

Book Reviews

Ireland. A Natural History. David Cabot. Pp. 512, with over 230 illustrations. Harper Collins, London, 1999. Hbk £34.99. ISBN 000–220079–1. Pbk £17.99. ISBN 000–220080–5.

This book has been much needed. Ireland, always in the news, is a source of intense fascination to outsiders, not least naturalists and botanists. This splendid addition to the New Naturalist Library, not so much introduction as comprehensive synthesis, is a fact-packed guide to the natural wonders of our smaller, enigmatic western partner. A friend, quizzing me about Ireland, observed dryly “They tell me it is very green”. Yes, for here is an Atlantic land of water – soft rainy days, lakes, rivers, streams, boglands, beaches and lush pastures. Conversely some of Ireland’s richest habitats are the (relatively) dry islands of glacial eskers, sand-dunes, cliffs and, above all, limestone pavements.

Natural history in Ireland is all about the ecology of animals and plants at the furthest north-western fringe of Europe, made the more exciting by millennia of isolation. For the visitor, or a naturalised denizen like David Cabot, Ireland is irresistible, not least for plentiful opportunities to compare and contrast with Britain. The author’s Preface, which tells how he was instantly grabbed by the sight of unfamiliar hooded crows, and much else beside, has a familiar ring (in my case it was Brent geese feeding near my tatty Dublin lodgings). Cabot is primarily a zoologist but his interests range far and wide.

The book starts from a historical perspective, taking us from the Christian saints and scholars of the Dark Ages through bemused 17th century English visitors and invaders, the confident and learned world of 18th century Georgian Dublin and the 19th–early 20th century heyday of Irish natural history, to more recently departed polymath giants like Robert Lloyd Praeger (1865–1953) and the B.S.B.I.’s own David Allardice Webb (1912–95). The author notes the remarkable upsurge in Irish plant and animal recording during the last 25 years, although he could perhaps have taken a little more account of recent floristic literature and so many exciting discoveries such as *Trifolium occidentale*. He then talks us skilfully through the biological history and chapters on the vegetation, flora and fauna: mountains and uplands, peatlands, lakes, rivers, the limestone pavements and turloughs, the (sadly depleted) woodlands, the farm landscape, and the coastline and surrounding seas.

The book covers many well-known botanical areas, notably the legendary Burren landscape and the Killarney oakwoods, and equally fascinating but less publicised treasures such as the Scragh Bog fenland in Westmeath, the species-rich mineral flush in Bellacorrick Bog in West Mayo, Uragh Wood in Co. Kerry (with its Kerry spotted slugs), the precipitous arctic-alpine plant communities of Benbulbin, Co. Sligo, and the extensive sand-dunes and machair of the north-western coasts. The text also covers several of those individual Irish plants such as Strawberry Tree, *Arbutus unedo*; Cottonweed, *Otanthus maritimus* (on the Co. Wexford coast) or the special heaths of Connemara, that are absent – or largely so – from Britain, and so fascinate natives and visitors. The chapter on mountains looks at the conundrum whereby Ireland has a relatively poor mountain flora, but one of huge botanical interest, with arctic-alpines frequently descending to sea-level.

The last chapter is devoted to conservation, for a long time haphazard in Ireland but now given strength by EU law. Appendices at the end of the book list, with brief notes on interest and location, the nature reserves in the Republic of Ireland and Northern Ireland. Although the two political regions of the island have by necessity had separate statutory bodies for conservation, it is to the credit of the natural history community that it has never established any cross-border or sectarian division.

Here is a fine example of the high quality scientific natural history writing that is at the heart of the best New Naturalist volumes. For the British botanist keen to know Ireland, I can think of few better prescriptions than to read and digest Cabot’s book, browse through the classic works of Praeger and, while you are at it, take out a subscription for *Irish Naturalists’ Journal* to keep the story updated.

J. R. AKEROYD

Flora Nordica. Volume 1. Edited by B. Jonsell. Pp. xxii + 344. The Bergius Foundation, the Royal Swedish Academy of Sciences, Stockholm. 2000. €60. ISBN 97 7190 033 0.

