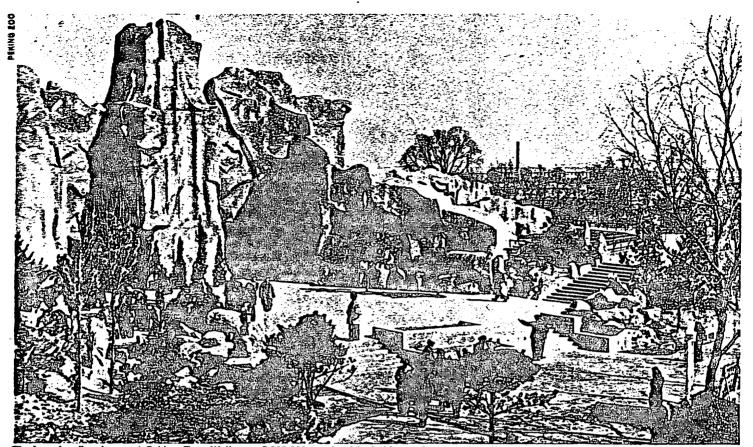


Top: Main entrance to Peking Zoo, which contains 3,600 animals belonging to more than 400 species. More than 30 species were successfully bred here in 1965, including a pair of Australian black swans. Above: A pair of Manchurian tigers at Peking Zoo. The animals often go swimming in the water-filled moats which surround their grassy enclosures

by Caroline Jarvis

China has for so long remained apart from most of the western world that we do not often read accounts of wildlife in captivity there. Yet China now has three of the most excitingly modern and revolutionary zoos in the world, as well as many smaller ones. Caroline Jarvis visited China last year, and she spent three weeks seeing some of these wonderful zoos



The imposing lion house at Peking Zoo. Well over 5,000,000 people visited this zoo last year-a higher attendance than at any other zoo in the world

POR many years I had heard from zoo people, and from friends who had visited China, of the great number of zoos being started in China, of the interesting animals they contained, and of the considerable amount of conservation work being undertaken in China. The more I heard, the more I wanted to go to China—and at last, in September 1965, I was able to spend three weeks in China on a private holiday, looking at zoos, talking to zoologists and seeing as much as I could of China, its people, and its animals in that short time.

At every zoo I visited, and indeed whereever I went while I was in China, I was made tremendously welcome. The zoo people could not have been more patient or helpful in answering my endless questions. Altogether, it was a fascinating and infinitely worthwhile experience.

Animals have always played an important part in Chinese life and culture. From earliest historical times they have been portrayed in paintings, in sculpture, in porcelain, in embroidery, and in literature. They have been objects of veneration to many and important sources of food, clothing, and medicine. Statues of lions, elephants, turtles, sacred cranes, and many other creatures are found in the temples and palaces; and in the countryside one constantly comes across huge stone beasts,

staring out across the rice fields, guarding or pointing the way to a tomb or sacred place.

Today the interest in animals seems to be greater than ever before. More zoos have been started in China in the past 15 years than in any other country in the world and they have the highest attendance figures of all. Beautiful stamp issues showing giant pandas, golden-haired monkeys, Manchurian cranes, butterflies, and fishes have been issued; and pictures of giant pandas, cranes, and other animals appear on handbags, scarves, tobacco tins, cups, glasses, and many other household objects. At the same time, much serious research is being undertaken by Chinese zoologists into the natural history, conservation, and classification of their very varied, and in many instances unique,

Chinese zoos likewise have a long tradition. Although the first known zoo in the world was started by the Egyptians in 1494 BC, the idea of an educational zoo originated with the Chinese: in 1100 BC the first emperor of the Chou dynasty founded a zoo arranged on educational lines known as the 'intelligence park'. However, in the long intervening period between the Chou emperors and the 20th century, zoos in China went into a decline. Before the Revolution in 1949 there were

only three or four zoos in the whole country. The largest was at Peking and had been founded in 1906 by the Dowager Empress Tse Hsi but it contained few animals and was only open to the court and nobility. By 1949 the only animals left in the zoo were some monkeys, a pair of parrots, and a one-eyed emu. The other main zoo was at Shanghai, but this was also tiny and not much more than a holding ground for animals being exported abroad. Before 1949 very few Chinese had the opportunity of seeing for themselves their great zoological heritage of wild animals.

Since 1949 the situation has changed radically. There are zoos in many of the large towns and most of the public parks have an 'animal corner'. In Shanghai, for instance, where there is a very large modern zoo, there are also collections of animals in most of the city's 11 public parks. Altogether, there are about 20 major zoos and about 40 minor zoos in China today, the most important being at Peking, Shanghai, Canton, Chengtu, Chungking, Harbin, Kirin, Kunming, Nanking, Tsinan, Tsingtao, and Wuhan.

