

Book Reviews

Welsh ferns, clubmosses, quillworts and horsetails, 7th ed. G. Hutchinson & B. A. Thomas. Pp. 265. National Museums & Galleries of Wales, Cardiff. 1996. Price £11.00. ISBN 07200-04-35-7.

Welsh ferns is one of those books which has become a familiar old friend, parochially titled but broad in scope and which has developed and for the most part improved with the passing of each of its many editions. The latest, seventh, edition marks perhaps the most radical change, resulting in a book nearly half as long again as its predecessor. Gone are the hard cover and all mention of herbarium records. The major innovation, which I welcome, is the inclusion of maps giving Welsh distribution at the hectad (10-km square) level and thumbnail sketches of broader European ranges. The latter, while somewhat small, convey a useful impression. However the use of a mid-tone for uncertain occurrence is poorly reproduced and unclear.

The introductory preamble on biology and morphology has been split, the morphological section moved until after the fern allies and now relating to the true ferns alone. I think this is a mistake and would have preferred an all-embracing section prior to the species accounts. The many nomenclatural changes made in the 18 years since the last edition have been taken on board, although *Asplenium trichomanes-ramosum* L. should be called *A. ramosum* L., a name itself proposed for rejection. In some contentious areas, e.g. the taxonomy of *Pteridium*, the authors give an overview without explicitly expressing an opinion. The treatment of all British taxa, which always made a nonsense of the volume's title, has been taken to an extreme, with all taxa, however briefly naturalised, getting a mention and a token Welsh name. The manufacture of vernacular names attracts strongly polarised views; I dislike it and it adds here to an already cumbersome and less than easy to use index! The original half-tone plates have been re-photographed and are deplorable. There are niggling errors aplenty. *Cystopteris alpina*, an extinct(?) native, is curiously completely omitted. *Asplenium viride* is given as L., not Huds., throughout. *A. × badense* was convincingly shown to be an aberrant, possibly octoploid, *A. ceterach* and not of hybrid origin in 1989. Herbarium specimens of reputedly British *A. fontanum* do exist, etc. The world distributions for some taxa have been retained from earlier editions although taxonomic changes have occurred in the meantime, e.g. we have the near cosmopolitan distribution of *Trichomanes radicans* given instead of the true Macaronesian-European endemic range for *T. speciosum*. Similarly *Huperzia selago* does not occur as stated in Macaronesia where it is replaced by *H. suberecta*.

In spite of these criticisms there is much to recommend this inexpensive and useful guide, which like its antecedents deserves a place on the bookshelf.

F. J. RUMSEY

The botanists and guides of Snowdonia. D. Jones. Pp. 174. Gwasg Carreg Gwalch, Llanrwst. 1996. Price £6.95. ISBN 0-86381-383-6. Obtainable for £7.50 (incl. p. & p.) from Gwasg Carreg Gwalch, 12 Yard yr Orsaf, Llanrwst, LL26 0EH.

This small softback book is described as “an account of the botanical exploration of Snowdonia from the earlier period when the Herbalists and Apothecaries conducted ‘simpling voyages’ into the countryside to gather plants for medicinal uses, up until the Victorian era by which time botany had developed into a separate science”. Having written comparable accounts in Floras of Shropshire and Montgomeryshire (including tracing different activities of many of the same botanists), I well understand the difficulties of providing readers with a satisfying balance between biographical information, anecdotal material and sometimes long lists of the species found and of maintaining some thematic unity in the work as a whole.

Dewi Jones breaks up his account into 19 chapters, but the guides who led visiting botanists up Snowdon and some of the local botanists, as well as the routes they followed, often serve to link these together. On the historical side (as Gwynn Ellis mentions in his foreword), particularly enlightening is the underlying theme of the contrast between the life style of the English gentry who wished to see the sights and plants of Snowdonia and that of the local peasantry who guided them. I found that the botanical information did not always come to life quite as vividly, but a full index to plant names enables one to trace the story of individual species, sometimes over nearly three centuries. I tried this with *Lloydia serotina* (18 entries, from Edward Lhwyd's discovery of it, published in 1696, to the splendid story of the 19th century Oxford Professor in smooth-soled leather boots who never saw the Snowdon lily in situ on the Glyder cliffs because he was too terrified to open his eyes), *Saxifraga nivalis* (eleven entries) and the two *Woodsia* species (nine entries jointly) and gained a perspective on them which I had not obtained when first reading the book. However, the result was far less satisfying with *Saxifraga cespitosa* (four entries).

