Biometry Sokal And Rohlf

Suitable for undergraduates with a minimal background in mathematics, this introduction ranges from descriptive statistics to fundamental distributions and the testing of hypotheses. Includes numerous worked-out problems and examples. 1987 edition.

A detailed exposition of the most common mathematical models in population and community ecology, covering exponential and logistic population growth, age-structured demography, metapopulation dynamics, competition, predation, and island biogeography. Intended to demystify ecological models and the math behind them by deriving the models from first principles. The primer may be used as a self-teaching tutorial, as a primary textbook, or as a supplemental text to a general ecology textbook. Annotation copyright by Book News, Inc., Portland, OR

Scientists⊔ views on what makes an experiment successful have developed dramatically throughout history. Different criteria for proper experimentation were privileged at different times, entirely new criteria for securing experimental results emerged, and the meaning of commitment to experimentation altered. In About Method, Schickore captures this complex trajectory of change from 1660 to the twentieth century through the history of snake venom research. As experiments with poisonous snakes and venom were both challenging and controversial, the experimenters produced very detailed accounts of their investigations, which go back three hundred years⊔making venom research uniquely suited for such a long-term study. By analyzing key episodes in the transformation of venom research, Schickore is able to draw out the factors that have shaped methods discourse in science. About Method shows that methodological advancement throughout history has not been simply a steady progression toward better, more sophisticated and improved methodologies of experimentation. Rather, it was a progression in awareness of the obstacles and limitations that scientists face in developing strategies to probe the myriad unknown complexities of nature. The first long-term history of this development and of snake venom research, About Method offers a major contribution to integrated history and philosophy of science.

"Legend is overdue for replacement, and an adequate replacement must attend to the process of science as carefully as Hull has done. I share his vision of a serious account of the social and intellectual dynamics of science that will avoid both the rosy blur of Legend and the facile charms of relativism. . . . Because of [Hull's] deep concern with the ways in which research is actually done, Science as a Process begins an important project in the study of science. It is one of a distinguished series of books, which Hull himself edits."⊔Philip Kitcher, Nature "In Science as a Process, [David Hull] argues that the tension between cooperation and competition⊔is exactly what makes science so successful. . . . Hull takes an unusual approach to his subject. He applies the rules of evolution in nature to the evolution of science, arguing that the same kinds of forces responsible for shaping the rise and demise of species also act on the development of scientific ideas."⊔Natalie Angier, New York Times Book Review "By far the most professional and thorough case in favour of an evolutionary philosophy of science ever to have been made. It contains excellent short histories of evolutionary biology and of systematics (the science of classifying living things); an important and original account of modern systematic controversy; a counter-attack against the philosophical critics of evolutionary philosophy; social-psychological evidence, collected by Hull himself, to show that science does have the character demanded by his philosophy; and a philosophical analysis of evolution which is general enough to apply to both biological and historical change."⊔Mark Ridley, Times Literary Supplement "Hull is primarily interested in how social interactions within the scientific community can help or hinder the process by which new theories and techniques get accepted. . . . The claim that science is a process for selecting out the best new ideas is not a new one, but Hull tells us exactly how scientists go about it, and he is prepared to accept that at least to some extent, the social activities of the scientists promoting a new idea can affect its chances of being accepted."⊔Peter J. Bowler, Archives of Natural History "I have been doing philosophy of science now for twenty-five years, and whilst I would never have claimed that I knew everything, I felt that I had a really good handle on the nature of science, Again and again, Hull was able to show me just how incomplete my understanding was. . . . Moreover, [Science as a Process] is one of the most compulsively readable books that I have ever encountered."⊔Michael Ruse, Biology and Philosophy

The 9th International Symposium on Insect-Plant Relationships (SIP-9) was once more, following the tradition established in 1958, a forum for investigators in both basic and applied entomology interested in the important and fascinating field of interactions between plants and insects. We were pleased and honoured to organise this symposium, which took place June 24--30, 1995 in Gwatt on the shores of the Lake of Thun in Switzerland. 168 participants from 26 countries from all over the world actively took part in the symposium by contributing 12 key-note lectures and a total of 141 oral presentations and posters. The favourable response and the lively interaction of the participants in all symposium activities is the clearest indication of the success of SIP-9. The organisers appreciated the enthusiasm and the willingness to collaborate shown by all participants. The following volume contains written contributions (72) of only half of all presentations. This is due to the fact that we decided to produce not only an account of the proceedings but also to publish all contributions as a special volume of the journal Entomologia Experimentalis et Applicata. This procedure was last adopted in 1978 for SIP-4, organised by Reginald F. Chapman and Elizabeth A. Bernays, and ensures a wide distribution of the papers within the scientific community and easy access through libraries. Inevitably we had to employ the same review procedure as applicable for the manuscripts regularly submitted to Entomologia.

