

REVIEWS

SILENT SPRING. By RACHEL CARSON. Hamish Hamilton. London. 25s.

The use of organic chemicals to control weeds, fungus and insect pests is now normal practice throughout much of the world. Yet this is a new development and relatively few people realize the full significance of the chemical revolution in agriculture and preventive medicine. The gains in public health and food production which have accompanied the use of pesticides are well known, unfortunately they have been accompanied by losses and these are much less well known. Miss Carson's book is an eloquent appeal which forces us to consider the actual and possible dangers which result from the use of pesticides. She questions the wisdom of those who have allowed unnecessary damage to occur in her own country.

She reminds us that Man is part of Nature, not outside it; he is dependent upon plants and animals. She shows us that the problem of pesticides is primarily an ecological one; yet most of the decisions on whether a chemical should be used are made by people who have not had an ecological training.

Miss Carson describes the man-made disasters which have occurred in the U.S.A. as a result of inefficient control of the use of pesticides. No one with a knowledge of the methods of control in other countries can be sure that avoidable damage is not being done elsewhere. In Britain much has been done to prevent it, but too little is known about the modes or action of the chemicals used, of their chronic effects and their side effects to leave any grounds for complacency. The need for more research is urgent; Miss Carson's book indicates the fields in which it is most urgent.

Many, probably most, pesticides do no more damage to wildlife than do ploughing or weeding by hand, but as Miss Carson shows, there are other chemicals—particularly the chlorinated hydrocarbons—which threaten life on a world scale. These substances are persistent and become spread through food chains. No part of the world is too remote to be safe from contamination. It is not known whether small amounts of these chemicals cause damage. Miss Carson shows the urgent need to find out.

She ranges widely over the subject; she discusses the effects of pesticides on soil animals, on species of aesthetic, scientific and economic value. She covers land, freshwater, and sea. She discusses the problems of resistance and alternative methods of control.

All who are interested in the conservation of wildlife, of natural resources and of Man himself should read this biased, stimulating and beautifully written book.

N. W. M.

THE BIRDS OF SIKKIM. By SÁLIM ALI. London, 1962. Oxford University Press. 52s. 6d.

The author of this book is well known as an ornithologist and conservationist as well as for his previously published ornithological work.

Produced with financial assistance from the Government of Sikkim, this first-class volume provides a great deal of information, not only about the birds themselves, but of the country—and it is an area remarkable for the diversity of habitat, ranging from tropical forest to altitudes of perpetual snow, all within the compass of not many miles.

The scene is set in the Introduction with a description of the vegetation, climatic conditions and geography; then some 400 species of birds are described, the English, scientific and local names being given, together with an indication of the size of each species, a description which includes measurements, the status, habitat, habits, breeding information, including a description of nest and eggs, and the distribution beyond the boundaries of Sikkim.

Important items of the relevant literature already published are listed.

Identification is further helped by the coloured plates, depicting some 140 species, by Paul Barruel, David Reid-Henry and Robert Scholz. The photographs, with one exception, show types of country and the line drawings by Walter Ahrens and Paul Barruel illustrate a further thirty-six species of the birds.

In addition to the species fully described, there is an Appendix which lists many more that have been recorded as occurring in the area. The author has collated information supplied by other distinguished ornithologists who have worked either in this difficult terrain or on the material gathered there.

Sikkim has long been comparatively well known to botanists: this well-produced volume is warmly commended, for it adds greatly to knowledge of its large and diverse bird population.

J. J. Y.

IBAMBA. By WYNANT DAVIS HUBBARD. New York Graphic Society Publishers, Ltd. \$ 6.95.

This is a posthumous publication, the author having died in April, 1961. It is a story, expressively and somewhat melodramatically related, of endeavour, hardship and disaster in Northern Rhodesia in the early thirties. For anyone who has struggled against the forces of nature in undeveloped Africa much of what is described is commonplace; for others the trials and tribulations of such a life are most revealing. Amongst the many hardships experienced certainly the worst was the ordeal by locusts, protracted and progressively devastating.

The author's primary concern was not farming, but the establishment of a wild life research station. Why this never materialized after four years of unremitting effort this story explains. The behaviour and individual characteristics of an odd medley of animals and birds—orphans of the wild—mainly acquired shortly after birth and brought up in intimate association with their human "parents", provide much material for serious thought. The author has some strange theories on the subject of animal behaviour as influenced by the human/animal association, but the reader can judge them for himself. The wild creatures which shared his and his wife's home he did not regard as "pets", but as equals. Sad to relate, as is so often the case with those adopted orphans which are allowed complete freedom, nearly all came to an unfortunate end. The climax of the story is the heart break at the eleventh hour when Paddy, the lioness—who had always been the most beloved member of the adopted family and who was devoted to the infant daughter—had to be shot, when about to be moved to America because an outbreak of foot and mouth disease unexpectedly prevented all movement of livestock, and the Hubbard's own departure could not be postponed.

C. R. S. P.