

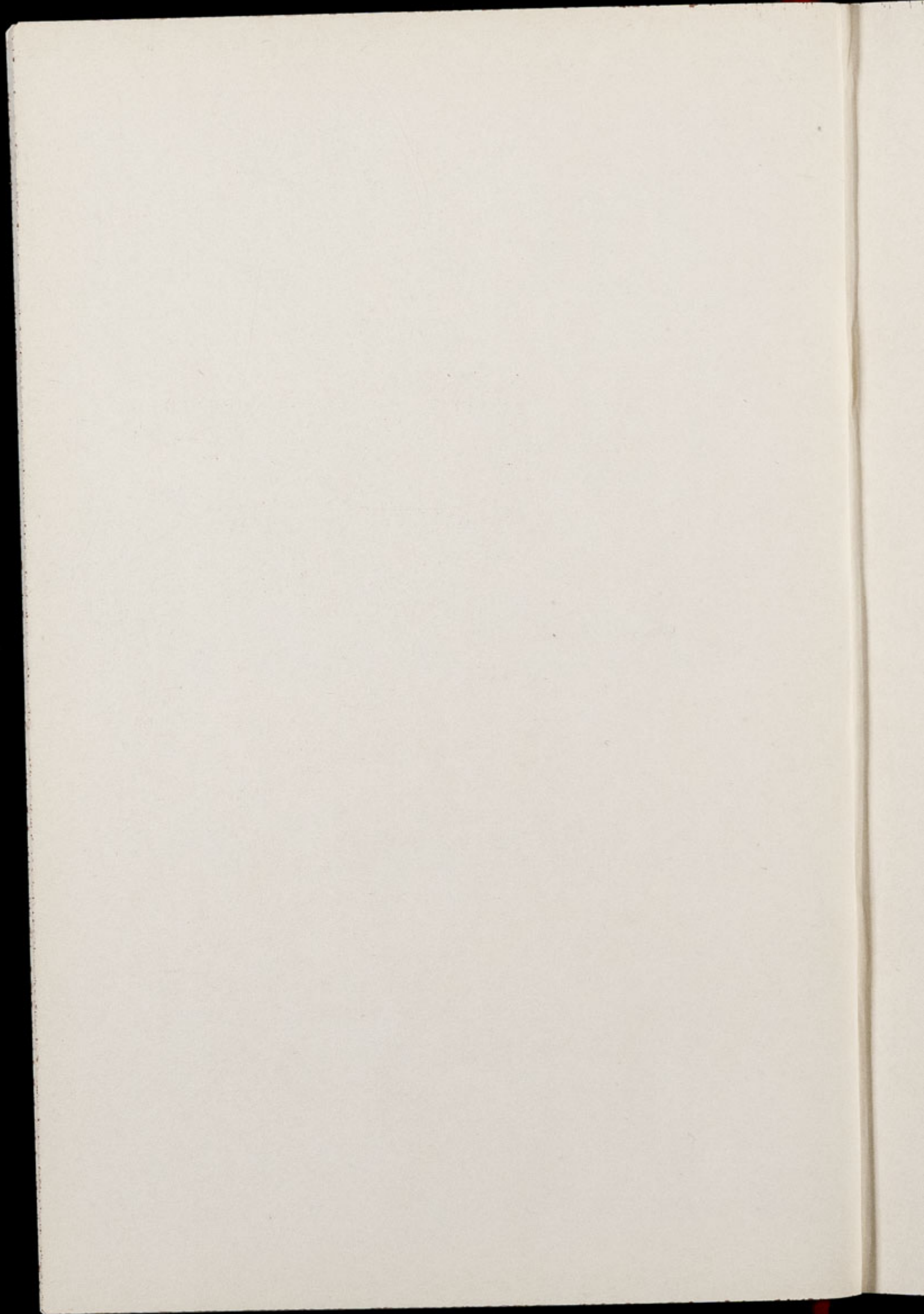
*By Courtesy of Mr. & Mrs. E. Sorby*

# Chester Zoo News

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

February, 1964

Price 1/-



## Editorial

The absence of snow and severe frosts during the first few weeks of 1964 has shown in our attendance figures. To the night of Sunday, 26th January, already 4,092 visitors had paid for admission to the Gardens this year. This figure compares very favourably with those for 1961, 1962 and 1963 which were, to the same date, 2,561, 1,804 and 555, respectively. Indeed, 1964 has had a most encouraging start.