A far-reaching course in practical advanced statistics for biologists using R/Bioconductor, data exploration, and simulation.

THE definitive basic book on applied biostatistical methods. Particularly suited for readers with limited mathematical background, it makes biostatistics accessible by using thorough, intuitive explanations (often laced with humor and described with an appeal to common sense logical notions), and by focusing on selected statistical methods and procedures applicable to the biological, biomedical, and health sciences. It discusses the concepts of the method, the rationale of the method, when to use the method, and how to interpret the results. The computations (while included) are not the focus of the presentation. Several larger examples are used repeatedly (from chapter to chapter) to demonstrate how investigators develop and carry out a study by moving from problem statement, to data accrual, to computation of descriptive statistics, to estimation and hypothesis testing, including univariate, bivariate and finally multivariable procedures for both discrete and continuous variables. The book is not tied to any particular computer package (e.g., SAS, Systat, BMDP), however many prototype computerized outputs of statistical analyses are illustrated and discussed in detail, with guidelines for reading and interpreting results. Descriptive Statistics. Probability. Populations, Samples, and Inference. Some Important Distributions. Estimation. Hypothesis Testing. Frequency Data. The Analysis of Variance. Simple Linear Regression and Correlation. Multiple Regression. Logistic Regression. Repeated Measures and Longitudinal Studies. Distribution-Free and Nonparametric Methods. Demography and Vital Statistics. For anyone involved in the biological,

The first edition of Geometric Morphometrics for Biologists has been the primary resource for teaching modern geometric methods of shape analysis to biologists who have a stronger background in biology than in multivariate statistics and matrix algebra. These geometric methods are appealing to biologists who approach the study of shape from a variety of perspectives, from clinical to evolutionary, because they incorporate the geometry of organisms throughout the data analysis. The second edition of this book retains the emphasis on accessible explanations, and the copious illustrations and examples of the first, updating the treatment of both theory and practice. The second edition represents the current state-of-the-art and adds new examples and summarizes recent literature, as well as provides an overview of new software and step-by-step guidance through details of carrying out the analyses. Contains updated coverage of methods, especially for sampling complex curves and 3D forms and a new chapter on applications of geometric morphometrics to forensics Offers a reorganization of chapters to streamline learning basic concepts Presents detailed instructions for conducting analyses with freely available, easy to use software Provides numerous illustrations, including graphical presentations of important theoretical concepts and demonstrations of alternative approaches to presenting results

The use of biostatistical techniques in molecular biology has grown tremendously in recent years and is now essential for the correct interpretation of a wide variety of laboratory studies. In Biostatistical Methods, a panel of leading biostatisticians and biomedical researchers describe all the key techniques used to solve commonly occurring analytical problems in molecular biology, and demonstrate how these methods can identify new markers for exposure to a risk factor, or for determining disease outcomes. Major areas of application include microarray analysis, proteomic studies, image quantitation, determining new disease biomarkers, and designing studies with adequate levels of statistical power. In the case of genetic effects in human populations, the authors describe sophisticated statistical methods to control the overall false-positive rate when many statistical tests are used in linking particular alleles to the occurrence of disease. Other methods discussed are those used to validate statistical approaches for analyzing the E-D association, to study the associations between disease and the inheritance of particular genetic variants, and to examine real data sets. There are also useful recommendations for statistical and data management software (JAVA, Oracle, S-Plus, STATA, and SAS). Accessible, state-of-the-art, and highly practical, Biostatistical Methods provides an excellent starting point both for statisticians just beginning work on problems in molecular biology, and for all molecular biologists who want to use biostatistics in genetics research designed to uncover the causes and treatments of disease.

Ecological community data. Spatial pattern analysis. Species-abundance relations. Species affinity. Community classification. Community ordination. Community interpretation.

Data in biology. The handling of data. Descriptive statistics. Introduction to probability distributions: binomial and poisson. The normal probability distribution. Estimation and hypothesis testing. Introduction to analysis of variance. Single classification analysis of variance. Nested analysis of variance. Two-way analysis of variance. Multway analysis of variance. Assumptions of analysis of variance. Linear regression. Correlation. Multiple and curvilinear regression. Analysis of frequencies. Miscellaneous methods. Mathematical appendix. A package of statistical computer programs.

