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Wild Andalusia, by Charles-A. Vaucher, Patrick Stephens, 95s.

A book with 274 photographs and 50 pages of text will inevitably be judged on the former, and this is perhaps unfortunate, for if this text were expanded to give a broader survey of the ecology of the Coto Doñana, the magnificent Andalusian reserve with which *Wild Andalusia* is largely concerned, the photographs could perhaps be seen more in their context.

However, the text achieves the objective for which it was presumably intended—to give an impression in words of the richness of wildlife and habitat of the Coto, to act, in other words, more as a preface than an introduction to the photographs. It is regrettable that so many of the marks of a translation have been allowed to remain; the curious distribution of capital letters, the erratic and sometimes incorrect use of Latin names, and the appearance in the same paragraph of "ammophiles" and "psammophile plants".

But these are quibbles; one would buy this book for the photographs, and these are superb. If I have any criticism, it is that the feeling of space and colour integral to the Coto atmosphere does not fully come over, but all the photographs, even those that are clearly fill-ups, are typical Coto. I like particularly the colour plate of the spoonbill, and of course the great imperial eagle, while some of deer among the mammal photographs are equally good. By providing such superb photography of so wide a range of the Coto's typical fauna, this book must surely make a claim on all who know or hope to get to know, the Coto Doñana.

ALASTAIR FITTER

Henry Walter Bates, Naturalist of the Amazons, by George Woodcock. Faber. 35s.

Based on Bates's Naturalist on the River Amazons, this useful book will bring a knowledge of the man and his work to a wide range of readers. Some will surely find a rich reward in tackling the original, in which the spirit of the man, his wisdom, courage and humanity can be fully appreciated.

From his boyhood in Leicester, where his father worked in the hosiery trade, Bates's chief delight had been in natural history pursuits; together with Alfred Russel Wallace, two years his senior, and a young master in Bates's school, they found in Charnwood Forest a rich hunting ground and vent for their enthusiasms. But from his youth Bates was far more than an ardent collector of specimens; as Charles Darwin knew when he wrote to him, "there were high philosophical guestions before your mind."

Already in 1847, whilst beetle-hunting in the Welsh hills, Bates and Wallace first planned a tropical collecting expedition together, hoping to defray their expenses by the sale of specimens sent home—a risky business in those early days of travel. When they finally set sail, in April 1848, Bates little knew that eleven years were to elapse before his return; nor could he foresee the incredible dangers to be overcome, nor the lasting damage to his health.

The sympathetic humanity of his character illuminates his shrewd comments on man and beast, and the book should reinstate Bates as one of the pioneers in 19th century thinking and scientific discovery, besides staking his claim as one of the truly great writers on tropical scenery and primitive travel.

Coincident with the publication of George Woodcock's book, the *Annals of Science*, in volume 25, no. 1, publish a 47-page article on the correspondence between Darwin and Bates in the years 1860 to 1863,

containing many letters not previously published. It is, as it were, a magnified detail in the history of science, prepared by Dr. Robert Stecher who has written a prefatory note, and gives a true picture of the friendship that existed between the two men.

NORA BARLOW

High Tide, by Professor J.L.B. Smith. Books of Africa, Cape Town, R3.50.

Harvest of the Sea, by John Bardach. Allen and Unwin, 55s.

The Fertile Sea, by A.P. Orr and S.M. Marshall. Fishing News,
London, 55s.

Professor Smith, who described the first coelocanth fish and called it *Latimeria*, and furthermore instigated the successful search for the second, died in 1967, after a lifetime of ichthyology and game fishing. He had written many articles, both scientific and popular; 30 of the latter are collected here. They are all characteristic, including some about dangerous adventures in the turbulent waters of Mozambique, where his wife was an enduring comrade, in fact heroical. The photographs are fine and the publishers deserve praise also for sticking to upright titling on the spine, which is unfashionable but suggests a book worth possessing. Even non-ichthyologists will savour the narrative quality.

Anyone considering a problem in the resources of the sea should first look to see what Professor Bardach has written on the point: surely he cannot have left anything out of this book—ah, yes, shagreen. Lest the encyclopediac quality sound dull, let it be noted that the book is studded with gems, such as the mimic species of fish that uses its resemblance to a cleaning wrasse to approach a larger fish and bite pieces out of it. There are no fewer than twelve references to Cousteau in the index, with many more covering a wide range. On the larger issues, also, Bardach is excellent: on Pollution, indexed as Wastes, he quotes modern man as "standing knee-deep in filth and firing rockets at the moon". Altogether an industrious work, sound and reliable, with a final warning that unless care is taken in time, the result of technology may well be to damage the sea as it has done the land.

The late Dr. Orr's Buckland Lectures have been made into a very interesting book by his lifelong colleague Dr. Sheila Marshall, It conveys a clear and authentic understanding of the subject—all the more interesting because the authors find space to give alternative explanations of the many unanswered questions on the fertility of the sea. The interest comes from deep thinking about life-processes. Thus some of the very small crustacea called copepods, if fed on only one species of green microorganism, will die off after a few generations, but a mixture of certain pairs of food species may keep them alive indefinitely. Fertilising aquatic ecosystems is successful in enclosed habitats only, but the authors are solidly in agreement with Bardach's underlying theme when they write, "There is no doubt that more food can and must be got from the fertile sea." Some following paragraphs indicate hopeful sources of increased production. The book is careful, critical, and jargon-free. Surely this is the top quality treatise on the subject. The illustrations are, as the publisher claims, truly remarkable, including a generous series of D.P.Wilson's fairylike photographs of living plankton organisms, and many exquisite line drawings in miniature.

MICHAEL GRAHAM