



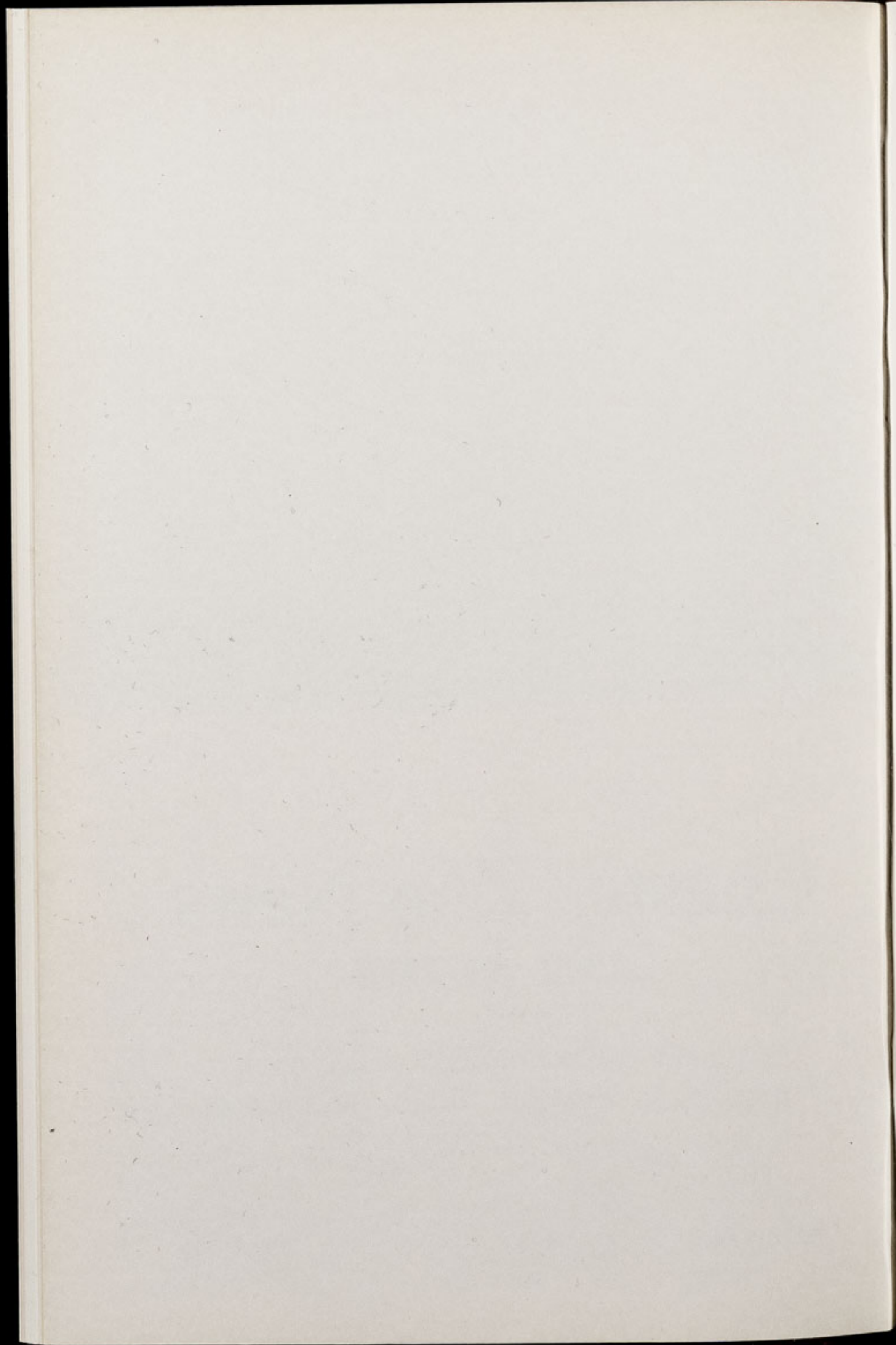
Chester Zoo News

AND GUIDE

THE NORTH OF ENGLAND ZOOLOGICAL SOCIETY
ZOOLOGICAL GARDENS, UPTON-BY-CHESTER

August 1978

Price 12p



The North of England Zoological Society

ZOOLOGICAL GARDENS, UPTON-BY-CHESTER

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Plains Viscacha

By courtesy of K. W. Green, A.R.P.S.

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APPOINTMENT OF NEW DIRECTOR

The Selection Committee responsible for engaging a new Director has appointed Dr. M. R. Brambell, Ph. D. (Edin.) M.A., Vet. M.B. (Cantab.), M.R.C.V.S. It is hoped that Dr. Brambell will commence his duties on 1st November, 1978. He is married with two sons aged fifteen and thirteen years.

Since 1967 Dr. Brambell has been Curator of Mammals at the London Zoo. His major tasks have been the design and commissioning of new buildings, the rationalisation of diets and the long term planning of breeding policies.

