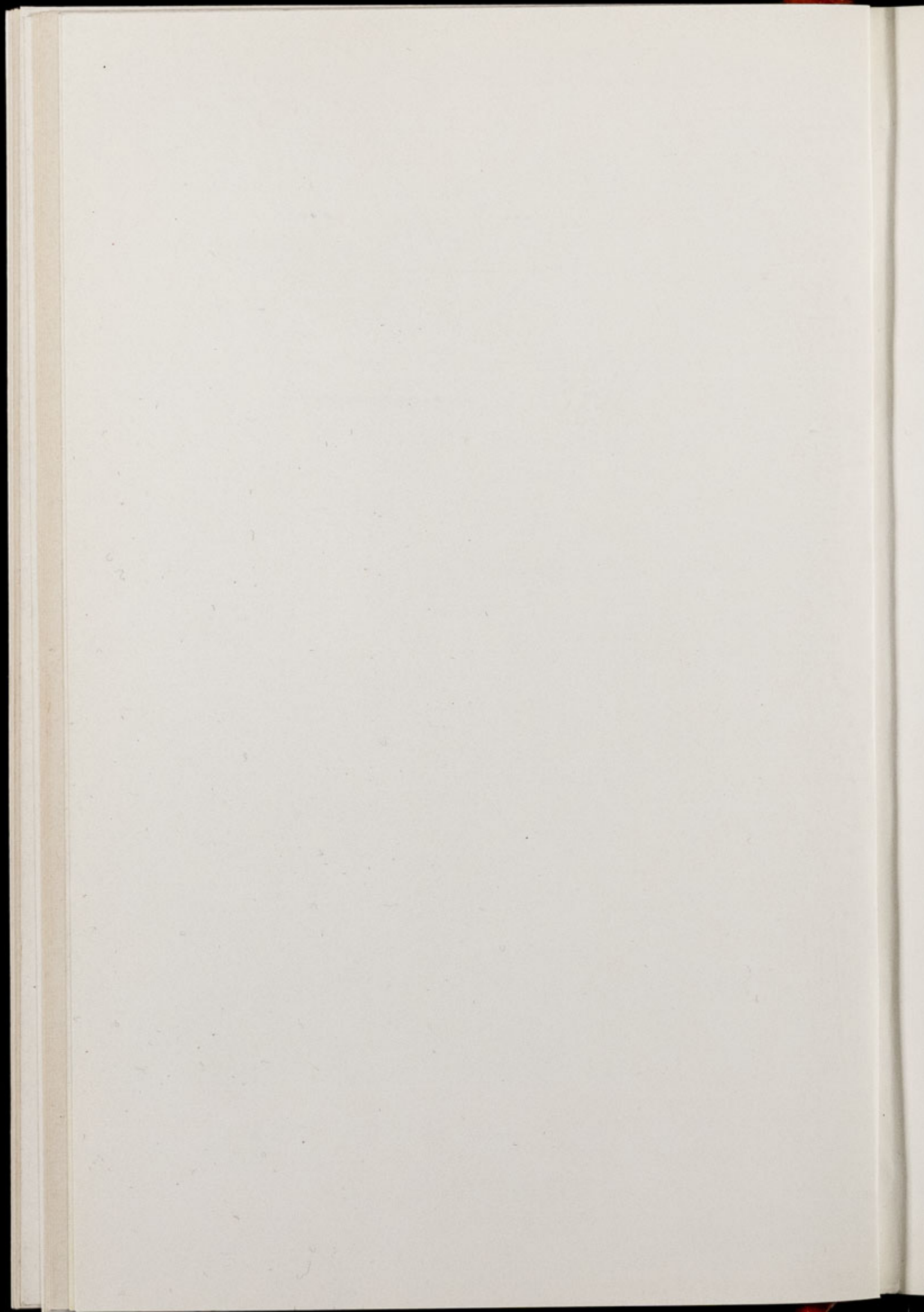


# CHESTER ZOO NEWS

## *AND GUIDE*

March 1977

Price 12p



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

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COVER

Common Leopard Cub "Candy"

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

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Telephone Chester 20106/7/8

## HAND REARINGS

Two Common Leopard Cubs (*Panthera pardus*) were born to "Susie" on August 9th, 1976. These were a pair. The male weighed 2lb. at birth and the female 1lb. 14oz. The two cubs were taken from the mother for hand-rearing by Mrs. Joan Timmis, wife of the Curator. They were fed every two hours round the clock.