I can scarcely fault the botanical index, but too many people mentioned in the text do not appear in the general index. Twelve Robertses and ten Joneses are indexed, but I have found two more of each in the text! The choice of works in the bibliography seems arbitrary, and some of the authors of works mentioned in the text but not in the bibliography are in the index, some not. The twelve colour photographs of plants are satisfactory, but some of the 28 black-and-white illustrations much less so. I wish I knew the sources of the coloured print of the busy summit of Snowdon in the 1850s on the cover and of the monochrome print on the title page.

Jones does not stick strictly to Snowdonia in this book. The first chapter, on the 16th century manuscript herbal of William Salesbury (whom I prefer to spell Salusbury), is included on the grounds that its author "spent the greater part of his life at Plas Isa, Llanrwst", and another chapter is about Hugh Davies's *Welsh botanology* (1813), essentially a Flora of Anglesey with an alphabetical list of Welsh plant names with their Latin and English equivalents. My editorial fingers itched at the erratic punctuation and misspellings; some of the Latin is faulty too. But in the end I was prepared to follow a few byways and to tolerate some bumps along the road. This is a book packed with fascinating information about North Wales, historical, social and botanical.

P. H. OSWALD

The introduction of Chinese plants into Europe. L. A. Lauener, edited by D. A. Ferguson. Pp. xii + 269. S.P.B. Academic Publishing, Amsterdam. 1996. Price Dfl. 140.00/US \$87.50. ISBN 90-5103-130-0.

When Andrew Lauener died in 1991, he left a virtually complete manuscript of this book, the fruits of many years' experience of working with Chinese collections in the Herbarium of the Royal Botanic Garden, Edinburgh. David Ferguson, with the help of some colleagues, prepared it for publication, which was facilitated by friends in The Netherlands.

The author approaches his subject mainly from a systematic angle, unlike Emil Bretschneider's monumental *History of European botanical discoveries in China* (1898), E. H. M. Cox's *Plant hunting in China* (1945) and Roy Lancaster's *Travels in China: a plantsman's paradise* (1989), the longest chapter by far being that entitled "The plants". This consists of an alphabetical account by genus of how some Chinese plants reached our gardens. The factual details (often fascinating) of collecting and introducing them into cultivation are accompanied by comments about botanists who have worked on the genus and their publications, about the names, nomenclatural history and botanical features of certain species, and about their uses both in their native region and in cultivation. All this information is provided in a personal way, reflecting the author's experience and including remarks on who is working on what and what is due to be published soon (data that are inevitably sometimes out of date). Each genus is illustrated by one or more bold line drawings that give a good impression of the plant in question but may on occasion strike some readers as being rather dark, even fuzzy. The book also includes small chapters on China, Chinese place names and plant collectors (alphabetically), a selective bibliography, a useful gazeteer of most place names mentioned (with co-ordinates) and indexes.

Readers interested in the activities of botanical collectors in China will find little in this book that

has not been treated in more detail in the three works mentioned above (only the first two are in the bibliography). What it will do is answer such questions as "Who introduced that species into cultivation?" and, for some species, "Has it always been grown under that name?" A certain amount of apparently irrelevant information, a comment about *Rubus chamaemorus*, *R. idaeus* and *R. fruticosus*, for example, would seem to be aimed at gardeners who are more familiar with European members of the genus than with Chinese ones. In general, however, the information given is usually accurate, though sometimes incomplete. If you know that a garden plant is Chinese in origin, you are likely to find some interesting and/or useful background data about it in this book.

N. K. B. ROBSON

Aquatic plants in Britain and Ireland. C. D. Preston & J. M. Croft. Pp. 365. Harley Books, Colchester. 1997. Price £25.00. ISBN 0-946589-55-0.

