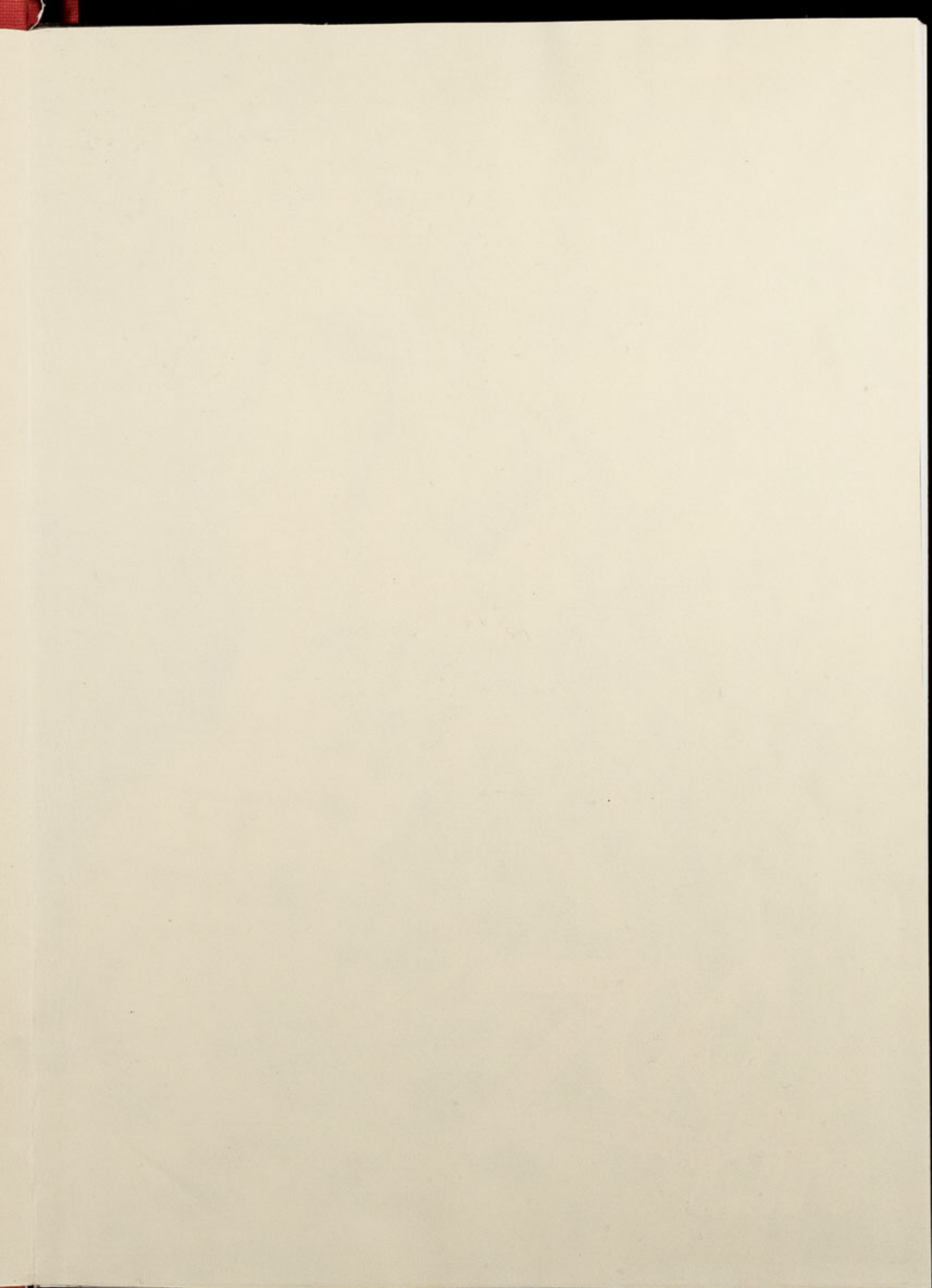


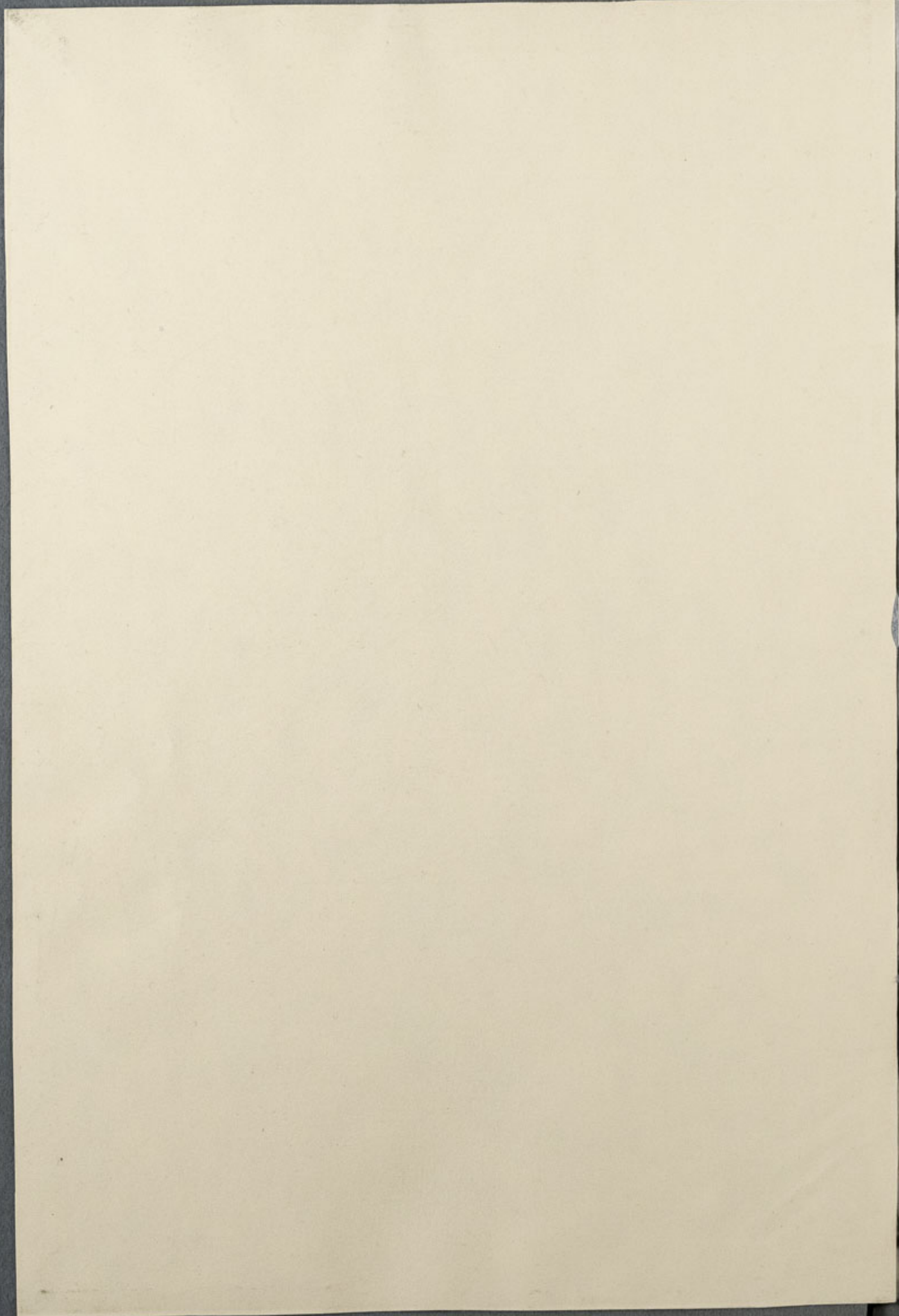
ZOO LIFE

SPRING 1990

WINTER 1991







SPRING 1990

Chester
ZOO
Life

Chez Nous

INTO THE NINETIES

Whether or not this is the first year of a new decade or the last year of the old one, there can be no argument that we are now in the nineties, and that in ten years time we will be in the two thousands. Future dates have no significance except to provide convenient and arbitrary pegs on which to hang targets. We want to get our zoo to be perfect and we want perfection now - tomorrow is too late.

Yet we know that perfection is that crock of gold at the end of the rainbow which takes time to reach, and when one gets there it has moved on and beyond our reach. So we have to compromise; to accept that it takes time to attain new perfection. With ten years to go to the start of the two thousands, we can set our sights on what needs to be done.

