

How to Map Read

CHOOSING THE RIGHT OS MAP

Ordnance Survey (OS) provide two main maps. The Landranger map is a smaller scale at 1:50,000, ideal for getting to a walk by road as it shows you a larger area in a given space on the map. But it is not detailed enough to take you safely on a walk. For this you need the Explorer map at a larger scale of 1:25,000. This map gives a walker all the detail they need to safely follow a walk. For example, it shows field boundaries, woodland, open moorland, footpaths and bridleways, and a lot more.

So, for walking you will need the Explorer map and for most of this area of North Devon and Exmoor you will need OL9.

GRID REFERENCES

The OS grid is part of a national grid which is divided into large squares. You will see large letters, in our case it is SS in the top left corner of the map. This simply pins the grid reference down to this part of the country. It is therefore usually not that important unless you are giving a grid reference to someone out of the main area or to emergency services.

Along the top and side of a map are numbers. These are what you use to create a grid reference. You always start

by using the numbers along the top or bottom of the map. They are also repeated across the map for ease of use, as when these Explorer maps are fully unfolded, they become unwieldy. The Explorer maps are printed on both sides, in the OL9's case the West Exmoor side covers from squares or grids SS50 to SS80 and the other side, East Exmoor covers from square or grid SS80 to SS99 and then ST00 to ST10. So this OL9 map is crossing over the National Grid SS area to ST area.

Let's take an example of a written walk along a footpath near Selworthy, starting with a 6-figure grid reference of SS919 467. So, we need the map open on the East Exmoor section. We can ignore the SS as we already have the OL9 map which covers this large area. The first place to look is along the top or bottom of the map, whichever is easiest. In this case along the top will be easiest. Reading from the left go along until you come to the square marked 91. Now look along the right or left edge of the map for those square or grid numbers. In this case it is easiest to look along the left edge of the map. Read up the map to reach square or grid 46. Now go to where the 91 and 46 lines intersect. This gives you your first grid reference of 91/46, or the 1km square bounded on the left by the 91 line and along the bottom by the 46 line. This is a 4-figure grid reference which is not accurate enough to pinpoint a position.