The introduction clearly states that this book summarises the distribution, habitat and reproductive biology of the vascular plants which grow in freshwater in Britain and Ireland. For the purposes of identification one is referred to Stace's *New Flora of the British Isles* (1991) or to special literature. I find it a pity that there are no keys or "important diagnostic characters"; there is rather a lot of unprinted paper in the book and it would not have been longer or more expensive with, at least, some information on critical taxonomic features. In some cases this is important because new introductions such as *Cabomba caroliniana* and *Hydrocotyle ranunculoides* are not described in Stace's *Flora*. Granted, both species are illustrated but the illustrations are without scales and are not much more than habit sketches; they do not allow critical determination. It is no doubt unfair to criticise something which is clearly stated not to be an aim of the book but its title and very attractive cover may lead some people to believe it is a "popular" work. This is a serious scientific work written for experienced botanists.

The authors discuss the problems concerning the definition of what an aquatic plant is. They attempt to include those species which "characteristically" grow in water which persists throughout the year. In the Apiaceae some species which are deliberately excluded are listed including *Sium latifolium*; this species germinates under water and develops finely divided submerged leaves and it overwinters under water. This book is for summer botanists. *Apium repens* and its hybrid with *A. nodiflorum* are not even mentioned; in my experience the hybrid is rather more aquatic than, for example, *Calla palustris* and *Myosotis scorpioides* which are included. *Hypericum elodes*, at least in Ireland, may grow in water the whole year but it is not even mentioned, neither are *Cotula coronopifolia*, *Lycopus europaeus*, *Teucrium scordium* and *Samolus valerandi*. The choice of species is a problem of personal experience and is not important – all the "real" aquatics are included – but it would be useful to know which "aquatic" species were intentionally excluded. Each genus but not each species is illustrated. The purpose of the illustrations in an important scientific book like this is not quite clear; some of them, such as *Cabomba caroliniana* and *Lagarosiphon major*, are poor.

Each species has an updated distribution map clearly showing changes in the distribution. Distinct symbols are used for pre-1950, 1950 to 1969, and 1970 and later records. It is very depressing to see the changes since 1950. The introduced species have different symbols and, on the whole, they seem to be doing rather better than the natives. An interesting case is *Sagittaria latifolia* which seems to be slowly taking hold in the south. *Sagittaria sagittifolia* is a very distinct plant: everyone knows what it looks like and it is rarely gathered. Nobody needs to poke into its flowers or put its fruits under a lens. However, if you do it may turn out to be *S. latifolia*. Around Zürich it seems to have virtually replaced *S. sagittifolia* and nobody saw it happen! For this reason it would have been valuable to have some diagnostic characters; the authors do, at least, say it may be overlooked because of its similarity to *S. sagittifolia*.

The habitat descriptions are very concise and clearly presented, also they are well documented. The bibliography runs to 24 pages! The part on reproductive biology is rather mixed: for some species it is excellent but for others almost no information is given. It would have been valuable to know more about which species are self-incompatible and the vectors for pollen transfer among insect-pollinated plants. The nature of the effective disseminules and their dispersal could have

been expanded; the authors have considerable experience with these plants and should, perhaps, have more often added their own observations rather than relying on published work. Conservation designations of the rare species are presented at the end of the book.

I have devoted most of my life to the biology of aquatic plants. This book has delighted me and I have learnt a lot of new information. What more can one wish? This is an essential work for all people concerned with the ecology and management of freshwater. The standard of production is very high – I failed to find any serious mistakes. For a book of this quality and length the price is remarkably low.

C. D. K. Cook

The making of the Cretan landscape. O. Rackham & J. Moody. Pp. 237. Manchester University Press, Manchester. 1997. Hardback £50.00, ISBN 0-7190-3646-1. Paperback £19.99, ISBN 0-7190-3647-X.

