD subtensions when set on 25x power.

simple tracking exercise would indicate the adjustments are precise, accurate and repeatable.

The Hornet ED's HMD-T reticle features relatively fine cross-hairs with 11/2 MRAD sub-tensions that can be used to adjust for hold over, windage or even estimating range. As a second focal plane scope, the reticle size remains constant regardless of magnification setting and as such the value of the sub-tensions are corrected for 1:1 use only when set at 25x. This means the 1 MRAD sub-tension values are true at 25x. halved at 50x (1 MRAD sub-tension now equals 0.5 MRAD) and doubled at 12.5x (1 MRAD sub-tension now equals 2 MRAD).

With a front focal plane scope the values remain constant but the cross-hairs appear thicker as the power is increased. Some may argue this obstructs the field of view for fine target work hence in this style of target scope second focal plane optics can be preferred.

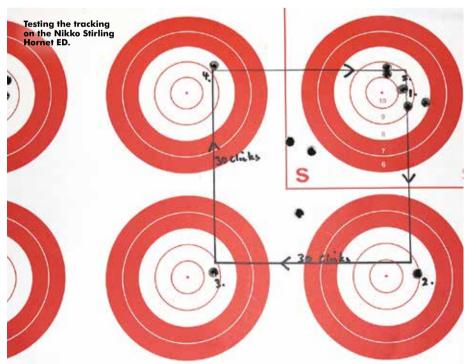


Removable metallic lens covers are hinged to swing 270 degrees to fold flat against the body.

The reticle remained sharp and clear between power settings and the varying light conditions on the day. With the illumination engaged, the constant variable adjustable knob made dialing on just the right amount of intensity of the illumination system a breeze. The scope features fully multi-coated lenses and the sight picture was nice and bright.

At the range the large side wheel made parallax adjustment quick and easy when moving between ranges to engage distant targets. It certainly does nothing to reduce the bulk of the scope but is both simple and practical to use. Again in this respect the Nikko Stirling Hornet ED is a purpose-built target scope which I imagine will mainly find its most practical use on the bench or range mat where bulk is not a factor.

In summary, the Nikko Stirling Hornet ED 10-50x60 scope presented as a great value package for those getting into long-range shooting and target disciplines that require plenty of magnification. It was well featured with bright clear optics so hard to argue against at around \$1000. More at nikkostirling.com or osaaustralia.com.au •



Specifications

- ED glass Extra-low Dispersion
- High-end optical system
- Precise Target turrets
- I/20 MIL click (5mm at I 00m)
- 30mm main tube
- Parallax adjustment -10 yards to infinity
- HMD-T reticle, based on MIL standard
- Sunshade
- · Illumination unit on ocular
- Extra side wheel (100mm)
- Fully multi-coated lenses
- · Fast focus on ocular
- Metal flip-up lens covers on objective and ocular

Easy to achieve a better hunting experience



t's often said by hunters who also appreciate the outdoors for what it is and all that it offers - bagging the game pursued is a bonus. That sentiment was expressed by past renowned hunters such as Fred Bear, a much-respected American archer who was fulfilled just quietly stalking the forested hills in search of deer and enjoying nature's calming surroundings.

Other experienced hunters and authors such as Peter Capstick, Robert Ruark and more recently Daniel J. Donarski Jr. in his book 21 Days in Africa eloquently described in detail the pleasurable experiences attached to hunting, the animal and bird sounds, waterways, scenery, sunrises and sunsets and those special moments that arouse the spirits and make it all worthwhile.

Hunting the great outdoors is much more than just the kill or bagging game, even though that's the aim. The successful veteran hunter, for example, didn't become accomplished overnight. It takes a preparedness to learn through patience,

observation, understanding, perseverance and self-determination.

Half a century on, recalling my own early days out in the field, my hunting skills were far from developed. At the age of 17 I learnt my first lesson from a good friend to look afar for game or distant movement. That morning I ended up with five rabbits and a memorable experience valued to this day.

Ethical hunting also teaches us respect for people, livestock and property, sustainability by taking only enough and leaving some for next time and others, fairness and an appreciation of the privilege to hunt game. These are all qualities and traits reaped through the sport.

Your expectations

Over the years and to avoid disappointment I have learnt to approach a trip with minimal expectation, whether a simple rabbit hunt or a planned wild boar or big game buffalo safari in the Northern Territory. With the best intentions and wellmade plans there are forces and conditions

outwith our control. Nature itself can intervene through drought, flood and extreme temperatures. Understanding and patience plays a big role in how you handle a hunting trip.

Changing conditions

On any trip, the land and wildlife activity and their numbers will vary according to the availability of food and water. In drought conditions wildlife or game, driven by their survival instincts, will move out of the area altogether and it can take months or a few years for certain animals such as feral pigs to return. In nature's cycle of life, when the rain finally does come wildlife rebounds and flourishes.

A property owner's pest eradication measures will have an effect on game. With regards to rabbits it can mean a total wipe-out. Lambing season often calls for restricted or no shooting for a period and it's important the owner's wishes are respected to maintain an ongoing amicable relationship. On the other hand, there may

Easy to achieve a better hunting experience

be lamb losses through fox predation and the hunter's assistance is welcomed.

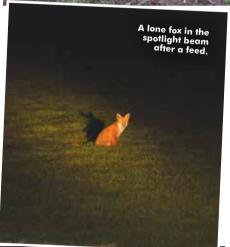
At another time, flooding or muddy conditions can prevent property access. Ripping up dirt tracks and leaving deep wheel furrows is not appreciated. Patience is required and the moment will eventually come to make it all worthwhile again. I accept that's how it is.

Positive attitude

A hunting trip can be a rewarding outing even when the odds are stacked against you. On one trek to a NSW property we were beset by a series of unexpected obstacles, yet we had a great time. On the way, a punctured radiator and overheated motor required attention. As we neared the property, a lone mature kangaroo sat stooped foraging by the side of the road facing the bush to our left. Taking a wide birth at a reduced speed we were just about to pass when it unexpectedly turned around and jumped in front of the vehicle. There was damage to the front fender and two side doors were dented.

The following day the vehicle became bogged to the axle in a 15cm shallow, dry mud-encrusted drain barely 60cm wide that we hadn't noticed in the tall grass. The highlift jack broke. We were forced to trek 15km back to camp in the middle of the night. The next day a 1.5m brown snake entered the tent through a 20 cent-size hole where the zips met while we were out hunting but luckily started exiting on our return. It also rained on and off all around us, save for the campsite itself.





On the plus side we recovered the vehicle the next day with the farmer's help, continued hunting to score a solid boar, bagged a few ducks and cooked on the spit a small pig that turned out to be succulent and tasty. Despite all the setbacks we remained positive throughout and in the end had a memorable trip, one that has been recounted in conversation with fellow hunters time and time again. What is destined can't be helped but having a positive attitude does.

Learning and gaining experience Even after years of hunting, a hunter really never stops learning. Different animal species, especially dangerous game, require a different understanding and approach, such as our tough, heavily-built Asiatic water buffalo of the north, as does tackling different terrain like the steep, loose shale slopes of New Zealand's mountains in pursuit of chamois or thars, and the use of appropriate firearms and projectiles for the intended game hunted. How to better read the lay of the land to seek out the quarry, animal signs, tracking animal behaviour and more. The learning is ongoing.

When rabbits are plentiful and in the open, a .22LR, shotgun or varmint rifle will do the job. At other times, especially if the area

Explore your hunting options

has been heavily hunted, they may remain in their burrows or seek the sanctuary of the bushes or thick growth to emerge infrequently. Kicking the bush to flush them out and using a shotgun may prove more rewarding than perhaps thought.

Again, they may be absent during



Easy to achieve a better hunting experience

daylight hours but spotlighting at night could bring results. Take a fox whistle. If there are rabbits or it's lambing season you're likely to encounter foxes. For pigs and goats, ascertain where the dams and other water holdings are situated. Often livestock and feral animals tend to forage in company and frequent the same water source. The examples vary but if you consider the options relevant to your property you may improve your chances of bagging game.

Planning

Make a hard copy list of the gear and food provisions you'll need to take on a trip, including spare parts in the event of a burst radiator hose, tyre puncture or similar scenario. Also take suitable clothing to cope with prevailing weather conditions and if it's cold include an extra blanket. Good bedding is a must. A tired, weary hunter isn't going have an enjoyable experience.

Politely ascertain from the farmer or property owner beforehand what game they've observed and if there's a need for vermin control. And don't forget a little something for the man or woman on the land to show your appreciation.

Your own contribution

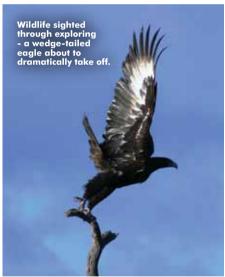
You might ask how you can make a difference. Well, just by doing simple tasks such as helping pack and unpack camp gear. You might not be asked but a voluntary gesture is always appreciated. Assist with meals, even if just cutting up vegetables or preparing a simple salad. Through observing others cooking in camp you will pick up pointers and at some stage come



up with your own special dish. The more helping hands, the more time for hunting.

Huddled around a campfire with a mug of tea or coffee in hand recounting stories or reminiscing helps also build camaraderie. Bake a damper in a camp oven.

And there are other ideas that make camp life and hunting more pleasurable. My own consisted of an improvised meat spit to cook game over red hot coals, or even a plump chicken from a supermarket. Basted with herbs and infused by the smoke from the burning redgum coals, the rich smoky flavour is a different experience altogether.



Conclusion

Given the opportunity most of us would be out hunting in a heartbeat. Why? Maybe because it's a part of our deep-rooted DNA, nature calls us or just to be away for an enjoyable experience with mates or friends. Or perhaps for all those reasons.

As a long-time hunter and having taken young hunters under my wing, I regard hunting in the outdoors as a healthy, rewarding and enjoyable outlet for all the reasons mentioned. A place removed from the everyday demands and challenges of life to regain your perspective and recharge the batteries, metaphorically speaking. All I know is that when I return from most hunting trips, whatever the result, it is with a greater sense of appreciation. •





he quest for a more powerful load for my .223 Remington led me to build a rather interesting wildcat, which is nothing more than a .223 Remington case necked up to .257. Most .223 Remington (5.56x45) owners, including those who seek and destroy the most dangerous thin-skinned creatures on the planet, wish their rifles had a bit more stopping power.

To this end, rifle manufacturers have responded with fast-twist barrels to cope with the demands of heavier bullets. Even so, good game bullets are limited to 65gr weight and lack frontal area. Heavier bullets are available but are generally of the

target variety and therefore unsuitable for hunting, although I did have good success on pigs with 68gr Nosler BTHP when I could find them.

Probably the most sensible option for hunting large game would be to buy a .270 Winchester or 7mm-08, but when the majority of shooting is confined to rabbits, foxes and other small ferals with the rare chance to sneak up on a pig or deer, a more versatile .223 makes a lot of sense.

The vision splendid

A search of my local area for a gunsmith prepared to share my vision proved rather difficult. Building a 6x45 would not be

an issue but a similar .223/25 seemed to have them stymied. The consensus was the conversion wouldn't work because the new calibre would be slow, noisy and not as accurate as a .223. Eventually I found gunsmith Allan Swan who has a reputation for building oddball rifles and even enjoys putting together Martini conversions.

My original plan was to build the rifle on a Martini Cadet action. I have my own dinky method of rimless cartridge extraction for Martinis but had a change of heart and decided to build the rifle on a Tikka Model 55 action with a varmint profile barrel. Allan's barrels are made in-house and handlapped and the price was reasonable, so the



project went ahead (check allanswangunsmithing.com).

Upon taking delivery of the finished rifle my first impressions were favourable, the polishing and blueing absolutely first-class. Next I did the cleaning rod test which consists of passing a dry patch through the bore and using the sensitivity in your fingers to detect any tight spots or rough areas. I found no issues, in fact the barrel interior was glassy smooth and reminiscent of an early model Sako I once owned.

My next task was to obtain reloading dies as this rifle is a reloading proposition only. A search of the internet revealed dies were available from the CH Tool and Die Company in the US, but because the necessarv parts were available in my workshop I made my own. With the use of heat and a slow cooling process, the temper was removed from an FLS .223 Remington die, the neck recut with an accurate drill press and 6.7mm drill bit.

The die was tested and found to be a little severe, so an old but very strong .44 calibre phosphor bronze brush with valve grinding paste was put in the chuck of the drill press. A few seconds of polishing and the neck was perfect. Reheating the die to cherry red and quenching in iced water completed the job with no warping of the die, a .257 expander button added to complete the die.

Cases were lubricated and easily formed with just one pass through the new equipment. ADI .223 Remington cases were used for most of the testing along with a sprinkle of Winchester, Federal and PPU. In my opinion ADI brass is the best as it's more robust and has a smaller flash hole which is said to promote accuracy. The .223/25 is easy to reload for, as it will readily accept a lightly compressed load of mediumburning powders such as ADI 2206H. For starting loads I used a reloading manual and data for the smaller and less powerful .256 Winchester Magnum. With the use of



a chronograph and ½ grain powder increments a batch of safe, sensible loads was developed. However, with some of the very heavy bullets and medium burning powders I was travelling uncharted waters. In the end, 50 years of reloading experience and a cautious approach won the day.

Range testing the Tikka .223/25 The rifle was tested on a bench rest with a variety of bullets but very little load development as it seemed to have strong bullet preferences and shot extremely well right off with pills it liked and no amount of tuning (and my efforts were considerable) would make the others shoot well.

Projectiles that found favour were 70gr Sierra Blitz, 75gr Sierra HP, 90gr Sierra HPBT, 117gr Hornady SP Spitzer and 85gr Hawkesbury River cast. Bullets that did not find favour were 87gr Sierra Varminter and 75gr Hornady V-Max.

