

Book Reviews

British alpine hawkweeds. D. Tennant & T. Rich; line drawings by D. Tennant, paintings by R. C. Booth. Pp. 234. B.S.B.I., London. 2008. Price £30 (hardback), ISBN: 978-090115-838-3; £25 (paperback). ISBN 978-090115-839-0.

When I opened this book the first thing which went through my mind was the memory of glorious days on the Scottish hills with Cyril West, Norman Douglas Simpson, Archie Kenneth, Mary McCallum Webster and Ursula Duncan. The next thing which crossed my mind was how wonderful it would be if we had the whole British and Irish flora set out like this.

The alpine hawkweeds as a group are fairly easily recognisable in the field and occur mainly in the Scottish mountains with an isolated species in the Lake District and another in Snowdonia. The opening chapters in the book describe the thrill of botany in the mountains; the scenery, the weather and the distance you may have to walk to find the plant you are looking for. A detailed account of the discovery of each species of alpine hawkweed from John Ray (1627–1705) to the present day is given. A section then follows on the geographical areas in which the plants are found, pointing out ecological factors which make the adjacent areas so different. A summary is given of which species occur in each vice-county, ten or more being found in favoured localities. Tennant has searched for and mostly found nearly all the localities given on old herbarium sheets. (I should perhaps mention at this point that Edward Shearburn Marshall's original collection is in **CGE**, not **BM**). A list of species with rarity and threat category follows.

Anyone who has tried to grow alpine hawkweeds in ordinary garden soil will know the result is not very satisfactory. Tennant describes how he has found a method of growing them so that they look like they do in nature. His collection of cultivated plants allowed Clive Stace and colleagues at Leicester University to study their chromosomes and DNA. This information is included in the book.

The main part of the book then deals with each of the 39 taxa in detail. The nomenclature and synonymy are completely up to date. The detailed descriptions give not only morphology but also what the ornithologists call 'jizz', the look of the living plant, the way it holds itself,

its colour and its variation. One of the most important things discussed is the variation within a species. This variation may be that some plants in a population can be slightly different from others, or it may be when plants from two different populations are compared they are slightly different from one another. The taxonomist has to decide whether the difference is great enough to describe as a new species or whether it is better to keep them in a variable species. Different ecology can also make them look different. In cultivation many of the differences may be ironed out. This sort of variation is discussed under each individual species. Sometimes it is worthwhile calling a particular variant a forma as in *Hieracium hanburyi* (p. 116).

The whole book is copiously illustrated. Breath-taking colour photographs show the type of terrain you will have to walk in if you wish to seek alpine hawkweeds. David Tennant has carefully drawn each species in black and white showing the general aspect of the plant, its height, spread of flowers, shape of capitulum and undulation of leaves. Separate drawings show the range of leaves from the outer ovate short primordial to the narrower, longer inner ones. Colour photographs also show the general aspect of the plants. Drawings and photographs in the introduction show types and density of hairs, type of leaf teeth, shape of capitula, apices and shape of leaves and drawings and coloured photographs of the spread of ligules as seen from above. Each species is individually mapped. On top of it all Raymond C. Booth has made fine full page paintings of *Hieracium holosericeum*, *H. backhousei*, *H. insigne* forma *insigne* and *H. notabile*.

Because of their rarity, species of alpine hawkweeds should no longer be collected, unless material is needed to describe a new species. They need to be examined and checked against the illustrations in the field. The book is rather too large to fit comfortably into a rucksack, but modern equipment such as digital cameras will enable you to take the images into the field.

I really cannot find anything missing from this wonderful book, and I have lived with hawkweeds, both in the field and the herbarium, for nearly 60 years. The authors are to be congratulated for putting together this fine book for the

B.S.B.I. in conjunction with National Museum Wales, and I strongly recommend it to all people, amateur or professional, who are interested in wild plants and particularly to those who love the mountains.

P. D. SELL

Orchids of Europe, North Africa and the Middle East, by Pierre Delforge, 3rd edition, 2006. A. & C. Black, London. ISBN 0-7136-7525-X. Price £29.99.

Pierre Delforge, a leading authority on European orchids, has now published a new third edition of his well-known reference source and guide to the orchids of the region. Its forerunner was first published in 1994 and now the updated French third edition has been translated into English by Laurent Penet and Carine Collin and edited by Simon Harrap. This is a hard-back volume approximating to A5-size and so fits comfortably into the field botanist's pocket, although at 640 pages and printed on good quality paper its weight might deter some.

In all, the book contains about 1270 colour photographs, many of which have been taken by the author; these are usually arranged two to four to the page with descriptive text in the adjacent column. The latter includes information relating to etymology, taxonomy, flowering season, habitat, geographical distribution and, in some cases, additional brief notes and discussion on details of special interest. Introductory chapters relate to the understanding of orchids such as their anatomy, life cycle and methods of reproduction and fertilisation. Then follow chapters on orchid nomenclature and systematic classification, identification, aberrants, hybrids, and finally a section on threats and conservation. These are also illustrated with colour photographs. After these introductory chapters come the species accounts which form the main body of the book and run to a total of 592 pages. Finally, there is a list for further reading, a glossary and a much-needed index of scientific names.

