
The genus Acacia is pantropical, with around 1340 described species found in Australia, the Americas, Africa and Asia. The 129 African species are found primarily in drier parts of the continent, with 40 recorded in Zimbabwe. Although the genus was first described in 1754, and a number of taxonomic works and field guides have been produced, this is the first comprehensive guide to the acacias of Zimbabwe, which also provides details of their distribution and ecology.

The introduction describes the taxonomy, early geographic spread of the genus from its centre of origin and present distribution. This is followed by a thorough – and unfailingly clear – dip into its ecology and uses. As a naturalist specializing in elephant ecology, I found this section particularly useful. For a book aimed both at botanists, and the interested public, this broader picture, and the unpretentious manner in which it is presented, is a welcome addition. The ‘Description of Acacias’ section describes the predominant features that aid field identification – trunk, thorns, glands etc – and is satisfyingly free of jargon.

‘How to Use this Field Guide’ describes the four methods provided to identify acacias. The first and main key is dichotomous, and uses vegetative characters, incorporating pods and flowers only where necessary because of their seasonal absence and potential problems associated with this. This is the book’s only key that separates acacias from similar non-Acacia species, as well as separating introduced Acacia species. Two matrices are provided for identification: one, a species matrix, and the other a character matrix, both of which are equally foolproof.

A brief discussion on ‘Collecting Acacia Specimens’ gives valuable advice on how to collect botanical specimens in the field, the drying processes and the importance of unambiguous recording of notes, especially those concerning field characteristics and locality details. Whilst this might sound patronizing to professionals, it adds another welcome explanation for the rest of us who know no better, and are afraid of asking.

The Guide then launches into individual descriptions of the 40 Acacia species, giving a spacious double page for each. The text, on one page, provides a brief description of the species, followed by succinct details of field characters, distribution and ecology. However, like most people I tend to head straight for the pictures. I have used it this guide in the field and yes, it worked even for me. Illustrations include a flowering branch, leaves, flowers and a mature pod, along with enlargements of the glands, leaflets and seeds. A map of Zimbabwe showing the distribution of each species sits neatly at the page’s corner. The illustrations are beautiful and
represent another storming success for Rosemary Wise. I am particularly enchanted by her charming drawings showing the typical habit of each individual, depicted alongside vehicles or elephants or figures to give an indication of size. One small criticism is the extreme ethnic bias of the predominantly white figures seems strangely inappropriate and somewhat embarrassing in a book based in Zimbabwe.

The final few pages whisk through a description of exotic *Acacia* species followed by enlarged illustrations of pods, and, of course, the essential glossary. Quite simply, for someone based in the field, and who needs and wants to understand and identify acacias, this book is ideal. The authors have drawn on vast field experience that has enabled them to come up with fabulous details such as these. I had previously adopted a habitual fear of the standard botanical guides, those that need not only vast prior expertise to understand, but also immense strength to carry. At last I find an attractive, accessible and practical book that makes my ideal companion in the field: mine, already, has become thumbed, grubby and dog-eared through use and admiration. The Zimbabwean bush will never look the same.

J. DYSON

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This delightful pocket-sized little book is the ideal replacement for Clapham, Tutin and Warburg’s *Excursion Flora* (1981). It is only one third the size of Stace’s full-sized *Flora* (1987). The essential difference between this work and the unabridged edition is that it is designed to be a field guide and so must be handy-sized to comfortably fit in the pocket. Many people use the *New Flora* as a reference work but the *Field Flora* is only meant to be used in the field as a portable identification manual for which is well suited. Full coverage is given to all groups except the three notorious microspecies genera, *Hieracium*, *Taraxacum* and *Rubus*, which are keyed out to section only. Hybrids are also briefly covered at the end of each generic entry. Like its predecessor it has a floppy plastic cover with a fashionable ‘retro’ 1970s design. In order to make this volume concise, two thirds of the original text were omitted. This was made possible by omitting all the species and subspecies descriptions, condensing family descriptions and whittling down the 160 pages of illustrations to only 27. More shrinkage was achieved by paring down to a concise index with only generic and English names; species names and authorities are left out. Essentially, what one is left with is a manual of dichotomous keys with habitats and distributions incorporated against each species.

Like the old *Excursion Flora*, there is a perfectly adequate glossary, a regional outline map of Britain, and a vice-county map with accompanying list of vice-counties. As Stace says, the *Field Flora* differs from the old *Excursion Flora*, which
put more emphasis on common species and omitted less common species and less common aliens. I was pleased to see the economy of space, which keeps the book as small as possible, but does not sacrifice clarity. However, those people who like to annotate their own copies may be saddened at the skimpy nature of the margins and narrow spacing.