Crete is the most southerly region of Greece and the largest, most mountainous Greek island. The native flora is of enormous national and global importance, and one of the choicest in the plant-rich Mediterranean region. Of some 1650 higher plant species, 10% are endemic or shared only with Karpathos and Kasos to the east. This unique and ancient flora, as significant as that of most tropical islands, is also irresistible to the hundreds of British botanists and naturalists who flock there each spring. Now a book is available to supplement their field guides.

In *The making of the Cretan landscape*, English botanist and landscape historian Oliver Rackham and American archaeologist Jennifer Moody present the fascinating and complex story of the vegetation and landscape of this beautiful island. They dedicate just one chapter directly to the flora and two to the vegetation, but their holistic approach is essential to a full understanding of the processes that have influenced, and continue to influence, the varied plant life of Crete. The book is beautifully written, scholarly but never losing its humour or lightness of touch.

This exciting work, which pursues themes familiar from Oliver Rackham's 1986 classic, *The history of the countryside*, will guide the curious visitor, whether botanist, conservationist or bemused tourist, through the complexities of Cretan vegetation and landscape. The authors break away from the conventional philosophy and restrictive practices of contemporary biology and ecology to combine their field observations, trawls through Venetian archives and broad perspective of geography and history. They take the reader from the earliest geological and prehistoric beginnings, through the "Golden Ages" under the Minoans and the Byzantine Empire, superseded by long Venetian and Turkish occupations, to the modern Crete of E.U. subsidies.

On Crete, links with the past are real and tangible. Agriculture has long been the basic occupation of the people, and the prosperous market town of Archanes near Iraklion has remains of a Minoan farm, complete with olive press. Rackham & Moody cite the observation of a visitor from Renaissance Venice who recorded "Iusgriano con fior d'oro" (Golden Henbane, *Hyoscyamus aureus*) on a bastion of Iraklion's huge 16th century city walls. This predominantly south-west Asian plant survives today at the site.

The opening chapters, on geology, physical geography, climate and animal life past and present, include a useful account of how the famous flower-rich gorges and the distinctive flat mountain-plains like Lassithi and Omalos may have formed. The simple, elegant map of gorges and mountain-plains in the preface is the only one of its kind in published form. Oliver Rackham is a fine cartographer and calligrapher and his diagrams and maps embellish the text throughout. He provides valuable distribution maps of major endemics, such as Cretan Wall-lettuce (*Petramarula pinnata*), Cretan Sainfoin (*Ebenus cretica*) and Cretan Dittany (*Origanum dictamnus*), and the principal trees, among them the endemic Ambelitsiá (*Zelkova cretica*) and Cretan Date-palm (*Phoenix theophrasti*), the latter now known also from the Dodekanisos and adjacent Turkish coast. The maps illustrate new data, notably Hungarian Oak (*Quercus frainetto*), otherwise not recorded from Crete. Another oak, *Q. brachyphylla*, is usually recorded as *Q. pubescens*. One should note that Rackham & Moody eschew (probably wisely) recent taxonomic progress, including the revised *Flora Europaea* Volume 1!

Above all, Rackham & Moody endeavour to dismantle the simplistic but widespread notion that Crete, and much of the Mediterranean region, is merely a ruined landscape or "Lost Eden". The

conventional view is that grazing by goats and other domestic stock is the culprit. The authors refute this, stating (their italics) that “*There can be no doubt that in Crete, ‘excessive’ browsing is not an artefact, but is the natural state to which the flora, and especially the endemics, are adapted.*” While native vegetation has certainly been profoundly modified by more than five millennia of human activity, the authors argue that today’s vegetation, notably the scrublands and woodlands, may actually be in better condition than for centuries. This has immense implications for nature conservation in Crete, the rest of Greece and perhaps all the lands around the Mediterranean.

The authors pursue their radical hypothesis with reference to flora, vegetation and landscape history in the context of the socio-economic and historical background of human settlement, trade, rural industry, roads and tracks, animal husbandry and vernacular architecture. The Cretan flora itself remains a dynamic, living resource, with wild plants still being utilised by the local population. The authors argue that, despite often considerable fluctuations in tree cover and agricultural priorities, basic ecological patterns and processes remain the same. Indeed the ancient Minoans and Mycenaeans may well have known similar vegetation to what we see today. Overgrazing and bulldozing of new olive terraces is certainly a problem in many areas, but once the visitor starts to look around, it is remarkable how much land is covered by impenetrable scrub and stands of woodland, wood-pasture and what the authors rightly call savanna. Rackham & Moody are undoubtedly closer to the mark than the Greek pundits who see Crete’s apparent lack of forest cover as another calamity of Turkish rule!