The *Flora Nordica* Project was initiated in 1987 to produce “a comprehensive, diagnostic Flora of high scientific standard covering the vascular plants”, some 4,600 altogether, of Denmark, Finland, Iceland, Norway and Sweden, including the Faeroes, Jan Mayen, Bear Island and Spitsbergen. The chairman and editor-in-chief is Bengt Jonsell, well known in the B.S.B.I. and one of our Honorary Members. The first of the expected eight or so volumes is now published, covering Lycopodiaceae to Polygonaceae in *Flora Europaea* order. All but one of the 31 authors are from the Nordic countries. A good flora, and this is clearly a very good one, can only be properly assessed after years of constant use, so rather than writing a review I will attempt to indicate how useful this book is likely to be to botanists in Britain and Ireland.

Flora Nordica is written in English. It gives practical and concise dichotomous keys, plenty of synonyms which are in most cases adequate for our purposes, vernacular names where these are already available in the Nordic languages, and indication of types for all names based on Nordic material. The good and clear descriptions are about as long as those in Sell & Murrell's *Flora of Great Britain and Ireland*. Distribution and habitat are given in considerable detail, and most species are mapped by provinces. There are paragraphs on Biology, Variation, Hybridization and Similar Taxa, and there are numerous line drawings, mostly of diagnostic features. Chromosome numbers are included, with the origin of those based on Nordic material being given. Subspecies are given full treatment, and varieties are included though these do not get much of a showing in the present volume. An outstanding feature is that all hybrids are described or at least diagnosed. Casuals are treated in reduced typeface and format depending on their frequency, and this leads to a rather fussy appearance and, for British readers, a sometimes annoying inconsistency of descriptive information. *Flora Nordica* thus provides a great deal more information, both in kind and in depth, than any modern British Flora.

Volume 1 turns out to be very applicable to the British flora. In the families covered, 200 out of the 270 species in Stace are also in *Flora Nordica*, i.e. 74%. (Conversely 200 out of the 288 species in *Flora Nordica* are also in Stace, i.e. 70%.) The accounts of the two largest families serve us particularly well, 90% of the Stace species in the Salicaceae being covered, and 81% in the Polygonaceae. In both ferns and conifers 69% are covered. In *Salix*, *Flora Nordica* describes no fewer than 111 hybrids, while Stace has 67 and describes only 15. Probably no other foreign Flora is for us so relevant and worth studying. For its descriptive treatment of hybrids alone it is unique, and in the paragraphs on biology, habitat and variation in particular there is a vast amount of information otherwise available, if at all, only widely dispersed in the literature. Although they are working from opposite ends of the classification and direct comparison is impossible, on the evidence of the available volumes *Flora Nordica* and Sell & Murrell provide similar amounts of description and infraspecific taxonomy, while the former provides a great deal more other information.

The taxonomy is generally familiar, and where unfamiliar it is usually enlightening. For example, *Polygonum aviculare* has six subspecies, including our *P. boreale*, *P. rurivagum* and *P. arenastrum*, surely a more reasonable solution than trying to separate them absolutely as species. On the other hand, the subspecies of *Rumex crispus* are not recognised, and it is suggested that part of the variation may be due to introgression with other species. In the very thorough account of *Salix*, *S. fragilis* is very narrowly defined, with the material with hairs on the buds and young leaves being ascribed to *S. × rubens*, the hybrid with *S. alba*. (In one of the few conspicuous errors in the book, *S. × rubens*, though included in the vegetative key, is omitted from the key to material with female flowers.) Quite extensive essays are devoted to some of the major taxonomic problems, such as in *Betula pubescens* and *B. tortuosa*, *Rumex acetosella* and *Salix repens*. There are numerous instances where one is stimulated to apply characters and ideas to our own plants. Is it really true that anther-length provides an absolute distinction between *Rumex acetosella* subsp. *acetosella* (1.2–1.5 mm) and subsp. *angiocarpus* (0.8–1 mm)? If so, it would be very useful in this dioecious species, but the occurrence of mixed populations makes it difficult to check with certainty.