Respective safe velocities were 70gr Sierra Blitz 2850fps to 3050fps with best accuracy at the lower end of the scale, 75gr Sierra HP 2970fps, 90gr Sierra HPBT 2785fps and 117gr Hornady





In search of power - the .223/25 wildcat

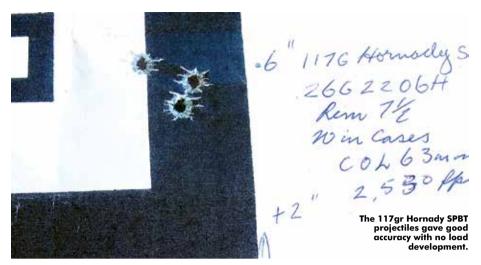
SPBT 2530fps (only with 2206H powder). All other powders tested including W748, Alliant Reloader 15, ADI 2208 and ADI 2207 produced maximum velocities of around 2350fps. Winchester 748 gave 2485fps and a sticky bolt lift, indicating the approach of dangerous pressure.

Grouping of all favourable jacketed bullet loads hovered around .5" for three shots at 100m, with some doing considerably better. The cast bullets gave good accuracy at 1750fps with a variety of powders at 50m. No gas check and no lube was used other than the factory coating, with suitable powders being W296, ADI Trail Boss Alliant Unique, ADI 2205, ADI 2207 and to a lesser extent Alliant 2400. The 2400 gave 'on again, off again' results with some unburned powder grains. All cast bullet loads had .5g of dacron filler and were crimped. Accuracy for cast bullets was between .6" and .8" for three shots at 50m, depending on powder choice.

Rabbits are numerous in my area and cast bullet loads were tested in conjunction with our new German wirehaired pointer pup Harley for his first attempt as a pick-up dog. All rabbits were killed cleanly with precious little meat damage.

Conclusion

My results lead me to believe I've put together a rifle suitable for my needs with some remarkable characteristics I've yet to mention. When I tested the 117gr Hornady, the grouping was around .6" for three shots at 100m. When I tested the 70gr Sierra Blitz the grouping was .45" but the amazing thing was that, had I fired at the same aiming point, the 70gr load would



have passed through the centre of the 117gr group.

It gets worse with the cast bullet load bang on at 50m and about 2" low at 100m with no scope adjustment. Foot pounds of energy generated by the 117gr bullet at a muzzle velocity of 2530fps is still more than 1000 foot pounds at the 200m mark and 900-plus at 300m which is a vast improvement on any load that can be fired in a .223 Remington.

Trajectory for the 117gr load according to my reloading manual is 2.5" high at 100 yards, 0" high at 200 yards and -10.6" at 300 yards. No energy gain and very little trajectory gain is obtained with lighter bullets as the heavy bullets play catch-up at long range, therefore I've adopted this projectile for my heavy game load. Yet another bonus is the ability of 117gr-loaded rounds to fit straight into the magazine of the Tikka rifle. •



E-NEWSLETTER

The SSAA National E-newsletter is a subscription email service available FREE of charge to SSAA members.

Current and upcoming news, views and events about firearms ownership, sport shooting and recreational hunting issues, important SSAA news special offers and time-sensitive news...







Straight to your inbox

Subscribe today at ssaa.org.au/e-newsletter

Covert? Tactical?

Be careful what you wish for

Geoff Smith

n an ideal world people should be able to believe the words used to describe products and policies. What constitutes truth should be subject to rigorous verification. Advertisers should be liable to prove that claims made about particular products or policies are real and verifiable.

But the world is not ideal and we constantly face situations where high-profile individuals, who would normally claim some measure of credibility, put forth statements that not only are untrue but that they know we know to be untrue! Cynics refer to this as 'alternative facts' or fake news. A fact is something known to be true or to have happened, so when an untruth is put forward as authentic, questions arise. The actual nature of truth itself comes into question.

Nowadays we find that replica and deactivated firearms are viewed much more seriously than they were in the recent past, when realistic-looking replicas that fired blanks or airsoft pellets were easily and lawfully acquired.

Appearances of firearms and the words used to describe them in advertising quite obviously have an impact on sales and desirability within the intended market. Even a cursory glance at current firearms advertising in the US reveals a strong trend towards military use. The word 'tactical' is often used to describe firearms and accessories in a manner that combines their actual performance.

Tactical, in relation to weapons, according to the Oxford dictionary, means done or for use in immediate support of military or naval oberations. So using 'tactical' to describe a firearm for domestic or recreational use is at best misleading, merging, as it does, the idea of 'military' with the exciting and therefore desirable. Discussions with military personnel who have been in actual combat will quickly confirm that being shot at is quite the opposite of the above.

Similarly, is there a reason why recreational shooters might need to employ a description including 'covert weapons system' for a rifle? As private citizens we aren't really permitted to own 'weapons' of any kind, Queensland's firearm legislation notwithstanding, since 'weapons' are meant for attacking and/or defending. These

days we're prevented from even carrying a pocket knife into many places such as licensed premises, so describing a firearm as a 'weapon' is totally wrong, at least in the context of lawful firearms use by private citizens. I find it disappointing that legislators can misuse language in this way, especially as it then reflects poorly on those of us who are recreational shooters.

Cartridges in the modern parlance also sometimes take on a darker meaning than their lawful use can permit here in Australia.



This cigarette lighter based on Walther's P-38 is a well-made miniature - not a gun, not a toy, yet could be a 'weapon' if used by an arsonist.

'Blackout' for example implies silent, indeed, 'covert'. In the US where sound moderators are commonplace, perhaps the .30 calibre Blackout cartridge designed primarily for use in AR-15 rifles might be of some use.

Here, where both sound moderators and category D firearms are difficult to justify (although the reasoning is somewhat peculiar), it seems both odd and misleading. If we particularly needed a subsonic .30 calibre, surely it would be easy enough to load down one of the multitude of such calibre cartridges already available in bolt, lever or pump-action rifles.

It seems it's only due to the entertainment and advertising industries that military fashion trends become desirable to the masses. A film about a sniper sees someone take out a 'terrorist' at some impossible distance and suddenly there's a popular demand for rifles finished in sand-coloured Cerakote with odd bolt handles designed to accommodate gloved hands in the cold mountains of Afghanistan, and fitted with all manner of Picatinny

rails on which to mount rangefinders, lasers and other accoutrements that are both cripplingly expensive and, in any case, neither generally available nor of any particular use to civilians.

The functional reality is that a modern bolt-action rifle, fitted with a reasonable quality scope and perhaps a bipod, can be used to do precisely the same thing for a fraction of the cost. In a way it's a little scary to think the 'tactical sniper rifle' concept is based on a romanticised vision of something specifically designed to terminate some poor devil at extreme

And even if this were so, the mere possession of such a rifle in no way guarantees that the person who has been fooled into parting with a mountain of cash to own it can actually use it like a properly trained military marksman equipped with the electronic toolbox required to make such shots.

We should never lose sight of the fact that the bullet is what does the work. Objectively the shape, hardness, mass and impact velocity of the bullet rather than how fancy the rifle might look is what determines the outcome assuming, of course, the bullet can be made to connect with the target in the first place.

The popularity of extreme long-range shooting is increasing and there's no doubt the requisite skills demanded by this branch of our sport involve quite a bit of learning about trajectory, wind effects, air pressure variation and other aspects of exterior ballistics coupled with a great deal

Discussions with sales assistants from several gunshops shows a sizeable proportion of people affected by the hyperbole from movies and the like have no idea of the practical realities. Reality may be defined as "all those things that can't be wished away". There's no room for fantasy when handling real firearms because that bullet, which is at the core of our sport, once launched into the air cannot be called back. If that bullet happens to be fired at a steel plate a thousand metres away, it matters not one iota if the rifle from which it is fired is a battered but still accurate old Omark or a super-duper new tactical rifle painted bright pink! •

Landowner link-up with SSAA cured feral pig carnage

Assistant Editor Dave Rose



SAA members have been hailed by a former farming stalwart in New South Wales for helping keep his business buoyant for more than four decades. Bob McFarland's family were the proud owners of the mighty 11.000hectare sheep station known as Oxley Station near Hay from 1909 until selling the property in 2015.

However, such was the devastation inflicted on Bob's sheep stocks by marauding feral animals, mainly pigs, the operation at times seemed like mission impossible to maintain.

The homestead had lain vacant for 12 years before Bob returned there in 1968 with his wife Errolly from North Queensland where he'd been working as a jackaroo. In the early days it was gruelling work for Bob, with such a major venture on his hands. He estimates he had 9000 to 10,000 sheep on the range in a good year or about 4000 in drought. "But I always kept my breeders," he said.

The task was onerous enough before the dreaded feral pigs muscled their way into the equation. "The land is at the bottom end of the Lachlan River and there are lots of reed beds so the pigs were running rampant as it was so wet and they were literally breeding like rabbits," Bob said.

The marauding pigs were doing serious damage to the flock, particularly around lambing time, so it was in 1972 Bob hit on an idea which revived his farming fortunes and slashed the devastating impact being inflicted by the feral hordes.

As landowner, Bob had previously resented the uninvited presence of unruly and rogue shooters who took it upon themselves to try their luck in pursuit of the feral population across his vast acreage amid the Western Riverina.

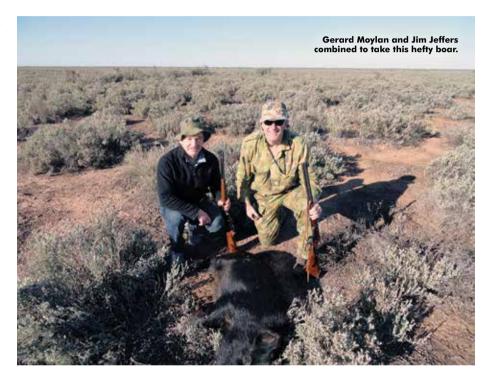
"It was out of sheer desperation I turned to the shooters," said Bob. "But I had to change my outlook otherwise I'd have gone off my head. Previously I would curse and shout if I saw anyone around the place with a gun. I even had guns pointed at me

on a couple of occasions and also had stock shot by some of these characters."

His scheme involved organising hunters into formal groups who paid a nominal fee for the chance to help Bob rein in the menace of the ferals by methodically thinning their numbers with their shooting expertise.

"We had a massive problem with feral pigs and foxes," said Bob. "But I had a change of heart as regards the hunting fraternity. Instead of running them off my place as ratbags and irresponsible individuals I changed my tack. With huge numbers of feral animals and huge numbers of shooters looking to hunt them, it all suddenly made sense."

So Bob went about systemising units of shooters on the strict proviso they had to be members of the SSAA or a similar body before being allowed on to the McFarland estate. "When the SSAA came in it was a completely different picture. They were lovely people 99 per cent of the time from all walks of life," he said.





"I aligned myself with the SSAA as it was a reputable organisation. About 90 per cent of the shooters who came to the estate were members. I had to take out public liability cover but I don't think I ever had a claim.

"The SSAA even sent me some membership forms which I used to get shooters to fill in and send back if they weren't already members. It was the best thing I ever did, resulting in 300 regular hunters from 1972 until 2015, who were all fine and decent people. In that time they shot more than 17.600 feral pigs and I reckon it was probably a good bit more as some couldn't actually tell me the exact number."

Bob even noticed certain traits among sections of his new-found band of helpers. "The Germans who came along loved hunting pigs," he said. "They thought the place was like a picture theatre being able to hunt pigs then cook and eat them. The

Landowner link-up with SSAA cured feral pig carnage

Germans were really enthusiastic hunters - they'd see me at the end of the weekend and tell me they'd had a wonderful few days."

So, how did it work? How did Bob manage to coordinate such extensive numbers of shooters around his sprawling domain? "I used to have three or four groups each weekend and would never really want more than four in each party." he said. "Over such a big area they never came within a cooee of each other so they had plenty of scope."

Bob feels other farmers could learn from what he did by tapping into the keen, willing and thoughtful ranks of those SSAA shooters who love to hunt. "They did such a good job that by the end it was a battle to find a pig," said Bob. "My lambing percentages really improved and the illegal shooters were frozen out because my paying guests didn't want them there when they had paid for the privilege.

"It was illegal hunters who initially caused problems and left a mess. The





SSAA groups would not only clean up after themselves but often take care of others' untidiness too.

"I could write a book about the advantages of what I did. If I hadn't done it there would not be a computer big enough to calculate how many pigs would have still been running around. The sows that were shot would have been untouched and just been able to carry on breeding and so it goes on."

Sadly when Bob lost Errolly, his wife of 47 years to cancer in 2014, he found it tough to continue living on the property

on his own. So he decided to sell and now enjoys a new life in Orange, where he relocated to be near his daughter Fiona and her family.

But he still carries fond memories of his bountiful years in charge of Oxley Station and how the efforts of SSAA members greatly assisted his livelihood during that time. "A few of the members, namely Jim Jeffers, Mick Kelly and Gerard Moylan, were not only great clients but have all become very good friends along with many others," said Bob.



Aussie knifemakers at the cutting edge

pswich Civic Centre will be the venue for this month's Queensland Knife Show from February 16-17. The show is at exhibitor capacity and on track to become one of Australia's top shows this

Promoted jointly by the Knife Art Association and Queensland Metal Artisans Collective, the show is one of several being staged by KAA this year with venues including Perth (February 2-3), Melbourne, Sydney, Adelaide and Canberra.

In 2014 the KAA established the inaugural Sydney Knife Show which has grown into the biggest of its kind in Australia, attracting more than 100 exhibitors from as far afield as the US and Japan featuring a diverse array of knives, tools and supplies from manufacturers, knifemakers, dealers and collectors.

Following the success of the Sydney show, the KAA went on to establish the Australian Blade Symposium, bringing together the very best of knifemaking in Australia. Over one weekend, beginner to advanced makers have the chance to learn from top artisans considered leaders in their field.

Being able to learn techniques from Australia's and the world's best knifemakers has continued to improve the quality and calibre of Australian knifemaking and grow the knifemaking community. Symposium presenters have included American Bladesmith Society accredited Master



The Knife Art Association was established in 2013 as a not-for-profit organisation run by members to promote the art of knifemaking and support local manufacturers. Its members range from knifemakers and blacksmiths to industry suppliers and collectors, all with a vision to see Australian knifemakers recognised and valued for the range of skills and crafting that goes into their unique creations.

