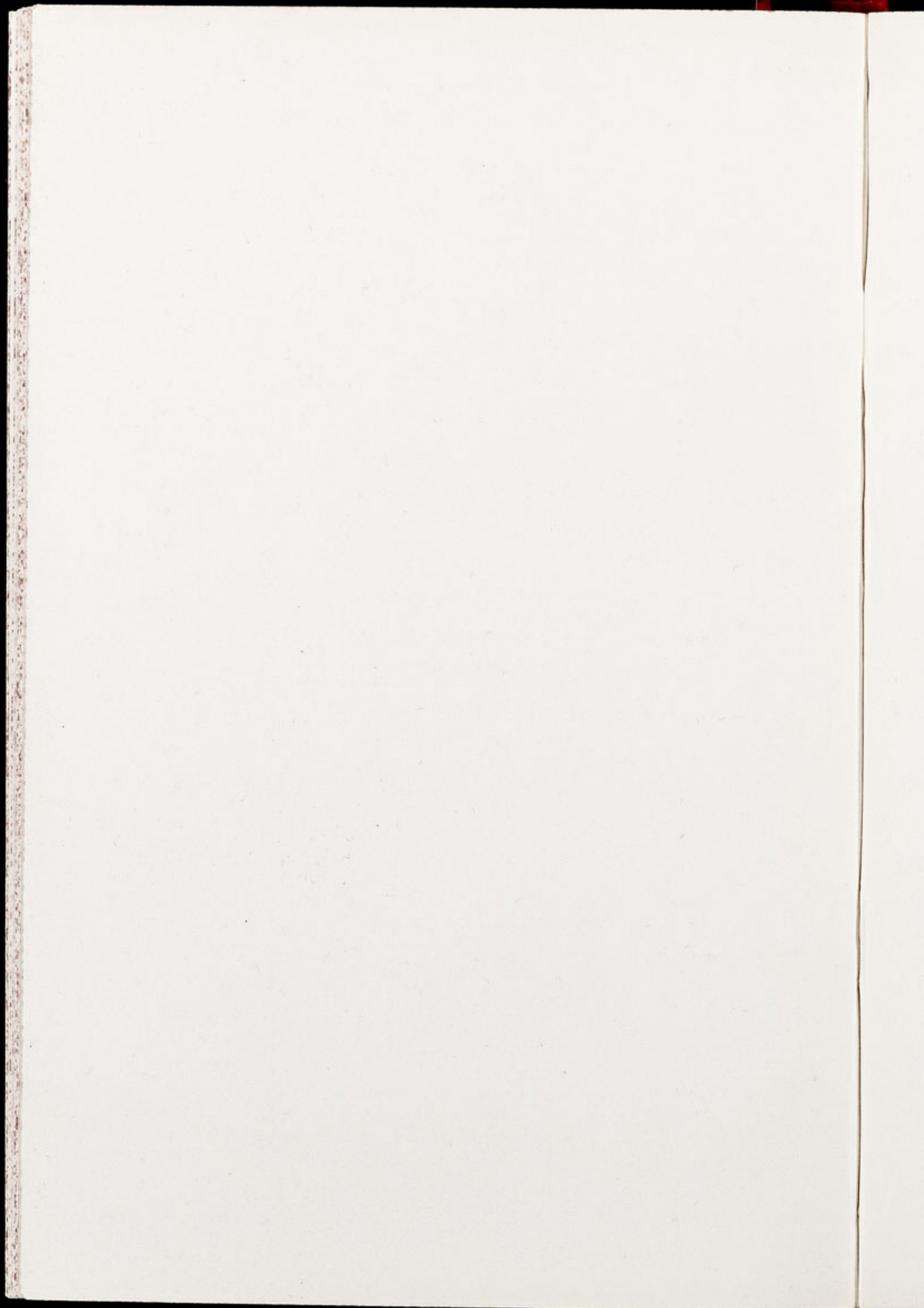




CHESTER ZOO NEWS
AND GUIDE

December 1970

Price 1/-



The North of England Zoological Society
ZOOLOGICAL GARDENS, UPTON-BY-CHESTER

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COVER: *Snowy Owl.*

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

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ARRIVALS AND BIRTHS

Recent births include those of a Yellow Baboon (*Papio cynocephalus*) and an Ankole calf. A Coastal Bushbaby (*Galago crassicaudatus lasiotis*) has been presented.

New arrivals are three Coypus, a pair of Fennec Foxes, a Llama and a Collared Peccary.

