

- 1 An introduction to multivariate analysis.
Lecture 2: Exploring and presenting dependencies and group membership
- 2 Methods considered here
- 3 Methods not discussed here
- 4 Multiple regression
- 5 A Multiple Linear Regression Equation
- 6 An Example of Multiple Regression
- 7 Two Constrained Ordination Methods
- 8 The objectives of multivariate analysis
- 9 Constrained methods are used in many disciplines
- 10 An example application – estuarine fish
- 11 An example: the effects on dependent variables
- 12 An example: the ordination of the samples (years)
- 13 General organisation of the data
- 14 The size of the Data Tables
- 15 Use spreadsheet programs to organise data
- 16 Types of variables
- 17 How many variables and objects are allowed?
- 18 Transformations
- 19 An example without transformation
- 20 Transformation of the environmental data
- 21 A log transformation of the primary matrix
- 22 Redundancy Analysis
- 23 Redundancy Analysis
- 24 Redundancy Analysis
- 25 Presenting Redundancy Analysis output
- 26 Scaling Redundancy Analysis Plots
- 27 Measuring significance for Redundancy Analysis
- 28 Permutation tests for Redundancy Analysis
- 29 Canonical Correspondence Analysis
- 30 Canonical Correspondence Analysis
- 31 Canonical Correspondence Analysis

- 32 Canonical Correspondence Analysis Output
- 33 Scaling CCA Output
- 34 Representing nominal variables
- 35 Representing the Response to a Single Variable
- 36 Which score to plot?
- 37 Permutation tests for CCA
- 38 Choosing between CCA and RA
- 39 Multicollinearity
- 40 Take care not to create multicollinearity
- 41 Stepwise variable selection
- 42 Discriminant Analysis
- 43 The Purpose of Discriminant Analysis
- 44 Fisher's approach to Discriminant Analysis
- 45 Applications of Discriminant Analysis
- 46 In conclusion