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Chester Zoo News

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

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Editorial

Looking back on 1963, we feel that it was an outstanding year for Chester Zoo. The obvious highspots were the opening of the new Monkey House in August, the Conference of the International Union of Directors of Zoological Gardens in September and reaching our target of over one million visitors in one year, in October.

However, there were other equally satisfying, if less newsworthy occasions. New babies were born each month, perhaps the best known being the baby Giraffe in April. Purchases and Presentations included a Pigmy Hippopotamus which arrived in April, a Hippopotamus in June, a Tuatara in August and a pair of South American Tapirs in November.

During June and July the Zoo's roadways were re-surfaced; further extensions were made to the gardens and many new enclosures completed throughout the year. It will be quite a challenge to see if we can better 1963's record in 1964.

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COVER: The Cover Picture this month shows a Bronze-backed Tree Snake.

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ZOO BABIES

ORYX: A new arrival on the 5th December was "Kim", a baby Beisa Oryx (*Oryx beisa*). Her parents were also born in the Gardens, "Fred" in April 1955 and "Bridget" in December 1958. Kim is a beautiful little animal with a warm, golden brown coat. Already she is showing a tiny pair of horns.

WILDEBEESTE: The third Wildebeeste or Brindled Gnu (*Connochaetes taurinus*) baby of 1963 was born on 16th December and has been named "Karen". Babies number one and two (born in June and July respectively) were both males.

