

Shooting the Creedmoor Way

by Graeme Wright



The firing line in action.

Keith Cree, Australia, using the Creedmoor or back position to shoot.

In September last year, the SSAA hosted the Fourth Modern International Long Range Black Powder Creedmoor Match on the wonderful Queensland Rifle Association (QRA) Duncan Range at the Belmont Shooting Complex in Brisbane. In the original competition, the major trophy was the Creedmoor Cup. However, after the Creedmoor

matches were discontinued, the trophy was renamed the Palma Trophy and is now known by this title.

We are indebted to Don Ruwoldt, Secretary of the SSAA Brisbane Club and his staff for their enthusiastic assistance in the administration of the shoot. The Creedmoor Match was sponsored by the SSAA, the World Creedmoor Association

and Forbes Wholesale. The competition was held under the auspices and using the excellent facilities and personnel of the QRA. We thank Rex Wigney, manager of the QRA complex in Belmont, for his encouragement and guidance in organising an important international event. We owe much to his skill and experience for the welcome success we achieved.

This report has three parts: the Creedmoor match and its unique characteristics; the quality of the ammunition and rifles needed to achieve success in the events; and the good fellowship, skills, idiosyncrasies and personalities of the competitors.

The match

The range was opened on September 10 for practice and sighting exercises only. The individual competitions were fired on September 11 and 12 over 300, 500, 600, 800, 900 and 1000 yards. Fouling shots were permitted at each range, then each competitor had to achieve 10 scoring shots from a maximum of 15 sighting and scoring shots at each range using the NRA scoring system.

Some 18 rifle shooters registered to compete in the international matches. Competitors were arranged in pairs and in two relays so each shooter always had a



Dave Gullo of the USA prepares to shoot.

spotter and scorer and there were always workers to mark and patch the targets in the pits. Competing in pairs has the added advantage of another pair of eyes to help judge both the wind and appearance of mirages, particularly at the longer ranges. Wind and mirages are the bane of the long-range shooter; indeed the wind got so bad on occasions that my windage had to accommodate 8 to 12ft of drift at the 1000-yard range.

While we had outstanding fine, sunny and still weather for the practice day of shooting, September 11 brought overcast skies, squalls and rain to start the competition. Thereafter, the skies were dull and the wind blew heartily, but the rain stayed away, making for a difficult, but very interesting competition. Despite the weather, the scores tallied to some very fine totals, indicating that several of the competitors knew how to beat the difficult conditions.

Once the individual scores were known, shooters were allocated to one of three international teams: Australia, New Zealand and the USA. The allocation to compete for the Palma Trophy was made first by nationality: six Australian, three New Zealand and four US competitors. The remaining five competitors were distributed serially from their individual competition results to give the New Zealand and American teams six members as well.

The match was then shot over 800 and 900 yards, then twice at 1000 yards. Each competitor had the opportunity to record ten 10-scoring shots from an allocated 15 cartridges at each range. The match was completed over two days, finishing on September 14. This, by coincidence, duplicated the dates of the original match shot



The firing line getting ready for the next volley.



Dave Long, NZ, in action.



Barry Evans from WA, using the blow tube.

at the Creedmoor Long Island Range on September 13 and 14 in 1876 - 130 years earlier. The first Creedmoor Match was a celebration by the American NRA of the centenary of the foundation of the USA in 1776.

The rifles and ammunition

It is a prerequisite of both the international and individual competitions that each competitor shoots across a chronograph screen to prove that their bullets fly at a minimum velocity of 1250fps. This is a safety measure to ensure bullets shot at long range do not fall at a steep angle into the scoring pits.

Shooters who are versed in the ways of black powder shooting at extended distances know that long, heavy bullets shoot farther and straighter than small, light projectiles, provided the rifle twist is tight enough to stabilise the big bul-

SSAA COMPETITION - THE DISCIPLINES ISSUE

lets. If you know the length and calibre of the bullet you want to shoot, you can apply the Greenhill formula (Sir Alfred George Greenhill, 1879) and calculate the barrel twist you need to stabilise that bullet. For example, .45-calibre bullets of 550 grains need a one in 16" barrel twist to give stable and accurate shooting. It is interesting to note that the black powder cartridges used in target shooting in the 1870s and 1880s were described as 'smallbore'.

