

ally out-of-date or imprecise vernaculars listed, e.g. nine eyes and lamprey eel for the sea lamprey, *Petromyzon marinus*, for USA. An English vernacular is given for most species but the French vernacular names seem to be less complete. For the first 110 species in the Caribbean list I was able to add French names for 14 species which lacked them, and 9 French synonyms from my manuscript list of fishes of Canada. Of course it might be argued that these French vernaculars are not prevalent in the Caribbean, but this criticism might also be applied to some of the FAO "book" French names included. It is unfortunate that FAO translators have often overlooked the prior existence of French-Canadian vernaculars and have introduced newly coined "book" vernaculars. I am unable to comment on vernaculars from the other five languages. The last item under each species is a one sentence statement of the world range of that species.

An index to scientific names is provided. Species are indexed under genus but not under the species

name. All higher level taxa are indexed. In the vernacular index *little tuna* and *tunas* are indexed, but not *tuna*, *little*. The inclusion of these indices makes this publication really much more worthwhile, but I am prejudiced in favour of united indices with both common and scientific names — this saves the reader from first having to find the appropriate index.

Lists of common and scientific names are useful to editors, fisheries management, ichthyologists, and translators. They are especially useful in an area, such as the Caribbean, where the fauna and linguistic heritage is rich. Zaneveld is to be complimented for accepting the difficult challenge of assembling this list, which will be valuable to all those interested in studying and managing Caribbean fishes.

DON E. MCALLISTER

Curator of Fishes, National Museum of Natural Sciences,  
Ottawa, Ontario K1A 0M8

## The American Darters

By Robert A. Kuehne and Roger W. Barbour. 1983. The University Press of Kentucky, Lexington. 177 pp., illus. U.S. \$45.

Darters are small, often colorful, fishes of the perch family (Percidae) that live mostly on the bottoms of streams from which they dart (hence their name) to seize their minute prey. The three larger North American species of the perch family, the yellow perch, the walleye and the sauger, are well known. The (at least) 140 species of darters comprising the subfamily Etheostomatinae are poorly known to the public or even the angler or naturalist. This is a pity because many have beautiful colors, interesting courtship and parental behavior, and varied adaptations to their environment. The authors describe this as a book about darters, not a treatise on them.

The book covers all named and some un-named species of darters including those of United States, Canada (12 species), and Mexico. The book is divided into the following sections: Acknowledgements, Introduction, Glossary, Keys, and sections on the following genera and their species: *Percina*, *Ammocrypta* and *Etheostoma*, References and an index. Treated in this book are 31 species of *Percina* (4 Canadian), 7 of *Ammocrypta* (1), and 94 *Etheostoma* (7).

The Introduction describes the distinctions between the darters and their relatives, the layout of the book,

the photographic techniques, and the laws and ethics of collecting. The three-page glossary covers anatomical, ecological and other technical terms. Branchiostegal ray is defined as gill ray; this is incorrect (gill rays are cartilaginous rods in the interbranchial septa).

The key to the species of darters occupies 14 pages and uses 68 photos (to illustrate characters). Most of the key characters are distinctive and many are illustrated. Some key couplets use only a single character.

The body of the text consists of one to three pages describing each of the genera and their subgenera, and species accounts which vary from one-half to one and one-half pages.

The species accounts have the following headings: Description, Distribution, Natural History, Abundance, and Name. The descriptions are quite detailed and describe scalation, colour, fin ray, scale and vertebral counts, and sexual dimorphism. The concise paragraph on distribution is supplemented by a small 8.5 cm standard base map of the United States, southern Canada and northern Mexico with the native range shown by shading. Notes on habitat, species associates, life history, behavior and hybridization are presented under Natural History. This will be the most readable and interesting section for the average reader, and is usually the longest section after Description. The presence of many short Natural History



accounts should spur further study. Under Abundance is an account of how common the species was and is, for those species whose range has been influenced by man. The meaning of the scientific name is explained under Name.

In the middle of the text are found 24 color plates, each with six photos of a darter. Most photos are of freshly caught specimens; photos of preserved specimens are so noted. Emphasis is placed on the more colorful breeding males, some of which are so splendid that it is a pity that some whole-page plates of single individuals were not included.