You have read about the new Tropical House in previous magazines, but this is not the only new building scheduled for completion in 1964. News of our extensive development programme is contained in the following pages.

### CONTENTS:

<i>Page two</i>	Zoo Babies, Diana Monkeys.
<i>Page four</i>	Gardening News.
<i>Page five</i>	Eland.
<i>Page six</i>	Work in progress.
<i>Page eight</i>	New Cat accommodation for Chester Zoo, Wapiti.
<i>Page nine</i>	New Staff Canteen.
<i>Page twelve</i>	Flamingos.
<i>Page fourteen</i>	Demolition and Erection, New Ranges of Toilets, Aquarium News.

*COVER: Our Cover Picture this month shows Chester Zoo's Diana Monkeys in mischievous mood.*

---

ANNUAL SUBSCRIPTION FIFTEEN SHILLINGS POST PAID

TELEPHONE : CHESTER 20106/7/8

### ZOO BABIES

**HIMALAYAN BEARS:** (*Selenarctos thibetanus*) Twin Himalayan Black Bear Cubs have again been born. Last year's Cubs had to be hand-reared, but the latest babies are being well cared for by mother, without our assistance. We are looking forward to the first public appearance of the youngsters. Bear Cubs are always a popular and entertaining exhibit.

**WATERBUCK:** (*Kobus defassa*) Our very latest arrival is a baby Waterbuck, born on Monday, 20th January. This new addition to the Waterbuck group is a male calf.

### DIANA MONKEYS

Diana Monkeys, the subject of this month's cover picture, belong to the group of Monkeys known as Guenons. They are extremely agile and in the wild spend most of their time high up in trees in search of fruit and berries, which form the major part of their diet.

In common with most other Guenons the Diana Monkey is found in the tropical forest of West Africa, where it is really at home in the canopy layer of the forest. Dianas are very well adapted to forest life; their tails are almost two feet long and act as an aid to balance and their limbs are slender but strong.

These monkeys have few serious enemies — sometimes a leopard may kill one which is rather slow, or a python may take a youngster by surprise. Man is probably their greatest enemy as by destroying their natural habitat he is reducing the numbers.

In captivity Diana Monkeys are most amusing, being very mischievous and always on the move. At Chester we have two of these entertaining animals, accommodated in a spacious cage alongside the food preparation kitchen of the new Monkey House. A favourite trick is to jump at the glass front of their cage whenever a visitor passes — this of course gives visitors endless amusement and the monkeys obviously enjoy their game. In the cover picture one monkey is about to leap in the direction of the camera, whilst its companion waits to applaud.



WATERBUCK

*E. Kirkland, F.R.P.S.*

All the cages in the Monkey House are provided with trapping cages operated from the Keepers' service passageway. When the sliding door of the trap is open the handle is turned upwards against the wire of the cage, to prevent the Keepers tripping over it. The monkeys delighted in pushing this handle down again, so much so that we were forced to padlock the handle to the wire to avoid accidents. Both Dianas now spend hours trying to remove the offending padlock and return the handle to what they obviously think is the correct position.

### GARDENING NEWS

The weather has remained open and dry and landscape work has been making rapid progress. This has been in direct contrast to last year, when we were unable to proceed with similar extensions for a period of some two months, due to the long spell of severe frosts.

At present we are completing new extensions at the rear of the Monkey House. Thirty-six Standard Lime trees have been planted to form an avenue. These will be underplanted with approximately one thousand Laurels from our own nurseries. The Laurels will be kept clipped to a height of two feet to make a solid low wall over which visitors will be able to view the animals and birds in their new enclosures.

