



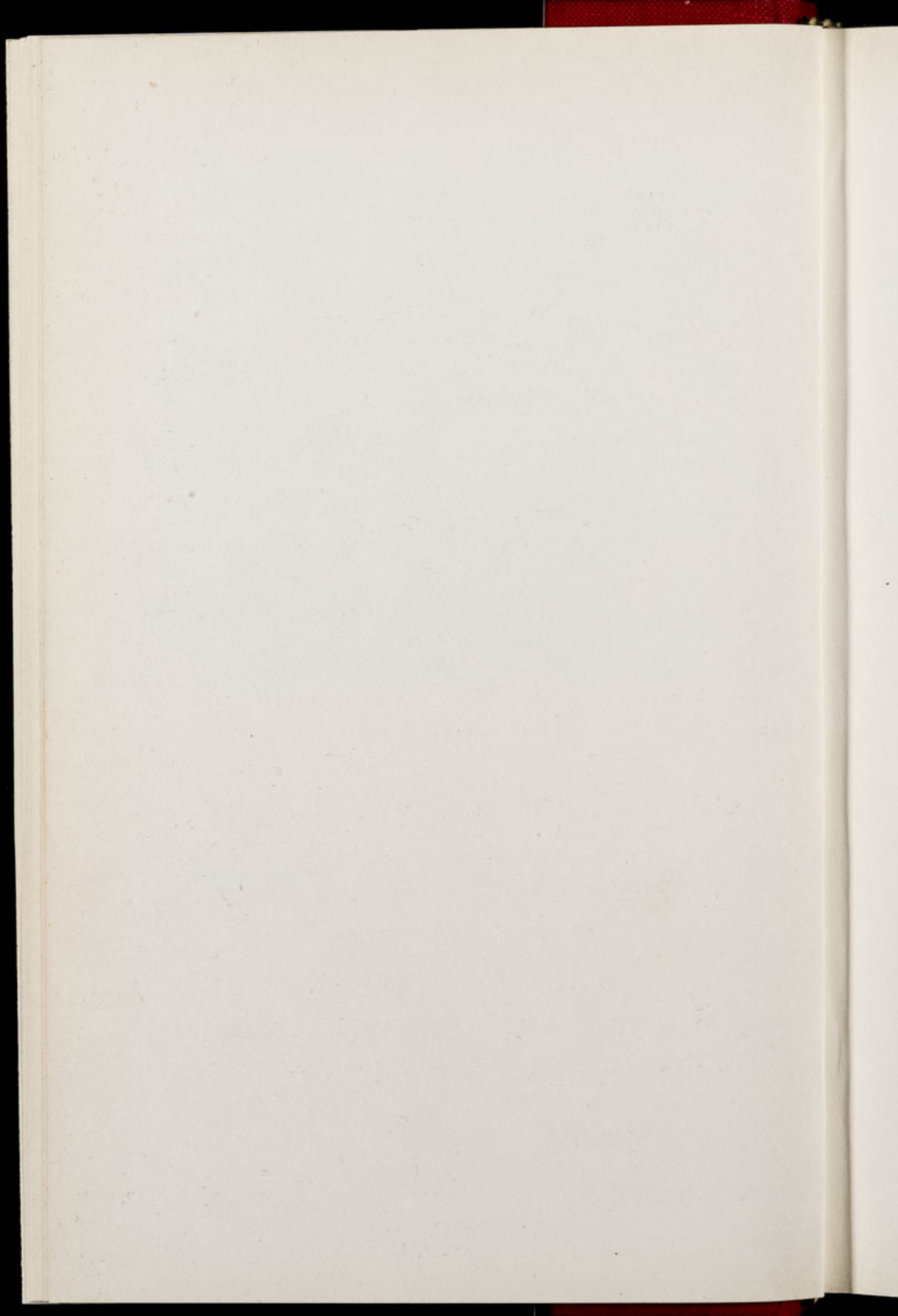
Chester Zoo News

AND GUIDE

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

February 1980

Price 15p



The North of England Zoological Society

ZOOLOGICAL GARDENS, UPTON-BY-CHESTER

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CONTENTS

<i>page two</i>	White-Bearded Gnu
<i>page four</i>	Pampas Cat
<i>page seven</i>	Scottish Wild Cats
<i>pages eight/nine</i>	Zoo Guide
<i>page ten</i>	Aquarium News
<i>page thirteen</i>	Members' News
<i>page fourteen</i>	Subscription Increase. Gardening Notes

