



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

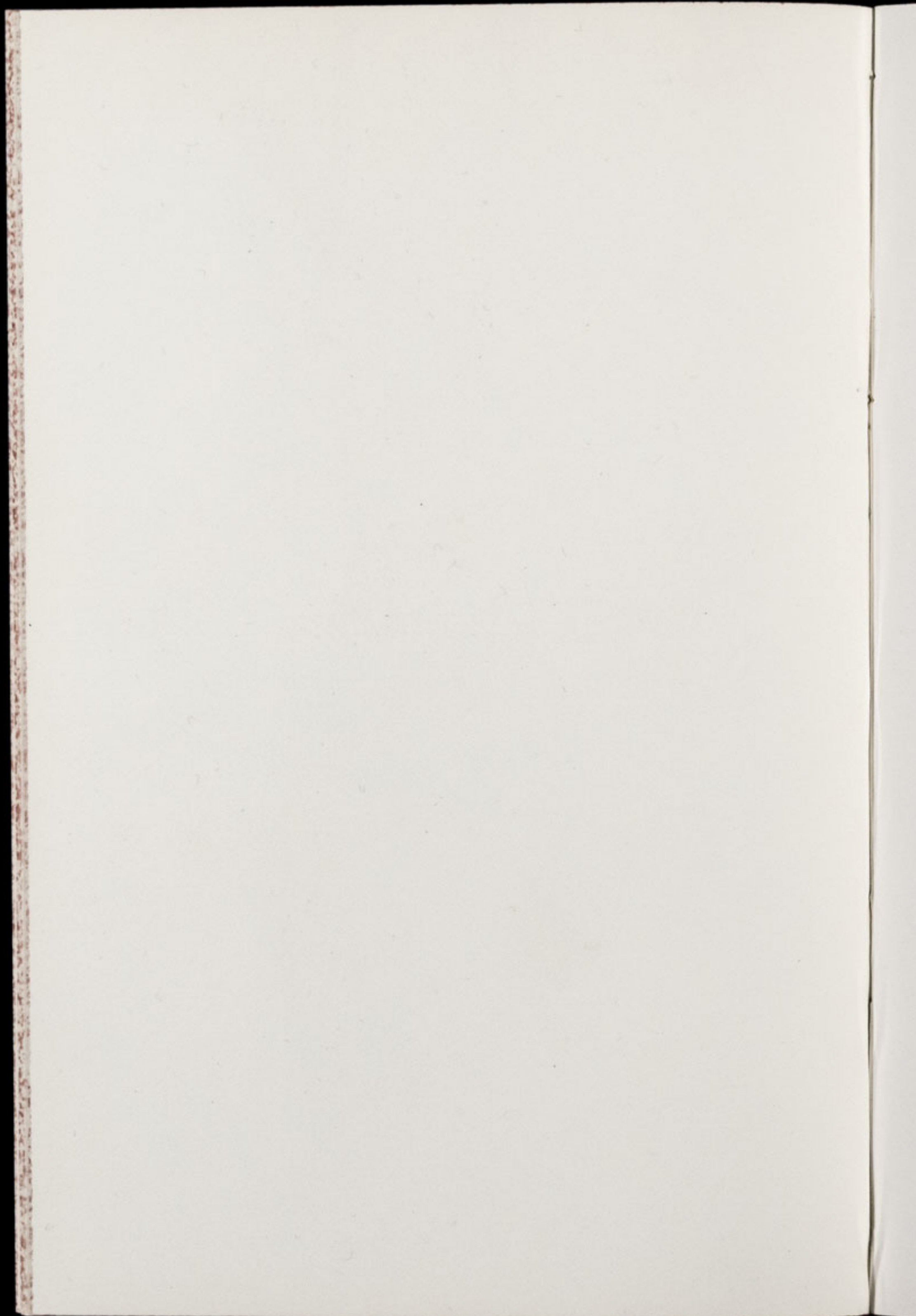
# Chester Zoo News

## **AND GUIDE**

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

July 1973

Price 6p



# The North of England Zoological Society

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*COVER: Two white Red Lechwe calves; see page four.*