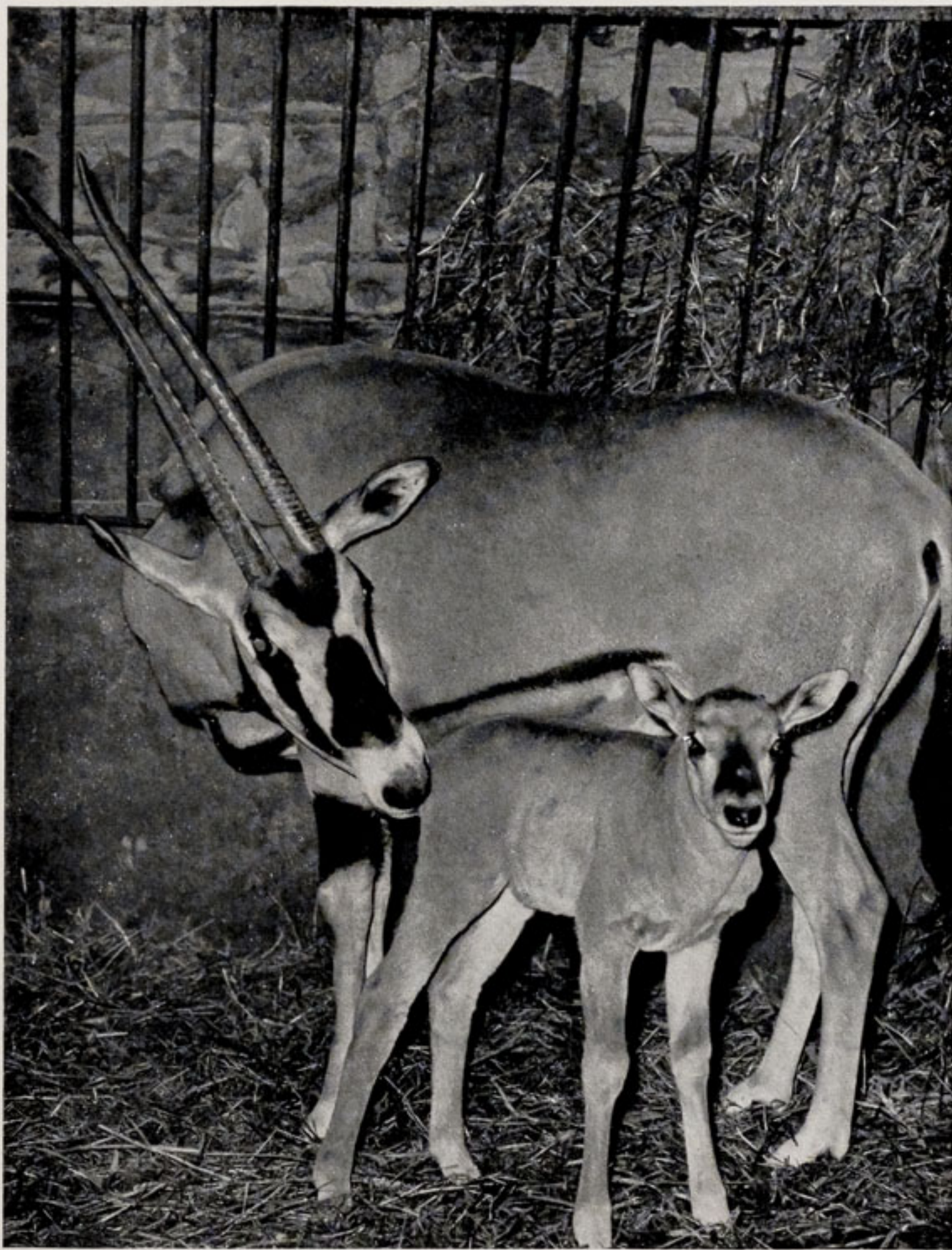
TUATARA NOTES

When he arrived in August 1963 our young male Tuatara was extremely timid and was placed in a quiet compartment at the rear of the Reptile House. A large hollow log was provided as a retreat and the floor of the compartment covered in peat. Our next duty was to persuade the Tuatara to eat and we offered a varied diet of earthworms, slugs, snails, beetles, etc. Within a few days he was eating everything given to him.

Whilst the Tuatara was settling down, we were preparing an exhibition enclosure for him, so that our visitors could view our rare exhibit in a setting resembling that of his natural habitat. This enclosure has a small cave in which he can bury himself, various plants for additional cover and a swimming or drinking pond.

At first the Tuatara hid for most of the day, only coming out during late evening or early morning. After several weeks he began to show himself more and appeared to enjoy lying in his pond for varying lengths of time. He grew bolder with every passing week and now will even venture over to the glass front of his enclosure.

Many of the delegates attending the Conference of the International Union of Directors of Zoological Gardens last September showed great interest in our Tuatara and we appreciated hearing from those Directors whose Zoos had experience of keeping Tuataras. A point of great importance is to maintain the correct temperature for the animal.



"BRIDGET" AND "KIM"

Mr. & Mrs. E. Sorby

We have met no problems with regard to diet and the Tuatara eats young rats and mice and even fully grown mice, in addition to all types of insects, apart from stinging insects. He has put on a considerable amount of weight and is no longer the timid creature he was on arrival.

We hope that the Tuatara will continue to progress well and that some day we will be fortunate enough to obtain a mate for him. In the early spring he will be moved to our new Reptile House, where every facility will be available to ensure his continued good health.

THE AMERICAN BISON



R. T. Bloom

BISON AND CALF

In the next paddock to that of the Père David Deer described last month, we have a herd of eight American Bison. This is also a paddock without bars, offering the animals considerable freedom and unimpeded viewing to members of the public.

Previous to the settlement of the American prairies the Bison roamed in their millions—some observers estimating their numbers to be as high as sixty millions. The Indians shot

a few for food and used Bison hide for clothing, but this had little or no effect on the extent of the Bison population.

With the spread of farming and cattle ranching came the downfall of the Bison. Millions were slaughtered, their hooves made into glue, their tongues tinned and their flesh was often used



J. Whitworth

CHESTER ZOO'S TUATARA IN ALERT POSE

as food for the men employed on building roads and railways. In America and in this country too the Bison is often called the Buffalo, hence the names of such professional hunters as "Buffalo Bill".

At the end of last century the Bison had almost been exterminated—only a few remaining in isolated parts of the country. These few were rigidly protected and National Parks created in which the animals could live unmolested. At the present time there are several thousand Bison in the National Parks of America and some have been distributed to the larger Zoos.

