

woodland and scrub, grasslands, and dwarf shrub heaths (heather moor). A final section discusses the history and pattern of Scottish vegetation. The illustrations are mainly utilitarian, which is not to say that they are unattractive.

R. S. R. FITTER

Waterfowl To-morrow, edited by **J. P. Linduska**. US Department of the Interior, Fish and Wildlife Service, \$4.00.

Over a hundred conservationists and research workers have contributed chapters on all aspects of the subject to this immensely informative and well-illustrated book about the changing status of North American wildfowl. The main nesting areas in Canada and the United States are described, and their relative value to individual species assessed; the four migration "flyways" are discussed in biological terms and as administrative units, and the picture is completed by an examination of the wintering grounds in the southern States and Mexico. Natural factors controlling populations are considered, such as past glaciation, present climate, botanical succession, predators, parasites, and disease. As might be expected the largest section deals with the influence of man himself—sometimes beneficial, as when he provides reservoirs for resting birds, or crops and harvest waste as food, but all too often disastrous, with breeding grounds drained for agriculture and poisoned by pesticides; ponds and rivers polluted, and feeding places sprayed with spent lead shot, which is eaten in bulk by ducks and usually lethal.

Chapters on the historical and modern management of federal, state, and private refuges deserve a wide readership among conservationists concerned with similar problems in Europe and elsewhere. Perhaps the most interesting part of the book deals with the possibilities for manipulating wildfowl stocks. In particular, the concept of farming certain areas for waterfowl and thereby maintaining a large field-feeding population, while keeping crop-damage in neighbouring agricultural land to a minimum, has progressed a long way in the USA. This, with temporary but lavish flooding, burning, or waterweed control, can result in wildfowl concentrations that we in Europe can hardly imagine. Throughout, the book assumes the hunter's right to take a legitimate harvest of these concentrations; in many ways he indirectly helps to finance both research into what *is* a legitimate harvest, and the setting up of refuges that protect his future sport.

Bird-watching is, perhaps surprisingly, increasingly popular. At one refuge in Wisconsin where 44,500 goose-hunting trips were made, 75,800 people came just to watch the geese, and it is interesting to speculate whether these bird-watchers will contribute the equivalent in monetary terms of the hunters they are replacing. One reason why we and the rest of the world are far behind North America in the depth and detail of our knowledge, and the achievement of our conservation projects is our general disinclination to make sacrifices for the wildlife we so obviously enjoy.

PETER SCOTT

Seals of the World, by **Judith E. King**. British Museum (Natural History), 11s.

A great deal of valuable information on the distribution, structure, and biology of sea-lions, fur-seals, and true seals is brought together in this excellent well-written book, illustrated with many distribution maps, line drawings, and photographs.

The major part consists of a species by species account, but the author does not entirely succeed in her attempt to give each one the same treatment; for instance, she shows how to identify some species but not others. In