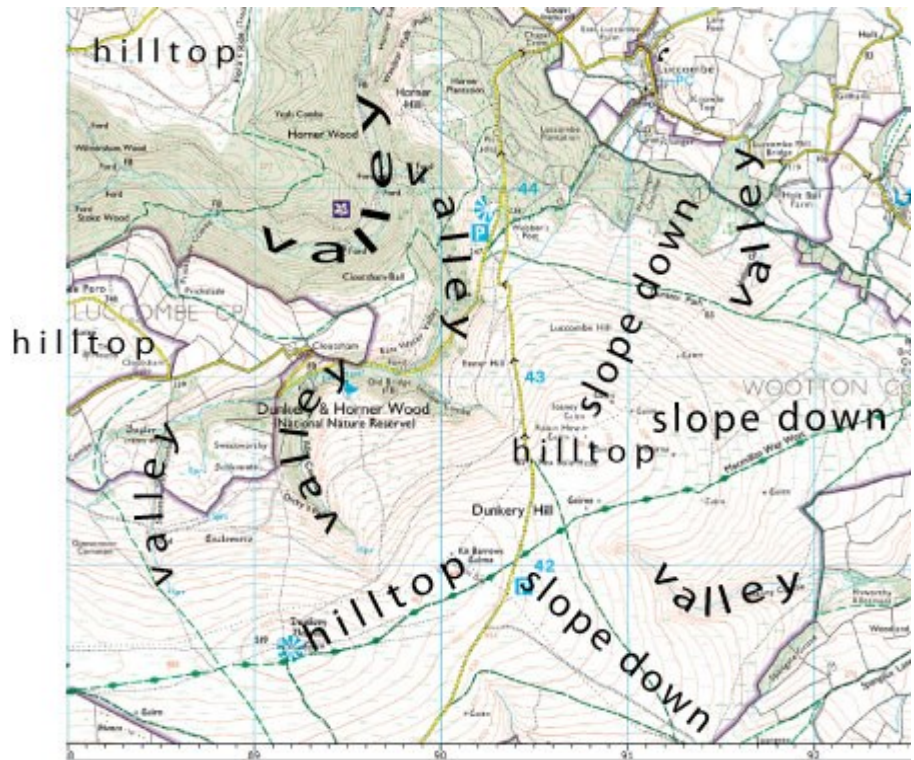


A 6-figure grid reference pins a position accurately down to a small area. So, we now need to divide this 91/46 1 km square down into tenths both across and up (so 100metres by 100metres). We have to use our imagination and judgement here. So, the first part of the grid reference is saying 919. We already have the 91, so we need to go across the square by 9/10ths, so nearly right across. The second part of the grid reference says 467. We are already at 46, so we need to go up the square by 7/10ths. If you have got this right, you will be on the road by Selworthy village. The next direction grid reference says SS919 472, so we are still on the grid line 91 plus 9/10ths, as we have not moved from 919, and 467 has moved to 472, so we have move exactly north into the square above and by a further 2/10ths into that square.

One more for practice. The next direction says SS913 476. So, we are still on the grid 91 but are now only 3/10ths across, so we have moved slightly west. We are still in grid 47 but have moved northwards to 6/10ths up this square. So, we are where the path comes out onto the road.

CONTOUR LINES

All Ordnance Survey maps are covered in contour lines, the thin brown lines that wriggle all over the map. They join points of the same height above sea level. These lines do have numbers on them in places. If these numbers are the right way up as you read them, then the hill is going uphill. You will also see the occasional brown dot with a number beside it which is the height in metres above sea-level at that point. The grid lines are usually at 10metre intervals.



You will also see thin blue lines which represent streams and rivers. Use these to save you worrying about looking for grid line numbers because rivers always run along the bottom of a valley. So, you see a blue line and the contours must be going uphill from there to the top of the hill and back down to the next blue line in the next valley. Get this idea into your head and the map will suddenly come alive and the hills and valleys will become obvious.

The closer the contour lines are together, the steeper the gradient, and conversely, the lack of contour lines means flat country.

SYMBOLS

OS maps use symbols on the map as well as text. The legend on every map describes these symbols. The ones that are of particular interest to us as walkers are the rights of way and road symbols, the woodland, open moorland, churches and buildings symbols. It also shows field boundaries on Explorer maps which are very useful.

The two public rights of way symbols you are most likely to use are the short green dashed line and the long green dashed line. The short green dashed lines are footpaths for walkers only and the long green dashed lines are bridleways where you may also encounter horses and mountain bikes. You may also find small black dotted lines which are also footpaths which are probably on the ground and probably regularly walked but are not necessarily designated a public right of way. Orange small, dotted lines are permitted

footpaths which the landowner has given permission to cross. He has the right to take away that permission with short notice. As with all rights of way, please use these respectfully.