ILLUSTRATIONS

<i>page three</i>	White-Bearded Gnu and Calf
<i>page five</i>	Pampas Cat
<i>page six</i>	Scottish Wild Cat
<i>page eleven</i>	Blue Discus Fish
<i>page twelve</i>	Clown Fish with Anemone
<i>page fifteen</i>	Cattlya Orchid

COVER PICTURE

Gnu Calf

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

Annual subscription — Three Pounds, postage paid

Telephone Chester 20106

THE WHITE-BEARDED GNU

Africa offers a wealth of handsome, graceful animals, with a scattering of rather unusual looking beasts such as the Hyaena, the Crocodile and the Rhinoceros. Among these is an animal it is hard to call graceful or handsome and which has been called the "clown of the plains": the Gnu or Wildebeest.

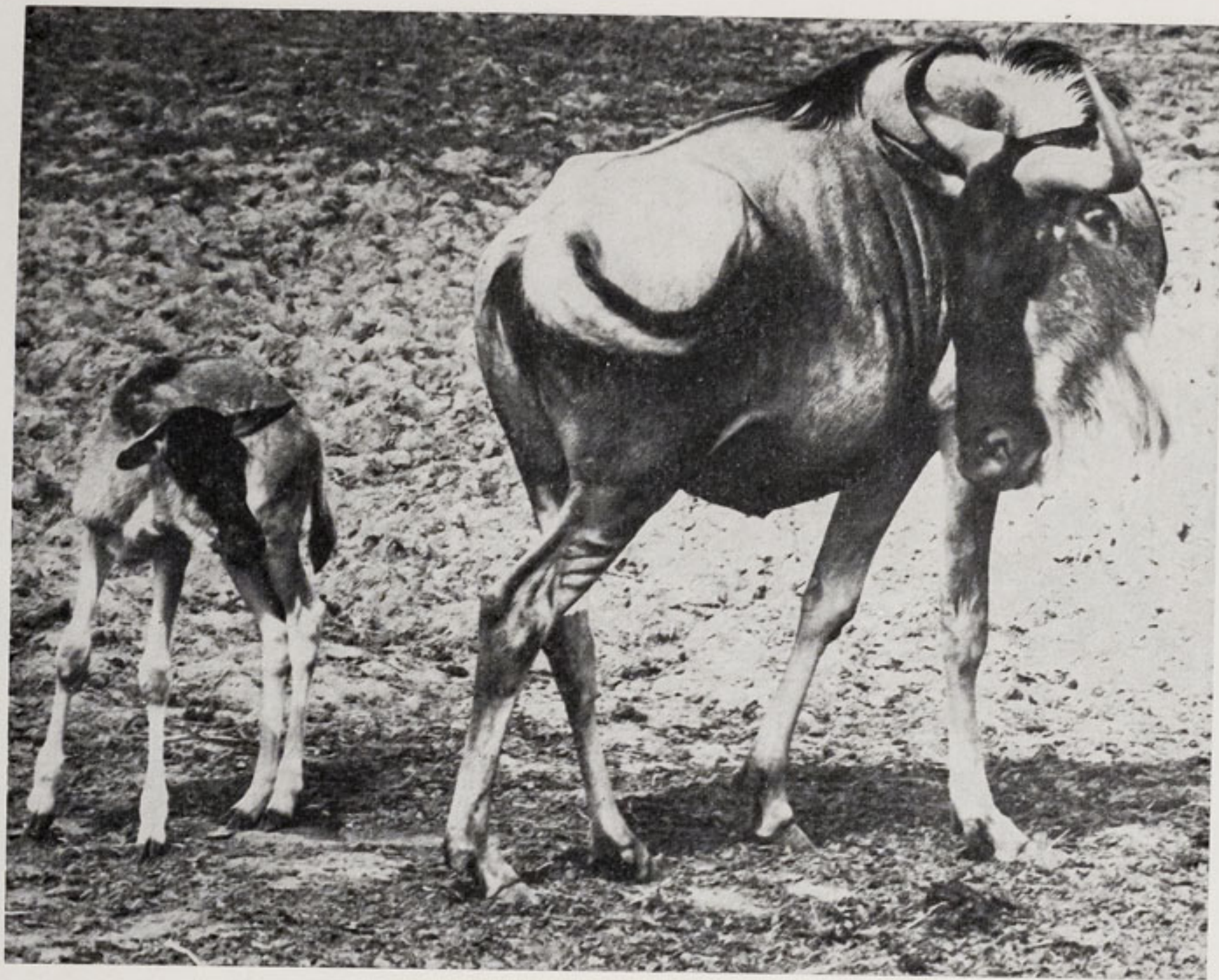
A recent birth at Chester of a White-bearded Gnu (*Connochaetes taurinus albojubatus*) shows that the youngsters are rather attractive, much as are all baby animals; the pale fawn coat contrasting against the darker face and dorsal stripe.

