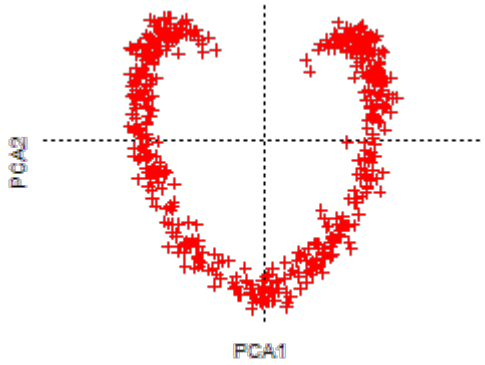
Analysis of community ecology data in R

David Zelený



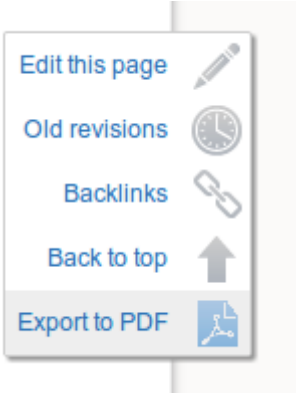
Introduction

This website is focused on an analysis of multivariate community ecology data, i.e. data with many descriptors (usually species) and samples (usually plots/sites/traps etc.). Since I am a vegetation ecologist, the website descriptions, and elaborated examples are heavily biased toward the analysis of vegetation data; still, I think that other ecological fields (e.g. zoologists or microbiologists) may still find the website useful. The aim is *not* a comprehensive online source of information about multivariate analysis (there are much more useful websites for this, see Links to other materials). I focus mostly on preparing practical working examples of analyses with real datasets and elaborated solutions of individual exercises. The website's secondary aim is to provide insight into the theoretical background of established methods and links to recent developments in multivariate analysis and analysis of diversity. This is not to say that I try to keep pace with all the new and fancy analytical methods, more likely just those I found useful, promising or interesting (in my purely subjective and desperately biased view).

From time to time, I use this website as teaching materials for my class Numerical Methods in Community Ecology or some of the courses & workshops. For this reason, certain parts of the website are locked, namely those with class exercises and their solutions. Also, the website is constantly under construction, with major development and changes done during or before the semester when I teach some of the classes. In the remaining time, the website can serve as a resource of online information about different aspects of community data analysis in R.

How to use this website

This wiki provides a concise overview of relevant theory, real-world community datasets, and example R scripts. Although these R scripts can be copied directly into the R command line, I strongly recommend that you avoid copy-pasting and instead type the script yourself. This is the best way to get familiar with the logic of R, although at the beginning, typing may feel annoying. This website also provides several working examples and datasets with real or simulated ecological data, which you can use to become more familiar with a method or problem. Each working example has (or should have soon) a *solution* link - but please, try to resist clicking it immediately and instead push hard to find the solution yourself. Sometimes, the link to *hints* is provided - if you struggle with a search for the solution, hints may help.



Export button creating pdf of the website.

If you need to **print the website**, export it into a PDF using the export button located at the right margin of the website, among the page tools. You may also use the browser's print function (works fine in Firefox, Chrome, and IE as far as I know). This will print the current page without buttons, links, and other elements.

If you need to get to previous pages, you can find them in the **Trace** line in the website header. There is also a useful button, **Backlinks**, in the right vertical menu, which shows the other available wiki pages that link to the currently opened page.

Not important (or too much detail) information is sometimes provided as a footnote, with a link in a text which looks like this:[1]. By hovering the mouse over it, you can see its content without clicking on it. By clicking on it, you scroll down the page. To return to the original place, click again on the [number] in front of the footnote.

1)
This is a footnote! I guess this information (that it's a footnote) is not important, that's why it's a footnote...

From:
https://anadat-r.davidzeleny.net/ - **Analysis of community ecology data in R**

Permanent link:
https://anadat-r.davidzeleny.net/doku.php/en:start

Last update: **2025/07/08 17:41**