



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

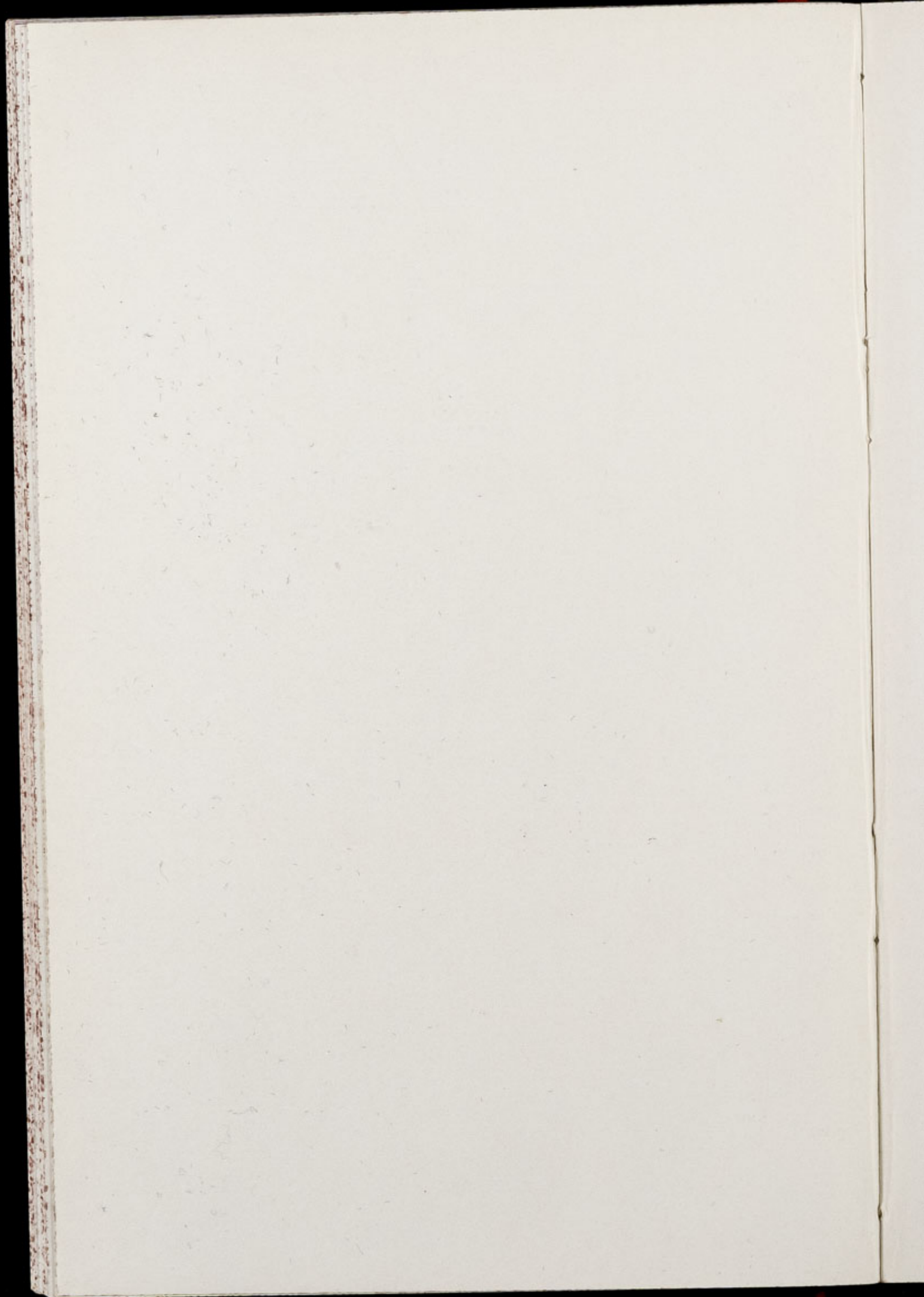
Chester Zoo News

AND GUIDE

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

May 1971

Price 5p



The North of England Zoological Society

ZOOLOGICAL GARDENS, UPTON-BY-CHESTER

COUNCIL

MISS G. M. RUSSELL-ALLEN, O.B.E. (CHAIRMAN)
HER GRACE SALLY DUCHESS OF WESTMINSTER
THE RT. HON. LORD TOLLEMACHE, M.C., D.L.
W. P. BLAND
A. C. JOHNSON
H. F. PARKER
J. N. WILSON
J. A. KILPATRICK, M.B., Ch.B., F.R.C.S.E.
A. E. SMITH
F. MOSFORD
PROF. J. O. L. KING, Ph.D., M.V.Sc., B.Sc. (AGRIC.), F.R.C.V.S.
H. D. COOPER, F.I.M., F.I.F.F., A.I.B.
A. K. McGHIE, A.I.B.
G. R. PRYOR, C.Eng., Hon.M.I.Prod.E., F.B.I.M.
E. SORBY, M.A. (OXON)
G. S. MOTTERSHEAD, M.Sc., DIRECTOR-SECRETARY

CONTENTS:

<i>page two</i>	Arrivals and Births.
<i>page four</i>	Chimpanzee and Baby. Bird Notes.
<i>page six</i>	Sooty Mangabeys.
<i>page eight/nine</i>	Zoo Plan.
<i>page ten</i>	Theft of Birds. Nestboxes.
<i>page twelve</i>	Reptile Notes.
<i>page fourteen</i>	Otter Sculpture.
<i>page sixteen</i>	International Zoo Yearbook. Subscription forms.

ILLUSTRATIONS:

<i>page three</i>	Eland and young.
<i>page five</i>	Chimpanzees, Meg and baby.
<i>page seven</i>	Sooty Mangabey and baby
<i>page thirteen</i>	Nanday Conure.
<i>page fifteen</i>	Common Boa.

COVER: *Young male Californian Sea lion; see page two.*

ANNUAL SUBSCRIPTION — NINETY FIVE NEW PENCE POSTAGE PAID
TELEPHONE :: CHESTER 20106/7/8

ARRIVALS AND BIRTHS

During the past month the following species have been bred:

- 2 Red Lechwe (*Kobus leche*)
- 1 Eland (*Taurotragus oryx*)
- 1 American Bison (*Bos bison*)
- 4 Soay Sheep (*Ovis aries*)
- 1 Bagot Goat (*Capra hircus*)
- 1 Vervet Monkey (*Cercopithecus pygerythrus*).

Fortunately the two Red Lechwe have been born at a more suitable time of year than some of the previous youngsters which arrived in the middle of winter. Our stock of this species is now 12 and is accommodated in enclosure No. 76.