The zoo is a wonderful place to visit, but we all know it has problems. It has paddocks which go to mud in Winter; it has roofs which blow off in gales (though only three were damaged in the gale of 25th January); it has animal houses which could be even better for the animals and more welcoming to the public; it has an identity problem. Most people in the North West have heard of Chester Zoo, but very few know it is a charity, and fewer still understand what is meant by a zoological charity - what are its purposes and what the constraints placed upon it.

Our task over the next ten years is to market ourselves so that Chester Zoo remains a place that everybody wants to visit, and, having visited, leaves knowing about and wanting to support its aims. By the year 2000, zoos which have no aims other than to make a little money out of people coming to look at animals and nothing more, will have lost their popular support. There is nothing wrong in wanting to look at well cared for animals, but the animals themselves are becoming far too valuable to their own kind to be doing nothing more. They must be contributing to the future of their species.

In terms of the zoo, this comes down to bricks and mortar and well drained paddocks; to improved car parks; a new entrance; better signs; extended advertising; greater training of staff; greater co-operation with other zoos; greater concern for the world of animals, not only the animals in the zoo. We have to fit the zoo into the national scene, and now the world scene. It is very appropriate we set out through the nineties towards that crock of zoological gold somewhere beyond the magical year of 2000 by being admitted to membership of the World Conservation Union, the body we will continue to know as the IUCN. We will strive to meet our obligations.

Richard Brambell



Cover Picture: This lovely portrait of a cheetah was the winning entry in last year's photographic competition. Below: Chester Zoo Photographer of the Year, Brian Cavanagh, receives a framed print of his photograph from Mike Lyndley, of the "Survival" series, at the February Members' Meeting.

MEMBERS' MEETINGS

Monday 12th March 1990
President's Evening

Our President, His Grace the Duke of Westminster, will attend this meeting, and the guest speaker will be Dr. P. Morris, an expert on small mammals - especially hedgehogs. A light buffet will be served - Prior booking with Maureen Allsopp will be necessary for catering numbers. Ring Maureen to reserve your ticket - (0244) 380280.

Time: 7.00pm for 7.30pm

Venue: Lecture Hall

Access: Through Time Office entrance.

Price: £4.50

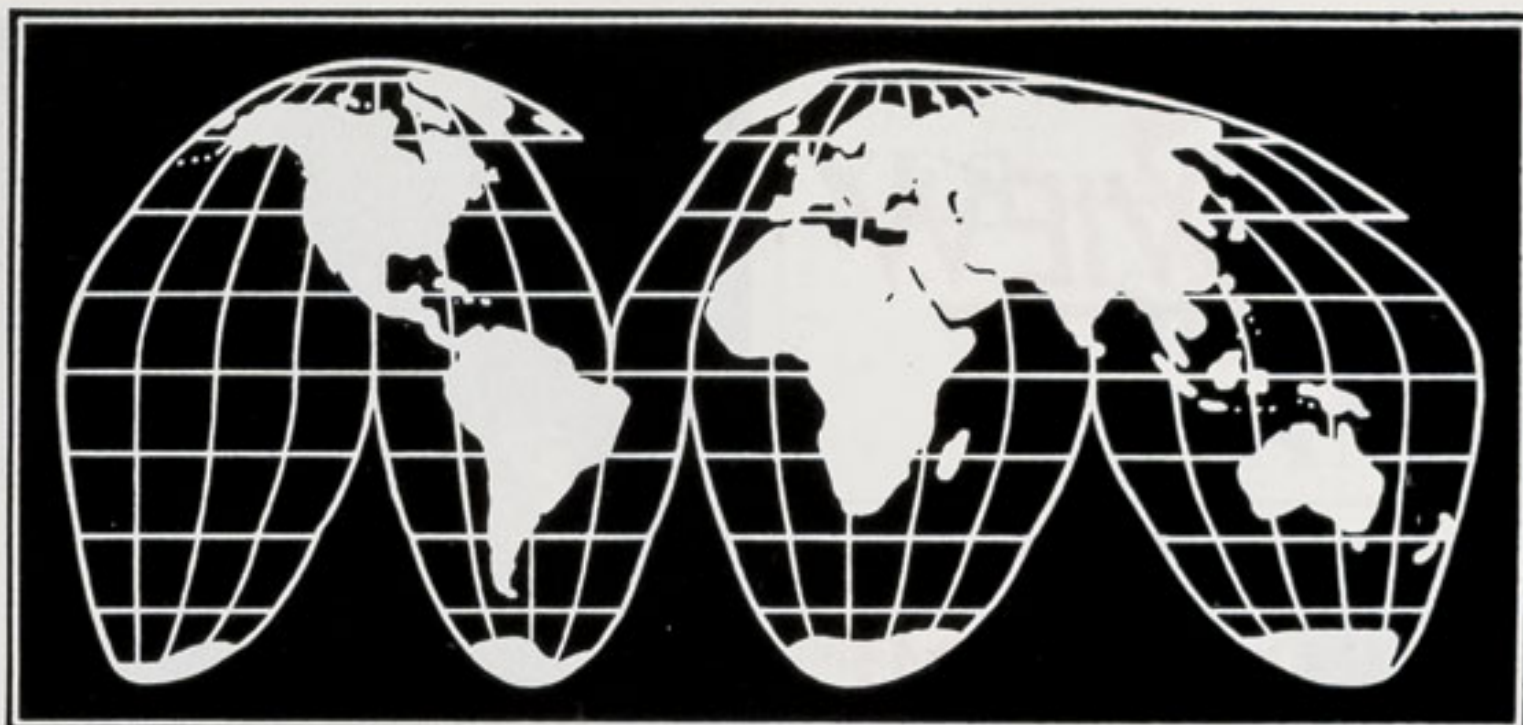
Saturday 14th April 1990

2.30pm in the Lecture Hall.

"The Future of Wild Life in the East African Parks", accompanied by bird song - Mr David Lovatt Smith.

Saturday 12th May 1990

Annual General Meeting.



CHESTER ZOO JOINS THE I.U.C.N.

The North of England Zoological Society's application for membership to the I.U.C.N. - International Union for Conservation of Nature and Natural Resources - now to be called World Conservation Union, has been approved, and the zoo is now a member in Category B c) - National non-government organisations.

Under the regulations of the union, we are asked to publish the following statement to all members, defining the Union's objectives.

"The North of England Zoological Society has been admitted to membership of I.U.C.N., the World Conservation Union, a union of member states, government agencies and non-governmental organisations concerned with the development, promotion and implementation of scientifically-based action towards conservation and sustainable use of the world's living resources.

I.U.C.N. is an independent international organisation, founded in 1948 at Fontainebleau, France, under the sponsorship of the United Nations Educational, Scientific and Cultural Organisation (Unesco) and the Government of France. Its Secretariat, now based at Gland, Switzerland, is responsible for developing the programme of work for the various I.U.C.N. components as approved by members meeting in General Assembly every three years.

Network

The work of six Commissions (Ecology; Education and Training; Environmental Policy; Law and Administration; National Parks and

Protected Areas; Species Survival; and Sustainable Development) and various advisory groups is co-ordinated to support the Union's programme and to serve as a network for conservation action around the world.

A Field Operations Division develops and manages conservation projects, based upon external funding, worldwide in collaboration with partner organisations. Two centres, IUCN's Environmental Law Centre in Bonn, Federal Republic of Germany, and the World Conservation Monitoring Centre in Cambridge, UK, run jointly with the United Nations Environment Programme (UNEP) and the World Wide Fund for Nature (WWF), develop and provide a data base and mechanisms needed for implementing conservation activities. In addition, IUCN provides services for international conventions, such as Ramsar and World Heritage.

Strategy

With the advice, co-operation and financial assistance of UNEP and WWF, and in collaboration with the Food and Agricultural Organisation of the United Nations (FAO) and UNESCO, IUCN was responsible for the preparation of the World Conservation Strategy (WCS). Published in 1980, the Strategy provides the principles on which conservation should be based, linking conservation with development.

The WCS defines conservation as 'the management of human use of the biosphere so that it may yield the greatest sustainable benefit to present generations while maintaining its

potential to meet the needs and aspirations of future generations.' The major objectives of conservation reflected in the Strategy are:

- maintenance of essential ecological processes and life-support systems.
- preservation of genetic diversity
- sustainable utilisation of species and ecosystems.

Development is defined in the Strategy as "the modification of the biosphere and the application of human, financial, living and non-living resources to satisfy human needs and improve the quality of human life." For the development to be sustainable, it must take account of social and ecological factors as well as economic ones; of the living and non-living resource base; and of the long-term as well as short-term advantages and disadvantages of alternative actions.