However, the adults are entirely different. They seem out of proportion. From the large dark head with its broad, flattened muzzle and strangely-shaped horns, to the dirty white "beard", black mane and long horse-like tail, the curious appearance is striking. The physical make-up of this large antelope is completed by powerful shoulders, set much higher than the hindquarters, and slender legs, which seem hardly able to support its stocky bulk.

Although, as in many species, the female is generally smaller than the male, both sexes carry the unusually-shaped horns. The shoulder height varies from 51 to 55 inches, and weight can be anything from 350 to 600 lb.

Large herds of these antelopes may be seen grazing alongside Zebra in the savannah grasslands, where there is little opportunity for the animals to conceal themselves, so they seek greater safety from predators such as Lions, Cheetah, Cape Hunting Dogs and Hyaenas by congregating in large numbers. New-born calves are particularly under threat in open grassland, a threat which is countered by having all the calves born almost at the same time.

Wildebeest are renowned for their annual migration, in search of good feeding grounds and water. They will drink every day if possible but can survive for up to five days without water. Occasionally, the diet may be supplemented with melons and similar succulents which do compensate a great deal for a low intake of liquid.



By courtesy of Mel Grundy Photographic Agency
WHITE-BEARDED GNU AND CALF

During the migration, herds may be numbered in thousands, but inside the one mass are smaller groups of from 2 to 150 cows which may be shared by up to three bulls. These bulls, though, will defend the area around their females against other bulls, and even predators, driving intruding animals away into other parts of the herd.

Mating usually takes place at the start of the migration to the Summer pastures and bulls will fight among themselves, although these encounters rarely end fatally. The herds leave the plains in May and return again in January, when the females are nearly ready to give birth after a gestation of about 240 days. The youngsters are born in an area with a good food supply which will give them a good start in life. Even though the new-born calf is soon on its feet and able to follow the herd in a matter of hours, the first few days of its life are dangerous and it can easily fall prey to a variety of predators, especially Lions and Hyaenas.

The lifespan can be up to 16 years, and at three years of age a male is ready to stake a claim to a group of females. Though they do not have permanent territories, because of the almost perpetual migration, each bull maintains a "sphere of influence" around it.

Our group now consists of four animals. The cover picture shows a young calf, and the picture opposite a cow and her youngster, where readers can see the comparison between youngster and adult.

PAMPAS CAT

Opposite, readers can see a picture of the male Pampas Cat (*Felis colocolo*) recently received on loan from Kilverstone Wildlife Park. We are very pleased to have this rare animal in our quite extensive range of cats. There are only three specimens in the country—all males—the other two being at Kilverstone. We are hoping to get females for all three and so establish a breeding population in Britain.

The coat is a beautiful silver grey with rather narrow contrasting



PAMPAS CAT

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



SCOTTISH WILDCAT

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

stripes of reddish-brown across the flanks and back; a darker line may be seen in the picture running down the length of the back and on to the tail. The underside of the body is much paler and the tail is grey.

This South American cat is found mainly in Argentina but limited information on the full extent of its natural distribution makes calculation of the wild population impossible. As in the case of many other declining species, it is likely that increased devastation of natural habitat by Man does not help in the preservation of this beautiful animal.

It is believed to be nocturnal and the wild diet includes birds and small mammals. Litters are believed to consist of one to three kittens.

SCOTTISH WILDCATS

Recently received into the Collection, were three Scottish Wildcats (*Felis silvestris grampia*) a sub-species of the European Wildcat.

