



Left: The pair of Przewalski Horses which were introduced to Whipsnade in 1901.
 Right: The characteristic horns of the same pair demonstrated by the present pair.
 Photos: Philip Street.

OVERLEAF:

A new study of the Whipsnade Rhinoceroses. Photo: "The Times."



Report from **WHIPSNADE**

By E. H. TONG

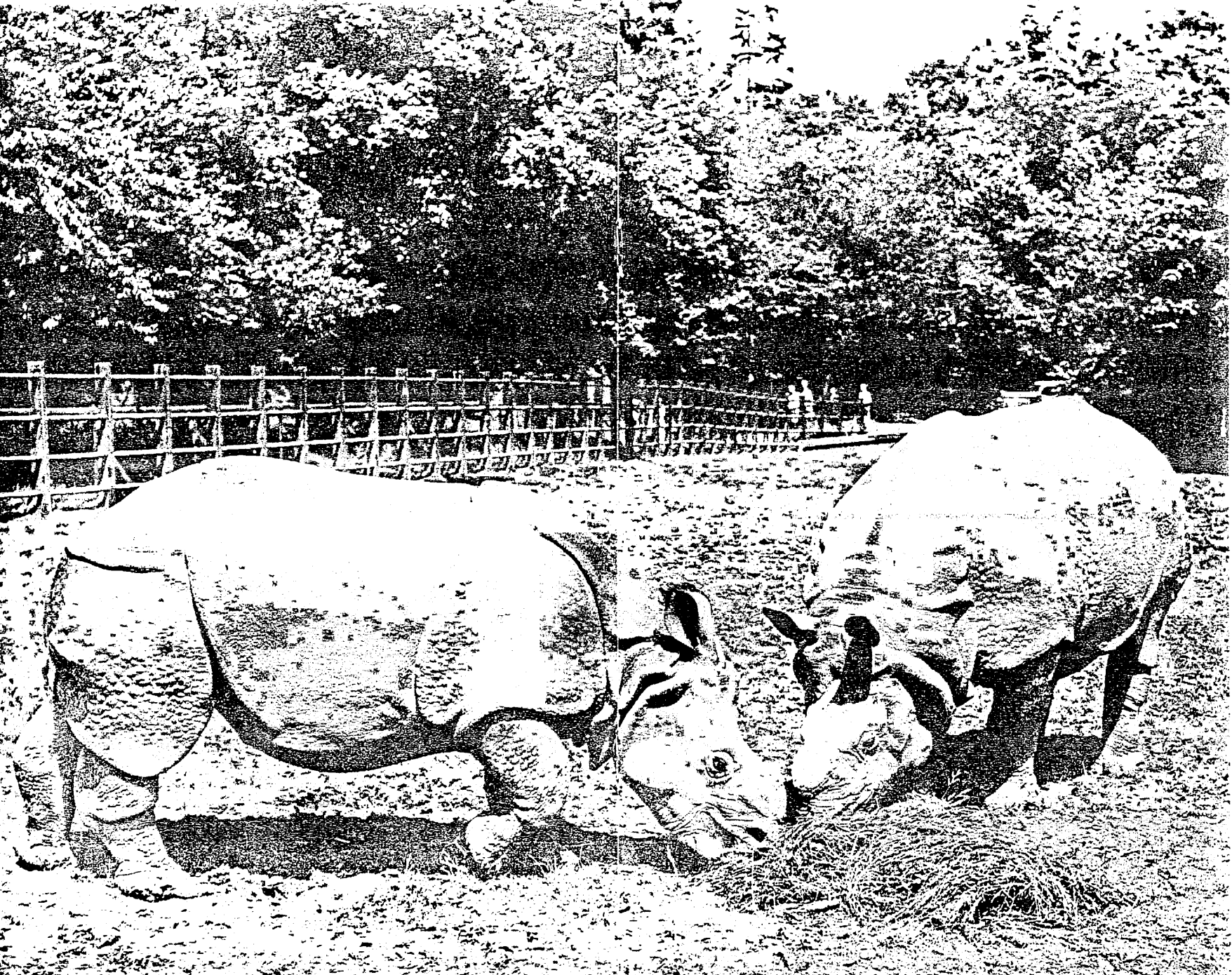
IN the early part of the year we received a communication from the Zoo at Praha to the effect they had twelve Przewalski's Horses which they had bred from stock brought in by Hagenbeck in 1901, and that they had the permission of their Government to exchange a pair. After considerable negotiation and a journey to Prague a fine two-year-old pair of these rare animals arrived at Whipsnade in May.

As far as is known, Mongolian Wild Horses have only twice been imported into Europe. At the end of the last century Frederick Falz-Fein obtained two mares and was later given a stallion by the then Tsar. In 1901, at the instigation of the Eleventh Duke of Bedford, Carl Hagenbeck sent an expedition to Kobdo, a town

situated under the northern slopes of the Altai Mountains, in Mongolia.

Hagenbeck's representative succeeded in bringing back 28 horses. Some of these went to Woburn Park, some to Berlin and other Europe in zoos. It is the descendants of these two importations which are now at Whipsnade. In addition to this young pair there is still a very old pair of these animals at Whipsnade, the stallion having been born at Regent's Park in August, 1931, and the mare deposited by the late Duke of Bedford in May, 1942.