It is fortunate that the American Bison breeds well in captivity and is also able to withstand all types of weather. At Chester this year we have bred four American Bison, three females and one male. The large male, which is the father of all the youngsters, tends to be rather fierce at times and the keepers must always be on guard when entering his enclosure.

THE POLAR BEAR ENCLOSURE

Everyone knows what Polar Bears (*Tharlarctos maritimus*) look like, that they come from the Arctic regions of the world and are among the largest bears in existence. However, not everyone realises that these apparently docile and lazy animals are both extremely cunning and dangerous.

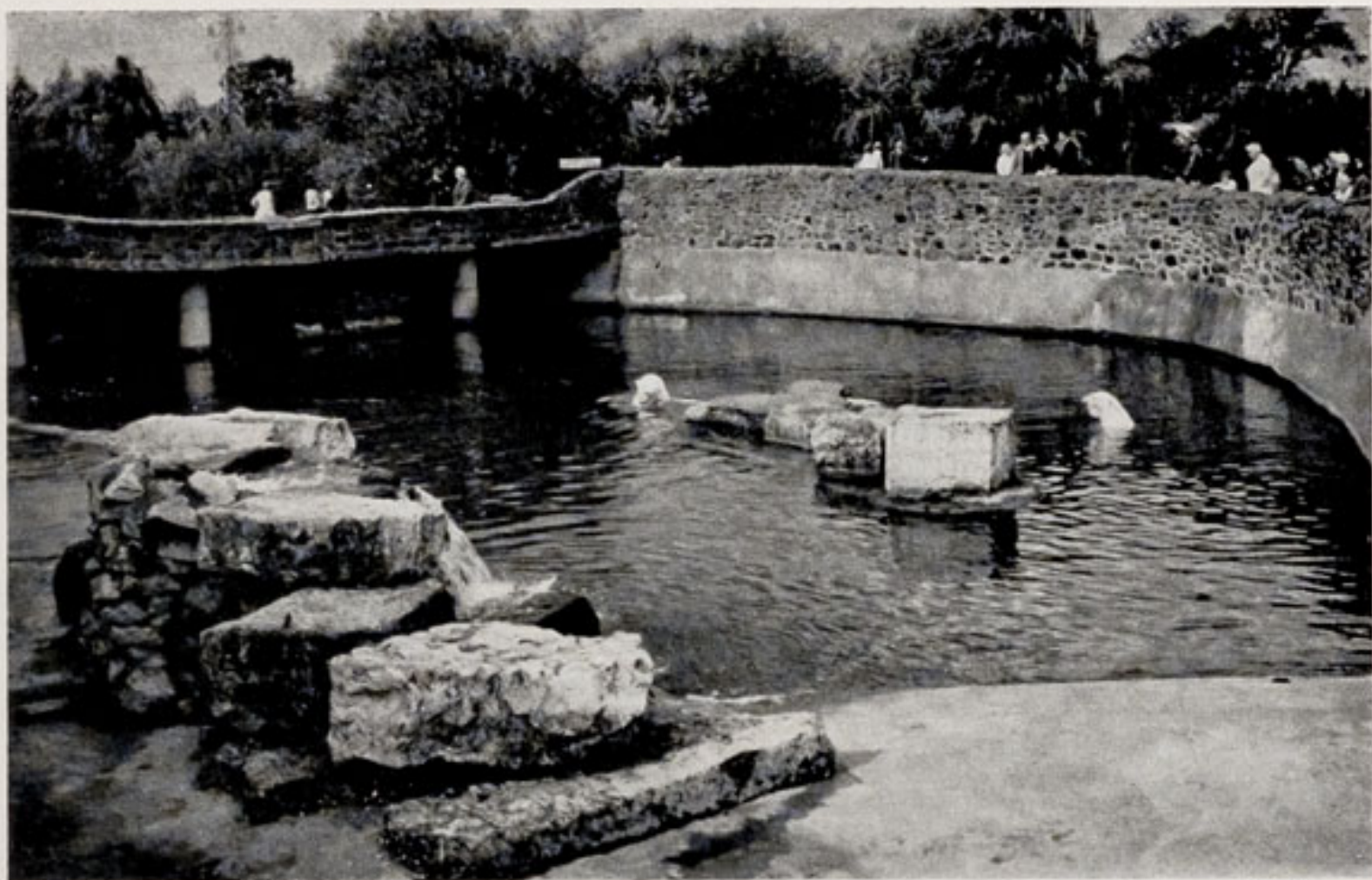
We have at Chester four Polar Bears — "Rubble", "Rack", "Ruin" and "Motty." Motty is, of course, the offspring of Rubble and Rack, born here on the 3rd of December, 1959. The four animals are accommodated in an enclosure covering nearly half an acre and containing a large swimming pool,

