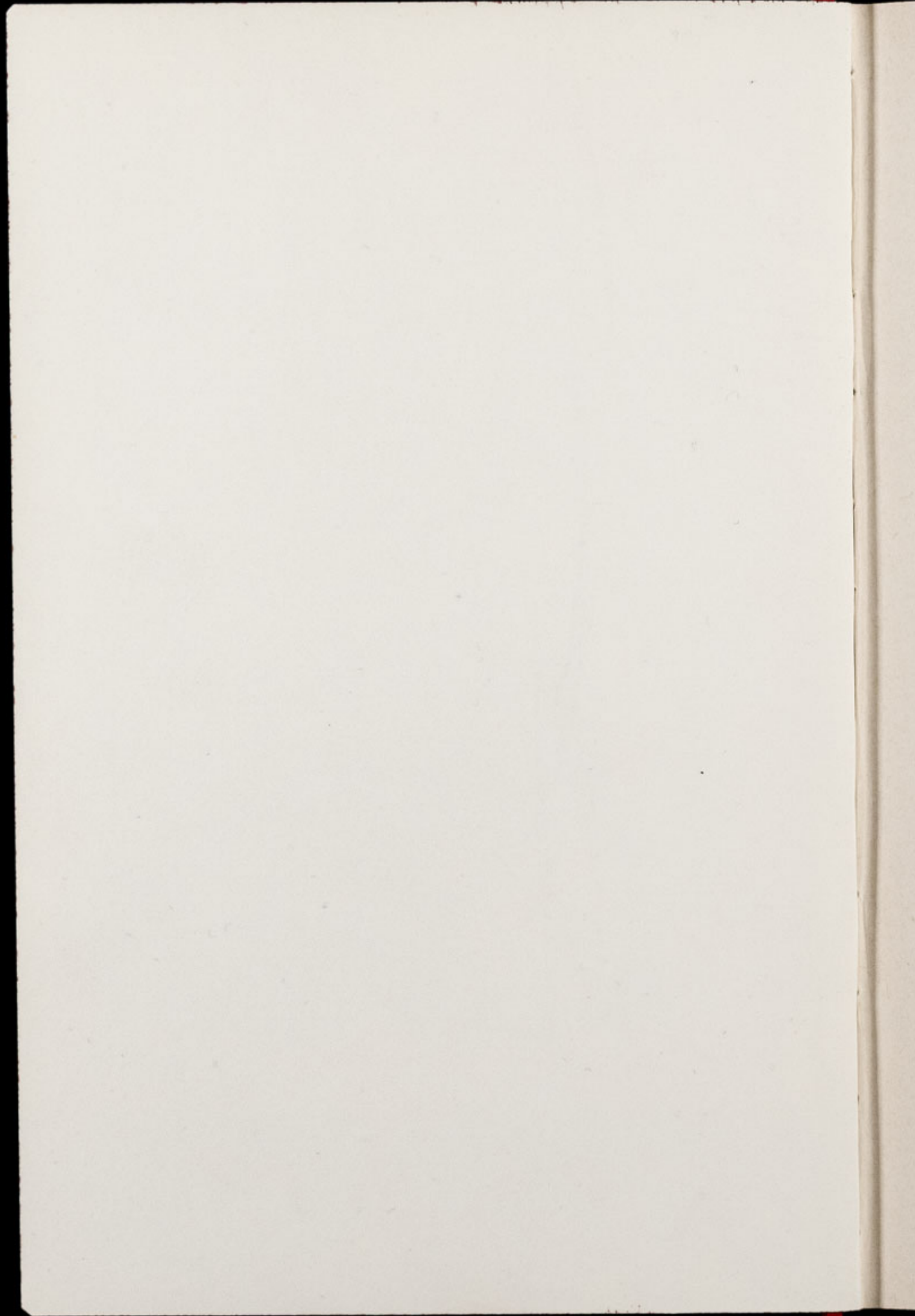




CHESTER ZOO NEWS *AND GUIDE*

January 1973

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The North of England Zoological Society

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COVER: *Sooty Mangabey and baby: see page two.*

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

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ARRIVALS AND BIRTHS

The mild weather over the Christmas and New Year holidays brought several hundred visitors to the Zoo. With regard to the animals, the middle of winter is always a very quiet time of year with few births and hardly any arrivals. It is far more difficult to acclimatise animals from warmer regions in the winter and so the transportation of any new stock is delayed more often until the spring.