Philosophy

The IUCN philosophy is also appropriately reflected in the World Charter for Nature, which was adopted by the United Nations General Assembly in 1982.

On becoming a member of IUCN, we endorsed the objects of the Union, as indicated in the Statutes, and elaborated in the aforesaid World Conservation Strategy and the World Charter of Nature.

IUCN's membership currently stands at: 60 states, 114 government agencies, 402 national non-government organisations and 30 affiliates, giving a total of 644 members in 119 countries.

ZOO REVIEW

CHESTER JOINS ORYX PROGRAMME

Chester is now one of five British zoos taking part in the breeding programme for Scimitar-horned oryx, (pictured right) with the aim of returning a herd of animals to the wild in the future.

The first re-introduction of this species, from the UK to Tunisia, took place in December 1985. Ten animals, born in Marwell and Edinburgh Zoos, were released in the Bou-Hedma National Park.

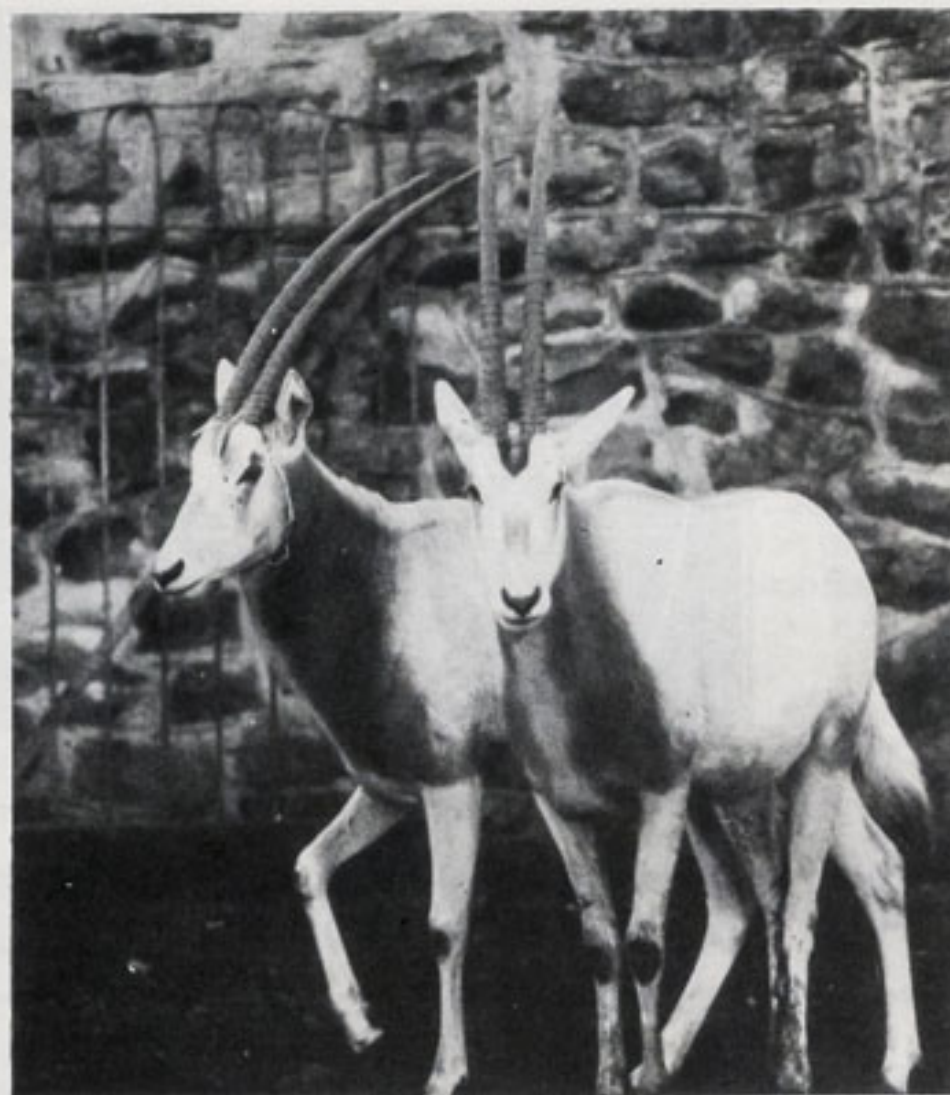
Senior Curator Peter Wait travelled to Edinburgh Zoo in December, and brought back three female Scimitar-horned oryx, to join the male which had previously arrived from Whipsnade.

"They are spectacular animals!" Peter Wait commented. "I am amazed at the speed of growth of the horns, which sweep high and backwards - giving

them their name, of course. The horns come through within a few days of birth, and the ones which I collected, although only one year old, already have mature horns."

Sadly, the Scimitar oryx is now extinct North of the Sahara. At one time, the inhospitable, sparsely vegetated environment formed its own protection to animal life. But with the advent of motorised transport, the oryx became easy prey to hunters. The Red Data Book - the conservation bible - lists the Scimitar oryx as being in danger of total extinction in the near future.

With the re-introduction programmes, British zoos hope to be able to save this species in the same way that the Arabian oryx was saved from total extinction in the 1970s.



STOCK TAKING

One of the annual jobs that comes with the passing of each year is taking account of the stock in the collection.

We started the year with almost 6,000 specimens and finished the year with a similar amount. It is what happened in between that has to be balanced. The process also helps to remind us of the breeding successes over the year. 244 mammals were born 39 different species, and notable amongst these were seven Rodrigues Island fruit bats; ten Ring-tailed lemurs; an orang-utan and 15 Red lechwe - all endangered species.

The bird collection had an equally impressive year, with five first time breedings in the UK - the Trumpeter hornbill, Channel billed toucan, Ashy starling, Golden palm weaver and White headed buffalo weaver. Dr Roger Wilkinson has written a full report on page 10.

The reptile section, too, had a number of successes following last year's first

breeding of the Madagascan tree boa and the Bamboo pit viper. These include a UK first breeding of the Alligator lizard and the first zoo breeding of the Cuban boa and the Brown basilisk. Partula snails, received as part of an I.U.C.N. breeding programme are also reproducing.

Although the aquarium has been under some handicap due to extensive alterations, the keepers have found time to get another zoo first breeding with the Brown discus.

Many of these 1989 successes have now gone on to other collections, where hopefully, in time, they will also reproduce and strengthen captive populations for the future. Others remain with us at Chester to expand our own numbers and allow the continued multiple generation breedings now becoming commonplace in the leading zoological collections.

Peter Wait.

MEMBERS' CONCESSIONARY TICKETS

Members are reminded that with effect from 26th March, concessionary tickets will cost £2.10 each - half the new entrance price.

Annual members may purchase up to 20 tickets annually, in blocks of five @ £10.50. Each ticket will admit either one adult or two children/OAP's. They

are not on sale at the gate, and must be purchased in advance from the Membership Office. Cheques should be made payable to Chester Zoo, and a stamped addressed envelope would be appreciated.

Maureen Allsopp
Membership Secretary.

WALKWAY NAMED IN MEMORY OF COUNCIL MEMBER

Chester Zoo has honoured the memory of a much respected member of its Council, by naming a road in the gardens "Ronald Pryor Way."

Ronnie Pryor joined the Council of the North of England Zoological Society in 1968, and his warm personality and wise advice were greatly valued by the Zoo's first Director, George Mottershead.

When Mr Mottershead died in 1978, Ronnie Pryor,

as Vice Chairman, took part in the process of appointing the present Director, Dr. Michael Brambell.

Mr Pryor died in 1984, within a few days of the death of his wife.

"Ronnie Pryor Walk" was officially opened by Miss Muriel Upton, who was Mr Pryor's Personal Assistant throughout his career as Chairman of Edward Pryor & Sons of Sheffield.

PROBLEMS OF OIL SPILLS AT SEA

**An Open Meeting on Friday
27th April 7.30pm - Chester
Zoo Lecture Hall.**

Two speakers will discuss the issues raised by oil spills at sea.

Jon Moore, of the Field Studies Research Centre, will speak on the biological and ecological effects of the oil and of the chemical dispersants used in the clean up.

A second speaker, yet to be confirmed, will address the technology of the clean up process.

Tickets, inclusive of light refreshment, are £5.00 and available through the party-bookings office in the zoo.

900,000!

