

# EYES ON THE PRIZE

Properly assessing your eyesight could make a big difference to your scores, as **Martin Puddifer** discovers from a leading name in the eyesight and shooting eyewear business.

Anyone who finds themselves talking to Ed Lyons about the relationship between good shooting and good eyesight should take lots of notes during the conversation. The Wolverhampton-based optometrist, one of two Eds behind the Edwards Eyewear brand (the other being 2014 World FITASC champion Ed Solomons), has so much knowledge to share on the subject that you and he could lose hours pouring over the subject.

## THE TRIPLE CROWN

According to Ed, shooting eyewear should fulfil three roles: to protect the wearer's eyes from the impact of falling debris such as clay fragments; to protect the wearer's eyes from the glare of the sun's ultraviolet rays; and to help improve the contrast of the target against its background. While generic eyewear – the kind provided by shooting grounds that usually feature a

polycarbonate lens – is great for safety and is more than suitable for plenty of recreational shooters, those competing at a higher level will attest to refractive (vision correction) lens or prescription eyewear (which covers glasses or contact lenses) being both physically and optically stronger. These premium lenses are made from Trivex or Polyamide.

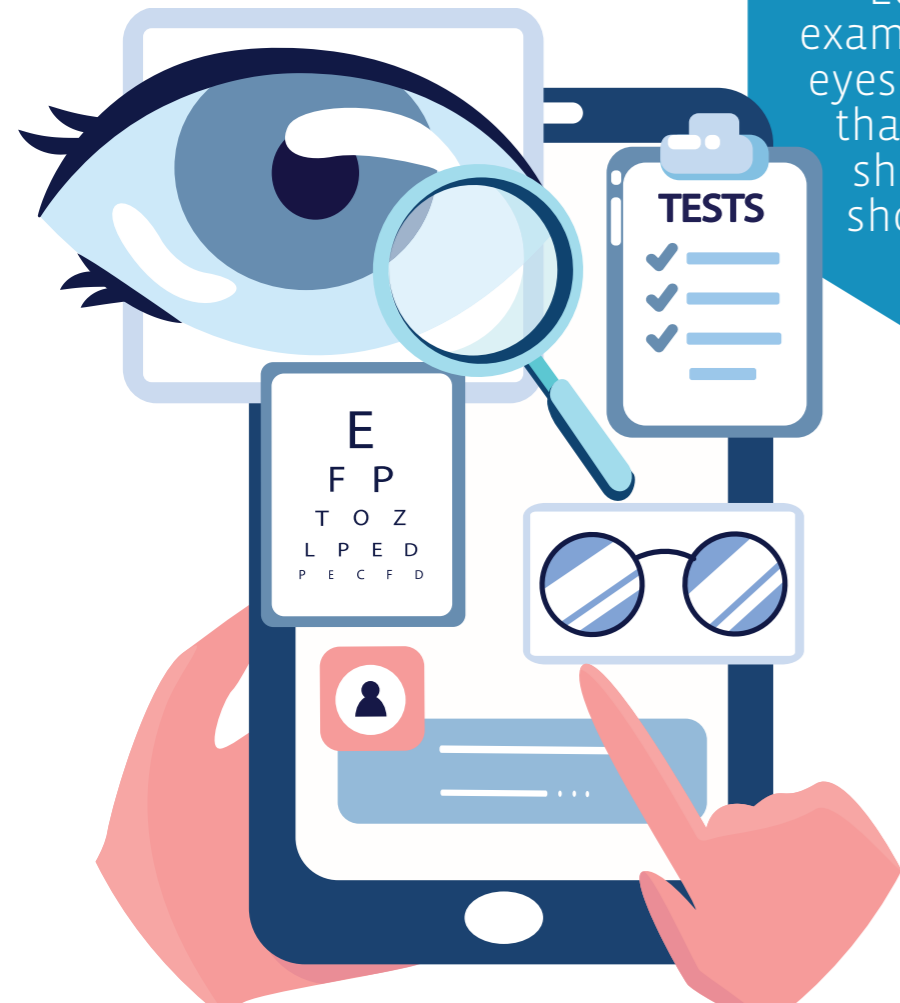
## UNIQUE NEEDS OF A SHOOTER

The good news is that these more advanced forms of eyewear don't have to cost the earth, but for the best results, ones that are unique to the shooter, there is still an important process to go through before the eyewear is selected:

an analysis of the shooter's eyesight. Ed has examined the eyes of more than 3000 shotgun shooters, including multiple world and Olympic Champions during his 20-year career and his assessments, conducted at Flint & Partners Optometrists, the other side of West Park from Molineux Stadium, home of Wolverhampton Wanderers, are "pretty exhaustive".