There is just one birth to report. On the 31st December an old female Sooty Mangabey (*Cercocebus torquatus atys*) produced a healthy baby which is believed to be a female. It was the second Sooty Mangabey born in 1972, the first being Greta, a little female which was hand-reared after her mother had died. Greta is still living in the Monkey House and shares her enclosure with a young Sykes Monkey and a Hamadryas Baboon.

Following a recent count it is estimated that eighteen Bennett's Wallabies (*Wallabia rufogrisea*) were bred during 1972.

CONSTRUCTION WORK

Winter is also the time when most of the building work is executed. This season the two major projects are the creation of Sunken Gardens near the North Entrance and the construction of new paddocks on sites No. 100 and 101.

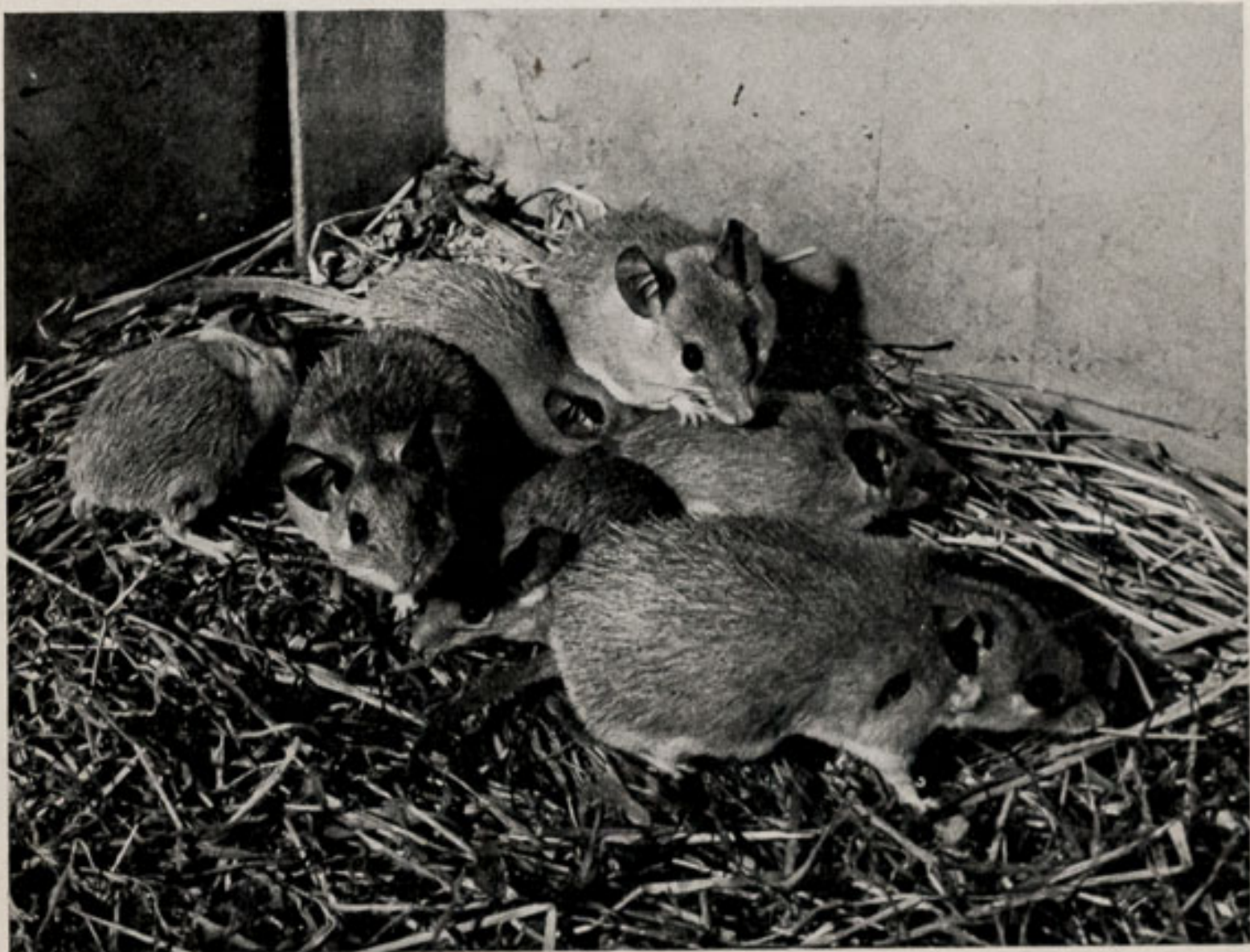
The site for the Sunken Gardens is a steep-sided hollow, known formerly as the "Donkey's Nest", No. 12 on the plan. Fortunately the weather has permitted rapid progress and to date all the walls have been built and the necessary soil transported to the site. In the bottom of the hollow there is a large pool which will feature a fountain as the centrepiece. This pool is fed, via a series of smaller stepped pools, from a waterfall. It was necessary to terrace the sides of the hollow