This felid is of a much more robust and powerful build than our domestic fireside pet. The head is much larger and flatter and the thick bushy tail culminates in a black-tipped blunt end. Including the tail, the Scottish Wildcat can be up to 2½ feet in length. Males may weigh from 6½ to over 15 lb., females being somewhat smaller and ranging from 6½ to 10 lb.

Despite the fact that domestic cats breed with wild cats, although there is some variation in size and colouring, the dominant colouring appears to be grey or yellowish grey with well-defined stripes on the back and legs. There is not much evidence of how well these hybrids can compete with the pure-bred true wild cats, and they possibly die out before they give birth to any further generations.

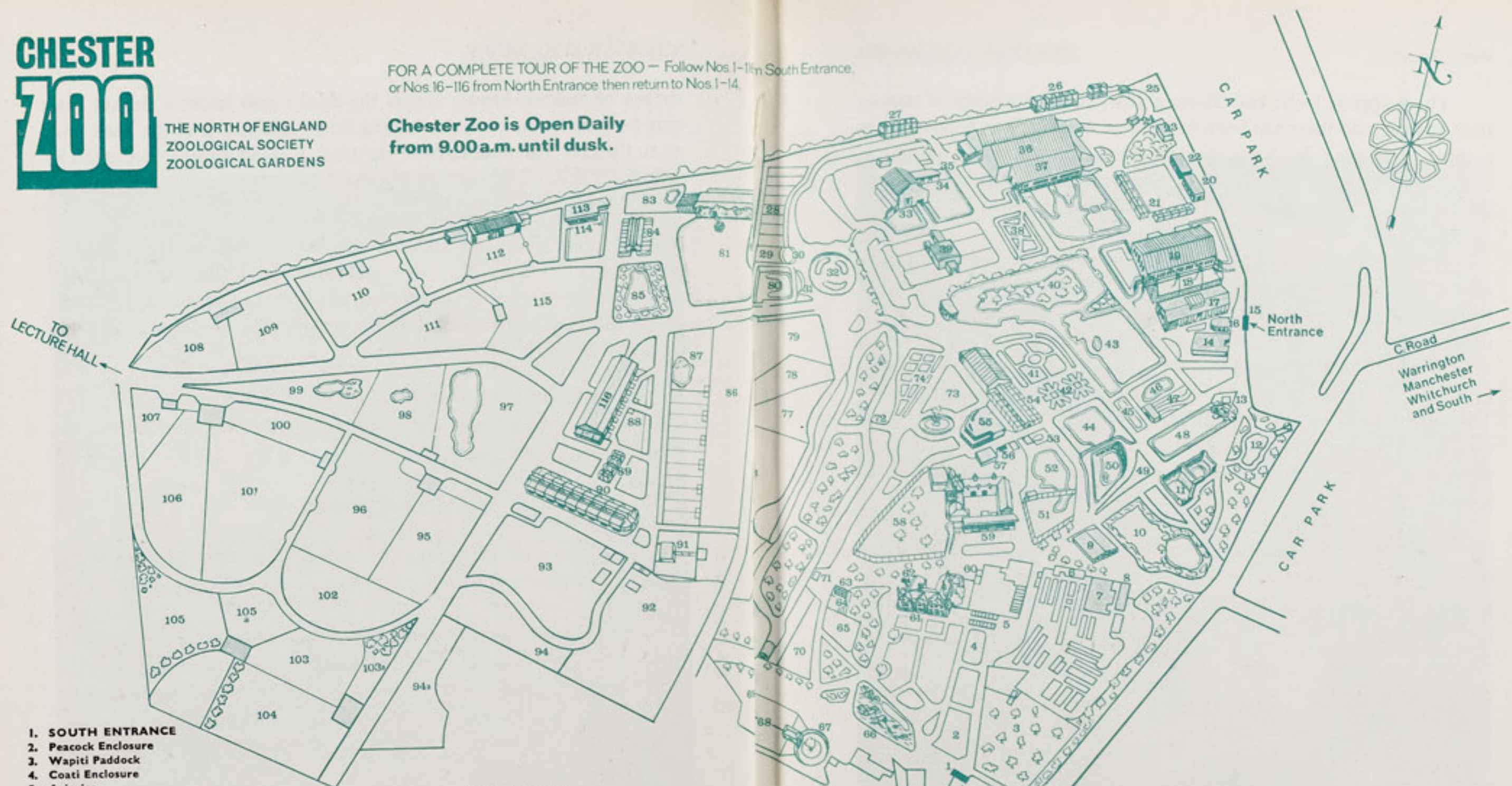
Males defend a territory marked with droppings, urine and claw-scratching trees, but will occasionally, during a bad Winter, wander in search of food. They also may wander during the mating season. These cats are more nocturnal than diurnal, although they will bask in the sunshine in a favourite place within the territory, much as any other cat would do.