The book, which covers twenty-eight genera, is obviously the culmination of a great amount of field study and extensive research and, whilst it is presented in a scholarly manner, it will still be very usable as a field guide. Despite this, one wonders how many botanists will cope with the author's predilection for recognising at species and subspecies level, what often must surely be relatively minor taxonomic varieties and forms. One

manifestation of this is in *Ophrys* where the genus (split into two sections) covers around 250 species and runs to a total of 265 pages; this represents more than 40% of the book. Another curious anomaly is the relationship between the taxonomic rank listed in the index and that given on the relevant page entry. As an example, the index recognises 37 subspecies of *O. sphegodes* and 36 of *O. fusca*, but on turning to the appropriate page they are treated as full species. Quite apart from any technical inconsistency, this makes the use of the index confusing. Also, whilst considering nomenclature and taxonomic rank, recent molecular work within the Orchidaceae has led to the development of a new nomenclature within several genera. In the book, however, whilst the author claims to have taken this into account, he has usually retained the more traditional names, only indicating new ones under synonyms.

The treatment of the two supposed British endemics, *Epipactis dunensis* and *E. sancta*, is also a little confusing. These taxa are very difficult to separate on morphological characters alone, with the later-described *O. sancta* relying almost solely on genetic evidence. Nevertheless it is retained at species level but placed in a separate 'group' to *E. dunensis*. Whilst no doubt technically correct, when using the book in the field, this makes a comparison of the two species difficult. There are also similar examples. The adoption of a more stable taxonomy would also have been advantageous since excessive splitting may cause confusion and frustration for the user and so, inevitably, detracts a little from the book's value. Nevertheless it is a mine of information and, although not to the taste of 'lumpers', it will be a very valuable source of information. This fact, combined with its excellent colour photographs, makes it a very useful field guide, especially for those visiting the Mediterranean area.

M. J. Y. FOLEY

Nouvelle Flore de la Belgique, du Grand-Duché de Luxembourg, du Nord de la France et des Régions Voisines (Ptéridophytes et Spermatophytes). 5th edition. J. Lambinon, L. Delvosalle & J. Duvigneaud. Pp. cxxx + 1167. Jardin Botanique National de Belgique, Meise. 2004. Hardback. 48 Euro. ISBN 90-72619-58-7.

Like several other relatively small and species-poor countries of north-western Europe (e.g. The Netherlands, Denmark, Sweden, Great Britain), Belgium has a compact 1-volume Flora which covers its native and alien wild plants and is periodically updated by new editions. This fifth French-language edition follows earlier editions in 1973, 1978, 1983 and 1992 [1993], and there have also been three Dutch-language editions in 1985, 1988 and 1998; in future it is intended to alternate the language versions, so that the most up-to-date edition might be in either language. The well-established *Nouvelle Flore* covers not only Belgium and Luxemburg but also some adjacent areas of France, Germany and the Netherlands. A map is provided, although the various boundaries on it are not as clear as could be wished. The status classes of plant included are native, naturalised, adventive, spontaneous and cultivated. Many in the last category are covered, e.g. *Magnolia*, *Hamamelis* and *Canna*. I found no numerical inventory, but a rough estimate produced a figure of approximately 2500 species.

The Flora adopts the format of successive keys to families, genera and species, the last followed by species entries which provide authorities, synonyms, vernacular names (French, Dutch and German), plant growth-form and height, flowering time, habitat and distribution, but no chromosome numbers and no further descriptive matter. There is a detailed 22-page introduction, about 160 pages of very well executed line-drawings, four indices (Latin and the vernacular languages), a good illustrated glossary, with a ruler and a list of signs and abbreviations on the rear endpapers. An additional interesting feature is a vegetative key to trees and shrubs, occupying 48 pages and covering all the cultivated species treated in the Flora down in size to the likes of *Hypericum calycinum* and *Cotoneaster dammeri*, but not to *Helianthemum inter alia*.

The sequence and taxonomy adopted is best described as classical late 20th Century, with

no attempt made to follow more recent evidence from DNA data. The family sequence is more or less that of Cronquist, but with frequent divergences, e.g. Amygdalaceae and Malaceae split from Rosaceae, a few (but not many) families such as Alliaceae and Amaryllidaceae split from Liliaceae, and Lobeliaceae split from Campanulaceae. Hence the dicots and Scrophulariaceae are retained in their classical senses, *Acorus* remains in Araceae, *Cardaminopsis* is still separate from *Arabidopsis*, and the Orchidaceae still include Burnt Orchid, Lady Orchid and Green-winged Orchid (as well as Man Orchid) in one polyphyletic genus *Orchis*.

