

(Acanthocephala) a species *R. peltorhamphi* from Australia and New Zealand is used. However, this parasite was made the type species of the genus *Heteracanthocephalus* by Petrochenko¹.

A fish and parasite check list occupies a significant part of the book. Dr Hoffman notes in the introduction to this that "Some of the parasites recorded from some fish are probably not primary parasites of those fish: they may have been 'accidental' parasites, and, in some cases, perhaps erroneous records." This is the major disadvantage of a check list, and this one, in common with others elsewhere, must be used with extreme care. Many of the parasites listed under some of the fish species are not in their normal hosts. For example, very many of the species listed under the pike *Esox lucius* L. are clearly secondary infections, derived from other species of fish taken as food. This is not to imply criticism of Dr Hoffman's list, it is an inherent defect of any check-list of this type.

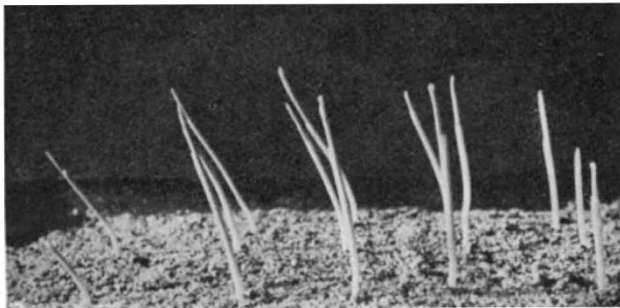
A very extensive bibliography is given. This will be extremely useful to workers in all parts of the world, even if they never need to use the book as a key for identification purposes. An index concludes the book.

The book is recommended to all freshwater fishery parasitologists.

JAMES C. CHUBB

¹Petrochenko, V. I., *Acanthocephala of Domestic and Wild Animals*. (In Russian), 435 (Moscow, 1956).

HOW PLANTS WORK



The stronger the light intensity the more a coleoptile curves towards it. From a chapter entitled, "How Plants Grow" in *The Green Plant*, by Arthur W. Galston (Prentice-Hall International; 21s.). This book, a selective rewriting of the same author's *The Life of the Green Plant*, is part of Prentice-Hall's "Foundations of Biology Program" which aims to give students in school an introduction to the biology of plants, animals and man.

NEARING THE END

The Last of the Wild

On the Track of Rare Animals. By E. Schuhmacher. Zoological Appendix by Gerd Diesselhorst, Irenäus Eibl-Eibersfeldt, Theodor Haltenorth and Walter Hellmich. Translated by Gwynne Vevers and Winwood Reade. Pp. 315. (160 colour plates.) (London: William Collins and Co., Ltd., 1968.) 84s. net.

THE beautiful colour photographs in this book are the by-product of seven years' travelling to film wild animals in many parts of the world. The journeys were intended to make a pictorial record of rare animals, especially those threatened with extermination through excessive predation or the devastation of their habitats by man. Many of the pictures portray such animals, but many others show animals that are still common and in no danger.

The work was helped by various organizations interested in conserving wild nature, and the photographs alone provide the strongest argument for conservation—no one could contemplate such spectacular scenery or animals of such interest and beauty without wishing to preserve them from destruction. It is a pity, therefore, that one of the pictures shows the photographers seriously disturbing, perhaps partly destroying, the minute habitat of a rare frog in a small rock scree on one of the islands in Cook Strait, in order to catch and photograph the animal—and is chasing wild asses at 30 miles per hour round the Little Rann of Kutch in order to obtain pictures from a motor car the best way of leaving the creatures undisturbed? Conservationists should take care to refrain from actions that they would deplore in others; there is no excuse for such conduct, not even the big money that comes from films and television. On the other hand, it may be as well to secure good pictorial records before it is too late of animals that are not likely long to survive the encroachments of humanity on their habitats. Photographs in this volume of particular interest include one of the Javan rhinoceros, claimed to be the only one ever taken of the animal in the wild, and one of a herd of bull walrus basking in the sun which must surely be one of the funniest animal photographs ever taken.

The photography in this volume is of the highest technical standard, but the text is less brilliant. The author gives a short narrative of his trips to various parts of the world, but it is written in a loose style with many sentences that sound good but defy analysis to find their meaning. The book concludes with an appendix of sixty-four pages describing the species illustrated. This gives a great deal of interesting information but is marred by a number of inaccuracies which would not be expected from contributors and translators of such zoological eminence.

L. HARRISON MATTHEWS

ALL ABOUT OTTERS

Otters: a Study of the Recent Lutrinae

(The World Naturalist.) By C. J. Harris. Pp. xiv + 397 + 52 plates. (London: Weidenfeld and Nicolson, 1968.) 105s. net.

It is strange that the zoological world should have had to wait so long for a definitive work on this notably interesting group of mammals, a group hitherto represented on the taxonomic map not so much by a blank as by an agglomeration of self-obscuring scrawls.

Mr Harris's admirable monograph, involving more than five years of research and collation of material in twelve languages (the bibliography runs to 1237 references) should, to my mind, serve as a model to future workers in comparable fields. The first aspect to strike the reader is the thoroughness and depth with which the author has explored his subject, describing sixty-three species and sub-species—with distribution maps refreshingly placed in the relevant text—and listing ten further forms whose systematic status he considers to be in doubt. Some idea of the taxonomic tangle with which he was originally confronted may be gained by the length of his first appendix, "Alphabetical Synonymy of the Genera, Species and Subspecies of Recent Otters", which occupies no less than sixteen pages. This is an example of the painstaking lucidity which characterizes the whole work; others are the all too rare marginal reference system, the working glossary, and the very comprehensive index.

While this is essentially a work of scholarship and precision, it has none of the metallic quality of a computer's conclusions, and one is aware throughout of the author's personality and of his profound empathy with his study subject. This uncommon flavour, together with fifty two remarkable photographs, should give the book