

BOOK REVIEW

Britain's Ferns. A Field Guide to the Clubmosses, Quillworts, Horsetails and Ferns of Great Britain and Ireland. J. Merryweather. Princeton, New Jersey: Princeton Press, WILDGuides (info@press.princeton.edu). 2020. 280 pp., 700+ colour photographs, illustrations, distribution maps and tables. ISBN 978 06 91180 39 7. £20 (paperback). doi: [10.1017/S0960428620000165](https://doi.org/10.1017/S0960428620000165)

For some twenty years, James Merryweather has been delivering courses on ferns to natural history enthusiasts through the Field Studies Council. His latest book illustrates beautifully how he approaches this subject, employing colour photography, sketches and line drawings, augmented by short text and explicit keys, to bring out the often fine details required to aid identification of this group of plants.

The author is a well-qualified expert in this field, a fern enthusiast and member of the British Pteridological Society since 1968 and, before early retirement, an academic at the University of York, studying mycorrhiza. The book is aimed at a broad audience, written to inspire the absolute beginner and capture the interest of the informed expert, and builds on the development of his earlier work *The Fern Guide. A Field Guide to the Ferns, Clubmosses, Quillworts and Horsetails of the British Isles*, an AIDGAP (Aids to Identification in Difficult Groups of Animals and Plants) book published by the Field Studies Council that went to three editions (1992, 1995 and 2007).

This is a comprehensive publication, covering all 77 British and Irish pteridophytes in detail, for the most part following the species and names in Stace (2019). The book is fairly compact, 215 × 152 × 20 mm, although not lightweight, because practically every page includes glossy colour prints; however, it is eminently suitable for carrying in a rucksack to take into the field. The flexible cover has a wipe-clean finish and incorporates flaps at front and back that carry a key to codes at the front (phenology, icons and conservation status) and a short index at the back; these allow quick reference when deep in study within the guide.

The text begins with instructions on how to use the book, a glossary, and guidance on how to recognise a pteridophyte. The illustrated identification keys come next, first sorting into the four groups (clubmosses, quillworts, horsetails and ferns), then identification within these groups. For horsetails he highlights their appearance in March to April, as well as from April onwards, to illustrate the characteristics of cone development. For ferns a double-page spread shows clear diagrams of frond shape and degree of frond division to enable identification to one of four categories. Thus category A (undivided frond either very narrow, narrow or broad) identifies Hart's-tongue and adder's-tongues, and category B (pinnate or once-divided fronds from very narrow to triangular in outline) groups several aspleniums, holly fern, hard fern, moonwort and polypodies. The species accounts follow, usually a double-page spread that includes the common and Latin names, a code for

conservation status, derivation of the name, observation tips, distribution and possible confusion with other species, accompanied by several colour images of frond outline, habitat, close-ups of pertinent characters, and a distribution map with other features highlighted in key form. The book concludes with a series of fascinating articles on all-year-round pteridology, juvenile ferns, urban ferns, variation, and non-natives and nuisance ferns.

Unlike Stace (2019), who has a lumpers' approach to *Dryopteris affinis*, here extensive illustrations and descriptions of *five* taxa within the *D. affinis* complex are provided, and the author has made a strenuous effort to compile a key to these morphologically variable taxa. Also, two species of bracken – the common *Pteridium aquilinum* and less familiar *P. pinetorum* – are included. He also makes reference to the recently confirmed (and still under-recorded) taxon *Botrychium nordicum*. The author does not cover all the hybrids that have been recorded but does mention some of these and makes comparisons with related species; the common hybrid *Polypodium* × *mantoniae* merits a double-page spread.

All this is delivered in a very enjoyable style that illustrates the author's personal interaction with ferns in the field. First, for the difficult male ferns he delivers "the concepts of *Symphony of Characters* and WOB (Walk On By)" as an aid to their identification; for *Asplenium ruta-muraria*, "An almost ubiquitous adornment of mortared walls (unless the 'weed police' have been active . . ."; or for *Dryopteris cristata*, "These photographs are the best possible without disturbing this rarity's habitat. **Please tread carefully (or not at all)**"; and a useful tip for *Ophioglossum vulgatum*, ". . . could be mistaken for Broad leaved Plantain . . ."

This is a delightful, entertaining and very valuable guide, and packs a huge amount of information into bite-sized pieces that can easily be digested. There has been great attention to detail in the production, with few typographical errors. I could criticise the comment "the habitat differences are so great that comparison is barely warranted" when differentiating *Asplenium ruta-muraria* from *A. septentrionale*, because I see them together on the basalt rocks below Arthur's Seat in Edinburgh, and they do hybridise occasionally, but that is a minor point.

I hope that this book reaches a wide audience and introduces a new generation to the delights of ferns and their so-called allies.

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