Dr. Brambell is Chairman of the Scientific Authority for Animals, which is responsible for advising the Secretary of State for the Environment on the International Trade in Endangered Species.

THE ARCTIC FOX

In Enclosure 64 one can see the pair of Arctic Foxes which the Zoo received into the Collection in February of this year. They have now lost their Winter coats and taken on their darker Summer colouring.

The Arctic Fox (*Alopex lagopus*), is one of the few true Arctic mammals. It is small and has a fox-like appearance but with longer legs is very attractive and much valued for its beautifully thick pelt. Weighing between six and twelve pounds, the Arctic Fox can be found throughout the entire Polar region, withstanding a variety of temperatures.

Commercially, this fox is of great value in the fur trade, the coat being very dense and in a variety of lovely colours. The Latin

name "*lagopus*" refers to the growth of hair extending over the feet during the Winter.

There are two colour phases of the coat, one is white and the other is blue. During the winter the Fox has a white coat with a small amount of black on the tip of the tail, but in the Summer the coat can vary from almost black and blue-grey to chestnut brown and



By courtesy of K. W. Green, A.R.P.S.

ARCTIC FOX (*Alopex lagopus*)

light grey. The rarest and most valuable pelts are those coloured almost black to blue grey. Both colour phases display a yellow sheen in direct sunlight but this is more readily seen in the Summer coat. Investigation into the genetic make-up of the Arctic Fox has revealed that the original colouring was blue and that the white Winter coat evolved through necessity as camouflage in snowy areas.

The Arctic Fox tends to be a loner, never living in colonies of

any kind, not even during the breeding season. The pregnant female builds a new den in a dry hill or rocky crevice. This new den must have a large chamber in which to rear her young. Three or four pups are whelped, but occasionally as many as ten can be produced in one litter. If food is difficult to find the pups die, but if there is a good supply many of the young survive. The fertility rate is high but many pups die during the first few days and many are stillborn. During particularly severe Winters fewer young are born. The male helps with the rearing of the pups, providing food for his mate and guarding the den.

The diet depends entirely on the time of the year. Carrion and stranded marine animals, lemmings, other small rodents and ground dwelling birds and their eggs are main items, but during the Winter lemmings cannot be found as they are beneath the snow. The fox then takes to following wolves and polar bears and eating the leftovers of a kill; another alternative to starvation is to follow a herd of large herbivores such as reindeer or musk oxen, waiting for the too old, young or sick to die. Only the strongest foxes survive the bitter Winter to await the return of the migratory birds from the South to the Northern breeding sites.

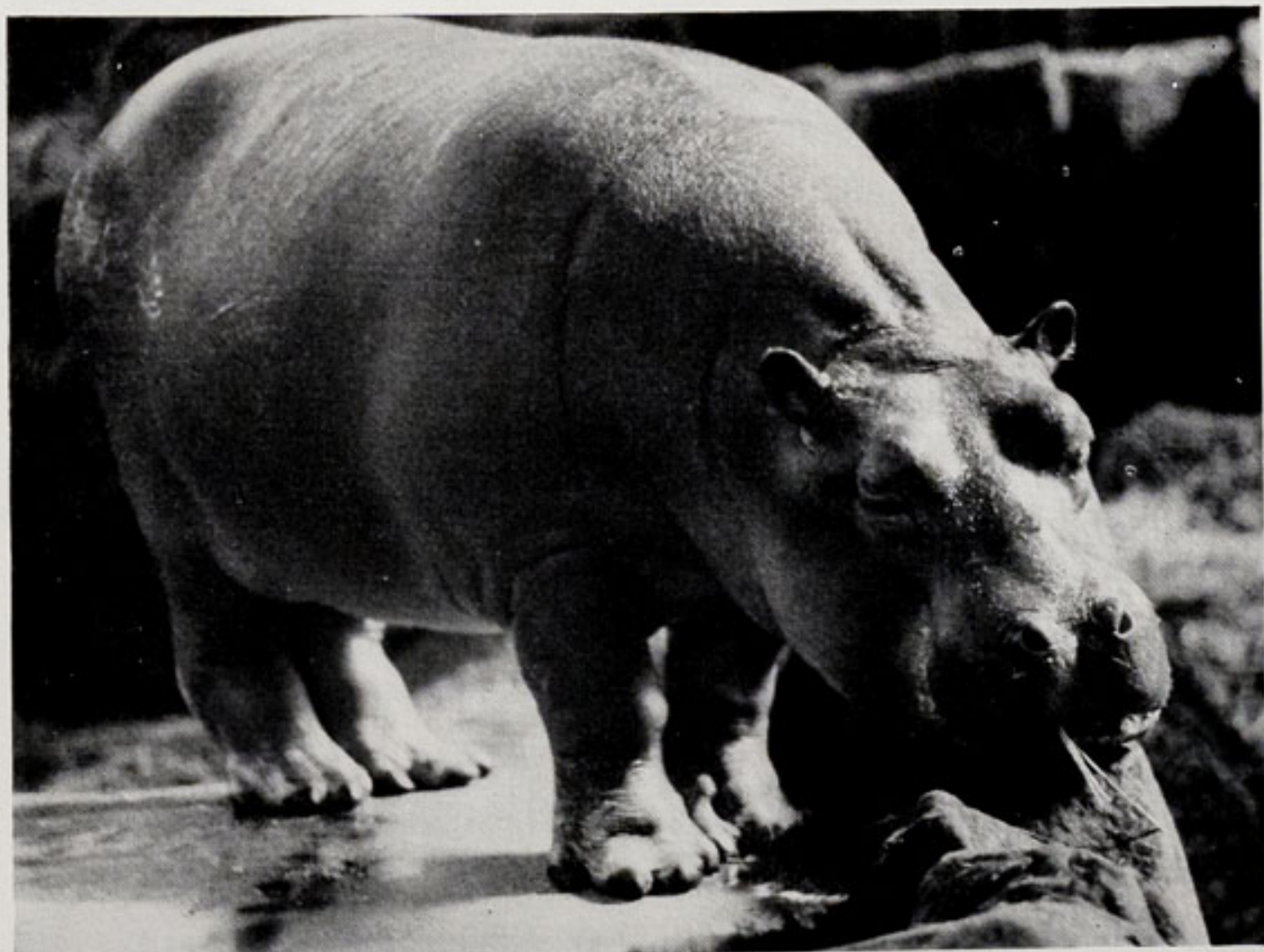
Where the fox is not pursued by Man for its coat it will seek out human settlements as it has no fear of people. It has been known as a constant visitor to camps and it is usually the culprit when something goes missing. The Arctic Fox will take any object that it can drag or carry, even if it isn't food; truly the magpie of the mammal world!

