



ZOOLOGICAL GARDENS  
CHESTER  
*Zoo Life*



**Winter  
1999**

### Business is booming!

It is wonderful to complete the century on a very high note! In 1998, we had the largest number of visitors for 20 years, and I thought it would be hard to equal that this year.

We have, however, increased numbers by more than 4% and are again comfortably over the million mark in total! Membership of our charity has also increased in both the adult and junior categories and now stands at 14,500 – an all-time record.

The Zoo finances are correspondingly healthy and we anticipate our total income will, for the first time, be over £10 million. It is interesting to recall that in 1984, when the Zoo reached its first half century, the level of capital expenditure was £160,000, whereas now it is £1.9 million – more than a tenfold increase!

This means better homes for our animals, better facilities for staff, volunteers and visitors and better funded programmes in conservation, education and science.

### High public profile

A vital ingredient in attracting visitors has been excellent animal exhibits and high quality educational interpretation. Marketing this on television certainly helps our charitable cause and many television producers have chosen to film here.

We have, for example, featured on several children's programmes and Channel 4 Schools programmes. The Zoo was the venue for episodes of 'She's Got to Have It'; Granada's 'Just the Job'; 'Wild Things'; and a BBC Science programme.

This Autumn, we had a 30 episode series, 'Vets to the Rescue' which was broadcast every weekday for six weeks on BBC1 at 12.30pm.

Filming for 'Vets to the Rescue' took place over 15 days during the Summer – two programmes each day. The BBC built a set on our old car park, and invited people to bring in their pets for consultation with Trude Mostue, television's glamorous vet.

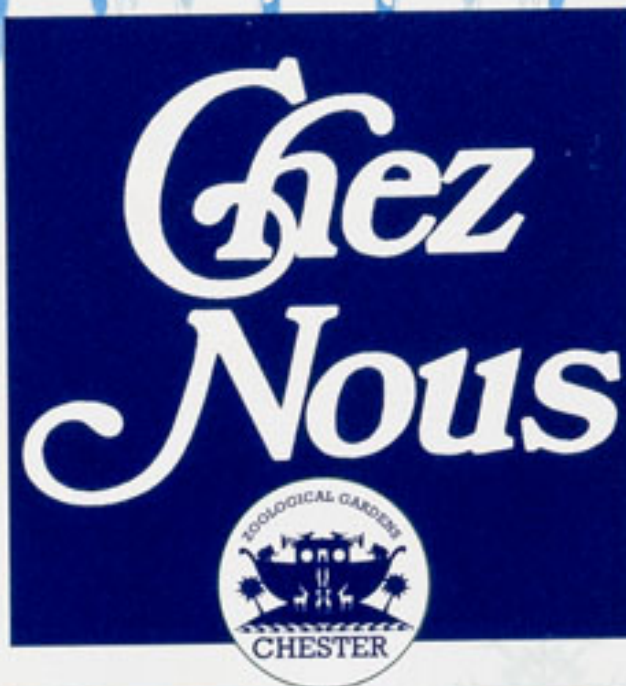
For part of each programme, the cameras came inside the Zoo, to feature our own veterinary work. The result was a very interesting and varied series. We hope that the BBC will repeat it at peak viewing time.

### Zoo re-organisation

Given our recent success, it would be tempting to continue as we are, without considering if the current Zoo organisation is the best possible arrangement for the next millennium. We did not give into temptation! Earlier this year we took advice from a senior consultant in this field, and – following deep discussions with staff and Council – major changes were implemented that will substantially improve all departments.

From a public perspective, one of the most significant of these changes is the formation of an entirely new Visitor Services Division.

Although we believe that our visitors have been well cared for, the services have been shared between a number of departments. This resulted in unnecessary overlap and meant that no one department had the crucial



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Editor: Pat Cade



*This is a very appropriate time to offer a very warm 'thank you' to all Zoo Life readers for their continued support of Chester Zoo.*

*On behalf of Council and staff, I wish you a very Happy Christmas and good fortune in the New Year. 'Lang may yer lum reek' – as we used to say in my native Scotland before environmental pollution became an issue!*

■ Front cover: Conservation is not just about large and exotic creatures! The tiny Harvest Mouse is the focus of one of the Zoo's long term projects, in collaboration with Cheshire Wildlife Trust. See the article on page 17.

Photo by Ian Walker

responsibility of focussing on our customers' needs in a more coordinated way.

The task of the new Division, to be formed in the new year, will be to oversee site cleanliness and presentation, transport, catering, retail, toilets, facilities for disabled visitors, and all the other diverse aspects that are so important for maximising the enjoyment of a day at the Zoo.

### Big Birthday!

New Year's Eve will, of course, be a world-wide celebration. At Chester Zoo we have a very special reason for celebrating that date!

Our wonderful baby elephant, *Sithami*, will reach her second birthday. *Sithami* means 'Hope' and her arrival certainly gave us hope and confidence for the future breeding of Asiatic Elephants at the Zoo – and for the development of a self-sustaining 'safety net' population in collaboration with European zoos.

Recent research conducted by the British Mammal Society highlights the increasingly grave plight of Asiatic Elephants. Once counted in millions, the population in North East India has, for example, now dwindled to an alarming 11,000 or so.

At Chester, the year 2000 should see the arrival of two more calves. Our bull *Chang* has been playing his part in the continuation of his species, and both *Thi-hi-way* and *Jangoli* are pregnant.

Work on the new Elephant facility is now under way, doubling the outdoor space for the animals. This will enable us to invite more females from other collections to spend time in *Chang's* company, and Chester Zoo will then truly become the UK National Breeding Centre for Asiatic Elephants.

### A New Century

The turn of the Century should give us all pause for thought, so see my article *Millennium Reflections* (pages 6/7) on the past, present and future of Chester Zoo. For year 2000, there will be in addition to the major new Elephant development – *Islands in Danger*, the *Wildlife Discovery Centre*, the impressive *Roman Garden* and much else. In 2001, there will be the opening of the spectacular *Spirit of the Jaguar* complex (details on the centre pages of this magazine).

We are immensely grateful to the Jaguar Car Company for sponsoring the Zoo and for their commitment to our vision for the next millennium. I must also thank our many other sponsors and animal adopters, large and small, for helping us to achieve so much. For core funding we remain dependent on income from visitors, including gate tickets, retailing and catering. Without our visitors, members and adopters, we would be unable to carry out any new improvements or fund our extensive commitment to conservation of endangered species, both in the Zoo and in the countries of origin.

## MEMBERS' MEETINGS

January - May 2000

### 15 January

Mark Sparrow *From Kew to the Zoo*

### 12 February

Michael Coupe

*Birds of Prey in Britain and North America*  
(with live demonstration).

### 11 March

Professor Gordon Reid

*Zoo Outreach in Costa Rica*

### 15 April

*Zoo Review,*

Director and Heads of Division

May - AGM (date not yet agreed)

## CHESTER ZOO

The winners of recent draws were:

### JULY 99

£100 Miss I Rigold, Nova Scotia

£100 Mr G Milan, Rhyl

£ 50 Ms J Irving, Bebington

£ 50 Mr & Mrs Lindsay-Smith, Pen-y-Mynydd

£ 50 Mr N Morgan, Warrington

### AUGUST 99

£100 Mr J Clegg, Kirkdale

£100 Mrs C Pearl, Oxton

£ 50 Mr R Davies, Wem

Membership of the '100 Club' is still invited. The cost is £5.00 per month, and all money received is divided equally between the Zoo's conservation fund and the prizes to members. Contact Alan Sykes at the Zoo for details.

£ 50 Mr N Morgan, Warrington

£ 50 Miss I Rigold, Nova Scotia

### SEPTEMBER 99

£100 Mrs K Parsons, Boughton

£100 Mrs I Thompson, Upton by Chester

£ 50 Mr A Chiverton, Bognor Regis

£ 50 Mrs G Billingham, Buxton

### OCTOBER 99

£100 Mr S Kalischer, Menston

£100 Dr P McDuggleby, Irby

£ 50 Mr R Grice, Parkgate

£ 50 Mr A Carr, Thingwall

£ 50 Mr D Keay, Blacon

## Legacy

We are very grateful to receive a generous donation from the estate of the late Mr Norman Kendall Horrocks. Mr Horrocks, a resident of Marple, was a retired schoolmaster. He was at one time Senior Geography teacher at Central Manchester High School for Boys, and authored a standard text book on physical geography. Mr Horrocks never married and all his life enjoyed a profound respect for every aspect of learning. So it is extremely fitting that his bequest will benefit both the Zoo library and our scientific outreach work.

## Award

THE Association of British Wild Animal Keepers gave the late Phil Whalley the award for the *Best Enrichment Article* and the overall *People's Choice Award* for his submission based on the Monkey Islands Exhibit.

News of this success was received with pleasure and sadness by his friends and colleagues at the Zoo.

## FAUNA AND FLORA INTERNATIONAL (NORTH WEST GROUP) - SPRING PROGRAMME 2000

Owing to the travelling nature of the speakers, we have to build a little flexibility into our programme to make the most of speakers' availability. On exceptional occasions, we may have to alter either the date of talks or the listed speakers.

### FRIDAY 28TH JANUARY 2000

#### DOCUMENTING, PHOTOGRAPHING AND CONSERVING INDONESIAN WILDLIFE

with JOE KENNEDY

What better start to the new Millennium than a Winter's evening being transported to Indonesia in the company of Joe Kennedy, documentary film maker, producer and director as well as internationally renowned photographer.

Joe's incredible 'natural history' career, largely with the BBC, has taken him to most corners of the earth but on this occasion he will be concentrating on Indonesia.

We will have a preview and behind-the-scenes look at the filming of the BBC Natural History Unit's major new Natural World documentary on Indonesia, due to be shown over three programmes in Spring 2000, which was featured in August's *BBC Wildlife* magazine.

Joe's talk will concentrate on the natural world and environment as well as the people of Indonesia. This promises to be a brilliant evening.

### FRIDAY 11TH FEBRUARY 2000

#### ECCENTRIC ENDEMIC: THE WILDLIFE OF MADAGASCAR

with NICK GARBUTT

Nick Garbutt is a zoologist, natural history author, photographer and artist. He has worked on a variety of research and conservation projects as far afield as India, Nepal, Kenya, Tanzania, Zimbabwe, Borneo and Mauritius - but places Madagascar above all of these in his estimation.