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### ARRIVALS AND BIRTHS

Since our last report, the following mammal births have been recorded:

- 1 Chimpanzee (*Pan troglodytes*)
- 3 Pumas (*Felis concolor*)
- 3 Leopards (*Panthera pardus*)
- 4 Lions (*Panthera leo*)
- 1 Alpaca (*Lama pacos*)
- 1 Arabian Gazelle (*Gazella arabica*)
- 1 Red Lechwe (*Kobus leche*)
- 1 Fallow Deer (*Dama dama*)
- 1 Highland calf (*Bos taurus*)

The baby Chimpanzee has been produced by Meg, the oldest Chimp in the collection. An old wrinkled face and greying fur betray Meg's twenty-six years, almost twenty-four of which have been spent at Chester Zoo, but despite her advancing years, she is still an attentive mother. It is unfortunate therefore that in twelve months' time zoo staff will probably encounter the same old problem with this female — her refusal to allow her babies to be weaned properly. To prevent them dying from malnutrition, they have to be removed and complete their development in the care of zoo staff.

The baby is a female and the keepers have named her Lollipop. She and Meg may now be seen in one of the inner enclosures of the Chimpanzee House.

At about a month old, the Puma and Leopard cubs have just made their first reconnoitres in their respective outer enclosures at the Cat House. The father of the Leopard cubs is a Black Panther, which of course is merely a black form of the Common Leopard, but none of the litter is black. This raises the very interesting subject of the incidence of black and spotted cubs from mixed parents.

The dictionary definition of heredity is the "tendency of like to beget like" and it is a complex subject. However, for the purposes of understanding the results of Black and Spotted Leopard crosses, it will be sufficient to know a few fundamental facts.

First of all, animals carry genes which are present in pairs. When an animal forms gametes — eggs in the case of the female and spermatozoa in the male — no gamete contains more than one member of any pair. As would be expected, the cubs from a mating of pure-bred Spotted Leopards will always be spotted, as the parents will transmit only genes bearing spotted coat characteristics. In the same way, a pair of Black Leopards will invariably produce black offspring.

If a pure-bred Spotted Leopard, bearing genes for the spotted coat, mates with a Black Leopard, carrying genes for the black coat, by the laws of heredity, the cubs will bear genes of both types. However, as the spotted coat is known to be dominant over the black, the cubs from such a mating will be spotted.

Then, if a mating occurs between two of these impure offspring, each bearing two types of genes, the female will form eggs of both types and similarly the male, spermatozoa. Thus there can be three combinations from such a union. In the first instance, a spotted gene may combine with another spotted gene and the result will be a pure Spotted Leopard again. Secondly, a spotted gene may unite with a black gene and another impure cub be the result, though, as already stated above, invariably this will be spotted. Thirdly, a black gene may join with another black gene to produce another pure Black Leopard.

Naturally, it does not follow that the litters of every second generation pair will contain both black and spotted cubs. Very often all are spotted, though if any is bearing genes of both types, the black strain may appear in a later generation if an appropriate mating has occurred.

At present the second litter of Lion cubs is only a few days old and will not be seen outside for several weeks but when eventually they join the four elder cubs, life will be anything but dull in enclosure No. 91. Whilst they were being vaccinated recently, it was ascertained that these elder cubs are three males and a female.

Visitors can see the woolly, brown baby Alpaca with the rest of the group in enclosure No. 68.

Earlier in the season, our herd of Arabian Gazelles was split into two groups — a trio, comprising a male and two females, being transferred to enclosure No. 46, a spacious grassy paddock with indoor quarters. This species of Gazelle is extremely rare in its natural range and therefore we consider the establishment of a viable breeding group as of the utmost importance. Because the males are aggressive, it is not possible to keep all the Gazelles together in one paddock and in previous years they have occupied several enclosures at the rear of the Monkey House, No. 87 on the zoo plan. By necessity, only two or three Gazelles could be kept in each enclosure and it was not unusual to hear a visitor remark "What, more of them?"