PYGMY HIPPOPOTAMUS

The Pygmy Hippo, (*Choeropsis liberiensis*), is one of two species of Hippopotami, the other being the Common Hippo



By courtesy of Steve Cartwright, Mel Grundy Agency
YOUNG PYGMY HIPPO (*Choeropsis liberiensis*)



By courtesy of K. W. Green, A.R.P.S.
YOUNG COMMON HIPPO (*Hippopotamus amphibius*)

(*Hippopotamus amphibius*). Dense, swampy jungles in West Africa, Sierra Leone, Liberia and the Ivory Coast provide protection for the Pygmy Hippo as it is often hunted by the natives for its meat.

Little is known about this solitary, nocturnal animal other than that it is rare, adapts to captivity and has been known to breed in Zoos. These though, are limited facts when dealing with rare and endangered species.

Upon first examination, it can be said that there is little difference between the two types of Hippo, but closer inspection reveals various physical dissimilarities, which can be clearly seen. The head of the Pygmy Hippo is more rounded and only one pair of incisor teeth are present as against two pairs in the Common Hippo. The eyes are on the side of the head whereas the larger species has bony protuberances at the forehead, and the nostrils are rounded instead of the aquatically adapted slit-like nostrils of the water-dwelling Common Hippo. On the previous page it is possible to denote these differences in the pictures of a young Pygmy Hippo and a young Common Hippo.

Reaching approximately three feet at the shoulder and attaining a length of six feet, the Pygmy Hippo is a curious animal; this is further confirmed by a thick, oily substance secreted in the pores of the dark grey skin. This substance contains a red pigment and when it lies on the surface of the skin looks strangely like blood! In actual fact, it is there to protect the skin when the Hippo is in water for long periods, or in particularly dry conditions.

The Hippo's diet consists of shoots, leaves and fallen fruit found in the forests and is completely herbivorous. A single young is born after a gestation period of 201-210 days and it is possible for individuals to reach ages of about forty years old.

Originally, two Pygmy Hippos were at the Zoo but Max, the male died of old age. He was caught on the Ivory Coast and came to Chester in 1963. Phyllis, the female, was Zoo bred and arrived in Chester in 1956; she has been sent to Bristol Zoo to be mated. In the meantime visitors can see one young and one adult Pygmy Hippo in Enclosure 36. These are being cared for at Chester Zoo until Phyllis returns.

RECENT BIRTHS

The following births were recorded recently:

- 3 Fallow Deer (*Dama dama*)
- 1 Agile Wallaby (*Wallabia agilis*)
- 3 Arabian Gazelles (*Gazella arabica*)
- 2 Barbary Apes (*Macaca sylvana*)
- 2 Plains Viscachas (*Lagostomus maximus*)
- 1 Northern Lynx (*Felis lynx lynx*)

Also received, were two pairs of Korean Ground Squirrels (*Eutamias sibiricus*). These have settled down well and it is hoped that they will breed.