By August 15th the male weighed 2lb. 4oz., and the female 2lb. On the 30th August the female "Candy" weighed 2lb. 5oz. The male became ill and died on the 23rd September. About the same time "Candy" had a severe infection but fortunately did not lose any weight. She then required intensive nursing and was given various antibiotics and drugs. She was ill for a week or more.

On the 8th October she was given solid food but without success. It was not until the 22nd October that her first solid food was taken in the form of minced meat. "Candy" continued to take milk and started to lap. From then on she began to take solids three times a day.

About this time "Candy" was taken into the Zoo Nursery near the Bird House. She then weighed 6½lb. and continued to make excellent progress. Mrs. Timmis visited her each night for just over a week and then severed all connections with her.

We had hoped to have a photograph of Mrs. Timmis with "Candy" as she is now, but the animal has become rather large to handle and Mr. Peter Wait, Curator of Mammals, kindly held her whilst a photograph was taken. Visitors can see the young Common Leopard in the Cat House (Enclosure 90). She is housed with the male Black Panther (*Panthera pardus*) born to "Lucy" and "Satan" in June last year. He can be seen on the cover of the September 1976 magazine, and has been named "Lucifer".

## GENERAL NEWS

Two female Common Zebras (*Equus burchelli granti*) reported as having been bred in the zoo in 1976 are now about eight months old and can be seen in Paddock 79. A Grevy's Zebra (*Equus greyvi*), also a female, will be three months old at the end of this month and on warm sunny days is on show in Paddock 95. By the time Easter is here the youngster will be seen in the paddock almost daily.

\* \* \*

In the previous issue of the magazine we reported the breeding of a Green Monkey (*Cercopithecus sabaeus*). The mother had previously given birth to three youngsters, and on each occasion had not been able to rear them. Unfortunately her latest offspring has also died. The parents can be seen in the Monkey House.

\* \* \*

In the Insectarium which is housed in the Tropical House, we now have three young Macleay's Spectre Stick Insects (*Extatosoma tiaratum*) on show in a small tank. These youngsters are about 2in. long and by the time this issue is circulated will no doubt have grown considerably. The numbers of the young Macleay's Spectres will be increasing every day for the next few months. The adult male has been taken off show owing to the malformation of his wings, but the Keeper, David Haines, will be pleased to show the insect to visitors if they would like to see it and would enquire in the Tropical House.

\* \* \*

Our two Male Oxen (*Ovibos moschatus*) reported as having been added to the collection have settled down very well in their quarters, and now that the weather is less cold can be seen almost daily in their paddock (Enclosure 107) opposite the Bison (*Bos bison*) (Enclosure 108). It was at first thought that the pasture at the zoo was too rich for them, and so the animals were introduced gradually to it. We have at last been able to get a photograph of them—Kenneth Green,

our regular photographer, has been dogged by wet weather on the days when he was available, or on the good days the oxen would not pose near enough to each other. However, we now have a photograph opposite.

These burly animals, of medium height and with long, shaggy coats have a very broad head and short neck. Musk Oxen grow horns which are joined above the eyes by a plate about 10 centimetres thick and extremely hard. From the centre plate the horns follow the shape of the head above the eyes and down the side of the face. Our oxen are young ones and, although the plate is visible, have only just started to grow their horns. The winter coat of these animals is basically black to brown, and from the end of June to the end of July dark brown. Long hard bristles grow between the wool of the coat.

