

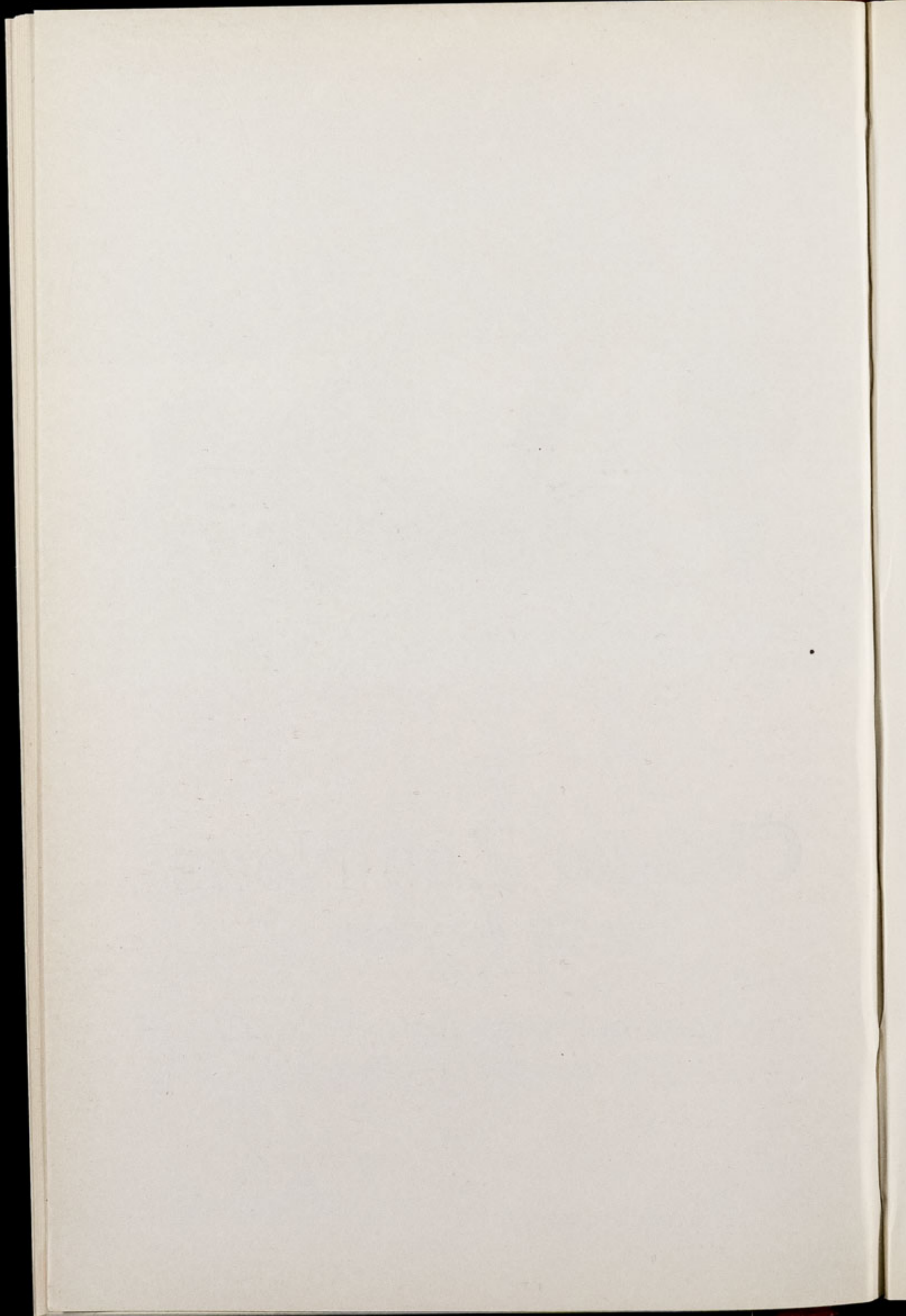
Chester Zoo News

AND GUIDE

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

June 1978

Price 12p



The North of England Zoological Society

ZOOLOGICAL GARDENS, UPTON-BY-CHESTER

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COVER

Young South American Tapir, Joy.