PLAINS VISCACHA

Readers may recall a Plains Viscacha being hand-reared approximately eighteen months ago by Mr. Peter Wait, Curator of Mammals, and Mrs Wait. It is commonly believed that hand-reared animals are incapable of becoming independent individuals, but the Viscachas have proved this point to be wrong. The Zoo is pleased to announce that this Viscacha has now become a father of two young, as listed above. The Wait's family cat was none too keen on this particular hand-rearing, though. He has accepted Arabian Gazelles, Wallabies and Kinkajous without any trouble, but definitely did not like the Viscacha. This may be because they are extremely vocal, with a great range of squeaks and calls, which often sound

CHESTER ZOO

THE NORTH OF ENGLAND
ZOOLOGICAL SOCIETY
ZOOLOGICAL GARDENS

FOR A COMPLETE TOUR OF THE ZOO — Follow Nos 1-116 South Entrance
or Nos 16-116 from North Entrance then return to Nos 1-14.

**Chester Zoo is Open Daily
from 9.00a.m. until dusk.**

To
LECTURE HALL
& CLASSROOM
(Reservations only)



1. SOUTH ENTRANCE

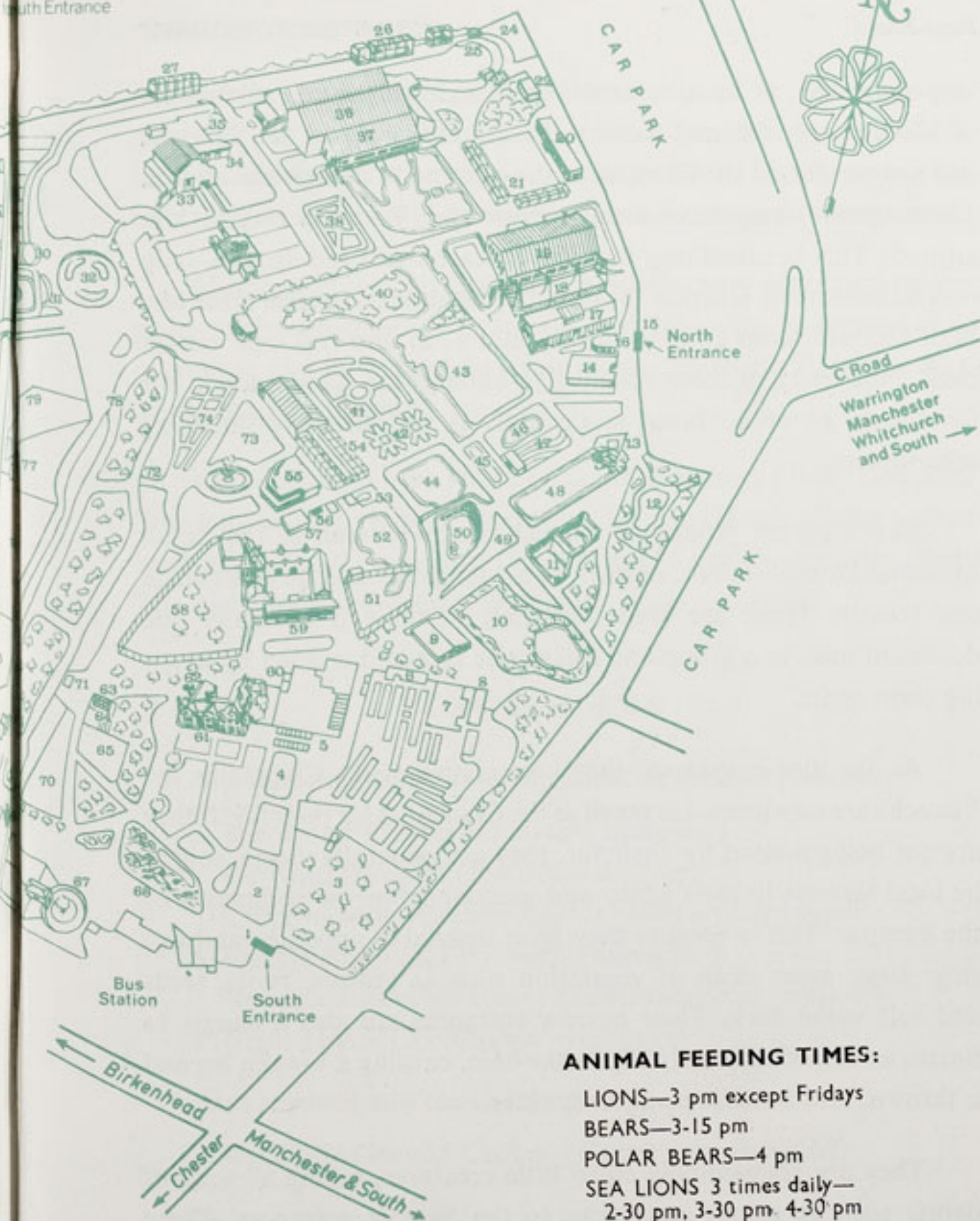
- 2. Peacock Enclosure
- 3. Wapiti Paddock
- 4. Coati Enclosure
- 5. Aviaries
- 6. Milk Bar
- 7. CORONATION HALL
- 8. CLOAKROOM, FIRST AID, TOILETS, INVALIDS' TOILETS, MOTHER AND BABY ROOM
- 9. CAFETERIA
- 10. Picnic Lawn
- 11. Bears
- 12. Jubilee Gardens (Noah)
- 13. Kiosk
- 14. AQUARIUM
- 15. NORTH ENTRANCE
- 16. PUSH CHAIRS, WHEEL CHAIRS, LOST CHILDREN
- 17. PARROT HOUSE
- 18. Free Flight Aviary
- 19. APE HOUSE
- 20. Shop and Kiosk
- 21. Aviaries and Picnic Lawn
- 22. TOILETS
- 23. Tuatara Exhibit
- 24. Peccaries
- 25. Waterbus Halt
- 26. Birds of Prey Aviaries
- 27. Condor Aviary
- 28. Jackal and Hyena Enclosures
- 29. Animal Enclosure
- 30. Porcupine Enclosure
- 31. Coypus
- 32. Beavers
- 33. Giraffe House

