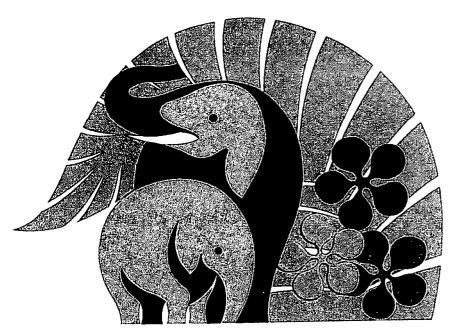


## SINGAPORE ZOOLOGICAL GARDENS



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The idea of establishing a zoological gardens at Seletar Reservoir was conceived in early 1968.

A committee of voluntary workers, under the chairmanship of Dr. Ong Swee Law was formed to undertake preliminary studies and investigations. The advice of various zoo experts from Europe, U.S.A., Australia and Asia were obtained on the feasibility of such a project. In September 1969 a report was submitted to the Singapore government recommending the establishment of a Zoological Gardens at Seletar Reservoir.

The report received the approval of the Singapore Government and the Singapore Zoological Gardens was formally incorporated in March 1971 with a paid-up capital of \$5 million from the Government in the form of equity participation. The authority to manage the Zoological Gardens is vested in the Board of Directors, comprising two Board members, Dr. Ong Swee Law (Chairman) and Mr. Khong Kit Soon.

In November 1970, the Singapore Zoological Gardens appointed Mr. Lyn de Alwis, Director of Dehiwala Zoo, Colombo, as a Consultant. Together with the architects for the Zoological Gardens, detailed plans were drawn up by the Consultant in close consultation with the Singapore Zoological Gardens.

The site for the Singapore Zoological Gardens, 12 miles away from the city centre, is on a promontory of land, 260 acres, jutting into the Seletar Reservoir. It is bordered on three sides by water with a comparatively narrow neck measuring 700 yards. An attractive feature of the site is the reservoir itself, which has determined much of the thinking for the layout of the Zoo.

The Zoological Gardens has been planned in a garden setting with animals exhibited in surroundings as similar as possible to their natural habitat. The Zoological Gardens will have initially some 50 separate enclosures containing about 300 animals on 70 acres of land. As its name implies, emphasis will be placed not only on animal life but also on plant life. The planning has incorporated some of the more recent advances in zoo design, with a large number of animals to be displayed in open-type enclosures, landscaped to resemble their natural habitats. The aim is to establish a first class zoo in design and management,

with healthy animals competently and humanely looked after in clean and attractive surroundings.

In the choice of exhibits, emphasis is given to animals from the South-East Asian region. There are also animals from other parts of the world, like the kangaroo from Australia and the lion and white rhinoceros from East Africa.

Most of the exhibits in the Zoological Gardens are mammals with a few feathered species included as they are so much an integral part of the wild life scene. For this reason, flightless birds such as the ostrich and cassowary have been included in this community of animals.

When the current tree-planting programme reaches completion and maturity some of the less desirable secondary jungle growth in the area will be replaced by selected trees to make for a cooler and more attractive place. Over 2,000 trees were collected two years ago and it is hoped that the undulating nature of the terrain, with delightful views of the Seletar Reservoir on three sides, with its natural beauty, will be enhanced by our work on tree-planting and landscaping.

Close to the entrance to the Zoological Gardens are the Administrative Building, where the administrative offices, restaurant and cafeteria are situated, and the Souvenir Shop. A ring road, along which most of the exhibits are located, will bring visitors around the Zoological Gardens. It will be curving so that most of the exhibits will come as a surprise to visitors and this feature is accentuated by a profusion of flowering shrubs and bushes.

As an amenity two electric trains with coaches and an electric car will be provided to transport visitors along the ring road. This additional attraction will permit the young and the elderly to tour the site in comfort.

One of the features of the Zoo will be the provision of daily attractions such as animal feeding and performance by trained animals. From the experience of other zoos this will be a great attraction to adults as well as children.

It is hoped that the Singapore Zoological Gardens will make a contribution towards meeting the social, recreational and educational needs of our society. The pace of modern living has resulted in an increasing human need to find relief in nature from crowded concrete structures and zoos have universal attraction for all regardless of age, race, financial standing and educational background. Eighty per cent of zoo visitors consists of family groups. In providing an amenity for family groups and meeting these very real human needs, the Zoological Gardens will, it is hoped, make a significant social contribution to our society.

# **GENERAL INFORMATION ABOUT THE ZOO**

#### Location

: The Zoological Gardens is located 12 miles from the City of Singapore at 80, Mandai Lake Road, Singapore 25, off 12 milestone Mandai Road (see (map on page 52).

# to the Zoo

How to get : By Public Transport United Bus Company (UBC) Service No: 137 will make regular stops at the Zoological Gardens car park near the entrance to the zoo.

> UBC Service No: 137 from Toa Payoh Eastate to Mandai Lake Road From Toa Pavoh Central via Lorong 6, Lorong 6 Circus, Slip Road, Kim Keat Avenue, Link Road Toa Payoh East, Lorong 7, Lorong 6, loop-in at Braddell Road, Upper Thomson Road, Mandai Road and Mandai Lake Road.

> Return via Mandai Lake Road, Mandai Road, Upper Thomson Road, Braddell Road, Flyover, Lorong 6, Lorong 4, Lorong 6, Lorong 7, Toa Payoh East, Lorong 6, Slip Road, Kim Keat Road, link road. Toa Pavoh East, Lorong 5, Lorong 4, Toa Payoh Central, Lorong 2 and Toa Payoh Town Centre.