Rackham & Moody demonstrate convincingly that most of the woody vegetation has either persisted or regenerated over the last 150 years. Landscape drawings of 19th century visitors such as Edward Lear in 1864 show this clearly. Pines, cypresses, maples and oaks have invaded former fields and terraces, both in the lowlands and the mountains. In western Crete, high maquis dominated by Strawberry Tree (*Arbutus unedo*) and Tree Heather (*Erica arborea*) has developed into dense woodland. This echoes a trend seen over the rest of Europe in the late 20th century, as people drift away from the countryside and land falls out of cultivation.

In the final chapter, “Conservation and the future”, the authors are more optimistic than most commentators. Nevertheless, they are concerned about current trends in the Cretan landscape. They note especially ribbon development on the coast, destructive bulldozing for new roads and olive terraces, and “the idea that the irrigation of olives is a necessity rather than a bonus. The search for water has dried up rivers and springs . . . All this is for a subsidized monoculture unlikely to last long.” Certainly, arable weed communities such as those in small upland fields dominated by bulbous or tuberous-rooted, arable weeds like wild tulips and *Geranium tuberosum*, are threatened by progress. As all over Europe, wetlands have disappeared or diminished, although coastal lagoons and marshes survive here and there. Fortunately, apart from plants of coastal sands such as *Androcymbium rechingeri* and *Centaurea pumilio*, relatively few endemic plants are threatened by habitat destruction. Many are under threat due to their natural rarity, but they grow in remote places with few or no visitors. Most occur on remote rocks and screes, high up on the sides of gorges or precipitous cliffs; several, like Cretan Wall-lettuce and *Verbascum arcturos*, thrive on walls.

The authors rightly conclude that the way forward must lie in education, and are cheered by the fact that younger people in Greece are waking up to the interest, value and fragility of their native environment. They stress the contribution of ecotourism, since increasingly people visit Crete for its natural history. It is certainly a way to restore prosperity and people to village communities in the mountains. The island has breathtaking, dramatic scenery, fine antiquities and excellent tourism facilities, and not least traditional Greek *xenophilia* or hospitality to travellers (these days, alas, tempered by a canny, sometimes aggressive commercial streak). Even ecotourism can damage fragile plant, animal and human communities, but it is much less a threat than outright habitat destruction through uncontrolled development.

Oliver Rackham and Jennifer Moody provide much food for thought, and a good read on the long flight to Chania or Iraklion. Their splendid book will provide the thinking naturalist – why do so many amateur botanists merely want *names* for plants? – with the indispensable background information to appreciate the Cretan flora. One hopes too that at least the odd copy of *The making of the Cretan landscape* finds its way on to the desks of decision makers and politicians in Greece. The book is a triumph, a milestone in the study of the Mediterranean world and its ecology.

J. R. AKEROYD

Flora of Great Britain and Ireland. Volume 5. Butomaceae–Orchidaceae. P. D. Sell & G. Murrell. Pp. xxi + 410. Cambridge University Press, Cambridge. 1996. Price £60.00. ISBN 0-521-55339-3.

In the light of destruction of forests for paper, one has to ask with the publication of the third major Flora of the British Isles by Cambridge University Press in ten years, is it worth having? My feeling is an emphatic yes! Chop down those forests – this is a landmark in British botany. The Clapham, Tutin & Warburg era can now be laid to rest with the highest honours and affection.

The Flora of Great Britain and Ireland has largely been written by Peter Sell with the assistance of Gina Murrell and Potamogetonaceae and Ruppiaceae contributed by C. D. Preston. The aim of the Flora is to supply full descriptions of all the species in Stace's (1991) *New Flora of the British Isles*, to include all the large apomictic genera and many infraspecific variants, and to add more information about hybrids. It is thus a detailed desk-top reference work complementary to Stace, the latter concise and portable.

