

and overrun vast areas, finally being reckoned a plague second only to the Colorado beetle. This monograph is an authoritative statement of the present position of the musk rat in Europe—its biology, distribution, control and economic importance.

Some doubt is expressed as to whether extermination is even conceivable; it is certainly impossible without virtually continental co-operation and gigantic expenditure. The value of the skin, marketed as musquash, encourages trapping and helps to bring the annual bag to over a million, but this figure is negligible when one realizes that the musk rat can start breeding at six months and have three or four litters, each averaging seven young, a year.

Four different types of damage are listed. First, and most important, is the result of their extensive tunnelling in the banks of rivers. Then follows their effect on fisheries and on fish traps and nets, and finally there is the direct damage to crops. Considerable space is devoted to their control, largely by trapping, and there is an exhaustive bibliography of forty pages. The musk rat's history in Great Britain is recorded and it is noted that the successful campaigns of 1932 and 1933 cost a total of around £12,000. The price was cheap if only we have learned our lesson.

G. S. C.

THE SEXUAL CYCLES OF VERTEBRATES. By J. F. D. FRAZER.  
Hutchinson. 10s. 6d.

“The reader for whom this book is designed is the university graduate or senior student”; so its appeal to readers of *Oryx* will be limited. It provides a competent review of the mechanisms whereby male and female vertebrates are adapted for mating and the production of young. It deals with the anatomy and functions of the genital system, the breeding season, the sexual cycles of the different classes of vertebrates and the important and interesting part that the hormones play in sexual function and behaviour.

L. H. M.

SECRETS OF THE ANIMAL WORLD. By F. J. POOTMAN. Translated into English by Mervyn Savill. English edition published by Souvenir Press, Ltd., London, W. 1, 1959. 18s.

Of recent years a branch of animal study which has intrigued mankind since earliest times has been placed on a sound scientific footing. It is called Ethology, or simply, the Study of Animal Behaviour.

Mr. Pootman's book, translated into good, readable English, is in the nature of a well-balanced survey of major pieces of research into this absorbing field, covering a wide selection of animals, and amply supplemented with the author's own observations. The photographic illustrations are very good.

Only one error needs to be pointed out, a typographical one. "The British bird-watcher David Lang" mentioned on page 22 is, of course, David Lack of robin fame.

A. L.

NATURE IS MY HOBBY. By C. V. A. ADAMS. Wheaton: Exeter. 15s.

The amateur naturalist is usually either an observer or a collector; this book is written for the latter and is a very valuable addition to the current literature in this field. Mr. Adams has managed to gather together many valuable hints on collecting and preserving insects, shells, skulls, flowers and sea weeds. There is a section on the collection and mounting of birds' nests which is a subject rarely covered in natural history guides. Finally, there is a chapter on setting up and keeping aquaria and vivaria. Many of these topics are dealt with in other books, but the great value of Mr. Adams's work is that they are all together in one volume and it is quite obvious that all his advice is based on practical experience. The book is illustrated by photographs and a large number of excellent drawings—those describing the construction of nets and other apparatus being particularly good. One or two slight errors, particularly in the glossary, do little to detract from the value of this work.

The book deals only with the collection and preservation of specimens, not their identification, but there are good bibliographies after each section which list books suitable for further reading and these will help to solve any taxonomic problems.

In the introduction F. S. Russell particularly recommends this book to younger people and, although mainly written for them, it will be of use to teachers as well, particularly in secondary schools, and, in fact to all who have an interest in this branch of natural history.

D. G. L.

JAMES AND SUSAN IN THE COUNTRY. By J. CLEMENT-JONES. Illustrated by Gunvor Övden. Hutchinson. 9s. 6d.

Apart from their school books, most children under fourteen or fifteen read purely for pleasure; in books they seek not