So whether you're looking to learn about

knifemaking, have an interest in knives and blades as a user or collector, the Knife Art Association will have something for you. Find them online at knifeartassociation.com

SSAA's COMPREHENSIVE GUIDE TO

Shooting & Hunting

IN AUSTRALIA

SSAA's Comprehensive Guide to Shooting & Hunting in Australia is an introductory publication intended for those new to the SSAA or to sports shooting and recreational hunting in general - 156 pages!

NEW EDITION!

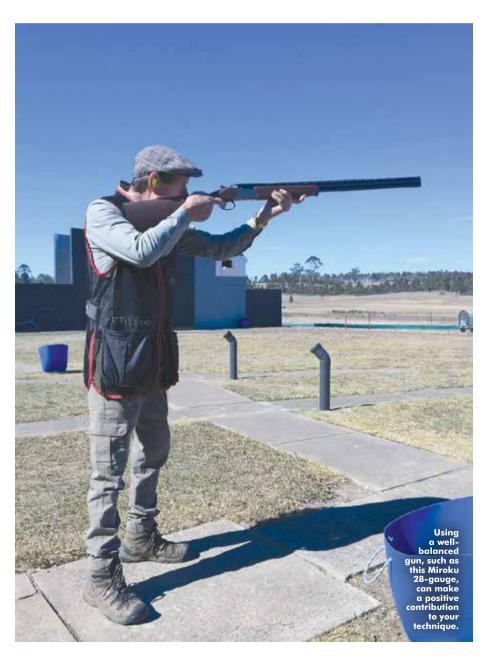
Everything you need to know to get into shooting and hunting.

Order online at ssaa.org.au or call 02 8805 3900

Feelgood factor of a

well-balanced shotgun

David Crofts



he balance of a shotgun is a subject I believe is vastly underrated by too many shooters. Whereas 'gun-fit' and especially 'choke' receive more than their fair share of the written and spoken word, the subject of balance and its effects are, at the moment, a poor relation.

The fact is, plain and simple, a gun that's balanced to suit the user is a pleasure to shoot and will gain that person the edge in competition or in the field, A.I. Smith. a former world and European FITASC sporting champion, noted: "A well-balanced gun is a joy to shoot - one that isn't balanced can lead to disaster."

Balance in basic terms is the weight distribution of the gun and if that gun is well-balanced it will make a difference to how it feels in the hands of the user. Have you ever noticed that when you pick up three or four identical new shotguns of the same make, barrel length and grade you'll find one seems to feel more dynamic in the hands than the rest? That particular one, by chance, just happens to be balanced more to

Or have you ever picked up a friend's gun or one in a shop where it feels much lighter in weight than it actually is? Michael Yardley, the UK-based shooting journalist and instructor, has made a similar observation that a "well-balanced heavy gun seems lighter than a poorly balanced gun of lighter weight".

Many writers have stated that a wellbalanced gun is one in which the weight is 'between the hands' or 'balances on the hinge pin', but balance is entirely tactile. It is part of the handling qualities, the feel of the gun concerned and its individual user. Let me assure you that you cannot overrate the value of balance - it adds a dynamic quality to the gun.

The American expression 'a fast-handling

...a gun that's balanced to suit the user is a pleasure to shoot and will gain that person the edge in competition or in the field.

Secure the action in a vice. Don't overtighten and use soft guards on the jaws to avoid marking.

gun' I believe is trying to describe this dynamic quality that good balance adds to the gun. British gun writer Gough Thomas noted, in a similar vein to A.J. Smith, that: "Balance and handling quality - this most desirable attribute of a gun is hard to overrate. A well-balanced gun seems to join eagerly in the game, whereas a badly balanced one hangs inertly on the hands in a spirit of complete non-cooperation."

Most shooters will adapt themselves to use a gun which is a poor fit and still shoot that gun quite well if it happens to be balanced to suit that shooter. However, reverse the situation where the gun is a good fit but poorly balanced and watch the kills to cartridges ratio fall below par.

The subject of balance is not a new one. In 1900, ballistics expert Sir Ralph Payne-Gallwey made the observation that: "A well-balanced gun and one badly balanced. though both be of the same weight, are easily told apart. It is a pleasure to use one, an annoyance to use the other."

The main issue with balance, and why I believe it's not written about more often, is that it's wholly subjective. A shotgun balanced for one individual does not necessarily mean it will suit another, in a similar way that where the stock is fitted for one

individual, because of their physical attributes it may not fit the next person.

Senior instructor and gunfitter Chris Batha makes a similar observation: "Discovering the combination of balance and feel that works best for you is as uniquely individual as you are." Innovative English gunsmith William Wellington Greener, on the other hand, was pretty specific regarding the balance point for shotguns - "A 12-bore with 30-inch barrels weighing 7lb or over should balance at about 3 inches (76mm) from the breech: if with 27- or 28-inch barrels and 5.75 to 6lb. about 25/8 inches (67mm) from the breech would be considered a good balance."

It's best to balance the gun on a loop of thin but strong string or cord. Whereas some shooters may choose to measure the balance using the hinge pin as the datum point, most high-class makers measure the point of balance from the breech face. In fact, Greener quite clearly states that the balance of a gun "is always to be measured from the breech-ends of the barrels".

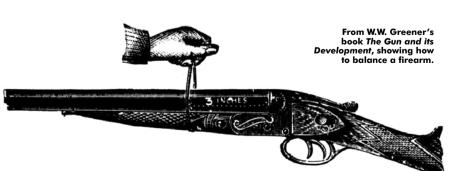
The main reasoning for using the breech face as the reference point for balance is due to the differing bar lengths of the various types of shotgun actions, say a Beretta compared to Krieghoff



Remember the carpenter's motto - measure twice before drilling or cutting.



Once you've marked the location for the boring tool, you can bore the hole.





Don't apply too much pressure when boring the



U/O. The breech face is, in most cases, a constant datum but the hinge pin or trunnion will actually vary in position from maker to maker.

Changing the balance of a gun is not as difficult as you may think. It's a matter of removing material from, or adding weight to, the stock until the required balance point is achieved. Initially I do the experimentation at my local club, shooting at my usual practice targets. I find that once you locate the sweet spot, the gun seems to break targets more easily than before. If you feel your shotgun is stock heavy, removing material from the stock is the way to go.

You can check if you need to remove material from the stock by sticking one or two of those 'sticky-back' wheel-weights close to the muzzles of your gun. As an alternative to wheel-weights, some gun and accessory makers produce weights which can be attached to the barrels by magnets or clamps - a quick search on the internet should point you in the right direction.

If it improves the handling then experiment with more, or less, weight until the preferred balance point is achieved and indicate that point with a permanent marker on the barrels. It's just a matter of removing the weights then taking some timber out of the stock until the gun balances on the

mark made (if you do this yourself, proceed carefully as you don't want to bore or drill through the side of your stock).

This is easier if the gun is fitted with a buttplate or recoil pad. The stock can be hollowed out behind the pad or plate then the pad replaced once the balance point is achieved and no one is any the wiser. Make sure you have the pad or plate fitted to the stock when checking the balance point, as leaving the pad or plate off the stock can make quite a difference.

If, on the other hand, the end of the stock is shaped and chequered as on some sideby-sides, this is a job for someone with the ability to plug the holes with timber and re-chequer them to match after completion.

If the gun feels barrel heavy, adding weight to the stock is the answer. You can do this by using the 'sticky back' weights or taping lead strip to the stock until the required balance point is achieved. Once the sweet spot is found, mark the barrels as before. It is generally easier to add weight to the stock, as most over-and-under shotguns and some of the newer side-by-sides have the stock held in place by a stock bolt. You can place the required weight in the hole bored for the stock bolt, to increase the weight of the stock without boring extra holes in the timber. If you have one of the

older side-by-sides the stock will have to be drilled to accommodate the weight, and as mentioned, re-plugged and re-chequered (or maybe fit a recoil pad if you need extra

If you're not happy with even the thought of removing stock material, or adding some lead ballast, once you've marked the balance point visit your local gunsmith and ask them to do the work necessary to achieve the required balance point. Please note the balance point that suits you for a 30" barrelled 12-gauge over-and-under may be not be guite the same as that for a 30" barrelled 12-gauge side-by-side or smaller gauge gun of the same barrel configuration.

Hopefully I have brought to the attention of fellow Australian wing shooters the importance of balance in regards to shotgunning. It may take a little experimentation to find your preferred balance point but it will be time well spent to gain that dynamic quality in the handling of your favourite shotgun to enable you to improve your kill to cartridge ratios - whether in hunting or competition.

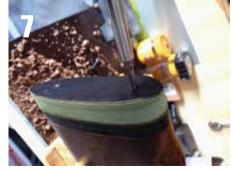
I'll finish with a thought by renowned writer Michael McIntosh on the subject: "There's no great mystery about balance, although there is a certain magic in its results."



Remove cuttings and shavings from the hole.



Sometimes the hole will need enlarged to remove enough material to obtain the balance point.



Finally, replace the recoil pad.

Catch .22 ammo dispenser

delivers simple solution

ere's a subtle tip for shooters looking for a foolproof way to keep their ammo clean - follow the lead of Brent Thorp. The same problem was encountered by Brent who, along with wife Colleen, founded Keyband in the Little Mountain suburb of Caloundra more than 40 years ago.

The self-dubbed 'quirky' import-export business has been sourcing and supplying quality sporting goods among other things from markets including China, India and Indonesia and Brent, a keen shooter and SSAA member, realised the solution to his ammunition problem was under his nose.

The defining moment came when he imported the Catch .22 ammo dispenser produced by Marble Arms & Manufacturing of Michigan. Brent explained: "I've tried belts, pockets, cardboard boxes, glove boxes, you name it - all storage prior to this little beauty wouldn't keep the ammo clean. Frustrated by the lack of choice I decided to import the Catch .22 into Australia.

"The Catch .22 is enclosed so it keeps .22 ammo clean and safe, which keeps your rifle bore clean too." Brent's initiative means the Catch .22 is brand new to the Australian market and now on offer.

The handy storage dispenser can carry 50 rounds of .22LR ammo for swift



reloading of tubular magazines. It attaches to your belt and keeps rounds spotless, so forget searching for stray ammo in your pocket. This simple apparatus blocks dirt, grime and particles from infecting lubricated bullets and harming your rifle bore.

Each of the 10 staggered, top-loading 'silos' holds five rounds. Alternatively, it can accommodate 30.22 Magnum or .17 HMR cartridges. Grooved detents let you slide the lid open to expose one silo at a

time and slot the rounds into the mag tube. There's also a convenient belt clip which can be used as a shoulder sling.

The Catch .22 is a great alternative for gun owners concerned with hunter safety. Net weight is 94g and it measures 53mm wide, 135mm long and 29mm deep.

As a special gesture to SSAA members, Keyband is offering to ship the Catch .22 for \$29.95. For more visit keyband.com or call Brent Thorp on 0409 484 609. •





he thought-provoking article by Joe Norris 'To pay or not to pay' (Australian Shooter, October 2018) struck a chord with my wife and I who, as graziers running a mixed farming enterprise, must admit we do wonder about what value hunters give to the privileges they enjoy when sporting shooters are allowed access to local properties.

As hunters and firearm enthusiasts ourselves, we completely understand the power of our ancient passion not just to grow our own food, but to seek out and hunt the animals that we do. However, among farming peers we are the minority as most farmers shoot rather than hunt from necessity. Admittedly, most of the ammunition we fire is used to cull and target feral species.

From our side and from opinions of neighbours, I'd like to share an insight into some things that affect landowners in the hope of nurturing better relationships between ourselves and hunters who need to understand we're running a volatile business.

We have to make ends meet and access for hunting comes with many risks and issues you may not be aware of, so please keep an open mind if reading on.

With ongoing drought continuing to ravage our bottom line, ever decreasing crop yields and prices for stock at sale time, fuel costs, power, rates, maintenance, property insurance, Workcover and concerns over biosecurity, the farmer of today needs to diversify and use all options available just to make a living.

Every animal on the property, including introduced species, has a value even if never realised or ever sold, as it has consumed feed and water harvested for the purpose of making the land as productive as possible. It can be a native animal struggling to survive due to conditions or predation and competition from introduced ferals and therefore important to conserve, or an introduced species with 'value' as a game animal to hunters or to the market.

I won't get into the argument about the

definition of feral verses introduced 'game' animals as, for the farmer, they're both introduced species. The result is the same: they cost money to the business as what they consume would otherwise feed stock animals, they cause damage - pigs rooting up pasture, deer and goats eating sown

crops, pasture and even wine grapes - and therefore need controlling. This gives them value and to that end we manage these animals, examples being feral goats which may fetch \$100+ each when mature, and deer which have substantial value when fully realised.

More than ever before, kangaroos are invading the country we have destocked to allow what little rain has fallen to hopefully start growing feed for our animals which I supplement with bought-in hay and grain at great cost (many suppliers profit from a drought but not farmers). These animals need to be continuously controlled, so why not let sporting shooters do this for us while we tackle other jobs that pile up. Because the roos are here every day. wrecking fences, desperately looking for food and water, not just on a few long weekends when urban hunters can take time off work (not their fault), that's modern life but it's my reality daily. Sporting shooters, as helpful as they are, are a mere a drop in the bucket in helping us.

Another factor is the extra insurance premiums we must pay in case hunters have an accident on our land that affects them making a living and facing medical expenses. Protection is an extra \$1000 on top of the annual \$10,000 farm policy, purely so hunters can enjoy my place without monetary risk to me. That's an added cost I wouldn't have if I didn't allow hunters

In our local country town there are currently two landowners who face losing everything they have due to lawsuits from people they allowed on for a weekend shoot that resulted in serious injuries, all for a carton of beer! In a review of our legal and



financial positions, we were made aware of these heartbreaking lawsuits and warned we should either cease hunter access or pay to be legally covered urgently. Sticking my head in the sand could cost me my livelihood.