The new beds at the end of the Monkey House are almost completed, ready for planting with the Rhododendrons mentioned in our last issue.

We have been fortunate in acquiring another two tons of Daffodils and Narcissi for naturalising. These, with the three tons already planted, will cover almost all the ground in the Zoo available for this type of planting. We should have a really fine show this spring.

Tree and shrub plantings have been completed for this year and we are now able to reorganise our nursery and prepare to plant the shrub cuttings which were rooted in August and are still in frames waiting to be planted out.



G. F. Williams

LANDSCAPE WORK IN PROGRESS NEAR THE NEW LIME AVENUE

### ELAND (*Taurotragus oryx*)

Between the Rhinoceros House and the Père David Deer paddock is an enclosure containing a small herd of Eland, comprising one large male, three adult females and two young females, born in 1963.

Eland are the largest of the antelopes and are divided into two species — the Giant and the Common. An adult male of the Common Eland — the species we have at Chester — has been known to weigh sixteen hundred pounds and stand six feet high at the shoulder.

Both sexes have spirally twisted horns, those of the male growing to a length of three feet. The horns of the female are even longer but more slender. Another characteristic of both sexes is the flap of skin, known as a "dewlap", hanging from the lower part of the neck.

Eland congregate in herds of up to two hundred and are quite common in Kenya, Tanganyika and as far south as the Kalahari Desert. They are found in some mountainous areas up to an altitude of twelve hundred feet and over all their range seem to prefer open country. This liking for open country is probably due to their lack of enemies. A male or bull Eland, with its great strength and impressive bulk, is a formidable opponent for even a lion. The Eland can either use his long horns in defence or trample the attacker with his forefeet.

In parts of South West Africa the Eland has been successfully domesticated and is used as a beast of burden, in addition to producing beef and milk. The milk is far richer than that of the domestic cow and when kept in a stall the Eland supplies a considerable amount.

Eland are far less susceptible to disease than other hoofed animals, especially those diseases spread by insects such as the tsetse fly. They can, therefore, be kept in places where cattle would not survive.

Acclimitisation to the British weather is rapid and although our Eland are provided with substantial sleeping quarters, these do not require to be heated. In the winter months we provide an extra thick bed of straw.

Five youngsters in all have been born in the two years Chester has exhibited Eland. The male calves born in 1962 have since found homes in other Zoos. In the normal way our Eland are extremely docile, although the females are understandably prone to temperament when they have young calves.

### WORK IN PROGRESS

Work on the new Tropical House is going ahead so rapidly that we have been reminded that the new bridge, from the Tropical House entrance over the canal to the Birds of Prey Aviaries, is still a mere skeleton. However, we hope to complete the bridge within the next few weeks and also the new Birds of Prey Aviary which was partially erected early in 1962.



*P. Stubbs, Daily Mirror*

BULL ELAND INSPECTING THE UNDERSIDE OF HIS FEEDING TROUGH

## NEW CAT ACCOMMODATION FOR CHESTER ZOO

For some considerable time we have felt that the accommodation for our cats, excluding Lions and Tigers, has been quite inadequate. The present range of cages is really a remnant of the war period. Now we are about to construct an entirely new cat section, more in keeping with the Chester tradition of housing animals. We are anxious to give the smaller cats the maximum amount of fresh air and freedom compatible with safety.

The site selected for the new accommodation is at the end of the Lime Avenue (mentioned in the Gardening News on page four) between the new Monkey House and Ankole Cattle paddock. We plan to have a series of twenty enclosures, varying in size to suit the requirements of the different cats. Further details of this new project will follow in later editions of the magazine, when the final plans come off the drawing board.

### WAPITI (*Cervus canadensis*)



Mr. & Mrs. E. Sorby

#### NEW ANTLER FORMATION

because, in the past, he has been rather aggressive towards his offspring and has attacked and injured the youngsters.

