

BOOK REVIEW

THE PLEISTOCENE OF CEYLON. By P. E. P. Deraniyagala, Director of National Museums, Colombo, Ceylon. 164 pp., 40 text-figs., 58 plates. Price Rs. 8.50 (1958)

The author has put back the commencement of the Pleistocene to 1,100,000 years and considers that this period is still prevalent. His main index fossil for this assessment is the hippopotamus and by combining stratigraphy and geomorphology with the radiation of the extinct and recent faunas and floras over connexions with India resulting from land oscillation, he has produced a volume that is out of the usual run of geological publications. Of especial interest are the pages on the raised beaches, travertine, laterite and the fossiliferous gem sand which indicate various climatic phases and redeposition.

The most important section is on the extinct vertebrates which he terms the *Ratnapura fauna* and regards as an offshoot from the Pinjaur and Nerbadda fossil faunas. He points out that while the fossil horizon of the Pinjaur of India possesses 67 genera of mammals and the Nerbadda 13, the *Ratnapura fauna* has 20.

Of special interest among the vertebrates he has listed is the first fragment of a fossil *Homo* to be discovered in India, Burma or Ceylon. It is a heavy left brow ridge. He has named these humans *Homo sinhaleyus*

and regards them as Neanderthaloids. Of younger age is his other extinct human *Homo sapiens balangodensis* which apparently flourished towards the close of the Stone Age, and persisted into the early part of the metal-using age. A burial site yielded a number of flexed skeletons in association with a Mesoneolithic stone culture with potsherds but without any trace of metal.

Equally important is the extinct hippopotamus *Hexaprotodon sinhaleyus* which indicates that the island which today has no natural lakes had once possessed large lakes and rivers that harboured this large mammal. The author terms this climatic phase the *Lake phase* of Ceylon.

This book is illustrated with a number of excellent pen-and-ink and wash drawings by the author who depicts his reconstructions and also by a series of photographs. Many of the 'types' of the fossils which he had presented to the British Museum are also figured. The *Geological Magazine*, xcvi, p. 176, has stated that the discovery of this fauna has greatly extended the known geographical range of many Siwalik species. It certainly opens up a new vista in the study of both man and beast in Ceylon and southern India. The book is one of the most important publications on the Pleistocene of the entire Indian Ocean area.

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