As *Flora Europaea* neared completion in the mid 1970s, a group of British botanists under David Valentine began planning a “Critical Flora of Great Britain and Ireland”. This envisaged a

work very much along the lines of *Flora Nordica*, but it never got beyond the planning stage, partly for lack of funding. Much of the momentum went instead into the Floras by Stace on the one hand and Sell & Murrell on the other, with Clapham, Tutin and Moore occupying the middle ground. We must congratulate the Royal Swedish Academy of Sciences for supporting such an uncompromisingly thorough international project as *Flora Nordica* through the Bergius Foundation, and our Nordic colleagues for bringing this first volume to completion. Anyone seriously interested in the British flora will find it both stimulating and very useful, and will be consumed by envy.

A. O. CHATER

William Turner. Libellus de re herbaria novus 1538. Edited with a translation into English by Mats Rydén, Hans Helander & Kerstin Olsson. Acta Societatis Litterarum Humaniorum Regiae Upsaliensis 50 (ISSN 0280-0918). Pp. 146. Swedish Science Press, P.O. Box 118, SE-751 04 Uppsala, Sweden. 1999. Paperback with dustcover, SEK150 (+ postage and handling). ISBN 91-630-8620-4.

"The chief purpose of the present volume," begins the preface to this simple but scholarly and elegantly produced book, "is to make the whole of William Turner's *Libellus de re herbaria novus* (1538), the first scientific botanical treatise published in England, available in English, with historical, textual, linguistic and botanical commentaries." For this, the team who produced it deserves the gratitude of anyone interested in the history of British botany, and particularly of our plant names. William Stearn's lavish edition of *Libellus* and *The names of herbes* (1548), published by the Ray Society in 1965, provided facsimiles of the two texts and revised versions of indexes identifying Turner's plants, originally published by B. Daydon Jackson and James Britten over a hundred years ago, but no full translation of Turner's Latin text.

William Turner, described by Charles Raven as "the true pioneer of natural history in England", was born at Morpeth in Northumberland around 1510, became a student and then a Fellow of Pembroke Hall (now College), Cambridge, and died in London in 1568. He is best known for his great *Herball* (1551-1568), written after several years of self-imposed exile on the Continent for religious reasons from 1540 had widened his experience; but his pioneering work, *Libellus*, published before he left Cambridge, reveals him as first and foremost a botanist (with a primary interest in the naming and description of plants) rather than a herbalist.

This new edition of *Libellus* has a 13-page introduction, which succinctly discusses Turner as botanist and plant-name scholar; the significance, sources and contents of his first botanical book; the English, scientific and officinal plant names in it; Turner's Latin; previous editions of the book; and the editorial principles of the present one. We learn that the quarto volume of 20 pages is organised, in roughly alphabetical order, in 148 sections in the sequence of the scientific names, describes or mentions some 175 plant taxa, the great majority flowering plants (native and non-native), and includes some 255 English names (or forms); of these "no fewer than 44% are used as standard or *Flora* names today (form and spelling disregarded), with same or different botanical reference" and some 15% are, the editors believe, "first attested there".

There follows a facsimile of the only known extant copy of *Libellus*, in the British Library. Though the facsimile in the Ray Society edition is cleaner, this one, despite some quite serious show-through from the reverse sides of the pages, creases and other blemishes often removed in the former, is actually clearer where the printing is faint or smudged. It also provides a more authentic representation of the original. Next come a transcript and translation, set out on facing pages. The latter, derived from a "basic translation ... carried out as a term paper in Latin" by Ms Kerstin Olsson of the Department of Classical Philology, Uppsala University, is unstilted but faithful to Turner's Latin. [Indeed, having compared the translations of the preface and the entry under "NARCISSVS" with those of Charles Raven reproduced in the Ray Society edition, I tend to favour the new ones.] This section is followed by a helpful commentary on selected phrases, set out under headings identical to those in the transcript and translation. Together, these two sections occupy 69 pages. One of my few criticisms is that, when one is looking something up, it is difficult to see at a glance which of the two one has opened: running headings would have been helpful here.

