BOOK REVIEWS

SEALS

Seals of the World

By Gavin Maxwell, with John Stidworthy and David Williams. (World Wildlife Series No. 2.) Pp. xii + 151 + 16 plates. (London: Constable and Co., Ltd., 1967.) 45*s*. net.

SEALS have been much before the public in England during the past few years owing to the conflict between the interests of fishermen, to whom they are pests, and of others to whom they are endearing creatures. An attempt to reduce the numbers of the grey seal on some parts of our coasts has led to much ill-informed protest, but it is surely better that public opinion, however misguided, should be anxious that our fauna be preserved than indifferent to its destruction. The publication of this book under the auspices of the World Wildlife Fund, which is to receive "part of the proceeds" from its sale, seems to be timed to take advantage of this feeling to whip up support for its propaganda.

Seals have for thousands of years been of the greatest economic importance to the people who live near the shores of the northern oceans of the world; they yield food, oil, furs, hides, ivory and other useful products. So long as seals were cropped for subsistence by people on the peasant level of life, all was well; but when, around the beginning of the nineteenth century, big business realized the wealth awaiting the gathering, an era of almost incredible destruction started. Although seals are aquatic mammals they have not, as have the whales, completely emancipated themselves from the land, or ice-fields, to which they must resort to give birth to their young and nurse them through the first few weeks of life. It is when they temporarily leave the sea and congregate in large herds that they are vulnerable to commerce.

Local exploitation of seals, mainly for their oil, was carried out on a small scale in different parts of the world as European exploration advanced, but the devastation came at the turn of the eighteenth century when fortunes were made from fur seals, especially in the southern hemisphere, and in a couple of decades the animals were practically exterminated. Throughout the nineteenth century the remnants were spasmodically hunted down, until early in the twentieth century even occasional raids no longer paid expenses. It has taken half a century for the populations to begin showing signs of recovery. Events in the north Pacific took a similar course, but were halted at a rather earlier time. The sea lions and fur seals of South America, the elephant seals of the sub-Antarctic, and the fur seals of the north Pacific are now cropped rationally—an easy thing to do with polygamous species that have an excess of males. The ice-field breeding seals of the north Atlantic, such as the harp, bearded and other seals, are, however, still over-fished although some measures for their conservation have been taken. The history of sealing is disgraceful, but at the eleventh hour before the final disappearance of the animals reason is beginning to prevail, and the prospects of preserving the world populations of these scientifically fascinating animals, and of taking a crop of useful products from them for the benefit of mankind, seem to be brighter.

Apart from their economic value seals are of the greatest interest to zoologists—their highly adapted anatomy, and the innumerable peculiarities of their physiology, have long attracted attention, and provide a host of problems for study by observation and experiment that will keep enthusiasts at work for many years. The recently discovered use of sound echo-location in some species has opened yet another field of investigation—and now SCUBA divers are able to meet seals in their own element, even below the ice-fields of the Antarctic wastes.

This book gives a short general account of seals, and of man's dealing with them; it then gives an account of each species in turn under headings such as distribution, appearance, habits, reproduction and so on. It concludes with a list of the species and a short bibliography. The author claims no originality in the work for which his two assistants ransacked the literature in search of material. They have been industrious, and have collected most of the important facts about seals, and they have not copied over many of their predecessors' mistakes, though they have missed some of the latest discoveries. There are a few misprints such as "deputations of sealing vessels" for "depredations". The interesting photographic illustrations show twenty-eight of the thirty-two species. It is not clear, however, why this book should have been compiled, for a first-class book with the same title, written by Judith E. King who has spent years in original research on seals, was published by the British Museum (Natural History) only three years ago at less than a quarter of the price of this volume. L. HARRISON MATTHEWS

ANOTHER JOURNAL

Biochemical Genetics

Vol. 1, No. 1, June 1967. Edited by Charles R. Shaw. Pp. 1–71. Annual subscription (4 issues) $18. Outside US and Canada add $1·80 for postage and handling. (New York: Plenum Publishing Corporation, 1967.)

ANY new scientific journal is at present a mixed blessing: library budgets are usually stretched to the limit, and the reading capacity of every research worker had already reached saturation some twenty years ago.

In this light a new quarterly by the title *Biochemical Genetics* is unlikely to be welcome on the usual grounds of filling a non-existing gap.

This said, what are the mitigating circumstances? First, the proposed field of the journal states its primary interest in the biochemical genetics of diploid organisms. Presumably this means organisms other than *Escherichia coli* and phage T_4 or, more generally, eukaryotes. This is welcome, but it may lead to class consciousness and inferiority complexes. Second, the editorial board includes a number of very distinguished people. Third, the first number includes some good specialized papers. To quote a few, one on polymorphism for alcohol dehydrogenases in maize; one on a new assay for galactose-urydyltransferase in cultured human cells; and one on ATP levels in erythrocytes of Negro and white Americans.

Among the articles of general interest, there is one by Fitch and Margoliash on a method for estimating the number of invariant amino-acid coding positions in a gene.

On the whole the first number is good, and if we have to be plagued by—and subscribe to—yet another journal, let us wish it as good a continuation. G. PONTECORVO

IN THE SUB-ANTARCTIC

Sub-Antarctic Sanctuary

Summertime on Macquarie Island. By Mary E. Gillham. Pp. 223 + 32 photographs. (London: Victor Gollancz, 1967.) 45*s*.

MACQUARIE Island is one of nine truly sub-Antarctic oceanic islands, scattered around the Southern Hemisphere between latitudes 50° and 60° south. It is of volcanic origin, and was heavily glaciated at the height of the Quaternary ice ages. Its meagre flora, vegetation