Two of the new Coypus (*Myocastor coypus*) are males and were acquired because all the animals in the resident group were found to be females. The Coypu is a large rodent which originates from south and central South America. Individuals may grow to a length of 3 feet, of which about one third is a scaly tail very much like that of a rat in appearance. The fur consists of two layers, an undercoat of soft dense fur, known as nutria, and an outer layer of longer coarser hairs. In colour the Coypu is mainly yellowish brown but has a white tip to the nose and chin. The white whiskers are long and the large incisor teeth are bright orange. Swamps and the banks of streams and lakes are the Coypu's main habitat as it is an excellent swimmer and spends much of its life in and near water. The hind feet are webbed, while the front paws are used like hands for manipulating food and other objects and bear strong claws for digging. The Coypu eats various plants and also molluscs.

Gestation lasts from 120 to 150 days and there is thought to be more than one litter of up to nine young each year. The nipples of the female are situated high on the sides of the body enabling the young to suckle whilst swimming.

In the early part of this century Coypus were in some danger of being exterminated as a result of the demand for their nutria. However the Argentine government took protective measures in time. Some Coypus were exported to other countries including Britain where fur farms were established to breed them. In East Anglia animals which escaped from these farms have become

pests. In their native country Coypus are preyed upon by Jaguars but here the adults have no natural enemies apart from man and the population has increased rapidly. Their habit of burrowing has caused damage to banks and dykes and of course crops have been invaded. In consequence it is now imperative that every individual and organisation in Britain keeping Coypus obtains a licence, which is reviewed annually.

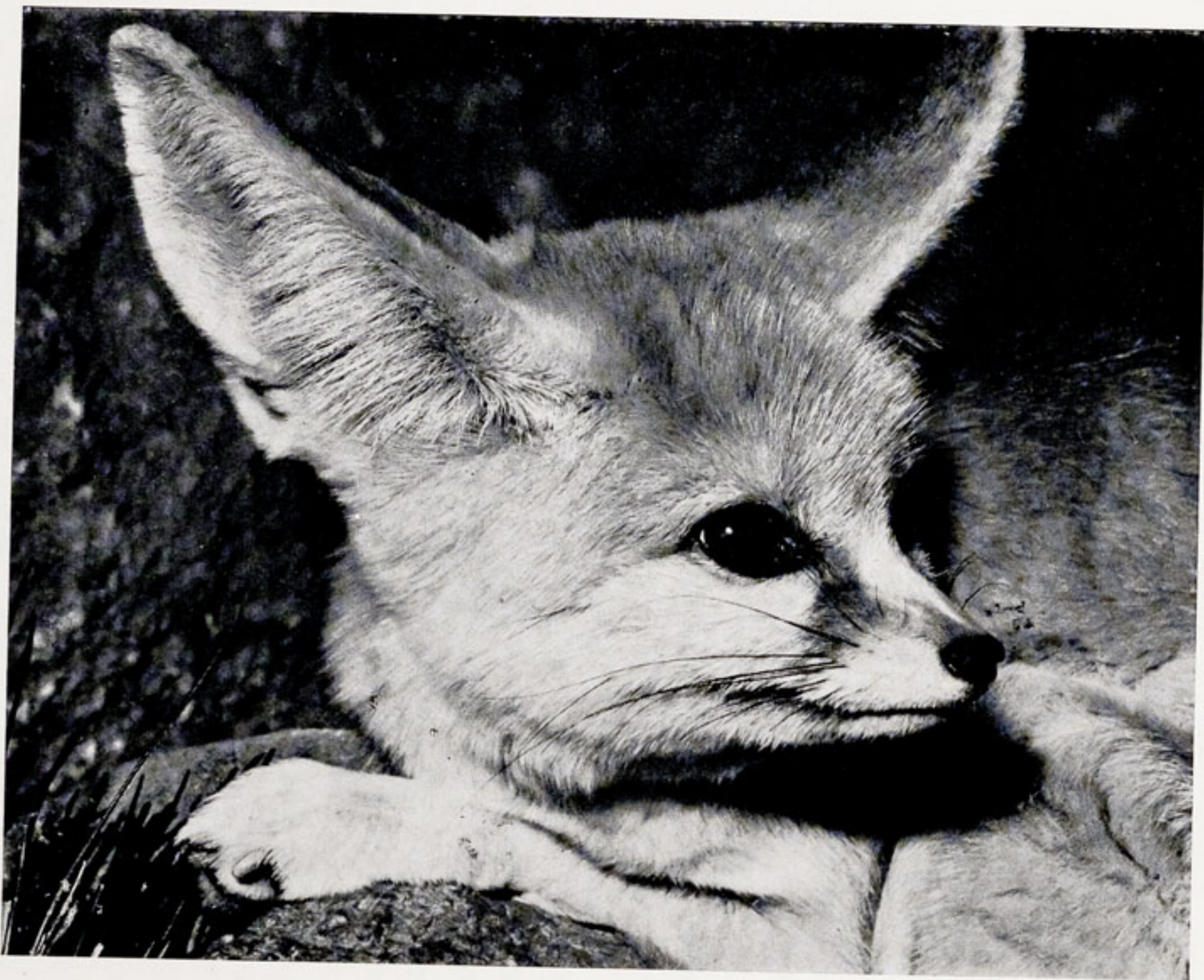
There are now seven Coypus at the Zoo and these are on exhibition in enclosure No. 30.