The Eland calf may be seen in paddock No. 104 and the American Bison calf in No. 102. Shortly before the latter was born, a young female Bison, one of last year's calves, was sent to Newquay Zoo as a mate for a bull bred at Chester in 1968.

In the Monkey House there is a family group of Vervet Monkeys consisting of the father and mother, the recent baby and a young male born last June. This species, which originates from Africa, has always bred well at Chester Zoo.

The cover photograph shows one of two more young Californian Sea lions which have been acquired for the new pool. Both are males and have settled in well. Another four are expected to arrive shortly.

Presentations include a Fruit Bat (*Pteropus spp.*) and a male Formosan Sika Deer (*Cervus nippon taiouanus*). This island race of Sika Deer is seriously endangered in the wild and has been allotted a red sheet in the I.U.C.N.'s Red Data Book. The reasons for its decline are given as destruction of the forests and hunting by man. High prices are paid for various parts of the animal's body credited



ELAND AND YOUNG (*Taurotragus oryx*)

Mr. & Mrs. E. Sorby

with medicinal and aphrodisiac qualities. Though a few may still exist in remote parts of the island, the survival of the Formosan Sika Deer depends probably on captive herds.

A pair of Colombian Red Squirrels (*Sciurus granatensis*) has also been presented and is on exhibition in the Small Mammal House. This species has a range from Costa Rica to Colombia, Ecuador and Venezuela.

CHIMPANZEE AND BABY

Last month's cover photograph showed a Chimpanzee named Jane with her baby, Kate. In the illustration on the right is another of the young Chimps, Sue, protesting somewhat as her mother, Meg, transports her briskly across their island.

