

**North American Bison, their Classification and Evolution**, by Jerry N. McDonald. University of California Press, £24.00.

When the Society for the Preservation of the Wild Fauna of the Empire was founded in 1903 the American bison was on the brink of extinction and some of the earliest reports in the Society's journal which deal with species outside the Empire are concerned with the American bison. Fortunately, there were enough concerned conservationists in North America to save the remnants of the teeming millions of bison which once roamed the prairies, and subsequently the wood bison was discovered in remote Canada. Over the next half century the European bison was to hover on the brink of extinction, and between the two species there has grown up an enormous literature documenting this fluctuating fate. The future of both is now well assured – to the extent that buffalo meat is now marketed from the surplus in the USA.

Although Dr McDonald's book is by no means concerned with conservation, it will be a useful addition to the library of anyone interested in the conservation of large ungulates, if only because it helps fill a lacuna in an otherwise well-documented area. As the author states, he has attempted using Darwinistic interpretations, drawing on the fields of paleobotany, paleoecology, socio-biology, geography and archeology, to develop a dynamic model, recognizing evolutionary species, as opposed to morphological species.

For conservationists trying to understand the evolutionary trends of endangered species, books such as this provide plenty of background material.

**Keys to Vertebrates of Poland: Mammals**, edited by Zdzislaw Pucek. English translation 1981.

Available from: US Dept of Commerce, National Technical Information Service, Springfield, Virginia 22161, U.S.A.

Much more than a key, this useful volume is a basic handbook to Polish mammals. In addition to identification details there are summaries of distribution including maps, based on an atlas about to be published. The original Polish edition was published in 1964, but the text has been extensively revised, and apart from some minor taxonomic changes (in *Mus* for instance) this is a useful work of reference for anyone interested in central European fauna, unlikely to be superseded for many years.

JOHN A. BURTON

**Captive or For Ever Free? the Condor Question**, edited by David Phillips and Hugh Nash. Friends of the Earth, paperback £4.50.

This is a miscellany of objections to the Fish and Wildlife Service/National Audubon programme for saving the California condor. The most distinguished contributions, including interviews with the late Carl Koford and rancher-naturalists Eben and Ian McMillan, argue that the risks involved in captive-breeding and radio-tagging such rare birds outweigh the benefits.

They suggest that conventional conservation methods, vigorous habitat protection and a clampdown on shooting, poisoning and disturbance, could have been more effectively pursued. Official figures showing the collapse of the wild population are challenged on the basis that immatures are still evident. Most convincingly, the invasion of nest-sites – to gather data that are technical rather than vital – is presented as the worst example of research defeating its own purpose. (The death of a chick during handling in 1980 reinforced this argument.)

Unfortunately, the book opts for a romantic not a zoological portrait of the condor. Some of the pieces contradict each other over details, yet the overall rhetorical bias permits no space to opposing points of view. The world's captive-breeding successes, for instance, are given scanty analysis.

Despite the book's assertions to the contrary, rearing condors in captivity does not exclude preserving their habitat. That so many sincere conservationists should oppose the recovery team, however, may be a justified indictment of the high-handed conduct of the team's members if not of the principles of its programme. Though unsatisfactory as an answer to 'the condor question', the book is eloquent in warning against the triumph of 'science' over sensitivity.

STEPHEN MILLS

**Vanishing Eagles.** Illustrated by Trevor Boyer, written by Philip Burton. Rigby International Pty, London, £9.95.

People have long regarded eagles as regal birds, because of their large size, predatory habits, aloofness, and mystery, and because of the wild country they usually inhabit. Many have admired their beauty and power, and their almost effortless flight into the teeth of a gale. Others for generations have regarded them as enemies of their domestic stock or game, and have persecuted them remorselessly. The bald eagle is the national emblem of the United States, but is in danger of extinction. Indeed, eagles as a group are now more gravely threatened than ever in the past, by persecution, pollution from modern chemicals, and destruction of habitat for human development.

This book is timely, and puts this conservation message well. It also offers an accurate yet readable summary of information that is available only in more detailed form elsewhere. A small criticism is that Iceland does not appear on the map of distribution of the white-tailed eagle, nor Britain for the golden eagle despite Scotland's large population of golden eagles. The book contains a set of striking drawings and paintings by Trevor Boyer, first commissioned by Eagle Star Insurance. These make this book something of beauty and wonder, catching the grandeur of the world's eagles and wild places.

ADAM WATSON

**Waders,** by W.G. Hale. Collins New Naturalist, £9.50.

**Estuary Birds of Britain and Ireland,** by A. J. Prater, T. and A.D. Poyser, £14.

The first of these in Professor Hale's own words 'is a general and personal view of wading birds'. It is a fairly comprehensive review of the biology of waders, mostly British species, well up to the usual high standards of the New Naturalist series.

The second book presents the results of the BTO Birds of Estuaries Enquiry, dealing not only with waders but also ducks, geese, swans, divers, grebes and cormorants. It is in three parts: general estuarine biology and threats to estuaries; an account of estuaries on a regional basis; and an account of each species. It is an extremely useful and worthwhile document but sadly the results only apply up to 1975. I would have preferred to have had the results sooner without much of the dressing up of the earlier chapters. There are other sources for estuarine biology. There is one persistent mistake common to both books in the spelling of the scientific name for the catworm. The first book only uses *Nephtys* and is therefore consistently wrong. The second book uses three different spellings,