
VISUALISATION OF TERRAIN FROM THE MAP

This is probably the most important skill to be learnt for successful orienteering, particularly at an advanced level. Map reading is not just a question of knowing what all the symbols represent – the map gives a picture of the terrain, and to read the map well is to be able to see this picture.

Visualisation is really being able to form a three-dimensional picture from a two-dimensional map. With practice, this means you can recognize the terrain when you arrive there by relating it to your mind's eye picture of the map. To apply this technique successfully requires a great deal of experience in different types of terrain. If the terrain is very detailed, you must constantly revise your visualized picture, perhaps every 50 metres or less.

The central skill here is being able to visualize contour shapes from the map. As well as the basic shapes, you can be much more accurate in your navigation if you are able to register more subtle detail. In particular, you need to differentiate steep slopes from gradual ones, or correctly anticipate deep gullies as opposed to shallow ones. Small changes in steepness of slope, slight bulges on a spur, or a bend in a hillside can give away a control site.

Less experienced orienteers rely heavily on linear features such as paths, watercourses, vegetation boundaries and even valleys and ridges for their navigation. This technique, combined with careful pacing and compass work, can be very effective, particularly if there are a lot of linear features on the map. However, in detailed terrain with less linear features, visualizing the shape of the land is far more effective for fast, accurate navigation.

TIPS FOR IMPROVING TERRAIN VISUALISATION

- Survey your own orienteering map. Learning how to map greatly improves your navigation. If you are not able/allowed to do this, try to spend some time on map walks, particularly in new types of terrain, First practice matching map to ground, then visualizing terrain ahead of where you are, and seeing how well your picture fits reality when you get there.
- Get as much experience in different types of terrain as possible. Try to attend coaching days and camps in high quality terrain (eg granite, sand dunes, gold-mining, complex contours) when they are offered.
- Use contour only maps in training. This will force you to visualize the shape of the ground even where there are many linear features.
- Map memory exercises where you actively try to remember shapes, rather than just lines, improve visualization ability.
- Simplification exercises work very well also – you can try to draw a mud map, or simplified map of a leg of a course, for instance. You could practice from the map at first, then from memory. Concentrate particularly on the vicinity of the control – this is where it is most important to have an accurate picture of the map.
- Line orienteering – this involves drawing a line on a map, then trying to run along the line. Obviously the line must cut across slopes and valleys, rather than following linear features. Try line orienteering on a contour map.
- Practice visualization at home, by imagining yourself completing an old course you have done. See if you can “see” the terrain all the way round.

Source:

Peter Palmer: The complete orienteering manual.