BIRD NOTES

In a spacious aviary near the Tropical House visitors can see a pair of Andean Condors (*Vultur gryphus*) which were received in a recent exchange.

The Andean Condor is the largest bird of prey in the world, an adult specimen measuring over 4 feet long with a wingspan of 10 feet. On these tremendous wings the Condors soar at heights of up to 15,000 feet in isolated ranges of the Andes from Venezuela and Colombia south to the Straits of Magellan.

The Condors are the living remnants of a once extensive family which included the largest flying bird ever known, *Teratornis incredibilis*, with a wingspan of almost 17 feet. Condors feed mainly on carrion, although some eggs are also taken, and, like most vultures, their heads and necks are bare of feathers. However, they are not closely related to the old world species of vultures.



CHIMPANZEES, MEG AND BABY (*Pan troglodytes*)

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

Indigestible parts of the carcass, such as bone, teeth and hair, are regurgitated in the form of a pellet.

The Andean Condor has glossy black plumage with whitish areas on the wings and a white ruff at the base of the neck. The beak is hooked and the skin on the head purplish-red. A fleshy caruncle is present at the base of the beak in the male.

Mating is accompanied by an elaborate courtship display in which both birds participate. In the wild, nesting is believed to occur every other year and both parents undertake incubation which lasts for 54 to 58 days. The Condors do not build nests, the single white egg being laid usually on a rocky ledge high up on a cliff. In the early weeks the chick is covered with down. It does not attempt to fly for six months and is tended by its parents until over twelve months old. Several zoos have bred Andean Condors successfully and from observations of birds in captivity it would appear that they do not become sexually mature until 8 years old. The pair now at Chester Zoo are fairly young birds.

Andean Condors are widely distributed and are in no danger of extinction at present, unlike their northern relatives, the Californian Condors, of which only a few pairs survive.

Two pairs of Canary-winged Parrakeets (*Brotogeris versicolurus chiriri*), which were received in another exchange, have been accommodated in one of the new aviaries on site No. 42. These birds measure from 9 to 9½ inches in length and have mainly green plumage with a yellow patch on each wing. Over their extensive range in eastern South America, the Canary-winged Parrakeets associate in large flocks and feed on a diet of seeds, fruit, grasses, etc.

A Hill Mynah, a Quaker Parrakeet and a Yellow-fronted Amazon Parrot were among recent presentations to the Bird Section.

SOOTY MANGABEYS

The photograph on the right shows the latest Sooty Mangabey baby with its mother in the Monkey House.



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

SOOTY MANGABEY AND BABY (*Cercocebus torquatus atys*)

CHESTER ZOO

THE NORTH OF ENGLAND
ZOOLOGICAL SOCIETY
ZOOLOGICAL GARDENS

1. SOUTH ENTRANCE
2. Peacock Enclosure
3. Wapiti Paddock
4. Lesser Pandas
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. Animal Enclosure
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. RAINBOW CAFE AND SHOP
21. Aviaries and Picnic Lawn
22. TOILETS
23. Tuatara Exhibit
24. Peccaries
25. Waterbus Halt
26. Birds of Prey Aviaries
27. Owl Aviary
28. Jackal and Hyaena Enclosures
29. Animal Enclosure
30. Porcupine Enclosure
31. Coypus
32. Beavers
33. Giraffe House
34. Camel House
35. Waterbus Halt
36. TROPICAL, NOCTURNAL AND REPTILE HOUSES
37. CHIMPANZEES
38. Floribunda Rose Garden
39. Zebra House
40. Gibbon Island

41. H.T. Rose Garden
42. Aviaries
43. Flamingos
44. Waterfowl Enclosure
45. Waterfowl Enclosure
46. Capybara and Waterfowl
47. Penguins
48. Sealions
49. Rock Garden
50. Polar Bears
51. Tigers
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. G.P.O. Telephone
63. Gibbon Pen
64. Animal Enclosure
65. Cheetahs
66. Ornamental Rock Garden
67. Malayan Bears
68. Animal Enclosure
69. Aviary
70. Wallabies
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. Kamchacka Bears
81. ELEPHANTS
82. Hippos
83. Tapirs
84. Small Mammal House
85. Waterfowl Enclosure
86. Ankole Cattle
87. Gazelle Paddocks
88. Storks and Ostriches
89. Baboon Pens
90. Cat House
91. Lions and Tigers
92. Antelope Enclosure
93. Antelope Enclosure
94. Antelope Enclosure
95. Highland Cattle
96. MONKEY HOUSE
97. Waterfowl Enclosure
98. Wallabies and Waterfowl
99. Cranes and Waterfowl
100. Llamas and Alpacas