Over the past nine years he has visited annually, researching and photographing the island's unique wildlife. He is a regular contributor to many magazines as well as to the BBC Natural History Unit's picture library. Nick is author of *Mammals of Madagascar* and *Madagascar Wildlife - A Visitors Guide* and in 1996 was winner of the *BBC Wildlife Photographer of the Year Competition*.

### FRIDAY 17TH MARCH 2000

#### RWANDA'S MOUNTAIN GORILLAS - NOSES, TOES AND MEIOSIS

with ANDREW ROUTH

Andrew Routh, a keen supporter of FFI North West since its early days, is a veterinary surgeon with a particular interest in the treatment and conservation of wildlife, both in the UK and abroad. Andrew has worked in Thailand with Gibbons, Bears and Elephants, taught avian medicine, surgery and rehabilitation in India, worked with Lizards in the Caribbean and Loggerhead Turtles in Zakynthos, about which he has previously spoken to FFI.

Andrew's talk this time is about Gorillas, with special reference to some of the veterinary problems they encounter, including the condition of syndactyly, first observed by Diane Fossey and thought to be inherited. He will also touch on the problems in managing small, island populations with regard to their genetic diversity.

### FRIDAY 7TH APRIL 2000

#### MARINE TURTLE CONSERVATION IN THE MEDITERRANEAN

with DR BRENDAN GODLEY

Following his passion for Marine Turtles, developed when he led several expeditions to Turkey as a veterinary student at Glasgow University, Brendan has become one of the 'leading lights' in this area of conservation.

Now a Veterinary Surgeon, Brendan runs the Marine Turtle Research Group based at the University of Wales, Swansea, and has close involvement with work in the field.

We have been trying to organise Brendan's visit for a while, but his extensive travels overseas - for the past year mainly between the Mediterranean and Ascension Island - has involved some planning! We hope, but cannot guarantee - as with other speakers who are eminent research scientists based in the field - that Brendan will be in the UK in April 2000. His talk will bring us right up to date with the current situation for these threatened marine chelonians.

## FFI Evenings

ARE open to everyone, and are a combination of serious message and social enjoyment. Lectures are held at the Lecture Hall, Chester Zoo, just off the A41 north of Chester. Doors open at 7.00 pm for a 7.30 pm start. A light buffet and wine are included in the price of £6.00 for Members of FFI, £6.50 for non-members, and £5.00 for students. All funds generated go to specific FFI conservation projects. Please telephone Penny Rudd at the Zoo on 01244 650215 for further information, or if you would like to attend one of these evenings. Prior booking is not always essential, but it is helpful for catering purposes.



# OLD FACES, NEW JOBS!

CHIEF Curator Chris West concludes his report on his 'cabinet' re-shuffle, with details of Neil Spooner's new role.

Neil is probably best known within the Zoo and the Society generally for his association with Elephants. Certainly many photographs (including in back copies of *Zoo Life*) testify to his involvement in the success of our Asiatic Elephant herd. Many people may, however, be unaware of Neil's many years of general experience in zoos worldwide and as a traveller and organiser. It is this experience that is being drawn on in the Project Liaison role set up last January.

The Zoo is currently progressing a considerable number of development projects – many of them of significant complexity and major capital investment. Examples are the extension landscaping and environmental enrichment of the Elephant paddock and planning to similarly improve the environment enjoyed by our breeding population of Black Rhinos. There are literally dozens of smaller projects which also require co-ordination and 'driving forward'. This vital role is being carried out by Neil with colleagues from Animals and Estates Division, but he still finds time to support broader Elephant and other conservation initiatives.

Please reflect on the painstaking work of Neil and others when you see so many changes for the better in our Zoo!



## Honorary Fellow

CONGRATULATIONS to Zoo Council Member Mr Brian Coles, who has been elected an honorary fellow by the Royal College of Veterinary Surgeons.

The honour is in recognition of his outstanding contribution to knowledge of avian medicine and surgery. Brian Coles has been principal of a busy small animal practice for 33 years, and has been closely associated with Chester Zoo since he saw practice here as a student in 1954.

He is Consultant in Avian Medicine and a member of the Zoo's Scientific Advisory Committee. Photograph shows Brian Coles receiving his scroll from Mrs Lydia Brown, President of the Royal College of Veterinary Surgeons.



## Computer Hiccups

WE are currently in the process of transferring our Membership and Adoptions services to a new computer system. This will allow us to give you an even better service. However, during the changeover, (as those of you who have ever had any dealing with computers will readily understand!) there may be some slight 'hiccups' in our various communications. We hope you will understand the complexities involved and be patient if you experience any difficulties.

## Cool Millionaire

FOUR-year-old Emma Rogan from Gatley, Cheshire was our millionth visitor for 1999 on Sunday 14th November. Tigers are her favourite animal so resourceful Celia Long from The Ark Shop produced one for Emma, with a companion

lion for younger sister Clare. Chris Vere was there to congratulate her mother and father, Sharon and Peter, offering free admission, millennium calendars and a special certificate. Andrew Price took the picture.



*Book review by Mark Pilgrim, General Curator, Operations.*

## In Praise of Primates

Steve Bloom, Konemann 240pp £9.99 ISBN 3829015569 (hb)

THE first thing that struck me on opening this book is the very high quality of the photographs.

The second thing was how little text it contains.

Steve Bloom's beautiful pictures, mainly of Chimps, Bonobos, Gorillas and Orang utans, were taken either in the wild or at rescue centres and zoos, including Chester. One cannot fail to instantly recognise the expressions and the emotions behind them in the faces of these apes.

That we can read these faces so well should serve to remind us of our closeness to them and our responsibility to care for them now and to safeguard their future.

These faces more powerfully express the message in the title of this book than words could ever do.

Bet you can't look at the young Orang catching rain in his mouth without smiling! At an incredible £9.99 it is worth buying for that alone.

It is on sale in the Ark Shop – so present your membership card, or the 10% discount voucher from the Autumn issue of *Zoo Life*, and it will be only £8.99!

# Garden Awards

OUR talented gardening team picked up two more awards this autumn.

The coveted North West in Bloom trophy for the Best Large Tourist Attraction has again returned to the Zoo – for the 8th time! – and we also won a special merit award in the Chester in Bloom competition.



Picture shows General Curator of Botany and Horticulture, Mark Sparrow and Amenities Manager, Chris Williams collecting the North West in Bloom awards from the Lord Mayor of Chester.



## Father Christmas and the Grotto

**DAYTIME** from 12 noon – 3 pm at the *Twilight Zone*.

Saturdays and Sundays in December plus Monday, Tuesday and Wednesday, 20th, 21st and 22 December.

**New Magical Fairy Light Lit Evenings.**

Admission between 5 pm – 7 pm with fairy lights to lead you round part of West Zoo – Elephants, Monkey Islands and *Twilight Zone*. **£5 per person** (adult or child over 3) (**Members concession** £4) includes child's present from Father Christmas and warming drink and snack. Ark Shop open for a huge selection of gifts. Tuesday 7th December, Thursday 9th, Saturday 11th, Tuesday 14th, Thursday 16th, Monday 20th, and Tuesday 21. No need to book.



## A Day to Remember

IN September 15 members of our *Legacy Pledge Club* enjoyed a special 'Behind the Scenes' visit with Keeper, James Andrews. This is one of a number of special privileges offered to supporters who have been kind enough to tell us they have mentioned the Zoo in their wills.

The Club were able to see the Ring-tailed Lemurs and the Chimps being fed, and then were treated to a very 'close' close up with Cormac, our bull Giraffe.

"A visit to feed the Penguins was next" explained James, "then, onto another close encounter, this time with Elephants!"

The afternoon was rounded off by a backstage tour of Monkey Islands and a spell in the *Twilight Zone*.

Many thanks were expressed to James and all his colleagues who helped to give our Legacy Pledgers a day to remember. Another such tour will be arranged in the Spring.

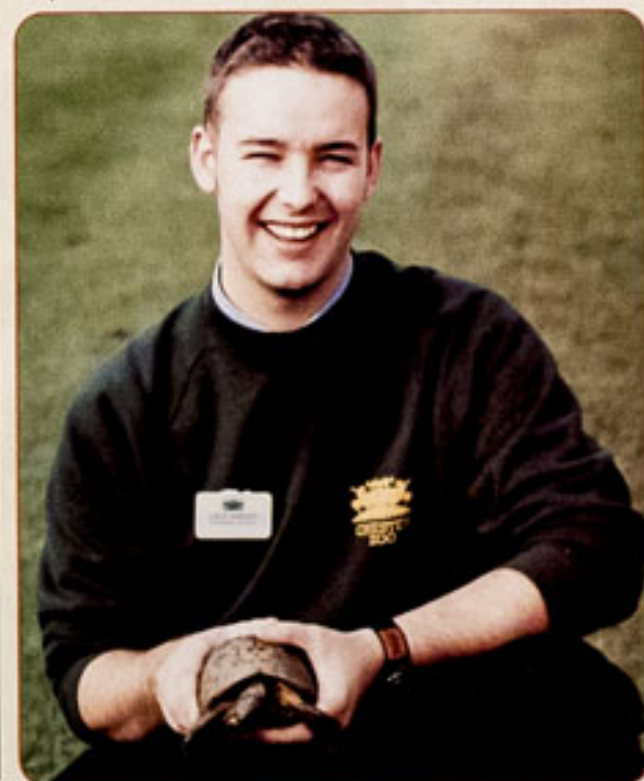
Anyone who would like to join the Legacy Pledge Club should contact Development Manager, John Regan on 01244 650230.

## Welcome Jason!

JASON Sheridan is the new member of our Education team.

Jason earned his teaching qualification at Nottingham Trent University, following a degree in ecology at Sheffield University.

He joined the Zoo at the end of September.



## Alice meets the White Rabbit

EACH year, the Lewis Carrol Society elects a young girl to be Alice in Wonderland. The Millennium 'Alice' is 10 year old Jane Whitlow from Preston Brook. She continued the tradition of the last ten years, by

making her first official engagement renewing the Society's adoption of a White Rabbit in the Children's Farm. She is pictured here sharing a hug with a rabbit called Louis!