This is a book about the scientific process and how you apply it to data in ecology. You will learn how to plan for data collection, how to assemble data, how to analyze data and finally how to present the results. The book uses Microsoft Excel and the powerful Open Source R program to carry out data handling as well as producing graphs. Statistical approaches covered include: data exploration; tests for difference – t-test and U-test; correlation – Spearman's rank test and Pearson product-moment; association including Chi-squared tests and goodness of fit; multivariate testing using analysis of variance (ANOVA) and Kruskal–Wallis test; and multiple regression. Key skills taught in this book include: how to plan ecological projects; how to record and assemble your data; how to use R and Excel for data analysis and graphs; how to carry out a wide range of statistical analyses including analysis of variance and regression; how to create professional looking graphs; and how to present your results. New in this edition: a completely revised chapter on graphics including graph types and their uses, Excel Chart Tools, R graphics commands and producing different chart types in Excel and in R; an expanded range of support material online, including; example data, exercises and additional notes & explanations; a new chapter on basic community statistics, biodiversity and similarity; chapter summaries and end-of-chapter exercises. Praise for the first edition: This book is a superb way in for all those looking at how to design investigations and collect data to support their findings. – Sue Townsend, Biodiversity Learning Manager, Field Studies Council [M]akes it easy for the reader to synthesise R and Excel and there is extra help and sample data available on the free companion webpage if needed. I recommended this text to the university library as well as to colleagues at my student workshops on R. Although I initially bought this book when I wanted to discover R I actually also learned new techniques for data manipulation and management in Excel – Mark Edwards, EcoBlogging A must for anyone getting to grips with data analysis using R and excel. – Amazon 5-star review It has been very easy to follow and will be perfect for anyone. – Amazon 5-star review A solid introduction to working with Excel and R. The writing is clear and informative, the book provides plenty of examples and figures so that each string of code in R or step in Excel is understood by the reader. – Goodreads, 4-star review

This volume presents the cutting-edge research of leading scientists, re-examining the major debates in Neanderthal research with the use of innovative methods and exciting new theoretical approaches. Coverage includes the re-evaluation of Neanderthal anatomy, inferred adaptations and habitual activities, developmental patterns, phylogenetic relationships, and the Neanderthal extinction; new methods include computer tomography, 3D geometric morphometrics, ancient DNA and bioenergetics. The book offers fresh insight into both Neanderthals and modern humans.

The Biostatistics course is often found in the schools of public Health, medical schools, and, occasionally, in statistics and biology departments. The population of students in these courses is a diverse one, with varying preparedness. The book assumes the reader has at least two years of high school algebra, but no previous exposure to statistics is required. Written for individuals who might be fearful of mathematics, this book minimizes the technical difficulties and emphasizes the importance of statistics in scientific investigation. An understanding of underlying design and analysis is stressed. The limitations of the research, design and analytical techniques are discussed, allowing the reader to accurately interpret results. Real data, both processed and raw, are used extensively in examples and exercises. Statistical computing packages - MINITAB, SAS and Stata - are integrated. The use of the computer and software allows a sharper focus on the concepts, letting the computer do the necessary number-crunching. * Emphasizes underlying statistical concepts more than competing texts * Focuses on experimental design and analysis, at an elementary level * Includes an introduction to linear correlation and regression * Statistics are central: probability is downplayed * Presents life tables and survival analysis * Appendix with solutions to many exercises * Special instructor's manual with solution to all exercises

