Other analyses

A further bubble plot you might like to try on the Fal *n*MDS is to superimpose abiotic variables from the Fal environment worksheet, and we have already referred to the constrained LINKTREE clustering that tries to explain community groupings in terms of particular environmental variables, but PRIMER also has another generic way of looking at the relation of community structure to potentially explanatory variables – in combination, rather than individually, see **BEST** in Section 13. There is an overall hypothesis test for the significance of such a link, and the mechanism of non-parametric matrix correlations (which also includes PRIMER's **RELATE** tests) can be applied to other contexts in which multivariate data sets are compared (Section 14).

PRIMER calculates a range of univariate diversity-related indices through the **DIVERSE** menu including ones based on taxonomic or genetic/functional relatedness of the taxa (**TAXDTEST**), see Section 15, and a range of diversity curves (e.g. dominance plots, species accumulation, Section 16).

Other main menus (e.g. **Select**, **Edit**, **Tools**, **Plots**) offer a wide variety of data manipulations and standard plotting functions (**Histogram**, **Means**, **Box**, **Bar**, **Surface**, **Line** and **Scatter Plot**).

The final Section (17) deals with region estimates for means in multivariate studies, e.g. average communities for each of the Fal creeks, plotted on a 2- or 3-d MDS together with an approximate measure of the uncertainty about these means, from bootstrapping. You might like to finish this brief excursion through PRIMER by running **Analyse>Bootstrap Averages** on the Bray-Curtis resemblance matrix from the Fal biota, taking all the defaults, to get the multivariate *means plot*.

And you can save all this in a PRIMER workspace file *.pwk with **File>Save Workspace As**.

Revision #4
Created 12 March 2024 22:34:17 by Arden
Updated 8 January 2025 00:16:42 by Abby Miller