The Flora follows the classification used in Stace's *New Flora* (1991) and Kent's *List of vascular plants of the British Isles* (1992), resulting in a degree of harmony between the three, with the genera and species sometimes in a different order (Pontederiaceae is listed under Bromeliales in the Conspectus but in the correct place in the text). There are some taxonomic differences from Stace and Kent such as the plant hitherto called *Zostera angustifolia* included under *Z. marina*, *Carex viridula* under *C. flava*, and *Dactylorhiza lapponica* under *D. traunsteineri*. As a result of the extensive nomenclatural work done on the British flora in recent years there are few changes in names, and there is no difficulty in relating the three due to the extensive synonymy.

As the Flora aims to provide full descriptions I checked those for the first species on or after pages 1, 90, 180, 270 and 360 against our herbarium material in the National Museum and Gallery of Wales (NMW). In general the accounts all worked well though there were the few usual specimens and measurements exceeding the stated limits, perhaps because we grow larger and better plants in Wales than in Cambridge. The bracteole-like structures present in the inflorescence of *Butomus umbellatus* were not mentioned. Our plants of *Carex diandra* are significantly larger with stems to 75 cm and leaves to 60 cm × 4 mm. The account of *Deschampsia flexuosa* is very good. We have no material of *Chionodoxa luciliae* and I wonder if it really merited inclusion as it has only been recorded from lawns of Cambridge Botanic Garden. I was surprised to find *Ophrys insectifera* has leaves up to 8 cm wide – ours are rarely more than 2 cm. Overall there was a refreshing feeling that the measurements and descriptions had been looked at afresh and not copied from elsewhere.

The keys to species include infraspecific taxa as well as the species, and those to *Juncus*, *Luzula* and *Puccinellia* I checked worked well. A few literature references such as the Biological Floras or taxonomic papers are cited. Summary distribution data for all taxa are provided. Inevitably a few are out of date (e.g. *Cyperus fuscus* has been known in Berkshire since the early 1980s) and later volumes will no doubt draw on *Atlas 2000*.

Judgement on treatment of critical groups will really have to wait for the *Hieracium* treatment in volume 4, and the only really critical genus dealt with is *Dactylorhiza*. The genus has a novel treatment, probably the most complex in the Flora, with numerous subspecies, varieties and forms, and useful details of the hybrids. I found it difficult to apply to herbarium material due to the necessary emphasis on flower features, but the detailed accounts will help interpret variation present in the field. The drawings of the labella will help, and I would have liked colour photographs.

A substantial amount of the book is dedicated to the intraspecific taxa, and this Flora provides the first recent serious attempt to summarise the information available. This was my only disappointment, not because of what was included but because I was left wanting to know more. There is no means of tracing any infraspecific taxon not included in the Flora, even if they are no longer worthy of recognition. For instance, we have many specimens of *Deschampsia flexuosa* in NMW named as var. *montana* (L.) Hook. f., a variety mentioned in Hubbard's *Grasses* (1984), and I was left wondering if it existed or not, and similarly what has become of *Carex diandra* var. *major* Koch? Perhaps these are our big Welsh plants?.

Many infraspecific taxonomic problems remain to be investigated. Are there Norfolk plants of *Alisma gramineum* subsp. *wahlenbergii* or not? There are specimens of *Juncus maritimus* var. *atlanticus* from Cornwall and Hampshire in BM (and possibly elsewhere), and a similar plant occurs down the west coast of Europe to at least northern Spain where it appears to have been described as

var. *longipedicellatus* Sen. & Elias. Similarly, a form of *Juncus maritimus* visually identical with var. *congestus* occurs in Spain where it has been named as var. *compactus* Elias. Jan Kirschner and I do not accept *Luzula multiflora* subsp. *frigida* as a British plant, though the material of *Luzula multiflora* from Scotland would repay further study (our 1996 subsp. *hibernica* was published too late for inclusion). I am uneasy about the way infraspecific taxa in many genera have been strait-jacketed into one infraspecific rank, but thankful that there are few new combinations as a result. These problems simply point to the huge amount of work which remains to be done on infraspecific taxa, and this Flora gives an excellent baseline from which to direct further work.

