Estimating Animal Abundance

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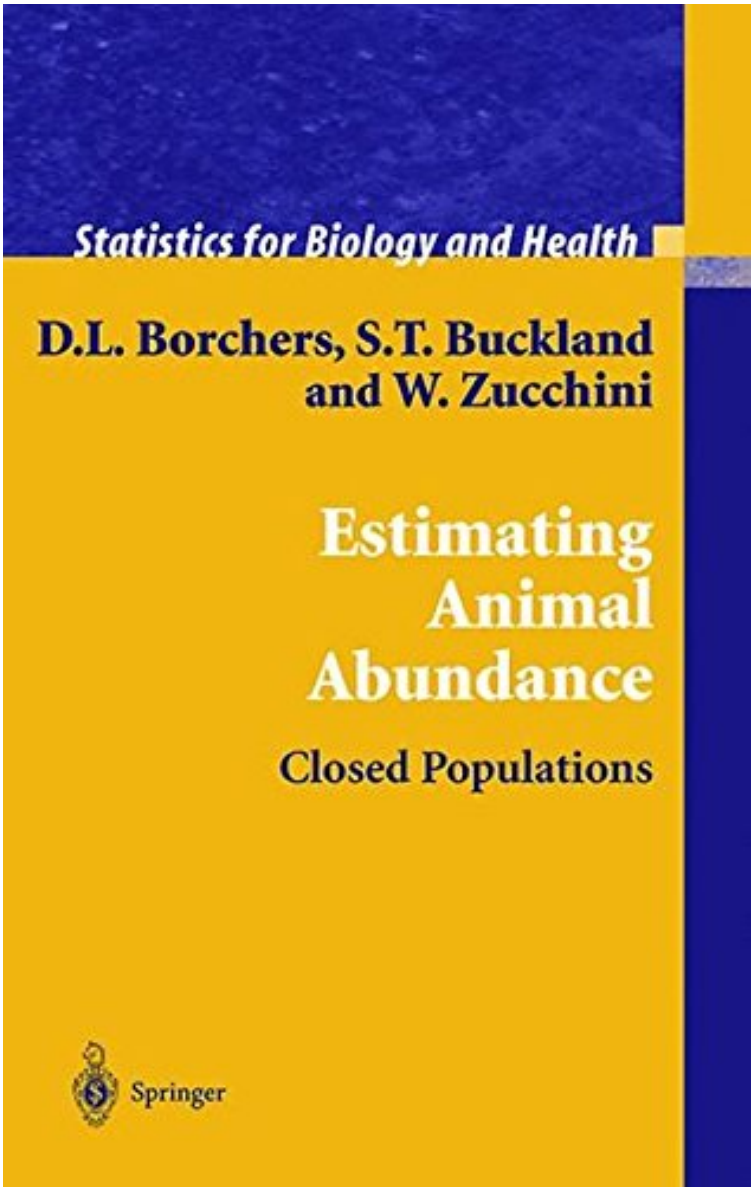

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D.L. Borchers, Stephen T. Buckland, Walter Zucchini : Estimating Animal Abundance before purchasing it in order to gage whether or not it would be worth my time, and all praised Estimating Animal Abundance:

The first accessible introduction to the many various wildlife assessment methods! This book uses a new approach that

makes the full range of methods accessible in a way that has not previously been possible. Accompanied by free, user-friendly software to get some "hands-on" experience with the methods and how they perform in different contexts.

From the reviews: "In a unified likelihood-based framework, this book provides an excellent updated introduction to closed population models. The authors also briefly address how the framework can be extended to deal with open populations.....In addition to intended readers in biology, ecology and statistics, this book will reach a wider audience in other disciplines as some closed models have been widely applied to other areas including epidemiology, health sciences, software reliability and census undercount estimation. I compliment the authors for this significant book and hope they will write another on open populations." Biometrics "This is a useful book. It provides a comprehensive, readable survey which should be of value to anyone who wants an introduction to the currently available methodology for estimating animal numbers." International Statistical Institute, Short Book s "The great strength of this text is that all methods are described not just in the same book, but in the same statistical framework... The authors have gone to great lengths to explain the principles underlying every method, in easily accessible, nonspecialist language. This includes a single-sentence "key idea" at the beginning of every chapter, which is generally a succinct and pertinent introduction. Practitioners with little background in statistics will find these explanations particularly worthwhile, being all too-familiar with the "recipe"approach to statistical analyses...."Coherence for the cognoscenti" is possibly the book's greatest contribution. It unfolds like a well-written sonata, with every section echoing the underlying themes before letting rip with the detailed development. Its potential as a nursery for new research ideas should not be overlooked." Journal of the American Statistical Association "This would be a good reference book for bio-statisticians interested in problems of estimation of animal abundance." (T.J. Rao, Sankhya, Vol. 65 (2), 2003) "This book introduces and surveys the various methods used to assess wildlife populations. This is a useful book. It provides a comprehensive, readable survey which should be of value to anyone who wants an introduction to the currently available methodology for estimating animal numbers. The book is well-written. Relevant free software is also available on the web in the form of an R Library of simulation and estimation functions for many of the advanced methods ." (C.D. Kemp, Short Book s, Vol. 23 (1), 2003) "This is the first book to provide an accessible, comprehensive introduction to wildlife population assessment methods. It uses a new approach that makes the full range of methods accessible . This book uses a single conceptual and statistical framework for all the methods. This makes understanding the apparently different methods easier . As the first truly up-to-date and introductory text in the field, this book should become a standard reference for students and professionals in the fields of statistics, biology and ecology." (T. Postelnicu, Zentralblatt MATH, Vol. 1002 (2), 2003)From the Back CoverThis is the first book to provide an accessible, comprehensive introduction to wildlife population assessment methods. It uses a new approach that makes the full range of methods accessible in a way that has not previously been possible. Traditionally, newcomers to the field have had to face the daunting prospect of grasping new concepts for almost every one of the many methods. In contrast, this book uses a single conceptual (and statistical) framework for all the methods. This makes understanding the apparently different methods easier because each can be seen to be a special case of the general framework. The approach provides a natural bridge between simple methods and recently developed methods. It also links closed population methods quite naturally with open population methods.The book is accompanied by free software on the web, in the form of an R library, allowing readers to get some "hands-on" experience with the methods and how they perform in different contexts - without the considerable effort and expense required to do this in the real world. It also provides a tool for teaching the methods, including a means for teachers to generate examples and exercises customised to the needs of their students.As the first truly up-to-date and introductory text in the field, this book should become a standard reference for students and professionals in the fields of statistics, biology and ecology.