It's not about letting SSAA members participate in culls to help with competition for feed during a drought. SSAA personal membership insurance won't protect a landowner from personal lawsuits. The property owner is legally responsible for the safety of their visitors. Many hunters help landowners with trade skills or labour as 'payment' in an exchange of benefits, but the landowner bears the legal liability for any misfortune that may result.

So what about this value in introduced animals that make them so desirable and emotive to so many. Why do many Australians find paying to hunt on someone else's property so unpalatable yet they have no issue spending up to five-figure sums to hunt overseas? Do we just expect it here for free because we're doing the farmer a favour? Are these managed feral animals such as goats and deer worth nothing monetarily to the casual hunter even though they have value to the grazier?

At one of our regular farmers' gettogethers I asked two invited hunters how they felt about paying, to be told they'd only consider it if they could shoot at least

Hunting: Make it a two-way partnership

30 pigs or goats a day. So is the hunt itself really their motivation?

Farmers in Queensland, New South Wales, parts of Victoria and South Australia are battling a drought worse than 1965, in some areas much worse. Personally, we've been feeding stock since Christmas 2017 as well as costly agistment, yet we consider ourselves lucky compared to some. Many primary producers, those allowing access to private land hunting, are suffering so badly they will never recover, with offshore corporations waiting to snap up their land and potentially put it out of bounds to hunters for good.

In many areas the Country Women's Association and community groups are collecting funds to make and distribute care packages for farmers, with even toilet paper a luxury for some who are spending everything they have - and borrowing even more - to keep their stock from starvation. These animals are the core of their business and must come first.

Given the above, is it fair that hunters should be rudge a contribution to use someone's property to hunt, camp and relax away from their day job?

If you have a relationship with a landowner, a place where you can get away with mates or family, treasure it and nurture that partnership. Hunters need these relationships as, without them, there would be far fewer opportunities for shooters if all they had was public land and rifle ranges.

More and more hunters are finding it increasingly difficult to access private land as other people stake their claim, so please keep in mind that your pastime comes at a cost to your host. Help make this a two-way street and keep it a viable option in this country if that's what it takes to get out there. Australian hunting may not be as glamorous as an African safari but without it most Aussies couldn't hunt at all. •





Celebrating the rebirth of a Savage 99



The finished rifle is excellent with a smooth, positive feed, next to no recoil and .204 accuracy.

n the late 1950s I became the owner of a Savage 99 takedown model in .22HP which came with one box of cartridges, 10 fired and 10 still loaded. The 10 loads didn't last long but gave me great admiration for the quick and easy loading of the rotary magazine and positive loading and ejection of cartridges.

Because of its slender design with no protruding bolt or external hammer it made an excellent saddle rifle. I was disappointed when I learned cartridges couldn't be had at that time, so the rifle was retired to my safe where it stayed for 15 years before being traded to a collector.

In the ensuing years I've owned many rifles but the Savage 99 was always in the back of my mind. In 2011, I began reading up on the 99 and some of its problems and features. The action would shoot the correct loads reasonably well with factory sights, where both front and rear sights are mounted on the barrel, but when a scope was mounted atop the breech, accuracy was only achieved by setting the barrel solid in the breech.

The .22HP was designed to take a projectile of .228 diameter with a rifling twist to suit a projectile of 70 to 71 grains and outside of these dimensions it just won't shoot accurately. For some years we've been able to buy a European cartridge known as 5.6x52.R, but I'm told this is supplied as a loaded version with a projectile of .224 diameter and, as such, has to be hand loaded for acceptable

In 2013 I placed an advert asking for a Savage 99 in .22HP and ended up owning two, one which shoots nicely and the other not so, as the barrel has seen better days. It was obvious rebarrelling was the answer.

I've been looking at the .204 Ruger as a long-range fox and dog rifle and considered the possibility of barrelling the Savage 99 in .204 calibre using the 5.6x52R case. In comparing the two I found the 5.6x52R has a powder capacity of three to four grains over the .204 Ruger case. It would remain a long, tapered bullet easy to load and eiect.

I contacted gunsmith Barry Cockinos who necked a .22HP case down to .204, inserted a projectile then tried it in the rifle. It fed into the rotary magazine and on into the breech as smooth as the originals so no modification is needed to the rifle, just a barrel. Barry prepared a profile and ordered a 20-10 Savage 99 stainless steel barrel from Total Solutions Engineering, built a sizing die, blued the breech then fitted the new barrel and bridge mount for a scope.

At present I'm 'shooting in' the new barrel and experimenting with powders and loads around a 39-40 grain projectile using only 10 Norma 5.6x52R cases, sized to .204 and trimmed to 52mm. To date they've been fired, sized and reloaded 10 times with no rejects.

The finished rifle is excellent with a smooth, positive feed, next to no recoil and .204 accuracy. My thanks to Barry for a cheap and rewarding alternative for Savage 99.22HP owners.

Allan Palk, NSW

Zeiss Victory RF 8x42 rangefinding binoculars

Con Kapralos

arl Zeiss would have to rank very highly on the podium of global sport optics manufacturers. Life at the top of that tree is very competitive with fellow German and Austrian rivals ensuring healthy competition - and rightly so. Zeiss has always been one to refresh its sport optics ranges, especially riflescopes, with the current V range (V8, V6, V4) catering to all requirements.

On rangefinding binoculars though, Zeiss were behind the game. Their competitors have had much success lately with new releases - laser rangefinding binoculars not only optically brilliant but ergonomically unsurpassed. But Zeiss, never one to rest on their laurels, decided the time was right to redesign their range with the Victory RF rangefinding binoculars in 8x42, 10x42, 8x54 and 10x54 specifications.

Not only were they long overdue, they would realign them with their rivals in the rangefinding binoculars market. But Zeiss have an ace up their sleeve in the new Victory RF range, something to put them ahead of the rest - Bluetooth connectivity. For readers unfamiliar with Bluetooth, it's a wireless connectivity medium which allows electronic instruments to share information and operating interfaces without the need for micro-SD cards or connecting USB devices to download data to an instrument. It's the way of the future and something already found in a myriad of electronic gadgets in use every day.

Australian Shooter approached Zeiss importer and distributor Outdoor Sporting Agencies with a request to review the new Victory RF binoculars and was supplied with the 8x42 unit.

Zeiss Victory RF 8x42 rangefinding binoculars

They come in the customary white Carl Zeiss carton. On opening, a picture of a reindeer and an image of the unit - and its Bluetooth connectivity technology - whet the appetite, with the binoculars and carry



case held in a sturdy foam liner. The grey clamshell case contains two carry straps (one for the case, one for binoculars) as well as bridged rubber eyecup protectors which slot over the ocular lenses. The objective lenses are protected with clip-in plug-type protectors which hang low on their retaining straps and stay out of the way when required. A lens-cleaning kit and two instruction leaflets complete the contents. The user instructions leaflets are the only minus point of the whole package, the details for use quite minimalistic and a more comprehensive manual would be more user-friendly.

Victory RF 8x42 rangefinders up-close

The binoculars are a completely new design and ergonomically excellent. Not only is the unit much more comfortable to hold, the

layout of the operational buttons is spot-on. The review binoculars measured 121mm wide (eye-spacing set at 65mm) by 166mm in length and weigh 895g. The binoculars are of a central twin-pivot bridge design with the focus wheel positioned between the two bridges and within easy reach of the index finger. The focus wheel is light in operation with only 1½ turns achieving a crystal clear image from about 2.5m to infinity.

Housing for a CR2 battery is incorporated in the front and easily accessed and is rated for 2500 readings. The adjustable eyecups are excellent, their rounded profile with four-position settings and individual diopter adjustments well appreciated and expected on a high-end unit. The strap securely anchors to two lugs either side of the ocular housings. The only other external features are the operational buttons on the main

binoculars body just in front of the forward bridge. The 'Menu' button is on the left and 'Power/Range' button on the right housing.

The position of these buttons on the tubes requires the hands to sit slightly forward of the bridge. With hands in this position the index finger controls the focus wheel while the middle fingers control the 'Power/Range' button (right hand) and 'Menu' buttons (left), respectively. The chassis is made from magnesium alloy and the external surfaces are coated in a matt black rubber for a secure grip.

Internally is where the Victory RF 8x42 shines. Many features of the previous Victory line continue in the new RF range, with Abbe-Konig prisms as standard and all lenses treated with the LotuTec coatings for enhanced performance in any lighting conditions. Optically, the Victory RF 8x42 continues in the superb tradition all Victory optics are renown for but the jewel in this crown is the Bluetooth connectivity built into the programming.

Without going too deeply into the how and why, Bluetooth connectivity allows a device to be wirelessly programmed via an Android or iOS device without the need for micro-SD data cards or USB cables to transfer ballistic data to the binoculars. The user can choose the particular cartridge/load from the Zeiss Hunting application on their smartphone or tablet, and by pairing the device and binoculars with Bluetooth connectivity, the ballistic data is downloaded to the binoculars.

The Victory RF range is capable of storing up to nine ballistic profiles and the user chooses whichever one is required. The unit also takes into account environmental conditions and shooting angles (incline/decline) and adjusts the hold-over required when the shooting range is measured. It is also truly customisable, from the brightness of the display, metres or vards, holdover measurements and elevation turret adjustments (mRad, MOA, 1/4" clicks etc), scan-mode or single measurements and a lot more.

These options let the avid hunter tailor the unit to their requirements and take the guesswork out of any shot - from 15-2300m with accuracy to 1 per cent out to 600m and 0.5 per cent from 600m and beyond. That information is available on the Zeiss Hunting application but the hard-printed material provided needs updating to something easier to follow, ideally an easy-toread booklet.

In the field

The binoculars were a pleasure to use and did everything the manufacturer claimed. The fast, one-press ranging function was appreciated and the customisable nature of



the unit made it easy to set up and use once the Bluetooth connectivity downloaded ballistic data. I used it extensively in a nonhunting setting, ranging reflective and nonreflective targets to 2000m, with distant targets requiring a steady hold to achieve a true reading.

What I most appreciated was the optical quality, all images having excellent clarity and contrast. When you buy a top-shelf optic such as this you expect the best, and the 8x42 RF rangefinding binoculars continue the Victory legacy of the best money can buv.

In a hunting application I paired the Victory RF 8x42s with my Android device (with Zeiss Hunting app) and downloaded ballistic information for my .243 Winchester rifle with Zeiss Conquest 3-9x40 scope, using 100gr GECO soft points. The information was stored in Ballistic Profile #1 and the rifle only needed to be resighted in for a 100m zero. Once adjusted, I set out to see if the hold-over (in 1/4 MOA clicks) would be verified out to 300m and the unit was spot-on, with targets (metal gongs) successfully dialled into and hit time and time again. Even at the maximum distance of the range (300m) a few more elevation clicks dialled into the metal plate.

I shoot for the table at distances no further than 300m and achieve this by sighting in my rifles high at 100m and taking the ballistic profile/maximum pointblank range into account for game out to 300m. Rangefinding technology like the Victory RFs make it easy to hit targets out to 1000m and beyond and as long as your riflescope has the elevation adjustment, this is very achievable using these binoculars.

Maybe it's time for me to embrace rangefinding binocular technology and turn sense into certainty by plumping for the Zeiss Victory RF 8x42s. Class costs money and at \$4240 they're not cheap but it's an investment in the best from the best in sport optics. For more, visit osaaustralia.com.au

SPECIFICATIONS

Magnification: 8x

Effective lens diameter: 42mm

Exit pupil diameter: 5.3mm

Twilight factor: 18.3 Field of view: 135m

Close-up setting limit: 2.5m

Diopter adjustment range: +/- 3 dpt

Eye relief: 17mm

Pupil distance: 53.5-76mm

Lens type: FL (fluoride)

Prism system: Abbe-Konig

Coating: LotuTec

Nitrogen filling: Yes

Waterproof: 400 bar

Length: 166mm

Width (with eye spacing

of 65mm): 121mm

Weight: 895g

Measuring range: 15-2300m

Measuring duration: < 0.3 sec

Battery: I x 3V Type CR2

RRP: \$4240 (8x42) as tested - 10x42 -

\$4345, 8x54 - \$4625, 10x54 - \$4766

Distributor: Outdoor Sporting

Agencies



Chris Redlich

s my spotlight swept from side to side across the paddock and the autumn night air began to chill my fingers, I felt relaxed. A day earlier I'd answered one too many phone calls on the building site and had to get away for a while. It had been one of those busy spells after a long weekend and no matter how much you try to take a break, it doesn't happen unless you just 'take off'.

I told my understanding wife I need a day off and she gave me her full support. Fortunately, we I live in the country and my regular hunting patch is just a short drive. So with the green light from my farmer friend and the ute packed, I was on

It's amazing how once you make

the break from the grind you become instantly relaxed, and that's exactly how I felt as I slowly spotlighted my way around the property looking for ferals, my rifle rested safely on the console of my ute.

While I didn't care, I thought I may have missed the party that night. The local feral population was all but non-existent until the spotlight picked up the eyes of my first. A hare darted back and forth across the paddock and stopped momentarily for me to measure a range with my Leupold laser range finder. At 180m I knew it was well within range.

I positioned the ute to where I felt comfortable and just as I took a sight picture it bolted. I guess if I had a spotlight trained on me for too long I wouldn't hang around either. The hare ran along

the same plain at the 180m mark just beyond the fence line. I manipulated the ute and spotlight to have it covered and in an instant he stopped and propped.

I was quicker to the draw this time and sent a 55gr Sierra pill on its way. At the sound of the thud and although I aimed for the head, the bullet appeared to destroy him, as a cloud of its hair floated to the ground. I made a mental picture of its location and decided to retrieve it later. So one down and time to search for more.

Within moments I picked up the glint of a fox's eyes and checking the .22-250 confirmed it was a young one through my Swarovski scope. Like the hare, he wasn't going to make my night's shooting easy. Every time I took a sight picture he

moved far enough that I had to mobilise the ute again. Although he didn't cover a lot of ground he kept disappearing from sight. Every time I yelled "Oi!" he'd give me a quick look.