By courtesy of Mr. & Mrs. E. Sorby

Annual subscription — Two Pounds and Thirty Pence, postage paid
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THANKSGIVING SERVICE

A Service of Thanksgiving for the life and work of George Saul Mottershead, O.B.E., M.Sc., was held in Chester Cathedral on May 26th, 1978.

This was a most fitting Service for a man who had a great knowledge of animals, caring for them in captivity in the Zoo which he had created. He gave pleasure to the millions of visitors that eventually came to know and love the Zoo, and contributed largely to the conservation of the many and varied species of wild life.

The Service was attended by Mr. Mottershead's daughter and son-in-law, Mr. & Mrs. F. Williams, and his three grandchildren Joy, Linda and George. Miss Howard, who was Assistant to Mr. Mottershead for many years, attended with the family. Members of the Zoo Council, many of the Staff, the Mayor and Mayoress of Chester and many local dignitaries were also present.

Professor J. O. L. King, Professor of Animal Husbandry, University of Liverpool and Chairman of the Council of the North of England Zoological Society, gave an address on the life of Mr. Mottershead.

The Lord Lieutenant of Cheshire, The Viscount Leverhulme, read The Lesson taken from Job, Chapters 39, v.1-11, and 42, v.1-16.

The Prayers were spoken by the Reverend Canon Dr. J. S. Lawton, Canon-in-Residence at the Cathedral. The Dean, the Very Reverend T. W. I. Cleasby, officiated at the ceremony.

A 'G. S. Mottershead Fund' has been opened for the purpose of raising a suitable Memorial. The nature of the Memorial will depend on the total amount received, and subscribers will be notified in due course. Contributions may be sent to the office.

GENERAL NEWS

We are very pleased to report the breeding of another South American Tapir (*Tapirus terrestris*). This is a female and would weigh between 10 and 12-lbs at birth. It has been bred from parents received into the collection in 1974. The last Tapir birth in the Zoo was in 1967. These animals are housed in the Pachyderm House.

Young tapirs are pretty little animals, displaying cream-coloured spots and stripes on their dark brown coats. The fur is



By courtesy of Mr. & Mrs. E. Sorby

MALAYAN TAPIR (*Tapirus indicus*)

quite short. At about two years of age the cream markings disappear and the animals then have the overall dark brown colour of the adults. A youngster will mature to about 3-ft in height and 6-ft. in length. The legs of the Tapir are short in comparison with its body height; the muzzle lengthens to form a brief, mobile trunk. The tail is short, and the eyes are small. The front feet have four toes, and the back feet three. The cover photograph shows the baby Tapir, "Joy".

There are four known species of Tapir, three from South

America and one from South East Asia. At Chester Zoo we have the South American (*Tapirus terrestris*), and one male Malayan Tapir (*Tapirus indicus*). The South American species has its range in Brazil, the Guianas, Colombia, Venezuela, Equador, Peru, Bolivia and in the north of Argentina. Its habitat is the thick forest to open grasslands and deserts. Tapirs drink a great deal of water, and one would assume they prefer the swamps and waterways of their distribution in the wild.

These animals are exclusively herbivorous, browsing on water plants and the leaves of twigs of the forest trees. The predators of the Tapir are the jaguar and the alligator. Tapirs however have very strong teeth and are able to defend themselves. Also their sense of smell and hearing is acute, and they are strong swimmers.

Tapirus indicus range in Malaya, Burma, Thailand and the Island of Sumatra. The colouring of this species is rather more interesting than that of the South American in that the head, neck, shoulders and legs are black, but the saddle-shaped area of the back and sides is pure white. These animals live in dense forests, browsing during the night on shoots and twigs of trees and shrubs, and on succulent water plants.