FRANCES Jaques has been appointed as the Director's new Personal Assistant. She took up the post at the beginning of September following 3 years in the oil and gas industry.

Prior to that she lived in Norway for 20 years, and for 9 years she worked as PA to a renowned professor in cancer research. Frances is fluent in Norwegian and has also worked as a translator.

Amongst other things, she translated 3 novels from Norwegian into English. Frances is delighted to be working at the Zoo, and has already spent a half day working in the animal division, notably with the Bongos and Tigers.

She hopes to spend time in some of the other animal houses in the forthcoming months.

## Director's P.A.



# Millennium Reflections

**T**HE year 2000 will shortly be upon us and there will certainly be new challenges ahead! I firmly believe, however, that the new millennium will bring much that is positive to us as individuals, to society – and, of course, to Chester Zoo and the animals that we all love.

At such a significant transition point it is worth reflecting on the history and achievements of the Zoo – and taking an exciting glimpse at the future, as far as we can anticipate it!

## **Zoo without bars**

Our Zoo was founded by Mr George Mottershead, who was born in 1894 in Sale, Cheshire. George had a keen interest in animals since childhood and was concerned to greatly improve standards of animal welfare beyond the cramped, stark cages and concrete of the Edwardian menageries.

As the first step towards his dream of a zoo without bars he purchased, in about 1930, the Oakfield building at Upton-by-Chester together with a stable yard, outbuildings and around nine acres of land. This formed the nucleus of what was to be Chester Zoo, after formal approval by the Ministry of Health in April, 1931.

## **The Zoo as a Charity**

Originally private, in May 1934 the Zoo became the present North of England Zoological Society – a scientific and educational charity.

Colonel Richard Blair Young was the first Chairman of Council of the new Society, Mr Mottershead the founding Director-Secretary and his daughter June, the first General Curator, with special responsibility for the Aquarium (which was opened in the basement of the Oakfield by Lord Daresbury as one of the earliest complete exhibits).

Things were not easy at first – there being few animals to see, limited amenities, few paying visitors and, indeed, few people with cars to make the journey! Nonetheless, there was early breeding success in 1939 with our first Lion cubs and Griffon Vulture chicks.

The first edition of the supporters magazine *Our Zoo News* (now *Zoo Life!*) was issued in the same year. Fortunately, there were strong benefactors from the outset.

His Grace the 5th Duke of Westminster organised fundraising for the first Chimpanzee House, with substantial donations from, among others, the John Holt Company of West Africa and Liverpool. By 1949 we had an Elephant House and, by 1953, the gardens were being developed as a feature in their own right – and the Coronation Hall opened as a major catering facility to cope with the growing crowds.

## **Expansion and international recognition**

The 1960's heralded an extraordinary growth in the Zoo and we achieved a million visitors for the first time. We hosted a prestigious conference for the International Union of Zoo Directors under Mr Mottershead's chairmanship, and the first *International Symposium on Zoos and Conservation*.

By the end of the decade we had acquired land holdings approaching 500 acres and were

## *The close of the century puts Zoo Director, Professor Gordon McGregor Reid in reflective mood . . .*

supporting about 550 mammals, 900 birds, 100 reptiles, 2,500 fishes and 400 dedicated staff! The vast new free-flight Tropical House was the jewel in our Crown.

The 1970's were equally remarkable with *Jubilee* – the first Asiatic Elephant successfully raised in Britain – being a high point.

## **Re-investing in the Zoo**

In 1978, under the Chairmanship of Professor J.O.L. King, Dr Michael Brambell (formerly Curator of Mammals at London Zoo) took over as Director, following the death of George Mottershead.

Faced with general countrywide recessions in the 1980's and early 1990's, aged buildings, drains and other infrastructure, Michael and his enthusiastic staff sometimes had a tough time keeping our half century old 'Zoo Ark' on an even keel.

Nevertheless, a re-organised Zoo with a 'Masterplan' displayed new vigour.

This is seen in a succession of notable achievements, including the: Flamingo Pool, Penguin Pool, Small Mammal (Nocturnal) House, Jubilee Cafeteria, Zoofari Monorail, *Asian Plains* (hoof stock), *Europe on the Edge* (rare European birds), *Back from the Brink* (Mauritius kestrels), and the magnificent Chimpanzee House and large external islands, opened by HRH Princess Diana.

Our already high standards of animal welfare and veterinary care showed even greater improvements and we began to develop an impressive record for breeding rare and endangered animals, even organising a release programme for Zoo bred Barn Owls which had become locally extinct.

We joined the World Conservation Union (IUCN) and also began to collaborate with other zoos in breeding programmes to ensure that genetic vigour was maintained and that proper scientific records were kept. Much of this vital cooperative work was done through the new animal TAGs or Taxon Advisory Groups. Education and interpretation gained a high profile with the foundation of an Education Division.

A Membership office was set up, animal adoptions launched, a volunteer scheme established and we began to better market ourselves to the public – including starting work on a new car park and entrance.

During this period His Grace the 6th Duke of Westminster kindly became our first President and Mrs Beatrice Jones became Chairman of Council.

## **Working Towards 2000**

Following the retirement of Michael Brambell in 1995, Bea Jones appointed me as the new



*In the Zoo's 65 year history, there have been only three Directors.*

*Top, Professor Gordon McGregor Reid, the current Director.*

*Centre, Dr Michael Brambell, Director 1978-95.*

*Below, George Mottershead, Founder and Director until 1978.*

Director. Council then teamed up with the executive and staff to build on the high achievements of our forebears and organise ourselves in preparation for the new millennium.

We produced a landmark publication called *2020 Vision* – a blueprint for the future Zoo from 1998 to the year 2020. This clearly expressed our purpose or 'mission' in conservation through breeding programmes, education and science.

Our main dependable source of income is visitors and so we also absolutely understood that, to support our worthy charitable goals, the Zoo must prosper as part of the leisure industry.

At first sight, the £11 million *Blue Planet Aquarium*, opened in 1998 nearby in Ellesmere Port, posed a major commercial challenge to our business. Happily, we have managed to combat this most effectively and - with total visitors topping one million in 1998 and 1999 - remain financially robust. We believe that this is because we have worked hard to market our conservation image or 'brand' to the public.

Consider, for example, our new Ark logo, themed retailing and catering, television advertising, new style *Annual Report* and *Zoo Guide*, first substantial Zoo computer website for visitors, and the interactive, educational CD ROM *Wild Animal Planet*. We even co-organised the first ever International Conference in Zoo Marketing in Aalborg, Denmark.

#### Award Winning Success

In the years to date – overlapping into the Chairmanship of Mr Keith Maybury – we have had an amazing baby boom with rare animals including Elephants, Asiatic Lions, Giraffes, Orang Utans, Black Rhinos, Bali Starlings, Chimpanzees, Humboldt's Penguins, Sand Lizards, Seahorses, Partula Snails and many others!

Our programmes in conservation, education and science have never been stronger - with our first forays in 'outreach' to directly conserve

animals in their natural habitats at home and abroad; and in advanced conservation technologies such as the 'Frozen Zoo' for eggs and sperm.

We have also hosted major international conferences which have resulted in world class publications such as the 420 page book *Biology and Conservation of Prosimians* (lemurs, bushbabies, lorises and their allies).

#### Better Facilities

We have built new and better facilities for our staff and animals and better maintain existing services. The recreational value of the Zoo has soared with the removal of outdated buildings and the opening of, for example, the Entrance Complex, *Ark Shop*, *Condor Cliffs*, *Monkey Islands*, *Twilight Zone* (bat cave), Sand Lizard Habitat, Wildfowl and Wetlands Area, Pelican Pool Hide, Grass Gardens, Tuatara Centre, Congo Peafowl Exhibit, Baby Elephant Nursery, Bull Elephant Facility, Penguin Pool and Wildlife Activities Education Centre. Our public profile is high, with exhibits graciously opened by HRH the Duke of York and the Speaker of the House of Commons Betty Boothroyd MP. We recently awarded the Gold Medal of the Society to Sir Richard Attenborough and to the Deputy Prime Minister, John Prescott MP – both, in their own way, pioneers in conservation.

Since 1995, our collective efforts have been recognised in the form of more than 55 national and regional awards in topics as diverse as: breeding success, conservation, animal welfare, education, science, horticulture, environmental management, marketing, tourism, public relations, disabled provision and overall business success! Numerous external awards for personal excellence have also been conferred on individual members of staff.

#### Beyond 2000

In 2000 and beyond we look forward to capitalising on the benefits of successive recent

waves of Zoo-wide reorganisation in personnel, training, teamwork project planning and health and safety; and in administration, documentation, finance, fundraising, education, marketing, public relations, estates, environmental management, visitor services, volunteering, disabled access, amenity horticulture and last (but by no means least!) an even sharper focus on saving both animals and plants from extinction.

Council itself will have been reorganised under Keith Maybury to face contemporary issues in Zoo governance.

We eagerly anticipate a Gold Medal ceremony for the distinguished conservationist Dr Lee Durrell in 2000.

We are confident that there will be further, major growth in outreach and conservation science, including welfare and veterinary aspects; and will see the publication of the important 292 page book *New Perspectives on Primate Evolution and Behaviour* co-sponsored by Chester Zoo and the Linnean Society of London.

#### New Developments

There will be the challenge of realising a new Animal Collection Plan and a Physical Master Plan for the development of the Zoo and its wider estates, including the completion of many exciting new developments such as the *Wildlife Discovery Centre*, *Roman Garden*, Millennium Clock Tower, *Islands in Danger* (with Komodo Dragons and Birds of Paradise), a 'Green' cafeteria, a remodelled Entrance Concourse and Reed Bed and the second phase of the extensive *National Elephant Centre*.

With the most generous support of the Jaguar Car Company we will complete a £2 million *Spirit of the Jaguar* complex in 2001, coupled with an outreach project to conserve Jaguars in nature.

