BetterOrienteering.org An orienteering skills website by Duncan Bayliss WRE

What is BetterOrienteering.org?

Better Orienteering is a free-to-use resource to help people start orienteering and get better at it, whether they have been orienteering just a few times or have been competing for some years and have reached a plateau.

When people first start orienteering it can be a bit daunting and something of a mystery as to how other people can do it so quickly. However, I have found that few people want to read a book on orienteering at that stage, even though there are some excellent ones available. I guess it feels like going back school, whereas orienteering is a fun leisure activity. So, I saw need for material on the web that is easy to engage with for a range of levels. I have created a lot of educational online material at University level and even with students the analytics show they gravitate first to videos. In that way the recently produced YouTube videos featuring members of the current GB Squad coordinated by Sarah Brown SLOW are excellent. People then tend to browse across a site and read the parts that catch their interest magazine-style. If it is clearly structured, they can then come back and fill in gaps in their understanding when they want to, or they can follow the links on to other resources to find out more and maybe after a while they do buy a book.

To help people interact with BetterOrienteering it has a *Quick Start* section which will help guide orienteers with different levels of experience to the sections that may help them the most.

Orienteering is a visual activity, so I have summarised orienteering as simply and visually as possible and included those visual summaries throughout the website.

The journey from beginner to winner

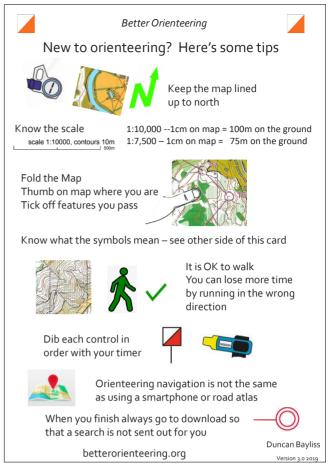
For most people it is a long journey from first starting orienteering to becomina competent navigator and combining it with a high level of fitness to win races. It seems to be a 3 to 5-year process in most cases. Better Orienteering aims to help people with a structured handrail through that development, so they can develop much more quickly and systematically.



BOC Long 2018 at Balmoral.

How did it come about? The story so far...

For a long time, there has been a need for somewhere to point new and improving orienteers to, where they can easily learn about orienteering skills and dip in and out as they need. So just after Christmas, I started writing what I intended to be a short guide to orienteering skills. I wrote what I wanted to say without reference to any existing publications and tried to impose some structure on thinking about orienteering. It rapidly snowballed into a much larger project. It became obvious that I needed some way to disseminate what I was writing, so set about creating a website. I discovered the *Get Up to Speed videos* on YouTube recently organised by Sarah Brown SLOW which are great. Many others have generously contributed material, including Steve Rush BOK, Martin Bagness WAROC, Rod Postlethwaite and Peter Jones WRE, Simon Errington HH



Example of one of the visual summaries on Better Orienteering

of MapRunner & Routegadget) and upwards of 20 orienteers have taken the time to offer comments on the content so far. I've tried to incorporate all their ideas, which has made the website grow considerably. I am still open to other collaborative content to make the site better.

How BetterOrienteering is structured

BetterOrienteering introduces a way to think about orienteering navigation that can be used at any stage of development of navigation ability. The central idea is that whatever our level of skill we need to combine understanding of navigation skills with strategies to use them effectively in practice and build that into a routine that is well practiced and reliable.

There is a newcomer's section, then a discussion of skills from Basic through Intermediate, Advanced and beyond. My aim was to structure the material so that it is easy for orienteers from absolute beginners to experienced orienteers to identify what might be useful to them.

In my view, discussion of orienteering skills has tended to focus on teaching skills without much linkage to how to use them reliably in practice. Using navigation skills in orienteering involves much more than just understanding those skills in theory.

The discussion of skills is built on the idea that we all need a rock-solid navigation routine we can execute reliably, or we will keep making easily avoidable mistakes, which I have called **Basic Navigation Routine**. It includes always orienting the map and thinking of all legs in sections. In my own experience it took me years to work this out and I would have improved much more quickly if it had been explained to me.