The enclosure was built in 1950 in memory of Miss Tompkins Grafton of Windermere, whose legacy brought about the turning point in the fortunes of Chester Zoo. We felt that we wanted to erect something outstanding in appreciation of her great kindness. A Polar Bear enclosure was chosen because of Miss Grafton's interest in these animals. In July 1950, the enclosure was officially opened by Miss Gwen Payne, then organiser of the B.B.C.'s Children's Hour.

At least twice a year it is necessary to enter the enclosure to do minor repairs, such as re-concreting the holes which the bears delight in digging. First, of course, the bears must be trapped in their dens and this they hate. It may take as many as ten days to get them all safely inside. For those working inside the enclosure it is somewhat nerve racking to hear the "sledgehammer" blows rained on the trap doors by the confined animals. Fortunately, the strength of the doors would defeat the onslaught of even the most determined bear.

CAMELS

To most of us in Great Britain the Camel is as strange and interesting as many of the fiercest wild animals. He seems to show no curiosity about the crowds visiting him at the Zoo, but gazes over their heads in a manner reminiscent of the stone sphinxes staring across the desert of Egypt.



J. Rogers

PART OF THE POLAR BEAR ENCLOSURE

For many hundreds of years the camel has been most useful to man, because of his great strength and ability to endure heat, thirst and hunger. In the hot, dry, desert regions the camel is horse, cow and sheep to the herders and traders. He carries their burdens, furnishes flesh and milk for food and hair for weaving cloth.

It has been said that without this rather ugly, often stupid and bad-tempered, but useful animal, the deserts of the Old World would be unpeopled and virtually unexplored. Before the opening of the railway from Cairo to Suez, over six hundred camels transported goods between the two towns daily.

Originating from barren and infertile regions, the camel is well adapted to survive on what would be a starvation diet to most other animals. His digestion is such that twigs, thistles and thorny shrubs are taken readily and rough fodder is preferred to lush vegetation. Moreover, the humps are a large store of fat, to be drawn on when food is scarce and the stomach is a honeycomb of little cells for storing water, so that the camel can go for days without drinking.

Anyone who has ever ridden a camel will testify to his ungainly motion. He lifts both fore and hind feet on the same side at the same time, tilting his body sideways. When he lifts the two feet on the other side, a pitching and rolling effect is produced.

The camel's feet are two-toed and the toes are joined to form a large padded sole, which prevents him sinking into the soft sand of the desert. He has a long neck and fairly large head with slit-like nostrils and a split upper lip — with which he feels for his food. There are leathery patches on the joints of his long legs and also on the breast bone; his hair is coarse and he has a tufted tail.

Two species of camel exist, the one-humped or Arabian Camel (*Camelus dromedarius*) and the two-humped or Bactrian Camel (*Camelus bactrianus*). The Arabian Camel is not known in the wild state but is found as a domestic animal from North Africa to India. In recent years it has been introduced to many parts of America, Australia and Southern Europe.

The Bactrian Camel is somewhat larger than the Arabian and has a heavier coat. It is a darker brown in colour and is shorter in the leg. A few may still be found in the wild state, but they too are widely domesticated, their habitat being Central Asia.

"Barkah", Chester Zoo's Arabian male camel is a particularly fine animal and came from Bristol Zoo in 1951. He is inclined to be somewhat temperamental and needs careful watching by his Keepers. His mate, "Matilda", was bred in Dublin Zoo and arrived at Chester in September, 1959.