**The future looks to be very bright indeed!**

1. 1977 *The birth of Jubilee - the first Asiatic elephant to be born in the UK*
2. 1981 *HRH The Princess of Wales opens the new Chimpanzee House and Island.*
3. 1997 *The Duke of York opens Monkey Islands*

4. 1997 *The last day of the year - birth of Sithami*
5. 1998 *Visit by Sir David Attenborough*
6. 1999 *Madam Speaker, Miss Betty Boothroyd, opens the new Penguin Pool.*



# Enrichment on the Giraffe Section

Keepers across the Zoo have been working on various methods of environmental enrichment. In the last issue of Zoo Life some of the methods of soliciting natural behaviour from cats and otters were discussed. Here, Allan Reid describes some of the ideas the Giraffe Team have been using. Giraffes are just one of the species included in this section. The team also cares for Camels, Meerkats, Babirusa, Cattle, Zebra and Coatis.

**E**NRICHMENT can be divided into three general different types. Looking around the section we can see examples in each category. A few of these are discussed here and perhaps you might pick out more on your next visit.

## 1. Social Enrichment

Animals that have adopted a gregarious lifestyle benefit from being kept in natural groupings. The by-play between individuals provides a constant source of stimulation. In some cases it also allows division of labour.

Our Meerkat group has now grown to ten individuals. During the day they are constantly active and alert, some digging about in the sand, others standing sentry duty. An alarm call from one will have the entire group running to a vantage point, or heading for the sanctuary of their boxes or 'caves'.

## 2. Structural Enrichment

A lot of enrichment can be 'built' in. The tree trunks in the Camel enclosure serve as rubbing posts, particularly popular during the spring moult. The Babirusa have a custom built mud wallow, which helps to keep their skin in good condition and serves as a cool retreat during

hot summer days. Likewise the Camels have a sand pit and the Zebra a dust bowl.

Piles of branches or large logs create visual barriers, allowing one animal to retreat from a more dominant animal, or even the public, when it feels threatened. Often just having such a retreat will endow an animal with a greater degree of confidence.

## 3. Nutritional Enrichment

This final category calls for the most keeper intervention. Food should be offered in ways appropriate to the species. Grazers should feed at ground level, browsers at head height or higher.

In most cases making the animals work a little in order to gain food will do no harm; indeed if properly implemented, most animals actually benefit from this, being fitter and more mentally alert as a result. Finally a bit of variety in the diet will reap great rewards.

Our group of Coatis are provided with a variety of feeding devices which tax both their agility and ingenuity. Food is also scattered around the enclosure and hidden in the log piles. By providing food several times throughout the day the animals are kept

active. So successful is this regime it has recently led one researcher studying Coatis in several collections to dub Chester's the most 'natural'.

The Meerkats are fed several times during the day. As well as these feeds, several mealworm dispensers are provided (look up into the rafters above the enclosure - that long drain pipe with the holes drilled in it is one of them!). These release their contents in an unpredictable manner which means that the Meerkats can never be quite sure when their next meal will arrive, just like in the wild.

It is always prudent to remind ourselves that quite often our plans can be short-circuited by the animals. We give the Giraffes freshly cut browse at various times during the day. Wild Giraffes are said to adopt different feeding strategies. The males, being taller, going for the highest branches, the smaller females feeding lower down.

No one seems to have explained this to Cormac, our dominant bull, who will quite often feed first from lower down on the suspended branches. It is almost as if he knows that the females can't reach the higher stuff and so he is in no hurry to get to it!



▲ Giraffes have to work a little to get food.



▲ A long tongue is an asset for the Anoa.



▲ Coatis need to search the log pile to find their dinner.



▲ Meerkats - constantly active and alert

# ONE MAN WENT TO MOW -

## and carried on for 100 days!

Throughout the Zoo there are people who do extremely important work without making a fuss and often go completely unnoticed. A good example of this is our Specialist Rhino keeper, John Willis. Mark Pilgrim explains:

FOR many years now John has been responsible for cutting the grass fields around the Zoo estate to supplement the diet of our herbivorous mammals.

For the first time ever this year, John has been able to cut and supply grass to the animals for over 100 days.

This superb achievement has been possible partly due to an extra field being used for grass; partly because the grass cutting machine can now cut wet grass; but mainly to John's management of which fields to cut and when, in order to get the best from them - and to his determination to achieve the 100 day total. This involved changing his working routine to work almost every morning of the week.

The benefits to the animals and to the Zoo of the fresh grass are huge. Most importantly the nutritional value of the grass, particularly its vitamin content, is far higher than hay which is the alternative food.

There can be problems however, if the process is not done properly. Firstly the fields of grass need to be well prepared to ensure that no poisonous plants, pesticides or waste materials are on them.

Secondly the grass needs to be over a certain length, since very short cut grass can choke animals, as they eat it much more

quickly than if they were naturally grazing. And once the grass is cut, it very quickly begins to deteriorate, generate heat and ferment which can cause colic. Therefore it must be fed to the animals within a couple of hours after cutting.

Compared to hay, grass has a much higher water content. This means that the animals need to eat more of it to achieve the same solid intake. This then extends the time in which they are feeding, keeping them occupied for longer and simulates more natural herbivore feeding patterns.

The grass supplied by John also means that the grass growing on the paddocks is less heavily grazed and therefore remains green and attractive to our visitors.

Finally while there is a cost to growing the grass and for John's time for cutting and delivering it, a significant saving is made compared to buying in hay.



All in all Chester Zoo is extremely fortunate in having the land on which to produce the grass and to have dedicated staff like John, who do more than expected for the benefit of the animals.

## WILL POWER

ONE in three people die without a will, and risk leaving their loved ones with emotional and financial headache.

Gareth Jones, Senior Partner of Cyril Jones & Co., solicitors, specialises in the legal complexities of wills, and says 'that many people make the mistake of thinking that only the wealthy need to make a will.

'This is not the case. If you die intestate - without a will - there are strict rules governing the inheritance of your estate.

'It may not be distributed in the way you might wish. It could go to relatives you dislike, or to the taxman.

'Your assets could be more substantial than you may realise, and your dependants must be protected - especially if you are a single parent. Matters can be complicated.

'For instance, if you own a house abroad, particularly in France or Spain where inheritance rules are different, you should also have a will drawn there.

'Making a will not only ensures that the right people will inherit, but, with careful planning, it enables you to arrange your affairs so that as little money as possible is

paid to the Inland Revenue in inheritance tax.

'The Inland Revenue allows you to leave £231,000 (1998/1999 exemption). After that, you start to pay tax at 40%.

'However, you can 'gift' sums of money while you are alive, which are not subject to this tax or regarded as 'potentially exempt transfer.'

One disgruntled taxpayer left a lemon to the taxman as a legacy, with a note saying - 'Now squeeze this!'

Nowadays with house prices rising and death benefits from pension schemes etc, many estates will exceed the limit, and it is wise to take advice.

Even if you have made a will, circumstances can change; they could either invalidate it completely or render it inadequate. Check if any of these apply to you:

- You have changed marital status
- Your wealth has increased or decreased significantly
- There is a new family member - child, grandchild, in-law
- You have inherited property yourself
- There has been a bereavement in the family
- You have expanded your business.

Wills can be used to leave legacies to your favourite charity or other organisations. Gifts to charities are wholly exempt from inheritance tax up to any amount, provided certain conditions are met.

They are intended to make your wishes as clear and simple as possible.

Chester Zoo, in conjunction with Cyril Jones & Co., is offering free 'will clinics' to Zoo Members and staff.

These are sessions at the Zoo where you can receive free advice on making a will or associated matters. This will be in a relaxed, informal context at the Zoo, and will, naturally, be in complete confidence.

Should you wish, you can then take advantage of a special will writing service available at a discounted rate.

If you wish to receive an invitation to attend one of these, or would like further information about wills, please contact Gareth Jones at Cyril Jones & Co either by telephone: 01978 263131; Fax: 01978 290530 or by e-mail: [gareth@cyriljonesco.demon.co.uk](mailto:gareth@cyriljonesco.demon.co.uk).

If you prefer, you can contact John Regan, Business Development Manager at the Zoo on 01244 650230, or e-mail [johnr@chesterzoo.co.uk](mailto:johnr@chesterzoo.co.uk).

# AFRICA WEEK 99

**For over a year, the Education Division has been holding activity days on all sorts of topics. This year, we held our first activity week, AFRICA WEEK, which took place in August.**

**Each day had its own unique blend of activities, based around a particular theme. The pictures below give a taste of the sorts of things we got up to. Look out for details of next year's activity days on page 21 As for the next activity week, you'll just have to hold your breath . . .**

## Monday

- Introducing Africa. (pic 1) Collage and map making (pic 2) Heather Swainston's workshop

## Tuesday

- Making some noise. (pic 3) Drumdance, an African drumming group, put some rhythm in our feet, and we finished by making some "bangers and shakers" of our own!

## Wednesday

- After a morning spent "on safari" (pic 5) in the Zoo (it didn't rain after all!), we had an Art Attack, and made 3-D masks of our favourite animals (pic 4)

## Thursday

On our Craft day, Ian Hughes, whose handiwork can be seen all over the Zoo, came in to give us some expert tuition on sculpture, with the lion and zebra being the impressive results. (pic 6)

## Friday

- We finished the week with Miso'shi telling African stories (pic 7) and giving us the chance to try some delicious food from Ghana. We also made some clay huts to take home. (pic 8)

**Many thanks to everyone who helped make it such a success, especially to all the children who took part - see you next time!**





# ZOO MEMBERS' TRIP TO NAMIBIA PART II

*Neil Spooner continues his account of the unforgettable trip to Namibia earlier this year.*



▲ Africat Foundation

**T**HE Ondundozonanandana Mountains traverse the spine of north central Namibia rising incongruously above a predominantly flattened hinterland that throws into conflict opposing landscapes of awesome geographical beauty.

Nestling within this region is the 130,000 hectare Ongava game reserve and a rest camp of such archetypical safari-style and elegance that the whole charade has both the feel and appearance of a post war movie set from a Hollywood 'Big Game extravaganza'.

The Chester Zoo group load their own brand of hunting equipment into the Ongava lodge jeeps for the first of several night safaris. Cameras of every description are on show – no advice stickers on resultant prints here – these are professional people!

