

Planning a User-Friendly Field Guide

Harrap's Wild Flowers: Second Edition

Harrap's Wild Flowers was published in 2013 and has generated a lot of positive feedback, so I was delighted to be asked to produce a revised and expanded edition. As I started to work on this, I began again the planning process.

Who Is It For?

The essential first question. *HWF* is principally aimed at 'beginners and improvers' – people that want to name the wild plants that they see around them, want that name to be correct, and want to improve and expand their knowledge. It aims to be 'self-contained' as users may not have access to other literature. As a consequence, *HWF* is also designed to be useful to more knowledgeable botanists that want a portable, *illustrated* reference, and to be attractive and a pleasure to handle for anyone who enjoys browsing text and photographs of wild flowers, both common and rare.

In short, Harrap's Wild Flowers is the book I would have loved to have used when I was a teenager, trying to identify the plants around me

The Guiding Principle: Make it easy for the reader

A simple structure

Keep all the text and illustrations relating to each species in one place.

What, No Keys?

Keys can be very useful, especially in families / genera with many similar species, but can be frustrating, even for experienced users. And any key, whether 'scientific' or simple, really needs to be bomb-proof to justify its inclusion, reliably leading to a correct identification time after time. As keys are off-putting to most 'beginners and improvers', I have opted instead for a simple photographic index on the end papers.



Avoid unnecessary detail

It is always tempting to include lots of information, but too much detail can overwhelm and confuse the user.

Minimise abbreviations

Text heavy with abbreviations is difficult to read and difficult to follow.

Limit Jargon

Botanists love jargon. Some is very useful and allows precise descriptions (e.g. petal, sepal, calyx, corolla), some is easily replaced by everyday English (e.g. leaf stalk, flower stalk), and some is so obscure that almost any botanist would have to look it up (e.g. 'marcescent'*). Learning the jargon puts you well on the way to 'joining the club', but in the meantime *jargon is a barrier* to wider participation in botany, and should be used with restraint.

Clear Photographs

Good illustrations are the backbone of a field guide. Digital technology has



facilitated a massive leap in the quality of photographs that is possible. Many plants are 'photogenic', most notably orchids, but many are not,

and the photographs in HWF were all taken with a view to illustrating a field guide.

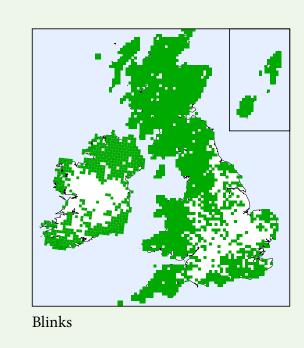
Illustrate Details

Recent developments, especially incamera focus stacking, allow small details to be clearly illustrated.



Clear Maps

Knowing what plants can be expected where you are is an important part of the identification process. Both editions of *HWF* have benefited from up-to-date range maps. Thank you BSBI, and thank you to the many people who contributed records to *Atlas 2000* and *Atlas 2020!*



'USER-FRIENDLY' guides reduce or remove some of the barriers that prevent people with a budding interest from engaging further with botany

Size Matters

A larger format offers some advantages:

- = More species
- = More detailed text
- = Bigger (and therefore clearer) illustrations
- = Larger fonts that are easier to read

A smaller format offers others:

More portable = more likely to be taken out and used Cheaper = more likely to be purchased

Size and extent are always a compromise, and at 140mm x 216mm HWF is probably about as large as a portable guide can reasonably be

Species Selection

Ferns Grasses, Sedges & Rushes

These groups include many species that require a critical examination in order to make a correct identification. Notoriously a challenge for beginners, their inclusion would increase the size of the book by at least 40%. In common with many field guides, they are omitted.

Common vs Rare

For beginners, the ideal field guide would include *only* the species that they will see, but for wild plants this is impossible. Each region of Britain and Ireland has a unique mix of species. Plants that are common in one region may be entirely absent in others, while many rarities are unlikely to be found by chance.

After much thought, in the second edition I decided to expand *HWF* to cover almost all native wild flowers. This avoids the frustration of trying to identify a plant that is not covered by your field guide. And, even if you are never likely to see Diapensia or Early Star of Bethlehem, it is nice to be able to look them up, and the expanded coverage is also an opportunity to showcase how rich our flora is – *important in these times of doom-mongering!*

Native vs Non-native

While the number of native species is relatively stable, as is the number of 'honorary natives' (archeophytes), the total number of recent introductions (neophytes) is steadily increasing. While focussing on natives and archeophytes, it is important to include neophytes, but it is not always obvious which ones.