The full descriptions of aliens will be helpful to botanists without ready access to literature or herbaria. An alien in the hand can now be checked in detail against the description – all too often the brief accounts in some Floras result in an assumption that the plant in the hand is the one in the book. Deciding which aliens to include and which to exclude presents its usual difficulties; the approach taken is to include as many as possible. Some species have been given fuller treatment than others (compare on the same page the full account of *Chionodoxa luciliae*, with the briefly mentioned *Muscari azureum*, apparently naturalised in derelict parkland in Somerset). On the basis of the information available to date, both *Serapias lingua* and *S. parviflora* merited full treatment as native species.

The book has a laminated hardback cover with a picture of bluebells. It contains an introduction, a conspectus of families for the whole work and a key to the monocotyledonous families included, the systematic accounts, a separate list of new taxa and combinations, a glossary and an index. The typeface and layout is that of the third edition of Clapham *et al.*, *Flora of the British Isles* (1987) and is not distinctive, and the illustrations are somewhat functional. There are a few minor formatting and typographical errors.

To sum up, the two key features of the Flora are the full descriptions of British plants with updated nomenclature, and the treatment of the infraspecific taxa. It is an essential reference work for academic and serious amateur botanists in the British Isles, and probably for all in north-west Europe. This is a taste of Peter Sell's outstanding, detailed knowledge of the British flora after a lifetime of study, and I sincerely wish Peter and Gina the best of luck with its completion.

T. C. G. RICH

New Flora of the British Isles, 2nd ed. C. A. Stace. Pp. xxx + 1130. Cambridge University Press, Cambridge. 1997. Price £28.95. ISBN 0-521-58935-5.

It is five years since Arthur Chater reviewed the first edition of this book in *Watsonia* 19: 161–163. As predicted it has become the standard Flora for taxonomy, nomenclature and identification within the British Isles. The limited and idiosyncratic typeface and skeletal index of the first edition have now been thoroughly remedied. The index now occupies 131 pages and the new typeface is clear, more varied and less wasteful of space. As a consequence, on roughly the same number of very slightly enlarged pages, a more generous margin is provided at the foot of each page and an additional 320 taxa are included.

The book is bound in similar flexible plastic covers to the first edition. Despite its weight, just exceeding 1.5 kg, the bindings appear to be adequately robust. I have received but one report of the binding of the first edition failing. Although the plastic cover is clearly designed to improve its durability in the field, the weight and bulk of the book are a severe drawback to it becoming a regular companion. As an aid to its use in the field, a centimetre and millimetre scale is provided on the inside front cover. In this edition its length has been usefully extended but it has been placed so close to the edge that the millimetre scale is barely visible on my copy.

Taxonomic and nomenclatural changes between editions have been mercifully few. I am particularly pleased that the name *Asplenium viride* has been restored to us, together with *Drosera anglica* and *Fragaria moschata*. On the other hand *Helianthemum canum* becomes *H. oelandicum*, to join a select band of half a dozen taxa or so now sporting new names. *Huperzia selago* has been split into two subspecies, whilst *Arctium* has been completely revised, following H. Duistermaat, to now recognise three species only. This latter genus is still described as “difficult”, which on first use of the key and new descriptions cannot be disputed. Other minor changes have been made to the

treatment of subspecies, e.g. within *Luzula multiflora*. Elsewhere many of the larger keys have been subject to minor changes to improve their performance and take in additional taxa. *Cotoneaster*, for example, has been extended from 45 to 68 species.