Two Wapiti (*Cervus canadensis*) have recently been bred in the Zoo and both are fine youngsters. The herd now consists of eight of these animals, which can be seen in Enclosure 3 near the South Entrance.

In 1974 we purchased a pair of Reindeer (*Rangifer tarandus*) but unfortunately the female died after continual harrassment by the male. We then purchased two more females in October 1976. A male was bred in the Zoo in May 1977, and we are pleased to report that recently we have bred a male and a female.

Our Reindeer are kept on specially prepared gravel and hardcore paddocks, grassland being too rich for them. A special pellet diet is fed to them twice a day, and willow branches are given two or three times a week. We do not give them hay. The Reindeer are in Enclosure 103a.

We have had a male and a female Agile Wallaby (*Wallabia agilis*) in the collection for about sixteen months, and the pair have recently bred a youngster which is now visible in the mother's pouch.

In August 1976 we purchased two pairs of Agile Wallabies but unfortunately the two females died. In July 1977 we purchased another female. The enclosure for these animals is 101. A picture of a young Wallaby is shown on page 16.

Two more Arabian Gazelles (*Gazella arabica*) have recently been bred in the Zoo and the herd now consists of nineteen animals.

There is a splendid herd of 24 Pere David's Deer, three having been bred in April this year. These can be seen in Enclosure 104. The coat of these animals is at its best just now and is a golden brown colour.

HAND-REARINGS

On the 7th December last Orang-utan "Lola" gave birth to a male, since named "Karau". This is "Lola's" second offspring, her first having died. She has been a good mother but eventually becomes bored with her charge. "Karau" was not getting enough nourishment and the baby was taken away for hand-rearing by Mrs. Joan Timmis, wife of Mr. W. H. Timmis, Curator of Primates and Birds. The youngster now weighs about 8½lbs.

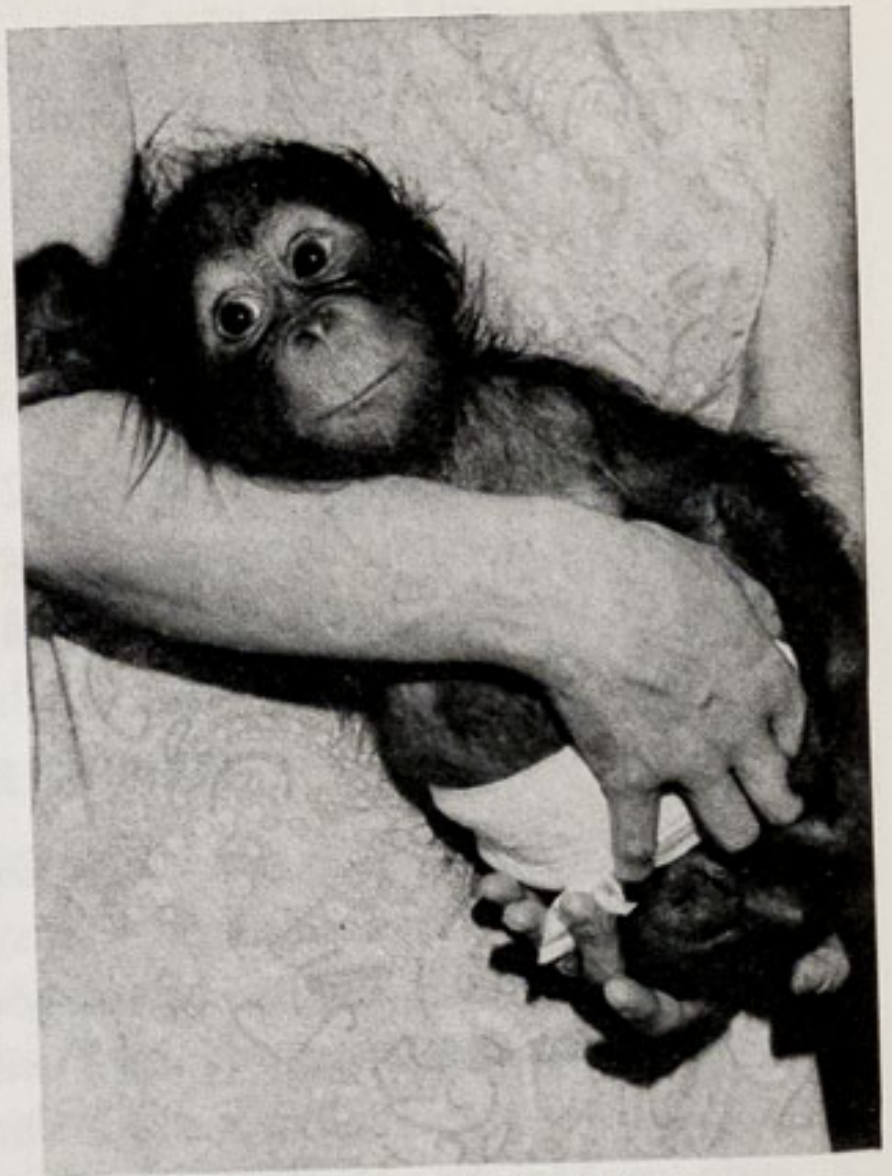
Another current hand rearing by Mrs. Timmis is that of Orang-utan "Datu", son of "Martha". The mother had rejected her baby at birth. "Datu" now weighs 7-lbs and was bred on the 6th April 1978. He is going to be a big animal as he is a good weight for his age in comparison with "Karau" bred in December 1977.