and to accomplish this a tremendous amount of soil was required. From the excavation of the ditches around the new paddocks there was plenty of surplus earth but it took many journeys before the terracing was completed satisfactorily. It is anticipated that the planting of the Sunken Gardens will commence shortly and a more detailed account of this will appear in a later issue.

The indoor quarters on the site of the new paddocks are well under construction and are similar in design to those built last year for the Grevy Zebras. The paddocks themselves are being enclosed on the aha principle and this work is also progressing well. There will be five paddocks in all, comprising three of grass and two smaller areas of hardcore.

GENERAL NEWS

The animals in the photograph below are Spiny Mice (*Acomys cahirinus*) which may be seen in the Nocturnal House. They are



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SPINY MICE (*Acomys cahirinus*)

prolific breeders and their successes are no longer reported each month in the "Zoo News", but they are no less interesting little creatures for that. Their name originates from the coarse spines present along the back and tail, which have evolved from the fur. These are just visible on the animal in the foreground. This particular species is found in Africa and in South West Asia as far as India.

Below are two Red Squirrels (*Sciurus vulgaris*) brought to the Zoo last year from mid-Wales. They had been rescued and hand-reared after the tree bearing their nest had been felled. On arrival they were only young specimens but now their tails have become quite bushy. The photographer managed to capture them together during one of their rare pauses for breath. They must be two of the liveliest residents in the collection as they are constantly leaping from branch to branch and dashing around their enclosure in the Small Mammal House. Few visitors are not fascinated by their agile antics.

Earlier in the year a decision was made to remove two young



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RED SQUIRRELS (*Sciurus vulgaris*)



YOUNG CHIMPANZEES, SUE AND KATE

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

Chimpanzees from their mothers. The adults soon recovered and rejoined the main group of Chimps on the islands. The youngsters, Sue and Kate, stayed for a while in the animal nursery and then were transferred to a spacious enclosure in the Monkey House where the photograph on page five was taken. The reason for separating them in the first place was that Sue in particular was not obtaining sufficient nourishment and her growth was becoming stunted. Certainly they are showing the benefits of a balanced diet. Visitors who saw them in the summer would hardly recognise them now, as they have doubled in size.

REPTILE NOTES

A male Rhinoceros Viper (*Bitis nasicornis*) has been acquired in an exchange. It is a young specimen which eventually, it is hoped, will become a mate for a female Rhinoceros Viper already in the collection. The female arrived as a young snake in September 1971 and at present is on exhibition in a vivarium with Pope's Pit Vipers. Regular subscribers will recall that a photograph of this beautiful snake appeared in the November 1971 issue. At present the new male is off show whilst undergoing the customary period of observation.

The Rhinoceros Viper is found in tropical West Africa where its habit of living near water has earned it the alternative name of River Jack. It has a thick body with a triangular head and two horns on top of the snout. Specimens rarely exceed four feet. This young male is approximately 29 inches long and is estimated to be no more than two years old. The Rhinoceros Viper has a highly toxic venom and is one of the more dangerous snakes of Africa. It is also the most colourful with an intricate body patterning of dark green, light blue, black, pale yellow, white and red. The extent and intensity of the colours vary in different snakes, the male acquired being much

darker generally than the female. The body of the female is particularly vivid in colour at the moment as she has just sloughed.