*Ovibos moschatus* now exist in Canada, the islands in the Northern Arctic Sea, inhabiting the Barren Grounds, and on the north and east coasts of Greenland. In the wild they can live for approximately 23 years. Young are born between May and June.

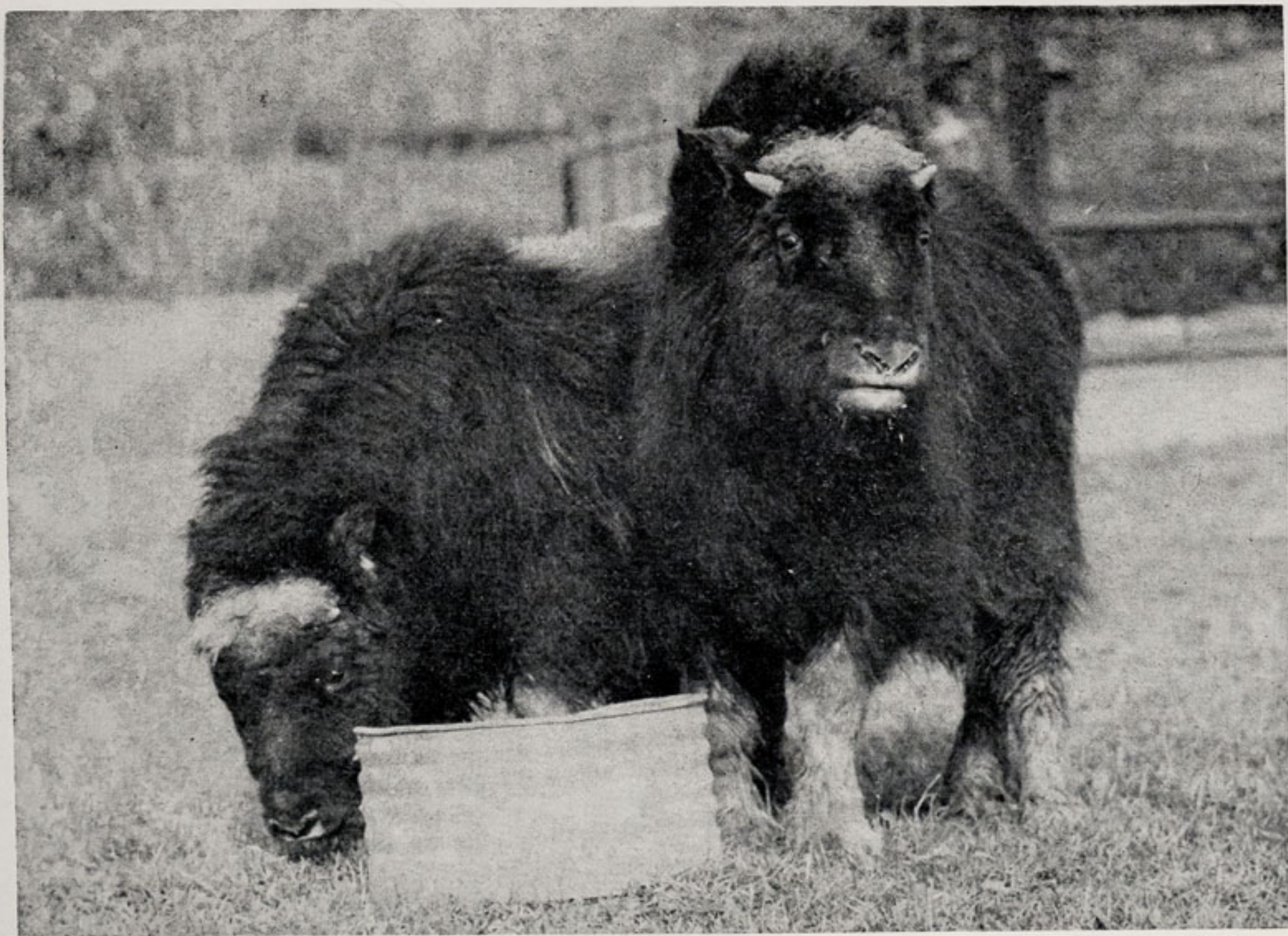
\* \* \*

We had to let "Freddie" go—the Chimp who came to us in 1969, at two years of age from Sierra Leone. On arrival at Chester Zoo he was put into an enclosure in the Monkey House. "Freddie" was kept in the Zoo Nursery until he was old enough to join the other chimpanzees on Chimp Island. However, in recent years he just got to be too much for us. He would insist on leaving the island and walking along the pathway with the visitors. We found him a home in Nigeria and have since learned that he has settled down quite happily in the land of his fathers. He has mated three females already, and is considered to be quite a character.

#### ARRIVALS AND BIRTHS

We are pleased to report the following mammals bred in the zoo :

- 1 Red Lechwe (*Kobus leche*)
- 1 Arabian Gazelle (*Gazella arabica*)
- 1 Bagot Goat



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

TWO MALE MUSK OXEN (*Ovibos moschatus*) TO BE SEEN IN ENCLOSURE 107

The distribution of the Red Lechwe is northern South West Africa, Botswana, the Caprivi Strip, south eastern Angola and Zambia into southern Zaire. Its coat is a lovely golden-brown colour with white extending from the throat to the chest and abdomen down the inside of the legs. The females do not have horns, but those of the males are long and measure between twelve to eighteen inches.

*Kobus leche* are an endangered species owing to hunting and the destruction of their natural habitat by man. They are, however, now protected throughout most of their range, being found in national parks and reserve areas. Here at the zoo these animals can be seen in Enclosure 78.

\* \* \*

Our herd of Arabian Gazelles can be seen in Paddock 106. These animals, as their name would indicate, originate from Arabia. In the wild they live in herds of twenty to fifty, moving about in search of water when there is a drought. Young are born in October or November, after a gestation period of about nine months.

