

Many bird casualties are reported from Irish lighthouses. Would it not be possible to institute floodlighting at some of them at least. The Royal Society for the Protection of Birds has reported this to be a practical and reasonably cheap method of saving bird life, and it has passed the experimental stage.

This book might easily have been long-winded or become merely a catalogue. It has avoided both dangers and is well balanced and very interesting. The Wetmore order is used but races are given separate consideration as in the "Handbook". I would have preferred them to be combined under their respective species. There are eleven good, well-chosen plates.

C. L. B.

HOW ANIMALS MOVE. By JAMES GRAY. Illustrations by EDWARD BAWDEN. Cambridge University Press. 16s.

It is many years since I did any physics, and that only the sketchy requirements of the medical course, but reading Professor Gray's book has produced three major reactions in me: a wish that the Royal Institute Christmas lectures had been available to me when I was at school; a wish that I could have been present at this particular series, with the fascinating demonstrations which I can only reconstruct from the illustrations of the book; and thirdly a profound delight that school children now get the chance of appreciating the interdependence of all branches of science, and of realizing that physics is not necessarily only a prelude to the study of atomic weapons, space ships, and other mechanical marvels—or monsters—of our age.

Into this book, written about ourselves and other living things, many of them everyday creatures with which we are all familiar, come such a variety of physical laws, and such a diversity of common interests, that it would, I think, be impossible for anyone to fail to find something to meet his individual taste. For the schoolboy interested in sport there is swimming, riding, running and jumping; for the young physicist there are kinetics and electricity, aerodynamics and radar; for the naturalist there are creatures of all sorts, familiar and unfamiliar; and for all there is the fun of learning "how it works".

The facts and laws set out in the graded series of chapters are basic. Professor Gray brings them to life and admirably succeeds in his purpose of demonstrating the essential obedience of all things, living and inanimate, to the fundamental laws of

movement and forces. He does more; he provides glimpses of many different paths leading off his main theme in many different directions; there will be some, at least, who will be stimulated to follow these paths and see where they lead.

The illustrations are good and some of the photographs technically excellent. I found a particularly happy liaison between text and pictures. One rarely has to look forward or back to find the appropriate illustration, and what more convincing demonstration could one wish of the powerful force exerted by a swimming fish than to turn the page and find the photograph of the swordfish which smashed a boat!

The whole book, by its use of familiar things, drives home the application of natural laws, and one is left wishing that the next step—the mechanism of the control by the living creature of these laws in relation to itself—might be equally lucidly set out. Perhaps Professor Gray will oblige!

B. M. J.

AFRICAN INSECT LIFE. By S. H. SKAIFE. Longmans Green and Co., 1954. £3 3s.

This book, which is really a textbook of entomology with special reference to African insects, cannot fail to be of considerable use and interest to amateur entomologists and agriculturists, particularly those resident in the southern half of the African continent.

It is divided into twenty-two chapters, each dealing with an Order, starting with the primitive insects such as the bristle-tails and the spring-tails, and ending, in chapter twenty-two, with ants. Structure, life-histories, habits and habitats are adequately described throughout and although the reader will probably become aware of the author's particular liking for the social insects, especially the termites and ants, all the Orders have been faithfully dealt with. In the chapters dealing with the social insects, methods of maintaining alive small colonies and brood chambers are described and figured, enabling the life-histories to be watched in the comfort of a study or the seclusion of a garden. Solitary bees can be induced to occupy glass tubes while with cork lino and ply wood excellent observation nests for termites and ants can easily and cheaply be constructed.

These details should encourage would-be entomologists of all ages to observe the living insect as well as or instead of capturing it for mounting in a cabinet.