Another venomous snake was acquired in the same exchange but this specimen is a native of America. It is a male Northern Copperhead (*Agkistrodon contortrix*), found in the north-eastern United States. At the time of writing, this specimen is also off show but visitors can see two other Copperheads which have been resident in the Reptile House since 1967.

There are various races of Copperheads inhabiting the eastern half of the United States. They are Pit Vipers and near relatives of the Water Moccasin and the Rattlesnakes. Characteristic of Pit Vipers, the Copperhead possesses heat sensitive pits on the snout behind each nostril. These snakes grow to between three and four feet in length and have been recorded as living for at least nine years. The new specimen is approximately three feet seven inches long. Though varying somewhat according to range, the colouration of the Copperhead is pinkish-brown generally with hour-glass shaped marks of a lighter shade spanning the back separated by areas of darker brown. The diet of this snake includes small rodents, birds and frogs.

The Copperhead prefers woody regions with rocky outcrops and is often found in upland areas below 1,000 feet. From October or November through to April it hibernates in a rocky crevice, hollow log or other suitable refuge. The young are born shortly before the winter sleep, in late August and early September. Copperheads are viviparous, producing up to eleven or twelve young at a time. These measure eight to nine inches long at birth and have bright yellowish green tails which in most forms fade as the snakes mature.

On the whole the Copperhead is reported to be a relatively mild-mannered snake though it would be foolish not to regard it with great respect. When angered it may vibrate its tail but, unlike that of the Rattlesnake, this has no horny rattle. Few adults have died from a bite by a Copperhead and its venom is said not to be as toxic as that