Passing the 900,000 mark for the first time for ten years was certainly a cause for celebration! Philip Rippon, aged 4 years, from Bebington, Wirral was the lucky 900,000th visitor for 1989. He came through the gates in the week between Christmas and New Year, and was greeted by Marketing Manager Chris Vere with gifts for all the family, pictured below.



YES — WE HAVE SOME BANANAS

A generous gift of over three tons of swiftly ripening bananas from our Liverpool produce merchants, Strafford & Donning, gave Jim Forrest, Animal Supplies Manager, a problem. Between Christmas and New Year, almost every banana eater in the collection had already had a fair stocking up of them!

Deputy Director Alan Du Cros tackled the problem swiftly. "Let's see if the zoo's retail team can shift them" he said.

So, in best barrow boy style, the shop staff moved them all - by the 40lb box - to offer bemused visitors on their way out of the zoo. "There's banana mousse, banana fritters, banana cake, banana bread, banana splits and even banana wine!" quipped Retail Sales Manager Alan Jones, as he, Steve Whistler and Chris Vere shifted boxes of fruit. The stores van made it look as though the bananas from Belize had come straight from the docks.

Picture above shows Steve Whistler helping another satisfied customer.



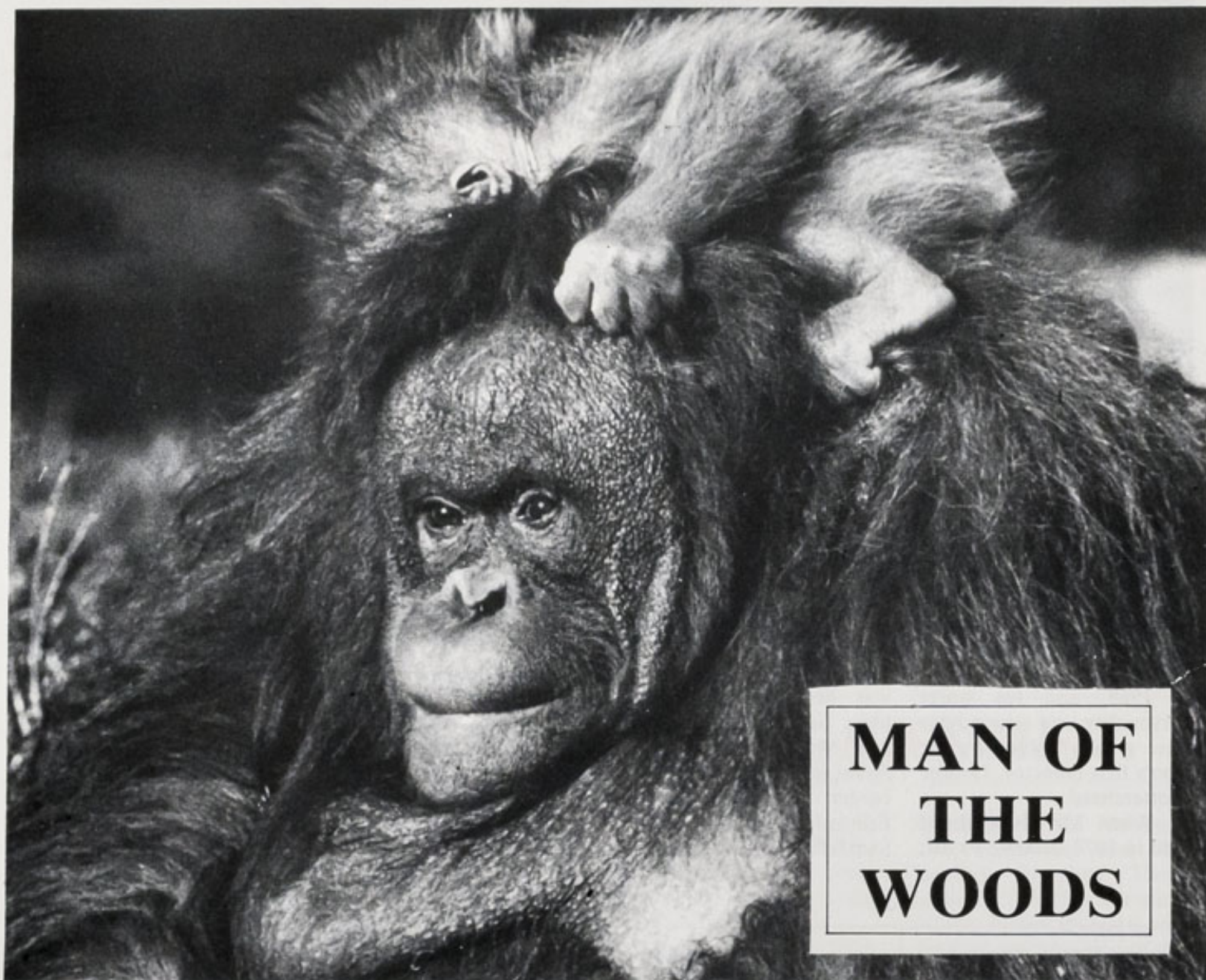
KONNICHWA*

The first of this year's Oakfield Restaurant theme gourmet evenings will be on Friday 16th March. Michele O'Sullivan and her staff have had tuition from three Japanese ladies on the authentic methods of cooking and serving a very special meal.

There are eight dishes, with wonderful names like Chawan Mushi, Saba Zushi and Sunomono! The cost is £18.75, and advance booking is essential. Phone the Party Sales Office on Chester 380280.

* Greetings





MAN OF THE WOODS

The Ape House has become one of the zoo's favourite places for visitors in recent years, due to the success we have had in breeding this rare primate. Baby orang utans have been on view constantly since 1974 and being slow to mature, they retain their baby appeal for a considerable time, entertaining visitors with their antics. But this is not the sole purpose for keeping this large ape in the collection. Both the Bornean and Sumatran races are under extreme pressure and have become endangered species, mainly through direct competition from man.

Although the forests of South East Asia are still extensive, clearing for agriculture and forestry operations has removed large areas where the orang used to live. Unfortunately, in many instances, large clearings have been made, which stop the orangs moving freely through the forests, thus creating small pockets of animals which do not meet others. As orang utans live alone or in small groups,

No. 8 in Peter Wait's series on the zoo's mammals

generally consisting of a female and a number of her young, any restriction of movement can affect the numbers born.

Enlightened

Man also used to catch orangs for the lucrative money market, but there may just be an argument that if they hadn't, there would not be the healthy captive population that exists to-day. The method of capture must be deplored. In most cases a female was killed to get the infant, which often died before it even reached its destination. Fortunately, this market is almost a thing of the past, and a far more responsible attitude exists to-day. Both Borneo and Sumatra have a more

enlightened approach and accept wild animals have a beneficial effect - if only to encourage tourism.

International and regional studbooks are kept and movements between collections are usually based on a free breeding loan arrangement. To-day, in zoos across the world, a species that was once considered to be extremely delicate and almost impossible to keep alive in captivity, is thriving and breeding in ever increasing numbers. The latest International Zoo Year Book lists 134 zoos keeping orangs, and these hold 699 individuals, of which 426 are captive bred. No fewer than 48 have been bred during the year reviewed. I think these figures prove the value of zoological collections to-day in providing areas where conservation of sensitive species can exist with some degree of safety, and ensure they remain with us for years to come.

Pongo pygmaeus is the scientific name given to orangs with an

additional *pygmaeus* or *abelii* to differentiate between the Bornean and Sumatran subspecies respectively. The name "Pongo" is derived from the Congolese term "Mpongi" and was originally used to describe the gorilla. Orang utan, is a local term, meaning "Man of the Woods." *Pygmaeus* was taken from the Greek language, meaning "small", maybe misleading for such a large Ape unless the comparison was made with man.

The uplands of Borneo and Sumatra, both similar in size to our island, are the homes of the orangs, and, like all island races, they tend to be more susceptible to the pressures of the modern world than mainland species, and the continued decline of numbers in the wild may be inevitable.

After man and the gorilla, the orang utan is the largest primate, standing up to 1.5 metres (5ft) tall, its heavily built body covered with long reddish brown hair, giving it a shaggy appearance. It has long, powerful arms, that almost reach the ground when it is standing erect. The legs, however, are relatively short and not as well developed as the arms, giving an obvious clue to its life style. Its hands are large and carry small opposable thumbs. Faces vary considerably, making identification easy. Mature males become much larger and heavier than the females with the added feature of cheek flanges surrounding the face. All adults have fatty throat pouches which are again rather more prominent in the males.