In a large enclosure near the Main Entrance to the Zoo we have a small herd of Wapiti, made up of one male, four females and two youngsters, born in August 1963. The male and three older females came to us from Whipnade and the younger female was born in the Gardens in 1959.

Visitors will notice that the male Wapiti is kept in a separate section of the paddock. Two gaps allow access to the females but are small enough to prevent the male escaping. The male is kept apart from the rest of the herd



Mr. & Mrs. E. Sorby

DEVELOPING ANTLERS

in weight. Adult females are nearer four feet at the shoulder and five hundred pounds in weight.

Each group consists of one male and several females and these 'harems' are formed during the rutting season in October and November. Wapiti calves are born usually in May or June and, like all young deer, have spotted coats. They keep well to cover and at any sign of danger lie immobile in the undergrowth.

All deer except Chinese Water Deer have antlers and all antlers, again with one exception, are grown only by the male. (Female Reindeer have antlers.) Male Wapiti usually have magnificent antlers and spreads up to five

Next to the Moose the Wapiti are the largest deer in North America. At one time they were found over most of North America from lower Canada as far south as Pennsylvania and westward to the Rockies. Now they have disappeared from the east and are still found wild only in the Rocky Mountain region and the far western states.

Male Wapiti are much larger than females — standing up to five and a half feet at the shoulder and up to seven hundred and fifty pounds



Mr. & Mrs. E. Sorby

FURTHER DEVELOPMENT

feet have been recorded. They are of course shed every year and regrown, unlike the horns of cattle, sheep, goats and antelopes which grow slowly throughout the lifetime of the animal and cannot be renewed if accidentally broken. We have found that our male Wapiti sheds his antlers on exactly the same date each year.

After the antlers are shed two horny knobs, known as pedicels, are left on the front of the skull. These become covered with skin when regrowth begins and it is on the pedicels that the bony structure of the antlers is laid down. As the antlers grow the skin or "velvet" extends over them. When they are nearly fully grown a bony ring — the "burr" — develops at the base, cutting off the supply of blood to the velvet, which then dries and peels off.