- 34. Camel House
- 35. Waterbus Halt
- 36. TROPICAL, NOCTURNAL & REPTILE HOUSES
- 37. CHIMPANZEES
- 38. Floribunda Rose Garden
- 39. Mammal House
- 40. Gibbon Island
- 41. H.T. Rose Garden
- 42. Aviaries
- 43. Flamingos
- 44. Waterfowl Enclosure
- 45. Waterfowl Enclosure
- 46. Waterfowl Enclosure
- 47. Penguins
- 48. Sealions
- 49. Rock Garden
- 50. Polar Bears
- 51. Big Cat Enclosure
- 52. Waterfowl Enclosure
- 53. Anteaters
- 54. BIRD HOUSE
- 55. FOUNTAIN RESTAURANT
- 56. Ape Nursery
- 57. TOILETS
- 58. Lions
- 59. SOUVENIR SHOP
- 60. TOILETS
- 61. OAKFIELD RESTAURANT

- 62. P.O. Telephone
- 63. Aviary
- 64. Animal Enclosure
- 65. Animal Enclosure
- 66. Ornamental Rock Garden
- 67. Wallabies and Kangaroos
- 68. Kangaroo Enclosure
- 69. Aviary
- 70. Cheetahs
- 71. WATERBUS BOOKING OFFICE AND KIOSK
- 72. Waterbus Halt
- 73. Fountain Flower Gardens
- 74. Rose Garden
- 75. Red Lechwe
- 76. Red Lechwe
- 77. Deer or Antelope Enclosure
- 78. Waterbus Halt
- 79. Zebra and Deer Enclosure
- 80. Brown Bears
- 81. ELEPHANTS
- 82. Hippos
- 83. Tapirs
- 84. Small Mammal House
- 85. Waterfowl Enclosure
- 86. Ankole Cattle
- 87. Emus, Cranes and Flamingos
- 88. Outside Monkey Enclosures
- 89. Baboon Pens
- 90. Cat House
- 91. Tiger Enclosures

- 92. Antelope Enclosure
- 93. Antelope Enclosure
- 94. Antelope Enclosure
- 94a. Llamas
- 95. Zebras
- 96. Zebras
- 97. Waterfowl Enclosure
- 98. Waterfowl Enclosure
- 99. Waterfowl Enclosure
- 100. Blackbirds
- 101. Wallabies
- 102. Animal Enclosure
- 103. Reindeer

- 104. Pere David's Deer Paddock
- 105. Przewalski's Horses
- 105a. Onager
- 106. Arabian Gazelles
- 107. Musk Oxen
- 108. Bison
- 109. Pere David's Deer Paddock
- 110. Prairie Marmots, Alpacas
- 111. Antelope Enclosure
- 112. RHINOS
- 113. TOILETS
- 114. Mpila Snack Bar
- 115. Antelope Enclosure
- 116. MONKEY HOUSE



ANIMAL FEEDING TIMES:

- LIONS—3 pm except Fridays
- BEARS—3-15 pm
- POLAR BEARS—4 pm
- SEA LIONS 3 times daily—
2-30 pm, 3-30 pm, 4-30 pm

ANIMALS MAY BE MOVED
FROM TIME TO TIME

very aggressive, or because of the bristles down the side of the face which are very stiff, and incidentally, peculiar only to the Viscacha and not present on the Chinchilla; the purpose of them is not known. There again, it may have been because the Viscacha chased him around! This is something that the Viscacha still indulges in, only now he substitutes Keepers for cats, but he appears to remember Mr. Wait and will jump up onto the Curator's lap and roll over on his back. Not many of these rodent-like animals are hand-reared, but for one to go on to breed successfully is an extremely satisfying achievement.