The pair of Indian Rhinoceros at Whipsnade are the only ones in this country. "Mohin," the male, came to Whipsnade in 1947 and is now approximately ten years old, and "Mohini," which incidentally, means "wife of Mohin,"



came in 1932 and is approximately five years old.

Since her arrival the pair have been kept in adjoining sheds, only one animal being allowed in the paddock at a time. A short time ago it was decided that the time was ripe for allowing them to meet, without a heavy iron barred fence between them, in spite of the danger of a battle.

Fortunately our fears, based upon information received from other zoos where similar experiments had been tried, were quite unfounded. "Mohan" and "Mohini" were let into the paddock and for a time stood facing each other nodding their heads, and caressing each other with their heads. An unexpected move by "Mohini" appeared to unnerve "Mohan," who ran snorting to the pond at the corner of the paddock. He submerged to his neck and refused to take further interest in the proceedings. The following morning, however, the two were discovered sleeping in "Mohan's" apartments and continue to live peacefully together.

The Kodiak Bear cubs have increased in size and popularity since my last report,

and the birth of a calf to "Henry" and "Belinda," the pair of Hippos, makes 1934 a memorable one. The baby, at first thought to be a female, was born on the evening of the Queen's return from the Commonwealth Tour, and was to be named Regina; subsequently the assumption proved to be wrong and Regina by popular choice becomes Reginald.

Other interesting births include two Bison calves, four Eland calves, two Ankole heifer calves and one Zebra filly foal, the latter the first for several years.

From the Queen's collection we received two Great Grey Kangaroos, two Red Kangaroos and two Wallaroos, the first kangaroos to be exhibited at Whipsnade for many years. In addition we also received from Australia four Black Swans, two Emus and two Dingos.

Ten Cape Penguins have been received from the Guano Islands Protectorate and added to the King and Humboldt's Penguins on the Penguin Pool, and two Wart-hogs, which have just completed their period of quarantine, have been transferred from Regent's Park.

Female Hippopotamus and her calf photographed at Whipsnade. Photo: Fox Photos Ltd.



Australian Lung Fish

By N. B. MARSHALL

LIKE the coelacanth fish, *Latimeria*, the Australian lung-fish (*Neoceratodus forsteri*) is a survivor of a group of bony fishes that were once widespread over the earth. But, so far as we know, *Latimeria* is the last of the coelacanths and it appears to be confined to the seas off south-east Africa, particularly to the region north of the Mozambique Channel. Lung-fishes are found in the freshwaters of North Queensland, tropical Africa and South America. However, fossil lung-fishes have been found in Europe, Great Britain, Greenland, Australia and North America and it is interesting that nearly all occur in fresh-water deposits.

The early lung-fishes of Devonian times (about 300 million years ago) had rather long bodies covered with heavily armoured scales, while the paired (pectoral and pelvic) fins had a scaly, presumably muscular, lobe fringed by the fin rays. The tail was asymmetrical and close in front of it were set the two dorsal fins and an anal fin. These features were also possessed by the contemporary tassel-finned fishes (*Crossopterygii*), the group to which *Latimeria* belongs. Undoubtedly the Devonian relatives of the Australian lung-fish and *Latimeria* can be said to have sprung from a common ancestor, an ancestor that must have been quite like the fish ancestor of the four-limbed vertebrates.

While in all main external features *Latimeria* is remarkably like the earliest coelacanths, the Australian lung-fish has a very different appearance from, say, *Dipterus* of Devonian times. The scales have lost the heavy armour, the number of bones in the skull has been greatly reduced, and the tail fin is symmetrical and indistinguishable from dorsal and anal sections. These changes can be traced in the fossil record: there is, for instance, a remarkable series of lung-fishes showing the gradual merging of the dorsal fins and the anal fin with the caudal fin. But

Neoceratodus still possesses the paddle-like paired fins with scaly, muscular lobes.

The lung-fishes are so called because of their air-breathing habits and the lung-like appearance of the swim-bladder from which runs a pneumatic duct opening by way of a glottis into the right ventral side of the pharynx. When there is a plentiful supply of dissolved oxygen in the water, *Neoceratodus* breathes through its gills, but from time to time the water in which it lives may become dried up to a series of stagnant water holes. It is during such times that its ability to rise to the surface and take atmospheric air into its "lung" becomes of vital importance. While the lung-fish survives, other bony fishes without a lung-like swim-bladder die in hundreds.

In the Burnett River of North Queensland observers have seen (and perhaps heard) the lung-fish visiting the surface at intervals of half-hour to an hour. (The action of exhaling and taking in a fresh supply of air is said to give rise to spouting, grunting and groaning noises.)

When the Australian lung-fish was described in 1870 by Gerard Krefft, then Curator of the Australian Museum, Sydney, there was much excitement among zoologists, perhaps almost as much as that caused by the discovery of *Latimeria*. Krefft saw that the peculiar dental plates of this fish were remarkably like those which had been found in Triassic and Jurassic rocks and given the generic name of *Ceratodus* by Louis Agassiz. In 1871 there followed a detailed monograph on the anatomy by Dr. Albert Gunther of the British Museum (Natural History). But long before this the early settlers in Northern Queensland had been eating this lung-fish and called it the "Burnett Salmon" on account of the pink colour of its flesh. (Now the fish is rigidly protected.) As well as occurring in the Burnett River it lives in the Mary River. Moreover, the "Burnett Salmon" was