Bullets less than .40" in diameter tend not to give reliable results at more than 300 yards. Perhaps members of the American NRA in the 1870s knew this, as they mostly shot at less than 300 yards with .32- and .38-calibre rifles and were thus reluctant at first to accept the original challenge from the Irish for a match shot out to 1200 yards. This was until Sharps and Remington came forward with guns designed specifically for their long ranges.

The most common bore diameter used in our shoot was .45" combined with cartridges holding more than 70 grains of 2F black powder. The cartridge of choice was the .45-90 Sharps straight case, but two competitors chose to shoot .40-70 Ballard brass made from .45-70 cases. There were a number of .45-70 rifles and at least one .45-110 Sharps and a .45-100 Sharps. The smallest bullet weight used was 465 grains in .45-calibre, but it did not perform as accurately as any of the other larger bullets. Even the .40-70 Ballard cartridges were loaded with bullets of 485 grains.

Most competitors loaded projectiles that weighed between 520 and 550 grains with at least 75 grains of 2F powder and a fibre or card wad. There are different opinions about the best primers to use. Some swear



From a different angle: Keith Cree, Australia, using the Creedmoor or back position to shoot.



The Creedmoor Cup, now the Palma Trophy.

Dave Gullo, USA, was the overall champion and USA team captain.

by large pistol primers, while others prefer Magnum rifle primers (most prefer the 215 Federal). The powder charge is often compressed and could be increased by 10 grains or more to increase the velocity, flatten the trajectory and reduce wind drift.

The most popular, successful and accurate bullets were Postell-style with a long bore riding nose. Cast from 1:20 tin and lead alloy, most moulds drop a bullet of at least 525 grains in .458" diameter. For loading, these bullets are divided into uniform weight groups and lubricated with soft black powder-style lubricant without resizing. Black powder guns shoot very accurately when fed good ammunition. For example, the Whitworth muzzleloader of the 1860s shot a .45-calibre rifled slug of 550 grains consistently into a 12" circle at 500 yards. Most of the rifles used in our competition could achieve at least MOA accuracy with good loads.

The bane of black powder shooting is the fouling left in the barrel after each shot. To try to reduce this fouling, most shots were followed by blowing a warm, moist breath down a blow tube into the barrel. This tends to keep the burnt powder deposit moist and reduces the effect of the fouling. Alternatively, several shooters ran patches wet with Windex through the barrel between shots followed by a patch to dry the barrel. Others followed this procedure after five or more shots.

The reduced recoil of the smaller, .40-calibre may be an advantage, particularly shooting prone using only a sling to support the rifle, but the big .45 bores always did better at the long ranges. Only one competitor, Keith Cree, chose to shoot from the



SSAA COMPETITION - THE DISCIPLINES ISSUE

classic Creedmoor position of lying on his back and delivering the bullet to the target from between his feet. The competition dictates that only slings may be used to support the rifle up to 600 yards. Beyond that distance, additional support may be obtained by laying the hand supporting the barrel on a fixed rest.

Several of the rifles shot on the Duncan Range were built from guns manufactured at the time of the original Creedmoor Match. Dave Gullo brought one of his magnificent Sharps Borchardt rifles. The gun is a blend of fine wood, beautiful engraving and a .30" Badger barrel chambered in .45-100 Sharps. Mario Blasco shot Colin Dobson's Alexander Henry falling block, which was also barrelled by Badger in .45-110 Sharps. Dick Bromhead brought his custom Martini in .45-90 chambering using a Sprinter barrel.

There were several rifles built on the rolling block actions of the late 19th century variously chambered in .45-90 (Keith Cree) and .40-70 Ballard (Laurie Kerr) and one with double-set triggers (Barry Evans). There was also a plethora of replicas, some built by Shiloh Sharps (Hayden Winn, Winston Coates, John Chase and Tom Passolt). Others were Pedersoli replicas of Remington rolling blocks and Sharps (Eric Gibson). Ernie Stallman of Badger Barrels in the US brought his 1885 High Wall replica .45-90 by Browning.