Two separate groups of Viscachas can be seen in the Small Mammal House—father, mother, two youngsters and an older male and female. These are kept separately as there is normally one dominant male in a group and it is easier to avoid conflict by keeping them apart.

At one time considered the poor relative of the Chinchilla, the Viscacha are now hunted as much as the Chinchilla for their fur. If they are not being hunted for their fur, they are generally being sought by local farmers in their scrub and grassland burrow complexes of the Pampas. This is because they have insatiable appetites and can strip large areas clean of vegetation such as grasses, roots, seeds and soft wood bark. Their burrow entrances are also a danger to horses as a hoof can easily slip in the hole, causing a broken leg and a thrown, and sometimes injured, rider.

They are enchantingly clean little creatures, taking all sorts of debris such as stones and sticks to the burrow entrances. These burrows are often shared by unusual neighbours, amongst these being burrowing owls, snakes and lizards.

An extremely individual characteristic is the mouth formation, which appears to be a mouth inside a mouth! It looks quite normal, as can be seen in the cover photograph. The larger part of the mouth

is where the incisor teeth grind substances; the edible parts are then passed back towards the throat into a "second mouth" which actually chews and then finally, swallows food. This ensures that only the parts which will finally be eaten gain access to the throat.

Although previously the Plains Viscacha may have lived on the plains, burrow complexes are usually built into hills. As farmers took over more and more land for livestock and crops the Viscachas were driven onto the hillsides.

Viscachas have been recorded as suffering from a liver condition. This only seems to happen when they are in a climate similar to that of Britain. Apart from this, they are easily kept in captivity; their Zoo diet consists of various vegetables, fruits and greens.

AVIARY NEWS

The following birds have been bred in the Zoo Aviaries:

- 2 Barraband Parakeet (*Polytelis swainsoni*)
- 1 Derbyan Parakeet (*Psittacula derbyan*)
- 1 Crimson-wing Parakeet (*Aprosmictus erythropterus*)
- 1 Quaker Parakeet (*Myiopsitta monachus*)
- 1 Red-sided Eclectus Parrot (*Eclectus roratus goodsoni*)
- 1 Night Heron (*Nycticorax nycticorax*)

Also received into the Collection:

- 1 Renault's Ground Cuckoo (*Carpococcyx renauldi*)