The Arabian Gazelle is one of the smallest of the antelopes. Its coat is a light brown colour with a fine dark brown stripe on each flank. The chest and abdomen are a creamy-brown. The fine legs of these creatures display dark brown markings. There is a brown mark inside the ears and a cream line from eye to nose. Its tail is about 6 inches long, and dark brown. Both male and female grown horns which stand straight up, curving inwards at the tips only.

\* \* \*

The young male Bagot Goat born recently is descended from the wild goats at Blithfield Hall belonging to the Bagot family. A herd was presented to the family by Richard II for excellence in hunting. Both male and female goats have horns, the males have long beards.

\* \* \*

In the autumn of 1976 we purchased a pair of Guanaco (*Lama guanicoe*). This species of Llama (*Lama guanicoe glama* being the domesticated form) at one time had a wide distribution in the high mountainous regions of South America, being able to endure extremes of cold and heat. It does, however, prefer dry areas even in the mountains. In its original distribution the Guanaco is now very rare. The species was to be found on plains, or near the coast where it kept to dry climates; when existing near the equator it stayed in the highlands and not on the hot humid plains. In the early part of the twentieth century Guanaco lived sparsely in the hot, dry lowlands of the Gran Chaco central-South America, and in southern Patagonia, South America, they existed in the deserts and savannahs of the plains and coastal areas. However, they live best in the highlands of South America at elevations of up to more than 4,000 feet.

In the wild these animals live in groups of twenty, one of the males keeping them together, defending them against their opponents. Males adopt the "ritual fighting" and courtship gestures of the even-toed ungulates, trying to knock down their opponent by snapping at the front legs, forcing the opponent on to its knees. If both go down together they cross their necks and one tries to press down the other. They also spit at their opponent.

