

SEEKING NATURE'S LIMITS—ECOLOGISTS IN THE FIELD

Drent, R., Tinbergen, J.M., Bakker, J.P., Piersma, T. & others. Moore, S.J. (Ed). Utrecht, Netherlands: KNNV Publishing (www.knnvpublishing.nl). 320 pp. with hundreds of colour and black-and-white photographs, and many maps, graphs and infographics. Hard cover. ISBN 90-5011-221-8. EUR24.95 + postage.

The concept of *Seeking Nature's Limits—Ecologists in the Field*, a Festschrift (a written celebration to mark the life and times of Rudi Drent as he goes into retirement), is appealing—but such things, based on a life of science, can be dry and disappointing. Not so this charming piece of work. Edited by Suzanne J. Moore and translated from the original Dutch by Rudi Drent himself, this work was a real pleasure to read. So much so, in fact, that it caused me to miss three good films on a long international flight!

The work consists of 40 chapters written by Rudi's former students and associates from the Centre for Ecological and Evolutionary Studies at the University of Groningen in the Netherlands and includes major players such as Theunis Piersma, Ron Ydenberg and Leo Zwarts. (The author list actually tops 50.) The work broadly concerns how animals should best manage their lives and, inevitably, this topic concerns animal decisions and optimality and how those factors relate to short-term benefits and lifetime reproductive success. After a brief preface, in which Rudi and colleagues confess to having their thinking moulded by the Krebs and Davis (1978) seminal work ("behavioural ecology"), the book begins with an extensive introduction by Rudi where the scene is set. This "chapter," although not listed as such, follows the same format as other chapters in the book in being illustrated by numerous atmosphere-generating photos, plus maps, sketches, diagrams and graphs, all of which serve to enhance the text. The truth is, however, that these enhancements are so well thought out that much of the primary essence of the book can be gleaned simply by looking through the innumerable illustrations—a boon for those with little time.

Beyond the introduction, the book is divided into six main themes: Carrying Capacity, Food, Individual Choices and Constraints, Sex and Society, Individuals to Populations, and the Science of Conservation. Within these broad themes are chapters on issues such as migration strategies, limits of energy expenditure, feeding strategies adopted by shellfish and the birds that feed on them, how herbivores exploiting the same resource interact, and the intricacies of living in groups. Although the science presented is unadulterated by popular sentiment (perish the thought that scientists might

expound in that vein), the chapter headings are trendy, appealing and often enigmatic (consider "Pink or blue," "The social prisoner" and "Do greylags dig their own graves?"), and the writing signals real passion for the subject animals and work areas. The introduction to chapter 1, for example, starts with "the eastern end of Schmiermonnikoog is covered in a surging mass of churning muddy water. The angry sea is devouring part of the dunes, and will soon spit the sand out elsewhere."

This approach, coupled with a considered, spare use of scientific references, makes the work accessible and appealing to a much wider audience than might otherwise be the case. Nevertheless, the density of thought and collective wisdom within the pages makes the book absolutely right for hard-core researchers and aspiring students. Pure seabird enthusiasts may be deterred by the limited scope given to their area (although gulls and terns have their own chapters), but the richness of the Dutch animals used (although oddities such as elephant seals, buffalo and hoopoe larks also figure) illustrates behavioural ecology theory admirably. I would challenge anyone interested in animal decisions not to be fascinated by this work. I personally now regard geese in a completely new light!

Although the work is not perfect (the introduction, for example, consistently refers to figures in the text that are on other pages), this book is a huge credit to Rudi Drent, his associates and indeed to the whole Dutch Centre for Ecological and Evolutionary Studies. They have taken behavioural ecology to the field—all over the planet in fact—and pushed conventional thinking forward while presenting complex solutions to simple questions in an appealing manner that (almost) anyone can understand. The presentation demonstrates that science can also attract a lay audience. I recommend this book unreservedly—except, perhaps, to those who might take it with them on long international flights when they want to watch the films!

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