SECTION C:

USING A MAP AND COMPASS

1. Introduction

Having a map and a compass are essentially the 2 basic instruments with which navigation can take place. The map will identify the features and the distances one must travel, while the compass will determine the direction of travel.

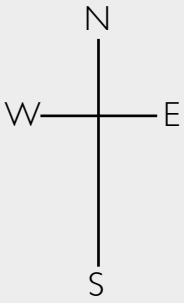
This section will:

a) Explain about the Three Norths

b) Explain how to set or orientate a map with a compass

c) Explain how to find a bearing from a map using a compass

2. The Three Norths



In navigation, we encounter the Three Norths. These are:

a) Magnetic North

This is where the compass needle points.

b) Grid North

This is north which is indicated by the north-south running gridlines on topographical maps.

c) True North

The direction pointing to where the geographical North Pole is located.

The variations between these three can be ignored in so far as BB expeditions are concerned since these are limited in scale and distance. However, it is useful to note that these exist. The first advantage of knowing the difference is coming up in the next section.

3. Setting a map

To set or orientate a map is simply to align the Grid North with the Magnetic North. Setting a map using a compass is particularly useful in conditions where there are no clear landmarks or where visibility is low such as at night or in densely wooded areas.

You can set your map in the following manner:

Step 1: Place the compass on the map and align the compass' direction of travel arrow with the compass needle, i.e. Magnetic North.

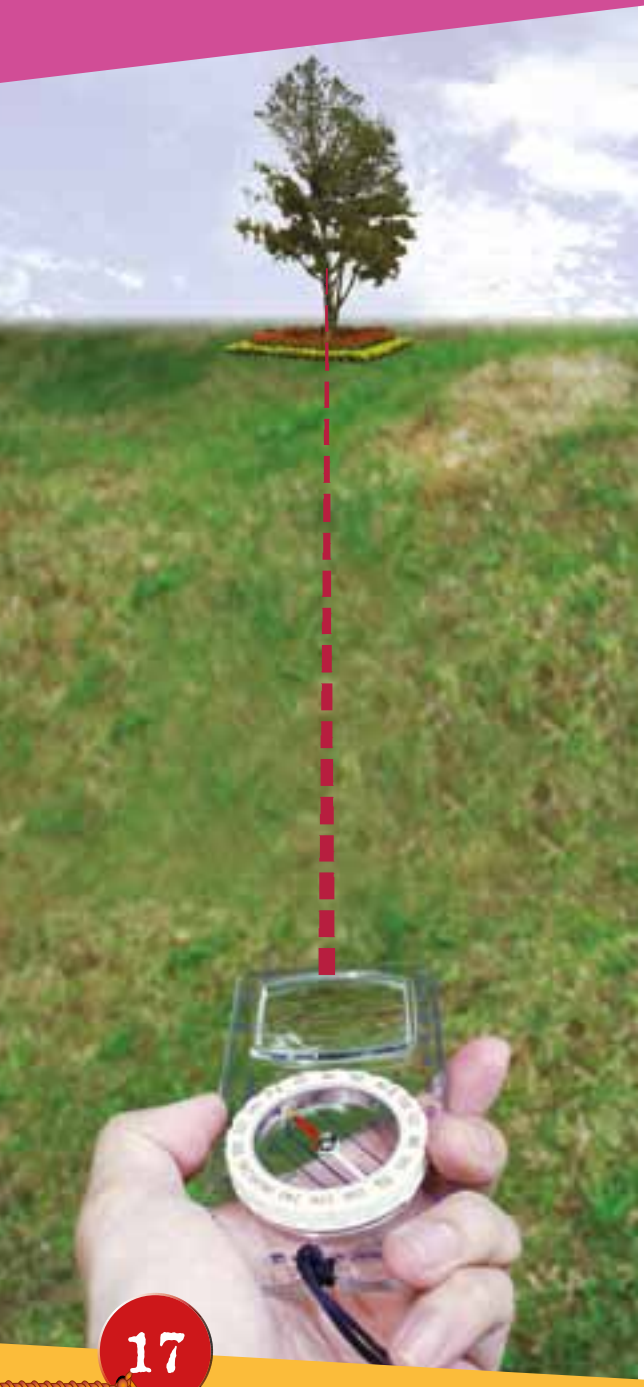
Step 2: Rotate the map till the blue grid lines are parallel to the orienting lines under the needle. The map is thus set.

4. Finding a bearing from a map

For us, this is the most important part of map and compass work. It involves knowing where you are on a map and where you want to get. To be sure you are going in exactly the correct direction, it is best to find the bearing from the map, put it on the compass, line it up with a landmark and then walk the bearing.

1. Direction of travel arrow points where you want to go

2. Line up the orienting lines with the grid lines



Step 1: Place your compass on the map as shown below with the edge of the base plate along the way you wish to go, and the direction of travel arrow pointing in that direction (not the opposite direction).

Step 2: Turn the housing until the orienting lines are parallel to the grid lines on the map. Make sure the orienting arrow is pointing to the top (north) of the map, not the bottom.

Step 3: Now take the compass off the map, hold it in the palm of your hand and turn it round until the two reds are together (the needle and the orienting arrow). Look down the direction of travel arrow. This is the way to go!

Note that it would be useful to identify a prominent landmark in the distance of the direction you are heading (the diagram above uses a tree as an example) and to simple walk towards it. This is so that you need not hold you compass up all the time to check if you are heading in the right direction.

3. Choose a landmark