Diet

Fruit is their staple diet and forms about two thirds of their intake. The remainder of the diet is made up from young leaves and shoots and the bark from the trees. Small vertebrates and birds' eggs will also be eaten, as will large insects. Orangs seem to have the ability to locate the whereabouts of trees bearing ripe fruit - maybe by watching the flight path of pigeons and hornbills, who share a liking for the same foods. Mangoes, figs, lychees and durians are typical of the kinds of fruit found in the area. They have a large appetite and will sometimes stay all day in one fruit tree, gorging themselves. Water will be drunk from cavities in the trees.

They are not social animals and even when a number of adults are attracted by a large tree bearing fruit, there is little social interaction between them - though juveniles will show interest in each other. Mature males are territorial and prefer to avoid fights with others, though encounters can be violent and many animals carry the scars of

previous fights. males can be very vocal and have a loud bellowing call which advertises their movements and warns others of their presence.

Infants

Females become mature at about ten years and when receptive to the male, will stay with him for several days at a time. When pregnant, they will go off on their own to rear the young, which are suckled for up to three years. The young are very dependent on the mother and are carried by her wherever she goes. The gestation is approximately nine months, and the interval between infants usually three - five years. Once weaned, the young become increasingly independent, but it is not unusual to see a ten year old still with its mother, who may also have two younger babies.

In the wild, orangs appear to live up to about 35 years, and have reached 50 years in captivity.

History

The history of orang utans at Chester is fairly recent. It was 1957 when the first, a male, made his appearance. This was Jimmy, soon to be followed by Paul in 1958. Three females, Betty, Jacqueline and Josephine, joined them in 1959.

During the 1960's, the orangs were housed adjoining the chimpanzees in the tropical house, and had access to small outside islands. In 1969 the present ape house opened, and Paul was one of the first occupants. He stayed there until his death in 1978. Young animals coming to the zoo in 1966 and 1968 have given us a good foundation stock and regular breedings from Martha and Lola, both Bornean and Ramona, a Sumatran, have taken

place. A total of 13 babies have been produced by these three females since 1974.

Inter-Zoo Loans

With the co-operation of Bristol Zoo, who sent Oscar, our Sumatran male, on breeding loan, we produced the first, second-generation, zoo-bred Sumatran orang utan in 1983. Regent's Park have sent Anak, a Bornean male, again on loan, as a safeguard against over-representation of certain blood lines - always a danger when only a small number of breeding animals exist. Animals from Chester reside in places as far apart as Sweden and Singapore.

During the past year, much work re-designing the sleeping area has taken place. Being a non-public area, this type of work is not apparent to visitors, but is extremely important to the well-being of the apes. As orangs are susceptible to human ailments, care has to be taken against spreading unwanted viruses. Even the common cold can be a serious complaint to an orang. Fortunately most of the modern medicines developed for man can be used to help with good results.

Identification

Blood cariotyping has also been developed to identify each subspecies and all our animals have been subjected to the indignity of giving a little blood for this purpose. It did give some unexpected results. Lola, who originally came as a Sumatran subspecies, was identified as Bornean, and consequently, her male infant, Karau, then became Bornean and not a hybrid. Rajang, the male, born in 1968, was found to be a hybrid and not a Bornean as we had thought.



PHOTOGRAPHIC WINNERS 1989

Judging the entries for last year's photographic competition was an unenviable job for George Green, Picture Editor of North Wales Newspapers. In its fourth year, the competition attracted more entries than ever before - over 600 of them!

The overall winner, with the title of "Chester Zoo Photographer of the Year," is Mr Brian Cavanagh, of Rock Ferry, Merseyside, for his lovely portrait of a cheetah. The photograph is on the front cover of this issue.

"This photograph kept leaping out from the others at each stage of the judging" said George Green. "Technically, it is very good indeed, and the framing and composition is very eye-catching."

Mr Cavanagh's prize is a luxury weekend for two at the new Chester International Hotel.

Second prize went to Mr. R. Morris of Warrington, for the photograph of a sealion - shown top right.

The judge's comment:

"The photographer caught the sealion, with its mouth wide open -presumably about to catch a fish. Getting a bit of action in animal photography always makes a better picture."

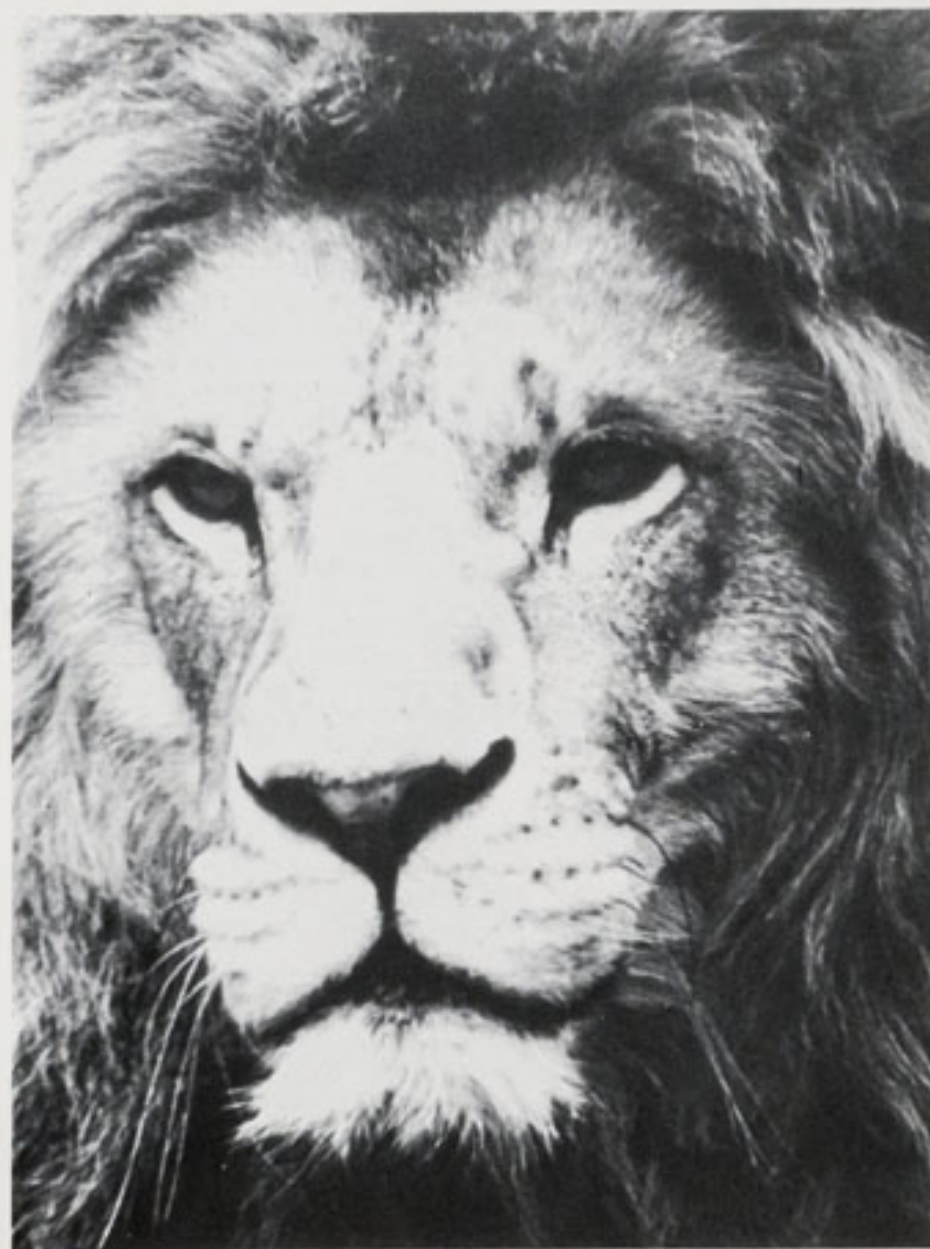
The third prizewinner is Mr D. Turner of Rochdale, who caught this majestic study of the lion, top left.

This year, there was a special prize and trophy for the best picture of the zoo's gardens, (below left). This was won by Mrs Parker of Halifax.

In the junior section, 15 year old Mark Norcott of Liverpool won first prize for the second year running. His close-up of an alert, bright eyed raccoon - below - every whisker in focus, was a clear winner.

Staff section first prize went to keeper Steve Cook, from the monkey house, for his picture of an infant Talapoin monkey, shown below right.

Entry forms for this year's competition will be available in the zoo in time for Easter.



