

described in terms of provinces, which are mapped on the endpapers. The plates cover less than half the species occurring, and are based on museum specimens which are frankly described as being "of varying ages". Not unwisely, the illustrators — John Henry Dick, John Gwynne and H. Wayne Trimm — have largely adopted a somewhat cartoonish style, with little attempt to show precise plumage detail or jizz. The shortcomings of the work largely reflect the lack of information, and when one realizes that the artists and the author are based in the United States one must applaud the achievement rather than criticize. Sadly, there is as yet no edition published in China.

A Pictorial Guide to the Birds of the Indian Subcontinent shares many species with the previous two books, and with them serves to create a mutually supportive trilogy of guides. It is a useful work in its own right, however, the strongest point being the illustrations by John Henry Dick which cover all species, including females and some juveniles, plus flight illustrations of raptors, some waterfowl and seabirds. In comparison the text is disappointing, comprising little more than the briefest statement of habitat preference and distribution, derived from and cross-referenced to Ali and Ripley's ten-volume *Handbook of the Birds of India and Pakistan* published between 1969 and 1974.

All three of the books discussed above owe their present incarnations to American initiative or co-operation, and the pre-eminence of the United States in the compilation of ornithological reference works is underlined by the *Field Guide to Birds of North America*. This book is the fruit of work by four consultants, nearly forty editorial and production staff and thirteen main illustrators, but what sounds like a recipe for unmitigated disaster has produced a guide of remarkable scope and high standards and utility. The colour illustrations cover most plumage variations, enabling one to compare, say, juvenile crowned and yellow-crowned night herons or flying juveniles of the light and dark phases of skuas — sorry, jaegers! With, on average, four species per plate, there is adequate room on the facing page for helpful descriptive text and distribution maps of varying scale, enabling more precise definition of more localized species. In practical terms, the *Guide* has the virtue of covering the whole of North America in a single book, unlike the otherwise excellent Peterson volumes. It should also find a market on the eastern side of the Atlantic, for its usefulness in relation to those species we normally share as well as for the vagrants which regularly test European ornithologists each autumn. □

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Fish: relations and compositions

D. H. Cushing

Fishes of the World, 2nd Edn.

By Joseph S. Nelson.

Wiley: 1984. Pp. 523. £52, \$44.95.

Marine Fishes.

Edited by V.P. Bykov.

Balkema: 1984. Pp. 322. Dfl. 50, £11.50.

PROFESSOR Nelson's authoritative text, the updated edition of a book first published in 1976, describes the classification of fishes down to families and it lists the genera. There is an illuminating discussion on the nature of systematics, cladistic or synthetic, but no hint of the recent flurries in this area. Each order is defined in anatomical terms, as is each sub-order and family; in each description there are indications of ecological status. The drawings are very clear and simple, and are linked quite exactly with the anatomical description, while on the end-papers there is a helpful diagrammatic presentation of the hierarchy of the higher categories of fishes. Links to the fossil groups are well established and, indeed, the fossil genera are listed in the description of each order. There are 45 maps showing the distribution of a class or of families throughout the world.

The volume edited by Dr Bykov is superficially similar to Professor Nelson's, in that the fish species described from Russian catches are grouped by families within two super-orders, Selachioidei and Teleostei. There the similarity ends for this classification is a convenience, not an end in

itself, and the real point of the book is to list the chemical composition by species, region and season and by parts of the body. In certain cases methods of processing are given in some detail. There is no attempt to describe each species for the illustrative drawing is probably considered sufficient; such drawings are well executed and can be matched with those of Professor Nelson. So far as I can see the species are correctly named, and while the book is of somewhat specialist interest there are useful snippets of information scattered throughout the text.

As works of reference the two volumes serve different readerships. That edited by Dr Bykov will be used on far-ranging factory ships and in processing plants where an indication of processing quality of each species caught would be of considerable value. (The book, incidentally, also indicates how far the Russian fleet works away from its home waters, the Barents Sea, the Baltic and the north-west Pacific; in the Barents Sea, species and their chemical composition would be well known). There are two readerships for Professor Nelson's text. First, museum systematists will be glad to have the classification set out so clearly for those groups in which they are not experts. Secondly, fishery biologists whose trade is population dynamics should profit from the arrangement of orders; the volume should be in every library where fisheries are studied. For example I have used it recently to track certain genera unfamiliar to me in a study of the marine resources of the western Indian Ocean. □

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