CHESTER ZOO

THE NORTH OF ENGLAND
ZOOLOGICAL SOCIETY
ZOOLOGICAL GARDENS

FOR A COMPLETE TOUR OF THE ZOO — Follow Nos 1-11 from 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.**



1. SOUTH ENTRANCE

2. Peacock Enclosure
3. Wapiti Paddock
4. Coatı 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. Ornamental Garden (under construction)
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. CLASSROOM
23. TOILETS
24. TUATARA EXHIBIT
25. Peccaries
26. Birds of Prey Aviaries
27. Condor Aviary
28. Jackal and Hyæna Enclosures
29. Animal Enclosure
30. Porcupine Enclosure
31. Coypus
32. Beavers
33. Giraffe House

34. Camel House
35. Giant Tortoise Paddock
36. TROPICAL, NOCTURNAL & REPTILE HOUSES
37. CHIMPANZES
38. Floribunda Rose Garden
39. Zebra House
40. Waterfowl 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 & G. S. Mottershead Memorial Gds

62. P.O. Telephone
63. Gibbons
64. Arctic Fox Enclosure
65. Serval Enclosure
66. Ornamental Rock Garden
67. Wallabies and Kangaroos
68. Kangaroo Enclosure
69. Guanaco Paddock
70. Cheetahs
71. WATERBUS BOOKING OFFICE AND KIOSK
72. Rose Gardens
73. Fountain Flower Gardens
74. Rose Garden
75. Red Lechwe
76. Red Lechwe
77. Deer or Antelope Enclosure
78. Zebra and Deer Enclosure
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. Reindeer enclosure
- 94a. Llamas
95. Antelope enclosure
96. Antelope enclosure
97. Waterfowl enclosure
98. Waterfowl enclosure
99. Waterfowl enclosure
100. Blackbuck
101. Wallab
102. Ostrich
103. Wallab
- 103a. Antelope enclosure

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

SEA LIONS 3 times daily—
2-30 pm, 3-30 pm, 4-30 pm

ANIMALS MAY BE MOVED
FROM TIME TO TIME

There appear to be two litters a year, each consisting of two to four kittens, and these are born in May or August; it is believed that a third litter may be born in December. The gestation period is about 63 days and birth takes place in a sheltered place under rocks in a hollow tree, or in a deserted fox den or badger sett.

The kittens are blind until about nine to eleven days old and, at about five weeks of age, they venture out into the open with the female. At ten to twelve weeks of age lessons begin in the catching of their food. The diet is wide and varied and includes mice, voles, insects, small birds and, occasionally, fish, hares and rabbits. Fully grown wild cats are believed to be able to kill small lambs or fawns. The cat catches its prey by stalking or by lying in wait until the victim is close enough for the cat to leap on to it. The youngsters are weaned by the time they are four months old and they reach sexual maturity at about one year old.