Assessments last around two-and-a-half hours and start with a short interview that seeks to establish the client's motivation for the assessment, which can range from a will to improve their shooting to tackling a downturn in form. "The needs of people who shoot differ greatly from those who don't," Ed explains. "Shooters, especially those on a talent pathway or currently shooting

Ed has examined the eyes of more than 1,500 shotgun shooters



## SELECTING THE RIGHT LENS

On the 'mind-melting' subject of lens selection, Ed recommends having access to just three – "one for sunny days, one for low light and something in between" – rather than 20 or 30 random ones, half of which might never get used. Ed admits to getting irate when he hears suggestions that shooters must wear X colour lenses for X colour targets, pointing to the fact that Paul Chaplow always wears the darkest lenses, while the likes of Ian Malarky or Phil Morgan always wear near-clear lenses. "There are so many nuances, it's all down to experience," Ed explains.

Ultimately, the client's individual needs, based on the current condition of their eyes, along with their shooting ambitions are more important than what looks good. "The best eyewear isn't always the most expensive," Ed explains, "It just needs to be lightweight, comfortable and unobtrusive." He also points out that lenses shouldn't need to be changed if a client's prescription from their regular high street optician changes slightly.

at an elite level, want to make sure their eyesight is optimised. They need to see the target quicker, more accurately and consistently, three factors that lead to better scores.

"During the assessment, I cover everything that's in a standard eye exam, but also conduct a series of shooting-specific tests using our Senaptec Sensory Station. The tests focus on: the shooter's visual acuity (the level of detail they can see through each eye and binocularly); contrast sensitivity (the ability to see well in poor light or against confusing backgrounds), depth perception (how two eyes work together), eye focusing speed; perception span (or multiple object tracking, which is a measurement of how well focus reacts with their peripheral environment); reaction time, eye tracking (measuring if the eyes are looking where the shooter thinks they are, which affects where the eye and gun are pointing), hand-eye coordination and critical decision making."

## WHERE IMPROVEMENT COMES FROM

Once the initial assessment is complete the results are cross-referenced against 3,000 anonymous records on Ed's database, enabling him to show his client how their current eyesight compares with others of a similar ability range and where improvements can





be made. Those improvements might involve prescription eyewear or even vision training if the issues involve the client's eyes' relationship with their brain.

While improvements might be marginal for elite-level shooters, some of whom may only need to be told their eyesight is good to boost their confidence, for those coming through the ranks an eye assessment could be just as important as their first-ever gun fit. "Ed Solomons said it took 1,000 rounds for him to adjust to the new sight picture he saw when using his new eyewear; it might take others a few months, if they put the work in," Ed explains.

### TRUST IN THE TECH

The eye-tracking technology at Flint & Partners is "pretty revolutionary" because rather than just getting a "feel" of where clients "think" they're looking, Ed can actually show them where they are looking. This kind of information can be crucial, especially when shared with a coach who had to previously interpret what the client could see and who might not realise that an eye dominance issue could be disguised as a technique issue.

"Very few clients at the elite level have fundamental issues with their

“There needs to be a synchronised approach where the coach can see what the client's new sight picture will look like and modify training accordingly.”

eyesight, which can lead to frustration because their coaches can't work out why problems are occurring," explains Ed, who took up shooting specifically to enable him to gain a greater understanding of the challenges they face. "We can conduct more complex visual assessments to produce a more in-depth report on a client's vision. We don't just want to conclude the assessment with 'you need prescription eyewear' or 'you need to practise more'. There needs to be a synchronised approach where the coach can actually see what the client's new sight picture will look like once the eyewear arrives, and modify training accordingly. Perfect eyesight doesn't mean you'll become the perfect shot, but you don't reach an elite level by having poor eyesight."

### A WINDOW TO THE SOUL

There are other benefits to assessment beyond testing a client's vision. Quoting Proverbs 30:17, Ed asserts that the eye is the window to the soul and that while anything from the depth of a client's eye sockets in their skull to their tear film instability can affect their eye dominance. An assessment can also flag up other important issues, too. "Every four years or so, a client will come in with a perceived eye dominance issue that turns out to be a brain tumour," Ed explains. "Sometimes these pathological conditions can be so slow to develop and are totally painless, but they chop out certain aspects of someone's vision, to the extent that when they're shooting a particular target they can't see it, especially when shooting with both eyes open.

"Fundamental health problems can be manifested through someone's eyesight, such as low blood sugar or poor hydration, so good nutrition is important for good eyesight. There's no point investing in good shooting eyewear if you're not going to look after your health."

Once obtained, quality eyewear should provide the client with many years of loyal service. 🧐