



# Mountain Skills



## Orienteering for mountaineers

By Sarah Dunn, Scottish Orienteering Association

SUMMER is here, the days are long and light, and much of the time the visibility is great. You can see the big features and follow a well-worn path to reach your goal. It all makes for a nice relaxing day when you can afford to put the map and compass away. Great. Except, how much navigation practice are you getting for when you really need it? For when the days draw in all too quickly, the mist descends and the rain sets in? The answer is probably very little.

But if you want to develop your skills and build your confidence to handle these more challenging days, then orienteering offers a fun and adventurous way to do that, giving you a way to practise the same navigation skills you need on the hills, repeatedly, in a safe and accessible environment.

Orienteering is a highly competitive sport at the top level, but many people enjoy it in a more recreational manner, with events set up to cater for all ages and abilities from under 8s to over 80s. The sport involves navigating round a course, using a specially prepared map (normally something like 1:10,000 scale) to visit a series of checkpoints. In the



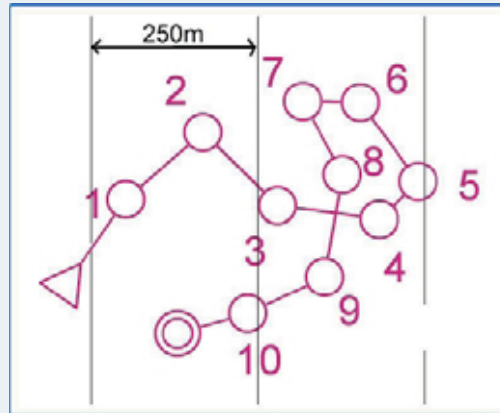
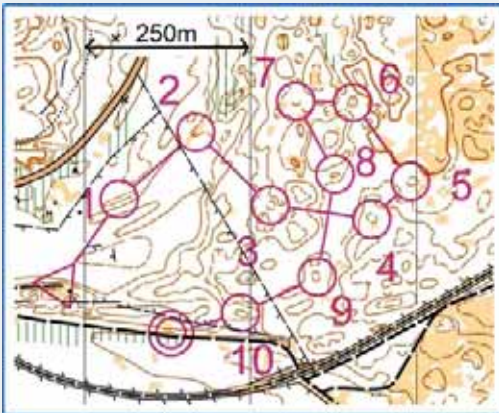
competitive version, the fastest round the course wins the race. It can take place in all sorts of different terrain, traditionally (linked to its Scandinavian origins) in the forest, but also out on the open moor or, more often now, within an urban setting too.

The bonus of orienteering in the forest is that it can replicate those situations of

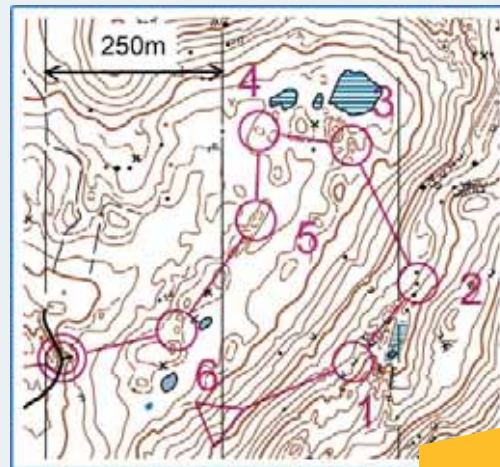
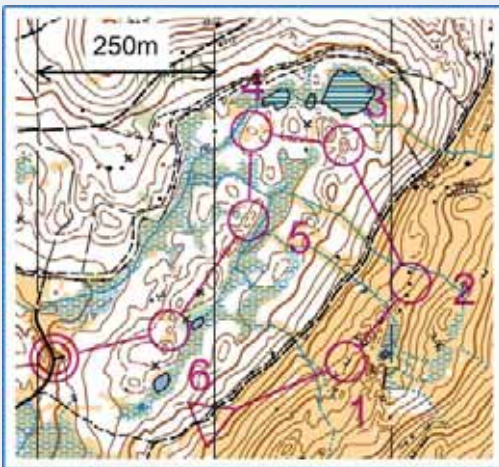
reduced visibility out on the hills, forcing closer map contact to be held and better technique to be developed. The checkpoints may be sited on paths, streams or other line features, or else on more technical courses they may be in 're-entrants' (little valleys), behind boulders or at the foot of crags, many hundreds of metres from the nearest path or track.

At a typical event there will be courses ranging from two to eight or more kilometres in length (straight-line distance) and participants might expect to take between 20 minutes and two hours, depending on age, experience and fitness. Courses may include anything from eight to 30 control points, depending on the planner and the nature of the area, but every event is a new experience.

Simply by having a go at a course you will find plenty opportunities to practise basic navigational skills which transfer to the hills. Multiple techniques including compass bearings, map setting, route choice, distance and height judgement, contour interpretation, and, all too often, relocation, could all prove



**Figure 1**  
– Control pick course to practise compass work and distance judgement



**Figure 2**  
Exercise in contour interpretation with a normal full map or “contour only” version

## Find out more

▶ You can identify your local club from the Scottish Orienteering website ([www.scottish-orienteeing.org](http://www.scottish-orienteeing.org)). Take a look at the club website or social media to find out what is happening in your area, or get in touch through their contacts page. Almost all events are suitable for newcomers, but you may need to be a member to join in with some club training sessions. Scottish Orienteering also organise Improvers Weekends for adults.

As well as joining in with organised events you can have a go at orienteeing at one of many permanent courses across Scotland. See [www.britishorienteering.org.uk/permanent\\_orienteeing\\_courses](http://www.britishorienteering.org.uk/permanent_orienteeing_courses). If you can't drag yourself away from your electronics then take a look at smartphone apps such as MapRun, iOrienteering or Mobo for which there are many courses across Scotland. And, finally, if you've always thought that orienteeing involved anoraks and backpacks then take a look at this: [www.youtube.com/watch?v=FnE-hftGQoU](http://www.youtube.com/watch?v=FnE-hftGQoU)

useful: mountain navigation skills in a micro setting.

While simply attending events will help develop skills and build confidence, participating in specially designed orienteeing training sessions, as offered by many clubs, can be even more beneficial to work on particular techniques. The big advantage over doing this out in the mountains is the repetition element in a compact area, in a short space of time.

Here are two examples of simple training sessions using courses that are just 1.5km in length, but offer multiple opportunities for skills development.

The first example is a 'control-pick' course (**Figure 1**). This course has lots of controls with short distances of 100 – 200m between them and lots of changes in direction. If you are using your compass well then you should be able to find the controls by holding a bearing and going straight between each point. A variant on the exercise would remove the underlying map so that you have a 'blank map' exercise where you must rely on compass and distance judgement to find the points.

The second example is an exercise in contour interpretation (**Figure 2**). In this short course different techniques need to be identified and applied on each leg:

- Start – 1.** Diagonally up the slope. What angle? How high? How far?
- 1 – 2.** Practise holding your height by 'contouring'
- 2 – 3.** Diagonally down the hill. Identify the break in slope. Recognise the 'ring contour' hills
- 3 – 4.** Interpret the contour shapes on the map and relate them to the ground
- 4 – 5.** Can you see the feature from recognising its shape and location?
- 5 – 6.** Use the spur as a 'line' feature to follow to the next control
- 6 – Finish.** Angle diagonally down the slope

A useful variant on this exercise is to modify the map by removing much of the map detail, leaving only contour lines and rock features to navigate by. This forces you to think about the information that the contour lines can tell you.