Guanaco mate between the late summer and early autumn. The gestation period is about eleven months; one young is usually born—two occurring rarely. The female feeds her offspring for about four months. During the first few hours of birth the little one is very lively, and in zoos the animal should be protected against itself.

The coat of the Guanaco is smooth and densely woolly with contrasting light brown and dark chestnut parts; males are taller than the females. These animals have large eyes, the upper lids having long eyelashes. The ears are long and pointed, the tail is round its topside being covered with chestnut-brown hair and the underside almost bare. Our pair can be seen in Paddock 110.

# CHESTER ZOO

THE NORTH OF ENGLAND  
ZOOLOGICAL SOCIETY  
ZOOLOGICAL GARDENS

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or Nos 16-116 from North Entrance then return to Nos 1-14

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

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(Private)



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and South →

## 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, MOTHER AND BABY ROOM
9. CAFETERIA
10. Picnic Lawn
11. Bears
12. Sunken Garden
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. Picnic Lawn
21. Aviaries
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. 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. Malayan Bears
68. Animal 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. Kamchatka Bears
81. ELEPHANTS
82. Hippos
83. Tapirs
84. Small Mammal House
85. Waterfowl Enclosure
86. Ankole Cattle
87. Emus and Cranes
88. Stork Enclosures
89. Baboon Pens
90. Cat House
91. Big Cat Enclosures

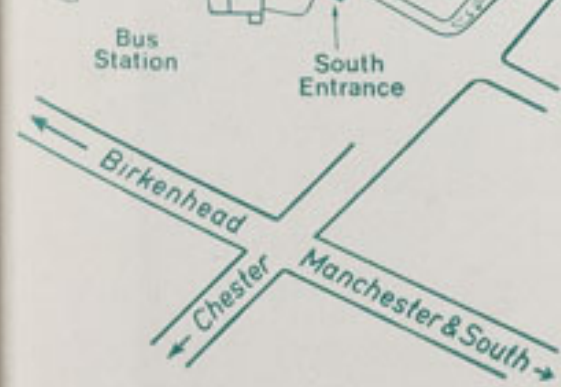
92. Antelope Enclosure
93. Antelope Enclosure
94. Antelope Enclosure
95. Zebras
96. Zebras
97. Waterfowl Enclosure
98. Waterfowl Enclosure
99. Waterfowl Enclosure
100. Blackbuck
101. Wallabies
102. Animal Enclosure
103. Wallabies
104. Pere David's Paddock

105. Llamas
- 105a. Llamas
106. Arabian Gazelles
107. Animal Paddock
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—  
2-40 pm, 3-40 pm, 4-40 pm