The night drives throughout the trip are excellent and provide not only a different wildlife perspective but a totally contrasting experience of moving through the bush after dark and all the nocturnal sights and sounds that go along with it. The highlights of this evening's sortie are Bush Babies and Aardwolf, both strictly creatures of the night and more often than not difficult to see at the best of times.

The Ongava lodge itself is a secluded camp set within a rise of a small escarpment overlooking a panoramic vista

and water source. The next two days reflect the wealth of wildlife in the area and species tallies are on the increase as the number of species seen and identified creeps ever higher.

The bird enthusiasts in the group are not disappointed either. Short-toed Rock Thrush, Pygmy Falcon, Freckled Nightjar and Meyers Parrot are all 'specialities' of the region.

Namibia plains game are also here in large numbers too, and the pièce de resistance is catching a prolonged sighting of White Rhino one evening just as the sun sets behind thick mopane brush that so typifies this particular part of Southern Africa.

Ongava is pure opulence coupled with wildlife viewing opportunities to rival anything on the African continent, so it is unsurprising that our stay here is seen as all too short as we head off towards Okonjima and one of Namibia's conservation success stories at the Africat Foundation for Cheetah rescue and re-release.

The road north leads towards the Waterberg plateau and the lovely Erongo Mountains which form a dramatic backdrop along the route from Windhoek to the Germanic coastal town of Swakopmund. Here, the northern economy is carried by two major mining

## OKONJIMA

Home of the



HANSEN

Tel 0651-4563/4  
Box 793 Otjiwarongo



districts and vast, lonely cattle ranches. Cattle ranching alone is rapidly becoming a thing of the past across the whole of Southern Africa, as farmers realise a more financially lucrative alternative and turn to tourist game ranching both for photographic safaris and trophy hunters alike.

Uranium and diamond mining are without doubt the country's economic mainstay. Namibia's mining income is the fourth largest in Africa and the 17th largest in the world, mainly thanks to both the world's largest uranium mine and the vastly rich diamond fields that produce a yield of some 200 kilograms, or one million carats annually.

Leaving all thoughts of diamonds behind, we arrive at Okonjima on day six of our tour, arriving at the Africat Foundation in the early afternoon for a two day crash course in big cat conservation and rehabilitation.

Africat was first set up by Wayne Hansen eight years ago when the family cattle ranch was handed over to him by his father after generations of farming domestic livestock.

After marrying, Wayne brought on board his wife Lise to front the operation

from a public perspective, quickly realising that public relations and marketing are important facets of conservation operations, even in remote areas of a sparsely populated country like Namibia.

Africat is a family run concern dedicated to cheetah conservation. Over the years it has become much more than this and has developed into a multi-faceted operation with an educational dimension targeting both children and adults alike.

Trying to change the entrenched attitudes of farmers towards apex predators is a difficult task.

However, despite all the odds, the Hanssens have begun to have success in this area and attitudes are indeed changing, albeit slowly.

The Onkonjima Lodge helps support the Africat Foundation and its operation. There are a dozen or so luxury en-suite rooms clustered around a small lawn and maze of sub-tropical plants.

The secluded swimming pool overlooking a huge compound containing orphaned lions completes the idyllic scene. The serenity of such a laid back atmosphere belies the fact that this is a place where things get done and there is no doubt that both the Cheetah and Leopard populations would be much more at risk were it not for the Hanssens strenuous efforts. One quarter of the world's population of 10,000 Cheetahs are found in Namibia. Roughly 10% of these inhabit demarcated farmland and as such are in grave danger of being shot, poisoned or trapped.

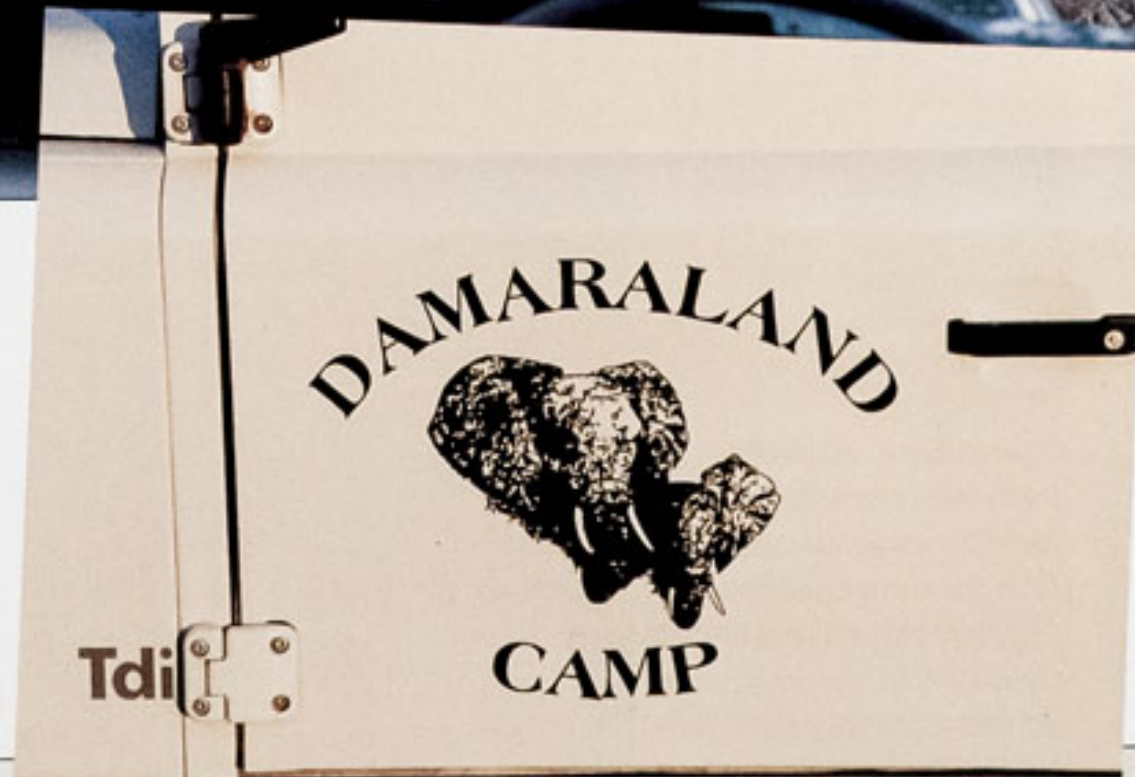
Africat are presently holding 42 Cheetahs, all in spacious compounds that few zoological collections could aspire to.

Many of these animals are ear-marked to be released back into the wild in areas remote from human habitation. Others, for varying reasons such as old age or infirmity, are destined to remain in conservational care and become part of an educational process to raise visitor awareness to the plight of the Namibian Cheetah and the threats it faces.

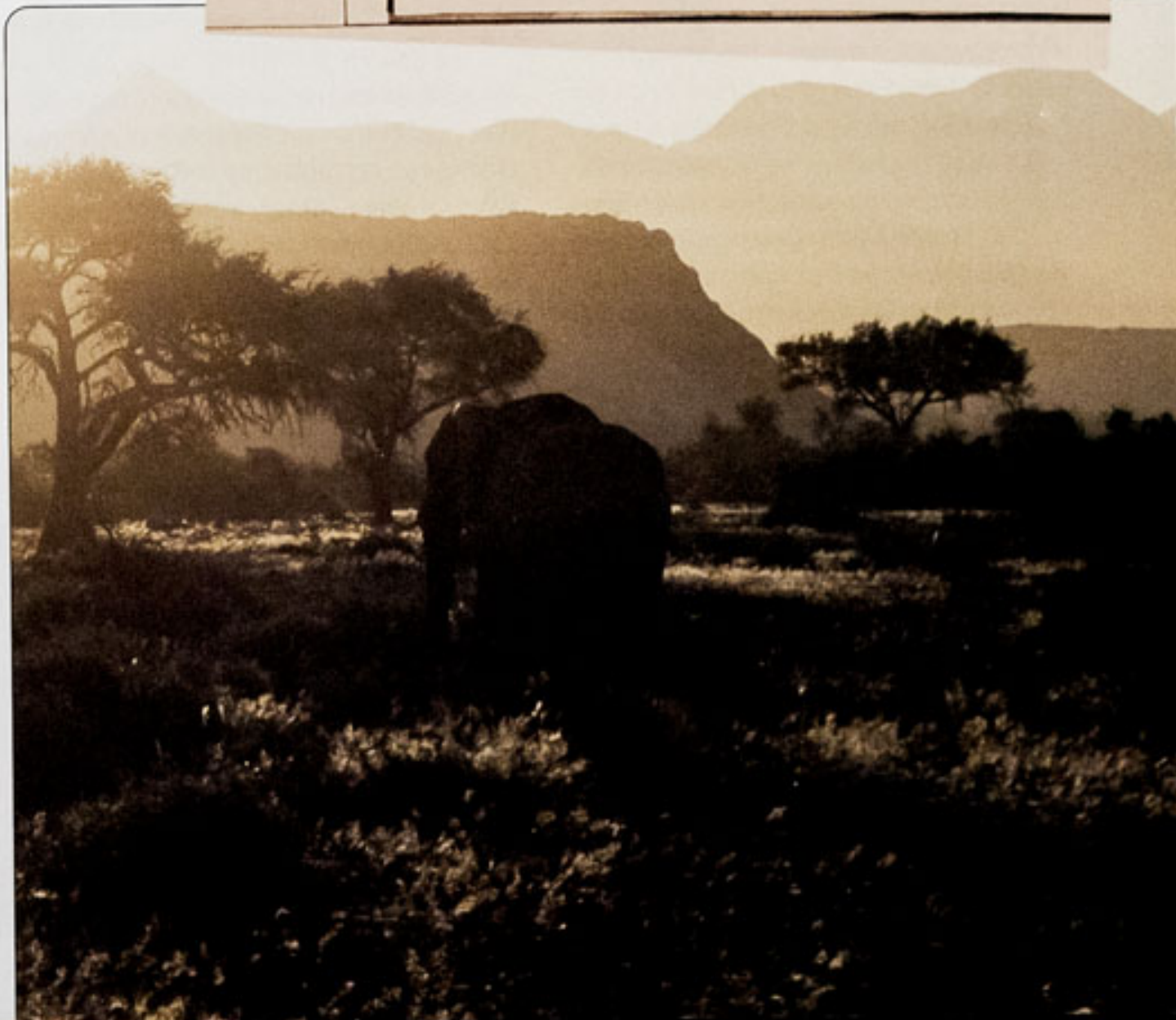
For many Onkonjima is the highlight of the entire trip. Over the next two days we are treated to educational talks and an insight into the fascinating world of the San bush people. We see Cheetahs, Caracal and Lions at close quarters, we see Leopards, we experience nocturnal visits to hides where Porcupines are literally counted by the dozen and generally we become a temporary part of what is a unique African experience and we feel privileged to have been given this opportunity.