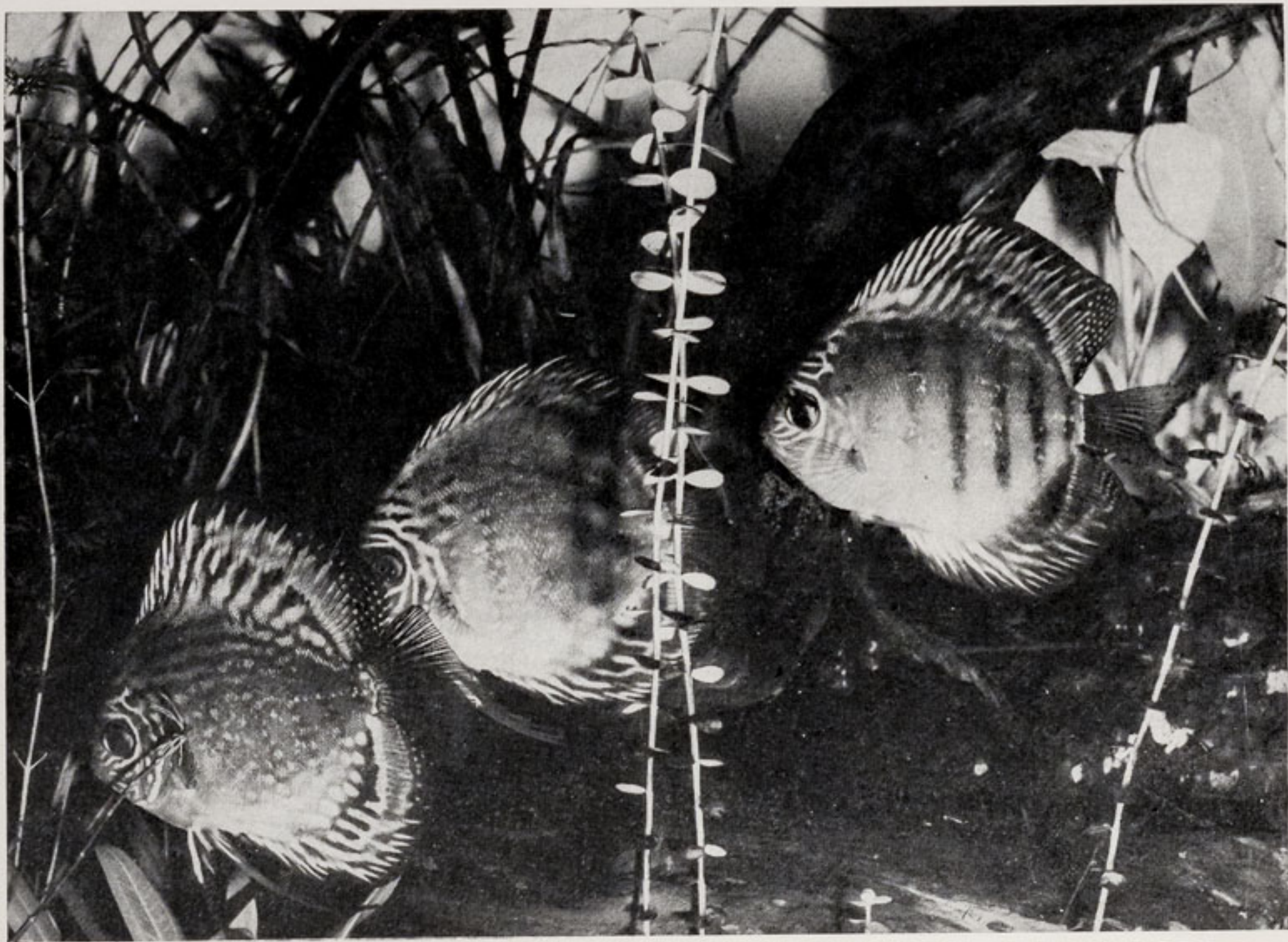
Wildcats have been exterminated from most of their former range in Britain because of the extent game birds and domestic poultry are included in their diet. In the Highlands of Scotland they are still fairly abundant.

AQUARIUM NEWS

On pages 11 and 12 readers can see pictures of Blue Discus Fish and Clown Fish with an Anemone.

At present we have nine Discus Fish and this includes two Blue Discus and six Seven-Coloured Discus. The latter are most attractive, showing various shades of reds, blues and browns.

Clown Fish live amongst the tentacles of Sea Anemones. Sea Anemones look rather like plants, firmly anchored to a rock and with their tentacles gently waving in the current. However, Sea Anemones are carnivorous animals and they catch their food—mostly small fish and plankton—by entangling them with the stinging cells which cover the surface of the tentacles. The Clown Fish are able to live safely among the tentacles of the Sea Anemone because they cover themselves with mucus which the stinging cells cannot distinguish from



BLUE DISCUS FISH

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



CLOWN FISH WITH ANEMONE

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

the mucus the Anemone covers itself with. If the mucus is removed from the Clown Fish, then the Anemone stings it to death and digests it.