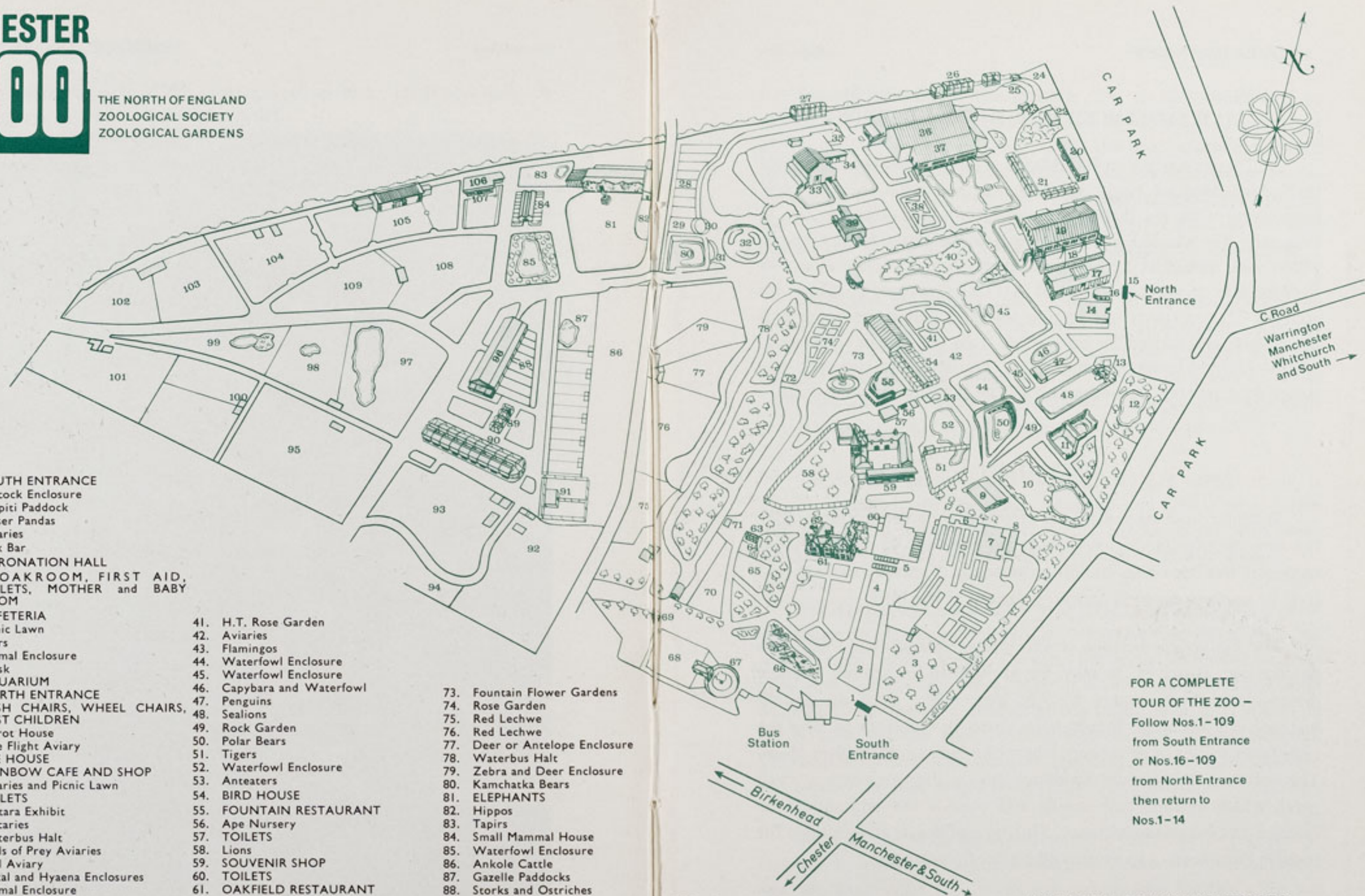
101. Zebroids
102. Bison Paddock
103. Pere David's Deer Paddock
104. Eland and Marmots
105. RHINO HOUSE
106. TOILETS
107. Mpila Snack-bar and Kiosk
108. Antelope Enclosure
109. Antelope Enclosure

Animals may be moved from time to time.