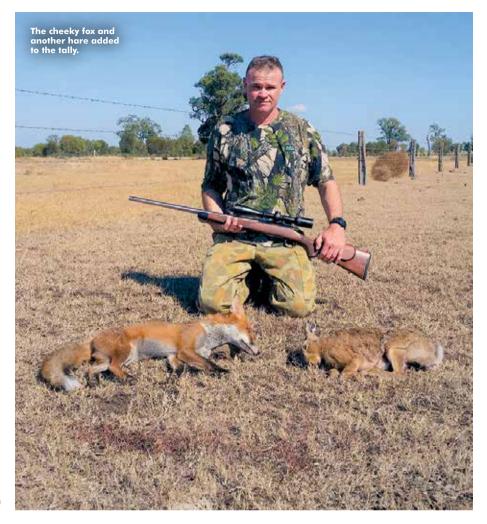
I turned off the spotlight and approached from a different angle. I was comfortable knowing he wouldn't travel far as he'd have cleared out by now if he was going to. I stopped the ute and flicked on the spotlight and immediately picked his eyes up again, now a little closer. I lowered the rifle and sighted him through the scope.

At 125m he took to his heels and, as I called out again, with a last act of defiance he stopped, looked back at me and stood up on hind legs with paws by his side. He seemed to enjoy cavorting in the spotlight but as he dropped back to all fours I nailed him through the chest. In all my years shooting foxes I'd never witnessed a display like that so to finally drop him was satisfying.

Upon retrieval I discovered why the fox kept disappearing from view - he was bobbing up and down behind the deep furrows of a freshly-ploughed paddock.

Soon after I was starting to think my night was over when suddenly three hares, as if ejected from the hole they'd been hiding in, came waltzing into view at about 200m and my .22-250 Rem dropped them instantly with two head shots and one to the neck.

In the dark I couldn't locate the





Impromptu hunt an unexpected treat

first one for a photo, and with the clock now showing 1am I reckoned I'd better find a place to roll out my swag. I camped by the dry creek for the night as this was my best place to hunt wild dogs in the morning, and if any were around I would hear them howl. The crows squawked a 5am alarm and I rose for the hunt.

Sadly there were no wild dogs to be found that morning but my day off from work was already a success. Lack of sleep kicked in from the previous night's shoot but out in the bush and away from work I felt recharged.

Before heading home I went in search of that first downed hare but all I found were the remains of some fur and a leg. A fox scat close by confirmed it had been someone's supper. Clearly another fox had been close by but far enough away to avoid being caught up in my spotlight. Oh well, another fox for another day off.

As it turned out, two weeks later my son had a day off from his footy schedule and without too much thought of what we were going to do, plans were made to return to the same spot for the night. Not a fox to be seen this time but between my son and I we removed six more hares from my farmer friend's struggling crops with the aid of the spotlight, Carl using his mum's Ruger M77 in .223 Rem and I my old faithful Remington .22-250.



We endured a bitterly cold first frost of the season in the swags that night, but you couldn't wipe the smile from Carl's face after a night hunting with dad in the bush, and a campfire by the creek soon thawed us out.

While we were once again out of luck as far as wild dogs go, the impromptu hunt was another unexpected treat and just goes to show you don't always have to nail the big one to have a great day's hunting.

NIOA jobs boost for regional Queensland

he Federal Government has thrown its weight behind a new state-ofthe-art forging and manufacturing plant in regional Queensland, in a joint initiative between Australian company NIOA and German counterpart Rheinmetall.

NIOA and Dusseldorf-based Rheinmetall plan to build the \$60 million facility manufacturing artillery shells and other munitions products for the Australian Defence Force - in Maryborough with the creation of 100 direct, long-term skilled jobs in the surrounding Fraser Coast region.

Their application for \$28.5 million of federal funding was approved under the government's 'Regional Growth Fund' which supports projects in excess of \$20 million investment, considered transformational to a regional economy. While final approval is still pending, the companies have also sought additional backing from the Queensland government.



NIOA MD Robert Nioa said the plant would ensure future munitions supplies to the ADF will be Australian-made and create Australian Industry Capability for current and future contracts.

"NIOA is proud to partner with Rheinmetall to establish an important project that will create a sovereign military capability in Australia and hundreds of jobs in regional Queensland," he said.

Rheinmetall Defence Australia MD Gary Stewart said the facility would replace munitions imported into Australia and ensure the nation has a long-term sovereign capability to supply the ADF.

"The artillery made at the new plant will be delivered to the Australian Army and for export to selected Defence forces globally through Rheinmetall's Global Supply Chain program," he said.

Get the maximum bang for your buck

Derek Nugent



ithout doubt one of the motivating factors behind any purchase is price and the desire to obtain value for money. The old adage that 'you get what you pay for' is certainly true as is the degree of satisfaction which comes with the acquisition of that topof-the-line product you've always wanted.

But we all know that along with the 'name brand' comes the premium price but not necessarily functionality, reliability or longevity much different to a lesser-priced 'budget' variety. I found this to be the case with the Maginon outdoor range, the full array of which I invested in to augment my hunting experience.

Maginon is a line sold in Australia by Aldi. They produce a selection of electronic devices which are wallet friendly and aimed at the outdoorsman. I've been successfully using three of these items for many years

and can't fault their quality, performance or durability. All come with carry pouches and straps, batteries, SD cards (as required) and a good warranty.

WK30 HD wildlife camera

I've been relying on this type of trail camera for five years. I have four of them (due mainly to the price) and they've functioned reliably 24/7 the entire time. Mine have taken many thousands of images between them and continue to do so.

It's a compact - 135mm high x 93mm wide x 72mm deep - weatherproof unit which captures high-quality HD images and video footage, colour during the day plus black and white after dark courtesy of 44 infrared LEDs. It also has a built-in microphone, features a three-zone movement sensor array with a trigger distance of 20m and trigger time of one second. The large



Get the maximum bang for your buck

thin-film-transistor (TFT) display built into the back of the camera, coupled with an easy to use menu allows you to set date, time, temperature and moon phase stamps on your images, all interesting information for the hunter.

You can set the image resolution, trigger sensitivity, number of shots to be taken in sequence and a reset time which best suits your purposes and can view, edit and delete images with ease. The camera will support SD cards of up to 32GB and when run on the full complement of eight AA batteries, the unit will function for up to six months.

While this piece does not have the capacity to email you images or alert you to a triggering, it won't set you back \$500 either. The camera costs only \$130 and comes with a three-year warranty, wall/tree mount, batteries, SD card and USB cable for playback on computer or TV. I've never regretted my decision to buy these cameras and have never had them fail me.

LRF 800 range finder

This is another staple from the Maginon group which I adopted and wholeheartedly recommend. The range finder is of comparable size to other units on the market

- 107mm x 68mm x 39mm, weighing 164g and comes with a carry pouch, wrist strap
- and comes with a carry pouch, wrist strap and lithium battery.

It has 6x magnification with a field of view at 1000m of 122m and a maximum carry of 800m. It also boasts a variety of mode settings which allows for use in the rain, on highly reflective targets and on targets where foreground interference could be an issue. It's described as rain resistant rather than waterproof.

By way of testament to the performance of the unit, I regularly 'test' it against an expensive name brand equivalent owned by a hunting companion. My piece registers the exact same ranges as his in every



circumstance and there appear to be only two real differences. Firstly, his has a nice orange blaze camo finish whereas mine is matte black, his component retails for around \$800 while mine cost \$150 and again comes with a three-year warranty. In terms of value for money I can't fault it and have yet to uncover any shortcomings.

NVB 60 night vision device

This is the latest addition to my Maginon collection and while I've only had it a year I'm delighted with its service and can see no reason why it won't live up to the expectations the other choices instilled in me.

During the day the device can be used like binoculars with a 3x zoom and effective range of 400m. After dark this is around 60m with a run time of up to six hours from eight AA batteries. It's a little bulkier than the other products discussed - 495mm x 350mm x 285mm, weighing 600g - but still

quite handy, is rain resistant and comes with a pouch, strap and tripod thread.

It comes into its own when quietly working a track or private road in search of rabbits, foxes, feral cats and wild dogs. The night vision device lets you spot and assess a target prior to hitting the spotlight and taking the shot. It's also invaluable when sitting off a wallow or carcass at night and observing - if not shooting - what comes in. The night vision appliance retails for \$150 and also has the standard three-year warranty.

All these gadgets are readily available at your local Aldi store and are sold as "specials" about twice a year so not always available. Also be aware Aldi's marketing strategy sees only a limited number, between six and 12 units, made available at each store. If, like me, you live in a regional area where there are few stores and high demand for these products, you must be prepared to dash in early and line up with everyone else.

But if you're in a major centre with multiple stores you're more likely to be able to walk in and buy what you want. The trick to obtaining them is to realise they're not on the shelves with other merchandise but are kept at the registers, and if you ask an operator they'll magically appear from a drawer at their feet.

I'm by no means an early adopter of technology but in the case of these products I made an exception as, for a very reasonable price, they give access to opportunities guaranteed to augment your outdoors experience. I honestly believe you won't go wrong by bolstering your hunting kit with any (or all) of these accessories. •



The Outdoor Edge ChowPal

Con Kapralos



enver-based knife and toolmaker Outdoor Edge is synonymous with producing quality items from the finest materials while being extremely affordable in the process. One of their latest releases is a tool so simple in its design and function, yet brilliant in its application, it's destined to become a hit not only with outdoors enthusiasts, but anyone who has been left wanting without cutlery when it's time to chow down!

The ChowPal, as the name suggest, is your best friend when sitting down for a bite to eat. It's an all-in-one utensil set/ multi-tool which includes in its design a can opener, bottle opener, flathead screwdriver, wrench set as well as a fork and folding knife/spoon that lock together and easily slide apart when you're ready to have a meal.



The unit measures 16.5cm in length with a blade length of 6.4cm and weighs 68 grams. When folded, it can be securely stored in the fluorescent orange pouch. It's crafted from 420J2 stainless steel and consists of two segments which lock together at the top - and are easily slid apart. One segment contains the fork, as well as having the can/bottle openers and wrench set fabricated into its frame, while the other segment contains the spoon with a fold-out, lockable knife with flat-blade screwdriver at the apex of the frame. The wrench set can be used to nip-up bolts from 8-13mm (5/16-1/2 inch), the can and bottle openers will always be handy to have on hand and the flat-blade screwdriver has a myriad of uses.

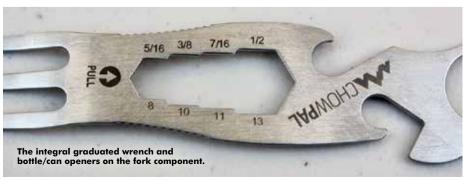
I warmed to the ChowPal immediately, taking it for an overnight hunt and was mighty impressed. The utensils did their task as expected and the knife was extremely sharp, slicing through steak and



Con Kapralos puts the Outdoor Edge ChowPal to

bacon with ease. Its stainless steel fabrication makes washing up easy and, once dried, the storage pouch keeps the utensil safe but clearly visible.

The ChowPal would make an excellent addition not only to your camping utensils or backpack but will also be handy in your work lunchbox. It also makes a neat little gift for anyone who's hard to please when it comes to buying for. The ChowPal retails for \$49 and is available through most outdoor or specialty retailers who carry the Outdoor Edge range. For more information on the ChowPal, visit the Beretta Australia website at berettaaustralia.com.au •





Nationals thwart Greens' Senate firearms manoeuvre

n attempt by the Australian Greens Party to impose more constraints on Australian firearms owners has been given short shrift by The Nationals.

The confrontation came towards the end of last year when The Greens attempted to push a motion through the Senate which was voted against by The Nationals.

The episode made it plain The Nationals are solidly aligned in support of law-abiding firearms owners.

The Nationals stress the point that there are more than a million law-abiding firearms owners in Australia who have purchased those firearms legally from equally law-abiding businesses. Such outlets undergo intense screening and readily operate within gun laws the envy of much of the rest of the world.

Thanks to the attitude of law-abiding store owners and those within the firearms industry there have been scant violations of the gun laws since the 1990s.

"These businesses go through thorough processes to ensure our gun laws are adhered to," said Senator Bridget McKenzie, deputy leader of The Nationals and Minister for Sport. "It is clear The Greens don't support sports shooters, hunters or our elite medal winning athletes in owning a firearm."

The Nationals are adamant that any added curbs or red tape inflicted on productive law-abiding individuals, businesses and industry will do nothing to cut the level of gun-related crime or the hankering for illegal firearms by lawbreakers to use for their own ends.

"We must continue to work on ensuring that law-abiding sporting shooters, hunters and farmers are respected and able to continue to enjoy legally partaking in this activity," said Senator McKenzie.



Support: Senator Bridget McKenzie.

Reloading press the perfect pitch from Lee Precision

ee Precision have been serving the reloading world for 60 years, so when the US firm trumpets a new arrival it's time to sit up and take

With the Lee family at the helm since 1958, recently-installed President John Lee was proud to unveil the new Auto Breech Lock Pro progressive press. This is a trail-blazing accessory which Lee is offering from its base in Hartford, Wisconsin for less than the price of a premium single stage press. The shooter simply has to order a set of Lee dies and a shell plate to operate with the press and it's all systems go.

Getting started is easy with help videos and product instructions on Lee's website. On arrival you'll find the press has all kinds of obliging faculties - the modular layout permits as much or as little mechanisation as the operator requires.

And no adjustments are needed, with cartridge changeover in seconds including primer size. There's a Breech Lock quick change feature in four positions and exclusive auto case placer.

Also included are four breech lock bushings, large and small priming arms as well as an ergonomic wood grip roller handle.

Some dealers charge for tools and storage rack but Lee includes these free and also supplies a hex wrench for calibre changes. The user will initially have to implement die adjustment into the breech lock bushings but, once that's sorted, the breech lock system caters for immediate change.

Recommended retail price is around \$230. For more details ask at your local gunshop or visit the Lee Precision website. Alternatively, you can contact Australian distributor Grycol International at grycol. com.au





EAN PARSON OF New South Wales emerged victorious from the 2018 SSAA National Benchrest Score Championships hosted by SSAA Coffs Harbour at its Dairyville Range. Ean's four-gun total of

1988.73 saw him collect the Nick Catlan Trophy ahead of second placed Don Powell with Chris Parry third. Ean (left) is pictured receiving his award from Coffs Harbour branch president Rod Madeley.



