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  $\pounds 12,000$ . 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.