CHESTER ZOO

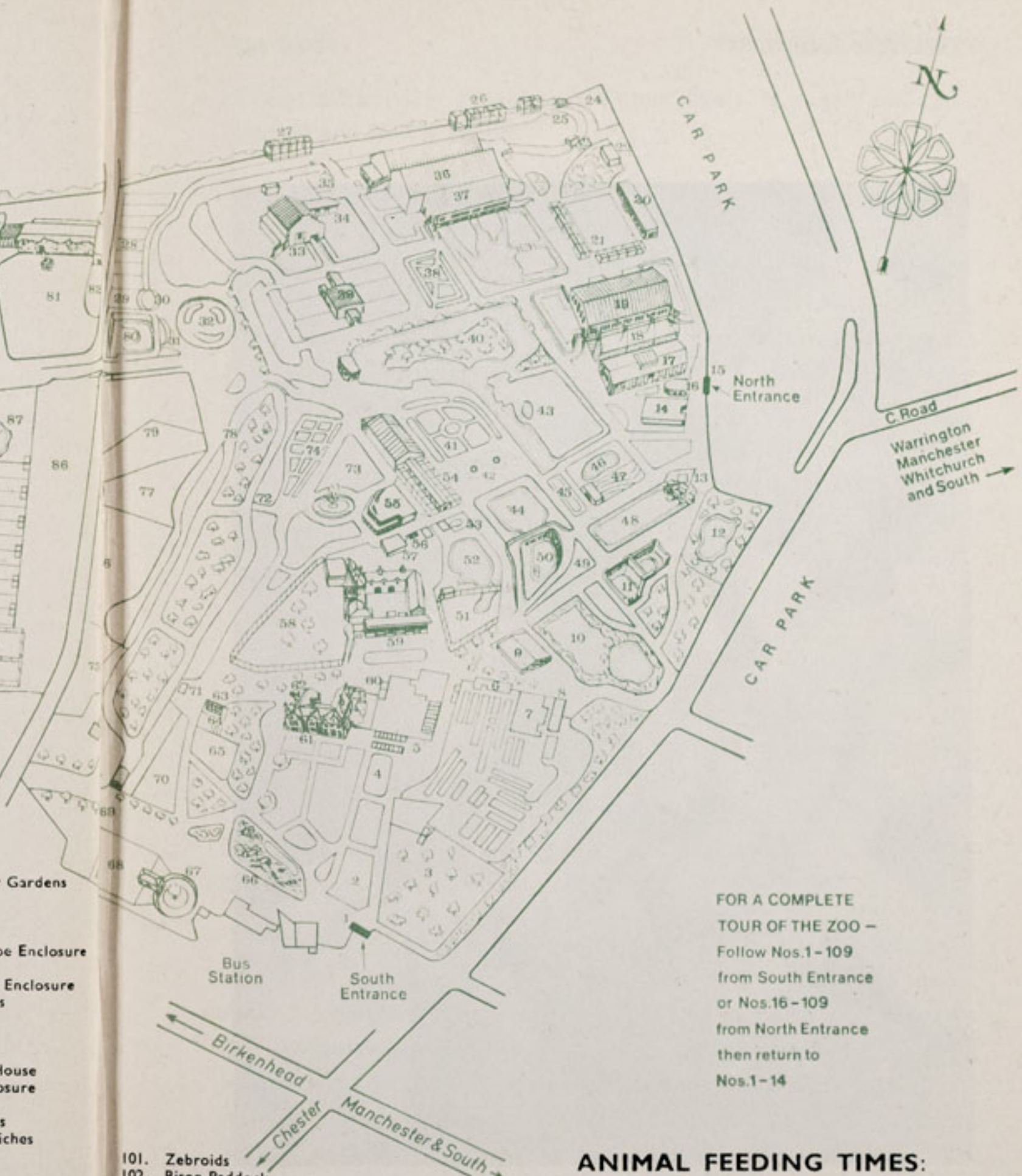
THE NORTH OF ENGLAND
ZOOLOGICAL SOCIETY
ZOOLOGICAL GARDENS

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 Hyena 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. CHIMPANZEEES
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

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



SEAHORSE (*Hippocampus brevis*)

B. Pengilly

of the Rattlesnake. Fatalities are more likely to occur amongst children and elderly people.

Two Freckled Monitors (*Varanus tristis orientalis*) were also new arrivals last month and we are pleased to report that they are a true pair, being about three-quarters grown at present. When adult the Freckled Monitors will measure no more than two feet long. They are being fed a diet of locusts, baby mice, chopped meat and egg. Distribution is in northern Queensland and the Northern Territory of Australia. These are shy lizards which live in holes in trees and in their vivarium at the Zoo the new Freckled Monitors have been provided with a hollow log. Colouration varies according to range, but these specimens are light grey with the "slit-eye" markings typical of the species covering the body. Freckled Monitors have not been exhibited in the collection before.

AQUARIUM NEWS

It might be surprising to learn how many people have at one time regarded the Seahorse as only a creature of legend, like the Unicorn, and are astonished when they find that it does exist. Certainly it is an unlikely candidate for being a fish, with its distinctive horse-like head, single short fin on the back and demure vertical swimming posture.

For any visitors who have never seen a live Seahorse, there are four males and three females now on exhibition in the Aquarium. All were completely black on arrival but this colour is beginning to fade, an indication that they are settling down. In time they should become yellowish-grey. Seahorses are marine fishes and this particular species (*Hippocampus brevis*) comes from the area of Singapore. Their tank in the marine section of the Aquarium is furnished with various types of coral. This, or a similarly branched material, is essential in a Seahorse aquarium, as these fishes require projections on which they can anchor themselves with their tails, as the Seahorse in the photograph on the left is doing.

Seahorses are related closely to the Pipe Fishes and both have external skeletons. In the Seahorses these are visible as the bony ridges on their bodies. They range in size from the Dwarf Seahorses, reaching little more than two inches long, to species which grow to twelve inches. The variety we have acquired is fully grown at about six inches. In order to be kept healthy, Seahorses must obtain live food and at the Aquarium this consists of brine shrimp, fry and a little daphnia.

One of the most interesting facts about the Seahorse, which is characteristic of the Pipe Fish also, is that the male carries the unhatched young in a pouch on his abdomen. When she is ready, the female deposits her eggs into this pouch by means of her ovipositor and then her role in the reproduction is completed. The male carries the eggs until they hatch, which may be from two weeks to two months later, depending on the species. Although we cannot be certain, from all appearances at least one of the males on exhibit is bearing eggs.

