



Survival Navigation

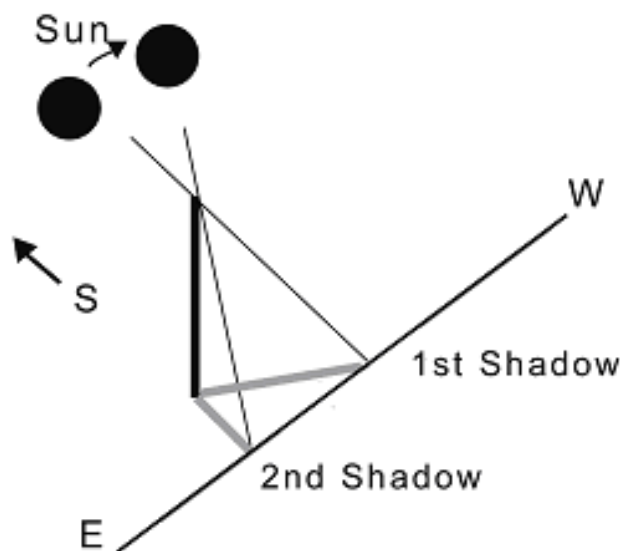
There are a variety of navigation aids; some are more reliable than others. It is a good idea to work on the evidence of more than one method before coming to any conclusions. The following methods are for the **Northern Hemisphere**.

Sun

The sun rises in the east and sets in the west. At midday, the sun will be due south. If you observe the sun's movements you can get a idea of the cardinal points.

Stick and Shadow Method:

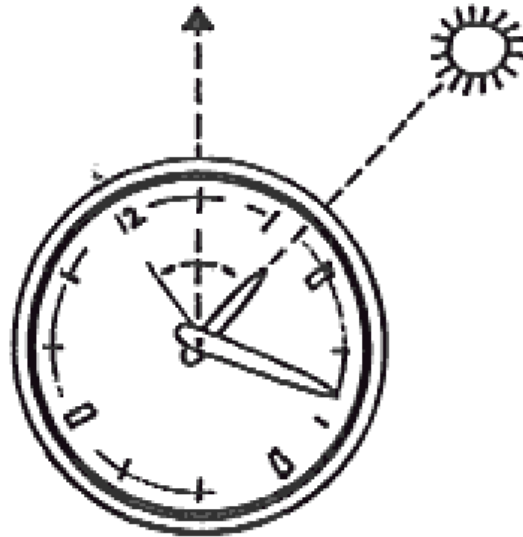
Put a stick about 3ft high into the ground, which should be flat and clear of debris. Mark the tip of the shadow with a stone. Wait for 10-15mins mark the top of the shadow again with another stone. The line between the two stones is the east-west line (first stone is west, second is east).





Watch Method:

If you have a watch with a clock face, hold it with the hour hand pointing at the sun. Imagine a line travelling through the 12 o'clock marker. Due south is the mid point between the hour hand and the 12 o'clock marker.



Plants

Growth Method:

Trees are never symmetrical and tend to be 'heavier' on one side. The side that gets the most sun, the southern side in Ireland, will grow more densely and appear 'heavier' than the side that is shaded by the trees own leaves. This effect is easiest to spot in isolated deciduous trees. Trees in woodland compete with each other so the effects become confused. You can also see this effect in tree stumps. The growth rings will be narrow on the north side and wider on the southern side. Again, if this tree was surrounded by other trees while it was alive the effects could be confused.



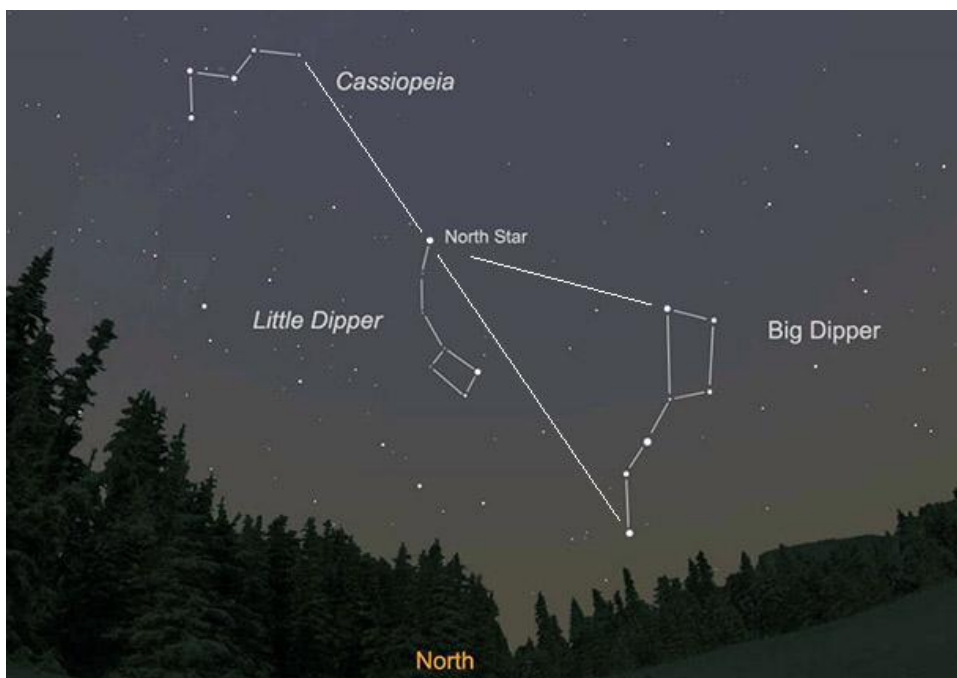
The Moon and Stars

Moon Method:

As the moon orbits the earth, the shape varies according to its position. We can use this to find a rough west direction. If the moon rises before the sun has set, the illuminated side will be the west side. If the moon rises after midnight the illuminated side will be the east side.

Polaris Method:

The stars stay in the same position in relation to one another. The whole sky seems to rotate around one star, Polaris or the North Star. To find this you must first find 'The Plough' or 'The Big Dipper'. The last two stars, opposite the handle, point to the North Star, about four times further away than the distance between them. You can also draw a line from the first star in the handle of the big dipper to the last star in 'Cassiopeia'.





Star Movement Method:

Set your eyes on two fixed points on the ground in the distance to help you observe the movement of the stars. Look at the star above these points, note its position. After a period of time the stars position will have moved. If it appears to be falling directly down you are looking due west, if its rising you are looking east. If it's looping to the right you are looking south, left you are looking north.

Magnetism

Improvised Compass Method:

A sewing needle or other piece of metal can become magnetised if it is stroked repeatedly in one direction against silk or a magnet. This can then be suspended by a string or floated on water, the needle will point north.