Another animal to benefit from such a close alliance with the Anemone is the Anemone Shrimp. The body of the Shrimp is partly transparent and partly covered with patches of colour, which helps to break up the outline of its body, therefore creating excellent camouflage, particularly on the sea bottom. Michael Crumpler, who is in charge of our Aquarium, has observed that this Shrimp is able to associate with two different kinds of Anemone, apparently without any ill-effects from stinging. It is assumed the Shrimp protects itself in the same way as the Clown Fish.

Another recent arrival is a very unusual Starfish—the Feather Starfish. This Starfish has eight tentacles rather than the usual five. It lives on plankton, which are small organisms, mostly microscopic but some visible to the naked eye, which are being carried in the sea water rather than living on the bottom. The Starfish, itself on the bottom, waves its arms in the water and catches any passing plankton. The arms work the captured prey towards the mouth, which is on the underside of the “hub” of the Starfish.

MEMBERS' NEWS

On 27th January, a Concert was held in the Russell Allen Lecture Hall in aid of the North of England Zoological Society Conservation Fund.

The Concert, which was well-attended was the second we have arranged, and the audience once again enjoyed music played by a Chamber Group, most of whom are Members of the Royal Liverpool Philharmonic Orchestra. We are very grateful to them for giving their time and talent so charitably towards our Fund.

We are hoping to hold more Members' events in the future, but will inform our Members a little nearer the dates.

Any readers interested in Membership of the Society are invited to apply to the Membership Office for details and application forms.

SUBSCRIPTION INCREASE

Due to the increased postal charges, we reluctantly inform readers that our subscription rates must be increased to £3.00

CHESTER ZOO NEWS is at present being produced every month and readers who would like to receive the magazine regularly can obtain subscription forms at the Souvenir Shops, or the Office. The charge for 12 issues, including postage, is £3.00 per year.

Completed forms can be handed in to the Souvenir Shops or posted to Chester Zoo News, Chester Zoo, Chester.

GARDENING NOTES

In January's issue we mentioned that the weather had been very mild up to the end of 1979, but this changed with the New Year. We had a drop in temperature to -7 deg. C. and frost continued for most of the month, although not severe.

The climbing plant, *Cobea scandens*, growing on the wall near the Tropical House entrance was killed off but we shall raise some more from seed this Spring. Propagation of the Summer bedding plants is well under way in the Greenhouses and seed such as *Begonia*, *Antirrhinum* and *Lobelia* have been sown and are now germinated.

Cuttings of the bedding *Heliotrope* and *Verbena* have also been taken and rooted in the mist propagation unit. In the middle of February, Gardeners pruned the standard *Fuchsia*. These are growing in nine-inch size clay pots into which they were put after being lifted out of the flower beds last October and then kept in a cool greenhouse. They do not need any extra heat after pruning, but are given a top dressing of rich compost and, as it will be over three months before they are used in the flower beds, they are left to grow on naturally. If any growth gets too long, the top of the shoot is pinched out to keep a nice compact and sturdy head.

The Tropical House was completed this month with the annual



By courtesy of J. Whitworth

CATTLYA ORCHID

pruning and sponging of leaves. Quite a lot of planting was done to fill in gaps in the troughs and beds. Also, at this time of the year, the Gardeners pay more attention to the *Bromeliads* growing on the artificial branches over the water near the waterfall. *Bromeliads* are arboreal, which means that they grow on the branches and in the axils of trees and the general term for such plants is epiphyte. In this country we have epiphytes growing, such as lichens and some mosses. Epiphytes are not parasites, for they use the tree only for support, whereas a parasite such as Mistletoe uses the tree as a source of nutrition.

Many Orchids are Epiphytes and, along with Bromeliads, have their own special way of clinging to the branches with their roots twining round. Each of these two groups of plants also has their own way of storing water; the Orchid has a pseudo-bulb and the Bromeliads form a rosette for the centre of the plant to collect and hold water. To keep these plants in position on our branches we use strong nylon fishing line in a neutral colour. *Osmunda* fibre and *Sphagnum* moss are bound on the branches as a medium for the root. The branches are sprayed every day with water. Most of the *Bromeliads* appear to come from South America. Among the genera and species we have are:—

Aechmea fulgens—scarlet and purple flowers;

Aechmea fasciata—pink and blue flowers with grey foliage;

Aechmea caudata variegata;

Billbergia braziliensis;

Billbergia iridifolia—scarlet, yellow and crimson;

Billbergia decora;