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

FOR A COMPLETE
TOUR OF THE ZOO —
Follow Nos.1-109
from South Entrance
or Nos.16-109
from North Entrance
then return to
Nos.1-14



MAN SENTENCED FOR THEFT OF BIRDS

At Chester Assizes on 29th March, a former member of our bird staff, Alan Michael Hunt, aged 23, was sentenced to two years' imprisonment for the theft of nine rare birds from Chester Zoo in February. He pleaded guilty to stealing the birds from Chester, which were valued at £2,125, and others from a private aviary in Bedfordshire. In addition he asked that six more cases be taken into account. During the proceedings it was said that Hunt broke into the aviaries and carried the birds away from the Zoo in a rucksack. On his journey home to Stanley, Co. Durham, the rucksack was struck by a passing car and a pair of the Birds of Paradise died.

NESTBOXES

We have now started to put breeding pairs of Parrakeets into the new circular blocks of aviaries on site No. 42 and the zoo carpenter has been busy building nestboxes. Naturally the size and style of nestbox depends upon the variety of the bird.

The Budgerigar nestbox is well known and probably needs no description. However, it may be as well to record its average dimensions — 6½in. square by 9in. high. Also, since no nesting material is used, there should be a saucer-like bottom to stop the eggs from rolling into corners where the hen might neglect them. The entrance hole should be about 2in. in diameter and a small perch which extends both inside and outside the box should be inserted just below the entrance. This type of box is also suitable for smaller Parrakeets, Lovebirds and birds of similar size.

For Cockatiels, most Conures and species of this size, the average dimensions of the nestbox would be 9in. square by 20in. deep with an entrance hole of about 3in. diameter. Those for larger Parrakeets, such as Ringnecks and Rosellas, would be even more spacious. The most popular type, which we are using in Chester, is

the "grandfather clock" style which is 12in. to 18in. square and up to 4 or 5 feet deep with an entrance hole about 4in. across. Because of the depth, we fix wire mesh inside the box, which is extended from the entrance hole to the bottom. Into these larger nestboxes we place a layer of turf and peat to the required level depending on the species of bird. This material is dampened prior to the bird nesting and thus gives off the moisture necessary for incubation.

Nestboxes for Parrots and Cockatoos are of considerable size and at the moment we are using large beer barrels with a hole cut about half way up the side of each. Again these are filled with turf and peat. The entrance holes have to be lined with wire or tin as otherwise while the birds are sitting on the nests they will chew at the wood around the holes and steadily enlarge them.

The Macaw nestbox, of which we have had several made, is usually placed on the floor and is built to represent a large rotten tree which is a site the Macaws would choose in the wild. Both outside and inside of the nestbox have to be lined with wire.

For Lories and Lorikeets which have a highly liquid type of droppings we use a box similar in size to that for Cockatiels, although tending to be a little longer, the most important feature of which is good drainage in the form of wire or a sufficient number of holes drilled through the base. A layer of pea-sized charcoals is placed on the bottom and this then covered with suitable nesting material. Charcoal has a tendency to absorb moisture and also it sweetens the soil which otherwise would become foul from the birds' droppings.

With all the birds we are attempting to breed, correct diet is essential in order that there is sufficient calcium for the eggshells and to ensure that the chicks are strong and healthy. We are therefore giving them plenty of green food such as spinach and chickweed. With Lovebirds, etc., fresh willow is provided which they strip, chew and use for building nests inside the box. All the birds have access to cuttlefish which is a source of calcium and good quality grit for their digestion.