Most of these guns had similar chambering, long barrels and Soule-type tang sights. The rear tang sight allows for most of the windage adjustment and is frequently combined with an adjustable iris aperture back-sight and spirit level front-sight. Older shooters often prefer a large, open front aperture with an adjustable rear aperture, which can be opened to increase the passage of light to improve and sharpen the sight-picture. Spirit levels can be difficult to



The Australian team - Keith Cree, left, Graeme Wright, Lance Eastwood, Barry Evans, Dick Bromhead and Winston Coates.

use properly, but once mastered, they help keep the gun straight and greatly improve long-range shooting. Overall, one had to be impressed by the quality of the rifles that were shot and by the scores they produced under trying conditions.

The competitors

At the end of the competition, it was the experienced shooters who knew their rifles and ammunition best and could handle the conditions who stood out. Using his .40-70 Ballard, Laurie Kerr shot consistently and accurately to take the mid-range trophy - mid-range in this context being 300, 500 and 600 yards. However, it was Dave Gullo using his .45-100 who prevailed at the longer ranges and for the overall aggregate. Dave Gullo is also the current world number one in this type of competition.

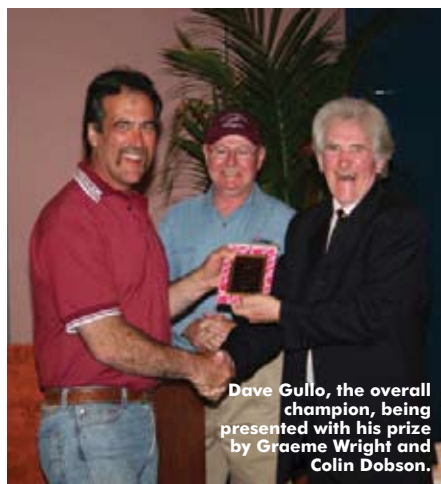
It was always going to be a tight competition between the Americans, led

by Dave Gullo, and the New Zealanders, led by Laurie Kerr. At the close of the last day, I was still adding up the scores on the way to the presentation dinner. This had one beneficial outcome - the teams did not know the placings until the presentations were announced. In the end, it was a narrow victory for New Zealand over the USA and Australia in third.

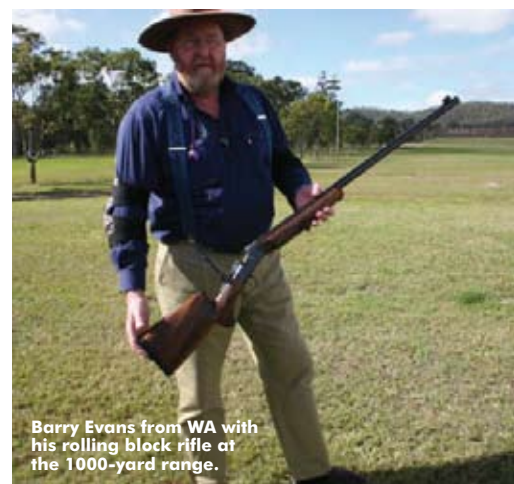
Sadly, the winning team could only view a photograph of the Palma Trophy, which is on permanent display at the American NRA headquarters in Alexandria, Virginia. Nevertheless, we all had a great shoot with wonderful competition in good fellowship. Indeed, Eric Gibson exclaimed at the awards dinner that he learned more about long-distance black powder shooting in the five days of the competition than he had done over several years of shooting on his own. The Creedmoor Shoot is a most worthy event. ●



Laurie Kerr, the mid-range champion, being presented with his prize by Graeme Wright and Colin Dobson.



Dave Gullo, the overall champion, being presented with his prize by Graeme Wright and Colin Dobson.



Barry Evans from WA with his rolling block rifle at the 1000-yard range.