Much has been made of the unwieldy length of pre-Linnaean plant names, but, as the introduction to this book points out, there are “no polynomial phrase-names in Turner’s works”: indeed “one-term terminology” (e.g. “ACORVM” for *Iris pseudacorus*) is the rule, occasionally with a synonym, while 9% of the headings are binomials and more of these occur within the text; a few (e.g. “*Plantago maior*” and “*rumex acetosus*”) are “still with us as standard names, unaltered or only slightly modified”.

The book ends with three tables (the first with six pages of notes), a brief index of persons and places, and five pages of bibliography. The first table, in four columns, gives Turner’s English and scientific names with their modern equivalents, the second Turner’s scientific names with their modern equivalents, and the third the modern scientific names and the corresponding English names in Libellus. These are approximately equivalent to Tables C, A and B respectively on pp. 61–73 of the Ray Society volume, based on those of Jackson (1877 and 1878), and reveal few changes in the identification of Turner’s taxa.

I strongly recommend this excellent little book (or libellus!).

P. H. OSWALD

Flora of North America north of Mexico. Volume 22 Magnoliophyta: Alismatidae, Arecidae, Commelinidae (in part), and Zingiberaceae. Flora of North America Editorial Committee. Pp. xxiii + 352. Oxford University Press, New York & Oxford. 2000. £65.00. ISBN 0-19-513729-9 (v. 22).

This is the fourth volume of the *Flora of North America* to be published. It provides accounts of the monocot families from Butomaceae to Marantaceae in the Cronquist system, excluding the families Cyperaceae and Poaceae which are reserved for later volumes. Many of the 30 families included are widespread in the North Temperate zone, and have numerous representatives in the British Isles. The largest of the Temperate families are Juncaceae (118 species), Potamogetonaceae (37) and Alismataceae (34). However, a substantial minority of the families covered are primarily Tropical, with many of their North American species restricted to the southern fringes of the continent. These include Commelinaceae (51 species), Arecaceae, perhaps more familiarly as Palmae, (29), and the slightly more widespread Xyridaceae (21).

The format of this Flora has been outlined in the reviews of two earlier volumes in *Watsonia* **21**: 141 (1996) and **22**: 195–6 (1998). In addition to the basic features common to most Floras, it contains distribution maps, some biological, ecological and ethnobotanical information and very useful literature references. (Perhaps mindful of the ever-litigious nature of American society, the editors warn readers that they do not encourage or recommend the reported folk remedies or culinary practices!). Botanists accustomed to Stace’s *New Flora* will notice relatively few differences in the treatment of species which are common to the British Isles and North America. Generic concepts are usually similar, although *Potamogeton* Subgenus *Coleogeton* is separated as the genus *Stuckenia*. At lower taxonomic ranks there are occasional divergences in nomenclature (e.g. *Potamogeton oblongus* rather than *P. polygonifolius*) and in taxonomy (e.g. *Juncus balticus* is treated as *J. arcticus* var. *balticus*, part of a “wide-ranging and obviously polymorphic complex”). As European authors usually restrict their attention to European plants and North American authors to the American flora, there are often unresolved questions about the relationships between the two. Are the American *Juncus arcticus* var. *alaskanus*, *Potamogeton strictifolius* and *Sparganium eurycarpum* synonymous with the European *J. arcticus sens. str.*, *P. rutilus* and *S. erectum*? These issues are sometimes discussed, sometimes ignored.