Work is still in progress on some of the new aviaries and the pathways around them are being resurfaced. This tends to distract the birds and we are hoping it will not spoil the breeding season. Several species have gone to nest or are showing interest including the Derbyan, Barraband and Plumhead Parrakeets and the Nanday Conures.

REPTILE NOTES

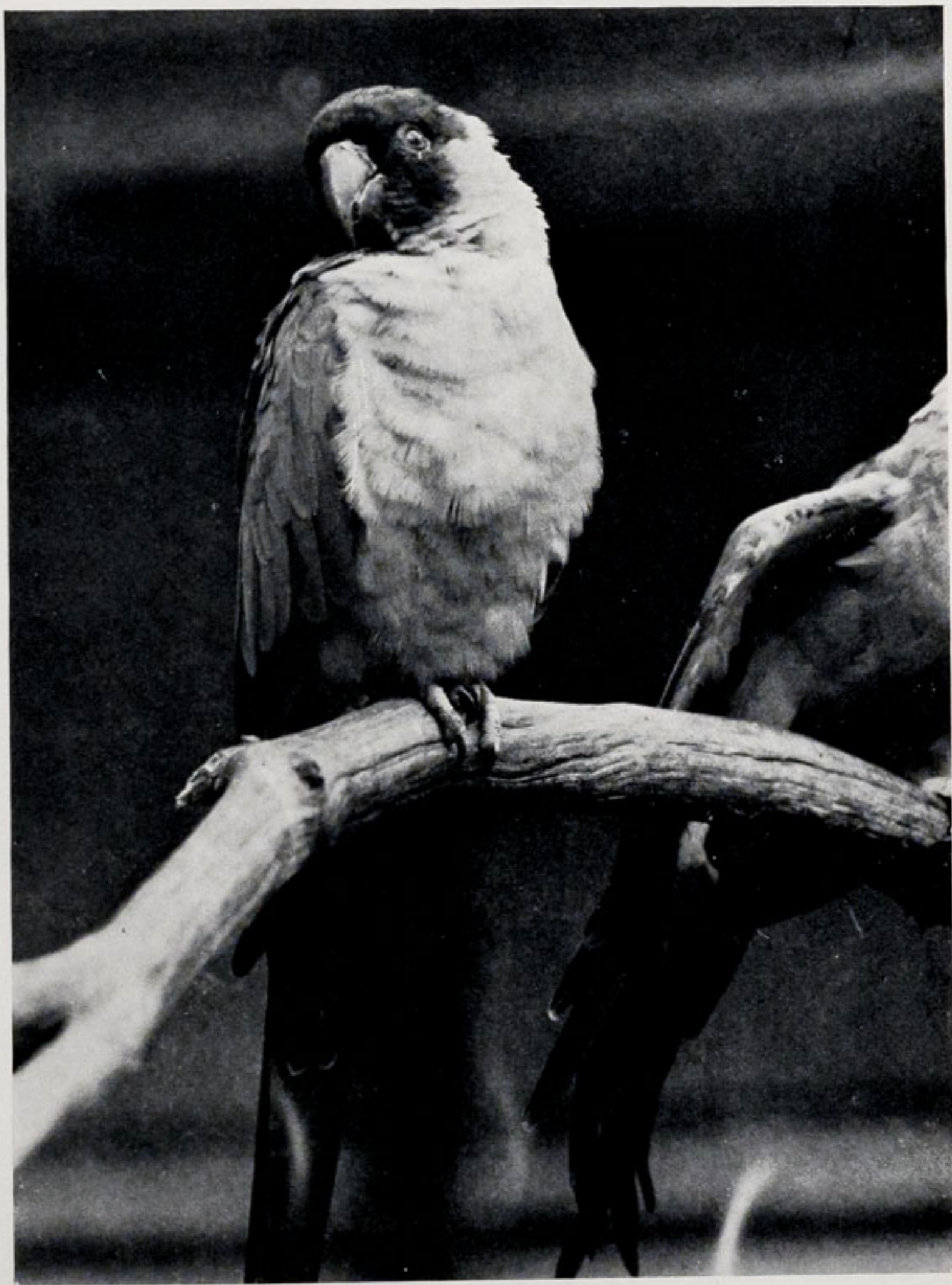
Among the new arrivals in the Reptile Section are a Black Mamba (*Dendroaspis polylepis*) and a Russell's Viper (*Vipera russelii*).