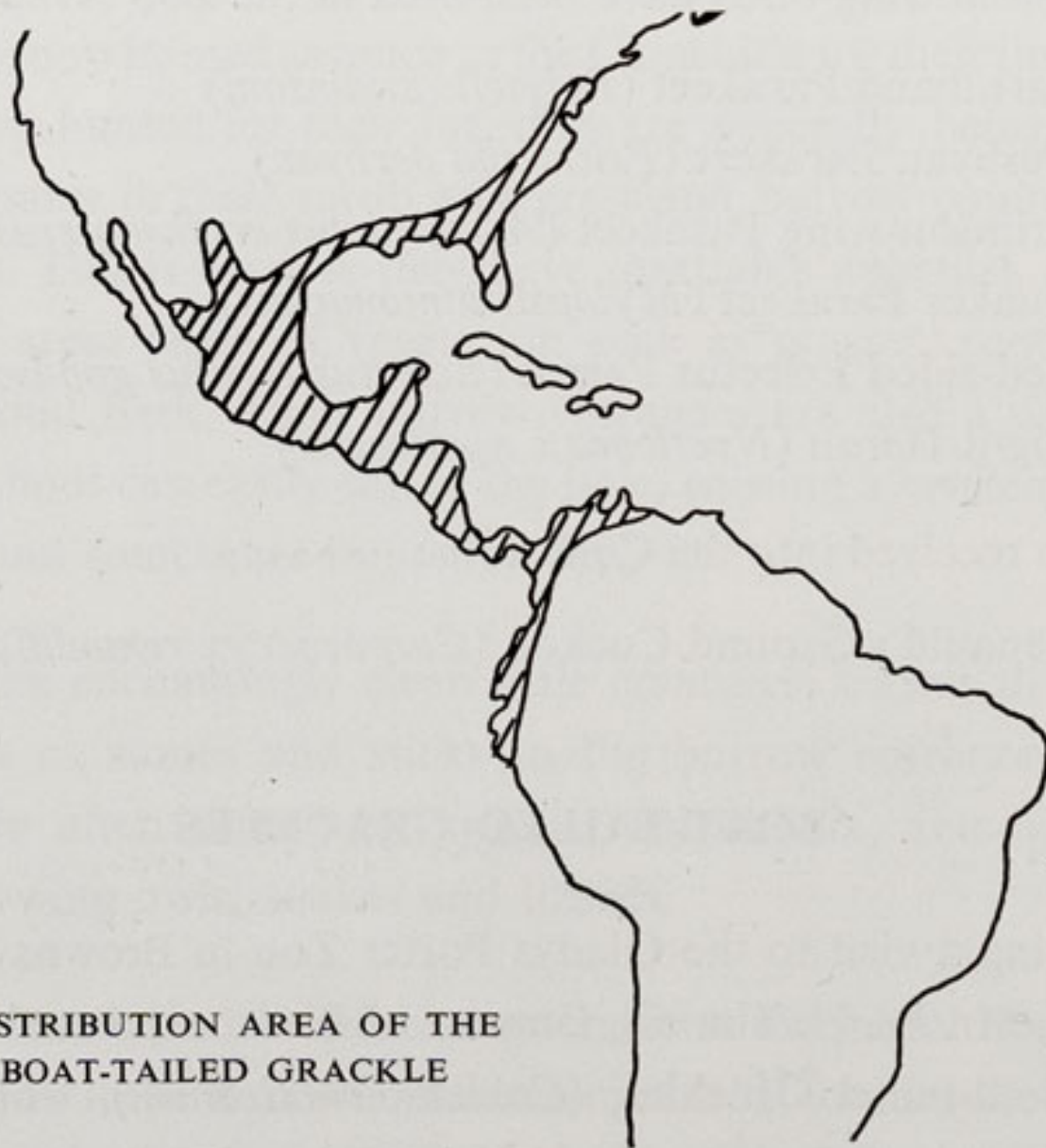
BOAT-TAILED GRACKLES

During a visit to the Gladys Porter Zoo in Brownsville, Texas last year, Mr. W. H. Timmis, Curator of Birds, expressed an interest in the Boat-tailed Grackles, (*Cassidix mexicanum*), which he saw in the grounds. Consequently, in the course of correspondence with

Dr. Don Farst, Director of the Gladys Porter Zoo, Mr. Timmis was offered two pairs of Boat-tailed Grackles. These were most gratefully accepted into the Collection as they were a new addition. Sadly, when these birds arrived, one of the females was in poor condition and despite all efforts to save her, she died. The remaining three birds are very healthy, have settled down well and it is hoped that they will breed.

As long as it is close to water, this bird is happy in a variety of temperatures, from scorching semi-desert to humid conditions, and can be found near human habitations. The lined area of the map below represents the distribution, and it is possible to see that the Boat-tailed Grackle occupies coastal areas to a great extent.

The unusual name, Boat-tailed, is descriptive of the long, graduated tail, which is wedge-shaped and curves upwards at the sides. The Mexicans honour this bird with two names, the male being known as "Clarineros", which means trumpeters, and the



DISTRIBUTION AREA OF THE
BOAT-TAILED GRACKLE

female as "Sanates". The male generally has a wider range of calls than the female, although she will often try to imitate him, and their selection of squeals, chatterings and whistles can often be heard as they fly to and from feeding areas.

The male is an extremely handsome bird with glossy black plumage which has a brilliant violet and blue sheen. It is also a large bird



By courtesy of K. W. Green, A.R.P.S.

BOAT-TAILED GRACKLE (*Cassidix mexicanum*)

at 16½ inches, including a 7 inch tail. The female, a warm brown colour, is smaller at 12½ inches, including the tail. Also noticeable are the sharp, black bill and bright yellow iris, together with the walking motion of the Starling. Another peculiarity of the male takes place immediately after delivering a call, when he will perch with the long bill pointing upwards; this shows to good effect the sheen on the neck, and may be done for this purpose. Females occasionally indulge in this performance, but to a lesser extent.

The diet of the Boat-tailed Grackle is very varied and consists of eggs, small nestlings, seeds, soft fruits including ripe bananas, crabs, shrimps and small fish. Freshly ploughed earth is also a favourite feeding ground as the Grackles will eat a variety of grain, including rice and maize, together with the small grubs and worms brought to the surface of the soil.

The Boat-tailed Grackle is a colony bird; even the roosting birds stay in the same trees as nesting females. Many eggs and nestlings are lost because of this, as in other species nesting females are left completely alone to rear their young. Courtship is often spectacular, with excited chases in flight taking place, the female ignoring the male's first attempts at a relationship. Eventually, the female decides that she will accept the attention paid to her. Random relationships are formed, with polygamy taking place in an area where there is an abundance of females, but the Boat-tail is normally monogamous.

The nest usually takes about a week to build, and this is built by the female. The bulky, untidy cup-like structure is built in bushes and trees, rarely higher than ten feet, from twigs, tidal debris and greenery. A lining of mud etc. is then put on the inside and finished with a layer of grass. Various quarrels take place as females steal nesting material from each other, but they are never malicious towards neighbours. A bird that has had material stolen from her, will just as readily try and steal from another female immediately afterwards.

