

Scout Orienteering

When you get to the start point on the day you will be supplied with a map of the course. Arrive early and use the time to plan your route.

The map is usually an 'orienteering map' which means that there are more details about the terrain on it than on a 'normal' map and that the grid on the map is set to MAGNETIC north. There is no need to adjust your bearings to account for the magnetic angle.

You need to take a good orienteering compass to the event. The advised one is the Silva 'Ranger 3':



This is a 'classic baseplate compass' and costs about \$50 – do not be tempted to buy a cheap compass; you get what you pay for. Also, be careful if you buy over the Internet, the compass you get must be made for zone 5 (the earth is divided in to 5 compass zones to account for the differing horizontal and vertical components of the earth's magnetic field). A zone 1 compass (North America and Europe) will probably stick if used in zone 5.

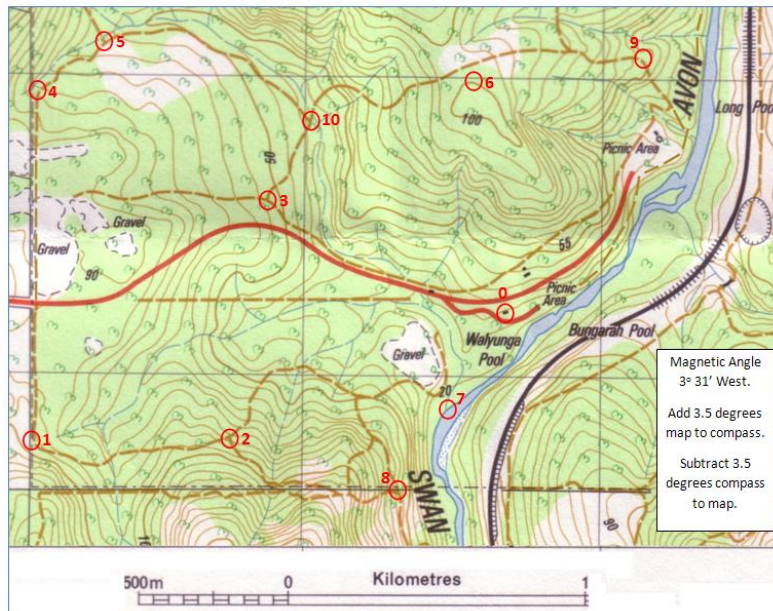
Before you start you need to calibrate your stride. To do so mark two points on the ground 10m apart then WITH YOUR NORMAL STRIDE count the paces you do between the points. Do it several times and take the average. Record the number you get to the nearest half pace. Use this measurement to 'measure' the distance on the ground – but remember that your pace will change depending on the terrain you're walking in and you need to compensate for it.

To navigate between two points in the bush:

1. Set your bearing on the compass from the map. Have at least two people in the team set the bearing and AGREE on the result.
2. Stand at your starting point and direct your marker, another member of your team, forward. You should always look for an object along the bearing line to which you can direct your marker "walk toward the big tree with the broken branch over there". Call out any course change the marker has to make – maybe he/she needs to walk around an obstacle.
3. When the marker is in position send your pacers out. The pacers job is to do just that – pace the distance. You should have at least two pacers each of whom must have worked out the paces they need to do from the point you are to the point you want to reach. It's a good idea to use a piece of string and tie a knot in for each 100 paces you count. Pacers should NEVER walk together – people walking together will naturally fall into the same pace!

4. Bring the rest of the team up to the pacers.
5. Repeat this procedure until the pacers say they are at their count. The pacers will be spread out so use the average position to base your search for the checkpoint. Leave one of the pacers 'in position' and use the rest of your team to search around him.

Now look at the map you have. The base point is marked distinctively and all the control points are marked:

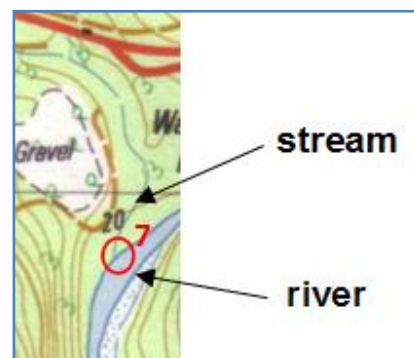


This example is not an orienteering map – but shows the principles involved. The start is at point '0'.

It's time to make your plan – this should be done BEFORE you set off NOT at each control point.

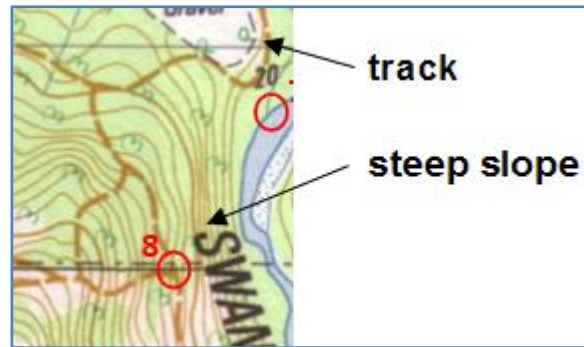
Write down the required bearing and the distance and the paces that are required – it's a good idea to take along a calculator for this. Use the ruler on the side of the compass to measure the distance against the scale on the map.

For example if the team decides to go to checkpoint 7 first:



The bearing is measured as 210 degrees (remember to add the magnetic angle on a 'normal' map) and the distance as 365 meters. Write it down. Then decide who's pacing that leg and work out their paces and write them down too. Have a close look at the map at point 7 a stream meets the river, that's easy to find!!! ALWAYS READ THE MAP.

From checkpoint 7 the team decides to go to checkpoint 8.



Look at the map! This time you see that a straight line from checkpoint 7 to checkpoint 8 is up a steep slope (and since it's near a river it's likely to have thick bush too). Steep slopes are hard to navigate. To the north of checkpoint 7 is a track so, your plan here can be "bearing 320 degrees walk 60m to a track; follow track to the west for 350m to a junction; take the south fork at the junction for 170m to the next junction; take the south fork for 230m to the next track junction (which is probably on a fence line)". Write it all down.

Repeat this procedure for the entire map. Make the most use of tracks that you can. Remember Naismith's Rule '5km/hour along tracks, 1 km/hour in dense bush'. Use the map to find a local landmark to the checkpoint then use the marker/pacer system from that, much closer point. Keep a close look at the contours – they tell you a lot too. For example look at checkpoint 6:



There are no 'easy' landmarks near it and it is 600m from both checkpoint 9 and checkpoint 10 – that's a long way in bush. But look closer. Checkpoint 6 is on the top of a hill, now we have a landmark. So, "from checkpoint 9 follow the track west for 600m; checkpoint 6 is 60m south of the track at the highest point of the track" – look closely, the map says there is a relatively flat plateau about 200m long at this point of the track just go 60m south from the midpoint of the plateau!

Learn to read your map and learn to use your compass – that's what Scouting is all about.