The trio which was moved has now swelled in number to five, as both females have produced fawns. One mother and baby can be seen in the photograph on the right. Altogether three young have been born this year, making a total of thirteen Arabian Gazelles in the collection.

In last month's issue we reported the birth of a white Red Lechwe calf. As can be seen from the photograph on the cover, a second white specimen was produced recently in our herd. The elder calf is a male and the younger, a female.

There has been one new arrival in the Nocturnal Section—a male Senegal Bushbaby (*Galago senegalensis*) which was a presentation to the Society.



ARABIAN GAZELLE AND FAWN (*Gazella arabica*)

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



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

SNOOZING LEMUR FASHION—Ring-tailed Lemurs (*Lemur catta*) in the Monkey House

The only other arrival is a female Ring-tailed Lemur (*Lemur catta*), received from Bristol Zoo in an exchange for one of our female Ring-tailed Lemurs. The object of the swap was to introduce new blood into each group.

There are six Ring-tailed Lemurs in the collection, which can be seen in the Monkey House. In the mid-1960's, the breeding record at Chester Zoo for this Madagascan primate was excellent and in fact all but one of the group was born here. However there have been no births since June 1968 and it is hoped that the introduction of the new female will stimulate breeding again.

### REPTILE NEWS

A six foot Black Mamba (*Dendroaspis polylepis*) was one of several presentations to this section during the past month. It has been introduced into a vivarium where there is another of these highly venomous African snakes and it is interesting to note the

difference in colour between the two specimens. Black Mamba is a misleading name for these snakes, as they are varying shades of dark green, though in shadow one might think their bodies were black. The new Black Mamba is olive green, a much darker shade than the original snake.

A young female Reticulated Python (*Python reticulatus*) has also been presented and she may now be seen with two larger specimens of this species. At present, her handsomely marked body is twelve feet long but she could attain a length of twenty-five feet quite easily, as the Reticulated Python is the longest snake in the world and has been recorded at over thirty feet. South East Asia is the home of this python.

When she arrived she was hand-tame, but after a few days in the spacious vivarium her natural instincts returned. With very few exceptions, Reticulated Pythons are aggressive and unreliable snakes. In fact it is true of many snakes that, even if they have been controllable in a restricted area, they revert to their wild temperaments as soon as they are released into a larger space. The Reptile Curator relates that one evening a hand-tamed Common Boa was released into a vivarium and the following morning it attempted to attack him.

A male Starred Tortoise (*Testudo elegans*), a native of India, was another presentation. Not quite mature, he could reach eight inches long when fully grown. He was released into the large Tortoise vivarium and it did not take him long to locate the two female Starred Tortoises!

We have also acquired another female Rhinoceros Iguana (*Cyclura cornuta*), a species which is found in Haiti and Puerto Rico in the Caribbean. Our intention is that the new female will form a trio with the pair of Rhinoceros Iguanas already in the collection.