We can then extend our routine with experience and develop strategies to deploy our navigation skills successfully, such as not pushing into oxygen debt, clouding our thinking and then making mistakes.

I have found many orienteers have still not nailed this question

of a **Basic Navigation Routine**. As a consequence, they can often navigate well, but will keep getting tripped up by simple weaknesses such as not looking at the map frequently enough whilst always keeping it accurately orientated to north.

BetterOrienteering has a series of free downloads to use as simple summaries to discuss navigation with beginners and improvers and to refer to when thinking about your own navigation. They can be printed or viewed on a smartphone, which has the advantage of being able to zoom in on map examples.

The Intermediate section goes on to introduce a Skills Tool Kit as a set of interlinked skills that can be used flexibly on a mix and match basis to tackle almost any leg.

After an awareness of a Tool Kit of orienteering Skills and developing a Basic Navigation Routine, we can continue to think



Burnham Beeches February 2018.

through how to put it all into practice reliably. These are the strategies we can employ to be successful. Some of those strategies are directly about orienteering navigation skills, such as Aiming Off. Other strategies are about how we focus and interact with other competitors.

At more advanced levels, it becomes helpful to think about the type of terrain and types of navigation challenge that will be facing, and to then categorise the types of leg during a race and respond to them with a routine that works for the different types of navigation challenge they present. As orienteers gain experience and they can further develop their strategies to include preparing for a race, starting well, then analysing performance afterwards. The insights you gain can then be

Better Orienteering **Basic Navigation Routine** Keep the map lined up to north Know the scale, tune in to it Thumb on map where you are Exiting control Every leg has 3 parts Route to Attack Point Finding control Break the leg into sections: Red = tricky/ slow Amber = easier/ steady Green = simpler/ quicker Go steady to No. 1 and get into the flow

built into an *Extended Race Routine* that starts before the day of the race and continues afterwards.

Learning from successful orienteers

I have been orienteering for 41 years and discussing orienteering navigation over many years with many orienteers it became apparent that many successful orienteers have been very structured in their thinking. They are analytical thinkers, as has been noted many times, with a predominance of scientists, engineers and doctors at the top of the sport. They have a Basic Navigation Routine whether they call it that or not. They think about how to respond to different types of leg and terrain. They reflect on their results and try to systematically work on weaknesses.

However, quite a few very successful orienteers said something along the lines of "I don't really think about it a lot, I just do it". Digging deeper and asking them to explain, for example, how they have tackled different courses and legs some common elements come out, the most striking of which is that they have learnt to totally immerse themselves in the process of spatial thinking while racing. In the same way that we see a concert pianist totally lost in a piece of music, bringing it alive for an audience, or we see an artist totally lost in the process of painting, so very successful orienteers become totally immersed in navigation. The common feature they seem to share while immersed in navigation, is that they have become excellent visualisers. They are simplifying the map to notable features and visualising what they will be seeing. They then move confidently through their visualisation and the 2D map is just the notes that support them in running through the 3D model in their head.

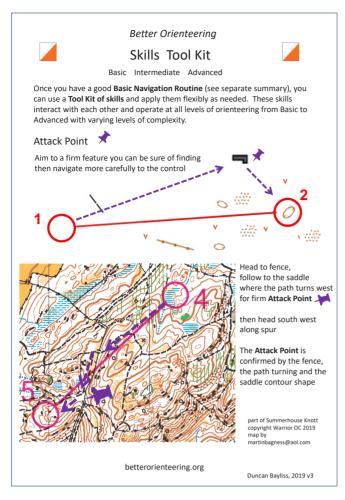
Testing visualisation – getting better at 3D thinking

To test this theory out I have tried to understand how I respond to map reading on an area I know very well, maybe have even helped to map, compared to an area that is totally new to me, with repeated training runs on some maps. The better I know an area the better I can visualise quickly the overall shape of where I am going, radically simplify complex terrain and head confidently to an Attack Point.



