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Nota di contenuto	Cover; Title Page; Copyright; Contents; Preface to the second edition; Preface to the first edition; List of figures; List of tables; About the companion website; Chapter 1 Introduction; Chapter 2 Patterns in vegetation ecology; 2.1 Pattern recognition; 2.2 Interpretation of patterns; 2.3 Sampling for pattern recognition; 2.3.1 Getting a sample; 2.3.2 Organizing the data; 2.4 Pattern recognition in R; Chapter 3 Transformation; 3.1 Data types; 3.2 Scalar transformation and the species enigma; 3.3 Vector transformation; 3.4 Example: Transformation of plant cover data Chapter 4 Multivariate comparison 4.1 Resemblance in multivariate space; 4.2 Geometric approach; 4.3 Contingency measures; 4.4 Product moments; 4.5 The resemblance matrix; 4.6 Assessing the quality of classifications; Chapter 5 Classification; 5.1 Group structures; 5.2 Linkage clustering; 5.3 Average linkage clustering; 5.4 Minimum-variance clustering; 5.5 Forming groups; 5.6 Silhouette plot and fuzzy

representation; Chapter 6 Ordination; 6.1 Why ordination?; 6.2 Principal component analysis; 6.3 Principal coordinates analysis; 6.4 Correspondence analysis; 6.5 Heuristic ordination  
6.5.1 The horseshoe or arch effect 6.5.2 Flexible shortest path adjustment; 6.5.3 Nonmetric multidimensional scaling; 6.5.4 Detrended correspondence analysis; 6.6 How to interpret ordinations; 6.7 Ranking by orthogonal components; 6.7.1 RANK method; 6.7.2 A sampling design based on RANK (example); Chapter 7 Ecological patterns; 7.1 Pattern and ecological response; 7.2 Evaluating groups; 7.2.1 Variance testing; 7.2.2 Variance ranking; 7.2.3 Ranking by indicator values; 7.2.4 Contingency tables; 7.3 Correlating spaces; 7.3.1 The Mantel test; 7.3.2 Correlograms  
7.3.3 More trends: 'Schlaengli' data revisited 7.4 Multivariate linear models; 7.4.1 Constrained ordination; 7.4.2 Nonparametric multiple analysis of variance; 7.5 Synoptic vegetation tables; 7.5.1 The aim of ordering tables; 7.5.2 Steps involved in sorting tables; 7.5.3 Example: ordering Ellenberg's data; Chapter 8 Static predictive modelling; 8.1 Predictive or explanatory?; 8.2 Evaluating environmental predictors; 8.3 Generalized linear models; 8.4 Generalized additive models; 8.5 Classification and regression trees; 8.6 Building scenarios; 8.7 Modelling vegetation types  
8.8 Expected wetland vegetation (example) Chapter 9 Vegetation change in time; 9.1 Coping with time; 9.2 Temporal autocorrelation; 9.3 Rate of change and trend; 9.4 Markov models; 9.5 Space-for-time substitution; 9.5.1 Principle and method; 9.5.2 The Swiss National Park succession (example); 9.6 Dynamics in pollen diagrams (example); Chapter 10 Dynamic modelling; 10.1 Simulating time processes; 10.2 Simulating space processes; 10.3 Processes in the Swiss National Park; 10.3.1 The temporal model; 10.3.2 The spatial model; Chapter 11 Large data sets: wetland patterns; 11.1 Large data sets differ  
11.2 Phytosociology revisited

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## Sommario/riassunto

The first edition of *Data Analysis in Vegetation Ecology* provided an accessible and thorough resource for evaluating plant ecology data, based on the author's extensive experience of research and analysis in this field. Now, the Second Edition expands on this by not only describing how to analyse data, but also enabling readers to follow the step-by-step case studies themselves using the freely available statistical package R. The addition of R in this new edition has allowed coverage of additional methods for classification and ordination, and also logistic regression, GLM

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