# CHESTER ZOO

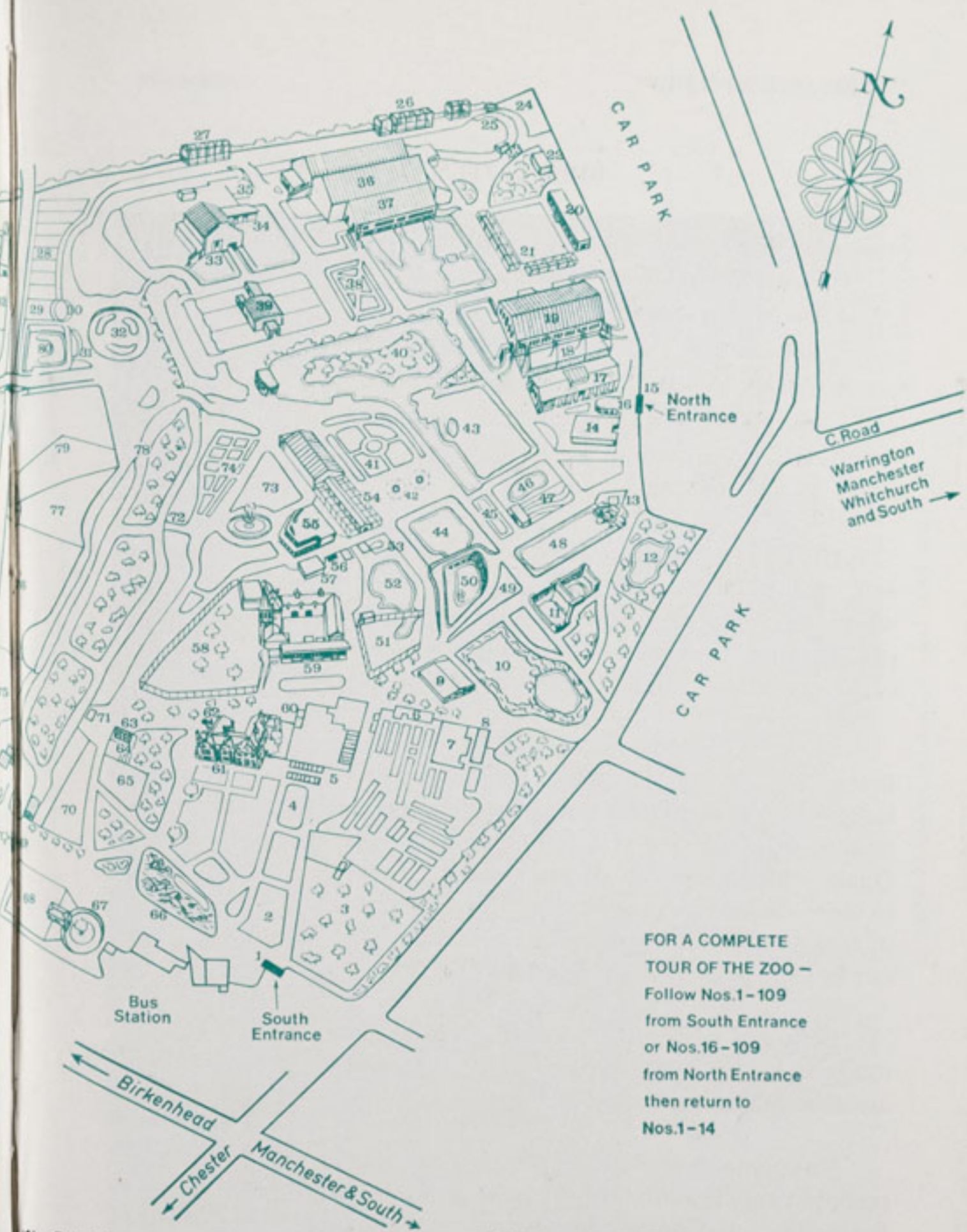
THE NORTH OF ENGLAND  
ZOOLOGICAL SOCIETY  
ZOOLOGICAL GARDENS

TO LECTURE HALL  
(PRIVATE)

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. Condor 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. Mammal House
40. Gibbon Island

41. H.T. Rose Garden
42. Aviaries
43. Flamingoes
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. Kamchatka 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. Zebra Enclosure
96. MONKEY HOUSE
97. Waterfowl Enclosure
98. Wallabies and Waterfowl
99. Cranes and Waterfowl
100. Llamas and Alpacas



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

## 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

During the past month the following chicks have left the nest:

- 1 Barnacle Goose (*Branta leucopsis*)
- 1 Diamond Dove (*Geopelia cuneata*)
- 1 Red-rumped Parakeet (*Psephotus haematonotus*)
- 6 Quaker Parakeets (*Myiopsitta monachus*)
- 3 Barraband Parakeets (*Polytelis swainsoni*)
- 1 Yellow-breasted Bunting (*Emberiza aureola*)
- 2 Red-billed Weavers (*Quelea quelea*)

The breeding season got off to a slow start in the Bird Section and all indications pointed to a poor record for the year. Bad weather in the late spring was a major factor, as a sudden cold spell caused a number of pairs to desert their eggs. However in the space of a few weeks, matters have improved considerably.