The timid alert Fennec Fox (*Fennecus zerda*) lives in desert areas of North Africa, Sinai and Arabia. It is the smallest of all the Foxes and has long silky fur which is a light sandy colour along the back of the body and white on the ventral surface.

Although Fennec Foxes inhabit deserts they avoid the intense heat by hunting at night when the temperature drops quite low. During the day they sleep in burrows which are also cool, as the heat does not penetrate far below the desert surface. To aid them in their nocturnal hunting these animals have developed large sensitive ears which can detect the slightest sound. Their diet consists of small rodents, lizards, birds, insects and various desert plants. Fennec Foxes can exist for long periods without drinking, obtaining moisture from their prey and vegetation, but if water is available they will drink regularly.

Their burrows are several yards in length and the sleeping chambers are lined with hair and dried plants. If danger threatens, the Fennec Foxes use their ability to dig burrows very rapidly in order to escape. Their main enemies are Hyaenas and Jackals.

The young, numbering usually from two to five, are born in the burrow after a gestation period of approximately 50 days. Fennec Foxes have lived for 12 years.



FENNEX FOX (*Fennecus zerda*)

E. Kirkland, F.R.P.S.

We now have four specimens of Fennec Fox which can be seen in the Small Mammal House.

The Collared Peccary (*Tayassu tajacu*) is one of the two living species belonging to the Tayassuidae family, the other being the larger White-lipped Peccary (*Tayassu albirostris*). The Collared Peccary has a range from the extreme south of the U.S.A. to Patagonia where it is found in habitats varying from desert to rain forest.

It is related to the pigs and like them its nostrils are situated in a flattened naked snout. The fur is dark brown peppered with grey and around the neck there is a line of lighter colouration from which its name is derived. Another name for the Peccary is Javelina which comes from a Spanish word meaning 'javelin' or 'spear' and refers to the shape of the canine teeth. These point downwards as opposed to those of the true pigs which grow upwards to form tusks. A musk gland is present on the back of the Peccary. This is normally concealed by fur but when the animal is excited the hair is erected and a musky secretion exudes from the gland. Peccaries have been seen to rub their backs on rocks and trees and it is thought that this gland may be associated with marking territories. The flesh of the Peccary is quite palatable as long as the musk gland is removed from the carcass very quickly, and they are hunted by the local inhabitants for both meat and hides.

Collared Peccaries form bands with an average of ten individuals in each. They are normally inoffensive but if provoked a group can defend itself very effectively from all but the largest carnivores. Their main enemies apart from man are Jaguars, Pumas, Bobcats, Coyotes and Dogs. They seem to be immune to the venom of the Rattlesnake. The diet of this species consists of tubers, berries, cactus fruit and other vegetation and also grubs. Peccaries are more active at night and in the cooler hours of the day.

An average of two young are born after a gestation period lasting from 142 to 148 days. They have reddish fur with a dark stripe along the back and have to move with the group very soon after birth.

The Collared Peccary we have acquired is a male and has been introduced to the three females already at the Zoo. Visitors can see them in enclosure No. 22.

The new Llama (*Lama glama*) is also a male and replaces one which died earlier this year. The baby Llama born in October and the young Alpaca in the adjacent enclosure are both progressing normally.