ANIMALS MAY BE MOVED  
FROM TIME TO TIME



## BIRD NOTES

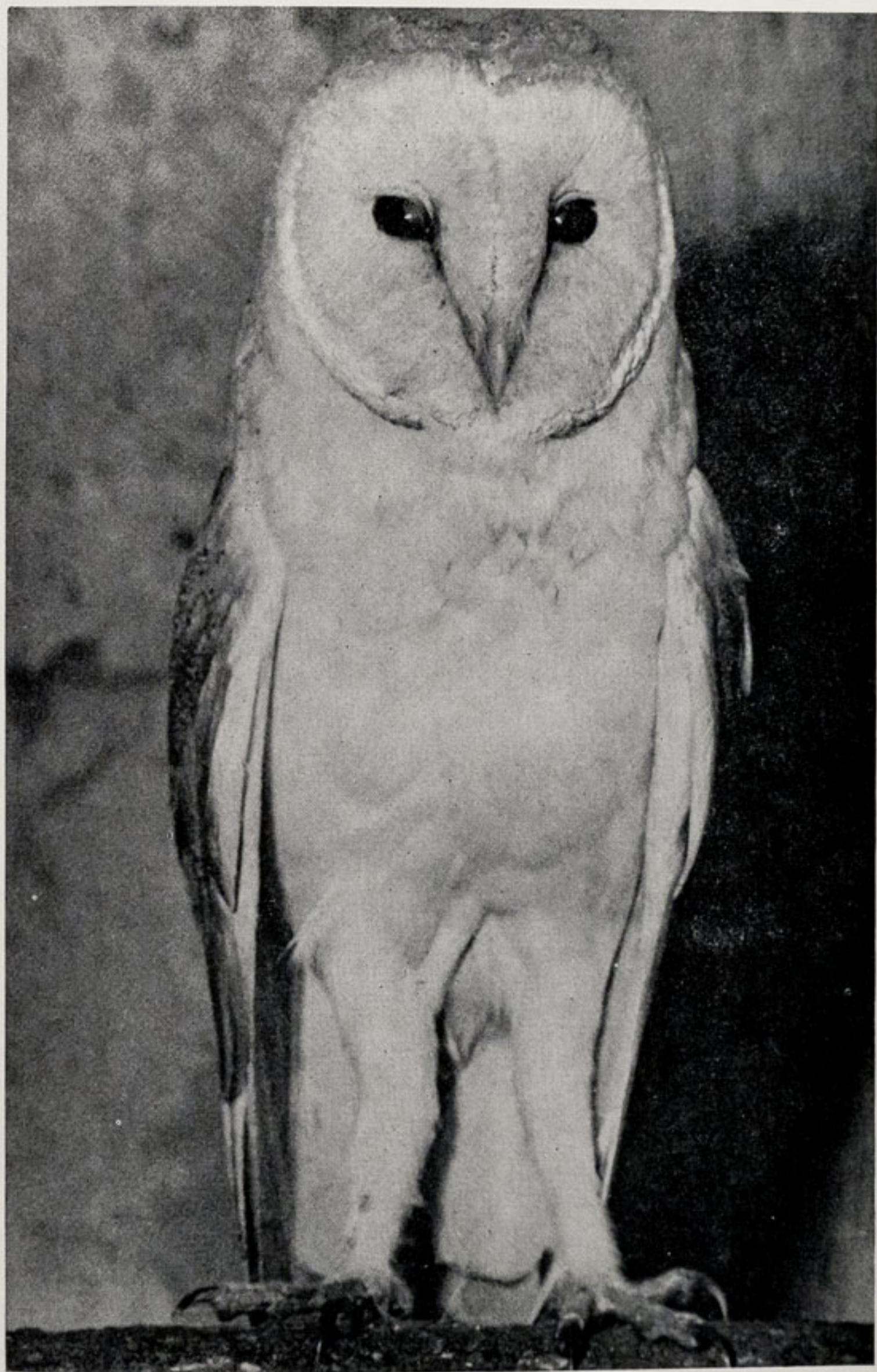
Readers will be interested to know that we have been presented with a pair of Barn Owls (*Tyto alba*) and a Little Owl (*Athene noctua*). These owls can be seen in the Aviaries near the Oakfield Restaurant. We have had a European Barn Owl (*Tyto alba*) since 1967 and an African Barn Owl (*Tyto alba affinis*) since February 1975, both having been presented to us.

The pair of owls which recently has been added to the collection are the White-breasted Barn Owls (*Tyto alba*). These are of the Family *Tytonidae*. *Tytonidae* is one of two groups of the order of *Strigiformes*, the other group being the *Strigidae*. See photograph on page 00.

Owls are perhaps one of the most fascinatingly interesting of all the bird species. They are, however, easily recognizable for their large heads, forward-looking eyes, and thick bodies. The Barn Owl is nocturnal, being most active in the late evening when darkness is falling and during the night time. Their prey consists of shrews, mice and voles, rats, small rabbits and birds. Frogs, large insects and bats are also on the menu. Occasionally they catch a fish on the surface of a pool.

The distribution of the Barn Owl is the British Isles, the Channel Isles, western France, Spain, Portugal, Italy and Mediterranean countries. The habitat of the White-breasted is the cultivated grasslands, parklands and open moors.