"Humphrey" and "Ena" our pair of Bactrian Camels were also bred in captivity in this country and came to Chester in 1960 and 1962 respectively. "Humphrey" is particularly docile, his only vice being a tendency to illtreat his mate if they are confined together indoors. Out of doors he is on the best of terms with Ena.



J. Rogers

"HUMPHREY" AND "ENA"

THE TROPICAL HOUSE

Since our last report on the new Tropical House, in the November 1963 issue of the magazine, work has gone ahead at a tremendous pace. We are happy to say that the entire building is now completely closed in. At present large areas of the roof are being insulated to reduce heat losses. Indoor accommodation for both the Gorillas and the Orangs is nearing completion and we have commenced building the compartments in the Reptile House. The heating plant is already installed which will be mainly responsible for maintaining the temperature in the reptile section.

Within a matter of weeks all the other heaters for the Tropical House will have been installed. Heated air will be drawn and directed by ducts and in some cases will be taken back to the heating plants, which will save a considerable amount of fuel. The heaters will be concealed from our visitors and so situated that they will not interfere with the structure of the various enclosures.

It is strange, but the more work we complete in this particular

building the larger it appears. It will certainly take a tremendous amount of plant life to fill the house to the extent we wish.

Construction will soon begin on a large pool for the Pigmy Hippos. When the house is a little further advanced it will be merged into the existing Pigmy Hippo enclosure. The animals will then have greater freedom and improved bathing facilities.

Several species of birds for the Tropical House have already arrived, including Scarlet Ibis, Francolins and Mynahs. It will be interesting to see their reactions when they are, almost literally, given their freedom again. We must, of course, provide shelter for some of the smaller birds, to allow them to escape from their more pugnacious fellows should the need arise.

Every effort is being made to complete the House by the spring. If we do not have any further distractions, in the form of major alterations and repairs in other parts of the Zoo, then we should achieve our aim.

"ELMER"

Chester Zoo lost one of its greatest characters at the end of November with the death of "Elmer" — senior member of the Chimpanzee colony. Elmer was estimated to be well over twenty years of age. For many years he was the dominant male of the Chimpanzee family and the father of a number of Chester's baby Chimpanzees. More recently, Elmer had relinquished the leadership of the group.

THE GARDENS IN MIDWINTER

The fine open weather experienced during December has been a great help to us in the gardens. All the routine work, such as cleaning and forking of shrubberies, will almost be completed by Christmas. The nurseries have been ploughed and dug over and the gardening staff are now free to begin the landscape work which has been made necessary by still further expansion of the Zoo.



"ELMER"

Mr. & Mrs. E. Sorby

The new rose plantings have been completed — the varieties of H.T. Roses used being Josephine Bruce, Piccadilly, Silver Lining, Monique, Peace, Wendy Cussons, Christian Dior, Rose Gaujard, Buccaneer and Prima Ballerina. This completes the replacement of the old beds in the H.T. Rose Garden, which has been carried out over the past three years.

Considerable numbers of shrubs and trees have been planted in the gardens. Some of these have been grown in our own nurseries and others bought in to increase the variety of our shrub collection. Most of the trees have been planted in new animal and bird enclosures, with the dual purpose of providing shade in the summer and wind breaks in the winter. They will also enhance the appearance of the enclosures.

It is intended to plant two large banks of Rhododendrons at one end of the new Monkey House and two hundred and fifty bushes have been ordered, although we have yet to make the beds.