Mrs. Timmis has another Chimpanzee for hand-rearing. "Meg's" seventeenth offspring, a female, bred in the Zoo on the 19th September 1977 was called "Mandy". The baby is now 8½ months old and weighs about 13-lbs. A photograph and a "Cover" write-up on the breeding is in the December 1977 issue of the magazine, and on page 3 one can readily see how tiny "Mandy" was then in comparison with the photograph on page 6. She will shortly be seen in the Zoo Nursery as she is becoming rather large for the house. Mrs. Timmis says it is always a wrench on both sides when the animals leave, but that after about three days her charges settle quite happily in the Zoo.

Sooty Mangabey "Sookey" gave birth to "Sasha" on the 17th April 1978. The mother was very rough with her baby (a male) which had several scars to prove it. It was taken away for hand-rearing as soon as this was observed. With care and attention from



ORANG-UTAN "KARAU"



ORANG-UTAN "DATU"



SOOTY MANGABEY "SASHA"



CHIMPANZEE "MANDY"

Photos by courtesy of K. W. Green, A.R.P.S.

Mrs. Timmis and her husband, "Sasha" has now recovered. This species of Mangabey develops quite rapidly and "Sasha" will soon be seen in one of the Zoo Nurseries.

Hand rearing the four animals has been a tremendous effort. Fortunately the nightly feeds inevitably came to an end but the animals still need to be fed at three-hourly intervals during the daytime.

BIRD NOTES

We are pleased to report the following birds which have been bred in the Zoo:

- 3 Splendid Parakeets (*Neophema splendida*)
- 10 Zebra Finches (*Taeniopygia castanotis*)
- 2 Eagles Owls (*Bubo bubo*)
- 3 Silverbills (*Euodice malabarica cantans*)
- 2 St. Helena Waxbills (*Estrilda astrild*)
- 2 Green Singing Finches (*Chloris chloris*)
- 4 Bengalese Finches
- 1 Orange-cheeked Waxbill (*Astrilda melpoda*)
- 2 Red-eared Waxbills (*Estrilda troglodytes*)
- 1 Canada Goose (*Branta canadensis*)
- 2 Rufous-backed Mannikins (*Spermestes nigriceps*)

Recently we were presented with a two-year old Peafowl (*Pavo Cristatus*) and a female Roseate Cockatoo (*Eolophus roseicapilla*). In April this year we received in exchange four Roseate Cockatoos, two having since died. We were therefore very pleased to receive the female presented to us to add to our remaining pair.

