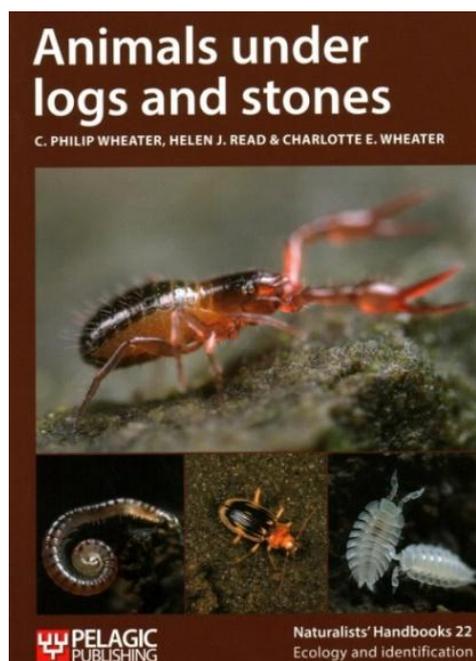


Animals Under Logs and Stones



Second Edition, 2023

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Accounts and identification guides for specific groups of animals found in Britain such as birds, snails, insects in general, butterflies, beetles, etc, have been available to naturalists for many years, including for older generations, Warne's *Wayside and Woodland* series, some of the *Observers Books* and the various *Collins Field Guides*. In more recent years the Field Studies Council has produced its AIDGAP keys whilst the various Linnean Society *Synopses* and the Royal Entomological Society keys to various insect groups provide a more complete,

although necessarily more technical, series of volumes covering many individual groups.

As far as popular guides to animals of particular communities/ecosystems are concerned there have been a number of books dealing with either the sea shore (e.g. Barrett & Yonge, 1958 and others) or freshwater (e.g. Needham & Needham, 1962; Clegg, 1968; Fitter & Manuel 1986). For terrestrial ecosystems (including soil and litter) the availability of such publications has been more limited, reflecting the diversity and numbers of groups and species and the relative complexity of their interactions. However, both before and subsequent to the *Soil Zoology* of Kevan (1955) there have been many studies and publications at a technical level. In terms of more "popular" publications, however, there has been a relatively limited number that deal with the diversity of animals in soil and litter. In 1961, John Cloudsley-Thompson and John Sankey, published their *Land Invertebrates* which dealt with a range of invertebrate groups with notes on some species but specifically excluding insects – perhaps one of the first books for general naturalists that recognised that there were some interesting animals with more than six (or eight) legs.

It was in 1996, in their Naturalists' Handbooks series, Richmond Publications released *Animals under Logs and Stones* (Wheater & Read, 1996), at 90 pages, a rather slimmer volume than this present, much expanded second edition with its 344. The new edition includes drawings by Charlotte Wheeler. Of the authors, Philip Wheeler is Professor Emeritus in Environmental & Geographical Sciences at Manchester Metropolitan University and Helen Read is an ecologist, working for the City of London Corporation as Conservation Officer at Burnham Beeches NNR and is also currently preparing a new Linnean Society Synopsis of British millipedes.

After an introductory chapter which includes a table of the taxonomic groups to order level (and their English names), there is a review of the environmental conditions in which the animals are living under logs and stones; microclimate, substrate, decay and decomposition, refuges and ecosystem services. There are references to such topics as the changes during decomposition of logs, species-area curves and equilibrium numbers.

This is followed by an extensive review of the biology of the cryptozoa, both invertebrate and vertebrate and the various animal groups represented in it preceded by sections on activity patterns, life-cycles and food & feeding, biology of the invertebrate cryptozoa.

A large part of the volume (pages 96-264) is about identification and following an introduction on techniques (including those for live animals) and diagrammatic and dichotomous keys to the major invertebrate groups. There are sections on flatworms, earthworms, slugs, snails, mites, harvestmen, spiders, woodlice, millipedes, centipedes, hexapoda, springtails, earwigs, cockroaches, crickets & allies, ants (workers), beetles, ground beetles, rove beetles, insect larvae, amphibians, reptiles and mammals. Each section contains a key to members of the relevant group with drawings of characteristic features. The remainder of the book has a section on studying animals under logs and stones including suggestions for possible projects, a list of useful addresses and links and references. As well as drawings, it also contains a large number of useful photographs.

Any book on animal identification is, of necessity, likely to be a compromise between accuracy and reliability compared with both ease of use, and comprehensiveness. Writing any account which does not aim to include all the known (British) species must necessarily involve decisions on which ones to leave out and the user always takes the risk that the animal being looked at might be one of these “missing” ones – it might even be one not previously recorded here. What this book should certainly allow is that both amateur and professional naturalists together with students in both schools and university will be able to “have a go” at identifying to some level, the animals that they come across in cryptozoic habitats (bearing in mind this caveat) and will hopefully be able to move into more detailed and comprehensive keys to each individual group as available and appropriate should they so wish. References are included in the introductions to the keys for each group.

A book for individual naturalists, for biology labs in schools and universities and for local natural history groups. A search on-line will give a variety of possible prices. £30 was that charged by a local private bookshop who ordered a copy for us.

A. D. Barber

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