BIRD REVIEW

1989

The most notable breedings in 1989 were those of Channel-billed Toucans (*Ramphastos vitellinus*) and Trumpeter Hornbills (*Bycanistes buccinator*). Both species hatched and reared two chicks and we believe that both are the first reported breedings in the United Kingdom for these birds.

Other breedings that may also qualify as firsts are those of White-headed Buffalo Weavers (*Dinemellia dinimelli*) and Golden Palm Weavers (*Ploceus bojeri*) in the free flight of the Tropical House, and of Ashy Starlings (*Cosmopsarus unicolor*).

First breedings are fun and also useful in extending our avicultural knowledge and experience especially where they involve genera rarely bred in captivity. However, more important than firsts are subsequent breedings, especially second and multiple generation.

We were then especially pleased to have our African Grey Hornbills (*Tockus nasutus*) breed again in 1989 but saddened when our female died incarcerated in the nest box with three chicks. The male continued feeding the chicks so the nest box was taken down, the body of the female removed, and the nest box then returned to the aviary. He continued to feed the chicks all of which were successfully reared.

Second generation breeding of two Azure-winged Magpies (*Cyanopica cyana*) resulted from the pairing of one of our hand-reared 1988 youngsters with an unrelated bird bred also in 1988 at the Tropical Bird Gardens, Rode. A further three chicks were reared by the original breeding group of three males and one female. Red-tailed Laughing Thrushes (*Garrulax milnei*), Coledo Mynahs (*Sarcops calvus*) and Kookaburras (*Dacelo novaeguineae*) were also reared in the arcade aviaries next to the Bird House. A first breeding at Chester was that of the White-cheeked Touraco (*Tauraco leucotis*).

Breedings in the Tropical House, additional to those already mentioned included Orange-headed Ground Thrush (*Zoothera citina*), Red-eared Bulbul (*Pycnonotus Jocosus*), Silver-eared Mesia (*Leiothrix argenteauris*), Mountain Witch Doves (*Geotrygon versicolor*) Crested Bronzewing (*Ochyphaps lophotes*) and Laughing Doves (*Streptopelia senegalensis*). Newly arrived Celebes Quail Doves (*Gallinolumba tristigmata*) nested but their egg disappeared before hatching.

Only two of our four pairs of Rothschild's Mynahs (*Leucopsar rothschildi*) laid eggs and only one of these hatched young. From two breed-



*Dr Roger
Wilkinson,
Curator of birds*

ing attempts three chicks were removed when about five days old and hand-reared for us by Anne Morris.

We were less successful with Spectacled Owls (*Pulsatrix perspicillata*) after a promising start losing both the incubator hatched chicks at a few weeks old. One pair of Snowy Owls (*Nyctea scandiaca*) reared five chicks, and a second pair a sixth youngster. The Great Eagle Owls (*Bubo bubo*) reared three chicks and the two pairs of barn Owls



Kookaburra Chick



White Stork with chicks.

(*Tyto alba*) between them hatched twenty-three youngsters of which twenty-one were reared until old enough to be collected by Dr Carol Hackney for the Owl Release Project. Our most delightful new arrivals are two White-faced Scops Owls (*Otus leucotus*), on loan from London Zoo.

Parrots

Parrots bred included three Lesser Vasa Parrots (*Coracopsis nigra*), two Blue and Yellow Macaws (*Ara ararauna*), three Lesser Patagonian Conures (*Cyanoliseus patagonus*), six Yellow-faced Parrotlets (*Forpus xanthops*) and seven Barraband Parrakeets (*Polytelis swainsoni*). Most notable were the rearing of two Musk Lorikeets (*Glossopsitta concinna*) and two Musschenbroek's Lorikeets (*Neopsittacus musschenbroekii*). We received a male Queen of Bavaria Conure (*Aratinga guarouba*) to pair with our young female, a second pair of Greater Vasa Parrots (*Coracopsis vasa*) and new for the collection two Green-cheeked Amazons (*Amazona viridigenalis*).

Other new arrivals to the bird collection in 1989 included Lady Amherst's Pheasants (*Chrysolophus amherstiae*) and Edward's Pheasants (*Lophura edwardsi*). Both species are listed in the most recent Red Data Book, the listing of Lady Amherst's warning us against being too hasty in our categorisation of which species deserve zoo space.



Rothchild's Mynah

Pheasants

Another species which has been 'promoted' into the IUCN listings of endangered species is the Blue Eared Pheasant (*Crossoptilon auritum*), now joining the White Eared Pheasant (*Crossoptilon crossoptilon*) and the Brown Eared Pheasant (*Crossoptilon mantchuricum*).

White Eared Pheasants bred again at Chester this year, as did Grey Peacock Pheasants (*Polyplectron bicalcaratum*) and Himalayan Monals (*Lophophorus impeyanus*). The previous years successes with breeding Bare-faced Curassow (*Crax fasciolata*) were repeated in 1989 with four youngsters reared. Unlike

1988 when all six birds reared were males, the four youngsters of 1989 sexed out as two males and two females. One of the 1988 bred males has been retained at Chester and paired with an older female to give us two pairs of these handsome birds. The other youngsters have been sent on loan to Rotterdam and Paignton Zoos and one to the private collection of Ken Howman. Variable Chachalacas (*Ortalis motmot*) bred again in 1989 and other Galliformes reared included Roulroul Partridge (*Rollulus roulroul*) and Californian Quail (*Lophortyx californica*). Our Congo Peafowl (*Afropavo congensis*) laid but only one clutch was fertile and sadly these failed to hatch. Hopefully these problems may be overcome next year otherwise we may need to look for a different male.

Cranes

Two Sarus Cranes (*Grus antigone*) were reared, one from the first clutch was successfully fostered by a bantam, repeating our experience of the previous three years. More notable was the second chick hatched by the parents from their second clutch of eggs and successfully reared by them after unsuccessful attempts in 1987 and 1988. The Demoiselle Cranes (*Anthropoides virgo*) laid eggs but these again proved infertile. Our recently acquired second pair of Demoiselles on sexing proved to be two males. We hope to exchange one of these for a female before the next breeding season. New arrivals to the collection were six West African or Black Crowned Cranes (*Balearica pavonina*), four received on loan from Barcelona Zoo, one from Paradise Park and one from Joe Blossom. We now have four pairs of West African Crowned Cranes at Chester and are working together with Rode Tropical Bird Gardens with this species. Although not yet listed as endangered the West African Crowned Crane is becoming extremely localised and now no longer breeds in many of its previous nesting areas. The bird is now extinct as a breeding bird in Nigeria where it once bred widely and is the country's national bird.

Ibis

We received a further four Waldrapp Ibis (*Geronticus eremita*) from Jersey Wildlife Preservation Trust taking our colony to a total of twenty birds. These Ibis are now virtually extinct in the wild. In order to give the Waldrapps the best possible chance of breeding we have sent our other Ibis, Herons and

Gulls that previously shared their accommodation, on loan to Penseynor Wildlife Park. One pair of Waldrapp hatched three chicks but failed to rear them. As with many other bird species we may expect a number of unsuccessful attempts by the parents before they gain sufficient experience in rearing. However the pair of Waldrapp that failed this year in rearing their own chick had previously been successful in rearing a Sacred Ibis (*Threskiornis aethiopica*) during the previous year's cross-fostering experiment. It would appear that Waldrapp chicks are rather less robust and more tricky to rear than the Sacred Ibis chicks. This is probably the case for many endangered species for which direct persecution is not the cause of their decline in the wild. The most endangered species seem often to be also the most difficult to reproduce in captivity.

Storks

White Storks (*Ciconia ciconia*) bred for the first time at Chester with two chicks being reared on show by their most attentive parents. Caribbean Flamingoes (*Phoenicopterus ruber ruber*) were successful for the third year running with three chicks reared and for the first time at Chester a pair of Chilean Flamingoes (*Phoenicopterus chilensis*) hatched and reared a chick. Both Caribbeans and Chileans numbers have also been increased through



White Cheeked Touraco



Lesser Vassa Parrot
Male feeding female

birds obtained by exchange or purchase. A few moves are still needed in order to balance the sexes of our birds. Hopefully 1990 will see the completion of our new exhibit for the Chilean Flamingoes — separating the species and removing the possibility of hybridisation. The Humboldt's Penguins (*Spheniscus humboldti*) were less productive than last year but nevertheless eight birds were reared from ten hatched. Five of these were sent to Harewood bird Gardens in exchange for Chilean Flamingoes.