"We highly recommend it—not just for statisticallyterrified biology students and faculty, but also for those who areoccasionally anxious or uncertain. In addition to being a goodstarting point to learn statistics, it is a useful place to returnto refresh your memory." –The Quarterly Review ofBiology, March 2009 "During the entire course of my Ph.D. I've been(embarrasingly) looking for a way to teach myself the fundamentalsof statistical analysis. At this point in my education, I've cometo realize that often times, simply knowing the basics is enoughfor you to properly apply even the most complex analytical methods.'Statistics for Terrified Biologists' has been justsuch a book - it was more than worth the $40 I spent on it, andwhile my 'book clubs' aren't meant to be reviews, I highlyrecommend the book to anyone who's in a similar predicament to myown." –Carlo Artieri's Blog Book Club The typical biology student is "hardwired" to bewary of any tasks involving the application of mathematics andstatistical analyses, but the plain fact is much of biologyrequires interpretation of experimental data through the use ofstatistical methods. This unique textbook aims to demystify statistical formulae forthe average biology student. Written in a lively and engagingstyle, Statistics for Terrified Biologists draws on theauthor's 30 years of lecturing experience. One of theforemost entomologists of his generation, van Emden has anextensive track record for successfully teaching statisticalmethods to even the most guarded of biology students. For the first time basic methods are presented usingstraightforward, jargon-free language. Students are taught to usesimple formulae accurately to interpret what is being measured witheach test and statistic, while at the same time learning torecognize overall patterns and guiding principles. Complemented bysimple illustrations and useful case studies, this is an idealstatistics resource tool for undergraduate biology andenvironmental science students who lack confidence in theirmathematical abilities.

This easily understood but rigorous introduction to biological statistics is a standard text and valuable reference for anyone doing scientific research. The fourth edition has been thoroughly revised and updated using computer calculations and the authors have expanded on important modern topics.

Challenging the notion that statistics are often incomprehensible and complex to use, the authors help readers to understand the language of statistics, which is often a stumbling block for those coming to the subject for the first time. As the results of health care research are so integral to decision-making and developing new practice within the profession, the book encourages the reader to think critically about data analysis and research design, and how these can impact upon evidence based practice.

This book constitutes the refereed proceedings of the 13th Australasian Conference on Information Security and Privacy, ACISP 2008, held in Wollongong, Australia, in July 2008. The 33 revised full papers presented were carefully reviewed and selected from 111 submissions. The papers cover a range of topics in information security, including authentication, key management, public key cryptography, privacy, anonymity, secure communication, ciphers, network security, elliptic curves, hash functions, and database security.

Paleolimnology is a rapidly developing science that is now being used to study a suite of environmental and ecological problems. This volume is the fourth handbook in the Developments in Paleoenvironmental Research book series. The first volume (Last & Smol, 2001a) examined the acquisition and archiving of sediment cores, chronological techniques, and large-scale basin analysis methods. Volume 2 (Last & Smol, 2001b) focused on physical and chemical methods. Volume 3 (Smol et al. , 2001), along with this book, summarize the many biological methods and techniques that are available to study long-term environmental changeusing information preserved in sedimentary profiles. A subsequent volume (Birks et al. , in preparation) will deal with statistical and data handling procedures. It is our intent that these books will provide sufficient detail and breadth to be useful handbooks for both seasoned practitioners as well as newcomers to the area of paleolimnology. These books will also hopefully be useful to non-paleolimnologists (e. g. , limnologists, archeologists, palynologists, geographers, geologists, etc.) who continue to hear and read about pal- limnology, but have little chance to explore the vast and sometimes difficult to access journal-based reference material for this rapidly expanding field. Although the chapters in these volumes target mainly lacustrine settings, many of the techniques described can also be readily applied to fluvial, glacial, marine, estuarine, and peatland environments. This current volume focuses on zoological indicators preserved in lake sediments, whilst Volume 3 focused on terrestrial, algal, and siliceous indicators.

An essential textbook for any student or researcher in biology needing to design experiments, sample programs or analyse the resulting data. The text begins with a revision of estimation and hypothesis testing methods, covering both classical and Bayesian philosophies, before advancing to the analysis of linear and generalized linear models. Topics covered include linear and logistic regression, simple and complex ANOVA models (for factorial, nested, block, split-plot and repeated measures and covariance designs), and log-linear models. Multivariate techniques, including classification and ordination, are then introduced. Special emphasis is placed on checking assumptions, exploratory data analysis and presentation of results. The main analyses are illustrated with many examples from published papers and there is an extensive reference list to both the statistical and biological literature. The book is supported by a website that provides all data sets, questions for each chapter and links to software.

An understanding of statistics and experimental design is essential for life science studies, but many students lack a mathematical background and some even dread taking an introductory statistics course. Using a refreshingly clear and encouraging reader-friendly approach, this book helps students understand how to choose, carry out, interpret and report the results of complex statistical

analyses, critically evaluate the design of experiments and proceed to more advanced material. Taking a straightforward conceptual approach, it is specifically designed to foster understanding, demystify difficult concepts and encourage the unsure. Even complex topics are explained clearly, using a pictorial approach with a minimum of formulae and terminology. Examples of tests included throughout are kept simple by using small data sets. In addition, end-of-chapter exercises, new to this edition, allow self-testing. Handy diagnostic tables help students choose the right test for their work and remain a useful refresher tool for postgraduates.