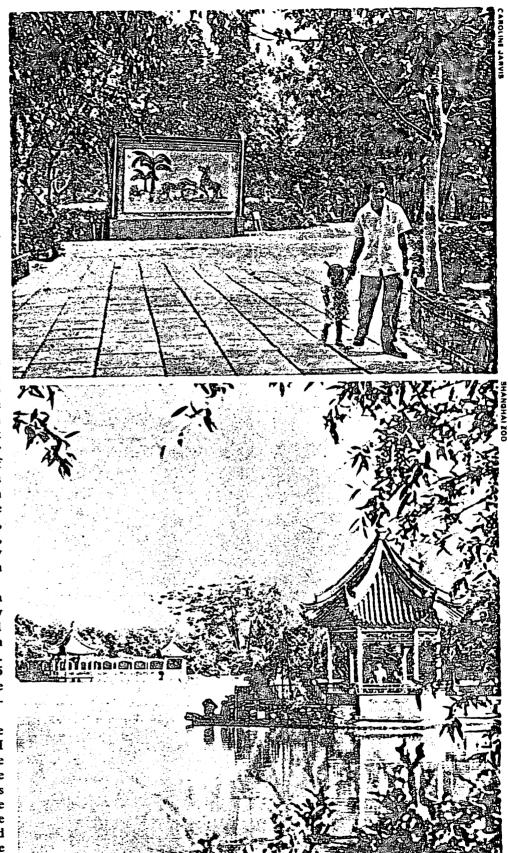
The Chinese are very proud of their wild animals and anxious that as many people as possible should have the opportunity of seeing and learning about them. Great emphasis is laid on the educational function of zoos. In all the ones I visited

tnere were large pictorial maps depicting animal distribution, rare animals, and illustrating such themes as 'why hippos spend so much time in the water' or 'how parrots talk'. Labels on the animal cages were invariably very detailed and even in the tiny Hangchow Zoo, the scientific names of the animals were given in Roman alphabet. These scientific names were also usually much more accurate and up to date than many in western zoos!

Zoos in China are administered by the Forestry Department of the local municipality, and paid for out of public funds, though the scientific workers come under the zoological institute of the Academy of Science at Peking. All the bigger zoos have large scientific staffs (Shanghai has about 20 scientific workers and Peking about 40) undertaking research into animal breeding, nutrition, health, and conservation. All the zoos employ both men and women as keepers in about equal numbers. They are taken on at 17 when they leave school and are required to have taken zoology in Middle School. At Peking Zoo they are given a two-month course before they start work in the zoo; keepers from other zoos also attend special courses at Peking Zoo. In addition to the regular staff, schoolchildren are used for some of the lighter jobs round the zoo. It is customary in China for all schoolchildren to spend one day a week working outside their schools, and in temples, parks, museums and many other institutions, groups of children can be seen busily polishing, weeding, tidying, and doing a great variety of light work.

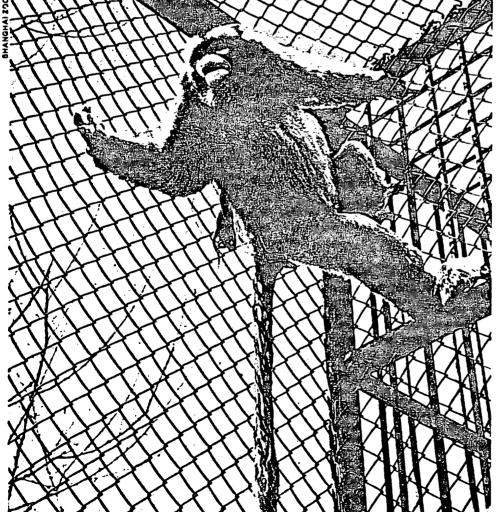
Like all public parks, the admission charge to the zoos is nominal: adults pay 10 cents (about 3d) and children under 1 metre in height are admitted free; on public holidays everyone is admitted free. Zoos are extremely popular and in 1965 Peking Zoo was visited by well over five million people, which is a higher attendance than any other zoo in the world.

