## 3g - A Guide to <br> Triangular Graphs

Royal

Triangular graphs (sometimes known as ternary graphs) offer an opportunity to display data based on three variables simultaneously. They can only be used for three variables where their total equals one hundred percent of the data.

## Why would we use a triangular graph?

Though not all data categories neatly fall into three and only three sub-categories, for those that do, triangular graphs offer a spatial method of seeing the relative abundance and position of such data. They are easy for the researcher to read and create; they can utilise colour to show further subdivisions in the data.


In the above example, the point shows:
$\mathrm{A}=59 \% \quad \mathrm{~B}=34 \% \quad \mathrm{C}=7 \%$
A triangular graph is an equilateral triangle with three 'axes'. Points can be plotted by reading the correct value off each of the axes and placing a point on the triangular grid. With many points, patterns may be observed and clusters of points may indicate a relationship between a place and a corresponding phenomenon. In this case, placing cluster circles on the triangular graph can be a useful way of highlighting these to the reader.


Triangular graph templates can be downloaded from online sources and hand completed or, if downloaded into a publishing software package, completed digitally.