The recurring error of transposed differentiating measurements between the two subspecies of Trichophorum has been corrected from both editions of Stace’s Flora and some Latin names and distributions have been updated. Another deviation from the second edition of the Flora is in the treatment of Dryopteris affinis, which has not been separated into subspecies because the differences separating them still need to be elucidated. The more difficult genera such as Carex, Cotoneaster, Salix, Potamogeton and Sorbus still retain their illustrations. The differences between Vaccinium oxycccus and V. microcarpum cannot be identified reliably from the key and so one would need to use the new Plant Crib (Rich & Jermy, 1998) for the most recent treatment. Further advances have been in the Plant Crib Pinaceae account, which has added further subspecies to those covered by Stace. There are other updates to be found in the Plant Crib but there is little to be gained to list the advances here.

Personally I am delighted to have such a wealth of information condensed into such a neat little book, which is an excellent companion for field-work in Britain and Ireland.

References


D. R. McKEAN


With numbers 11 and 12 in the series, Oxford University Press continue the excellent Oxford Biogeography Series. Both books are for the most part quite accessible and
both offer a well-referenced route into the literature. I would recommend them for final-year students.

The second edition of *Cladistic Biogeography* is basically unchanged in format since its original publication thirteen years earlier, but contains several important changes to take account of developments in the field of cladistics. The first chapter introduces the field of biogeography with a discussion of the disjunct patterns of diversity across the globe and discusses the development of ideas from Linnaeus to Croizat which have been used to explain these patterns. The second describes the methodology of cladistic biogeography. I found this chapter difficult in the first edition, and no less complicated in the second, but it is a comprehensive overview of the techniques, which has been updated to take account of recent developments in data processing. I think it is easy to become bogged down in the complicated mental gymnastics associated with component analysis – assumptions 1, 2, and 0 and suchlike – and recommend that until you find the need to carry out your own study, you press on to the remaining two chapters which deal with actual organisms.

The contents page suggests that Chapter 3 is essentially unchanged from the first edition, but in fact new and very different examples are used to illustrate the same themes. North Atlantic marine taxa are used to demonstrate the applicability of cladistic biogeography to both terrestrial and marine biota. This theme links into the almost unchanged final chapter, one of whose new sections is an acknowledgement that ocean basins rather than continents may often be the most suitable biogeographical units at the global scale. This chapter is the most contentious, because it seeks to explain some of the thorniest questions of biogeography, including the antitropical distributions of taxa such as *Euphrasia* and carabid beetles, which are found in the boreal and austral regions, but not in the tropics. Is the explanation to be found in the break up of the Pangaean supercontinent, the postulated continent of Pacifica, which predated Pangaea, or in theories of an expanding earth? Or some combination of all three? In some ways this chapter was a disappointment, as rather little has been added to the debate in the intervening years.

Humphries and Parenti ‘prefer to call this book a monograph rather than a textbook’, and whilst I would like to see a book that would tell me exactly how to apply the techniques of cladistic biogeography to a real problem, perhaps the field is simply too fluid for such an approach. Inevitably, I have some quibbles about the layout of the book (e.g. figures poorly integrated with text, and occasionally inserted in landscape format instead of being reduced to fit on a page), but equally I was pleased to see the text broken up by subheadings making it easier to navigate. In conclusion, this is a valuable update of this early member of the *Biogeography Series*.

*Panbiogeography* is a well-written book about another biogeographic technique, which also approaches the subject with a vicariance manifesto. The style is open and readable, and throughout the authors use a satisfyingly wide range of real examples to illustrate their points. I particularly enjoyed the lucid discussion of the mechanisms by which geological processes can cause isolation and the rapid evolution of complex ecological communities from relatively simple ones, and the descriptions of the con-
stant adaptation of ancient communities to ever-changing conditions such that their modern descendants survive in conditions completely different from those to which the taxa were originally exposed. Many of their examples are drawn from Africa and New Zealand, and I learned much about both areas from this book. *Panbiogeography* reads more like a textbook than *Cladistic Biogeography*, and this is best illustrated by comparing their descriptions of the methodologies of the two approaches. The basic approach of *Panbiogeography* is comprehensively summed up in four pages, after which I felt that I could tackle a problem using these methods. By contrast, *Cladistic Biogeography* used over fifty pages of discussion of the techniques after which I felt that I still had only a tenuous grasp of the subject.

For me, however, the very simplicity of the panbiogeographic approach is its undoing. Humphries and Parenti describe cladistic biogeography as having arisen from Platnick and Nelson’s fusion of Croizat’s recurrent patterns with Hennig’s development of cladistics as a tool for reconstructing phylogenies. Put together these lines of evidence can be a powerful tool for explaining the patterns of life which so interest us and it seems almost willfully perverse to concentrate on contemporary distribution patterns without using the illumination of the historical evidence to put these patterns into context. The authors of *Panbiogeography* begin with a discussion of the confusion about the subject in the contemporary literature, but I must confess that after reading their book I too suffer from that same confusion.

C. PENDRY

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