A female Weber's Lorikeet (*Trichoglossus haemotodus weberi*) has been sent to us on breeding loan. We already have three of these lorikeets in the collection, which were presented to us by Mr. James Serpell of Liverpool University.

In 1973 Mr. W. H. Timmis, Curator of Birds, spent four weeks on the Island of Flores in Indonesia in order to find out more about the feeding habits of Lories and Lorikeets.

On numerous occasions he was able to observe Weber's Lorikeets at very close range and found them to be quite common in the coastal

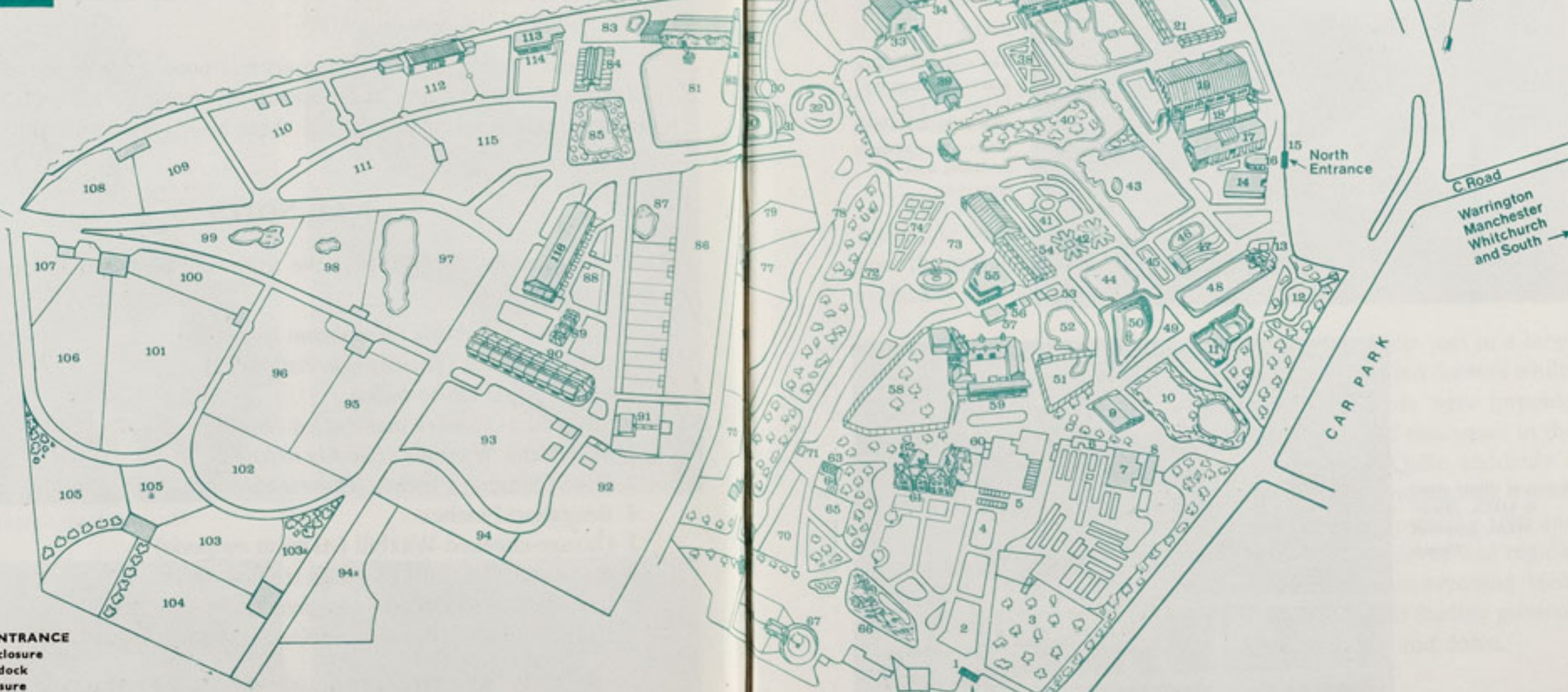
CHESTER ZOO

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 9.00 a.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. Zebra Enclosure
97. Waterfowl Enclosure
98. Waterfowl Enclosure
99. Waterfowl Enclosure
100. Blackbird
101. Wallabies
102. Animal Enclosure
103. Wallabies
- 103a. 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



The village of Maria, Marie-Marie on the Island of Flores which overlooks the forest where Weber's Lorikeets were observed.

A typical village scene in Maria, Marie-Marie, Island of Flores.



Looking down from the village at the forest where Weber's Lorikeet's were nesting.

Photos by courtesy of W. H. Timmis, Curator of Birds and Mammals, Chester Zoo

regions and also in the mountain ranges up to a height of 3,000-feet. Several pairs were observed breeding in the Manggaraise Central Range. The country there was very lush, green, humid and apparently very fertile. The area consisted of lontar and coconut palms, bamboo groves and huge tropical trees with very broad leaves. Scattered around the area were several native gardens and some small grassy slopes.

This particular region was volcanic and there was still volcanic activity to be found over most of the island in the shape of solfataras near the craters, dispersed fumaroles, and numerous boiling springs, especially in some tidal strips.