▲ Cheetah at Africat Foundation



▼ Elephant at sunset, Damaraland.



为后世后代的利益,保护和持续使用生物多样性。

——联合国《生物多样性公约》

The Chinese characters say 'Conserve and sustainable use of biological diversity for the benefits of present and future generations'

# FROM CHESTER TO CHINA

*By Chris West, Chief Curator*

**W**HILE in China earlier this year, I met Professor Jiang Zhigang, Deputy Director of the Centre for Animal Ecology and Conservation Biology of the Chinese Academy of Science.

We enjoyed a general conversation about zoology and conservation and explaining our organisations' respective goals, with me indicating the NEZS's mission and potential contribution.

My excitement rose when he told me that he had been the scientist responsible for the reintroduction of Milu, better known in the UK as Père David's Deer, into the wild in China.

The story of the demise of Père David's Deer in China during the Boxer Rebellion in 1900, its fortuitous salvation through the Duke of Bedford's efforts at Woburn Abbey and the ultimate return of deer to China, is one of the classical stories in conservation.

In August 1986, a group of 39 Père David's Deer were sent out from UK zoos



for rehabilitation in the wild in China, at Da Feng, in the vast flatland area 100 miles or so north-east of the Yangtze River. Of these, eleven were from Chester Zoo, and others came from Whipsnade, Marwell, Longleat and Glasgow Zoos.

Professor Jiang related the details to me, and has now sent me the photographs shown here.

The Professor also sent me a manuscript documenting the story scientifically, which

we plan to present for publication to an appropriate journal. I certainly hope that we can work together on future collaborations for mutual scientific benefit and to support the conservation in the wild of other Chinese species such as the Takin, Golden Monkey, Black-necked Crane and the Tibetan Gazelle.

It is good to know that there are now Père David's Deer, back in the wild in China, which were born at Chester Zoo.



# HARVEST MICE

*Penny Rudd has been co-ordinating a re-introduction programme for a very tiny endangered species.*



*Photo Ian Walker*

**S**OME Members may have seen the recent press coverage about the forthcoming re-introduction of Harvest Mice being planned by the Zoo, in conjunction with the Cheshire Wildlife Trust.

These wonderful, tiny creatures – the smallest UK mammal species, have been breeding in Penny Rudd's office since 1984 and the Zoo has supplied a large proportion of the individuals currently held in captivity around the UK.

The programme took a leap forward last year when it was agreed that we would plan a scientific re-introduction of the species onto the Zoo-owned farmland surrounding the Zoo, working within the International Union of Conservation and Nature's guidelines on re-introductions.

Together with volunteers from amongst Zoo staff and CWT's Members, a large network of Harvest Mouse enthusiasts now exists and the programme, co-ordinated by Penny Rudd, has bred over 200 youngsters this year – not an easy task working with a species which can be 'difficult' to establish. Naturally a 'seasonal' breeder (March to August) in the wild, with small litters and a high degree of mate-selection – more usually associated with the 'higher' mammal

families, Harvest Mice can be aggressive towards their mates and their young.

However, once a good pair has been established, and is being looked after by observant and accurate handlers, there is no stopping them! The altered photo-periods and heating regimes of office/house situations tend to keep them breeding right through the winter, and past experience has shown that if a female is stopped from breeding for even a short time, she does not readily kick into breeding condition again.

The current plan is to enter a 'soft-release' programme in 2000 involving the placing of Harvest Mice in outdoor enclosures planted with a variety of habitat options.

We will see which option proves the most valuable and if the mice, which will be closely monitored, acclimatise successfully, it is hoped that a full re-introduction will go ahead in 2001. In the meantime, further habitat reconstruction work is underway and the International Tree Foundation has given the Society a £300 grant to re-establish currently fragmented hedgerows with native tree species in the area of the estate selected for the initial re-introduction, and tree planting is planned

for late November 1999.

Sadly, it is thought that there are no longer any Harvest Mice in Cheshire, and the cause of their decline is likely to be both habitat decline and the result of farming methods.

We believe that these problems can be addressed. The Cheshire Wildlife Trust have carried out a bio-diversity audit of the Zoo's land and they have a Manchester University undergraduate allocated full-time for the next year working on this project to assist with establishing conclusively the absence of this species in this area (a pre-requisite for the re-introduction) as well as to finalise the details of the programme, working alongside Penny at the Zoo.

Negotiations are underway too with various other scientific bodies to work further on the enclosure design, individual identification methods, record keeping and post-release monitoring aspects of the programme to support the successful Zoo captive breeding which has already been established.

**Anyone who would like further information, or would like to consider more direct involvement in the programme should contact Penny Rudd, 01244 650215.**

# QUITE A MOVING STORY!



*In June this year, Chester Zoo agreed to be the major sponsor of the Kenya Wildlife Service's Black Rhino Translocation Programme. The plan was to re-establish the unique Tsavo conservation area as the Black Rhino's breeding ground. The translocation of animals was seen as the best chance for the survival and proliferation of the species in East Africa since the slaughter began 30 years ago. David Stirling, Director, Save The Rhino International, describes the dramas of the exercise.*

**D**AWN in Nairobi National Park and Duncan, my cameraman, and I were waiting patiently for the prearranged gathering.

This was the game capture unit from the Kenya Wildlife Service and for the past week they had been tranquillising specific Black Rhinos, loading them into crates and moving them, by road, down to Tsavo East National Park.

With an extra 18 black rhino in Tsavo East the population will increase to 54, the largest population of free ranging Black Rhino in East Africa.

The vast National Park of Tsavo had

been the main stronghold for Black Rhinos before they were decimated by poaching in the seventies.

By the late eighties there was not a single one left!

Funds raised by Save the Rhino International from Chester Zoo and a group of Eton school boys had secured fifty per cent of the translocation costs and as donors we were invited along on this cold winter's morning to film the day's proceedings.

The spotter helicopter soon took off, the advance ground team had identified a suitable animal for darting and in minutes

the low loader lorry, carrying the crates and the entourage of other 4 wheel drive vehicles, snaked through the park in search of this unsuspecting animal.

I was part of the ground crew and Duncan was filming from the helicopter. We stopped on the plain to see the helicopter hovering just above the ground. It was hard to see the rhino for the dust the chopper was throwing up but it soon became apparent that there were two rhinos, a mother and her sub-adult calf. They had chosen to dart the younger animal and now they had the job of separating mother from daughter. An extraordinary thing happened.

Tormented by the helicopter and demonstrating her fierce maternal instincts, the mother rose on her hind legs and struck the helicopter!

Meanwhile the daughter had charged down into a gorge.

The drug was now taking hold, the rhino staggered helplessly at the bottom of the gorge and collapsed. This was going to be a difficult recovery.

The first on the scene was the head vet, Tom Mboya. He was already checking her pulse and taking blood samples whilst the other vets arrived to give her various injections of antibiotics.

Her ears were notched for future identification and after much heaving and pulling we managed to get her in front of the crate.

An antidote was injected and with some gentle slapping she awoke and was

▼ A Rhino is tranquillised and padded for safety and comfort





translocation operation was a great success and I was particularly encouraged by the all African team who conducted it with such efficiency.

These translocated rhino have increased the Tsavo rhinos' home range of 1,800 square kilometres to 2,800 square kilometres.

Already at full stretch, the anti-poaching unit have a big task ahead of them.

SRI is fully committed to supporting the continued protection and monitoring of these 54 animals.

We would like to take this opportunity to extend our appreciation to Chester Zoo for their very generous contribution to the programme.

We look forward to an on-going working relationship with them as we support in-situ conservation programmes together.

We would also like to thank our new Patron, Martina Navratilova, for her generous donation which will go towards maintaining security for these rhinos in their new home.

▼ *Almost ready for the long journey.*

▲ *The team were pleased with their Chester Zoo t-shirts!*

made to stand up. Twenty people then pushed her and she staggered into the waiting crate. After being winched onto the low loader she set off on the road to Tsavo East - ten hours away!

I was particularly surprised at how tame the translocated rhinos became once in their bomas (enclosures) at the other end: After one week they would take browse straight from your hand. By the end of the second week these animals would be set free into their new home, the vast conservation area of Tsavo East. The





▲ A colourful fish print.

**W**HEN I was given this opportunity to be Chester Zoo's Artist in Residence, I felt like a child on her first visit, determined to see everything! For the first week, I went round and round the Zoo, riding on the monorail, looking into the greenhouses and talking to everyone. I didn't see everything of course.

Every time I walk around with my pens and sketch book, I see something new.

It's not just the animals that are interesting – observing the visitors is fascinating too.

One afternoon, I was drawing the visitors waiting for the chimpanzee feeding, and became aware that I was being watched. Someone was watching me, watching the

visitors who were watching the chimps who were watching the people!

The *Twilight Zone* is one of my favourite places, with the ever changing silhouettes of the bats against the rich dark colours of their environment. I intend to use my observations from there as a basis for a series of images. Working from sketches, I use a printmaking technique to produce a series of pictures.

Although I start by making an accurate representation of the subject matter, once the picture making process is under way, the balance of the composition and colours takes over.

This sometimes means the final result

## ANIMAL ART

*Ann Bridges, the Zoo's first Artist in Residence, writes about her work.*



becomes an impression rather than a realistic portrayal.

I endeavour to create an illusion of movement in my work, particularly in pictures of fish, where the moving water distorts their shapes with changing light, reflections and splashes adding to the challenge.