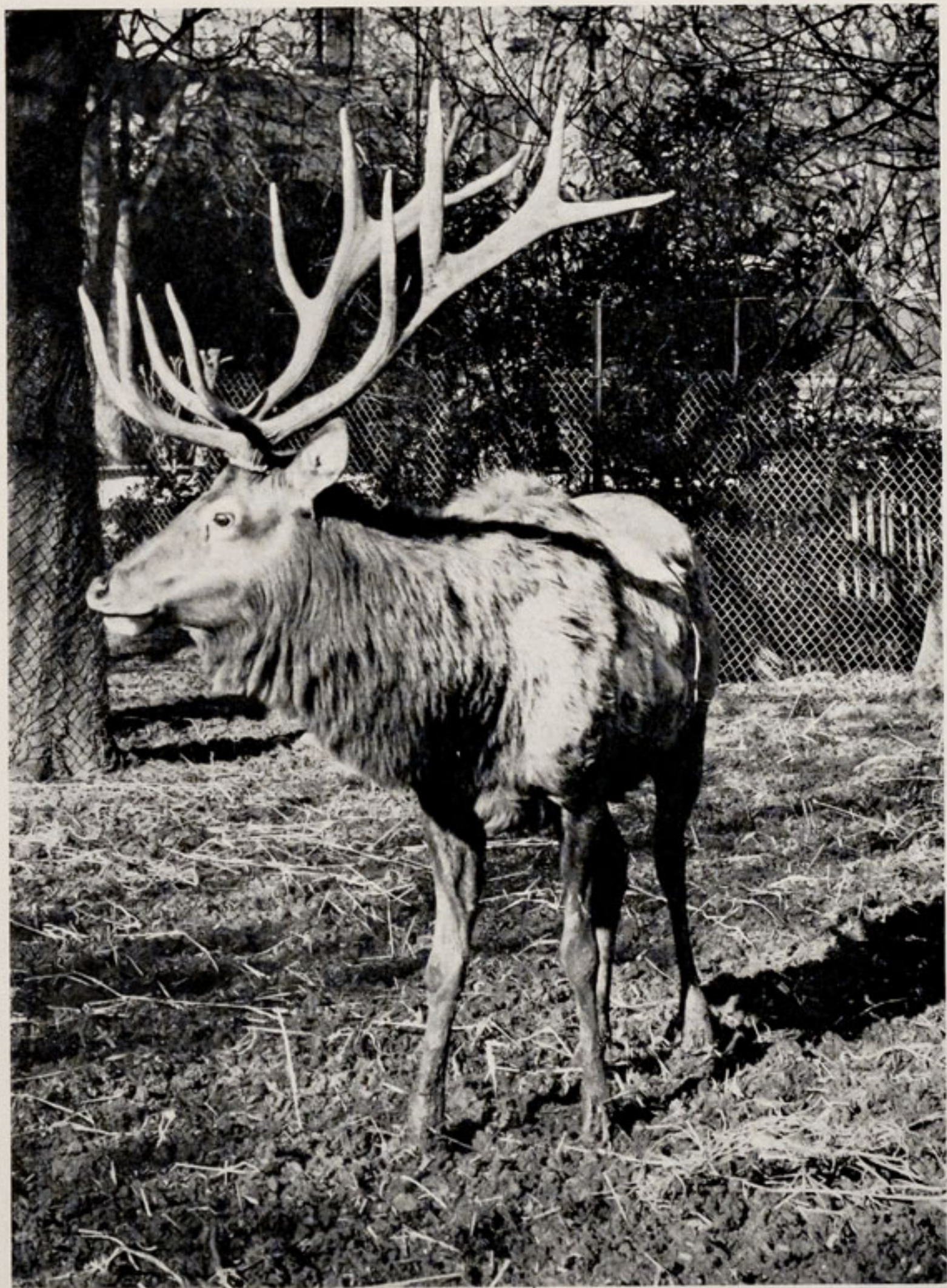
Because of their popularity as trophies, a complex terminology has been evolved to describe the antlers of deer. The shaft at the base is known as the "beam" and the points are called "tines". The tines, from the base upwards, are the "brow", "bez" and "trez" — the branched end being the "crown" or "surroyals".

The antlers of the male Wapiti have another purpose apart from defence. With the antlers the male marks trees and covers the marks, known as "fraying stocks", with a scent secretion from glands on his head. This scent attracts female Wapiti and also tends to discourage other males from entering the territory.

### NEW STAFF CANTEEN

The rapid expansion of the Zoo has brought about a corresponding increase in the number of Staff employed. Another project high on the list of priorities is the building of a new Staff Canteen.

We hope to begin work on the new Canteen in the near future as the present building is not nearly large enough. Many visitors do not realise that apart from Keeping, Gardening and Catering Staff, the Zoo also employs its own Builders, Painters, Mechanics and Maintenance Staff.