In the account of the Potamogetonaceae by R. R. Haynes & C. Barre Hellquist, I was less struck by divergences in taxonomy than by the differences in approach to the genus compared with European authors. They “strongly recommend that no one collect specimens of Potamogetonaceae that are lacking reproductive structures” and that “all specimens should be collected when in fruit”. A herbarium built up on these lines would be a useful collection of voucher specimens, but would provide no information on the over-wintering habit of species, or their first leaves or phyllodes; even flower and pollen characters would be past their best and turions probably under-represented. Species such as *P. robbinsii* (which “rarely flowers”) would rarely be collected, and sterile hybrids would be overlooked. In fact, although the authors say that “hybridization is common among

members of the genus" they provide very little information about hybrids, simply listing those accepted by Hagström in his 1916 monograph and by later authors. This comes as a severe shock to anyone familiar with the history of *Potamogeton* studies, as Fernald in his 1932 revision of the North American linear-leaved species famously criticised Hagström for proposing "preposterous hybrids (of hypothetical parents thousands of miles apart)". It is a pity that the opportunity was not taken to produce a revised treatment of the North American hybrids in this volume.

The account of *Typha* provides a contrast to that of *Potamogeton*, as C. Galen Smith draws on the results of 40 years' study of the genus in North America to provide a treatment in which hybrids are keyed out and *T. × glauca* (a "noxious weed") is illustrated alongside its parents *T. angustifolia* and *T. latifolia*.

Exchange of plant material between Europe and North America has been taking place ever since the European discovery (or rediscovery) of the continent in 1492. This Flora provides details of North American aliens which are to varying degrees naturalised in Britain, including *Elodea canadensis*, *E. nuttallii*, *Juncus tenuis*, *Lysichiton americanus*, *Sagittaria latifolia* and *S. rigida*. In the account of *Elodea* Haynes notes that in contrast to their behaviour in Europe, he knows "of no instance in North America where *Elodea nuttallii* or *E. canadensis* is weedy". Surprisingly, there is no mention in this account of the occurrence of hybrids between these two species in North America, although the monograph by Cook & Urmi-König in which this possibility is suggested is cited. There are many more European plants naturalised in North America than *vice versa*, and some of the species included in this volume are *Butomus umbellatus*, *Hydrocharis morsus-ranae*, *Juncus capitatus*(!), *J. compressus*, *J. inflexus*, *Luzula pallidula* and *Potamogeton crispus*. *Hydrilla verticillata* has spread widely since it was first recorded in the U.S.A. in 1959; it is described as "widely distributed in the Eastern hemisphere but it is uncertain as to where it is truly native". Could this species, like *Aponogeton distachyos* (S. Africa) and *Egeria densa* (S. America), have been introduced to both Europe and North America?

Botanists who need to identify plant material from North America will clearly find this Flora indispensable. I hope that I have written enough to show that those whose interest lies in the taxonomy and distribution of the British and Irish flora will also find much of interest in it.

C. D. PRESTON

A flora of Tiree, Gunna and Coll. D. A. Pearman and C. D. Preston. Pp. 168. Published privately by the authors. 2000. £9.00. ISBN 0-9538111-1-5.

After several recent floras which have left a visible bend in my bookshelves, it is a pleasure to have a book which can be taken along on a trip without a second rucksack. And to use the book will involve a *trip*, as Coll and Tiree, along with Colonsay, are the least accessible of the Argyll islands and taking a car is an expensive luxury. In terms of pages per unit area, it is arguable that this is actually a very large flora, as the islands are small, covering bits (sometimes very small bits) of only eight hectads and this, at my reckoning, runs out at about 20 pages per hectad. The relative value is even better if you work it out in tetrads.

Whatever currency you use, this excellent account of the flora of these islands is a good buy. From a decision to produce a flora in 1996 to its publication has taken a mere four years and only one dedicated field trip, and this during a period in which both authors were much involved in other projects. Much of the usual process of balancing coverage of different areas and habitats and the checking of records has clearly been cut short. As the authors acknowledge, it would have been a difficult process from hundreds of miles away. I am glad that this was not regarded as an obstacle, as I would much rather have this somewhat incomplete account than no flora at all.