Proceedings of the 9th International Symposium on Insect-Plant Relationships
Geometric Morphometrics for Biologists
A Practical Guide
A Practical Approach
Introduction to Biostatistics
Information Security and Privacy
Biostatistical Design and Analysis Using R
Statistics for Anthropology
Biometry
Second Edition
Modern Statistics for Modern Biology

Introduction and background; Exploratory data analysis and graphics; Deterministic functions for ecological modeling; Probability and stochastic distributions for ecological modeling; Stochatsic simulation and power analysis; Likelihood and all that; Optimization and all that; Likelihood examples; Standar statistics revisited; Modeling variance; Dynamic models.

At first glance, studying behavior is easy, but as every budding ethologist quickly realises, there are a host of complex practical, methodological and analytical problems to solve before designing and conducting the study. How do you choose which species or which behavior to study? What equipment will you need to observe and record behavior successfully? How do you record data in the dark, in the wet, or without missing part of the action? How do you analyse and interpret the data to yield meaningful information? This new expanded edition of the Handbook of Ethological Methods provides a complete step-by-step introduction to ethological methods from topic choice and behavioral description to data collection and statistical analysis. This book will be a must for beginning students and experienced researchers studying animal behavior in the field or laboratory.

This separate compendium of tables used with Sokal/Rohlf, "Biometry, Third Edition," eliminates the inconvenience of having to turn back and forth within the text to refer to data. It can also be used with other texts, or as an independent research resource.

From earlier ecological studies it has become apparent that simple univariate or bivariate statistics are often inappropriate, and that multivariate statistical analyses must be applied. Despite several difficulties arising from the application of multivariate methods, community ecology has acquired a mathematical framework, with three consequences: it can develop as an exact science; it can be applied operationally as a computer-assisted science to the solution of environmental problems; and it can exchange information with other disciplines using the language of mathematics. This book comprises the invited lectures, as well as working group reports, on the NATO workshop held in Roscoff (France) to improve the applicability of this new method numerical ecology to specific ecological problems.

Anthropology as a discipline is rapidly becoming more quantitative, and anthropology students are now required to develop sophisticated statistical skills. This book provides students of anthropology with a clear, step-by-step guide to univariate statistical methods, demystifying the aspects that are often seen as difficult or impenetrable. Explaining the central role of statistical methods in anthropology and using only anthropological examples, the book provides a solid footing in statistical techniques. Beginning with basic descriptive statistics, this new edition also covers more advanced methods such as analyses of frequencies and variance, simple and multiple regression analysis with dummy and continuous variables. It addresses commonly encountered problems such as small samples and non-normality. Each statistical technique is accompanied by clearly worked examples and the chapters end with practice problem sets. Many of the datasets are available for download at www.cambridge.org/9780521147088.

The NATO Advanced Study Institute on Numerical Taxonomy took place on the 4th - 16th of July, 1982, at the Kur- und Kongresshotel Residenz in Bad Windsheim, Federal Republic of Germany. This volume is the proceedings of that meeting, and contains papers by over two-thirds of the participants in the Institute. Numerical taxonomy has been attracting increased attention from systematists and evolutionary biologists. It is an area which has been marked by debate and conflict, sometimes bitter. Happily, this meeting took place in an atmosphere of

"GemUtlichkeit", though scarcely of unanimity. I believe that these papers will show that there is an increased understanding by each taxonomic school of each others' positions. This augurs a period in which the debates become more concrete and specific. Let us hope that they take place in a scientific atmosphere which has occasionally been lacking in the past. Since the order of presentation of papers in the meeting was affected by time constraints, I have taken the liberty of rearranging them into a more coherent subject ordering. The first group of papers, taken from the opening and closing days of the meeting, debate philosophies of classification. The next two sections have papers on congruence, clustering and ordination. A notable concern of these participants is the comparison and testing of classifications. This has been missing from many previous discussions of numerical classification.

In this definitive book, D. R. Cox gives a comprehensive and balanced appraisal of statistical inference. He develops the key concepts, describing and comparing the main ideas and controversies over foundational issues that have been keenly argued for more than two-hundred years. Continuing a sixty-year career of major contributions to statistical thought, no one is better placed to give this much-needed account of the field. An appendix gives a more personal assessment of the merits of different ideas. The content ranges from the traditional to the contemporary. While specific applications are not treated, the book is strongly motivated by applications across the sciences and associated technologies. The mathematics is kept as elementary as feasible, though previous knowledge of statistics is assumed. The book will be valued by every user or student of statistics who is serious about understanding the uncertainty inherent in conclusions from statistical analyses.