The treatment of hybrids is still very uneven. Few generic keys (the most notable exception being *Potamogeton*) include hybrids. Some are described in detail whilst only the British distribution of others is mentioned. The generally sparing treatment of intraspecific taxa may also still not suit all tastes. No attempt has been made to extend the ecological notes which are still far more brief than those of Clapham, Tutin & Moore (1987) in their *Flora of the British Isles*. Nor is any information provided on world distribution except for introduced taxa. Chromosome numbers have, however, been added to the second edition and distribution information mostly brought up to date. Technical terms have, according to the preface, been further reduced. This is to be welcomed and should be carried further in future editions, perhaps also considering an expansion of the glossary. In this, as in the first edition, no doubt to save space, users of the glossary are referred back to the generic texts for an explanation of some terms. This is not helpful when the latter description has forced reference to the glossary in the first place.

Improvements have been made to the illustrations. The small unsatisfactory silhouettes of *Euphrasia* have been replaced with excellent line drawings. Examples of species from the major sections of *Hieracium*, *Taraxacum* and *Rubus* are now included as line drawings for the first time, as are illustrations of *Polypodium* sporangia. Unfortunately no changes have been made to the illustrations of *Odontites*, *Veronica hederifolia* and *Ranunculus omiophyllus* criticised by Chater in his review of the first edition. In compensation other numerous small improvements include the addition of numbers to the family and generic names on the page headers, making recourse to the now formidable index largely unnecessary when moving from one key to another.

Taken together, the typeface change and large number of other small changes and improvements render this new edition so much more pleasant to use that, even if you already have a first edition, I strongly recommend that it is worth purchasing the second edition. It is still excellent value for money and whilst the native flora may not be covered in such depth as in other Floras, this is more than made up for by the large number of non-native taxa not covered elsewhere so conveniently. As undoubtedly the standard Flora for the British Isles for years to come, it is to be hoped the publishers will consider the investment worthwhile to ensure that the quality of the illustrations in future editions matches the quality of the text.

R. G. WOODS

A dictionary of plant-lore. R. Vickery. Pp. 437. Oxford University Press, Oxford. 1995. Price £14.99. ISBN 0-19-866183-5.

Anyone accustomed to the orderly, cut-and-dried world of field botany is likely to experience a series of shocks on any extended acquaintance with the literature of the study of folklore. For a start, there is no consensus on where that subject begins and ends. Many folklore collectors, for example, ignore medicinal uses of herbs, apparently regarding these as too mundanely practical to count for their purposes and perhaps better left to their kinsmen, the students of folk life. Then there is the lack of large-scale compendia, on the lines of *Topographical botany* or the *Biological Flora of the British Isles*, which would enable one to tell what is known already. In the absence of such works much energy is wasted in recording the same things over and over again. Only rarely, moreover, is information quantitative or spatial, making it impossible to tell how many people in any one locality or area follow the belief or practice in question or how widely it is to be met with in terms of geography. Newcomers will further find to their horror that few books on folklore are indexed, so there is usually no alternative but to search through them page by page.

For having the persistence to operate on such a dauntingly unsatisfactory front the author of a volume like the one under review deserves both sympathy and admiration. To a large extent, though, Vickery has sidestepped the worst of the problems by restricting his concerns in this particular case mainly to items recorded in the period 1981-94, just to the British Isles and just to plants (wild and cultivated alike). Essentially the book is the fruit of information provided, unsystematically, by some 700 informants. There is no means of knowing how far the reports

received were representative of the present-day pattern of behaviour overall, and all that could be done was to select some of the reports for quoting, simply as illustrations of the variety of beliefs and practices attached today to a great range of plants even in such a comparatively sophisticated set of cultures as those to be found in these islands. Many of the quotations are quite lengthy and make colourful reading. Within these limitations the coverage is comprehensive, and the average reader should find his or her curiosity satisfied on just about every matter likely to raise a query. The fact that the author is an experienced botanist in addition to being one of Britain's leading folklorists gives this work a special authority, and the punctilious way in which the source is cited for every particularised piece of information is assurance enough of the scholarly standard that obtains throughout.

Handy in size, attractively produced and very reasonably priced, this is a work which many readers of this journal will want to have not only on their shelves for reference, but also on their bedside tables for occasional dipping into – worthy successor as it is to those long-prized Victorian standbys, Mrs Lankester and the evergreen Anne Pratt.

D. E. ALLEN