

### Suggestions to Authors of the Reports of the United States Geological Survey

Fifth edition. Pp. xii+255. (Washington, D.C.: Government Printing Office, 1958) 1.75 dollars.

IN the eighty years that have passed since the foundation of the United States Geological Survey, more than 3,500 volumes of scientific and technical literature and more than 20,000 different maps have been published under its auspices—an output far surpassing that of any other geological institution in the world. Throughout this long history, continuous efforts have been made to promote lucidity, consistency and uniformity in these publications, and the code of practice established by the Survey for its authors, first published in 1909, has found widespread use outside official circles. The much enlarged fifth edition of this manual outlines the successive literary steps which a geologist-author will normally take from the beginning of an investigation to the final proof-reading of his text, maps and illustrations. It advises on matters of ethics and professional etiquette, enumerates the requirements of a well-prepared manuscript, deals at length with questions of typographical style, and gives a great deal of detailed information on the form and content appropriate to reports of various kinds. More than 50 pages are taken up with sensible advice on composition and expression, forming a sort of "A B C of Plain Words" directed specifically at geologists. Not all the suggestions will be acceptable to British readers, who may be somewhat puzzled by the preferred use of 'geologic' and comparable '-ic' endings in a country with a Geological Survey and a Geological Society. But there is no similar guide produced on the eastern side of the Atlantic; and, with appropriate warnings, the work could profitably become prescribed reading for all post-graduate students of geology, as a brake on the present over-production of 'geologese'.

C. F. DAVIDSON

### Causes de la Répartition des Êtres Vivants

Paléogéographie, Biogéographie Dynamique. Par Raymond Furon. (Evolution des Sciences, No. 10.) Pp. 168. (Paris: Masson et Cie., 1958.) 1,000 francs.

THIS book is well described by its author, in his preface, as "ce petit livre de 'morceaux choisis' n'est donc dans mon esprit qu'une esquisse de ce que pourrait être un beau livre qui n'existe pas: un Traité de Biogéographie", for it touches upon almost every aspect of its subject. Unfortunately the touch is too light to permit the suggestion of solutions to the many problems it describes, and this almost inevitably excites, rather than calms, the doubts that haunt most biogeographers as to whether the chaos of facts with which they are confronted can ever be reduced to final order.

Moreover, so vast a subject can be compressed within the limits of a single short book only by the most careful and balanced selection of information, and of the sources from which this comes, and in this respect also the book leaves more than a little to be desired.

With the author's main conclusions, that the present distribution of organisms chiefly reflects the catastrophic consequences of the Pleistocene glaciations, and that to understand the history of the living world its distribution in the Tertiary must be reconstructed, few biogeographers will disagree. They are likely to agree also that palæogeography and

palæontology are the keys to this reconstruction, but they are likely to feel some disappointment that an author so well qualified to comment on these particular aspects of the matter does not give a clearer lead as to how they may be more profitably pressed into service.

The great value of the book is as a source of much useful, and not infrequently unusual, factual information, and as such it can be recommended to all who are interested in the distribution of plants and animals.

RONALD GOOD

### Die Bänderschnecken

Eine Studie zur Evolution der Tiere. Von Prof. Dr. F. A. Schilder und Dr. Maria Schilder. Schluss: Die Bänderschnecken Europas. Pp. iv+93-206. (Jena: Gustav Fischer Verlag, 1957.) Broschiert, 30.30 D.M.

IN this third and final part of their monumental work on polymorphism in the banded snails (*Cepaea*), Prof. F. A. and Dr. Maria Schilder have tried to give an account of the variation in all parts of the ranges of the four species, and to draw some evolutionary conclusions. The booklet contains much useful information but suggests that such a task requires many more workers. The maps summarizing the data may be adequate for some areas of Germany, but it is well known that the proportions of the different colour and banding forms can vary greatly between adjacent colonies; for some large areas far too few colonies have been investigated for any reliance to be placed on mean frequencies from them as truly representative.

The conclusion reached is that the different forms in the polymorphisms have spread out from centres of special abundance. Lamotte's work is quoted as proving that visual selection by predators can never be of importance. The authors seem unaware of published criticisms of both Lamotte's conclusions, which are certainly invalid for Britain, and of their own inferences from their previous work on *Cepaea*. They combine data from colonies for making inferences about selection, although some at least of those colonies are in disturbed habitats and certainly not in genetical equilibrium with their environments. The composition of such colonies in relation to their habitats need give no indication that selection of any sort is acting, even though in fact it may be very strong. The data are given only to the nearest 10 per cent, and are too inaccurate for re-working.

A. J. CAIN

### The Sea-Horse and Its Relatives

By Gilbert Whitley and Joyce Allan. Pp. ix+84. (Melbourne: Georgian House, Pty., Ltd., 1958.) 30s. net.

A PART from a cosy introductory chapter which oozes with unsubstantiated sentimentalities, Whitley and Allan's book will be of value to interested ichthyologists as well as the children for whom it is primarily intended. Besides an account of the lore and legends of sea-horses, there are good descriptions of the structure, behaviour and reproduction of this remarkable fish which Sir J. Arthur Thomson once described as the "most 'kenspeckle' creature of the sea". The systematics of the sea-horse show that about a hundred species have been recorded, and these are distributed over four genera. About half the book is concerned with these and the rest with pipe-fishes, trumpet fishes, flute-mouths, bellows fishes and razor fishes. These, like the sea-horses, are illustrated by some remarkably fine drawings, most of which have been prepared by the authors.

T. H. HAWKINS