About four days after finishing the nest the female lays three or four very lovely eggs. These vary in colour from bright blue to pale bluish-grey with dark purple, black and brown markings in spots, thin streaks and blotches. After an incubation period lasting approximately two weeks the pale-salmon coloured nestlings hatch. They are ugly little creatures covered with a sparse, long grey down on the head, back, wings and legs. The mother feeds them on grubs and caterpillars, and occasionally, small lizards. After about three weeks, the female takes the nestlings out with her to feed, and by this time they resemble the female but with a brown iris and bare face and forehead.

From the time of building the nest, to the nestlings leaving, the male has nothing to do with them, the only domestic claim upon him being to guard the nest.

One of the Boat-tailed Grackles is shown in the picture on page 13.

GARDENING NOTES

Since the short heatwave at the beginning of May we have had only a few days of real summer weather up to the end of July.

The plants in the flower beds took a little longer to grow and spread due to the lower temperatures and wet weather.

In most of the flower beds the plants are planted nine inches apart and towards the end of July they have grown to cover the flower beds. The unseasonable weather was good for pricking out the Pansy and Wallflower seedlings in the nursery, which are for next Spring's flower display.

The first flush of flowers on the Roses was very good and as these die, the dead heads are cut off. The Roses are then sprayed with a combination of insecticides and fungicide to keep off greenfly and mildew. This ensures another good display of flowers later.

Various shrubs are flowering throughout the summer. These include the *Potentilla* which is bushy and can grow up to two or three feet high and is planted in the sides of the shrub borders throughout the Zoo. The flower is about one inch in diameter and like a buttercup with varieties of various shades of yellow also tangerine and white. We have not yet acquired the more recently introduced red one. The name *Potentilla* comes from the Latin *potens*; this name was given to the plant because some species have active medical properties.

Hydrangea hortensis is planted out in groups and in a trough round the walk for viewing the bears. This is the *Hydrangea* grown in pots for house decoration. It does best in a more sheltered position as in the open the new growth is subject to frost damage in the

Spring. Hydrangeas like plenty of water. The name Hydrangea comes from the Greek—Hydor, water and Aggeion, a vessel or vase, with reference to the shape of the seed capsule.

Veronica is a group of hardy herbaceous perennials. *Hebes* used to be included in the *Veronica* group of plants. The *Hebe* is an evergreen New Zealand shrub which flowers from July till Autumn. There are several groups of *Hebe speciosa* in the Zoo growing in sheltered positions. This is one of the taller growing *Hebes*. The flowers are reddish-purple and the bush grows up to six feet high. It is a fast growing shrub therefore the growth is not very strong and is easily weighed down or broken with snow in the Winter.

They should be pruned in April where it is necessary to keep them under control. *Hebe traversii* is stronger with an attractive small green leaf. It has white flowers and grows up to four feet high.

There is plenty of colour to be seen in the Tropical House on the *Bougainvillea*, *Hibiscus*, and *Jacobinea*. The *Bougainvillea* is just inside and on the top walk. *Hibiscus* and *Jacobinea* are planted throughout.

SUBSCRIPTIONS

New readers of the CHESTER ZOO NEWS who would like to receive the magazine regularly may be interested to know that subscription forms can be obtained from the souvenir shops. An annual subscription (12 issues) costs £2.30, postage paid, which can either be handed over the counter at the shops or posted with the completed form to the Director-Secretary, Chester Zoo, Chester.



The following notice is displayed on several boards in the grounds
Please comply with it at all times

FEEDING OF ANIMALS AND BIRDS

IT IS AN OFFENCE for any member of the public to offer food of any description to any Animal or Bird in Chester Zoo.

This regulation is made for the sake of the health of the Animals and Birds. Since the **NO FEEDING** rule was introduced, the number of deaths has dropped appreciably and sickness due to wrong feeding has been virtually eliminated.

What you may be offering to an animal may only be a sweet or an inoffensive piece of bread, but it can mean a death sentence for the animal. For example, a cough drop, which may relieve your cough, can cause instant death to many Animals and Birds in the Zoo.

You must not lose sight of the fact that you are only one of over a million visitors who visit the Zoo annually. If for instance an elephant had one bun from only one tenth of a day's visitors during the summer, it would eat between three and four thousand. You can guess the result.

We realise what a temptation it is for visitors, particularly children, to feed our Animals and Birds and this is why we invite members of the public to be present at the official feeding times.

This is a polite warning to you, asking you not to feed the animals. If you ignore it, the Keepers are authorised to ask you to leave the Gardens.

If you really love Animals and Birds, you will appreciate the wisdom of the ruling — No feeding by members of the public.

**PLEASE HELP US TO KEEP OUR COLLECTION OF
ANIMALS NOT ONLY ALIVE BUT IN FIRST CLASS
CONDITION**

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