White-breasted Barn Owls are about 400mm. long, with a wing span of 760mm., the latter being particularly adapted to hunting. They have a short tail. The plumage of the upper parts of the bird is an orange-buff colour, spotted with dark grey and white; the face is white, as also are the underparts—the latter being infrequently speckled with a few black spots on the breast. It is difficult to distinguish the sexes, except that the upper parts of the female are slightly bigger and greyer than those of the male. The eyes of owls do not move up and down or sideways. In order to have a good view



*By courtesy of E. Kirkland, F.R.P.S.*

WHITE-BREASTED BARN OWL (*Tyto alba*) HOUSED IN THE OWL AVIARIES  
(ENCLOSURE 5)

the owl must turn its head in whichever direction a sound takes it. Its eyes are best at night when they are needed for hunting their prey. The ears of the nocturnal owl are very sensitive to high-frequency noises, e.g., the cries and squeals of small animals.

The call of the Barn Owl consists of an eerie screech, a loud hissing noise and a snoring sound. In flight, however, the owl seems to be calling "get-get".

When roosting during the hours of daylight owls choose dark places—churches, barns and lofts, and old ruins. Some choose hollow trees or cliff crevices. Roosting is almost invariably done in pairs or singly. On the wing barn owls catch small birds, bats, etc. The prey is consumed whole immediately after it is captured, such items as bones, feathers and fur being regurgitated.

The breeding period for these birds commences in the early part of the year, possibly continuing into the autumn. Owls do not build a nest but drop their eggs on the ground. In zoos baskets or barrels are offered for egg-laying, and these are used also in gardens and on farms where it is expedient to attract the owl to a particular area. The usual clutch is from 3 to 7. Incubation is by the female, and eggs are laid at 48-hourly periods. Hatching occurs after 33 days and throughout the incubation period the male feeds his mate. Both parents eventually feed the chicks.

Newly-hatched chicks are covered with short, white down. This is slowly replaced by a creamy-buff coloured down which is longer and thicker. Within about twelve weeks the young have left the nest, by that time being hardly distinguishable from their parents although a certain amount of down does adhere to the feathers for a while.

\* \* \*

The genus *Athene* contains three closely-related species known as the Little Owls—these are the largest of the Little Owls. The species covers a wide range and variety of habitats in Europe and Asia. The Little Owl (*Athene noctua*) of Eurasia is the best known of the Little Owls. It is widely distributed in the Palearctic region from about 55°N in Europe to 30°N in North Africa. Its distribution



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

RENAULD'S OR CORAL-BILLED GROUND CUCKOO (*Carpococcyz renauldi*)  
TO BE SEEN IN THE TROPICAL HOUSE

extends farther south in Ethiopia and Arabia. *Athene noctua* also extends across Russia, Mongolia and China towards the Pacific coast of Asia; it is non-existent from India and most of south-east Asia. In the latter part of the nineteenth century Little Owls were first recorded in Britain when breeding in Kent; subsequently they rapidly increased their numbers throughout England and Wales.

In appearance this Little Owl is small and plump, with a flat-headed appearance. Its approximate length is 190-230mm. There are no feathered ear-tufts as in some species, and the tail is short. The plumage of the Little Owl is mostly a greyish-brown colour, mottled and barred with white on top but with pale dark streaks underneath. Owing to the poorly-developed facial disc and the pale eyebrows set on a low forehead this owl has an almost disapproving expression. It has an amusing way of bobbing up and down when perching on a tree or post. The wings of these owls are broad and rounded.

Breeding takes place in April and May in trees, on walls and cliffs, and sometimes on the ground. In Britain and Western Europe most eggs are laid in late April. The usual clutch is 3 and 5 eggs, sometimes 7 to 8. Eggs are incubated by the female and this takes four weeks. When the nestlings appear they are covered with a close, short white down. At first the male feeds them, but the female assists later.