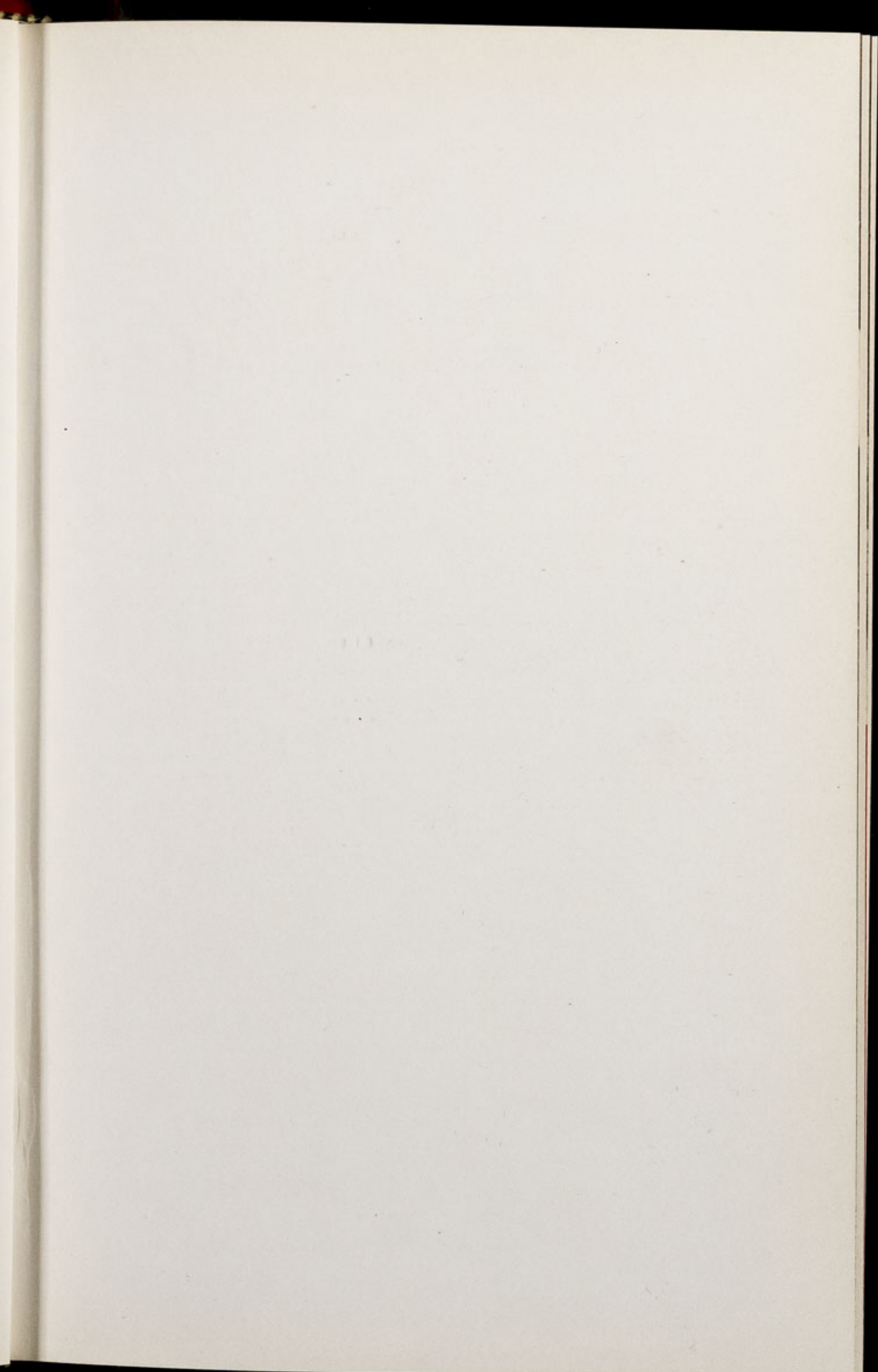
Billbergia nutans—yellowish green with blue margins;

Neoregelia carolinea;

Neoregelia spectabilis;

Vriesia speciosa—dark brown banded leaves.

We propagate our own plants from rooted shoots which come out from the base and these are grown in pots with compost of equal parts loam, rough peat and coarse sand.



Printed in England by
W. H. Evans & Sons Ltd.
Sealand Road Trading Estate
Chester