The Black Mamba inhabits low-lying (below 4,000 feet), open bush country from Ethiopia and Somalia southward to Natal and South West Africa, avoiding the western rain forest region. It is undoubtedly one of the most dangerous snakes now living and is said to strike out for 40 per cent of its length; the average snake strikes out for 25 to 30 per cent. It is the largest poisonous snake in Africa, averaging 10 feet in length with a maximum of 14 feet, and is comparable in size only to the King Cobra of Southern Asia. Its fangs measure up to 6½mm.

A fully grown Black Mamba secretes enough venom to kill from 5 to 10 men and few people survive its bite unless antivenin is administered promptly. The venom inhibits breathing and apparently also inhibits the branch of the vagus nerve that controls heart beat, thus causing the heart to beat wildly. A polyvalent antivenin (Mamba) is produced by the South African Institute of Medical Research, Johannesburg.

This species is one of the fastest snakes known and has been clocked at slightly over 7 m.p.h., which is perhaps twice as fast as the fastest North American snake. It gives the impression of great speed and in some of the older literature was reported to exceed the speed of a running horse.

The Black Mamba feeds mainly on rodents, Rock Dassies, birds and small mammals.



NANDAY CONURE (*Nandayus nanday*)

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

The Russell's Viper is distributed over eastern West Pakistan, most of India, Burma, Ceylon, parts of Thailand, South East China, Taiwan and a few islands of Indonesia. It is found in open grass or bush country, often around cultivated fields and villages. It occurs in lowlands but tends to avoid permanently marshy areas.

The Russell's Viper is mainly nocturnal but occasionally active by day in cool weather. It hisses loudly when disturbed and strikes with great force and speed. This viviparous snake is extremely prolific, giving birth to from 20 to 60 young and, as is true of many snakes, the young are more irritable than the adults. The Russell's Viper is a leading cause of snakebite accidents in India and Burma but the case fatality rate is lower than in bites by Kraits, Cobras and Saw-scaled Vipers. The lethal dose of Russell's venom for man is estimated at 40-70 mg; a large specimen yields 150-250 mg.

The average length of the Russell's Viper is from 40 to 50 inches with a maximum of 65 inches, though the island races tend to be smaller. The males are larger than the females. The specimen we have obtained is about 41 inches long.

Two male Common Boas (*Constrictor constrictor*) have also been acquired. These are only a few weeks old and measure about 12 inches long. The photograph on the right shows one of three Common Boas already in the collection.

A Pope's Pit Viper (*Trimeresurus popeorum*), which was gravid on arrival at the Zoo last year, has given birth to 20 young.

OTTER SCULPTURE

A trio of European Otters, sculptured in bronze and nickel by Miss Edna Rose of Hoylake, has been erected as the centrepiece of the fountain in the Flower Gardens, No. 73. The three figures, which are about 3 feet long, are so arranged that they appear to be playing in the water jet from the fountain.

Miss Rose has been an enthusiastic animal artist all her life and says she has a house full of pets. She taught sculpture at the



J. Whitworth

COMMON BOA (*Constrictor constrictor*)

Birkenhead College of Art and is a member of the Society of Wildlife Artists in London.

We hope to publish a photograph of this charming group in next month's "Zoo News".

INTERNATIONAL ZOO YEARBOOK

Volume 11 of the International Zoo Yearbook is now available; price £7.75, postage paid (overseas: £9.50/\$22.80). 'Marsupials in Captivity' is the special subject featured in this invaluable publication which also contains numerous articles on Zoo Architecture, Breeding, Conservation, Education, etc., and a comprehensive reference section. Copies may be ordered direct from the Publications Dept., (IZY), The Zoological Society of London, Regent's Park, London NW1 4RY.

SUBSCRIPTION FORMS

New readers of the 'Chester Zoo News' who would like to receive the magazine regularly may like to know that subscription forms are on display in the souvenir shops. An annual subscription (12 issues) costs 95p, postage paid, which can be either handed over the counter 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.

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