

ZOO NEWS

Recognising that the **London Zoo** is a major international institution and a major tourist attraction, the Ministry of Public Building and Works has granted the Zoo a total of £900,000. Of this, £650,000 is to enable the Zoo to repay its short-term debts, and £250,000 is in effect a grant, as the Government is to waive repayment of a loan of that amount made in 1964. In addition, the Government is prepared to contribute up to £700,000 in the four years 1970-73 towards the Zoo's rebuilding programme.

These grants to the Zoological Society of London were announced in the closing days of the last Parliament. Some 2 million visitors pass through the Regents Park turnstiles each year, of which about 20 per cent are from overseas, while Whipnade draws in about 600,000 people each year.

Two new zoo guides have recently been published, covering zoos throughout Britain.

The first is **Zoos, Bird Gardens and Animal Collections in Great Britain and Eire** compiled by Kate Bergamar and John Rotheroe (Shire Publications; 5s).

The zoos and parks are catalogued according to county in alphabetical order, and each account contains directions, information on ownership, opening hours, prices, extra amenities, and in many cases, details of the animals and birds to be seen. Very often there is a short history of the collection, from its creation to the present day. There is also a map showing the locations of the collections.

This is a straightforward reference book, and for five shillings is a very handy pocket volume.

The second guide, **The Penguin Guide to British Zoos** by Geoffrey Schomberg, is the same price as the other but sets out to be, and succeeds in being, a great deal more than just a guide. The author is the Secretary of the Federation of Zoological Gardens, and in his introduction he surveys the strengths and weaknesses of the British zoological

scene. This book contains all the information given in the Shire book, with the exception of phone numbers which is a pity, but the information is much fuller, and yet at the same time more concise. The 'extra' information is much more detailed, and each zoo is given a fairly lengthy history, as well as advice on the high points to look out for and the faults to beware of, at the zoo. The commentary also contains details of the zoo's breeding successes. Each zoo is coded with a letter, (A) signifying major representative collection, (B) major specialist collection and so on.

This guide is an excellent buy, and although *Zoos, Bird Gardens and Animal Collections* is adequate, the Penguin is much better value for money.

On 20 May **Woburn Wild Animal Kingdom** opened on the Duke of Bedford's estate at Woburn Abbey in Bedfordshire. The Duke, in partnership with Jimmy Chipperfield of the circus family, has filled his parkland with cheetahs, zebras, lions, giraffes, baboons, elephants and the largest group of white rhino outside South Africa. Visitors are at liberty to drive through the park in closed cars, or can hire a minibus at £1 per head for the first five passengers and five shillings per head thereafter. A Safari coach operates from the Abbey at eight shillings for adults and five shillings for children.

The parkland should be an ideal setting for the animals, and great care has been taken to ensure both safety, and the maximum amount of freedom to both visitors and animals. It should be well worth a visit.

Something always seems to be happening at **Chester Zoo**. Recently there have been a number of births, particularly in the monkey house. Three were born to different mothers on the same day in May. Two jaguar cubs have also just been born, and some pumas.

Chester has obtained two giant plantain-eaters which are very rarely imported as they are exceedingly difficult to transport. There are also two lady violet plantain-eaters which have just been flown in from Uganda.

Other new arrivals include five twin wattled cassowaries. These birds are glossy black and come from New Guinea. They are closely related to the emu, and can stand as much as 5 feet 5 inches high.

The new parrot house was opened at Easter. The aviaries are set at right angles one to another, in order to get away from the old idea of corridors. The birds have inside and outside flight and the windows are double glazed. There are detailed plans for extending some of the animal paddocks, but nothing has as yet been done.

At the **Flamingo Park Zoo** in Kirby Misperton in Yorkshire, there is a killer whale. The zoo obtained this animal in

1968 and 'Cuddles', as he is called, is now 14 feet 3 inches. He is very friendly and puts on a full-scale show for the benefit of the visitors, kissing his keeper and performing all sorts of aquatic tricks.

The zoo has also recently acquired 40 more flamingoes and 10 more marabou storks. There are plans to build a new penguin pool to cater for the growing number of penguins, which are very popular with visitors. It should be finished this month.