A Primer in Methods and Computing

Principles of Statistical Inference

A Primer of Ecology

Statistics Explained

Numerical Taxonomy

A Primer

Statistical Ecology

Statistics for Terrified Biologists

Statistics with Applications to the Biological and Health Sciences

Experimental Design and Data Analysis for Biologists

An Introductory Guide for Field Biologists

Offers students with little background in statistical analysis an introduction to a variety of statistical concepts and methods. In addition to the incorporation of computer calculation, this new edition expands on a number of important topics, including the revised Kolmogrov-Smirnov test.
Introduction to WinBUGS for Ecologists introduces applied Bayesian modeling to ecologists using the highly acclaimed, free WinBUGS software. It offers an understanding of statistical models as abstract representations of the various processes that give rise to a data set. Such an understanding is basic to the development of inference models tailored to specific sampling and ecological scenarios. The book begins by presenting the advantages of a Bayesian approach to statistics and introducing the WinBUGS software. It reviews the four most common statistical distributions: the normal, the uniform, the binomial, and the Poisson. It describes the two different kinds of analysis of variance (ANOVA): one-way and two- or multiway. It looks at the general linear model, or ANCOVA, in R and WinBUGS. It introduces generalized linear model (GLM), i.e., the extension of the normal linear model to allow error distributions other than the normal. The GLM is then extended contain additional sources of random variation to become a generalized linear mixed model (GLMM) for a Poisson example and for a binomial example. The final two chapters showcase two fairly novel and nonstandard versions of a GLMM. The first is the site-occupancy model for species distributions; the second is the binomial (or N-) mixture model for estimation and modeling of abundance. Introduction to the essential theories of key models used by ecologists Complete juxtaposition of classical analyses in R and Bayesian analysis of the same models in WinBUGS Provides every detail of R and WinBUGS code required to conduct all analyses Companion Web Appendix that contains all code contained in the book and additional material (including more code and solutions to exercises)
A straightforward introduction to a wide range of statistical methods for field biologists, using thoroughly explained R code.
Many biologists remain unfamiliar with statistical analysis and modelling, yet need to apply these techniques increasingly in their research. This volume describes how to analyze biological data, with commonly available software packages, without making errors which can invalidate results.Practical guidance is provided for planning the correct strategy for a variety of different statistical approaches and modelling problems and interpreting the results. Many examples of computer commands and output are given to illustrate the different analytical approaches. Biological DataAnalysis: A Practical Approach has been designed specifically to allow researchers with only a minimal knowledge of statistics to understand a

variety of statistical methods and apply them directly. The provision of data sets from several biological disciplines will make this book useful to alltypes of biologists.

This separate compendium of tables used with Sokal/Rohlf, Biometry, Third Edition, eliminates the inconvenience of having to turn back and forth within the text to refer to data. It can also be used with other texts, or as an independent research resource.

R — the statistical and graphical environment is rapidly emerging as an important set of teaching and research tools for biologists. This book draws upon the popularity and free availability of R to couple the theory and practice of biostatistics into a single treatment, so as to provide a textbook for biologists learning statistics, R, or both. An abridged description of biostatistical principles and analysis sequence keys are combined together with worked examples of the practical use of R into a complete practical guide to designing and analyzing real biological research. Topics covered include: simple hypothesis testing, graphing exploratory data analysis and graphical summaries regression (linear, multi and non-linear) simple and complex ANOVA and ANCOVA designs (including nested, factorial, blocking, spit-plot and repeated measures) frequency analysis and generalized linear models. Linear mixed effects modeling is also incorporated extensively throughout as an alternative to traditional modeling techniques. The book is accompanied by a companion website www.wiley.com/go/logan/r with an extensive set of resources comprising all R scripts and data sets used in the book, additional worked examples, the biology package, and other instructional materials and links.

Statistical Tables

Biological Data Analysis

An Introductory Guide for Life Scientists

Data Collection, Exploration, Analysis and Presentation

About Method

Statistical Tables [by] F. James Rohlf [and] Robert R. Sokal

Volume 4: Zoological Indicators

Introduction to WinBUGS for Ecologists