

## BOOK REVIEWS

### SPATIAL DATA ANALYSIS BY EXAMPLE

#### VOL. 1: POINT PATTERN AND QUANTITATIVE DATA

by Graham Upton and Bernard Fingleton

John Wiley & Sons Ltd, England. 1985

410 pages. ISBN 0-471-90542-9. £32.95

Spatial data analysis has been used in forestry traditionally to estimate tree stocking and animal density, as well as for ecological surveys. More recently, individual-tree modellers and physiological modellers have had a need to investigate spatial pattern.

In the past this has involved a wander through a variety of sources from a variety of disciplines. No more. Upton and Fingleton have combined a considerable amount of material into a well-balanced text which should provide answers to most questions. If the answer is not in Volume 1, or in the 21 pages of references, then it can be anticipated in the forthcoming Volume 2.

The book begins with an analysis of the identifications of pattern, which utilises examples from many disciplines. Chapter 2 considers the estimation of spatial intensity, and contains a brief mention of the angle-count method. Chapter 3 examines spatial auto-correlation, with Chapter 4 concentrating on inter-type relations. Chapter 5 is on regression and auto-regression, and contains standard statistical material, as well as examples of special cases applicable to spatial data analysis.

After nearly 20 years of reading forestry text books I was pleased to find a book which contained a mixture of familiar and new material, illustrated with a very wide range of examples. There are examples of the distribution of Romano-British walled towns, the positions of sea anemones on rocks, junior schools in Southampton, and even one on spatial gradations in drongo characteristics. There are also plenty of plant examples for the foresters.

I enjoyed the book, and I will be interested to see Volume 2.

R. B. Tennent

### THE RELASCOPE IDEA. RELATIVE MEASUREMENTS IN FORESTRY

by Walter Bitterlich

Commonwealth Agricultural Bureaux, Farnham Royal, United Kingdom. 1984.

256 pages. ISBN 0-85198-539-4. £27.50

This book is intended as a text for forestry students and as a standard reference book for mensuration foresters. The first three chapters are introductory, covering the development of angle-count sampling in 8 pages. The book then becomes specific,