A rather unusual feature of **Aberdeen Zoo** is their large number of Scottish wild cats, and they have recently obtained a few more. These creatures are very difficult to get hold of so this is quite a feat for Aberdeen. The zoo has also recently had a breeding success, with the birth of a Malayan fruit bat. It is unusual that this should happen in captivity.

A new chimpanzee enclosure has recently been erected. This gives the chimpanzees a lot of freedom as it is very spacious and contains many trees and shrubs for them to play among.

Plymouth Zoo was started by Jimmy Chipperfield and a partner in 1963. It has a small mixed collection of animals with the accent on African species. But the main – and unusual – attraction here is the fact that there is a large quarantine station next to the zoo where imported hoofed animals are kept until they can be sent on to their final destination. Consequently many large animals can be seen in herds. At the time of writing there were 17 giraffes and 15 eland, on view to the public.

Detroit Zoo in Michigan has lately been faced with the problem of what to feed its newest inmate, a snow leopard. The zoo had not been satisfied with the diet being given to their Siberian tigers, as these great cats did not have the proper lustre to their coats. Following the lead of Chicago's Brookfield Zoo, Detroit began adding ground turkey to their diet. This seemed to work wonders, and the male tiger began to act like one, instead of the rather lethargic creature he had been. It was therefore decided that the diet for the snow leopard should be the same. The food was thus offered to him and he seemed to like it and thrive on it, so at present this dietary plan continues.

Visit a zoo free!

Younger readers are reminded that our annual photographic competition now has a junior section. In two categories (for ages 16 to 18, and under 16), the main prize in each category is free admission for one year to the British zoo of your choice. On one visit the winners will be entitled to bring with them three friends or members of their families, also free. In addition, each winner will receive a complete set of the *Time-Life Young Readers Library*.

The full rules of the competition appeared last month, and will appear again next month, and the closing date is 30 September.

trosses; sooty shearwaters and penguins. At 8.15 am, a dark grey shape loomed against the grey sky and sea – it was the Bountys.

The dark shape divided and multiplied into many barren rocks, baring their jagged teeth through the surface of the ocean, miles from anywhere. By 10.30 am, the *Magga Dan* was anchored close in-shore and the motorboat was ready to be lowered. Bobbing close by, rafts of large Bounty Island shags would dive as a group and appear again at a distance. Dark penguins porpoised near the rocks, some taking the crest of the swell to hop ashore and climb the steep slopes. Fur seals snuffled noisily around the ship. Overhead, beautiful black-capped Antarctic terns called loudly to each other in a high pitched *peep – peep*. Mollymawks crowded the airspace above the islands, undertaking complicated manoeuvres to land on the highest slopes.

The ship's motorboat swung out on the derrick and down onto the sea, carrying a

Grey-backed mollymawks and erect-crested penguins, with Magga Dan in the distance. These birds breed on Bounty Island in their thousands, and occupy the same rocky slopes. The nests of the two birds are only pecking distance apart'

reconnaissance party to find a landing place. At several places, the bow nudged into the kelp-fringed shore, only to be sucked away and down several feet in the trough of a wave. Everybody aboard was soaked from the sea-spray. The islands are sheer and smooth-surfaced, and are eroded in places to form great caverns and pinnacles. Water, pushed through narrow channels, ballooned out on the other side before rushing gurgling, sucking back again.

The second party to try for a landing succeeded. By noon all who wanted to land had landed on the largest, most often visited island.

One jumped ashore and scrambled up a slippery, greasy, penguin path, arriving on the top-most slopes to experience at last, in flesh and feathers this avian Ascot. We were like Gulliver in a Lilliputian world of mollymawks and penguins.

Penguin and mollymawk parents arrived continually by sea and air. Chicks of both

species had advanced to the stage where feathers began to show through the down on the wings. Penguin chicks, muddled with guano and krill stains, stood or crouched in two's and three's. Solitary mollymawk chicks, pot-bellied flask-shaped bundles of white down, perched on their nest-pots with a grandstand view of the penguins. Most nests stood 8 to 10 inches high, but one almost improbable structure measured 16 inches from the ground, topped by a gawky chick.