The photograph on the right shows at work the only nest builders in the Parrot family, the Quaker Parakeets. There are several tunnels leading into this complex structure of twigs, each terminating in a nesting chamber, and it was in this communal nest that the six Quaker chicks were reared. The Quaker Parakeets add continually to their nest and building materials are provided for them in the form of either loose twigs or branches which they strip themselves. They can be seen in an aviary near to the Owl Section, No. 5.

Both the Red-rumped and Barraband Parakeets are accommodated in the Parakeet Aviaries, No. 42, where the young birds are now independent.

Visitors to these Parakeet Aviaries will also be able to see three pairs of a very beautiful conure from the Guianas and north western Brazil. The Sun Conure (*Aratinga solstitialis*) is aptly named, for the top half of its body is brilliant yellow, with tinges of orange on the forehead, cheeks, neck, breast and abdomen. Green, yellow and blue adorn the wings, and the tail is olive green shading into blue towards the tip. Adult length of the Sun Conure is about twelve inches and the sexes are alike. It has been bred in captivity but is an uncommon bird



QUAKER PARAKEETS (*Myiopsitta monachus*) AT NEST

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

in collections. Soon after the three pairs had been introduced to their aviary, nestboxes were erected in the hope that the Sun Conures might be induced to breed before the end of the season.

### AQUARIUM NEWS

Our attempts to breed the Half-beak fishes (*Dermogenys pusillus*) have now met with success. Since the last Aquarium News, two broods have been born and four young from the earlier batch have grown sufficiently to enable us to transfer them to one of the main tanks. Over thirty baby Half-beaks were obtained on the second occasion and these are still off show in a nursery tank.

The main difficulties experienced in breeding these fishes are that the females, which produce live young, either abort during their six to eight week pregnancies or, alternatively the young are stillborn. The initial broods in our Aquarium were stillborn.

As soon as it becomes apparent that the female Half-beaks are pregnant, the normal procedure is to transfer them from the main tank to a nursery tank. Once the young are born, the females are returned to the exhibition tank. At the present time the fry are taking sieved daphnia and newly-hatched brine shrimp. In their native Malaysia, the Half-beaks live in brackish waters and therefore brine shrimp is probably a natural food to them. With the Half-beaks, it is hoped that we will soon attain the situation which exists with other species in the Aquarium, such as the Australian Rainbows and the Paradise Fishes, where continual breedings ensure that we are completely self sufficient as regards stocking the tanks.

Amongst the other breedings since the last report there have been Siamese Fighting Fishes (*Betta splendens*), Jewelled Cichlids (*Hemichromis bimaculatus*), Albino Zebra Cichlids (*Cichlasoma nigrofasciatum*), Blue Acaras (*Aequidens pulcher*) and Golden Gouramies. The parent Golden Gouramies were acquired this year and have bred for the first time. Some four dozen fry are being reared in

a nursery tank and it is intended that these will form the basis of a breeding group of this very beautiful pale golden variety of Gourami.

In one of the larger community tanks, a pair of *Tilapia zilli* has spawned. As soon as they had hatched, the minute fry were siphoned from the bottom gravel into a nursery tank to ensure that they would be reared. This caused the parent fishes to become rather alarmed and they vigorously attacked the siphoning tube. A number of fry were left with the parents but at present many hundreds are wriggling about on the bottom of the nursery tank. They should be able to swim freely within the next day or two. This particular species of *Tilapia* is found in Africa north of the equator and in Jordan and Syria.

The Brown Discus (*Symphysodon discus*) have not yet managed to rear their young, though they have spawned several times. Recently the Aquarium keeper moved the pair to a screened tank, off show to the public, where he hopes the seclusion from the noise and disturbance which inevitably are present in the main tanks at this time of year, will encourage them to rear the fry. A pair of Blue Discus is also giving every indication of being ready to spawn.