Holmwood Common February 2018.

Thierry Georgiou in a presentation on how he developed his navigation strategies (linked to on Better Orienteering in the Beyond Advanced section) encapsulates perfectly how I had learned to navigate at one point in my orienteering development. I would visualise almost every feature and run through a complex corridor ticking off every feature I passed, terrified of getting lost. On a very complex area such as forested sand dunes, that approach would on average lead to a really good result because I might have a mistake free run where the consequences of an error for others can be a lot of lost time. It is however a slow way to orienteer. On other simpler terrain people who were not running faster than me were beating me. I was slowing myself down by not simplifying effectively. For me, that approach of intense map contact never worked out faster than 7 minutes/km. Thierry's insight that to go faster requires vou must build simpler, but more effective terrain maps or visualisations in your head was a revelation. He contrasts the feature picking navigator with the one moving faster to notable features before slowing nearer the control - the one runner knows where he is, the other knows where he is going. Thinking about legs in a different way can free you up to safely go faster.



The key element is often one of improving your mental maps or visualisation.

There is always more to learn

A recent conversation with a fellow M50 (Ifor Powell BOK) about his 2019 British Night Championships route just served to prove the point that there is always more to learn. One leg involved feature rich woodland, then crossing a marsh and finding a reentrant on a slope the other side of the flat marsh. Although I didn't compete, I looked at his map and thought it could be really easy to drift off-line and hard to find a firm Attack Point. However, he confidently approached the leg at high speed simply aiming to hit the slope and then relocate. It sounded risky, but on a closer look, he was right, there was a series of different re-entrants each with very distinctive shapes from one another, narrow, broad, straight, curving. He simply hit the slope matched the re-entrant he found to the map and turned to the control. There was enough detail and difference between them to do that reliably. The difference between us was that he had "seen" the shapes quickly from the map and knew he could rely on them. I hadn't visualised as accurately and just saw a series of re-entrants and planned a slower route aiming off to a firmer Attack Point. This theme comes up again and again. The better orienteers get good at going from a 2D map to a 3D model in their heads - the easier the orienteering becomes!

At advanced levels of orienteering there are of course other skills than just visualisation to work on too and the challenge becomes very much about how to integrate all that you know and can do at race speed in different types of terrain.

Route Choice and Executing a leg

The following schematic diagram captures a lot of the thought processes in navigating a leg. It combines strategies to employ such as identifying an Attack Point and Corridor to move through, with a series of processes you need to undertake

throughout the leg. The purple circles are indicative of a sense of the level of certainty you will need of your exact location at varying points through a leg – in the same way that a circle on a smartphone or GPS changes size depending on how certain it is of your location.

With Route Choice option A, following a Hand Rail, the purple circles are small indicating that you could know with a high degree of certainty where you are when on a path. With Route Choice option B, moving through a Corridor of features you might have less certainty of your exact location but be confident of where you are going, heading for a Catching Feature and the circle placing you is larger.

The permutations of skills and processes for different legs are endless, so you will need to follow a Basic Navigation Routine flexibly drawing from a Tool Kit of Skills as needed on route.

The orange, green and red runner symbols remind you to consider the appropriate speed for different parts of a leg and the navigation challenges they present and to think of the leg in sections

Do contribute to help make BetterOrienteering the best resource it can be

I hope this discussion has shown that there is some material on BetterOrienteering for a wide range of orienteering ability levels. The website is still developing, and more material has already been promised. If you would like to contribute, I would be glad to hear from orienteers over 18 if they have any helpful content, they can add to BetterOrienteering. You can email me via the contact page on Better Orienteering.

If you find BetterOrienteering helpful, please do link to it from club websites and share the website widely.

Duncan started Orienteering as an M10 with Wrekin Orienteers. encouraged by his father. Now an M50 he still runs for WRE.