Rheas

Five Rheas (*Rhea americana*) were bred but following an embarrassment of Emus (*Dromaius novaehollandi*) in 1988 when we had difficulty in finding homes for the sixteen birds bred, we decided to not rear any in 1989. Chilean Tinamous (*Nothoprocta perdicaria*) continue to be bred, although again we try to match production with demand as indicated by requests from other Zoos for their youngsters.

Waterfowl reared in 1989 included Emperor Geese (*Anser canagicus*), Hawaiian Geese (*Branta sandvicensis*) and a Ruddy-headed Goose (*Chloephaga rubidiceps*). Amongst the ducks bred were five Ringed Teal (*Anas leucophrys*) and six Marbled Teal (*Anas augustirostris*).

Although we had our disappointments at the end of the year we had a respectable total of over 360 birds hatched from more than 70 species. Not all the species were successful in rearing youngsters but 62 species had offspring surviving over 30 days.

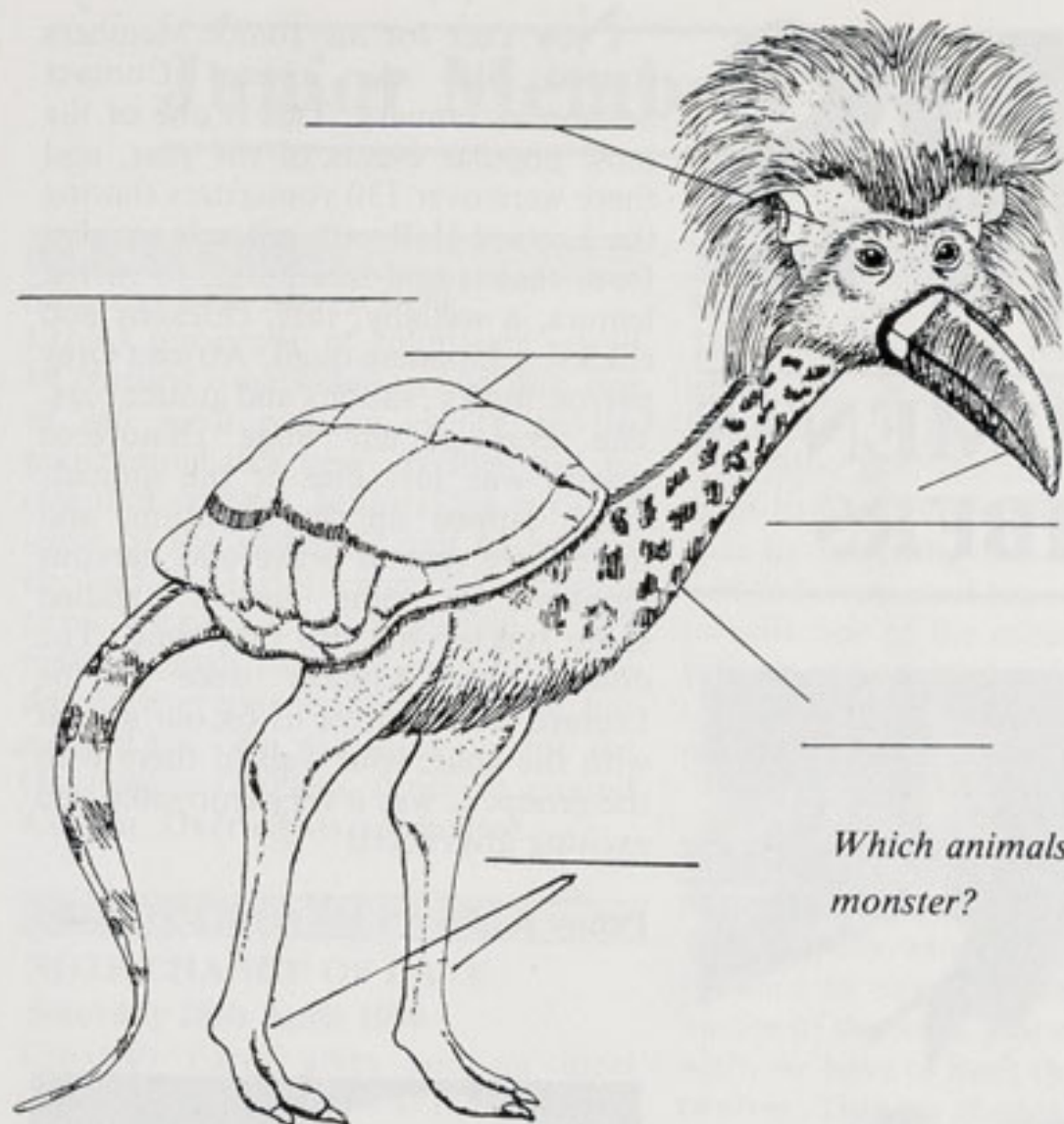
1990's

Our greatest disappointments were with the Congo Peafowl and Pink Pigeons which laid but failed to hatch chicks and the Waldrapp's that hatched chicks but failed to rear them. Those will be our main challenges in the 1990's in continuing to promote our interests in captive breeding for conservation.

Roger Wilkinson
Curator of Birds

SEARCH FOR A QUIZ-WHIZZ!

**Brenda Norgain,
Head of Education,
is on a quest for
quizzes.**



*Which animals make up this
monster?*

Most people love a quiz - but have you thought of inventing one?

The Education Division produces a never-ending stream of quizzes. There are the Family Fun quiz sheets; quizzes linked to exhibitions; newspaper competition quizzes, and "specials" for the marketing department.

Quizzes in the Zoo

The family quizzes, on sale for a few pence to all visitors, are fun - but they are also educational, and therefore, to be true to the principle which underlies all we do in the zoo, the answers must be obtained by looking at the animals and not by just reading the label, or by just knowing the answer before the zoo visit! That sounds easy; it's not! At least, it's not too difficult for the first few quizzes. Coming up with new ideas all the time is difficult.

Obviously, all these quizzes have to be tried out in the zoo before being available for use. There must be only one answer, and if we cease to keep a species mentioned in the quiz, that one must be withdrawn.

Quizzes to take home

These take the form of word searches, 'spot the difference', jumbled animals, etc. It's important that the solver has a reasonable chance

of remembering the answer from the zoo visit, or is able to work it out from the information given. They are well worth producing, as they act as a reminder of a good day at the zoo, and earn a little welcome income.

Compile a quiz

The list is endless. So, will you help? It is fun making up one or two. You will find it very satisfying if your quiz or items are selected for use in our published quizzes. We'll give you an acknowledgement and a complimentary copy of any publication which includes it. And for just one lucky winner, there will be a prize - a voucher for £15 to spend in our splendid Oakfield Restaurant.

Competition Rules

1. Entries must be original, of your own devising.
2. All entries become the copyright of the North of England Zoological Society.
3. You must provide the answers (!) and a guidance of the intended age range.
4. The Education Officers reserve the right to use or modify any material, and their decision on this, and selection of winning entry is final.

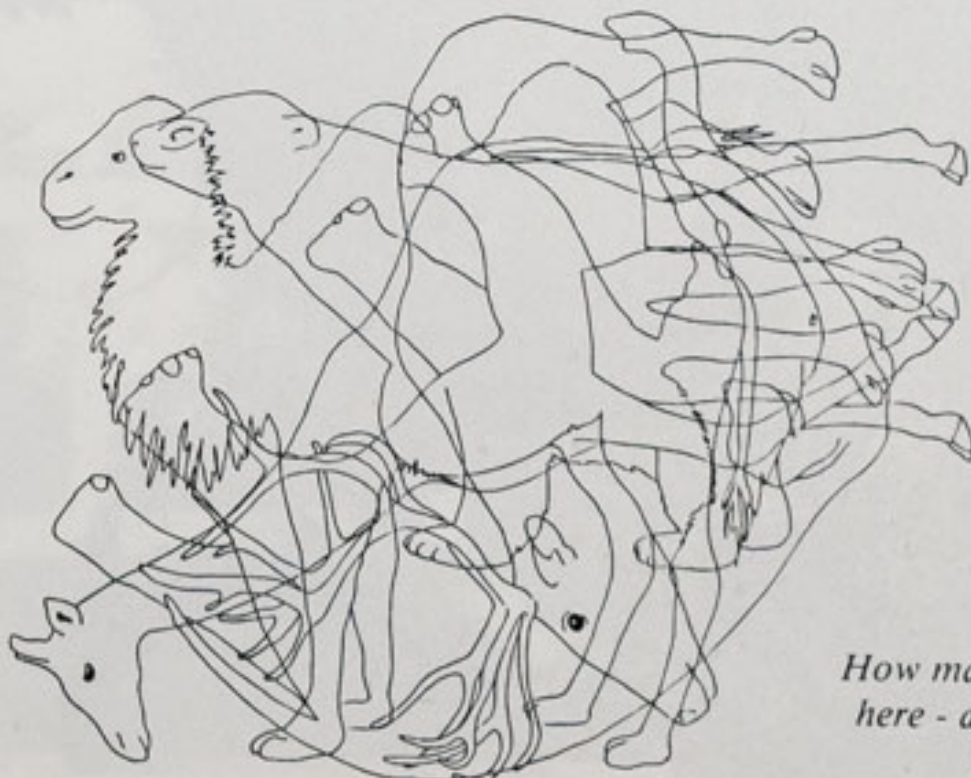
Finally remember:

The quizzes should be fun and interesting. They should not present wrong information, and they should be based on our zoo animals.

