BOOK REVIEWS

Pondweeds of the British Isles and Ireland. C. D. Preston. Peterborough: BSBI Publications. 1995. 352pp, incl. 49 distribution maps and 50 full-page line drawings. ISBN 0 901158 24 0. £16.50 (Europe £17.50) (paperback).

Pondweeds of the British Isles and Ireland is the long-awaited monograph in this series of handy little books so useful for identification purposes. The pondweeds have always been known to be a difficult group, mainly because of their plasticity. They comprise the Potamogetonaceae, containing the genus Potamogeton with 47 taxa including hybrids and Groenlandia densa, and the Ruppiaceae with Ruppia maritima and R. cirrhosa.

After the introduction there are a few pages on the history of pondweed study, followed by a discussion on their nomenclature (necessary as there are some minor disagreements about what some specific epithets represent). Short chapters on classification, evolution, hybridization and variation, chromosome numbers and morphology are all included. The last is well illustrated with clear line drawings including venation, leaf-tip shape, and stem cross-section.

Ecologically this work goes further than its forerunners in the series, with chapters on the use of waterplants as a food and refuge for birds, fish and other aquatic and amphibious organisms. All the different habitats are discussed. Other chapters include the effects of eutrophication and acidification, current status, conservation, and pondweeds in horticulture, the collecting and preservation of material, reference collections and finally the trophic requirements for each species. The keys to the species are easy to use, especially the second one which is broken into segments to make it less daunting. The main body of the book gives a full description, illustration and dot map of each species; comparisons are made between similar species and mention is made of known hybrids. Also included are an extensive bibliography, glossary and an index that has both scientific and common names. At £16.50 the book is good value, and has an attractive powder blue cover adorned with a Potamogeton.

D. R. McKean

Overzicht van de Paddestoelen in Nederland (Survey of Macrofungi in the Netherlands). Edited by E. Arnolds, Th. W. Kuyper & M. E. Noordeloos. Netherlands Mycological Society. 1995. 876pp, incl. 16 full-colour plates. ISBN 90-802818-1-6. 2000 Gld.

This hefty volume is a mine of information listing all those species of larger basidiomycete and the major ascomycetous fungi recorded from the Netherlands until 1994 (3488 taxa). There are sixteen composite plates of beautiful watercolours by one of the editors (E.A.) which are extremely useful as they illustrate many species not previously depicted in colour. Distribution maps accompany

the text and there are some attractive line drawings which break-up the introduction and separate sections.

The introduction outlines the purpose and approach of the book and includes discussion on reliability of records, nomenclatural and taxonomic principles adopted, and the importance of ecology and distribution. The taxonomic work (694 pages) forms the core of the publication, with genera and species treated alphabetically in each major section. There is a useful bibliographic index and annotated checklist which also includes a few 'fungi imperfecti' and 'phycomycetes' recorded during the mapping scheme. In addition an up-to-date enumeration of the Myxomycetes of the Netherlands is presented.

Of interest to many will be the chapter giving a summary of the macrofungi, in which the data are more accessible than they are in the main text. The synonymy focuses on names which appeared previously in Dutch lists; the text cannot and should not be taken as a checklist. In fact there are a few errors, e.g. *Tricholoma subpulverulentum* (Pers.) Singer — a combination made long before the attributed authority. But those spotted so far are minor.

With governments' interest being turned to the Rio Convention it is good to see a chapter devoted to threatened fungi, with tables of information arranged in the categories of threat universally defined. The editors with their colleagues have been leaders in this area in Europe.

Despite being in Dutch this is an easily understood publication for English speakers because of the very nature of its contents; a brief English summary is given. The Netherlands Mycological Society must be congratulated on the production of this book; it is a tribute to the many amateurs in the society who made it possible by supplying records, and is an extremely useful publication.

R. Watling

Wind and Trees. Edited by M. P. Coutts and J. Grace. Cambridge: Cambridge University Press. 1995. 485pp. ISBN 0 521 46037 9. £65 (hardback).

This book contains a selection of 27 papers about meteorological, mechanical and physiological knowledge relating to trees and tree growth that were presented at the conference *Wind and Wind-related Damage to Trees* held at Heriot-Watt University, Edinburgh in July 1993. The conference brought together about a hundred scientists from seventeen countries and enabled interdisciplinary discussions between physicists, aerodynamicists, foresters, engineers, physiologists, ecologists, pathologists and modellers.

The book is divided into five sections: Airflow over topography and in forests; Mechanics of trees under wind loading; Tree physiological responses; Impacts of wind on forests and ecology, and Risk assessment and management response. Each section begins with a review followed by papers on special topics. On the whole the book covers wind-related damage well, but there are some weak-