VISCACHAS

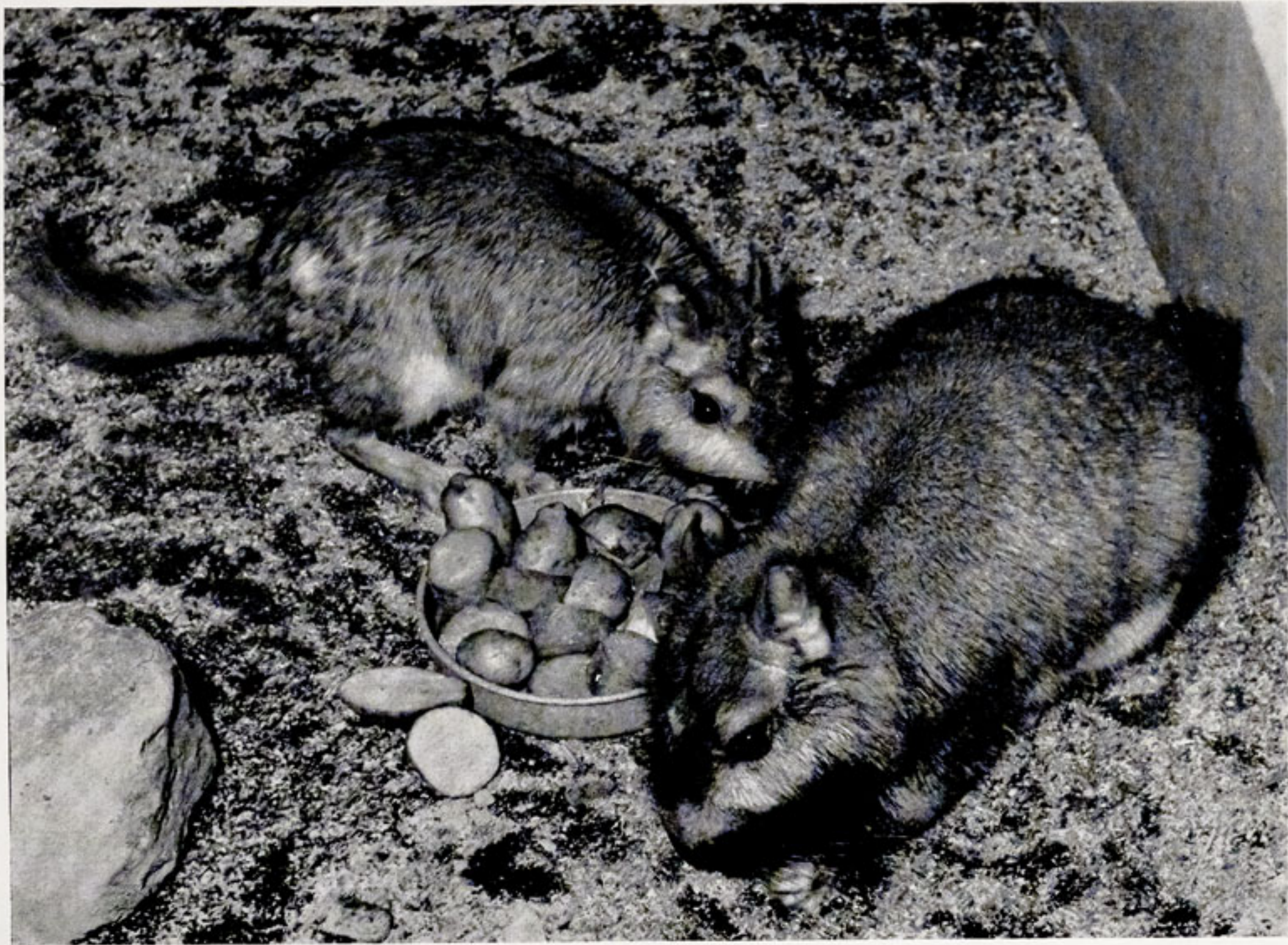
In the photograph on the right is the pair of Viscachas (*Lagostomus maximus*) which we mentioned in last month's "Zoo News". The male, which is in the foreground, is larger and more vividly coloured than the female. They can be seen in the Small Mammal House.

AMERICAN BADGERS

Badgers belong to the Mustelidae family which includes animals such as Weasels, Skunks, Sea Otters and Martens. The American Badger is related to the Eurasian species but differs somewhat in appearance and in certain habits. It is the only species of Badger found in the Americas and lives on plains and in semi-desert areas of S.W. Canada, central and western United States and in parts of Mexico.

Adult specimens can measure over 2 feet in length and have flattish bodies with short legs. They have large feet with strong claws for digging and the heads are rather triangular in shape. The fur on the back is long and greyish in colour and there are black and white markings on the face. Like most of the Mustelidae, this species possesses anal scent glands.

American Badgers mate in August or September but although the actual gestation period is only from 40 to 45 days the young are not born until the following spring. This is an example of delayed implantation and also occurs in the Eurasian species. Although the



PLAINS VISCACHA (*Lagostomus maximus*)