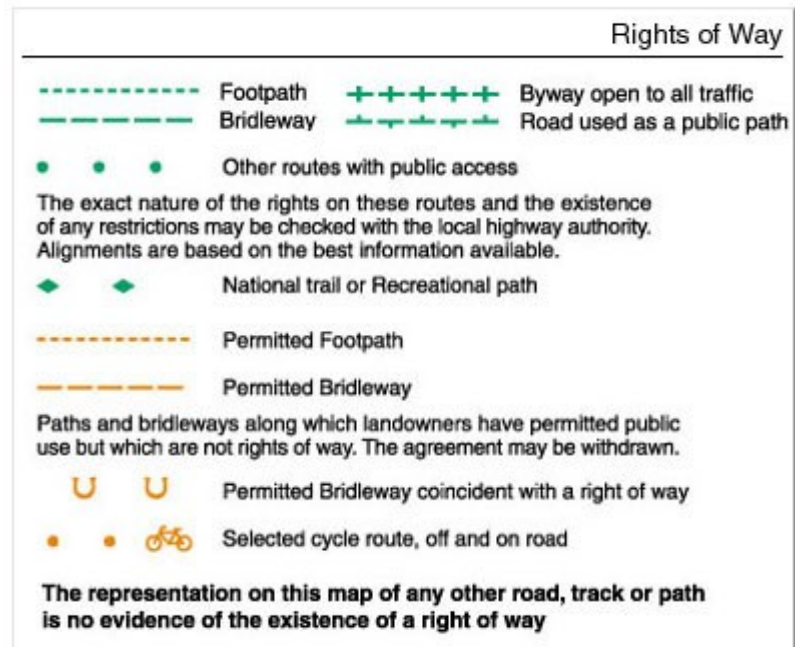
Woodlands are the green shaded areas on a map. They will even tell you what type of woodland it is. Open moorland will often tell you if it is boggy or rough grassland. Churches can be really useful for getting a fix on where you are on a map. Likewise farm buildings can also help you pinpoint your location. Field boundaries come in very useful, and the green dotted line will be marked on the relevant side of the wall or hedge to help you navigate. A magnifying glass can be useful sometimes to determine the paths position.

USING A COMPASS WITH A MAP

If you have decided to plan your own route or want to confirm that you are definitely going the right way, then a map and compass are essential. Even with a GPS unit it can still be better to use a map and compass, especially when it loses signal or batteries!

Nowadays you do not need to compensate for magnetic north as true north and magnetic north are almost in the same place.

I would recommend you get a Silva compass. This has a transparent base with measures on



the side for 1:50,000 and 1:25,000 scales as well as centimetres. The compass itself has a rotating bezel with degrees. The red pointer points north. It also has a neat magnifier on it, perfect for getting that fine detail of which side a path goes along a wall/hedge. And it has a black pointer (^).

So how do you use a compass with a map? There are basically two ways you can use it. There are others once you are proficient.

1. Let's say you come up to two paths going in slightly different directions. Which one should you follow? Using the black pointer (^) on the base plate, point it accurately along one of the paths. Rotate the bezel so the red north pointer is directly over the rotating red pointer under the compass. Now place it on the map where the two paths divide and line up the red base plate pointer to the nearest blue square edge going up the map. Align the edge of the compass transparent base plate to the footpath and the one that lines up with it is the path you initially pointed along. You can now determine if that is the path to follow, or the other one.
2. Let's say you are happily following the map along the green dotted lines. You come to a junction of paths, but you are not sure which is the right one as they are not that obvious on the ground. You know which path you should be following on the map. In this case place the compass on to the map. Place the edge of the compass base plate along the line of the path. Now rotate the bezel so the transparent base with the red arrow and its parallel lines line up accurately with the blue square lines going up the map (north). Remove it from the map and rotate the whole compass and base plate, not touching the bezel, until the red compass pointer is now over the red pointer under it. Where the black pointer (^) on the base plate now points in the direction you need to walk.

ORIENTATE THE MAP

It can be very reassuring to orientate the map to your surroundings. This is quick and easy with a compass. To save any confusion start by lining up the bezel and red pointers together. Now twist yourself and the map around until the red pointers and their parallel lines line up with the blue square lines going up the map. You are now looking north and should now see the contours fitting the landscape around you. Remember the trick of rivers always run along the bottom of valleys.

With a bit of practice and building of confidence, you now have enough knowledge to safely take yourself on a walk understanding the map and how to use it.

Bryan Cath
Combe Walks

ABOUT ME

I have been guiding walks in North Devon and Exmoor, both in person and with my written walks for many years. It concerns me how many people I guide cannot read a map, even basically. The added information one gets from a map when walking can make a walk more interesting. It answers questions as to what something is that you can see a little way off. It is also good for your safety when walking open moorland, for example. So, it is worth persevering and practicing map-reading.