Mr. Timmis's first sighting of Weber's Lorikeets was in a large forest tree which was absolutely covered with fiery-red flowers whilst in its upper branches red and green Weaver Birds were hopping upside down and imbibing nectar. A small party of macaques in the undergrowth kept him under close supervision. Quite suddenly a large flock of lorikeets arrived, flying very swiftly and making a great deal of noise. They immediately settled on the flowering tree and started feeding. Most of the Weber's Lorikeets observed had regular flight patterns, that is to say in the evenings non-breeding birds returned to their roost-sites and at first light left their feeding grounds normally using the deep valleys in which to fly up and down.

The first nesting pair observed was in a lontar palm some 20-ft. above ground. A local native was sent up the tree to disturb the sitting female, and it was found that the nest contained three half-grown youngsters. Numerous other nesting-sites were found and observations were made over a period of several days. Weber's appear to feed a great deal on flowering coconut trees; on two occasions several were observed feeding at the edge of rice paddies on very tall wild grass that was seeding.

Weber's Lorikeet had not been studied extensively in the wild and it was very exciting for Mr. Timmis to realise that he was witnessing a great deal which was completely new.

The plumage of Weber's Lorikeet is a dull green colour with lighter patches of green and very slight yellow tinges. Unlike other

birds of the lorikeet family it is quite a drab bird. The reason for this is probably because the Island of Flores contains many species of Birds of Prey, mainly due to the Island being more heavily forested than any other island in the Lesser Sunda Chain, and Weber's Lorikeet has evolved this particular plumage in order to survive.

Some of the time on the Island of Flores was spent in the village or "Kampong" shown in the two photographs on page 10.

LORIES AND LORIKEETS

Lories and Lorikeets can be described without any fear of contradiction, as being among the most beautiful of the world's birds; some also rank amongst the most intelligent.

Nectar and pollen are the natural foods of all lories and lorikeets. Most species also consume fruit, seeds, blossoms, buds or berries in varying quantities. Small insects, which have been ingested in blossoms and buds and in nectar, have been found in the crops of some lories.