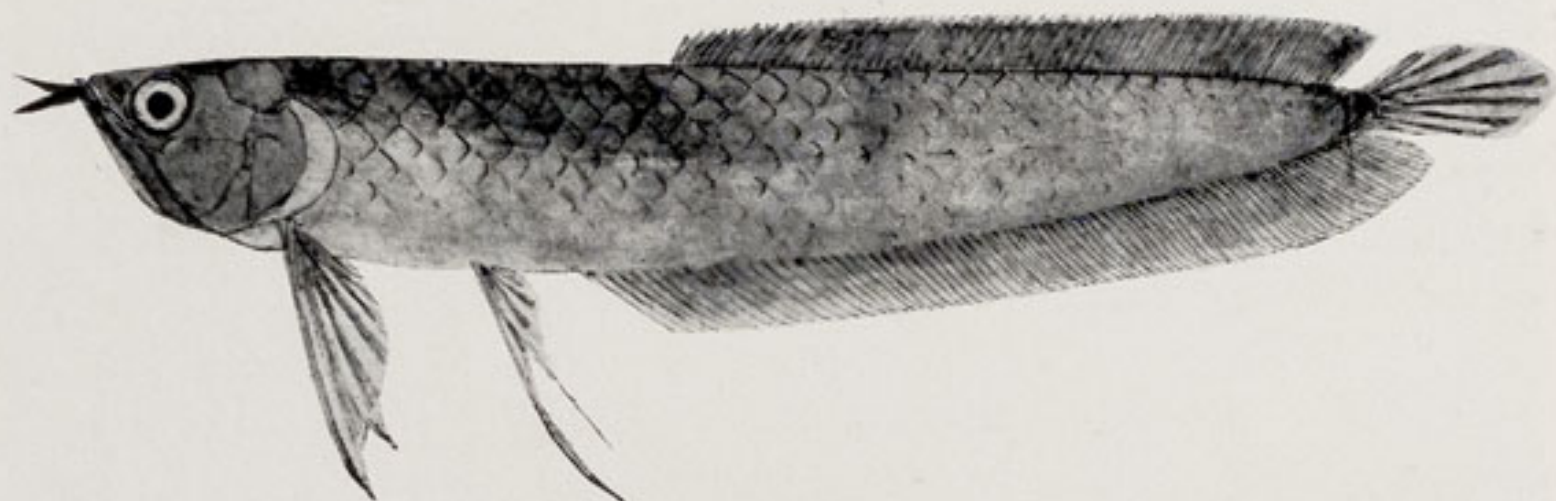
Azalea mollis x sinensis are being planted in the border opposite the Oakfield Restaurant. This border was planted last year with varieties of Veronica, which were all killed by the severe frosts of the winter. Reluctantly we have decided that Veronicas are rather too tender for us to plant.

We continue to build up our collection of tropical and subtropical plants, for the planting of the new Tropical House. In fact, we now have so many that they have overflowed our greenhouse space and a number of plants are housed temporarily in the Monkey House.

AQUARIUM NEWS

December has proved to be one of the most interesting and exciting months this year, for in this short space of time several rare fish have been added to the Collection.

Shortly after the November magazine was printed we received a telephone call from one of our suppliers, to say that several six-inch specimens of the rare South American Arowana had arrived



AROWANA

M. D. Murphy

and were we interested in acquiring them. To say that we were interested was an understatement, as these fish with the rather imposing Latin name *Osteoglossum bicirrhosum*, are among the most unusual fish to be exhibited in Public Aquaria.

Arowanas belong to the family *Osteoglossidae* which has branches in Africa, Australia and the Malay Archipelago, as well as in South America. The only other fish in this family which inhabits South American waters is one of the world's largest freshwater fish — the Arapaima (*Arapaima gigas*). This fish has been known to grow to almost fourteen feet. It is small wonder, therefore, that we are so pleased to have its closest relative — the Arowana — on exhibition.

A tank was prepared immediately and only a few hours after their arrival the pair of Arowanas accepted food. It was obvious at first glance that they were essentially surface fish and, therefore, it was reasonable to assume that any appropriately-sized small bird or mammal falling onto the surface of the water would be eaten. This was proved to be correct when four baby mice were placed on the surface and accepted immediately. After a few days the Arowanas also took live fish and mealworms and have now put on quite an appreciable amount of weight.