On my way to the Zoo each morning I still feel like that excited child who has been promised a trip to the Zoo to see the animals.

There can't be many artists who catch a glimpse of a lion through their studio window, or can give their 'address' as 'past the Cheetahs, Pudu on the right, just after the Macaws and opposite the Lions!'

## HUNGARIAN OTTERS



**Marianne Molnar was granted a studentship award by the Zoo to study otters in her native Hungary. This is a brief summary of her work.**

**O**TTERS are endangered in Europe due to persecution, habitat destruction and pollution. Their protection in Hungary is very important, as the existing population is a stronghold which can be used for natural colonisation of other European countries, where their numbers have become fragmented – or lost.

The aims of my work were to review the status of the the otter, to identify the problems and to seek possible solutions to secure the future of the species in Hungary, the Carpathian region and around Europe.

Since the 1950's the otter distribution in Europe has become very poor, with populations found only around the edges of the continent and hardly any in the central part. This was due to the wide use of toxic insecticides together with increased habitat destruction.

In the past, Hungarians have hunted otters for the valuable pelage and for meat.

A hundred years ago they were considered beasts, ravaging fish for food and for enjoyment.

This persecution, together with other factors, led to great reductions in numbers. In 1974 otters were granted protection and in a few

years they started to recolonise areas. From 1990 fish farmers had to face the loss of stock due to otters. Compensation was refused, and the rate of illegal killing rose. Major developments around the country meant natural habitats were lost. Pollution, too, is causing problems.

The results of a 1995-6 survey showed that permanently occupied sites were artificial lakes, canals and rivers. Streams were less occupied and natural lakes had hardly any. The overall conclusion is that the otter populations are stable and growing.

But as the country has been developing rapidly this decade, it is not known how the otters respond to the increased pressures on natural habitats. I am sceptical that the population really is stable.

The final density of otters, not only in Hungary but in other European countries, including England, will depend on habitat quality, habitat isolation and the rate of disturbance. It has been suggested that wild otters are absent from some Hungarian territories because man-made barriers have made them inaccessible.

A new strategy, the European Ecological

# Children's Activities in 2000

## Colour and Camouflage in the Animal World

Wednesday 23rd February 2000

In the morning, explore animal colouration through hands-on activities with bio-artefacts, close contact with living animals in the Education Centre and visits to animals around the Zoo. The afternoon will be filled with a variety of craft projects.

## Easter Eggstravaganza

Thursday 20th April 2000

Big eggs, small eggs, hatching eggs, birds' eggs, reptiles' eggs, fossil eggs. Find out what happens inside an egg, why eggs are different shapes and sizes and

▼ Painting and decorating Fabergé eggs.



Network (EECONET), specifically aims to minimise adverse effects by these barriers. Ecological Networks are groups of protected habitats, connected by natural or man-made corridors, allowing species to travel freely between them.

As long as the rate of harmful and destructive activity is so high, strict regulations are needed to prevent further damage. The main aim is to preserve, enrich and reconstruct key ecosystems, habitats via the construction of a Pan-European ecological network.

This will significantly decrease threats to wildlife and sites of scientific importance. Hungary's otters need protection to secure existing populations and allow free migration to countries in the region where they have been rare or absent.

By re-introducing otters, conservationally-bred, the rate of recovery could be speeded up and in areas where recovery would take too much time, populations could be rebuilt.

My thanks to Mr Pal Gera, Chairman of the Hungarian Fund for Otters and to Ms Aniko Kocsis, Chairman of the Oko Regio Trust for their help.

how different birds and reptiles look after their eggs. Time out and about in the Zoo looking for nests and young birds. Make a 'Fabergé egg' to take home.

## 'Bugs'!

Saturday 20th

May 2000

Over three quarters of all animals are creepy crawlies.

Investigate the strange world of mini-beasts. Help carry out a survey of the invertebrates in the Zoo's grounds. Get close to some of the larger 'bugs' in the Education Centre.



▲ Close contact with a creepy-crawly.

## Australia in a Day

Saturday 8th July 2000

Travel with us 'Down Under' to learn about the animals and people from the largest island in the world. Join in the fun of the Olympics and see if you can beat some of the animal champions.

## Dragons and Serpents

Saturday 16th September 2000

Reptiles come in many shapes and sizes. Discover more about their fascinating lives by a visit to the Tropical Realm.

Look closely at some reptiles in the Education Centre. See the largest lizard in the world, the Komodo Dragon.



▲ Komodo Dragon.

## Get your message across

Tuesday 24th October 2000

What does a monkey mean when he bares his teeth at you? Why are the maned wolves so smelly? Who are the peacocks trying to impress?

Take part in a range of exciting activities

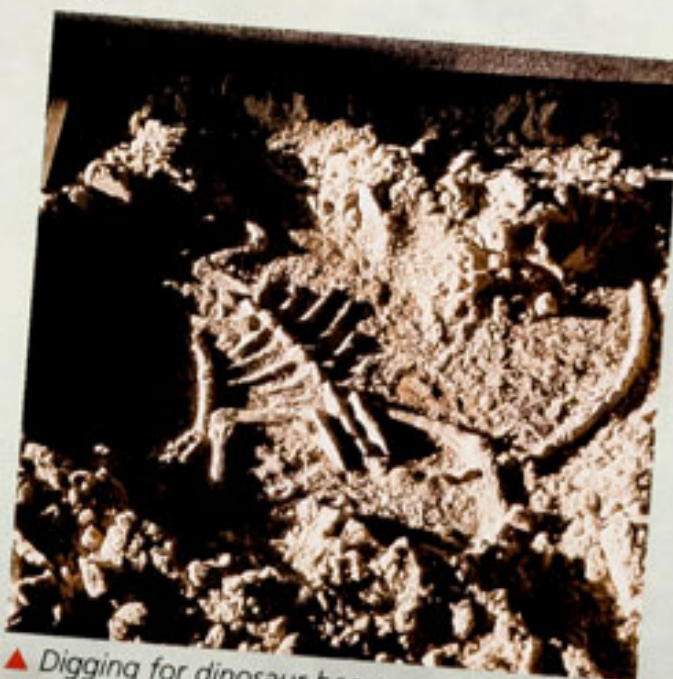
to find out the answers to these and many more questions about how animals 'talk' to one another without using words.

## Dinosaur Dig

Saturday 25th November 2000.

Repeated by popular demand.

Join us in a journey to the Jurassic as we explore the fascinating world of the biggest animals ever to roam the Earth. Examine real dinosaur eggs, take part in a dinosaur dig, hear about the latest dinosaur research, make your own plaster cast fossil and meet some of the dinosaurs' living relatives.



▲ Digging for dinosaur bones.

There will be a variety of craft activities for children to make and take home on each of the days.

- Children are asked to bring a packed lunch.
- Each day will be from 10.00 am to 4.00 pm.
- Children will be supervised throughout the day.
- Cost per day will be £15 (including a morning drink and snack)

Are you interested?

Contact the Education Division at Chester Zoo on 01244 650205 for a booking form.

Our thanks to COPUS (Committee on the Public Understanding of Science) for their sponsorship of these activities.



# JUNIO MEMBERS

SATURDAY 22 JANUARY 2000

## The Contact Session

Perhaps our second most popular event of the year, the Contact Session is your chance to meet some of the Zoo's friendlier residents. These are likely to include snakes, spiders, tortoises, rats, chicks, lizards, rabbits, guinea pigs, ducks and perhaps a few more.

Over eights should meet outside the Oakfield for 2.15 pm and we will walk to the indoor Picnic Area. Back to the Oakfield for 4.00 pm for collection by parents.

SATURDAY 26 FEBRUARY 2000

## Farm World, Erddig

There is nothing like feeding young lambs and our visit to *Farm World* near Wrexham will offer Juniors the chance to meet the year's new arrivals at very close quarters.

We will be able to have a look around this working farm and have a cart ride around the estate to see the early signs of Spring(?). Juniors of eight or over are invited to come along, and we plan to leave the staff car park at 11.30 am, returning at 4.00 pm.

SATURDAY 25 MARCH 2000

## Tracks and Signs.

Another chance to paddle in the mud during attempts to find suitable footprints inside the animal enclosures from which to make your own plaster casts.

March is usually a good bet for this event as it is cold and damp, but that does not put hardy Juniors off joining us to enjoy an unusual day and most Juniors will have a 'souvenir' to take home with them.

Over eights are invited and will meet outside the Oakfield at 11.00 am, returning there for collection at 4.00 pm. Please bring a picnic and it is important that you wear very old clothes and wellies.

SATURDAY 15 APRIL 2000

## The Sandstone Trail

It has been a while since we explored the wonders of the Sandstone Trail in Cheshire, and late Spring will be a lovely time to walk about eight miles of this famous trail.

The bus will drop us off near Broxton and will collect us at Beeston Castle later that afternoon. It may sound a long way, but the scenery is so delightful that youngsters do not seem to struggle with the distance.

Over tens are welcome and we will leave the staff car park at 10.30, returning at 4.30 pm. Bring a picnic and comfortable shoes.

SUNDAY 21 MAY 2000

## Cholmondeley Castle and Farm.

We should have a great day when we visit

this lovely estate in Cheshire. Set in beautiful gardens and rolling fields where we can picnic. The estate also has a large farm area where we will be able to see a variety of domestic rare breeds.

Please note that as the Castle is closed on Saturdays, we have to swop our usual day and visit on Sunday.

The bus will leave the staff car park at 10.30 am and return at 5.00 pm.

SATURDAY OR SUNDAY 24 \ 25 JUNE 2000

## Hilbre Island

Our visits to Hilbre in the past have been hugely popular. We will be met by the Warden and will spend some time rock pooling and investigating the caves of the area before arriving at Hilbre Island where we hope to spend some time birdwatching and looking out for seals.

The timing of this event is dependent on the tide times, so further details will be issued in a later magazine. Please keep an eye on this page for confirmation of date and times. This event will only be open to Juniors of ten years old upwards and places will be strictly limited.