Little Owls feed on insects all the year round; at night they hunt small mammals. During the breeding season small birds are also taken. They have a variety of habitats ranging from parkland, orchards and cultivated fields; they also inhabit rocky, semi-desert regions and steppes. Being terrestrial they settle on the ground and are able to run quite quickly whilst chasing their prey. Their call is a beautiful, plaintive "kiew" repeated every few seconds, and a loud, quickly repeated "wherrow".

The photograph on Page 13 shows one of the two Renault's or Coral-billed Ground Cuckoos (*Carpococcyz renauldi*) which were received into the collection in January this year. This species of cuckoo is as large as a pheasant, its overall length being 27 inches. The two birds can be seen in the Tropical House Aviaries. It is not yet known whether they are a true pair.

### GARDENING NOTES

The rockeries are now having the annual check for replacement and clean-up. During the winter months the ground surface becomes hard and where possible it is a good thing to put on a dressing of well-rotted straw manure mixed with plenty of grit, working it into the ground with a hand fork. Young plants which we propagated last year by cuttings and division will be used for replacements. We leave some gaps to be filled in at the end of May with dwarf plants in order to give colour during the summer months, as most rockery plants and bulbs flower in the spring. Among the plants used for summer flowering are the *Gazania* which has the common name of "Treasure Flower" (sometimes called the Australian Sunflower), and named varieties of *Viola* and *Verbena chamaedrifolia* (Germander-leaved). This species of *Verbena* grows at a fast rate, spreading over the ground and throwing up clusters of red flowers.

During the spring various bulbs will be coming in flower on the rockeries. *Crocus* and snowdrops are distributed throughout. *Galanthus* is the generic name for snowdrop, comprising two Greek words joined together—*gala*, milk and *anthos*, flower. The violet-scented *Iris reticulata* flowers in March; it grows to a height of about 6in., and its colours are violet, purple and yellow. *Scilla siberica* looks well especially after a covering of snow when its sky-blue flowers are pushing through. *Chionodoxa luciliae*, with blue and white flowers, also grows to about 6in. in height. Its common name is "Glory of the Sun", and the generic name is made up from two Greek words, *Chion*, snow and *Doxa*, glory. *Muscari botryoides*, or Grape Hyacinth, flowers in late April and the leaves come up again early in the autumn, giving the bulb a very short resting period. The specific name *botryoides* means "like a bunch of grapes".

*Erythronium dens-canis* (Dogs Tooth Violet) is one of the nicest bulbs, having a rose-coloured flower and broad mottled leaves. It also grows to about 6in.

Amongst the Narcissi is the early dwarf *cyclamineus*, 6in. high, February Gold, 9in. high, and *Triandus thalia*, 12in. The latter has large snow-white flowers in clusters of 3 to 4 to a stem. *Narcissus bulbocodium conspicuus* has the common name of "Yellow Hoop Petticoat". Its faintly golden-yellow flowers have a hooped cup and rushlike leaves. It flowers in the middle of April and the bulbs increase rapidly.

Several species of Tulipa can be seen flowering in May in the Rockery. *Tulipa greigii*—"Red Riding Hood", is oriental-scarlet with dark mottled leaves; *Tulipa eichleri* has flowers of crimson-scarlet, yellow-edged; the early *Tulipa praestans* has light orange-scarlet flowers bearing several on each stem.

Winter work in the Tropical House has now been completed and some new plants have been put in. It is good to see that the various climbers and shrubs which had to be pruned are breaking out into growth again now the days are lengthening. In the entrance to the Tropical House two groups comprising Orchids and Begonia species are displayed. The fruiting Banana is still there but as yet it has not ripened. We had a Frangipanni plant given to us last year, and this has been planted in the trough in the upper part of the Tropical House. A group of "Bird of Paradise" has been planted in a pocket halfway up the ramp.

### 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 £2.24, 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.**

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