Near the cliff-edge was the old castaways' hut, and in the foundations the guano and feathers accumulated to form a reasonably thick 'soil'. Under nearby slabs of rock, grey downy prion chicks crouched, none accompanied by the parent. Two species, the fulmar (*Pachyptila crassirostris*) and the fairy (*P. turtur*) prions are supposed to breed here. Under the same slab-rocks, numerous small spiders fastened their silken purse-like lairs. No doubt they feed on the abundant small flies everywhere at this time of the year – but what happens in winter? Billions of a large 'kelp-fly' settle on the guano and around the periphery of a few foul-smelling, brackish, turbid pools which are the only reservoirs for rain-water.

New species of insects probably await discovery. One 'find' on this expedition was a large, wingless daddy-long-legs fly, native to the Bountys, though related to similar species on other subantarctic islands. A new moth record – a tiny, drab-brown creature fluttered into the daylight from beneath the planks of the hut. So far, the Bounty Islands invertebrate checklist includes four or five kinds of beetles, four species of fly, a moth, a wasp, a weta (cricket-like insect), two species of spider, mites, lice, one amphipod, and some unidentified worms. Most of these feed upon organic detritus in the guano, or on the carrion of dead birds.

Southern fur seals (*Arctocephalus forsteri*) have repopulated the Bountys. Overall some 10,000 strong, they covered rocky platforms away from the penguins and mollymawks, usually nearer the sea. Bull seals commanded harems; some females suckled young, and groups of pups lay dozing or warily on guard. The rubbery bouncing gait of the aggressive bulls was much more efficient than human scrambling. One dared not approach close without first planning an escape route.

Antarctic terns and cape pigeons breed on almost inaccessible ledges upon precipitous cliffs. The black-bellied storm petrel also breeds on the Bountys, but none were seen. It is surprising not to find any skuas on the Bountys – a bird so typically associated with southern penguin colonies.

Some ornithologists believe there is no room for them on the tightly colonised rocks, amongst aggressive penguins and mollymawks.

The Bounty Island 'sea-shore' contains no beaches. Rock platforms and sheer rock faces are girdled by brown kelp and a stunted moustache of brown seaweed turf. Below the kelp the rocks are painted with a pink and white seaweed. One large radiate limpet – a form peculiar to the Bountys – clings to the rocks just above the kelp and extends to a height of some 30 feet, a clue to the height of storm waves.

But what lives beneath the tides? There is at least one species of fish, a member of the typically Antarctic and subantarctic genus *Notothenia*. Bull-headed, with scales like armour plating and mustard coloured, it grows some 18 inches long on an omnivorous diet of seaweed, crabs, shellfish, and offerings from the bird and seal colonies. Dredgings made close to the islands in 40 to 60 fathoms return a typically yellow sand, or a coarse grit of broken shell, corals, horny sea mats, lampshells, single-celled foraminiferans, tube-living worms and swimming crabs.

At the conclusion of the Bounty Island story, one finds that only a fragment of its biology is properly understood. What is the breeding cycle of the native shag? Where does it spend the tempestuous winter? What happens in winter to the invertebrate life in the guano soil, when most of the soil may be washed away to sea? Do the same penguins, seals, and mollymawks return every year to the same islands to breed? Are the Dominican gulls and red-billed gulls stragglers or permanent residents, and where do they go in the winter?

From numerous short visits to the Bountys, putting together a complete picture of its animal life is like mastering an almost impossible jig-saw, where many of the pieces are hidden in the unpublished notebooks of naturalists or on unedited film. Some of the pieces still wait to be found on the islands. As biologist, R. A. Falla wrote (*New Zealand Geographer*, October 1948):

'It is never going to be easy to visit the Bounty Islands, in spite of a prediction by an American visitor some years ago that aircraft trips would soon become mere suburban outings from Dunedin, but the proper preservation and regular inspection of such groups should be regarded as a primary duty. There is both obligation and opportunity also to promote some study of the ocean resources that within a small radius support such a vast congregation of birds and mammals' ●