Another new arrival in the marine section is a colourful Triggerfish, a member of the *Balistridae* family. There are numerous species of Triggerfishes, most of which are found in Pacific waters. This particular variety has a ground colour of yellowish beige with a complex patterning of light blue covering the body and blue eyes. A species which is thought to be a relative newcomer to aquariums, it may be seen in a tank with Clownfishes.

The Triggerfish derives its name from the action of its dorsal fin. This consists of three spines, the main one being fairly long. The fish is able to erect its dorsal fin and the first long spine is then locked into place by the second. The Triggerfish uses this mechanism to wedge itself into holes or crevices in rocks, especially at night, so that it cannot be dislodged by predators. While the dorsal fin becomes wedged against the roof of the crevice, a smaller fin on the

belly of the fish is lodged against the bottom. The Triggerfish may also activate this mechanism if it has been taken into the mouth of a predatory fish, a situation which has been known to result in the death of both species. When it is not required, the dorsal fin is relaxed and this can be effected with pressure on the third of the spines.

All the Triggerfishes have very large heads in comparison with their bodies. On the other hand their mouths are small, though they can still inflict a painful bite. Our particular specimen displays a characteristic of other Triggerfishes, an inclination for moving about the objects in its tank. Invariably in the morning the Aquarium keeper finds that pieces of coral have been dragged across the tank and arranged to form its refuge for the night.

Another Snakehead (*Ophicephalus sp.*) has been acquired. This specimen is beige along its back and cream on the belly with a row of large broken spots on either side. It is slightly shorter than the Snakehead already on show, to which it has been introduced, but this has not affected its boldness at mealtimes. In fact it has been observed to snap up the food before the other Snakehead has taken a bite. The original fish is quite old, having been at the Aquarium for about eight years.

The family of Snakeheads ranges across Africa, Southern and South Eastern Asia. They are long fishes with large heads and have voracious appetites. Through the possession of an additional respiratory organ allowing them to carry on supplementary air breathing, the Snakeheads are able to live in very dirty water and may even crawl over land in times of drought. They lay large eggs containing droplets of oil which causes them to float on the surface. After two or three days the eggs hatch. Until the yolk is absorbed the fry remain belly uppermost on the surface and then they swim freely.

