find a place on library shelves not only throughout Zaire but far and wide, and thus play the part desired for it: the awakening and encouragement of a widespread desire to conserve as well as to study these 'joys of creation', as the President calls them, the marvellous birds of Zaire and neighbouring countries. So much has still to be learned of them, as the authors aptly say - in Africa semper aliquid novi.

H. F. I. ELLIOTT

Ethiopian Wildlands, by Melvin Bolton. Collins, £5.50.

Melvin Bolton and his wife were rather suddenly transported from the wilds of Wigan to those of Ethiopia. This was fortunate for the wildlife of Ethiopia, for during his time there he made great additions to the scanty knowledge of many Ethiopian animals and of little-known areas rich in wildlife. And he enjoyed himself thoroughly while he did it.

The book both describes the lighter side of some of his field trips (expeditions would be a better word if the word 'expedite' was not unknown to the Ethiopian vocabulary): the tremendous fun of being stuck in the mud; of mending punctures; of being surrounded, in the back of nowhere, by rifle-armed warriors; of falling into rivers infested with crocodiles; but also the pleasures of watching spectacular assemblies of water birds, finding populations of animals believed almost extinct, and the simple joy of breaking into new country and learning for oneself about the wonderful African animals in their natural habitat. Some solid science is injected into the matrix here and there, in a readable style, but this is essentially an enjoyable book of personal reminiscences about the joys and tribulations of studying wildlife in Ethiopia. As one who has had his fair share of these joys and sorrows, I can endorse the feeling that one gets from the book that the pleasures exceed the pain.

The chapters cover the Rift Valley Labeo area; the plains of Nachisar (one of the last haunts of Swayne's hartebeest); the flood plains of the Baro River; the little-known mountains of the eastern Omo Valley and Lake Stephanie; the magnificent Simien Mountains; the Danakil desert, and the eastern lowlands where he rediscovered populations of typically Somalian animals such as dibatag, Speke's gazelle, and beira. His interest in all things natural is inexhaustible; he is also an excellent photographer, and his pictures, including unique photographs of beira greatly enhance the text. He was fortunate in having a wife who not only tolerated his long trips away from home, but went with him, on the wildest and woolliest of them, to Lake Stephanie, and was perhaps more alarmed by swarms of lake flies than by Hammarkokke riflemen. It is a book thoroughly to be recommended, not only as a vignette of Ethiopian wildlands, but as the personal adventures of a couple of very enterprising young people.

LESLIE BROWN

Terrestrial Environments. Croom Helm, £5.95; **The Desert.** Orbis, £4.95, both by **J. L. Cloudsley-Thompson.**

Professor Cloudsley-Thompson is one of the more prolific of authors, but his book on Terrestrial Environments breaks new ground in its comprehensiveness. It is one of his less 'popular' books in that it carries an extensive bibliography and numerous citations in the text. Nevertheless, its greatest appeal will be to the layman; despite its documentation, it is not a book for the professional biologist or even the undergraduate, because its wide scope inevitably leads to superficiality. Most readers will pick up snippets of information that they did not know before, but, judging from the topics that I know best, some recent developments seem to have been omitted. The book starts with good introductory chapters on zoogeography and factors influencing the ecology of animals. Each succeeding chapter deals with a single habitat type, including fresh waters which some might think inappropriate in a book on terrestrial environments. Three final chapters discuss the adaptive significance of morphological features and the interactions between organisms and their environments. The Desert is a more attractive book physically because of its beautiful collection of finely produced colour plates. They are so numerous that one wonders how the price has been kept as low as it has. I suspect that more people will look at the pictures than read the text, but this will not matter if they have read the first book since large chunks of it are reproduced here, often verbatim. All deserts, both hot and cold, are considered and the various adaptations shown by the animals and plants to desert life are discussed in an interesting and informative fashion. The author seems to make heavy weather of the section on Man and Deserts when he tries to explain hairlessness in man. He considers all the various theories that have been put forward and rightly concludes that none can satisfactorily explain the condition. Yet surely an organism that has evolved through neoteny and shows the proportions of a foetal ape might be expected also to have retained the hair pattern of a simian foetus. Instead of looking for the adaptive significance of hairlessness, perhaps we should accept that it is potentially a disadvantage but that it is the price that we have to pay for having a large brain. After all, it is not too difficult to invent clothes.

As always with Professor Cloudsley-Thompson's books, these are well written in an interesting style and can be recommended as useful background reading for conservation problems.

S. K. ELTRINGHAM

Amazon Jungle: Green Hell to Red Desert? by R. J. A. Goodland and H. S. Irwin. Elsevier, \$13.25.

This is a shrill, strident, polemic of a book, with its opinions plain at every turn of the page. It is an alarm call, caused by the very sudden construction in Brazil of 14,000 kilometres of new highway through the old forest. The purpose, according to the North American authors, is 'to show what little is known of this immense but fragile area, to relate what is being done, to predict what the environmental results may be, and to suggest some means of averting or at least blunting predictably vast and tragic consequences that lie ahead'. In the 122 pages of text they pull no punches, waste no time, and apparently see no good in any aspect of Brazil's new plans for opening up the second half of its country.

Basically the two men are against cutting down the trees. They hate the quick-term gains and long-scale losses implicit in such destruction. Instead, they insist that the nutrient cycle must be maintained. What is taken out must only equal what is returned. (Virtually nothing goes back in at present.) The forest canopy must be preserved so that sunlight cannot destroy the forest floor, as it does over millions more acres every year, and far more information about the area (this 'vacuum of science') must be discovered before anything more is done. If such (and other) steps are not taken we will all have cause to remember that 'the tropical wet forest is ecologically a desert covered by trees.'

For my taste, as one who prefers discussion to oratorical clamour, I like encountering all conclusions at the end rather than at the beginning and middle of every argument. I also stumble again and again in this book over words: autochthonous, societal, nosogeography. And I wonder if 'forest ecosystem' tells me more than 'forest' does. The authors may well claim that the subject is too urgent for a more polished approach. They may even feel that an attack will have most effect upon the Brazilians who, it can not be forgotten, have national charge of this international resource. Anyhow, they have created a passionate book, stacked with references, embroiled with fact, and one that had to be written. Let us hope it is also read, even in Brazil.

ANTHONY SMITH