

group of very vulnerable animals. It is a pity that the illustrations – 28 species in monochrome photographs – are substantially less comprehensive than the text.

The Wild Canids is an assemblage of 30 papers by as many authors, with the emphasis on behaviour and ecology, the great majority reporting original research. The literature on the wolf is voluminous and recently studies of the African hunting dog have received much publicity, but for the conservationist the most valuable part will be the accounts of the ecology of many additional species of wild canids. The Indian wild dog is dealt with by E. R. C. Davidar on the basis of long experience of amateur study; most of the other accounts are by professional zoologists. In most reference works the dogs of South America (amounting to nine species) get as little space as the cats; it is therefore particularly pleasing to find a paper on the ecology of two species, the pampas fox and the culpaeo, both of which appear to be surviving well despite heavy persecution, along with a review paper on the whole continent. The arctic fox, the red fox, the grey fox (of North America), the coyote, the enigmatic red wolf, the dingo and that animal much neglected by zoologists, the stray urban dog, receive detailed treatment. Some of the missing species, alas, are the most endangered ones for which information is desperately lacking. The Simien jackal receives only six lines, and some of the foxes are not mentioned beyond an introductory listing. A multi-authored book such as this is almost inevitably somewhat of a hotch-potch but the literature is so voluminous and scattered that it is valuable to have this amount of information in one place.

Hyaenas comprises, in the words of the author, the 'naturalist's titbits' that had to be left out of his recent detailed account of the spotted hyaena in Tanzania (reviewed in *Oryx*, XII, 1, page 120). With an abundance of well chosen photographs and a remarkable economy of words he succeeds admirably in giving a vivid insight into the ways of hyaenas. It is a masterpiece of skilful presentation.

GORDON B. CORBET

Animal Architecture, by **Karl von Frisch**. Translated by Lisbeth Gombrich. Hutchinson, £6.75.

The word 'architecture' is used in its widest sense to include bodily structures as well as the building of external objects such as nests and shelters, traps for capturing prey and bowers for courtship. To understand all these architectural activities a knowledge of the lives of the builders is essential, and Professor von Frisch brings to his task the fruits of a life's work as one of the greatest pioneers in the study of animal behaviour.

Starting with the exquisitely beautiful limestone shells of single-celled Foraminifera and the equally lovely siliceous skeletons of Radiolaria, which both fulfil the vital functions of support and protection for their owners, he surveys in turn the building activities of all the main groups of animals, unfolding fascinating examples of instinct, inventiveness and functional design. As might be expected from the author of *The Dancing Bees*, there are particularly absorbing accounts of the social insects, illuminated by his own researches.

Among the higher animals examples of activities occur frequently that are difficult to accept as purely instinctive, and most readers will surely agree with the author when he sees 'significant traces of the beginning of thought processes and aesthetic feeling' in the courtship behaviour of the Australian bower birds and the construction of their decorated courtship bower.

The illustrations throughout, both in colour and monochrome, are outstanding and apposite. The text can best be described in the author's own words in his Foreword: 'I have tried to be generally intelligible, for the book is chiefly intended for the nonspecialised audience. If the public at large knew more about the workings of nature it would help to protect our living environment against the progressive destruction that threatens it'.

JOHN CLEGG