Recent Spread?

Narrow-leaved Ragwort

Senecio inaequidens – has spread rapidly and now common in many areas = include. Forked Catchfly Silene dichotoma – few records and although a good scatter in 2003, this may be atypical = exclude. Panicled Willowherb Epilobium *brachycarpum* – a very recent colonist but locally abundant; seems likely to increase and spread = include.

How to order the species?

Strict taxonomic order (i.e following *Stace IV*) is the most 'scientific' but not necessarily the most practical or user-friendly. *HWF* follows Stace *IV* but families with only one or two species are often out of sequence, as is the order of genera within families. These changes are to make the best use of the space.

HWF also groups trees and larger shrubs together as they would otherwise be scattered through the text, and similarly groups aquatic plants. These groupings are, however, somewhat arbitrary, as what counts as a 'larger shrub' or an 'aquatic' is not always clear-cut.

Difficult Groups

An important part of species selection is a *realistic* evaluation of what it is possible to identify accurately without access to specialist literature and/or herbarium material and/or in-person training (as well as a commitment to study the group over several seasons).

A brief but inadequate text can lead to either 'false positive' identifications or to frustration for the reader when it becomes clear that identification is impossible with the information to hand. The problem groups fall into several categories.

Apomictic 'microspecies'



Differences may be constant (these are clusters of clones), but are mostly very subtle; identification is beyond the scope of a field guide:

Lady's Mantles Alchemilla - 14 species Brambles Rubus - 334+ species Rock Sea-lavenders -

Limonium – 40+ species Hawkweeds *Hieracium* - 420+ species Dandelions Taraxacum - 240+ species Whitebeams Sorbus - 40+ species

Reproducing vegetatively to produce clusters of clones

Elms *Ulmus* – 62 ++ 'species'

The status of the various forms of 'Field Elm' even as microspecies is disputed and identification is cetainly outside the remit of *HWF*.

Species limits hard to define due to frequent hybridisation

Roses Rosa - 73 hybrid combinations described

Eyebrights *Euphrasia* – 18 species but 71 hybrids described

Willows *Salix* – 68 hybrid combinations described

Marsh and Spotted Orchids Dactylorhiza

HWF includes full coverage of willows and Dactylorhiza orchids, and partial coverage of roses (dog roses are treated briefly), but eyebrights are not covered in detail – they are simply too difficult, and even *Stace* only lists the hybrids.



'Cryptic' species

Whitlowgrasses Erophila Fragrant Orchids Gymnadenia

Both genera include very similar species where the criteria used to separate them are still being worked-up. Separation is perfectly possible however, with care, and both are covered in HWF.



A notoriously difficult group in which there is evidence that plants at any one location are more closely related to each other than they are to similar looking plants at other locations. Nevertheless, variation in structure and coloration is so obvious that it is worth including details of the various 'species'.



Reference to existing literature

Now too much!

In an ideal world, there would be time to refer to all the more recent county floras, rare plant registers, the individual accounts of the Biological Flora of the British Isles, etc. Unfortunately, time did not allow this – there is now too much literature – with the result that some interesting information has undoubtedly been missed.

Sometimes contradictory, sometimes clearly wrong

An interesting aspect of researching HWF is the realisation that even the most authoritative texts are sometimes contradictory, and occasionally clearly wrong. As far as possible, I have compared what others have written with what I have seen in the field, checked descriptions against my photos, and researched further when I was not sure. Nevertheless, some puzzles remain.



Wild Cherry Prunus avium. One authoritative text states 'not suckering', while another states 'Numerous suckers are produced, so wild cherry nearly always occurs as clonal groups of trees'. The latter is my experience in Norfolk, and the one we planted in our garden suckers terribly!

A Field Guide to the Wild Flowers of Britain & Ireland

Design and Layout

The page-by-page layout of the text and photos was kept 'in house' (i.e. by Simon Harrap). As author, I could juggle the text and pictures, rewording and cutting text and resizing photo as necessary. This allowed the available space on each page to be used to maximum advantage.

Finally...

496 pages 1,225 plus species 2,600 plus photos 1,086 range maps

Despite careful checking, in common with any field guide, there will ALWAYS be errors and there is ALWAYS room for improvement.

I am very happy to receive comments and corrections!

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