THE NIOKA RANGE near Gunnedah. NSW hosted the Billy Dixon long range Black Powder Cartridge Rifle competition in September, incorporating the 2018 SSAA (NSW) BPCR state championships. This was the 20th year of the competition, in memory of the US Medal of Honour winner and buffalo hunter, and New South Wales

shooters led a clean sweep of medals this time round, Eric Johnston taking gold with a two-day total score of 25/42. Runner-up was Gavin Dignam on 24/42 with joint third place going to Rob Jones and Paul McCarthy a further point adrift. Our picture shows Johnston flanked by McCarthy, left, and Jones. Dignam is missing from the picture.

RAINBOW'S END: WHO needs a pot of gold when the real treasure at the end of the rainbow is a tight group at 500 metres. A perfect day's shooting at the SSAA range in Majura, ACT.



IPSC - ACTION • COWBOY • SILHOUETTE



Everything in steel targets.

Aussie Step Pty Ltd 1800 809 427

Full range online www.aussiestep.com.au/aussietarget.html

STEEL & SHOT



phone 0412 545 592 www.steelandshot.com.au email info@steeland shot.com.au

BATHURST ARMS FAIR

March 9-10, 2019

Saturday 9am-4.30pm Sunday 9am-3.30pm 10 Bent St, Maitland, NSW

huntervalleyarmsfair.com.au

Great Australian Outdoors magazine premiere edition is now available to purchase online at onlineshop.ssaa.org.au

To advertise with the **Australian Shooter** please call 08 8272 7100 or email advertising@ssaa.org.au

BRUCE DONNELLY Barrister-at-Law

Firearms legislation specialist in firearms and Crimes Act offences with firearms, domestic violence and firearms, sporting club offences, and security and safety regulations.

Located in Tamworth NSW covering the north-west and east-coast Local, District and Supreme Court Circuits and Tribunals.

Phone: 02 6766 8033 or 0429 668 033 Email: barra06@bigpond.net.au Lawley Chambers, Suite 2, 9 Fitzroy Street, Tamworth, NSW 2340



Jeffrey Pannan FDL 869-531-60F

Ph 03 9848 2233 Mob 0412 561 243

Wants YOUR **GUN COLLECTIONS** Anywhere in Australia TOP PRICES PAID

Pistol and rifle collections purchased outright. No hassles.

Wanted for waiting buyers of Springfield 1903 and 1903/A3, K98 German variants, German Sniper, No. 5 Jungle Carbine, early Lithgows WWI No. 1 Mk111, Arisaka.

Also wanted ammunition - Swedish 6.5x55 in original packets.
Accessories, ammo and reloading gear also required.

Email: blackjck@bigpond.net.au



Entrust your arms and militaria to the auction specialists with a proven and outstanding track record.

Two auctions a year May and October

Contact: **Roland Martyn** 0428 543 377

Cheryl Martyn 03 9848 7951

www.australianarmsauctions.com.au admin@australianarmsauctions.com



Get help from 4-time Olympic shooter and lawyer, Glenn Kable

Get the right legal advice! Available Australia-wide.

Having spent a lifetime around the sport, I have an intimate knowledge of the workings of all the bodies affecting the decision-making process, whether it is police or courts, local councils or governments, clubs or associations.

For a no-obligation assessment, phone 0407 962 200 or email glenndkable@yahoo.com mail@hartmann.webcentral.com.au



Australian Hunter magazine is now on Facebook



www.facebook.com/ Australian Hunter Magazine

SSAA Member Alert

Members are reminded that if you are using membership of the SSAA as your genuine reason for your firearms licence, you must ensure you renew your SSAA membership in time. Please be aware that state and territory police firearms registries regularly cross-check firearm licences and your member status. To support your genuine reason and keep your firearms licence and to make sure that SSAA can support you, make sure you renew your SSAA membership.



Camp/accommodation. Dogs permitted on some. Properties available in NSW, Qld, Vic, WA and SA. Western Hunting Information Guide now available. For a FREE brochure - www.westernhunting.com.au Email hunt@westernhunting.com.au John & Kerrie Eggins phone 02 6559 9888





enquiries@claremontfirearms.com.au

Yes, it's true - all the best shots are members of the Sporting Shooters' Association of Australia.

Now you can be the proud owner of one of a limited number of Maxwell & Williams coffee mugs emblazoned with exactly those words to tell the world and be the envy of your mates.

You can't buy this mug, no matter the size of your wallet. So if you want your shot of coffee in the SSAA Best Shots mug, you better get your entry in for your chance to win one!

SSAA members only.

Enter online at ssaa.org.au/win

Gun & Knife Show List

2019

February 2-3		Perth Knife Show	Gillian Wilson qmacinc@gmail.com
February 16-17		Brisbane Knife Show	Gillian Wilson qmacinc@gmail.com
March 2-3	Eastbank Centre, Welford St, Shepparton	200 tables antique & modern firearms - Collectables and Militaria Expo	Ricky Seiter 0400 567 353
March 2-3		Australian Blade Symposium	Gillian Wilson qmacinc@gmail.com
March 9-10		Bathurst Arms Fair	huntervalleyarmsfair.com.au
March 16-17	Ipswich Showgrounds, cnr Warwick & Salisbury Rds, Ipswich	Brisbane Show of modern, sporting, military guns, militaria, edged weapons, etc	Paul Brush 0412 562 252
April 6-7	The Betting Hall, Elwick Showgrounds, Hobart	Antique & modern firearms, edged weapons and militaria	Phil Gourlay 0477 411 457
April 13-14	Westgate Indoor Sports and Leisure Centre, Altona North	Melbourne Arms and Militaria Fair	Jeff Pannan 0412 561 243
May 4-5		Australian Knifemakers Guild/Melbourne Knife Show	Gillian Wilson qmacinc@gmail.com
May 25-26	Toowoomba Showgrounds, Glenvale Rd, Toowoomba	330+ tables firearms, ammo, militaria & collectibles & more	Dan Watson 0407 643 776
June 15-16	Gympie Showgrounds, Gympie	Gympie Arms and Collectables Fair	Gordon McRae 0428 865 205
July 6-7	Westgate Indoor Sports and Leisure Centre, Altona North	Melbourne Arms and Militaria Fair	Jeff Pannan 0412 561 243
August 3-4		Sydney Knife Show	Gillian Wilson qmacinc@gmail.com
September 7-8	Toowoomba Showgrounds, Glenvale Rd, Toowoomba	330+ tables firearms, ammo, militaria & collectibles & more	Dan Watson 0407 643 776
September 14-15	Cannington Exhibition Centre & Showgrounds, Cannington	WA Arms & Armour Annual Militaria Fair	info@waarmsandarmour.com.au
September 21-22		Hunter Valley Arms Fair	huntervalleyarmsfair.com.au
October 7		NSW South Coast Knife Show	Gillian Wilson qmacinc@gmail.com
October 19-20	Westgate Indoor Sports and Leisure Centre, Altona North	Melbourne Arms and Militaria Fair	Jeff Pannan 0412 561 243
November 3-4		Adelaide Knife Show	Gillian Wilson qmacinc@gmail.com
December 2		Canberra Knife Show	Gillian Wilson qmacinc@gmail.com

2020

September 12-13 Cannington Exhibition Centre & Showgrounds, Cannington WA Arms & Armour Annual Militaria Fair

info@waarmsandarmour.com.au

Persons wishing to purchase any firearm that requires a licence from any arms fair in NSW should apply for a Permit to Acquire at least six weeks before the fair. For reasons beyond the control of show organisers, some of the above dates may be changed. It is advisable to check the show dates before travelling.



Australia's most comprehensive firearms and accessories trading website





ssaagunsales.com

Buy and sell new and used:

- Firearms, parts and optics
- Ammunition and reloading components
- Knives and hunting products
- · Camping gear, vehicles, boats and property

Youth in Focus

Max Olufson

Communications Officer Sam Talbot

s a member of the junior section at SSAA Brisbane, 13-year-old Max Olufson has plenty of time to learn and refine his shooting skills. The SSAA member shoots a variety of disciplines and is constantly improving thanks to advice from an even wider range of coaches.

Leading the charge is Max's father Damon, junior shooter coordinator at SSAA Brisbane. The section is known as the Brisbane Junior Target Shooters where Max and other youngsters learn the ropes in disciplines like Field Rifle and silhouettes.

"I've learned a lot of skills as part of the junior section at Brisbane and people at various competitions have given me advice on how to improve. I also have air rifle coaching on Wednesday nights," said Max, who reckons the best advice his dad has given him is "don't pull the trigger until you're on the target".

Damon's on a mission to do all he can to bring more juniors like his son into the sport. "The more we can do to promote juniors in our sport the better," he said. "The club recently bought 20 new rifles for our junior shooters to replace the old ones we were using."

Damon's passion for the shooting sports has rubbed off on Max who enjoys almost every discipline he has tried his hand at, from Field Rifle and Rifle Metallic Silhouette to the more obscure Sports Pistol and Farm Gun (a hybrid of trap and skeet where competitors can use any shotgun expect for the typical under/over).



Although Max enjoys shooting all the disciplines there's one in particular that stands out for him. "My favourite is Silhouette Pistol because I like to get an instant result and pistols are fun to shoot with," he said.

With a variety of disciplines comes a variety of firearms, and Max is more than happy to list the ones he shoots regularly. "I use a .22 LR CZ455, .223 CZ527, 12-gauge coach gun, .22 pistol Ruger 22/45 MKIV and a 9mm CZ Shadow 2," he said. "The CZ Pistol is my favourite firearm as it has more kick than the Ruger."

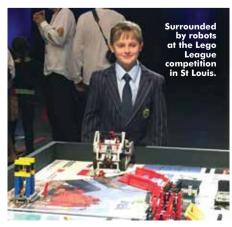
His proudest shooting moment to date came at the Queensland Field Rifle Championships where Max managed a seven-medal haul. Even more pleasing for the youngster though was achieving several personal bests throughout the competition. "I'd like to keep improving my

scores and win more competitions and beat my brother more in the ones we both shoot in," he said.

Even without the lure of medals, Max is more than happy to pull his weight by sighting-in rifles and helping his dad reload various ammunition for their next trip to the range. Aside from shooting he's interested in technology, including coding and game development. Along with his team at school, Max competed in a robot programming competition in Sydney. The Lego League competition required Max to build and program a robot to complete a number of tasks and he and the team did so well they won themselves a place in a competition in St Louis, USA.

We wish Max all the best with his shooting and look forward to seeing what computer programming and robotic inventions he comes up with next. •







\$25 - includes 11 issues of the Australian Shooter	STERS MODULATION
\$54 - includes 11 issues of the Australian Shooter and 4 issues of Australian Shooter	tralian Hunter magazine
Has the junior been a member before? Yes/No	tralian Hunter magazine embership No.
Details of junior being signed up (must be under 18)	
Branch (if known) Sex (pleas	
First name Middle name	Last name
Home address	P/C
Date of birth Phone	
Email	
OFFICE USE ONLY	
Details of sponsoring member	
First name Middle name	Last name
Membership No.	
Payment options	
Enclosed is payment for the amount of \$	I also wish to donate
Cheque Money order MasterCard Visa	\$ to the SSAA
Card number	MAIL TO: MEMBERSHIP OFFICE,
Evoiry data	PO BOX 282, Plumpton, NSW 2761
Expiry date Signature	
Cheques payable to the Sporting Shooters' Association of Australia Inc	SSAA Inc is subject to the provisions of the National

SSAA Inc is subject to the provisions of the National Privacy Act. Should you want a copy of the SSAA Inc Privacy Statement or seek further information, please write to PO Box 2520, Unley, SA 5061.

SSAA MEMBERSHIP APPLICATION SSAA Membership Office, PO Box 282, Plumpton, NSW 2761 ABN 95 050 209 688 Phone 02 8805 3900 Fax 02 9832 9377 Email mem@ssaa.ora.au Memhershin No. Have you been a member before? Yes/No **NEW** RENEWAL Title (PLEASE CIRCLE) Mr Miss Ms Mrs or Preferred SSAA Branch First name Middle name Last name Residential address Town/suburb State Postcode Postal address Town/suburb Postcode State Phone (Home) (Work) (Mobile) (Fax) Fmail Date of birth Male Female OFFICE USE ONLY Tick to subscribe to the FREE SSAA National E-newsletter via email MEMBERSHIP CATEGORIES AND SPECIAL OFFERS Each membership category (apart from Family Member) includes 11 issues of the Australian Shooter magazine per year. Add four issues of the Hunter magazine per year \$90 Adult (over 18 years) Includes \$35 insurance premium for SSAA Member Firearms \$125 Insurance for 12 months, valid until next membership renewal. Additional Family Member (No magazine) Applies to each additional person \$97 \$68 over 18 residing at the same address as a full-subscription Adult member, Includes \$35 insurance premium for SSAA Member Firearms \$132 \$103 Supporting Adult member No. Insurance for 12 months, valid until next membership renewal. Pensioner Available on production or photocopy of \$68 \$97 both sides of your Australian Concession Card. \$103 Includes \$35 insurance premium for SSAA Member Firearms Insurance for 12 months, valid until next membership renewal \$450 **5-year Adult** Contact SSAA for firearms insurance information. \$1800 Member for Life Contact SSAA for firearms insurance information. **vear** \$173 Overseas Available to members living overseas \$25 **Junior** (under 18 years) Parent's or guardian's signature



ALL **APPLICANTS PLEASE READ AND SIGN**

This application is made in full recognition of the Association's requirement for responsible and ethical behaviour. I undertake to do all in my power to preserve the good image of the sport and the Association. I understand that members breaking the Code of Conduct may be subject to suspension or expulsion. The Code can be found at ssaa.ora.au/code

SIGNATURE: DATE:

Refund Policy: Subject to Australian law, membership fees are not refundable, nor can they be transferred.