As with all floras, this account has the sense of a "work in progress", heightened by the remoteness of the islands and the history of recording here. Throughout most of the Highlands and Islands, resident botanists are (and have always been) very sparse and most recording is done by a limited number of expeditions, usually in high summer with all the bias that this induces. Fortunately, Coll and Tiree have proved an attractive target, both for itinerant botanists, particularly Joan Clarke and friends, and institutional study, notably Heslop Harrison in the past and Scottish Natural Heritage more recently, as the impressive bibliography shows. As a result, Coll and Tiree are probably as well-recorded as much of mainland Argyll and, certainly, the plant

communities on the islands have attracted more learned discourse. This book is a synthesis of the results of these botanical visits and one of its strengths is that a lot of disparate data are drawn together into a concise whole.

With such diverse sources of information there will always be a number of erroneous records and these have been dealt with in a common-sense manner, as has the particular problem posed by the stigma attached to the accounts of the flora by Heslop Harrison. The detective work this has involved makes interesting reading. In fact, the whole of the introduction is excellent. The descriptions of the main habitats are succinct and it is good to see NVC community categories being used as a matter of course. The section on phytogeography may seem rather long for these small islands but given their position on the edge of things, the association with Heslop Harrison and his theory of per-glacial survival and Chris Preston's recent work on geographical relationships in plant distribution, this seems justified. The comparison with the nearby island of Mull and the somewhat more distant Outer Isles is fascinating.

The layout is clear and straightforward with the comparatively long introductory section followed by the species accounts and finally by a short account of the stoneworts by Nick Stewart and ecological notes, with tetrad maps, on the Cyperaceae of Tiree by David Pearman. Other tetrad maps are provided only for a selection of aquatic plants, probably reflecting the lack of precision of older records, the main thrust of visits by the authors and a desire to save space. For most species of interest, the frequent citing of localities in the text with map references more than makes up for this. The species accounts are commendably concise but fuller accounts are given where there is a story to be told or a question to be asked, be it about rarities like *Eriocaulon aquaticum* or the more mundane *Eriophorum vaginatum*. Some accounts are rather enigmatic with *Juncus squarrosus* "common on heathy ground" but "very poorly recorded". To someone used to the mainland Argyll flora, the rarity of plants like *Digitalis purpurea*, *Eriophorum vaginatum* and *Conopodium majus*, abundant plants in main Argyll, comes as a surprise.

Do go and visit Coll and Tiree, they are wonderful islands, and do take this flora with you. Almost every page of the species accounts has at least an implied query on which the curious botanist could shed some light.

G. P. ROTHERO

Lichens. Oliver Gilbert. Pp. 214. The 86th volume in the New Naturalist Series. Harper Collins. 2000. Hbk £34.99. ISBN 0 00220081 8. Pbk £19.99. ISBN 0 00 2200821.

The high standard we have come to expect of this invaluable series is maintained or even excelled in this latest volume. The student of the smaller fungi, like the bus passenger, has had a patient wait (55 years since the first New Naturalist Volume) and now two books have turned up at once with the publication of Ingram and Roberston's "Plant Disease" as number 85 in 1999. In an age when "biodiversity" is on everyone's lips and in theory the otter or eagle now have equal status with the rarest lichen or plant pathogen the publishers and editors of this series are to be congratulated in bringing to the press two books which must further the appreciation and understanding of this huge slice of our wildlife.

In his opening chapter Gilbert shows that lichens are of more than just scientific interest with a review of the way they have impinged on our life. If you enjoy the look, feel and scent of Harris tweed, relish the long lingering qualities of the finest perfumes or just want to test the pH of your soil with litmus paper he describes the essential part lichens play.