The members of the Loriidea are among the most specialised of all parrots in their feeding habits; their tongues are adapted for feeding on nectar or pollen, a fact which has caused the group to be known as the 'brush-tongued' parrots. 'Brush' refers to the cluster of elongated papillae which are normally contained in a protective 'cup' formed by the arms of the horny U-shaped sheath that terminates the underside of a parrot's tongue. These papillae are not easy to observe as normally they are in use only when the bird is feeding on liquid or soft foods, also sometimes when preening another bird. When the bird is at nest or eating hard food the 'cup' is almost closed and the papillae shortened and compressed. Under these circumstances the tongue looks like that of other parrots, as it does after death. When the tongue is protruded the papillae increase several times in length and are held out from the cup, giving the tip of the tongue the appearance of an expanded sea anemone. The movements of the long, extremely flexible tongue cause the papillae to expand and contract and wave rather like the tentacles of the sea anemone.

Nectar and pollen would appear to be the main items of diet of

most species, thus for those birds kept in captivity a substitute must be found. However, the substitute diet must maintain these birds indefinitely in captivity and be of sufficient quality to enable them to reproduce. Pollen, the natural food, has a very high protein content, and nectar has a high carbohydrate content. The latter is less important in captive birds since they do not have to expend much energy in obtaining food, therefore the carbohydrate content of the 'nectar' should be low and the protein content high.

GARDENING NOTES

The Spring flowers have now come to the end of their season and staff were busy during the first half of this month planting out for the summer.

There are approximately thirty areas of large flower beds, each needing from one to two thousand plants and most of the other smaller flower beds need five to six hundred, making a total of approximately 80,000 plants.

There are many different shrubs in various parts of the Zoo and one of the best at present is growing against the wall of the Mpila Snack Bar. This is the *Ceanothus*, of which there are several types, all with various shades of blue. The *Clematis montana* gave their usual profusion of blooms again this year and can be seen trained on various walls in the Zoo; one very fine example covers a side of the Polar Bear Pit. The name *Clematis* is taken from the Greek word, *Klema*, a vine branch, and refers to the vine-like habit of this lovely plant.

The entrance to the Tropical House provides the cooler conditions required for *Abutilon megapotamicum*. This has survived each winter but at one time looked as though the severe weather last February had killed it. After cutting away the dead pieces it is now showing signs of breaking out again. One of the heaters on the outside wall inside the Tropical House no doubt helped it through the winter. *Abutilon* is the Arabic name for a mallow-like plant. *Cuphea platycentra*, often more commonly known as the Cigar Flower, with its striking colour combination of scarlet, black and white, originates from Mexico and is staged in the inside entrance to the Tropical House.



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

A VIEW OF THE GARDENS IN THE SPRING

Recently a large plant of *Erythrina crista-galli* was presented. This is a greenhouse deciduous shrub which should be cut down to the old wood in October and kept dry during the winter. Young growth starts in April and the plant should then be given plenty of water. By the end of May the stems will have grown to six feet long, with red flowers coming from the leaf axils. *Erythrina* comes from a Greek word, *Erythros*, meaning red, and *crista-galli*, cock's comb; this refers to the shape of the flower.

Further inside the Tropical House there are many lovely plants including *Gloriosa superba*, a tropical, tuberous-rooted climber. The common name of this plant is Climbing Lily, and this particular species is orange and red. There is also the yellow-flowered *Beloperone* better known by its more common and charming name, The Shrimp Plant. *Bougainvillea* and *Hibiscus* are flowering now and the climbing *Rhodochiton atrosanguineum* is looking extremely pretty with its reddish-purple flowers hanging down like bells.

In the Spring this year several photographs were taken of the Gardens. The photograph on page 14 shows the polyanthus and the daffodils with a view of the "polled" trees on the banks of the waterways overlooking the Fountain Restaurant. There is now an extended view of the paddocks beyond the canal.

It is hoped that the extensive polling of the willow and other trees in the early part of this year will discourage the starlings from paying us their seasonal visits in such large numbers. Each night, in October and November, they would come into the Zoo in their thousands, causing the branches of the trees to break and fall into the water, with the consequent silting up of the canal and lakes.

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.



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

YOUNG BENNETT'S WALLABY

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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