SSAA Inc collects personal information of members. The information you provide on this form will be disclosed to the state or territory branch of the SSAA to which your membership application relates. A copy of SSAA Inc's privacy policy can be found at ssaa. org, au/ privacy. You can obtain access to your personal information by writing to: SSAA, PO Box 2520, Unley SA 5061.

ATTENTION **NSW & ACT MEMBERS**

Complete this section ONLY if you wish to use your membership of the SSAA to support your Genuine Reason for having a firearms licence. Register your SSAA activities by marking one or more of the following boxes:

TARGET SHOOTING

HUNTING (club membership)

COLLECTING

HUNTING OTHER (R licence, property owner/permission)

Choose the insurance offer

and for just \$35 you get \$25,000 worth of firearms and fixed accessories cover.

Want to know more?

Call us at SSAA





PAYMENT OPTIONS Enclosed is payment for the amount of \$..... I also wish to donate Cheque Money order MasterCard Visa \$..... to the SSAA

Card number

Expiry date Signature.....

Cheques payable to the Sporting Shooters' Association of Australia Inc.

ssaa.org.au VISA





National

Big Game Rifle National Postal Championships

February 1-November 30, 2019
Program: February 1-May 31: Special Snap.
June 1-August 31: Group Three. September
1-November 30: Stopping Double Rifle. Rules: Championships shot as per current National Big Game Rifle rule book. Scoresheets showing

competitor's name, club, rifle, scope power and result of each shot to be sent to Graeme Wright, PO Box 5085, Kenmore East, Old 4069. Awards to third place and juniors. Entries in junior class to include date of birth. Contact: Graeme Wright thepilotgw@hotmail.com

SSAA Field Rifle, Scoped 3-Positional, NRA and Air Rifle National **Championships**

April 17-22, 2019 Southern Districts Rifle Club

Bedfordale, WA
Program: Wednesday, April 17, practice.
Thursday, April 18, NRA 3×40; 10m Scoped
Air Rifle - Precision. Friday, April 19, Field Rifle
Centrefire; 10m Scoped Air Rifle - 3-Positional. Saturday, April 20, Scoped 3-Positional Rimfire. Sunday, April 21, Field Rifle Rimfire. Monday, April 22, Scoped 3-Positional Centrefire. Nominations: See website. Rules: Current SSAA rule book. Prizes: See website. Facilities: Canteen, licensed bar, toilets, showers, on-range camping with limited power. Contact: Christine 0893 981 131 secretary@sdrc.com.au or Matt 0439 092 686 fieldrifle@ssaa.org.au. See website for full event details

SSAA National Centrefire Benchrest Championships April 19-22, 2019

SSAA Dairyville Range Coffs Harbour, NSW

Program: April 19, 8am Unlimited 100 and 200yds: April 20, 8am Sporter 100 and 200yds: April 21, 8am Light Benchrest 100 and 200yds; April 22, 8am Heavy Benchrest 100 and 200yds. Nominations: \$60 per class. Rules: Prenomination by April 1. Practice April 17-28. Prizes: National medals, top 10 patches, junior trophies. Facilities: Clubhouse, toilets, showers, barbecue, camping on range, catered breakfast, lunch, tea, coffee, gala dinner on Saturday included. Contact: David Billinghurst 0418 478 160 or Ray Munro

0408 649 126 **SSAA National Lever Action Metallic** Silhouette Championships April 26-30, 2019

Eagle Park, Little River, Victoria Program: Friday, April 26: Practice 10am-4pm. Saturday: 80 shots Rifle Calibre. Sunday: 80 shots Pistol Calibre. Monday: 80 shots Smallbore. Tuesday: Over-run day if needed. Sight-in 8am daily, briefing 9am. Membership and grading cards must be shown. Nominations: \$30 per event, \$80 all three. Rules: As per current rule book. Prizes: National medals all grades. Facilities:

On-range camping, cafe Friday-Monday. Contact: Mark Butler 0409 135 740 or reltub@alphalink. com au

New South Wales

SSAA NSW Benchrest Score Championships March 9-12, 2019

SSAA Dairyville Range, Coffs Harbour, NSW Program: March 9, 8am Light Rimfire 50m and 100yds; March 10, 8am Heavy Rimfire 50m and 100yds; March 11, 8am Light Centrefire 100 and 200yds; March 12, 8am Heavy Centrefire 100 and 200yds. Nominations: \$50 per class. Rules: Pre-nomination by February 28 (late fee \$10). Practice March 8. Prizes: State medals, top 10 patches, junior trophies. Facilities: Clubhouse, toilets, showers, barbecue. Camping on range. Catered breakfast, lunch, tea, coffee included.
Contact: David Billinghurst 0418 478 160 or Ray
Munro 0408 649 126. Full details on website.

Queensland

SSAA Old State Air Rifle Championships

March 30-April 1, 2019 Hervey Range Rd, Townsville, Qld Program: Saturday, March 30, Air Rifle Field Target 60 rounds (2 x 30); Sunday, Air Rifle Silhouette 80 rounds; Monday, 10m Precision Standing 40 rounds. Range open 8am daily and 10am Friday for practice. Nominations: \$10 per match, juniors half price. Grading as per SSAA rules, grading cards must be show. Prizes: State medals for first three in all grades, juniors, veterans. Facilities: Snacks, lunch and dinner Saturday, Sunday lunch available to buy. Camping at range with toilets and showers (fees apply), motel in town. Contact lan Macdonald macsplace99@hotmail.com or Heather Dale 0418 873 258 qldairchief@ westnet.com.au. Full details on website

SSAA Qld Gallery Rifle State Championships

April 13-14, 2019 SSAA Clermont Branch, Queensland Program: Friday, April 12, practice. Saturday, Imperial Silhouettes (30+ rounds), 1020 Match (102 rounds). Sunday, America Match (30+ rounds), 1500 Match (150 rounds). Nominations: From Gallery Rifle page on Queensland website, send to Secretary, Clermont Branch. Rules: As per handbook Prizes: State medals for first, second, third per grade in each match. Facilities: Limited camping at range. Contact: Frances Fowler 0400 83 I 115 or Don Robinson 0428 986 070.

SSAA Qld Combined Services State Championships

May 4-6, 2019
SSAA Bundaberg branch
Program: Friday, May 3, practice: Saturday, Class
1, 2 or 3 pistols. Sunday, rifle. Monday, rifle.
Rules: SSAA Combined Services rule book No.4. Nominations: All pistol \$40, all rifle \$60, all events \$90, individual events \$8, juniors half price.

Closing date April 19. Current SSAA membership and grading cards must be shown. Barbecue Saturday night, refreshments all weekend. Facilities: Camping at range, toilets, showers.
Contact: secretaryQ32@hotmail.com See SSAA (Qld) website for full details.

Tasmania

SSAA Tas Cowboy Lever Action Silhouette State Championships

February 16-17, 2019 SSAA Westbury Range (Harveydale), Birralee Rd, Westbury, Tas
Program: Saturday, February 16: 7.30-8.15am
Firearm and equipment scrutineering plus
shooters' brief, 8.30am 40 shots Cowboy Lever Action Silhouette followed by 80 shots Pistol Cartridge Cowboy Lever Action Silhouette. Sunday: 7.30-8.15am scrutineering, 8.30am 80 shots Smallbore Cowboy Lever Action Silhouette. Nominations to John Blackburn 0411 638 070, john blackburn constructions@hotmail.com Fees All events \$25 (\$60 all three), juniors and seniors half price. Rules: Current SSAA RMS rule book. Prizes: All grades and overall 3-Gun. Facilities: Basic camping near range, toilets (no showers) \$10 per night. Accommodation in Westbury, Launceston 40 mins away. Contact John Blackburn 0411 638 070. Full details on website

Northern Territory

SSAA NT Rifle Metallic Silhouette **State Championships**

May 4-6, 2019
Alice Springs Shooting Complex,
Butler Rd, Alice Springs
Program: Saturday, May 4: 80 shots Rimfire
Silhouette Rifle. May 5: 80 shots Centrefire
Silhouette Rifle. May 6: 40 shots Rimfire Hunting
Rifle then 40 shots Centrefire Hunting Rifle. Nominations: Rimfire Silhouette and Centrefire Silhouette \$20, Rimfire Hunting and Centrefire Hunting \$10, juniors and seniors half price. Online registration form at https://ssaaalicesprings. wildapricot.org/2019-NT-RMS-Championships. Rules: SSAA RMS rule book, bring grading cards and firearms licence in NT. Prizes: All grades and junior divisions. Facilities: Camping and caravan sites in complex with toilets, showers, accommodation in Alice Springs. Contact: Russell Wilkie 0408 165 752. Full details on website.

South Australia

SSAA SA Lever Action Silhouette State Championships

March 2-3, 2019 SSAA Para Range, SA Program: March 2: 40 shots Pistol Calibre, 40 shots Rifle. Barbecue after match. March 3: 80 shots Smallbore. Nominations: Rifle Cartridge \$20, Pistol Cartridge \$15, Smallbore \$15 or \$40 for all, juniors half price. Rules: Current SSAA RMS rule book. Prize draw on Saturday night. Facilities: Canteen for duration, camping on range. Contact: Dave McCarthy atm3855@yahoo.com. au or 0414 880 333.

Victoria

SSAA Vic Junior Rimfire Silhouette Championships

May 19, 2019 Eagle Park, Little River, Victoria Program: 8.30am weigh-in, 9am practice, 10.15am shooters' briefing, 10.30am 80 shots Rimfire competition. Nominations \$10. Rules: As per current rule book. Trophies 1st, 2nd, 3rd at U-18 and U-15 plus overall winner. Contact: Jeannine Taylor 0417 510 002 or Mark Butler

0409 135 740. SSAA Vic Rifle Metallic Silhouette State Championships

May 25-26, 2019 Eagle Park, Little River, Victoria Program: Saturday, May 25, 80 shots Centrefire; Sunday, 80 shots Rimfire. Nominations \$20 per event. Rules as per current rule book. Contact
Mark Butler 0409 135 740.

Western Australia

SSAA WA Cowboy Lever Action Silhouette State Championships July 11-15, 2019

Hedland Sporting Shooters Port Hedland, WA

Program: Thursday, July 11: Practice 8am-5pm. Friday: Rifle Cowboy Lever Action Silhouette 80 shots. Saturday: Pistol Cartridge Cowboy Lever Action Silhouette 80 shots. Sunday: Rimfire Cowboy Lever Action Silhouette 80 shots. Monday: Over-run day if needed. Sightin 7-8, 15am, briefing 8.45, first shot 9am. Nominations: \$25 per 80-shot match, 3-gun \$60, juniors half price. Rules: Current Rifle Metallic Silhouette rule book. Contact: Warren Goodfield 0407 440 43 l clas@ssaawa.org.au

ACT

SSAA ACT Military Firearms Club ACT Territorials

March 29-3 I, 2019 SSAA Majura Range, 50 Hector McIntosh Grove, Majura, ACT

Program: Thursday, March 28: Range set-up. Friday, March 29: Pistol scrutineering 8am, briefing 8.40, competition 9am. Saturday, March 30: Rifle scrutineering 8am, briefing 8.30, competition 9am. Sunday, March 31: .310/.22 rifle

scrutineering 8.30am, briefing 9.15, competition 9.30am. SSAA and grading cards must be shown. Nominations open until March 15, forms at www. actmfc.com, \$40 pistol, \$60 rifle, \$90 all matches, \$10 individual matches, juniors half price. Run in accordance with SSAA Combined Services rule book 2017. Prizes: Medals, Top Gun trophies, patch for every competitor. Facilities: No catering provided, camping and caravans permitted, toilets and showers, camping \$10 per adult per night, barbecue lunch on Sunday. Contact: Simon Troeth 0439 300 335 or mfc.ssaa.act@iinet.com au. See website for full details.

SSAA Official Calendar

INTERNATIONAL

August 19-24, 2019 12th MLAIC World Long Range Muzzleloading Championships

NATIONAL Feb 1-Nov 30, 2019

April 17-22, 2019 April 19-22, 2019

April 26-30, 2019 July 12-14, 2019

STATE

February 16-17, 2019 March 2-3, 2019 March 9-12, 2019 March 29-31, 2019 March 30-April 1, 2019 April 13-14, 2019 May 4-6, 2019 May 4-6, 2019 May 19, 2019 May 25-26, 2019 July 11-15, 2019

Big Game Rifle National Postal Championships SSAA Field Rifle, Scoped 3-Positional, NRA and Air Rifle National Championships SSAA National Centrefire Benchrest Championships SSAA National Lever Action Metallic Silhouette Championships SSAA National Junior Challenge

SSAA Tas Cowboy Lever Action Silhouette State Championships SSAA SA 2019 Lever Action Silhouette State Championships SSAA NSW Benchrest Score Championships SSAA ACT Military Firearms Club ACT Territorials SSAA Old State Air Rifle Championships SSAA Old Gallery Rifle State Championships SSAA Old Combined Services State Championships SSAA NT Rifle Metallic Silhouette State Championships SSAA Vic Junior Rimfire Silhouette Championships SSAA Vic Rifle Metallic Silhouette State Championships SSAA WA Cowboy Lever Action Silhouette State Championships Bisley, England

Southern Districts Rifle Club, Bedfordale, WA Dairyville Range, Coffs Harbour, NSW Eagle Park, Little River, Vic Springvale and Eagle Park ranges, Vic

SSAA Westbury Range, Tas SSAA Para Range, SA Dairyville Range, Coffs Harbour, NSW SSAA Majura Range, ACT Hervey Range Rd, Townsville Clermont Branch, Queensland SSAA Bundaberg branch SSAA Alice Springs Eagle Park, Little River, Vic Eagle Park, Little River, Victoria Port Hedland, WA

Kim Atkinson 27honevsuckle@msn.com.au

Graeme Wright thepilotgw@hotmail.com

0893 981 131 or 0439 092 686 David 0418 478 160 or Ray 0408 649 126 0409 135 740 reltub@alphalink.com.au 0417 510 002 or j9.taylor55@gmail.com

0411 638 070 - john_blackburn_constructions@hotmail.com atm3855@yahoo.com.au or 0414 880 333 David 0418 478 160 or Ray 0408 649 126 0439 300 335 or mfc.ssaa.act@iinet.com.au 0418 873 258 0400 831 115 or 0428 986 070 secretaryQ32@hotmail.com 0408 165 752 0417 510 002 or 0409 135 740 0409 135 740 0407 440 43 l or clas@ssaawa.org.au



onlineshop.ssaa

Shop now for exclusive SSAA products, including clothing, camping, accessories, knives, books and more.