K. W. Green, A.R.P.S.

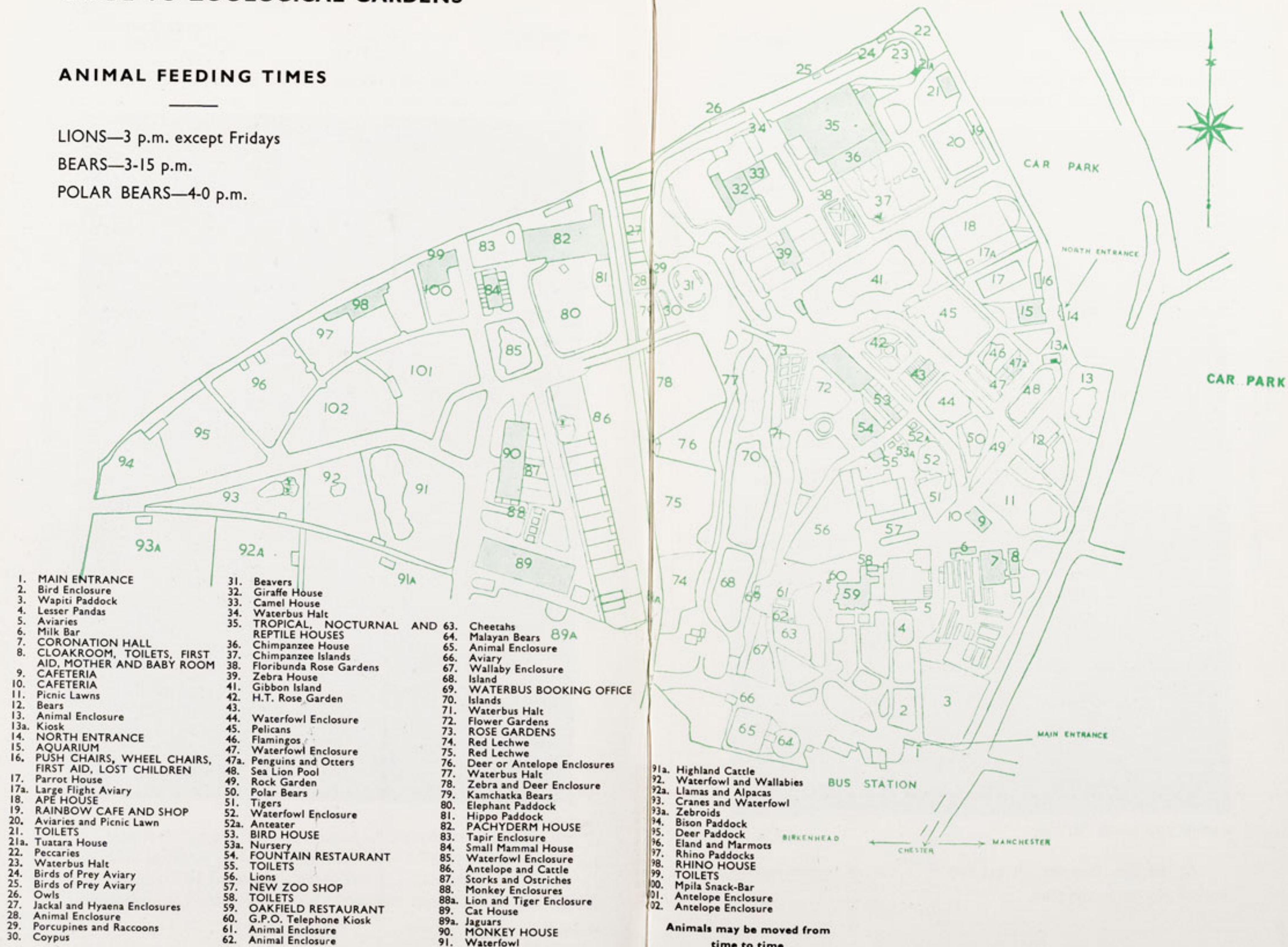
GUIDE TO ZOOLOGICAL GARDENS

ANIMAL FEEDING TIMES

LIONS—3 p.m. except Fridays

BEARS—3-15 p.m.

POLAR BEARS—4-0 p.m.



- 1. MAIN ENTRANCE
- 2. Bird Enclosure
- 3. Wapiti Paddock
- 4. Lesser Pandas
- 5. Aviaries
- 6. Milk Bar
- 7. CORONATION HALL
- 8. CLOAKROOM, TOILETS, FIRST AID, MOTHER AND BABY ROOM
- 9. CAFETERIA
- 10. CAFETERIA
- 11. Picnic Lawns
- 12. Bears
- 13. Animal Enclosure
- 13a. Kiosk
- 14. NORTH ENTRANCE
- 15. AQUARIUM
- 16. PUSH CHAIRS, WHEEL CHAIRS, FIRST AID, LOST CHILDREN
- 17. Parrot House
- 17a. Large Flight Aviary
- 18. APE HOUSE
- 19. RAINBOW CAFE AND SHOP
- 20. Aviaries and Picnic Lawn
- 21. TOILETS
- 21a. Tuatara House
- 22. Peccaries
- 23. Waterbus Halt
- 24. Birds of Prey Aviary
- 25. Birds of Prey Aviary
- 26. Owls
- 27. Jackal and Hyena Enclosures
- 28. Animal Enclosure
- 29. Porcupines and Raccoons
- 30. Coypus