It can easily be seen from the illustration shown above how completely adapted to a predatory life under the surface of the water this fish has become. The bulk of the body and indeed

most of the fins are below the lateral line. The jaws, with their branching sense organs, extend to the upper half of the body, where they are closest to the surface of the water. The placing of the dorsal fin far back on the body allows the fish to lie close to the surface and yet remain completely concealed whilst awaiting its prey.

Perhaps the most remarkable feature of this fish is the tremendous gape of its jaws when feeding. The lower jaw is a thin, delicate-looking structure which curves gently and has at its furthest point a pair of leaf-like appendages which we think are probably used as sensory organs. Food offered must be the correct size because, as far as we can tell, the food is not chewed but is bolted down in one piece.

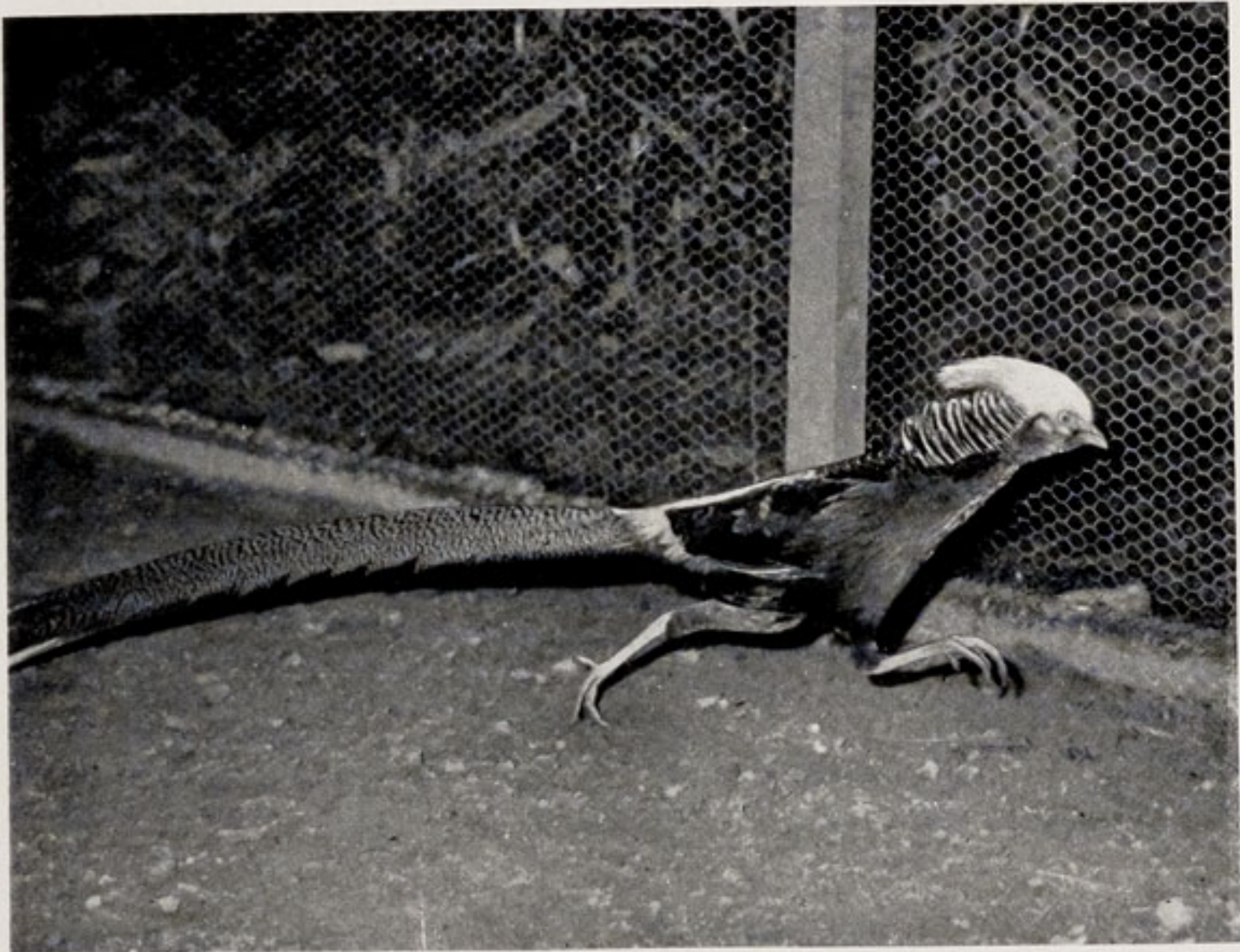
This month we have also received two representatives of the Bichir family; these particular specimens being *Polypterus delhezi* from the Congo region. These peculiar fish stalk their prey in the same manner as a newt, that is they move slowly across the bottom of their tank and when within striking distance of their prey, dart forward and seize the unsuspecting morsel.