*E. Kirkland, F.R.P.S.*

FINAL STAGE OF ANTLER GROWTH

## FLAMINGOS

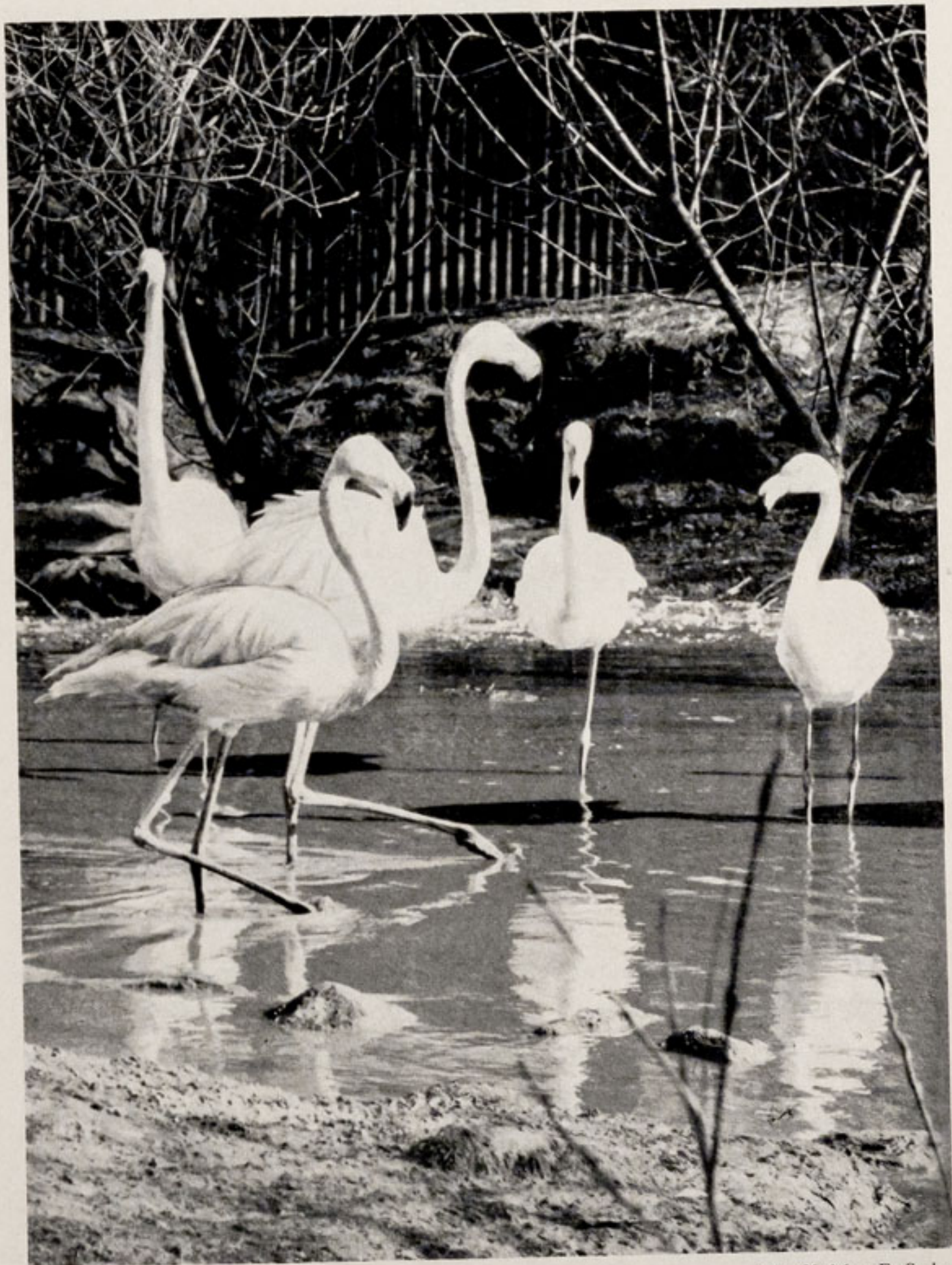
Flamingos, of which there are four living species, are among the world's most picturesque and beautiful birds. They belong to a distinct family — the *Phoenicopteridae* — which some authorities consider to be closely related to the ducks and geese. The downy young flamingos certainly resemble goslings. However, other authorities now think it probable that flamingos are more closely connected to storks and ibises.

Flamingos have longer necks and legs in proportion to their body size than any other bird and the curiously-shaped beak is in fact an extremely efficient combined scoop and sieve. Their plumage is scarlet, pink or creamy white in colour, depending on the species.

In the wild these birds feed on small plant and animal life, which abounds in the waters they frequent. We feed our flamingos on a "soup" comprised of broken-up brown bread, poultry mash, fish meal, lucerne meal and shrimps. In the spring and summer they find a great deal of natural food in the mud at the bottom of their pond and, for this reason, captive flamingos do much better on a natural pond than in one with a concrete bottom.

