

human population—its history, crofting activities and effect on wildlife, especially of the 'machair', the broad belt of fertile grassland running the length of the western side of the island, a unique botanical and zoological habitat now threatened by drainage schemes. Good photographs and attractive drawings by Michèle Coxon.

The Save the Village Pond Campaign has awakened interest in the restoration of our disappearing ponds. Robert Burton devotes most of his book to sections on the physical and chemical aspects of fresh water and the biology of pond animals and plants, with some practical hints on their examination. A short section on the mechanics of pond conservation stresses the necessity of preparing a detailed management plan before starting work. Illustrations consist of photographs by the author's sister, Jane Burton, and line drawings. A few corrections would be desirable in a reprinting, notably the illustration of a community aquarium which includes among its inmates the fiercely carnivorous great diving beetle that would soon be the sole occupant of such a tank, although the text (page 125) rightly suggests keeping predatory creatures for study in isolation.

JOHN CLEGG

Scientific Aspects of Nature Conservation in Great Britain. Royal Society, £3.50.

British Red Data Book vol 1: Vascular Plants, compiled by F. H. Perring and L. Farrell. Society for the Promotion of Nature Conservation, £2.95.

This hard-backed volume of one issue of the Proceedings of the Royal Society opens with two papers intended to set a philosophical and historical background to nature conservation. J. L. Harley sets out to place nature conservation in Great Britain in a world context and points out that if any land is to remain unexploited, as most conservationists would wish, other land must be exploited to the full. To this extent the interests of the farmer and the conservationist are compatible. But Harley believes conservation to be 'using land wisely' and is not an advocate of wilderness. His definition leaves wisdom undefined, however, and contrasts with his demand that 'the work of the ecologist' must have 'no overtones of good or bad or quality judgments'. The question is explored briefly in the discussion. D. A. Ratcliffe, on the other hand, sticks to his brief very closely and considers the work of the Nature Conservancy and its successor the Nature Conservancy Council.

The other papers are perhaps more concerned with the role of the scientist in conservation. J. M. Hellowell discusses the use of various indices of community status which can be used to detect changes, leaning heavily on freshwater examples, while C. D. Pigott contributes a lucid discussion of the ecological information required to formulate conservation plans for threatened habitats and species, a topic also covered by J. P. Dempster. Finally a stimulating paper by A. D. Bradshaw considers a more active side of nature conservation, including methods of restoring damaged land, of creating new and ecologically valuable habitats, and of the introduction and re-introduction of species.

Overall the volume emphasises the dichotomy between the 'wise use of resources' school and those to whom nature conservation revolves around the setting aside of areas in which exploitation for human benefit remains, in the first instance, a low priority. It is as well that this division of opinion is clearly put, for it is very real among natural scientists and others and is often glossed over.

It will be to proponents of the second school that the first of the British Red Data Books will be of greatest interest. It is striking to see endangered plant species accorded the honour of the first issue here. The book gives brief notes on the current status of the 321 rarest plants in Great Britain, which qualify by occurring in fewer than 15 10-km squares, and including some unfamiliar, because recently discovered species, such as *Galium fleurotii* and *Ophrys bertolonii*. Each is given a somewhat subjective but useful 'threat number', based on features such as number of localities, attractiveness and degree of protection currently enjoyed. This points up both the value and the limitation

of the objective initial criterion of occurrence in under 15 10-km squares: many locally abundant and even some species such as *Koenigia islandica* and *Taraxacum pseudonordstedtii* are in no real danger. The crucial factor unsurprisingly appears to be habitat destruction, so that arable weed and wetland species figure prominently.

The book is neatly produced and not without its lighter moments—it appears that no botanist has braved the Surrey nudist colony where *Teucrium botrys* once grew to check its status.

ALASTAIR FITTER

Wildfowl of Europe, by Myrfyn Owen; colour plates by Hilary Burn. Macmillan & the Wildfowl Trust, £12.

Something that is different about this book is its apparent acceptance that people enjoy birds for their own reasons—individual, specific and varied, not all of them closely connected with ‘ornithology’, and it sets out to nourish all these interests with a well-rounded approach to the subject. Wildfowl themselves are a perfect choice for such treatment: a group many would say that runs favourite in the combined stakes of beauty, romance, spectacle, aviculture, and even, according to taste, gastronomy. And the book combines much of the detailed biology of a monograph with the visual illustration, comparative descriptions, and distribution maps of a good field guide. But there is much more besides. Since 1967 Myrfyn Owen has been working with the Wildfowl Trust at Slimbridge and not surprisingly has a strongly ecological attitude to waterfowl. The subject has not been chosen arbitrarily as a good excuse for a book, but as one that lends itself perfectly to a demonstration of where a specialised group of birds belongs in the scheme of things. Pressures for and against them are discussed, plus environmental threats past and present, migration trends, and the conservation of wetlands so vital to them and therefore to us.

In the same tradition Hilary Burn’s pictures achieve something rare in bird portraiture—a skill with detail that presents her subjects as live, well-understood working animals in their landscape rather than their glass cases. Joe Blossom’s line drawings share this harmony; clear and decorative and just what is needed to enhance the visual interest of the pages while ‘illustrating’ the text in the truest sense of the word.

KEITH SHACKLETON

Handbook of the Birds of Europe, the Middle East and North Africa: Birds of the Western Palearctic, Vol. 1, Ostrich to Ducks, edited by Stanley Cramp and others. Oxford U.P., £25.

Manual of Neotropical Birds. Vol. 1, Spheniscidae (Penguins) to Laridae (Gulls and Allies), by Emmet R. Blake. Chicago U.P., £30.

The closing months of 1977 saw two giant strides towards achieving that highly desirable aim of an up-to-date ornithological handbook for every zoogeographical region of the world. The Indian Sub-region was first, in 1974, thanks to the indefatigable labours of Salim Ali and Dillon Ripley. North America, which began with a flourish in 1962, did not manage its next two volumes until last year and is now challenged by two other regions: the Western Palearctic with the opening volume of a seven-volume set, and the Neotropical Region with the first of a four-volume set. This still leaves huge gaps. The Chinese part of the Eastern Palearctic is the most serious, but both the Oriental and the Australian need pulling together—there are already excellent handbooks to parts of these regions—while somebody must surely some time give us a conspectus of all the islands of the tropical Pacific Ocean.

For more years than we care to remember, British and European ornithologists have been looking forward to a revised edition of Witherby’s path-breaking *Handbook of British Birds*, in its promised expansion to include the whole of the western Palearctic, i.e. east as far as the borders of European Russia, Turkey and Iraq. Now at last we have