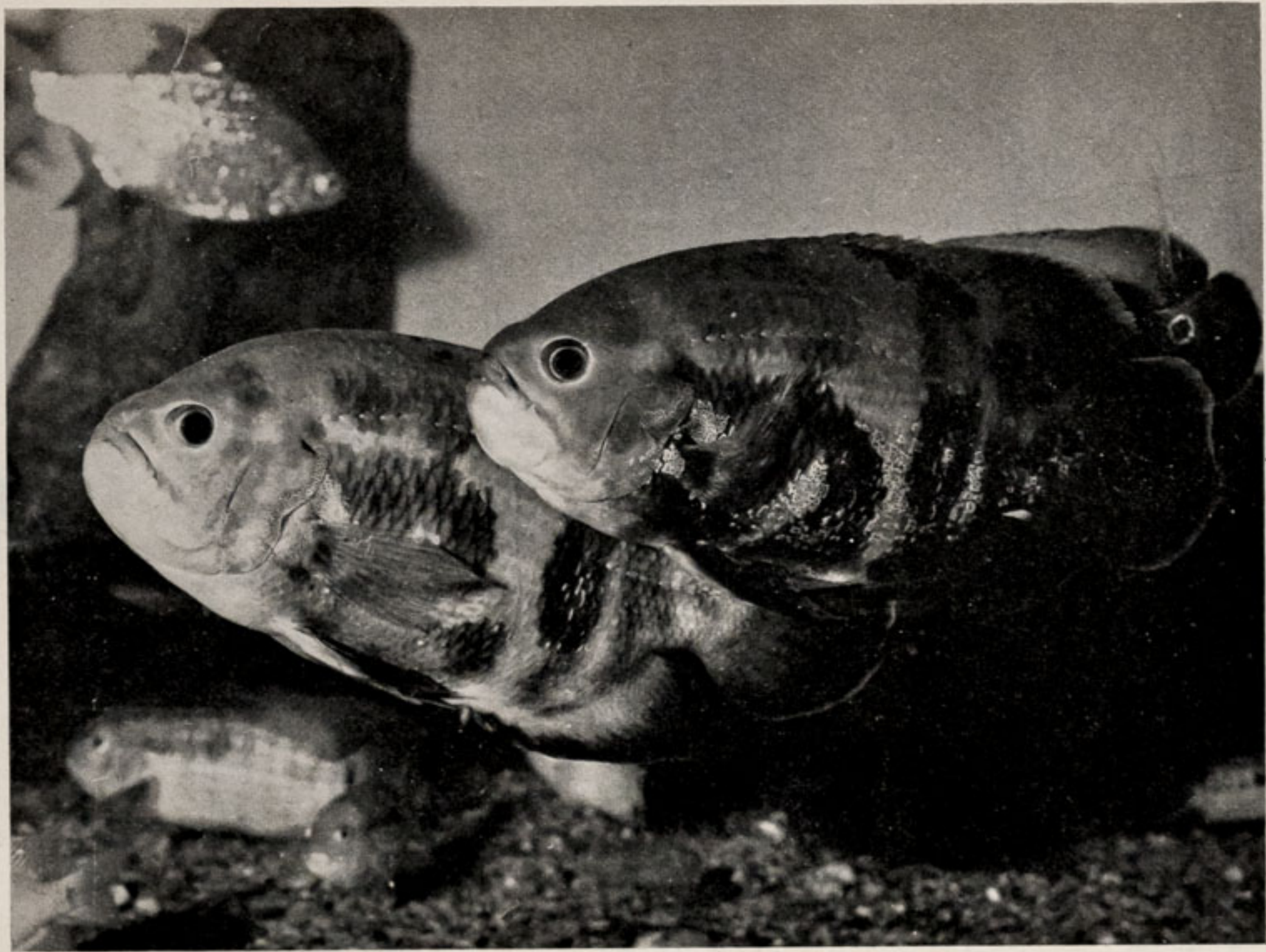
The baby Natterer's Piranhas (*Rooseveltiella nattereri*) mentioned in an earlier issue have grown considerably and now have been put on show. Six were acquired, of which one has died, but the remainder are feeding with the rapacity typical of the Piranhas. At this stage of their growth the red colouration on their cheeks and ventral surfaces is quite brilliant.

In the photograph on the right are two Marbled Cichlids (*Astronotus ocellatus*). These are two of the well grown specimens which we have in a large community tank in the Aquarium but recently some young specimens were acquired also.

Other names for the Marbled Cichlid are Oscar and Velvet Cichlid, the latter name arising from the fact that the scales are hardly visible and the fish appears to have a skin of velvet. The young represent two varieties, Tiger Oscars and Red Velvet Oscars. The wild Marbled Cichlid is found in eastern Venezuela and the Amazon Basin to Paraguay and when adult it may reach a foot in length. The young fish bear a more prominently marbled patterning than the adults, which are greenish-grey to black with orange markings, visible as light speckled areas on the fishes in the photograph.

A number of young Half-beak Fishes (*Dermogenys pusillus*) may also be seen in the Aquarium now. When fully grown they will measure six to seven centimetres but at the moment are about four. Half-beaks live near the surface of fresh and brackish waters in the Malay Peninsula and the Greater Sunda Islands. In appearance this is a slim fish with a lower jaw almost twice as long as the upper one, to which it is fused.

One of the main problems in keeping Half-beaks successfully is the pugnacity of the males. As yet we have not encountered a great deal of fighting though there have been one or two skirmishes.



B. Pengilly

MARbled CICHLIDS (*Astronotus ocellatus*)

The young of this species are born alive after a pregnancy lasting from six to eight weeks. Usually there are about fifteen young at a time. However, though Half-beaks sometimes breed in captivity on the first and second occasions, after that it seems that the females either produce still births or abort. The reason is thought to be incorrect feeding.

Two young Seven-coloured or Rainbow Discus (*Symphysodon aequifasciata*) have been introduced into a tank containing four Blue Discus.

We are delighted to record that the Director-Secretary, Mr. G. S. Mottershead, was awarded the O.B.E. in the New Year's Honours List. The Council and Staff of the North of England Zoological Society extend their hearty congratulations to him on this well merited recognition of his services.

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 are on display in the souvenir shop. 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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