- 31. Beavers
- 32. Giraffe House
- 33. Camel House
- 34. Waterbus Halt
- 35. TROPICAL, NOCTURNAL AND REPTILE HOUSES
- 36. Chimpanzee House
- 37. Chimpanzee Islands
- 38. Floribunda Rose Gardens
- 39. Zebra House
- 41. Gibbon Island
- 42. H.T. Rose Garden
- 43.
- 44. Waterfowl Enclosure
- 45. Pelicans
- 46. Flamingos
- 47. Waterfowl Enclosure
- 47a. Penguins and Otters
- 48. Sea Lion Pool
- 49. Rock Garden
- 50. Polar Bears
- 51. Tigers
- 52. Waterfowl Enclosure
- 52a. Anteater
- 53. BIRD HOUSE
- 53a. Nursery
- 54. FOUNTAIN RESTAURANT
- 55. TOILETS
- 56. Lions
- 57. NEW ZOO SHOP
- 58. TOILETS
- 59. OAKFIELD RESTAURANT
- 60. G.P.O. Telephone Kiosk
- 61. Animal Enclosure
- 62. Animal Enclosure

- 63. Cheetahs
- 64. Malayan Bears
- 65. Animal Enclosure
- 66. Aviary
- 67. Wallaby Enclosure
- 68. Island
- 69. WATERBUS BOOKING OFFICE
- 70. Islands
- 71. Waterbus Halt
- 72. Flower Gardens
- 73. ROSE GARDENS
- 74. Red Lechwe
- 75. Red Lechwe
- 76. Deer or Antelope Enclosures
- 77. Waterbus Halt
- 78. Zebra and Deer Enclosure
- 79. Kamchatka Bears
- 80. Elephant Paddock
- 81. Hippo Paddock
- 82. PACHYDERM HOUSE
- 83. Tapir Enclosure
- 84. Small Mammal House
- 85. Waterfowl Enclosure
- 86. Antelope and Cattle
- 87. Storks and Ostriches
- 88. Monkey Enclosures
- 88a. Lion and Tiger Enclosure
- 89. Cat House
- 89a. Jaguars
- 90. MONKEY HOUSE
- 91. Waterfowl

- 91a. Highland Cattle
- 92. Waterfowl and Wallabies
- 92a. Llamas and Alpacas
- 93. Cranes and Waterfowl
- 93a. Zebroids
- 94. Bison Paddock
- 95. Deer Paddock
- 96. Eland and Marmots
- 97. Rhino Paddocks
- 98. RHINO HOUSE
- 99. TOILETS
- 100. Mpila Snack-Bar
- 101. Antelope Enclosure
- 102. Antelope Enclosure

Animals may be moved from time to time

ova of the female is fertilised, it lies dormant and does not begin to develop until February. There may be from one to five young in a litter.

American Badgers living in remote districts may forage for food during the day but those near human habitation are nocturnal. They hunt for small animals, particularly rodents, often digging them out of the ground with their powerful claws. A Badger on the move trots quickly and purposefully and if taken by surprise by an enemy will dig so rapidly that it disappears out of sight within seconds. In farming areas the Badgers are regarded as pests since domestic animals may damage their legs by falling into one of the numerous burrows. Badgers in the northern part of the range usually hibernate during the winter.

The male of the pair in the collection is undoubtedly a very old animal, being at least 13 years old. The female has lived here since 1965 and both may be seen in the Small Mammal House.

BIRD NOTES

A Common Heron (*Ardea cinerea*) has been presented and we have acquired three Red-breasted Geese (*Branta ruficollis*).

As can be seen from the photograph, the Geese have very striking patternings. The patches on the sides of the head and on the breast are a reddish brown colour while those over the rest of the body are black. The breeding grounds of the Red-breasted Geese are in western Siberia. Often the birds nest in small colonies, laying their clutches of 5 to 9 eggs in small hollows which have been lined with down. For the winter they migrate to the southern shores of the Caspian and Aral Seas, sometimes wandering into Europe and North Africa.

At the Zoo they are on exhibition in one of the enclosures marked No. 86 on the plan.



K. W. Green, A.R.P.S.

RED-BREASTED GEESE (*Branta ruficollis*)

