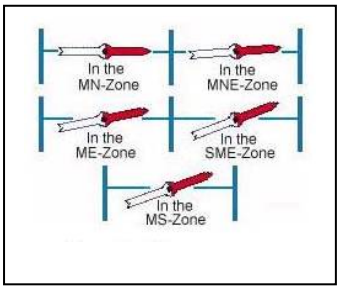
WHY DOES'NT MY COMPASS WORK PROPERLY IN OTHER COUNTRIES?

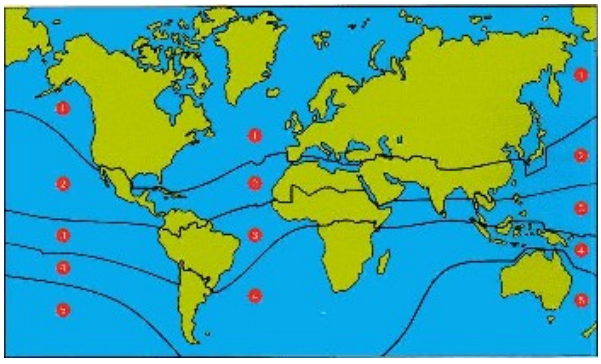
The magnetic needle of the compass is not only affected by the horizontal direction of the earth's magnetic field but also by its vertical pull. The closer you get to the magnetic north pole, the more the north-seeking end of the needle tends to point downward. At the magnetic equator, the needle will be level, while at the south magnetic pole the north-seeking end of the compass tries to point in an upward direction. This phenomenon is referred to as ***compass dip***.



To compensate for this effect, most compass manufacturers purposely introduce a slight imbalance to the magnetic needles of their compasses, so that their dip is negligible for the geographic area they will be used. The earth is divided into ***dip zones***, and compasses sold in each zone are compensated for use in that zone.

There are five dip zones and Australia and New Zealand are classified as being in Zone 5.

Magnetic Zone	Zone	Balance
MN (Magnetic North)	1	0.5° N↑
NME (North of ME)	2	1.9° N↓
ME (Magnetic Equator)	3	5.0° N↓
SME (South of ME)	4	7.8° N↓
MS (Magnetic South)	5	12.0° N↓



If you buy a compass in one dip zone and try to use it in another, the compass may not work well because of the difference in dip. For example, a compass bought in North America and then used in New Zealand or Australia may result in errors in the compass reading or may even make the compass impossible to use.

Some manufacturers produce compasses that are not affected by dip. These compasses have the term ***Global Compass*** or a notation on the package that the compass is corrected for dip anywhere in the world. If you intend to go on worldwide adventure, you might consider such a compass.

For more info, check out Wilderness Navigation by Burns & Burns. Available from ARea 51.net.au