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 of the New Forest is the result of *gradual* ecological development. Today the Forest faces the possibility of rapid and radical change, both in its functions and its ecological structure'. It does indeed, and much of the pressure is from urban-orientated minds which are unaware of the wealth of wildlife so delicately balanced by maybe anachronistic, but undoubtedly sympathetic forms of land use. Let these people read this book and ponder before planning to disturb the ecological foundation of this wealth.

For the ecologist and naturalist it is a book that will sustain and interest, inform and invite many hours of fruitful discussion, an altogether worthy contribution to the literature in support of the philosophy behind European Conservation Year 1970.

### P. F. GARTHWAITE

# The Life of Primates, by Adolph Schultz. Weidenfeld & Nicolson, 63s.

An interesting and readable account of the life of primates as seen by a physical anthropologist, this is not a book about conservation. In his concluding paragraph, however, he points out that the widespread deforestation in the warmer regions of the world, in order to gain new land in the competition for food, is ruthlessly restricting the habitats of other primates. Furthermore, primates are being used 'in staggering numbers' in modern research and for the production of vaccines. Lamentable as this may be, what mother with a sick child would protest against the slaughter even if she knew that the preparation of every four shots of anti-polio vaccine means the death of a monkey? The book deals with many aspects of the life of primates, especially the relation of structure to function, and includes a chapter on behaviour. It is illustrated with photographs, and embellished with numerous beautiful line drawings by the author who is an accomplished black-and-white artist. The final sentence warns that 'the most successful of all primates-man-is seriously interfering with the survival of the remaining nonhuman primates'. Survival in the wild must depend upon the conservation of appropriate reserved habitats; the supply of animals for research and the drug trade should be met by breeding primates in captivity on a large scale, an undertaking that will absorb large funds, much labour, and will need elaborate organisation, but cannot be started seriously too soon.

## L. HARRISON MATTHEWS

## Ecology and Behaviour of the Black Rhinoceros: A Field Study. By R. Schenkel and L. Schenkel-Hulliger. Paul Parey, DM 28.

Of considerable interest to wildlife workers, and all those interested in conservation and natural history, this report is based on a short field study of the rhinoceros population in a small area of Tsavo National Park in Kenya, considered to be one of the last strongholds of distribution of the black rhinoceros. Parts of the park are undergoing progressive ecological change from *Commiphora* woodland to bush grassland and open grassland, initiated by tremendous elephant destruction of the woodland and aggravated by fire. The question is posed: whether or not the black rhinoceros can survive this transformation of its habitat.

The text is divided into two major sections: Ecology and Sociology and Behaviour, and concludes with a short summary. The first section includes five general sub-sections, dealing with the habitat in part of