OTTERS AND PHOTOGRAPHY

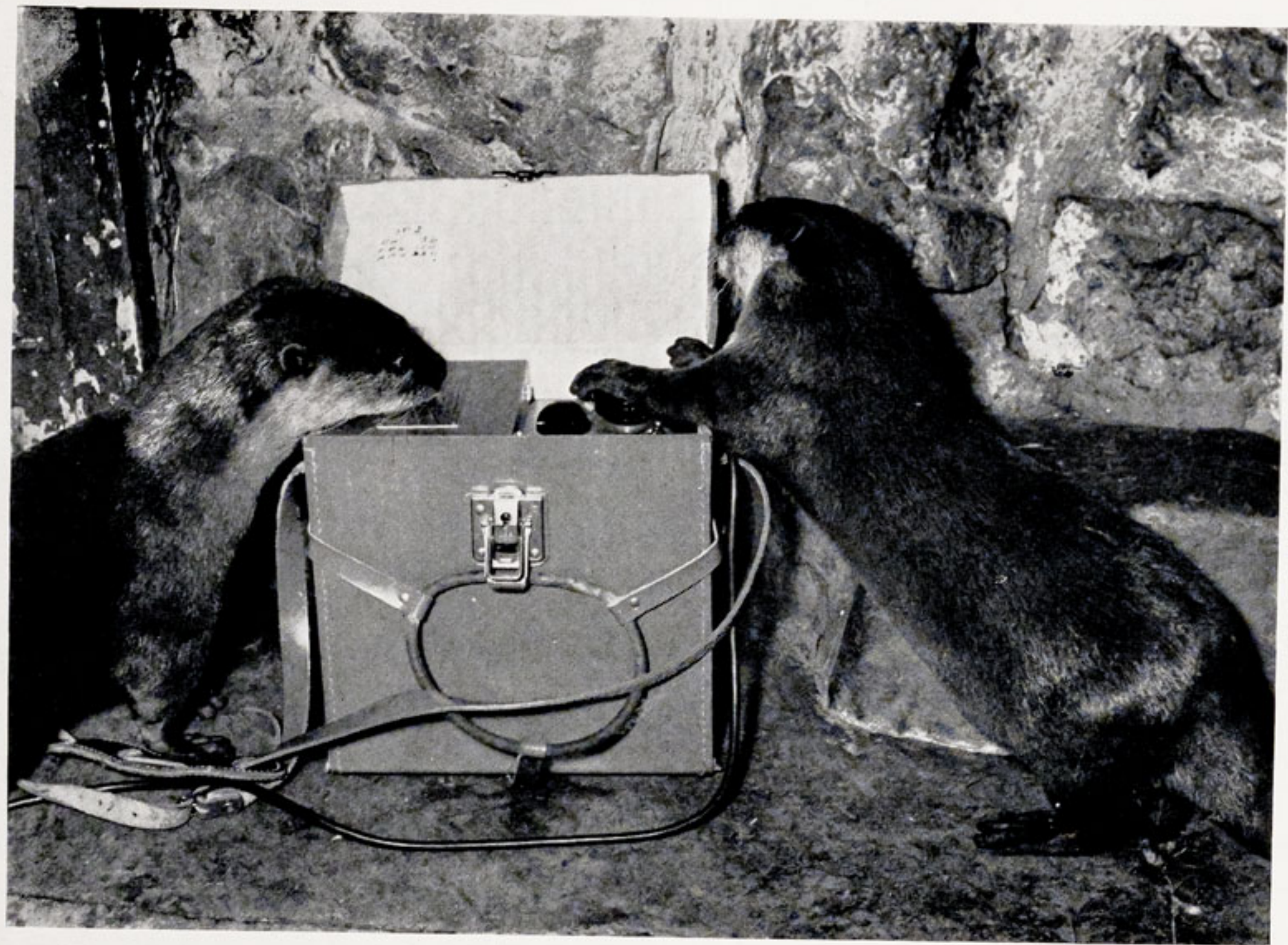
When a photographer was taking pictures in the Small Mammal House recently the Small-clawed Otters on the right decided very generously to lend a helping hand with the flash adjustments. As the equipment was quite safe he allowed them to play for a few minutes and took this amusing photograph.

THE RATITES OR OSTRICH-LIKE BIRDS

The Ratites are special kinds of birds which unlike all others, Carinates, have flat sternums without a keel. They are usually larger than other birds, their legs are very strong and their wings more or less reduced and useless for flight. All the Ratites are terrestrial in habit but their ways of living differ according to their various habitats — deserts, steppes or forests. At Chester we have representatives of the four largest Ratites, the Ostrich from Africa, the Rhea from South America, the Emu from Australia and the Cassowary from New Guinea and parts of northern Australia. The Ostrich and the Rhea are closely related, as are the Emu and the Cassowary but although similar in many ways, these two groups have apparently evolved quite separately.

Until fairly recently there were six races of Ostrich but one of these is now extinct. *Struthio camelus syriacus* was found over most of S.W. Asia but was hunted out of existence when the demand for Ostrich feathers was at its peak. The five remaining races are all found in Africa but occur in far fewer numbers than they did before civilisation came to the continent. *S.c. australis* is found in S.W. Africa, *S.c. massaicus* and *S.c. molybdophanes* in East Africa and *S.c. spatzi* in Rio de Oro and Mauretania, West Africa. *S.c. camelus* has the widest distribution from Niger in the west to Ethiopia and the Sudan.