WEDNESDAY 26 JULY 2000

## Day with a Keeper

Undoubtedly the most popular day in the calendar, when Juniors are given the opportunity to spend a day working alongside a Keeper in the Zoo. Because the work involved can be strenuous, we have to restrict this event to Juniors of twelve and over. We do try to accommodate Juniors' areas of special interest, but obviously places are strictly limited so this cannot be guaranteed. Please come prepared for hard work, wearing wellies and with a good picnic.

We will meet outside the Oakfield at 10.30 am, and the day will finish for Juniors at 4.00 pm. Please note that bookings for this event will be strictly on a first come first served basis and will not commence until Wednesday 12th July 2000, when the phone will be manned from 8.30 am.

FRIDAY 18 AUGUST 2000

## Summer Barbeque

This is another event when we meet for an informal summer social evening. It is always fun to see the Zoo at night after all our visitors have left. We try to vary what we do at the barbeque each year when we have a surprise event or speaker.

Over eights are invited to join the fun and Juniors should arrive via the staff entrance at 7.00 pm and walk through to the new restaurant. Parents are requested to collect Juniors from there at 9.45 pm.

SATURDAY 23 SEPTEMBER 2000

## Hawkstone Park and the Follies

This is certainly an event not to be missed for those who like interesting walks in lovely surroundings. This amazing park in Shropshire has masses to see, and the follies, some set in the hillside, are great fun. Bring a torch. We will leave the staff car park at 10.30 am, returning there at 4.30 pm. Please bring a picnic and over eights are invited to come along.

SATURDAY 14 OCTOBER 2000

## Liverpool Museum

We had to postpone this visit from 1999 as the Museum was being refurbished. The Natural History section is well worth a visit and Museum staff will also take Juniors behind the scenes to see how things are used by researchers and how thousands of items held by the Museum are stored. This will also give Juniors some idea of how exhibits are prepared for showing to the visitors. We will leave the staff car park, with picnics, at 11.00 am, returning at 4.00 pm. Over eights are welcome.

SATURDAY 18 NOVEMBER 2000

## Martin Mere

It is a few years since our last visit to the Wildfowl and Wetlands Trust at Martin Mere in Lancashire, and November is a brilliant time to see all the migratory geese and swans as they pass through this haven.

This can be a chilly event, and Juniors are strongly urged to dress warmly to join us to see the spectacular sight of thousands of birds.

The bus will leave the staff car park at 11.00 am, returning at 4.00 pm. Over eights are invited to join us. Picnic needed.

*Bookings must be made for all events. Please ring Penny at the Zoo on 01244 650215, not more than two weeks before the event you would like to attend.*

*Places are offered on a 'first-come-first-served' basis, and may be limited.*

*This list is provisional, and in exceptional circumstances we may have to alter dates and venues. You will be informed of such changes in Zoo Life - not by individual letter - so please keep up to date by reading the Junior Page in each issue!*

*A small charge will be made to cover costs for events involving transport, materials or food and you will be informed of this at the time of booking.*

# COMPETITION TIME

WHICH ANIMAL?



**Our computer has been getting its software in a twist, and distorted all the animal pictures! Can you work out what the animals are?**

**Answers on a postcard, please, by 15th January 2000, to: Junior Puzzle Time, Zoo Life, Chester Zoo, Upton-by-Chester CH2 1LH. A £10 voucher for the Zoo shops will go to the first correct answer pulled out of the mail bag.**

*EYE-EYE! The answers to the Autumn issue puzzle are : A - Spectacled Owl. B - White-faced Scops Owl. C - Ruffed Lemur. D - Meerkat. The first correct entry opened was from Elizabeth Ryder of Mold, Flintshire.*

THE group of 22 Juniors and helpers who spent an action-packed week in Northern Ireland on this year's Summer Field Trip, had a brilliant time! We stayed in the excellent accommodation at the University of Ulster and our trips included days out at Belfast Zoo, where we were warmly welcomed, and were able to see Jubilee, the Asiatic Elephant born at Chester.

We returned to Belfast Zoo for a second trip later in the week to have an evening picnic and further look around. Another full day was spent at the amazing Ulster Folk Museum, learning about life and farming in days long gone by in Ireland.

The Ulster Wildlife Trust hosted us for a guided tour around their estate, which was divided into four major habitats and the Juniors worked hard on species identification and discovery.

Bird watching was high on the list of priorities for our visit to the Oxford Island Discovery Centre at Lough Neagh and we had a boat trip on the Lough to get a better view, as well as a tour of the wildlife park. We also took to the water on the Strangford Lough ferry to visit the

Portaferry Explorers Aquarium.

No trip to Northern Ireland would be complete without a visit to the famous Giant's Causeway and this involved a very long, wonderful, sunny day, discovering the

beautiful North Antrim Coast and its beaches and daring to cross the well-known Carrick-a-rede rope bridge.

We learnt so much while we were away, and had a an excellent time too!



# Arrivals ● Births ● and Hatchings

## AUGUST, SEPTEMBER and OCTOBER 1999



● Congo Peafowl and chick.

Photo by Roger Wilkinson

### MAMMALS

*Rodrigues Fruit Bat	<i>Pteropus rodricensis</i>	0.0.1	Birth
*Lion-tailed Macaque	<i>Macaca silenus</i>	0.0.1	Birth
*Sulawesi Crested Macaque	<i>Macaca nigra</i>	0.0.1	Birth
Mara	<i>Dolichotis patagonum</i>	0.0.2	Birth
*Babirusa	<i>Babirusa babirusa</i>	0.1.0	Arrival
*Burmese Brow-antlered Deer	<i>Cervus eldi thamin</i>	0.0.2	Birth
Sitatunga	<i>Tragelaphus spekei</i>	1.0.0	Birth
*Blackbuck	<i>Antelope cervicapra</i>	0.1.0	Birth
*Arabian Gazelle	<i>Gazella gazella arabica</i>	0.1.0	Birth

### BIRDS

*Chilean Flamingo	<i>Phoenicopterus chilensis</i>	0.0.2	Hatched
*Marbled Teal	<i>Marmaronetta angustirostris</i>	1.1.0	Hatched
American Black Vulture	<i>Coragyps atratus</i>	0.1.0	Arrival
*Rourol Partridge	<i>Rollulus roulroul</i>	0.0.3	Hatched
*Mountain Peacock Pheasant	<i>Polyplectron inopinatum</i>	0.0.3	Hatched
Common Peafowl	<i>Pavo cristatus</i>	0.0.4	Hatched
*Congo Peafowl	<i>Afropavo congensis</i>	1.0.0	Arrival
Speckled Pigeon	<i>Columba guinea</i>	0.0.1	Hatched
*Mountain Witch Dove	<i>Geotrygon versicolor</i>	0.0.1	Hatched
*Luzon Bleeding Heart Pigeon	<i>Gallicolumba luzonica</i>	1.0.0	Arrival
*Mount Apo Lorikeet	<i>Trichoglossus johnstoniae</i>	0.0.1	Hatched
*Princess of Wales Parakeet	<i>Polytelis alexandrae</i>	0.0.4	Arrival
*Thick-billed Parrot	<i>Rhynchopsitta pachyrhyncha</i>	0.0.1	Hatched
*Red-tailed Amazon	<i>Amazona brasiliensis</i>	0.1.0	Arrival
*Schalow's Turaco	<i>Tauraco schalowi</i>	0.0.1	Hatched
*White-cheeked Turaco	<i>Tauraco leucotis</i>	0.0.2	Hatched
Silver-beaked Tanager	<i>Ramphocelus carbo</i>	0.0.1	Hatched
Red-cheeked Cordon-bleu	<i>Uraeginthus bengalus</i>	0.0.2	Hatched
Royal Starling	<i>Cosmopsarus regius</i>	0.0.2	Arrival
*Bali Starling	<i>Leucopsar rothschildi</i>	1.0.0	Arrival
Azure-winged Magpie	<i>Cyanopica cyana</i>	0.0.2	Hatched

### REPTILES

Malayan Box Turtle	<i>Cuora amboinensis</i>	0.0.1	Hatched
*Sand Lizard	<i>Lacerta agilis</i>	0.0.14	Hatched
Tokay Gecko	<i>Gekko gekko</i>	0.0.2	Hatched
Leopard Gecko	<i>Eublepharis macularius</i>	0.0.6	Hatched
Collared Lizard	<i>Crotaphytus collaris</i>	0.0.1	Arrival
*Cuban Boa	<i>Epicrates angulifer</i>	0.1.0	Arrival
Honduran Milk Snake	<i>Lampropeltis triangulum</i>	0.0.3	Hatched

### AMPHIBIANS

*Yellow Striped Poison Arrow Frog	<i>Dendrobates leucomelas</i>	0.0.1	Metamorphosed
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### FISH

Cardinal Tetra	<i>Paracheirodon axelrodi</i>	0.0.2	Arrival
Congo Tetra	<i>Phenacogrammus interruptus</i>	0.0.12	Arrival
Clown Loach	<i>Botia macracantha</i>	0.0.3	Arrival
*Lake Victoria Cichlid	<i>Haplochromis argens</i>	0.0.38	Bred
*Lake Barombi Mbo Cichlids	<i>Stometapia pindu</i>	0.0.37	Arrivals
*Lake Barombi Mbo Cichlids	<i>Sarotherodon sp.</i>	0.0.22	Arrivals
Madagascar Rainbow Fish	<i>Bedotia madagascariensis</i>	0.0.50	Bred
Arched Corydoras	<i>Corydoras arcuatus</i>	0.0.1	Arrival
Yellow Long-nosed Butterfly Fish	<i>Forcipiger longirostris</i>	0.0.1	Arrival
Yellow Tang	<i>Zebrosoma flavescens</i>	0.0.1	Arrival
Yellow-tailed Blue Damsel Fish	<i>Chrysiptera hemicyanea</i>	0.0.13	Arrival
Emperor/Banggai Cardinal Fish	<i>Pterapogon kauderni</i>	0.0.26	Bred
Cleaner Wrasse	<i>Labroides dimidiatus</i>	0.0.1	Arrival
Bicolour Angelfish	<i>Centropyge bicolor</i>	0.0.1	Arrival
Flame Angelfish	<i>Centropyge loricus</i>	0.0.1	Arrival

Key: Col. 1=Male. Col. 2=Female. Col. 3=Young or unknown \*Rare/Endangered