

BIOLOGIYA SAIGAKA (The Biology of the Saiga). By A. G. BANNIKOV *et al.* Selkhozizdat, Moscow, 1961 (In Russian). 64 kopecks (about 12s.).

This comprehensive monograph on the saiga, *Saiga tatarica* L., contains in its 336 pages all the information that is known on this most interesting ungulate. A short account of the near extermination, conservation, recovery and management of the saiga is given in this number of *Oryx* (see pages 30-33).

The language barrier is unfortunate, but it would be a great pity if this unique book were to go unnoticed in the world outside the U.S.S.R. on this account. Wild life conservationists, in Africa particularly, could learn much from the Russian success in rescuing the saiga from extinction and converting it into an important natural resource. However, as the title implies, the book is not concerned solely with conservation. It consists of the following chapters: I, A short survey of the history of study on the saiga; II, Description and taxonomic position; III, Geographical distribution and the history of the saiga's range; IV, Numbers and population density; V, Habitat, movements and migrations; VI, Herd formation; VII, Food plants, feeding, watering and grazing, and weight; VIII, Daily cycle of activity and behaviour; IX, Reproduction; X, Growth and development; XI, Changes in the skull and dentition with age; the growth of the horns; and determination of age; XII, Predators, parasites, diseases, and mortality from natural calamities; XIII, Population dynamics; XIV, Economic importance (including damage to agriculture; saiga-cropping or hunting and meat yields; trapping, feeding in captivity, and transportation). The book contains a bibliography of nearly 300 references, some good line drawings, adequate photographs, and a substantial amount of tabulated and graphical data.

Professor Bannikov's book is an outstanding contribution to the literature on the ungulates.

W. L.

THE BIOLOGY OF CILIA AND FLAGELLA, 1962. M. A. SLEIGH. Pergamon Press. £3 10s.

Cilia and flagella are organelles which occur widely throughout the plant and animal kingdoms. Their function varies widely from a purely locomotory effect as in many Protozoa and the dispersal of zoospores of algae, the excretory function of flagella in flame cells of Platyhelminths to the feeding mechanism of cilia of mollusc gills. Although many observations on the structure and function of these organelles were made in the past, this information could not be readily co-ordinated until their morphology had been established. After the invention of the electron microscope, this became possible and it was surprising to find that the structure of a cilium or flagellum was virtually identical irrespective of its origin.

The author has been interested in ciliary mechanisms for a number of years and in this book has prepared a critical synthesis of previous work. The subjects dealt with are the structure of the cilium or flagellum and their association with various basal intracellular structures, the physiology of ciliary activity, the movement of cilia and flagella and the co-ordination of ciliary beat. It is illustrated by a series of excellent electron microscope photographs of sections of cilia and flagella, and photographs of movement of cilia at lower magnification.

R. A. N.