Send you entry, complete with signed note stating that the material is of your own devising to: The Education Division, Chester Zoo CH2 1CH.

The closing date is 30th April 1990.

First correct answer to the two quizzes on this page, opened on 1st April, will win a copy of "Kirklands Animals."



*How many animals
here - and can you
name them*

Junior Members' Field Trips and Meetings

TRACKS & SIGNS

Saturday 24th March 1990

I think our group of volunteers would be lynched if we failed to add this, one of our most popular events, to the programme this year. Wellies will be essential so that Juniors can go into some of the paddocks and enclosures to find footprints and take plaster casts. We cannot guarantee that we will make enough plaster casts during the day for everyone to take one home, but we will try. We will meet outside the Oakfield at 11.00am, finishing around 4.00pm. **Over eights are invited.**

CROXTETH FARM PARK

NOTE CHANGE OF DATE

Saturday 28th April 1990

Croxteth Farm gives you an ideal opportunity to see how a 'Home Farm' to a large country estate worked before much of the modern machinery was invented. The Farm is traditionally laid-out and maintains only unusual and rare breeds of cattle, sheep and poultry. It is well worth the journey over to Liverpool to see the estate. We will be leaving from the staff car park at 10.00am, and arriving back at 4.30pm. **Over eights are invited.**

AINSDALE NATURE RESERVE

Saturday 23rd June 1990

Those of you who have visited this amazing Nature Reserve near Southport with us before, will remember that the day is not for the faint-hearted! **Over tens are invited** to join us searching the sand dunes and woods for unusual fauna and flora and to walk one of the nature trails, which is likely to be quite hard work, but very enjoyable. We will leave the staff car park at 9.00am, returning at 5.00pm.

DAY WITH A KEEPER

Saturday 21st July 1990

This is a day which many of you look forward to eagerly, but owing to the nature of the work you will be involved with, we have to limit the event to **over twelves**. This is a chance to come along for the day and work alongside one of our keepers, giving you the opportunity to see what the job involves and to see some of the 'behind the scenes' areas of the zoo. The day will start when we meet outside the Oakfield at 10.30am, and will end around 4.00pm, when Juniors will return from the sections they have been working on, to the Oakfield.

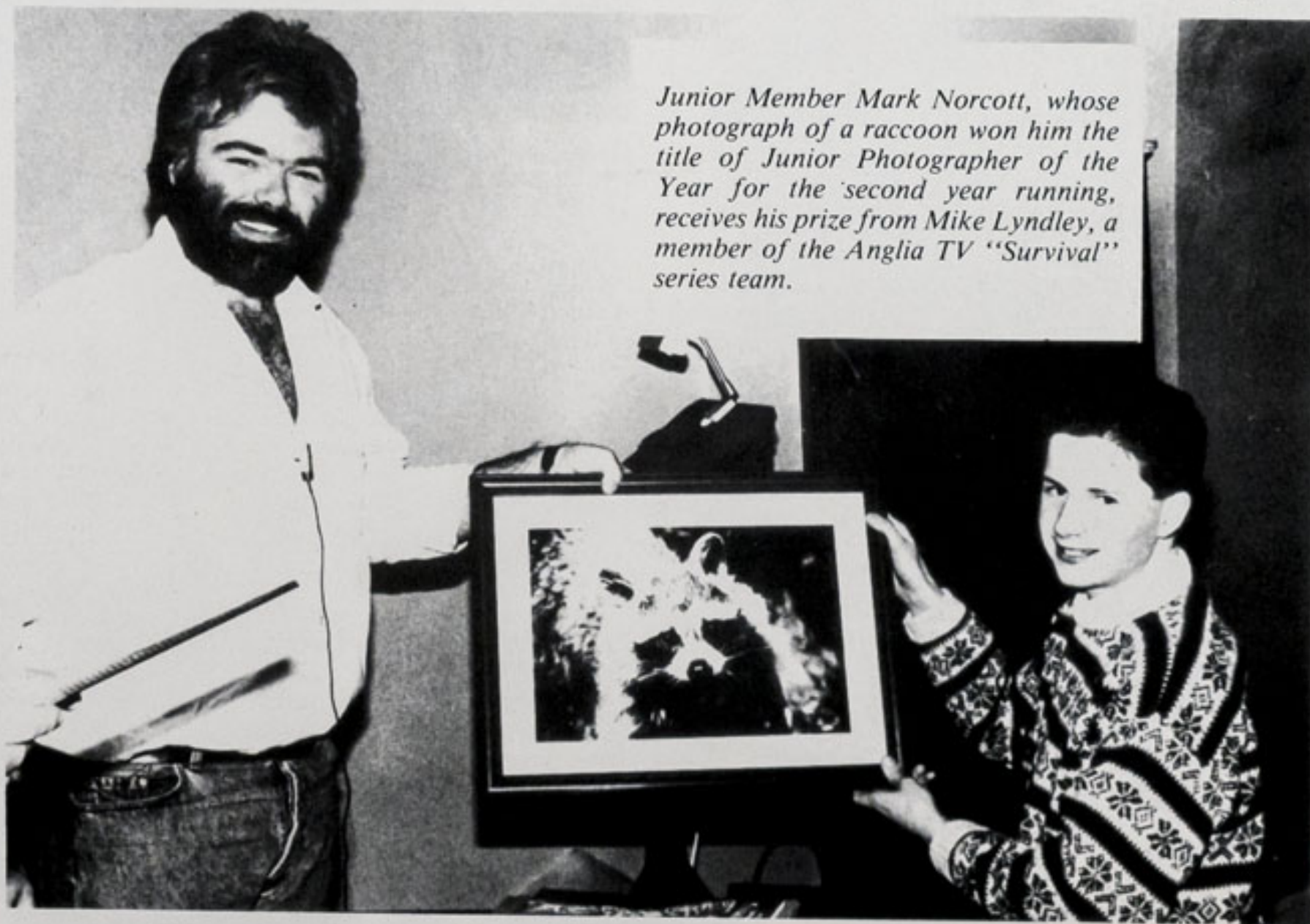
PLEASE NOTE

Bookings must be made for **all** events. Please ring me at the Zoo, **not more** than two weeks before an event if you would like to attend. Places are likely to be limited for trips, and are allocated on a first-come, first-served basis.

For those trips which involve either a bus trip, or the provision of food or materials, a charge will have to be made in order for us to cover basic costs. This will be collected on the day and will vary according to the distance travelled/food/materials provided.

The list is provisional, and in exceptional circumstances we may have to alter the dates and times of some of the trips, so please keep an eye on the listing on the JuNews page of the magazine to keep up-to-date.

Penny Rudd - Junior Members' Club



Junior Member Mark Norcott, whose photograph of a raccoon won him the title of Junior Photographer of the Year for the second year running, receives his prize from Mike Lyndley, a member of the Anglia TV "Survival" series team.

JU NEWS

SOME TOUCHING MOMENTS FOR JUNIOR MEMBERS

New Year for the Junior Members started with the annual Contact Session in January. This is one of the most popular events of the year, and there were over 130 youngsters sharing the Lecture Hall with animals ranging from snakes and tarantulas, to ruffed lemurs, a wallaby, rats, chickens and chicks, a Japanese quail, African Grey parrot, ducks, rabbits and guinea pigs. The ever patient huge rhinoceros iguana was just one of the animals which lapped up the attention, and there were several brave and nervous moments as some juniors handled some species for the first time. The donkey and reindeer were at the Lecture Hall to greet us on our arrival with the goat, who walked there with the group. It was a very enjoyable and exciting afternoon!

Penny Rudd.



Derrick Thompson took these photographs of Junior Members with some of the zoo's friendlier creatures.



Chester
ZOO
Life

SUMMER 1990