Flamingos build circular nests of mud, a foot to eighteen inches high and some twenty inches in diameter. The top is saucer-shaped and in it the single egg is deposited. Both cock and hen incubate and the egg takes approximately twenty eight days to hatch. The active young leave the nest three or four days after hatching and congregate in large groups, supervised by a number of adult birds. At Chester our flamingos have built nests on a number of occasions and some years ago a single egg was laid. Unfortunately the egg proved to be infertile, but we hope that eventually we will breed flamingos and perhaps 1964 may be the lucky year.

The species exhibited at Chester are the small Lesser Flamingo (which is fairly rare in captivity), the Greater Flamingo and the Rosy Flamingo.



*Mr. & Mrs. E. Sorby*

FLAMINGOS

### DEMOLITION AND ERECTION

Demolition of the old Monkey House is now well under way and we plan to erect a new "Zoo Shop" on the site. It will replace the present shop adjoining the Cafeteria, which is now proving to be too small to cater adequately for the requirements of our visitors.

### NEW RANGES OF TOILETS

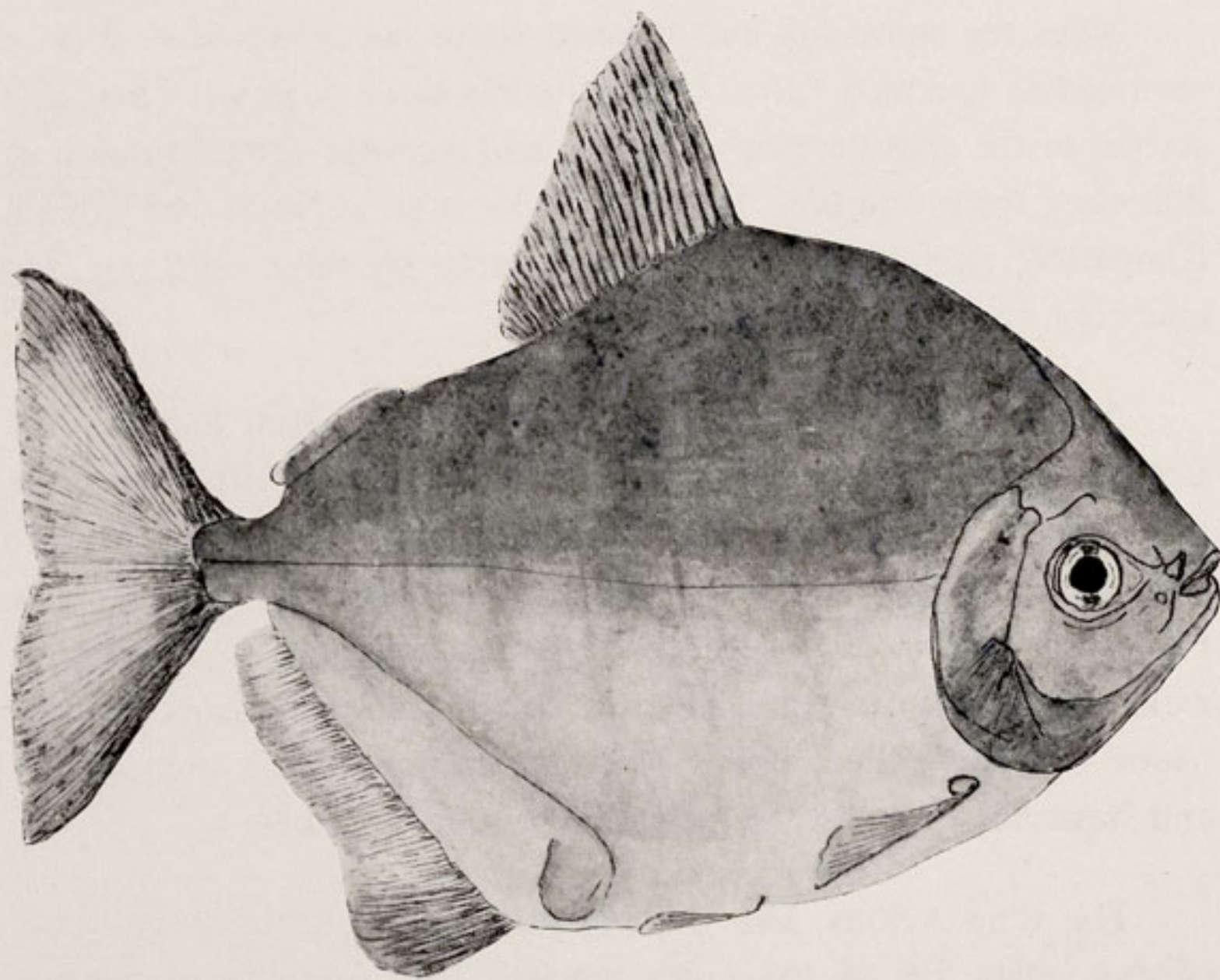
As readers will realise, the amount of work on hand is enormous and, in addition to that already mentioned, another "must" for completion before the season begins is the building of two new ranges of toilets. Work is about to commence on the laying of the sewerage pipe and once that is in place, the new toilets will follow in a matter of weeks.