You are then led through clear and succinct chapters on the nature of lichens, creatures that need lichens, and air pollution and lichens, to the main part of the book. Here the important role that lichens play in most of our major ecosystems is described, with chapters on woodland, acid rocks, heaths and moors, chalk and limestone, the built environment of church and village, our mountain areas, the rivers, lakes and coastal habitats. At a glance these pages seem liberally splattered with Latin names (since few lichens are blessed with English names). The non-lichenologist should not be put off. Read any paragraph and they trip easily by with Gilbert's lively writing style almost invariably linking them into some thought-provoking ecological process or ecological niche you never thought of. These range from the effects of wind blasted ice and grit in subarctic heaths of the Cairngorms to the "canine zone" of tree bases in suburbia and from crashed aircraft on St Kilda, through old shoes at Girvan, to the drip zone under galvanised motorway crash barriers.

Three appendices provide information on the use of lichens for dating objects, the biological estimation of air pollution and the use of lichens as indicators of ecological continuity. There is also an adequate glossary and extensive bibliography.

Misprints and errors are few and mostly inconsequential. Occasionally a now superseded lichen name creeps back in and the reference to "Soya" sheep on page 237 should probably not be proffered as evidence of a previously overlooked transgenic industry in western Scotland. The high standard of paper, print and plates we have seen in some of the recent "New Naturalists" is maintained here.

This book conveys the excitement of the recent rapid accumulation of knowledge of the part lichens play in British ecosystems and identifies areas where the amateur can still make a significant contribution. It handsomely realises the aspirations of the editors in "seeking to interest the general reader by recapturing the enquiring spirit of the old naturalists".

If this spirit moves you to discover the lichen genus *Rocella* in Ireland the author offers a more tangible spirit prize in the shape of a bottle of whiskey to the finder. Even without this inducement I am certain this book will stimulate you to get out and look at lichens, towns, cities and countryside in a new and exciting way.

R. G. WOODS

Alien Plants of Yorkshire. G. T. D. Wilmore. Pp. 316. Yorkshire Naturalists' Union. 2000. Price £15.00 (reduced price to members of the Yorkshire Naturalists' Union £12.00) ISBN 0-9504093-3-2.

It is perhaps surprising that in a small country with a flora that has been extensively botanised for over 400 years, so little time and effort has been devoted to the study of alien plants. For most of that period they have formed an increasingly substantial minority of the flora of the British Isles, (over 40% of taxa at the last count) but have usually been treated with suspicion or disdain. Often regarded as "second class citizens" (try telling that to people in areas of the country suffering from the ravages of *Fallopia japonica*, *Crassula helmsii* or *Rhododendron ponticum*) they were at best relegated to appendices in Floras or at worst completely ignored. Clive Stace's *New Flora of the British Isles* changed the position overnight, not only were botanists able to see what alien plants were present they also had help in identifying them.

However, some areas of the Country did have a better record in studying the alien flora and this excellent and fascinating book sets out the history of such studies in Yorkshire and catalogues the present state of our knowledge.

Some 3,046 taxa in 131 families are included and details given include: Scientific and English name; a brief statement on its status in Yorkshire, with Country or region of origin and list of Yorkshire vice-counties in which it has been recorded. For most taxa there then follows a more detailed list of records for each vice-county, but for about 90 common taxa there is a "thumbnail sketch" of habitats and history. The comprehensiveness of the book is well illustrated by the reviewer having penned a criticism on the omission of taxa alien to Yorkshire but native to Britain, only to find that appendix 3 covers this subject very well. Other appendices deal with less well documented taxa and taxa not included in Stace or the B.S.B.I.'s two "Alien" books, and a bibliography and comprehensive index complete the book.

Misprints and "typos" are commendably rare; over half a dozen taxa are wrongly attributed with illustrations in the index and page numbers are missing from the contents page. But this reviewer does have an intense dislike of single lines of a paragraph at the top or bottom of a page., and there are too many of these "orphans".

However, these are no more than minor irritations that in no way detract from the excellence of the book itself. Geoffrey Wilmore and the Yorkshire Naturalists' Union are to be congratulated on producing a book which deserves to be on the shelf of every botanist with an interest in the flora of these islands and hopefully will serve as an inspiration to others to produce similar volumes for other regions.

R. G. ELLIS