Amongst the new exhibits there is a Black Bullhead (*Ameiurus melas*), a species of catfish which lives in North America. The specimen was only six to seven inches long on arrival but is expected to grow to well over a foot.

Two Upside-down Catfishes have also been acquired and these are believed to be the species *Synodontis robbianus* which inhabits the Niger River in West Africa. The adult length of this fish is over six inches and it possesses a greyish brown skin heavily spotted with dark brown. Its popular name is applied to several species in this family of catfishes and refers to their practice of feeding upside-down on the surface.

Two Red and two Common Oscars (*Astronotus ocellatus*) are new exhibits, as are six young Golden Orfe (*Idus idus*). The Golden Orfe, a variety of Silver Orfe, occurs naturally only in southern Germany.

Six young Koi Carp which have been acquired are more brightly coloured than any we have already in the collection and when fully grown these fishes should make most attractive exhibits.

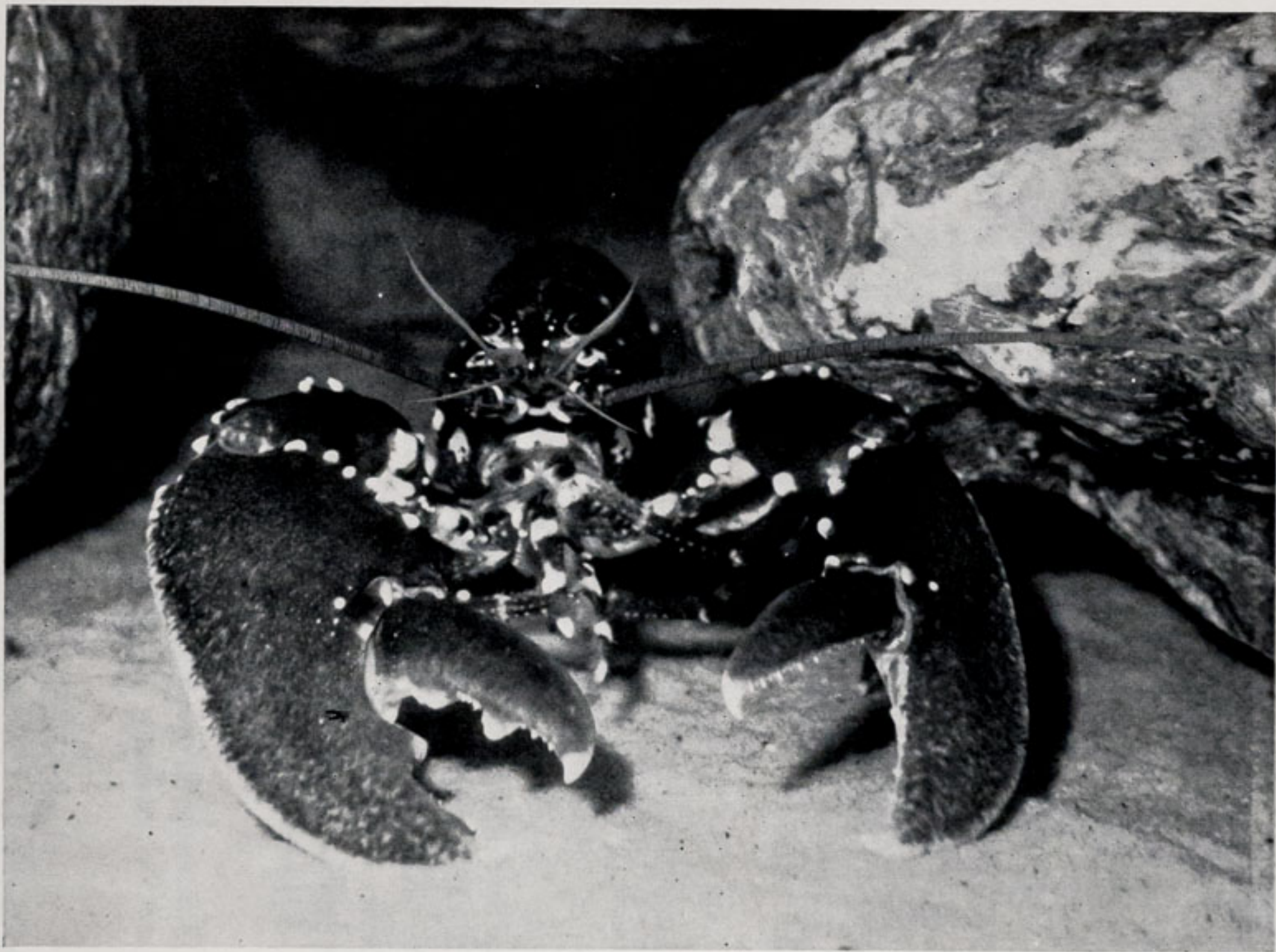
An adult pair of *Tilapia nilotica* and several young were presented to the Aquarium. The young are striped but the stripes will fade as the fishes reach maturity. This species reaches twenty inches in length and, as its scientific name suggests, its home is the Nile.