NEW PRODUCTS



SSAA Shotgun Vest

The new SSAA Shotgun Vest is made to our usual high standards and now comes with upgraded features such as the ability to insert additional padding in the shoulders to absorb recoil.

The vest comes with lots of pockets, has front and rear leather trim and Velcro adjuster, while the back sections are mesh for added breathability.

Comes in blue and green.

SVG005 - 2XL SVG006 - 3XL
\$74.95

SVG001 - Small

SVG003 - Large

SVG004 - XL

SVG002 - Medium

Green

Blue SVB001 - Small SVB002 - Medium SVB003 - Large

SVB004 - XL SVB005 - 2XL

SVB006 - 3XL

The uttimate outdoor jacket!



SSAA Renegade Jacket

The SSAA Renegade Jacket is made from wind and water-resistant breathable material and lined with cosy microfleece to keep you warm.

The clamshell jacket comes with a structured hood to keep the rain off and has a multitude of zippered pockets to keep your belongings secure in the field, on the range, while hiking, hunting or just out and about.

Green

CJG001 - Small CJG002 - Medium CJG003 - Large

CJG004 - XL CJG005 - 2XL

CJG006 - 3XL

\$94.95

Black

CJB001 - Small CJB002 - Medium CJB003 - Large

CJB004 - XL CJB005 - 2XL

CJB006 - 3XL

SSAA Softshell Vest

Our SSAA Softshell Vest is water resistant and made from 100 per cent polyester mechanic stretch fabric and comes with comfy microfleece on the inside to keep you warm.

CR0301-small CR0302 - medium

CR0303 - large CR0304 - XL

CR0305 - 2XL CR0306 - 3XL

\$64.95

SHOOTING GLASSES

SSAA Advantage shooting glasses



SGA001 \$49.95

SSAA Magnum shooting glasses



See full details online!

.org.au



Official online shop of the Sporting Shooters' Association of Australia

CLOTHING



SSAA Buffwear

These SSAA Buffs offer a multitude of uses and can be worn to keep dust and dirt out of your face when riding the quad or as a basic headscarf.

They also offer sun protection and are great for fishing as well as hunting and come in a range of colours that can match your favourite outdoor gear.

\$17.95



CBW001 Iron Bark



CBW004 Distressed Leaf



CBW002 Bullet

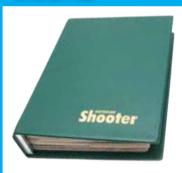


CBW005 Oz Flag



CBW003 Coloured Leaf

BOOKS



Australian Shooter binder

Our sturdy leather-grained vinyl binder will not only protect your monthly issues of the Australian Shooter, but it looks good too.

A0001 \$16.95

Al McGlashan's **Hunting Australia**

Al is one of Australia's favourite outdoorsmen. His enthusiasm for the hunt, so evident in his TV appearances, certainly comes out in his book. A must-read for all hunters.

> PHA00 \$29.95



PATCHES & PINS



SSAA cloth badge 7.5cm B0012

\$7.50



SSAA cloth badge B0015

\$7.50



SSAA belt buckle

A0004 \$39.95

SHOP NOW - IT'S EASY! Go to onlineshop.ssaa.org.au

or call 02 8805 3900 for phone orders

Australian Shooter 127



onlineshop.ssaa.org.au

Order online NOW or Call 02 8805 3900 or Fill in the Mail Order below





MAIL ORDER FORM

ALL ITEMS ARE WHILE STOCKS LAST

February 2019

SEND ORDER TO SSAA SHOP, PO BOX 282, PLUMPTON, NSW 2761 INQUIRIES 02 8805 3900

PRODUCT CODE	DESCRIPTION	SIZE	QTY	UNIT PRICE	TOTAL
Please note: For knife purchases, Member No. needed for age verification, as purchaser must be over 18.					

DELIVER TO

NAME	Please allow 14-21 days for delivery ALL PRICES GST INCLUSIVE			
ADDRESS	Please find enclosed payment in the amount of \$			
STATE P/CODE	or charge my MasterCard Visa			
PHONE	Card No.			
EMAIL				
MEMBER NUMBER	Expiry date / Signature			

Members-only competitions

For your chance to win one of these competitions, write your name, address, phone number and membership number on a piece of paper and place it inside an envelope, along with the name of the competition on the front of the envelope, as shown in the example. Alternatively, you can enter online. Competitions close February 28, 2019.

(Name of competition) SSAA National PO Box 2520 Unley SA 506 I

Enter online at ssaa.org.au/win

1 of 4.30-calibre pen sets

Valued at \$186

Kindly donated by Laser **Engraving & Handmade Gifts** customengrave.com.au

Engraved pen sets will be as per name entered.



Winchester prize pack

Valued at \$160.25



Kindly donated by Winchester Australia winchesteraustralia.com.au





Juniors

Black Neogard rifle cover

Valued at \$55

Kindly donated by Eagleye Hunting Gear eagleyehg.com.au

Competition winners!

MT14 accessory pack November Junior -Caleb Boyd, Qld

Lithgow T-Shirt, bar mat & calendar Judith Chapman-Stewart, Tas

1 of 3 .22 ammo holders Brock Trimmings, WA, Finnian Dryden, Qld Grace Jones, Qld

November Best Shots Mug Ross Baker, Qld

Handgun 16

Weaver Micro Red Dot Sight 4 MOA Michael Grove, Qld

Walther Pro PL70 pocket light Daniel Galea, NSW

HD Series 5018 Utility Hard Case Mark Baker, NSW

Hunter 66

240mm Halogen 100w light with aligator clip Greg Maltby, Qld

Water Resistant & Silent Hunting Backpack Catherine Abela, NSW

SSAA First Aid Kit Tackle Box Mark Ritchie, WA

Advertisers' index

Aussie Step	119
Australian Arms Auctions	120
Bathurst Arms Fair	
Be part of the solution	
Beretta Australia	25.51
Bradford Exchange	47.67
Bruce Donnelly	í20
Claremont Firearms	120
Cleaver Firearms	20.21
Copperhead Bullets	120
CR Kennedy	17.55
CR Kennedy Eagleye Hunting Gear	
Earmold Australia	75
EuroOptic	35
Field to Fork	105
Forbes Wholesale	56
Glenn Kahle	120
GC Precision Developments	37
Gold Coast Shooters Supplies	30
Great Australian Outdoors magazine	65
Grycol	41
Handgun magazine	81
Handgun magazine Hermann's Sporting Guns	61
Horsley Park Gun Shop	50
Hunter magazine	79
Hunter magazineInland Hunting Properties	120
Knife Shop Australia	10
Lightforce Australia	39
Liberal Democrats	77
Lynx Ontics	12
Lynx Optics Magnum Sports	15.57
Night-Vision Australia	16
Nioa	5 27
Nioa Noy Industries	71
Nvati	43
NyatiOutdoor Sporting Agencies	31
Pro-Tactical	33
Qld Gun Exchange	29
Raytrade	IBC IS
Raytrade Secure Your Gun, Secure Your Sport	86
Spika	73
Sponsor a Junior SSAA Farmer Assist	123
SSAA Farmer Assist	100
SSAA Gun Sales	IFC.3.121
SSAA General Insurance	45
SSAA Members Firearms Insurance	OBC
SSAA Membership Form	124
SSAA National E-newsletter	96
SSAA National E-newsletterSSAA's Comprehensive Guide	
SSAA TV	108
Tasco Sales Australia	13.53
Thales	38
Winchester Australia	11.49
Wolf-Eyes	8

AUSTRALIAN SHOOTER is published monthly and is printed by Blue Star Web, 81 Derby St, Silverwater,

The Sporting Shooters' Association of Australia Inc (SSAA Inc) is subject to the provisions of the National Privacy Act. We collect personal information from members of the Sporting Shooters' Association of Australia in the various states and territories. Should you want a copy of the SSAA Inc Privacy Statement or seek further information please write to PO Box 2520, Unley, SA

Freelance contributions are welcome. We do, however, recommend that potential authors contact the office prior to story drafting. Manuscripts and digital files may be sent to the address shown above. No responsibility is taken for the loss or damage of manuscripts or photographic material.

While the publishers exercise due care with regard to handloading data, no responsibility can be accepted for errors and/or omissions, or any damage suffered as a

Please note that certain firearm types and accessories advertised in the Australian Shooter may not be legally available in all states and territories. Please check with your local authorities before ordering. Neither the AS nor any of its advertisers accept responsibility in this matter. No text or photographs within the magazine may be republished, either electronically or in print, without the express written permission of the Editor. Copyright 2019.

The things you see - Part Two

here the mouth of a shallow inlet spilled out across the mud flats into the Arafura Sea, the helicopter banked and headed inland. The creek wound back through the mangroves, the water deep and dark in places, bright and shallow in others where herons and egrets fed along the edges and cormorants hung their wings out to dry in the morning sun. It looked the sort of place you might catch a feed of barramundi or mangrove jacks if you'd a boat and didn't mind dealing with crocs.

The further inland we flew the smaller the water became, the mangroves giving way to spindly stands of paperbarks and pandanus that grew in size and density as the water changed from salt to brackish and on to fresh. In some places clear water flowed freely, in others it stalled and became lily-dotted pools or backed up into swampy reed beds that housed the weathered mounds of crocodiles' nests.

A tracery of game pads began to appear along the creek edges, some paralleling the stream, others winding away towards the dry hill country. There were banteng cattle everywhere - herds of skittish cows and calves and groups of bulls that seemed reluctant to leave the water in the heat of the day. Some of the bulls were bigger than anything I'd seen before but our permit was for buffalo only, so all we could do was marvel at their quality and fly on.

A small group of horses stood and watched our approach then wheeled and galloped away. Alerted by the horses and disturbed by the clatter of the approaching aircraft, a group of buffalo cows and calves lumbered out from under the shade of the trees, their hides slick and shining from the wallow they'd been enjoying until we arrived. Something else moved in the shadows and as we came around to check we saw a group of large pigs standing in a muddy wallow, no doubt hoping we wouldn't notice them.

As we flew over the buffalo again, my mind raced back to another time and place

and B.T.E.C. (Brucellosis Tuberculosis Eradication Campaign) more than 30 years ago. Then the chopper had been a smaller, two-seater job with the pilot on the left and me on the right. There was no door and I was wedged into the gap where it should have been with a self-loading M1A1 .308 rifle across my knees, the muzzle pointing to the ground.

We shot every buffalo we could find, the numbers a daily measure of our success or otherwise. It was adventure on a grand scale and I unashamedly enjoyed every

minute of it, racking up experience that couldn't be found anywhere else.

This time it was different. We were flying over remote country on a big bullsonly mission. None of the animals below us fitted that bill so we kept on flying and looking and hoping our luck would change. If it did the plan was to land the chopper and hunt the animal on foot - easier said than done in some places but not impossible.

Where the creek petered out into a broad spring-fed flat, a buffalo bull was wallowing in a pool of muddy water, lying on his side

> and splashing about like a kid in a bath tub, throwing his head back and raking his horns through the mud.

He stood up as we hovered over him, lifting his head to watch us. He was an old boy past his prime, his body condition down despite the available feed. His horns were wide and reasonably heavy with sharp tips - a fine bull for someone else but not for me. As I took some photos his nerve finally broke. In a flurry of mud he turned and lunged away. The

helicopter banked the other way, searching for another animal that might meet my benchmark of bigger than anything I already had. It wasn't to be.

Before I knew it I'd run out of time. It was time to go back, empty-handed but not at all unhappy. The chance to have a helicopter look at one of the more remote parts of Australia was a rare privilege, too good to be missed and worth every cent of the cost involved. There'll

always be another time.























.22 Golden Bullet, .22 Golden Bullet HP, .22 Yellow Jacket HP, .22 Subsonic HP, .22 Target, Magnum Rimfire, Premiere Magnum Rimfire, .22 CBEE22 HP, .22 Cyclone HP, .22 Golden Bullet Buckets

AVAILABLE NOW AT YOUR LOCAL DEALER

Distributed by:



PO Box 4212, Dandenong South, 3164 Victoria, Australia **Ph:** 03 9706 5936 **E:** raytrade@raytrade.com.au









Now over 60,000 members have SSAA Firearms Insurance. Don't miss out.

For only \$35 get \$25,000 worth of Members Firearms Insurance.

Your firearms and fixed accessories will be covered against loss, theft and damage at home, at the range, while hunting and overseas for up to 28 days. Claims are settled for replacement value (up to 5 years), assessed by an approved firearms dealer and settled promptly. Compare it to your Home and Contents Policy, which may have an excess greater than \$100 and may only cover your firearms at home. Don't risk another year without cover - Trust SSAA to safeguard your firearms and fixed accessories.

Call: (02)8805 3900

Email - trevor@ssaains.com.au Visit - www.ssaaib.com.au





Are you covered?

Here's what SSAA Members Firearms Insurance covers:

FIREARMS AND ACCESSORIES.

All privately owned firearms registered to the member and fixed accessories.

COVERAGE.

- Accidental loss and damage of the equipment (including whilst in use, excluding chipping and scratching of stock).
- Malicious damage.
- Collision or overturning of the vehicle.
- Fire & extraneous perils.
- Flood
- Theft.

NOT COVERED.

Theft where the equipment was not stored in an approved gun safe as required by State or Territory authority, other than when the equipment is in use or away from the Insured's premises. Where the Insured or any person or entity to whom the equipment has been entrusted to fails to comply with any law relating to either storage, use or handling of the equipment.