### AQUARIUM NEWS

January heralds the beginning of the new season with its usual cold winds but, although the rest of the gardens may be affected by inclement weather, work in the Aquarium has been able to continue as usual. In fact a number of the tanks are being re-furnished whilst the Aquarium is quiet.

We are working on many new ideas to give the exhibition tanks a more natural appearance. The use of different varieties of tree roots, sections of trunks and branches has been most effective and definitely encourages the fish to settle down and become less shy. We have found that Willow roots are extremely useful for tank decoration. They adapt remarkably well to the tropical aquarium where, during the summer months, they grow profusely giving plenty of green shoots above the water and an abundance of white, pink and red roots in the water.

Many large sections of wood have been used to good effect, particularly where some of the smaller Tetras are exhibited. The



*M. D. Murphy*

METYNNIS SCHREITMULLERI

dark wood, combined with the acid content of the water, helps to heighten the otherwise delicate colours of these diminutive fish. Such plants as Giant Hygrophila, *Cryptocoryne beckettii* and *Cryptocoryne cordata* were introduced into pockets dug out of the wood. They are growing very well, notably the Hygrophila which has produced bunches of trailing roots covering the surface of the wood.

Whilst this work has been in progress there have also been one or two interesting spawnings. We were particularly excited when a large pair of *Metynnis schreitmulleri* were observed to be spawning freely in the gravel at the bottom of their tank. They seemed oblivious of their companions — two other *Metynnis* and fourteen Buenos Aires Tetras — and were apparently unaware of the fact that they were breaking all the rules by spawning so haphazardly in a community tank.

After the spawning had finished some two hundred eggs were removed to hatching trays. Unfortunately three days after hatching several of the eggs developed fungus and we were forced to assume that they were infertile. However, now that we know we have a compatible pair of *Metynnis*, we will step up their vegetable diet and hope for better success next time.

A pair of Blue Acaras, *Aequidens litifrons*, from Panama and Columbia, also spawned this month. Over three hundred eggs were produced in a plant pot. Unfortunately the pair were not able to look after the eggs in the normal way because, after the first day, Planarian Worms were seen to be eating the eggs. These aquatic worms are extremely thin and can creep among the eggs, causing havoc in a very short time. The eggs were removed immediately and have been hatched successfully outside the tank.

The Blue Acaras, like the *Metynnis*, spawned in a tank containing other fish of the same species. This is quite a common occurrence in the Aquarium. The majority of fish will spawn in any tank, with any number of inmates, provided there is sufficient room to do so and they are in the peak of condition.

---

### STOP PRESS

Another baby Giraffe was born early on the morning of 28th January, this time to "Goofy" and "George". The little male calf stands over five feet and has been named "Maxie". Although he is somewhat smaller than "Gerry" was at birth he is every bit as lively.



---

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

---