A freshwater Black Shark (*Morulus chrysophekadion*) was another interesting presentation. This fish belongs to the Cyprinid family and is not a true shark. However it is the largest member of its family, reaching one and a half feet in length. Chiefly an algae eater, the Black Shark is not an aggressive fish. The specimen presented is young and is black with a faint mottling of red spots. It may be seen in a tank with Silver Dollars and Tin Foil Barbs.

Varieties of Goldfish acquired recently include Fantails, Black Moors and Shubunkins.

A new resident in the local marine section is an immature lobster which shed its skin shortly after arrival. Several local anemones have also been collected for this section, including a variety new to our tanks which has a pink trunk and greyish tentacles. Incidentally our small crab population is thriving, though one can never be certain of the whereabouts of these creatures, as they clamber freely from one local marine tank to another.

In the adjacent tropical marine section, visitors can now see two Five-banded Butterfly Fishes (*Parachaetodon ocellatus*). These dainty little fishes have flattened disc-shaped bodies which are silver with five vertical black bands, the first running through the eye. Like many of the timid Butterfly Fishes, the Five-banded displays a "false eye" at the base of its caudal or tail fin. This is merely a spot but oddly enough a potential predator would find difficulty in detecting in which direction the Butterfly Fish was facing.



LOBSTER IN LOCAL MARINE SECTION OF THE AQUARIUM

*Mr. & Mrs. E. Sorby*

Still in the tropical marine section, a young Bannerfish (*Heniochus acuminatus*) has been introduced into the Seahorse tank. It is similar in appearance to our larger Bannerfish, with a black and white striped body, bright yellow caudal fin and long, trailing, white dorsal fin. Actually the Bannerfish is one of the largest species of Butterfly Fishes, ten inches being the normal length of the adult. This species frequents Indo-Pacific waters.

As they are fairly aggressive specimens, three Pufferfishes (*Arothron reticularis*) which arrived recently, have had to be placed in separate tanks. Distinguishable by its greenish brown body over-spread with white stripes and broken lines, this species is one of the larger Pufferfishes and grows to six inches long. Like all its family, it can inflate its body to extraordinary proportions and does so when alarmed.

Finally in this section we have additions to the Damsel and Clownfish tank. These are young Domino Damsels (*Dascyllus trimaculatus*), each with a black body showing three white spots, and Sebae (*Amphiprion sebae*) and Percula Clownfish (*Amphiprion percula*). The Percula is the most commonly seen of the Clownfishes and has a bright orange body with broad white bands. The Sebae Clownfish is deep brown with two thick white bars on the body. In this tank also, visitors can see an example of organ pipe coral. This species is interesting in that, unlike most corals, it does not lose its brilliant red colouration in the aquarium.

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### SUBSCRIPTION FORMS

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 95p, postage paid, which can either be handed over the counter at the shop or posted with the completed form to the Director-Secretary, Chester Zoo, Chester.

The following notice is displayed on several boards in the grounds

Please comply with it at all times.

### FEEDING OF ANIMALS AND BIRDS

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

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

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

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

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

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

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

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

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