Since all the zoos are new, they are mostly still being built, and if the ones I visited are anything to go by they will be among the best in the world when they are completed. The municipal authorities allocate plenty of land for their zoos. The landscaping is superb and the zoos are beautifully laid out with groves and avenues of trees, broad sandy paths, wide lawns, brightly coloured flower beds, willow-bordered lakes, pools of lotuses and water lilies, ornamental bridges and temples and many carefully placed garden seats. The Canton Zoo is particularly attractive in this respect. Although on the two days I visited the zoo the temperature



Top: The spacious grounds of Canton Zoo, opened to the public in 1958. Many of the animals at this zoo, which will not be fully completed until 1972, are exhibited in open enclosures. Bottom: The take at Shanghai Zoo, which contains many rare waterfowl species. This is perhaps China's most beautiful zoo, though it is still incomplete





Top: A family of golden-haired, or snub-nosed, monkeys at Peking Zoo. These are very rare animals not found outside China. Bottom: Male golden-haired monkey

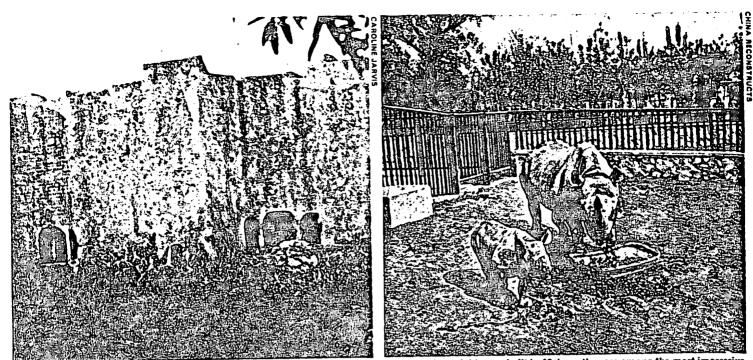
and humidity were both in the high eighties, one scarcely felt the heat at all in the zoo, so pleasantly shaded with trees were the winding paths.

Great care is also taken in the positioning of the animal buildings: walking round each zoo one has the feeling of being in a garden. Evey exhibit is a surprise to the eve: as the result of extensive use of trees and shrubs, it is seldom possible to see more than one building or group of buildings at the same time. Wherever possible the public is separated from the animals by low walls and moats, and enclosures are made to look as natural as possible. Both Canton and Shanghai Zoos have huge monkey islands filled with piles of boulders, trees, and swings; at Shanghai and Peking the tigers and lions are kept in large grassy enclosures bordered by deep water-filled moats (often used by the tigers for swimming) and backed by naturallooking, creeper-covered rockwork with small caves for the big cats to sit in during the heat of the day; bears are invariably shown in big sunken pits containing quantities of a very attractive rough white rock. The inside enclosures are equally spacious and modern.

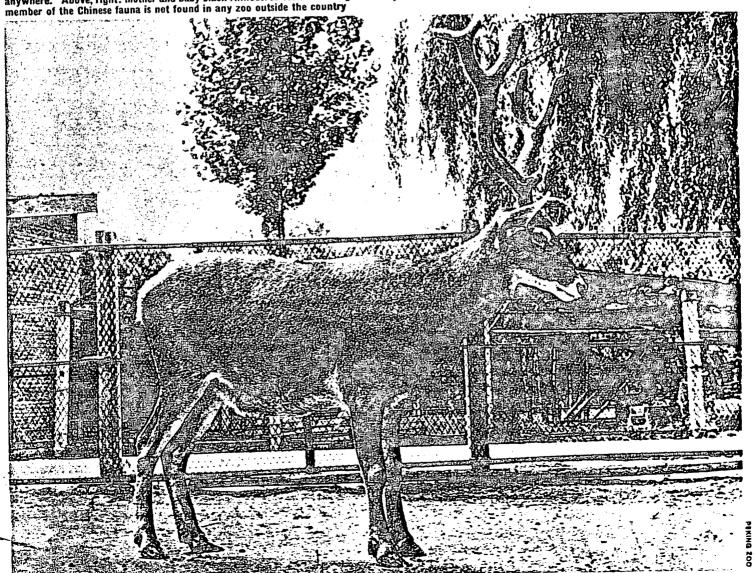
Perhaps most impressive, however, are the houses and enclosures for the pandas. At both Peking and Shanghai they are kept behind glass in very large airconditioned cages provided with rocks, pools, and a water spray to ensure the bamboo (which forms their staple diet) is fresh. As the summer is very hot they spend most of the day indoors, but in the morning and evening when it is cooler they go out into their grassy enclosures to wander among the clumps of bamboo and mimosa trees. The animals in all the zoos I visited looked very well cared for, sleek, and well-fed, and their enclosures scrupulously clean.

