

The Whale, edited by **Leonard Harrison Matthews**. Allen and Unwin, 115s.

Dr Harrison Matthews and his international team of collaborators provide an excellent concise account of whales and whaling, past and present. There are chapters on whales in mythology and folklore, on the different kinds of whales, their biology, and the behaviour of dolphins and porpoises in captivity with the story of the discovery of their sonar systems. The history of whaling is given in some detail, together with a description of the modern industry and the products of whaling. An account of the development and current state of scientific research on the large whales in relation to the regulation of whaling and the International Whaling Commission is of special interest in giving an outline of the steps by which the Commission made its slow progress towards the present policy of rational management of the whale stocks, and also in indicating what remains to be done; it is to be hoped that this policy will be fully implemented and upheld in the future. Some estimates for recent population sizes of blue, fin and gray whales are given in chapter 3. A final chapter mentions some of the treasures to be found in the literature of whales and whaling, and there is a select list of some two hundred references and a short glossary of technical terms.

The book is lavishly illustrated in both colour and black and white, with fine photographs and reproductions of old prints, paintings and drawings of whaling scenes. The illustrations of the whales, however, are poor; most of them give little idea of the beauty of form and colour of the species they are supposed to portray. In addition the captions to the pygmy right and pygmy sperm whales, and to Dall's porpoise and Commerson's dolphin have been transposed.

S. G. BROWN

In the Wake of the Sea Serpents, by **Bernard Heuvelmans**. Hart-Davis, 84s.

The coelacanth rather knocked the stuffing out of those who, echoing Cuvier, stoutly maintained that there could be no more unknown large animals to discover within the bounds of planet Earth. But there is none so skilled in procrastination and delay as the scientist who does not wish to believe an unpalatable fact, and the latter-day Cuviers have many lines of defence when they wish to ignore animals which have only been sighted (with a handful of notable exceptions) by non-scientists, have scarcely even been photographed, and of which not one bone, tooth or square centimetre of skin has ever been examined by a zoologist. Science is built on disbelief; if it were not we should doubtless still have the mermaid, the mandrake and the phoenix in our natural history books. But scepticism can be carried too far, and it would need a hardened sceptic indeed not to be convinced by Dr Heuvelmans's massive research that there are *some* undescribed animals in the sea subsumed under the general name of sea serpent. Not everybody, of course, will go all the way with him in his claim that the 358 sightings of unknown animals or other phenomena, which he considers genuine, reveal the presence of no fewer than nine unknown marine beasts. The more frequently sighted of these he calls the long-necked (48 sightings), the merhorse (37), the many-humped (33), the many-finned (20), the super-otter (13) and the super-eel (12). The

super-otter, a quadruped not necessarily related to the true otter but merely shaped like one, has not been seen in its high northern haunts, mainly along the Norwegian coast, since 1848, and may, he fears be extinct. Several of the others appear to have equally restricted distributions, but the long-necked, which is frequent in the waters round the British Isles, is fairly widespread.

If one supposes for a moment that all sightings of sea serpents are actually either hoaxes or misidentifications of known animals or other phenomena—a position which many zoologists certainly take up in respect of the closely allied Loch Ness monster—then an interesting subject for psychological research immediately suggests itself. Why should hoaxers or the hallucinated describe different kinds of imaginary animals with apparently real geographical distributions? Zoologists will rightly never be satisfied until they have examined at least some portion of these unknown animals, but it would be equally unscientific to do no more than suspend judgment on their possible existence, pending the arrival of physical evidence. Dr Heuvelmans has made as good a case as is possible on circumstantial evidence alone.

RICHARD FITTER

The New Forest, An Ecological History, by Colin R. Tubbs. David and Charles, 50s.

The New Forest occupies a unique status in European ecology. There is certainly no other area, with the possible exception of the Camargue, with such a long uninterrupted history of land use which has created and preserved a complex pattern of habitats in close association to create a wonderful diversity of wildlife. Many words have been written about the Forest, but Colin Tubbs, the Nature Conservancy's officer there for the past ten years, is the first to draw together the threads of its ecological history into a comprehensive treatise. It makes a fascinating and absorbing story.

The first six chapters, about half the book, describe the physical factors—the geology and climate, and the influence of man's activities. Pollen analyses have yielded much information about the early vegetative cover, as have Bronze Age barrows about man's early settlement and influence. But it was as a Royal Forest that the area acquired the status from which has evolved over the centuries its unique character, and a well-documented chapter gives a comprehensive account of the historical landmarks in this evolution. Indeed the whole book is excellently documented, with a useful list of references at the end of each chapter. The chapters on Modern Administration and Agricultural Economy bring out with great clarity and accuracy the place of the forest in the rural economy of southern Hampshire, for it is not as a playground for the public that it has been managed or designed but as a place where people earn their living with stock or timber. The last half of the book deals more specifically with the fauna and flora of the forest, how these have been altered or conserved by man and his domestic animals, the forester and his silviculture, and finally the visitor and his motor car.

The author makes an unemotional but forceful plea for proper planning. 'If the environment is to remain of the high quality which forms much of its attraction as a recreational area, and if the uses which have shaped it are not to become inhibited, then recreational activities need to be brought under much closer control'; and, 'The unique character