> **Deviation of UBC Service**

## No. 171 to cover Mandai Lake Road.

UBC Service No. 171 will be deviated from Mandai Road into Mandai Lake Road, Zoological Gardens car park, Mandai Lake Road and continue via the normal route i.e. Mandai Road, Woodlands Road, Upper Bukit Timah Rd., Dunearn Road, Bukit Timah Road, Rochor Road, and Oueen Street.

Return via Queen St., Rochor Canal Rd., Bencoolen St., Middle Road, Selegie Rd., MacKenzie Rd., Bukit Timah Rd., Upper Timah Rd., Woodlands Rd., Mandai Rd., Mandai Lake Rd., Zoological Gardens car park Mandai Lake Road. Mandai Rd.

## By Car:

The Zoological Gardens is a pleasant 35 minutes drive from the city centre. Visitors to the Zoo can get to the destination via Thomson Road or Bukit Timah Dunearn Road. For those who prefer Thomson Road route they travel by Upper Thomson Road turn left into Mandai Road until the 12 milestone, then turn left into Mandai Lake Road (where the

#### WHITE RHINOCEROS

It may not seem worthwhile being born a rhinoceros for this animal has been hunted and slaughtered for powdered rhino horn for generations. Rhino horn, for some strange reason, is considered an aphrodisiac in the Orient. Because it has been much in demand by hunters, the rhino is very close to extinction.

This animal is no small catch for it is the second largest land mammal after the elephant. An adult male measures 6 feet at the shoulders and may weigh more than 3 tons. The most unique feature of the rhinos and also the main cause of their misfortune, is the horns which are composed of closely compressed fibres. There is no bone in the centre. The horn is loosely attached to a roughened supporting area at its base and it can be casily separated when the animal is skinned. The horn grows continuously and may be replaced if lost.



The white rhino is not really white but is a paler colour than the black rhino, which similarly is not black but dark grey. Their thick-skinned bodies are hairless except for the ear fringes and tail tips. The white species is believed to have acquired its name from the African word "weit" which means wide. This adjective refers to the broad, squarelipped mouth that distinguishes it from the black. This animal although much larger than the black species, is comparatively shy and much less aggressive. It also has a prominent lump between the shoulders which is not found in the black rhino and it has a longer head.

The white rhino is strictly a vegetarian, grazing in thorny savannah land in two distinct districts in Africa—in the north, these animals are found in Uganda, the Congo and the Sudan, and in the south, in Zululand. They often seek shade under the trees and go for frequent baths and drinks.

Although the white rhino has a very acute sense of smell and hearing, it has very weak evesight and often does not see where it is going or who is coming towards it. However, the rhino has a friend in a small bird called the Redbilled Oxpecker (Buphagus erythrorhynchus) which travels on the rhino's back and sounds an alarm when danger is near. Actually, there are few animals which are large enough to cause the adult rhino any concern. Its greatest enemy is man himself. Needless to say, its offsprings have often been victims of the lions and crocodiles. A single offspring is born after a gestation period of 18 months and it remains attached to the female for several years.

# **ARTIODACTYLA**

(EVEN-TOED UNGULATES— HIPPOPOTAMUS, ARABIAN CAMEL, MOUSEDEER, SAMBAR DEER, SIKA DEER, AXIS DEER. GIRAFFE, FOUR-HORNED ANTELOPE, THOMSON'S GAZELLE, IMPALA AND BARBARY SHEEP.)

Most of man's domesticated species came from this order and they have supplied him with food, drink, clothing and transport for centuries. These are the "even-fingered" animals according to the literal Greek translation. They are supported by their third and fourth toes whilst the other toes rarely touch the ground or may be absent. The first toe has disappeared in the course of evolution. An exception is the hippo which stands on all four toes.

Many of the even-toed ungulates have a complicated digestive system involving a two to four-chambered stomach. This allows them to swallow large quantities of food, store them in the first 2 chambers and bring them out later to be chewed when they are resting safely. By this time the food has already been worked upon by bacteria. Small quantities are brought back into the mouth and chewed thoroughly. The food is then swallowed again and passed into the third and fourth stomach chambers. This process, called "chewing the cud" goes on until all the food is dealt with.

The even-toed ungulates still exist in large numbers and have been more successful than the odd-toed species despite intensive hunting by man. It is believed one of the main reasons for

this is that these animals are able to gather a lot of food rapidly and consume it in a safe place.

The even-toed ungulates differ from the odd-toed in another way. They have a pair of bony outgrowths from the top of the skull. There are four types of outgrowths:

- The deer have antlers which are branched and seasonal, usually present in the males.
- 2. The giraffes have permanent, short, skin-covered and unbranched outgrowths.
- 3. The pronghorn have antlers which are permanent and unbranched but have a slightly forked, horny covering that is shed annually.
- 4. The bovids antelope, cattle, sheep, goats, etc. have permanent outgrowths which are unforked and always horn-covered. Both sexes have them.

Most of the even-toed ungulates are vegetarians except the pigs and peccaries.

### HIPPOPOTAMUS

(Hippopotamus amphibius)

A person can always tell that a hippo lives in water because its eyes and nostrils are situated high up on its head. This means that the rest of the body can be almost completely submerged