Kite diagrams are used to display several observations seen at various points along a transect.

## Why would we use a kite diagram?

Kite diagrams allow researchers to graphically compare the different frequencies of different observed data along the same transect. As the frequency is shown by an area on the graph, potential and hypothesised relationships between different observations can be more easily identified.

Their most common, though not exclusive, use is for showing the frequency values of different species on a surveyed transect in a certain environment.

## Abundance of different species at Site A

Species A


Species B


Species C


Species D

Species E


| 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

The kite diagram is actually a more complex series of bar charts. Along a single $x$ axis (of which there are as many as there are species to represent) the data value is split, with equal amounts on each side of the axis, creating a 'kite' shape. In some cases, the researcher may wish to label the
$y$ axis with values so that the actual data can be read off the diagram. In general, though, kite diagrams are used to show relative abundance. The area of the kite shape for each observed phenomenon then represents the abundance of that particular phenomenon.

If a large range of values is being presented, it may be more efficient to calculate the values as percentages of the total and use these rather than the raw data.

Kite diagrams can be drawn by hand or using online packages, however, few spreadsheet software packages have kite diagrams as a standard graph choice in their system.