The Flora is a mine of useful information, and a detailed study amply repays the time invested. It is fascinating to discover the many ways in which the treatment differs from that usual in Britain, and since neither practice can be correct every time we have much to learn from both the deeper understanding and the errors inherent in the Belgian approach. There are numerous divergences from the treatment in our standard list, involving both nomenclatural conclusions and taxonomic judgements. The following give a sense of the contrasts: *Phyllitis*, but not *Ceterach*, is included in *Asplenium*; *Pilosella* is included in *Hieracium*; *Comarum* is separated from *Potentilla*; and *Ranunculus ficaria* follows the *Flora Nordica* treatment, whereby Sell's typification of the species is considered invalid and the two subspecies are called *ficaria* and *fertilis*. In addition there are some notable differences from our flora in species composition, e.g. two species of *Anthericum*, five species of *Thesium*, and five species of *Gagea* (including *G. bohémica*, discovered 1998!), all native, yet only two wild species of *Cotoneaster* (one native).

The *Nouvelle Flore* is essential to any botanist either visiting its area or wishing to learn more about those species which are common to here and there, for which it is thoroughly recommended.

The Wild Flowers of the Isle of Purbeck, Brownsea and Sandbanks. Edward A. Pratt. Pp. 296 + 32 of colour photographs and 24 of sketch-maps. Brambley Books, Luton. 2008. £18 p/b. ISBN: 978-0-9553928-4-9.

The front cover of this book, with a bright flowering spike of Dorset Heath (*Erica ciliaris*) inset alongside a view of Corfe Castle and green hills beyond, immediately invites any botanist to open it and investigate further. Here one quickly observes that the author is The Rev. Edward A. Pratt M.A. and that the book is dedicated to Almighty God, with two biblical quotations, formulas more reminiscent of a Victorian Flora than of the numerous local wildflower books published nowadays. In the same vein Professor Sir Ghilleain Prance's foreword harks back to his childhood botanising as a member of the Wild Flower Society, aided by The Rev. H. J. Riddelsdell's *Flora of Gloucestershire*, published 60 years earlier. But thereafter there is nothing old-fashioned about this delightful local Flora.

After an evocative description of a sunny late May afternoon's walk over Ballard Down (which can be followed on sketch-map 20), with accounts of sightings of "a dazzling male Adonis Blue" and a Peregrine Falcon stooping as well as of some of the down's floral riches, the book settles down to 14 pages of introduction, with headings such as "Purpose and Content", "Richest area in Britain" (SY98 having the highest total of any hectad), "Geology and soils" (especially important in this astonishingly varied area), "Identification Books" (a very well-informed account including a list of B.S.B.I. Handbooks), "Dorset Flower Books", "Reporting Finds" and, inevitably in today's safety-conscious world, "Warnings". Next come brief accounts of 44 "Flower-rich Locations", cross-referenced to the relevant sketch-maps and plates, a calendar of special sights, and suggestions for 20 walks.

The main plant list, starting on page 53, is preceded by exemplary explanations of its layout and terminology. Plant names generally follow Stace's *New Flora* (1997), but the author rejects the "excessive and inconsistent use of hyphens" in English names. "Stars-in-grass" is adopted for a local speciality, *Thesium humifusum*, without any mention of its usual English name Bastard Toadflax; so some

readers may be puzzled by the final words of its account: "Quite unlike Toadflaxes, except perhaps when in young leaf and very small. It is deserving and worthy of its new name." For status, "Early Introduction" and "Introduction" replace "Archeophyte" and "Neophyte". Species are categorised as abundant, frequent, occasional or rare (within their usual habitats): the N.V.C. distinction between frequency and abundance is not applied. The terms "*Dorset Rare*" and "*Dorset Scarce*" are used as well as "*Nationally Rare*" and "*Nationally Scarce*", and Cheffings & Farrell's 2005 *Red Data List* threat categories are added.

Unusually, very precise instructions for locating the less frequent species are included, generally with reference to the footpath numbers shown on the excellent sketch-maps rather than by map references. Finally, some species accounts end with helpful identification features, occasionally illustrated by small line drawings. As an example, the account of *Ranunculus parviflorus* ends: "In this area it grows close to the ground and usually has only one or two narrow petals, unlike illustrations in books. Foliage is green, not greyish. See Plate 9."

My criticisms are few. The index is simple but, as far as I have sampled it, reliable; however, in using it, I found it mildly irritating that it is located before the plates and sketch-maps rather than at the very end of the book. There are clear references in the text to the 107 colour photographs of habitats and species, but only English names of plants are used in the captions without any cross-referencing to the species accounts. The pictures are generally well-chosen, but the quality of reproduction varies greatly, so that, while most of the eight orchid photos are acceptable, those of the "Rare hybrid of Sweetbriar and Small-flowered Sweetbriar" and "The three species of Gorse in flower together" are worthless.

Genesis 1: 31 is quoted at the beginning of this book: "*God saw all that He had made, and it was very good.*" This account of a small part of God's creation is very good too!

P. H. OSWALD