Some very nice specimens of Snake Head have also arrived, but are a little too small to identify with any certainty. Snake Heads, like the Arowanas and Bichirs, are ferocious predators, requiring live food constantly if they are to grow into large, healthy specimens.

Apart from the three unusual species mentioned, we were presented this month with several dozen young specimens of Mouth-Breeders — *Tilapia tholloni* — hailing from West Africa. We are happy to report that the family of Gunther's Cichlid, which is also a Mouth-Breeder, is doing very well and the youngsters are growing rapidly.

PHEASANTS

Pheasants belong to the family *Phasianidae*, which also embraces Peafowl, Quail, Partridge, Grouse, Ptarmigan, Junglefowl and many other species. In the wild they live mainly on seed, grain, greenfood and insects and are, therefore, easy to cater for



Mr. & Mrs. E. Sorby

GOLDEN PHEASANT COCK

in captivity. Despite the exotic appearance of many pheasants they are, on the whole, extremely hardy. Cold weather holds no terrors, although damp conditions can be fatal to some of the more delicate species.

Like domestic poultry, pheasant chicks are active within a few hours of hatching and a number are bred at Chester Zoo every year. The youngsters are insectivorous and either ants eggs or maggots must be offered in addition to seed.

Golden Pheasant Cocks are a common sight in captivity, but their beautiful plumage of orange, scarlet, blue and yellow can never fail to impress. The hen, like most female pheasants, is a drab brown in colour. A number of Golden Pheasants are exhibited at Chester in pairs and other aviaries contain cocks only. It is impossible to introduce a hen into the bachelor aviaries, as the strongest cock would very soon kill all his weaker companions.

A close relative of the Golden Pheasant is the Lady Amherst Pheasant. This is another beautiful member of the family, although its plumage is rather less colourful than that of the Golden Pheasant. We have a cock and two hen Lady Amherst Pheasants at Chester, but we hope this number will increase next spring.

The Monal or Impeyan Pheasant is very much larger than the two species already mentioned. Although far from graceful in shape, its plumage is a delightful blending of purple, bronze and green. In strong sunshine this colouration is particularly lovely. Another feature of the Monal Pheasant is the crest on its head which is reminiscent of that of a Peacock. This Pheasant has a particularly powerful bill and in the wild its main food is roots and tubers. In captivity it is fond of chopped carrots. A single cock Monal Pheasant is exhibited in the long flight behind the Bird House.

The Chinese Silver Pheasant is one of the most pugnacious members of a family not noted for its peaceful disposition. Although the cock's plumage is almost entirely silvery white it is nevertheless a graceful and attractive bird. Many Silver Pheasants are hatched at Chester each year.

A fairly close relation of the Silver Pheasant is the Swinhoe Pheasant, but the blue and red of the cock's plumage makes it a much more colourful creature. A single pair of Swinhoe's Pheasants live in one of the pheasant pens alongside the Parrot House.

Sharing another of the pens alongside the Parrot House are a pair of Elliot's Pheasants. These birds are recent acquisitions and in captivity tend to be rather delicate. Elliot's are a small species of pheasant, the colouring of the cock being a pleasant blending of reds and greys. The plumage of the hen is less uniformly drab than that of most female pheasants.

A cock and two hen Common Pheasants share the Parrakeet Aviary opposite the Chimpanzee Islands and complete our pheasant collection.

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