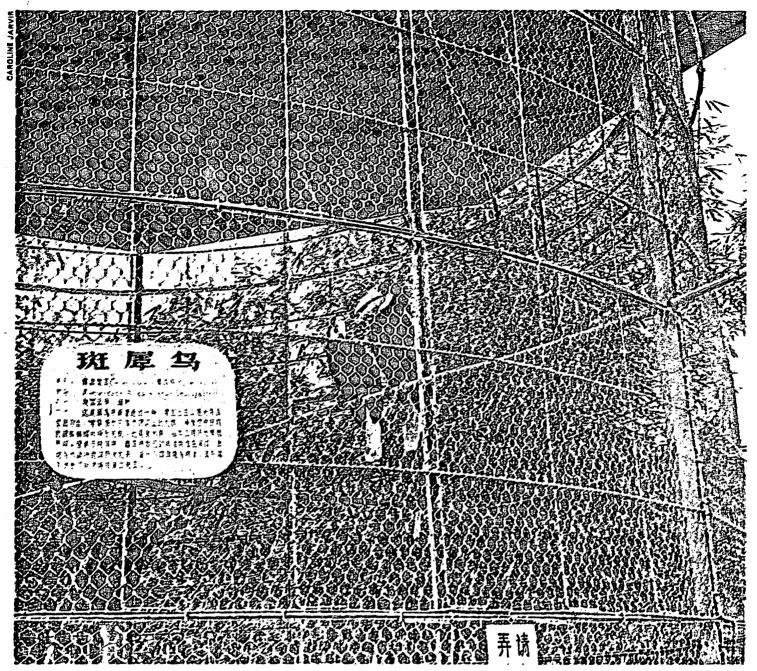
The three outstanding zoos I visited were undoubtedly Peking, Shanghai, and Canton. What remains of the Dowager Empress's zoo in Peking was taken over by the People's Government in 1949, renovated, and reopened in 1950. It covers 53 hectares and contains about 3,600 animals belonging to more than 400 species. African animals are well represented with black rhinos, zebras, giraffes, and hippos, all of which are breeding, as are polar bears, lions, banteng, emus, black storks, and many rare Asian species. Altogether, more than 30 species of animals were bred at Peking Zoo in 1965.

Shanghai Zoo was founded in 1953 and covers more than 70 hectares in a large park in the suburbs of the city. Though it is still incomplete, it is already very large—



All houses and enclosures for big cats and pandas at Shanghai Zoo, like the tiger enclosure (above, left) were built in 48 days; they are among the most impressive anywhere. Above, right: Mother and baby black rhinoceros born in Peking Zoo last year. Below: The strange white-lipped deer. This rare and little-known member of the Chinese fauna is not found in any zoo outside the country





A pair of pied hornbills at Canton Zoo. The admirable signs found in all Chinese zoos give full details of habit and habitat, as well as full scientific name in Roman letters (in this case Order: Coraciiformes, Family: Bucerotidae, Genus, species, and sub-species: Anthrococeros coronatus leucogoster

and certainly one of the most attractive zoos I have ever seen. The large moated exhibits blend imperceptibly with the lawns and groups of trees (more than 50,000 have been planted in the zoo) and there is a lovely 3-hectare lake, bordered by weeping willows and lotus and containing many rare species of waterfowl. About 1,800 animals belonging to 200 species are exhibited. The animal houses are generally simple but well-designed, and I was amazed to learn that the houses and enclosures for the big cats and pandas had been built in 48 days!

Work started on Canton Zoo in 1956, it was opened to the public in 1958, and is due to be completed in 1972. It exhibits

about 2,000 animals belonging to more than 300 species. African species exhibited included zebras, hippos, giraffes, and eland, all shown in spacious open enclosures. The director was particularly proud of his Sumatran orang-utans and the fact that two young had been born in the zoo during the past few years. There was a good collection of Asiatic cats and deer and I was interested to learn that there was a deer farm associated with the zoo outside Canton.

Since 1949 many deer farms have been started, particularly in Manchuria, and herds of deer are kept for their antlers which are used extensively in Chinese medicine for nervous diseases. In nearly all

the zoos I visited the deer had had their antlers removed for this purpose. I was also told that a farm had been started in Szechwan to breed musk deer for their musk. As in the Peking and Shanghai Zoos, there was a nice new elephant house containing a pair of Vietnamese elephants.

These, then, were the main zoos I saw during my trip. In my next article, I want to give an idea of some of the exciting and rare animals being successfully kept in Chinese zoos.

Caroline Jarvis's final account of her visit to the zoos of China will appear in two weeks' time, in Animals Volume 8 Number 19.