Examination of the 8½ pages of references shows that Scott and Crossman's *Freshwater fishes of Canada* was heavily relied on for Canadian information and more recent Canadian references were largely omitted. However, contrary to Scott and Crossman, *Etheostoma olmstedi* is treated as a full species rather than as a subspecies of *Etheostoma nigrum*. Kuehne and Barbour's maps do not show the occurrence of *Etheostoma exile* in southwestern Alberta, nor *Percina caprodes* in the La Grande Rivière system of Québec where it extends into the centre of the province. I did not note any Canadians in the acknowledgements.

A brief comparison with Lawrence M. Page's

(1983) *Handbook of darters* (T. F. H. Publications, Neptune City, New Jersey, 271 pp.) is useful. Page devotes less space to natural history but includes spot distribution maps which are superior to Kuehne and Barbour's. Page's color photos are not as good but are more numerous and he includes some habitat photos. Page adds sections on general darter ecology, evolution, zoogeography, a list of species with state/province and a list of species by state/province, as well as brief synonymies under each species and almost twice as many references — resulting in almost 100 more pages in Page's book. Both books are well written, cover much the same material in the species accounts, and both can be recommended to the general reader; the differences noted above may guide the specialist in her/his choice or they may choose to purchase both.

The student of North American darters would do well to add *The American darters* to her/his bookshelves. The aquarist, naturalist, and angler would find much of interest in this account of the miniature aquatic peacocks inhabiting our waters.

DON E. MCALLISTER

Curator of Fishes, National Museum of Natural Sciences,  
Ottawa, Ontario K1A 0M8

## The Reptiles of British Columbia

By Patrick T. Gregory and R. Wayne Campbell. 1984. Handbook No. 44. British Columbia Provincial Museum, Victoria. 103 pp., illus. \$3.

In the richness of its herpetofauna British Columbia is exceeded in Canada only by Ontario and Quebec. This diversity is related to the diversity of the climate which is reflected by habitats ranging from semiarid steppe to coastal rain forest. The present work replaces Handbook No. 3 by the late G. Clifford Carl and "incorporates much of the information in the earlier work and brings up to date the results of herpetological research from the past 30 years".

This book is divided into two main segments, introductory, and species accounts, the latter being the much larger and main part of the book. In addition to the introduction per se, the first section tells how the reader may learn more about British Columbia reptiles by listing pertinent publications. Following it is a discussion of systematics and the classification of reptiles as well as how to use the identification keys. The general biology of reptiles is discussed under such headings as Relationships and Diversity, Characteristics (or what makes a reptile a reptile), and Distribution. Of special interest, in regard to the Canadian

fauna in general, is the section on Adaptations to Northern Environments in which a discussion of the adversity of northern environments to reptiles is followed by one of adaptations of northern reptiles (reproductive, physiological, and behavioural). The rich faunas of the tropics rapidly diminish as one proceeds toward the poles and the species which live in high latitudes are able to do so because of special adaptations. As the authors point out, this is one of the most promising areas for herpetological research.

The checklist of British Columbia reptiles includes 18 species, two, possibly three, of which (all turtles) are introduced and probably extirpated.

The species accounts are arranged in three parts: turtles (4 species); lizards (3 species); and snakes (9 species). Each of the three parts begins with a good introduction to the group in question, discussing such subjects as structure, feeding habits and habitats, reproduction, senses, importance of colour, thermoregulation, defenses, and locomotion, as well as how to find the animal. There is a key to each group of reptiles, and, for the snakes, a field key as well, which does not require actual handling of the species, for one, the Northern Pacific Rattlesnake, is dangerously venomous.





McAllister, Don E. 1985. "The American Darters, by Robert A. Kuehne and Roger W. Barbour [Review]." *The Canadian field-naturalist* 99(3), 460–461.  
<https://doi.org/10.5962/p.355480>.

**View This Item Online:** <https://www.biodiversitylibrary.org/item/89190>

**DOI:** <https://doi.org/10.5962/p.355480>

**Permalink:** <https://www.biodiversitylibrary.org/partpdf/355480>

#### **Holding Institution**

Harvard University, Museum of Comparative Zoology, Ernst Mayr Library

#### **Sponsored by**

Harvard University, Museum of Comparative Zoology, Ernst Mayr Library

#### **Copyright & Reuse**

Copyright Status: In copyright. Digitized with the permission of the rights holder.

Rights Holder: Ottawa Field-Naturalists' Club

License: <http://creativecommons.org/licenses/by-nc-sa/3.0/>

Rights: <https://biodiversitylibrary.org/permissions>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.