The Ostrich is the largest living bird and males may attain the impressive height of 8 feet, the females being slightly smaller. The male Ostrich has black plumage on the body and contrasting white wings and tail which are shown to best advantage during the display;



ORIENTAL SMALL-CLAWED OTTERS (*Amblonyx cinerea*)

K. W. Green, A.R.P.S.

the female has brownish plumage. The thighs and long neck are comparatively naked and in the male vary from greyish to reddish in the different races. On each foot there are only two toes, the largest of which bears a long nail. The legs are extremely powerful and enable the Ostrich to reach speeds of 40 m.p.h. Often animals such as Antelope and Zebra graze near to Ostriches as the birds are very alert and their long necks give them an elevated view of the surrounding country, thus enabling them to spot enemies quickly.

One male will probably mate with several females. During courtship the birds spread out their wings to expose the white feathers and the male may also make deep booming noises. The nest is a bare scrape in the ground and each of the hens contributes to the clutch which may finally number from 30 to 40 eggs. Incubation lasts for about 40 days and is undertaken by both cock and hen birds, the cock sitting usually at night. Quite a high percentage of the eggs are wasted, some being discarded from the nest and others taken by predators. If danger threatens, the sitting bird may stretch its neck along the ground to escape detection or try to lure the predator away from the nest. Contrary to popular belief, Ostriches never bury their heads in the sand! When hatched the chicks are about 12 inches high and can run almost immediately. Although fully grown at 18 months, these birds do not breed until they are about 4 or 5 years old.

The diet consists mainly of vegetable matter and insects. In addition Ostriches swallow pebbles which aid digestion by grinding up the food in the gizzard. However they are liable to swallow anything which comes their way and have been known to take objects such as pliers, padlocks and keys! In consequence keepers have to take extra care not to leave these items lying about, as it is surprising to what extent metals can be digested by the birds.

Of the two species of Rhea, the Common Rhea (*Rhea americana*) is the larger, measuring about 5 feet high, and is distributed from Brazil to Argentina. Darwin's Rhea (*Pterocnemia pennata*) is found to the west of this range. For most of the year Rheas congregate in flocks averaging 30 birds. They inhabit the grassland areas and feed on vegetation, insects and occasionally small mammals. In parts of the pampas the vegetation grows quite high and the birds can conceal themselves in this, periodically stretching their long necks over the

top to look around. Like the Ostrich, the male Rhea mates with several females but then incubation is solely his responsibility. The females lay the eggs in a scrape in the earth which has been lined with grass and the male sits until the chicks are hatched some 40 days later.

The Emu (*Dromaius novae-hollandiae*) is the second tallest bird and grows to a height of 6 feet. The cock is usually smaller than the hen and he both incubates the eggs and rears the chicks. In both sexes the plumage is brown and coarse. Apart from a bluish patch of naked skin on either side of the head which seems to be associated with courtship, the feathers extend along the neck. There are three toes on each foot. The nest is a mound of grass and leaves on which the female lays about 9 eggs. The cock incubates for 60 days and during this time loses several pounds in weight. The chicks are brown with yellow stripes and may remain with the cock for up to 18 months.

Emus are distributed over most of Australia and have a varied diet of plant and animal foods. Though they consume many insect pests their fondness for grain makes them unpopular in wheat-growing areas. When food is scarce in the interior many Emus migrate to the coast and large flocks descend on the wheat fields, devouring the grain and mowing down crops in the process. In the past there have been several unsuccessful attempts to check them but the solution now seems to be the erection of high fences across the migration routes.

Cassowaries are birds of tropical forests. There are three species in the family, the Australian Cassowary (*Casuarius casuarius*), the One-wattled Cassowary (*Casuarius unappendiculatus*) and the Bennett's Cassowary (*Casuarius bennetti*), of which there are numerous subspecies. In adult birds the coarse quills are black and there are areas of bare skin on the neck which are often brightly coloured. Most Cassowaries have a flap of skin, known as a wattle, which hangs from the throat and all bear a tough bony growth on the top of the head which probably enables the birds to run quickly through undergrowth without being injured. Cassowaries prefer to stay hidden in the forests but if threatened have a formidable defence in the form of long claws on the middle toes of the feet. They are reported to be good swimmers.

Fruit and berries constitute the diet. The nest is a mound of leaves on the forest floor and once again it is the cock bird which incubates the eggs, usually from 3 to 6 in number.

At the Zoo the Emus and Rheas can be seen in enclosures at the rear of the Monkey House, while the Ostriches are on exhibition in the Camel House for the winter. Our Twin-wattled Cassowaries are also in winter quarters but unfortunately not on show at present.

In captivity all require a great deal of space and are treated as mammals rather than birds. Rheas and Emus are hardy and are looked upon as field birds and allowed semi-freedom. Ostriches in England require shelter during winter although they soon adapt themselves to our climate, but their strength and savagery oblige them to be kept in enclosures. The same applies to the Cassowaries, which are extremely irritable and usually very dangerous.

We would like to wish all our readers a very
Merry Christmas.



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.

Printed in England by
G. R. Griffith Ltd.
Castle Printing Works
Chester
