

Zoo Life

Summer 2002 - Issue 10

CHESTER ZOO'S MAGAZINE FOR MEMBERS AND ADOPTERS



Inside this Issue: Book your place to Eden • Marmot Mania • New photo competition

From the Director's Desk

Professor Gordon McGregor Reid



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MEETINGS are rather like cocktail parties. You don't want to go, but you're cross not to be asked!

That's a quote from Jilly Cooper's book *How to Survive from Nine to Five*. The sunshine is beckoning through my office window and the glorious gardens and wonderful animals are just a few steps away. But the diary is full of meetings. Would I really be 'cross not to be asked?' I couldn't possibly comment!

TEAM MEETINGS

Thursdays are the main meetings days. Once a fortnight the divisional heads get together to discuss weighty matters of policy, programmes and planning. On the alternate Thursdays, the wider management team, with representatives from all the different sections of the Zoo, meet for a very lively and informative exchange of news and ideas. Sometimes, when I listen to the reports from curators, gardeners, groundstaff, caterers, retailers, membership and adoption, development, marketing, events office, information technology, accounts and administration, personnel, safety and security, I'm amazed at the way all these skills knit together into the smooth, joined-up operation we present – I hope! – to our visitors.

I learn a lot from these meetings. Mostly, of course, the matters discussed are serious and important to the successful running of a very complex business. But it's a rare Thursday morning when there is no light hearted element to the business, and there are no hoots of laughter echoing through the corridors! We have heard tales of eccentric behaviour by brides in Oakfield House; of the phone call from the man who wanted to pay us to sedate a tiger, so that his girl friend could stroke it; of the marketing manager of a city centre shopping arcade, requesting a chimpanzees' tea party to entertain the shoppers; and (*my favourite*) of the press photographer, who learning that we were to transport a giraffe to Knowsley Safari Park, parked his car on the road outside, expecting to get a picture of an open top lorry with the giraffe nodding gracefully to other road users!

EXOTIC VENUES

Sometimes the meetings are in places even more exotic than Chester Zoo. Earlier this year I attended a Conservation Workshop in the United Arab Emirates. The trip was sponsored by the UAE government, who are taking biodiversity conservation of threatened Arabian species very seriously. I took

part in working groups on Arabian Leopard and Arabian Gazelle, and helped to facilitate a new Fish Group. Working in a tent in the desert of Sharjah is just a little different from Chester Zoo meetings! Alas – no magic carpets or belly dancers, but discussions on the little known freshwater fish fauna of the Arab Peninsula were almost as stimulating. On the last evening of the conference, an Arabian banquet was laid before us, and we all squatted on Persian rugs and politely used only our left hands to eat. Makes a change from coffee and sandwiches in the Oakfield!

GREAT ESCAPE

It is sometimes possible to escape from the meetings, and it's been exciting to walk through the Zoo and see all the new developments coming to life over the past couple of months. The long awaited two year old Black Rhino *Sammy* arrived safely from Osaka Zoo in Japan, accompanied on his journey by our Vet, Stephanie Sanderson. He has settled in well, and will be an important animal in the new *Tsavo Black Rhino Experience*.

Marmot Mania has proved very popular with the youngsters, and so far no overweight Dad has managed to get stuck in the tunnels. The Red Pandas are well established in their new custom-built enclosure by the Oakfield Lawn, and are attracting a lot of attention. The Animal Health Centre is now complete, and there will be a feature on this in the Autumn issue of *Zoo Life*.

Frances, my PA, is calling out the dreaded 'M' word once again. Have to go!

Front Cover: The beautiful Red Pandas are a very popular new addition!
(Photo by Pat Cade)



▲ Which way to the next meeting?

Meetings and Events previously found on this page have now moved to the Back Cover

CHESTER ZOO 100 CLUB

The winners of the recent prize draws are:

JANUARY 2002

£100 Mrs Roberta Carson, Chester
 £100 Mr John Barnett, Walton on Thames
 £50 M Tony Williams, Winsford
 £50 Mr John Clegg, Liverpool

FEBRUARY 2002

£100 Mrs E J Norman, Chester
 £100 Mrs Mary Doogan, Chester
 £50 Mr Donald McNeil, Newcastle
 £50 Mrs Kathleen Oaks, Manchester

MARCH 2002

£100 Mr Mervyn Garside, Chester
 £100 Mrs Catherine McGarva, Chester
 £50 Mrs Susan A Hall, Chester
 £50 Dr Philip Robinson, Chester
 £50 Mr Mike Wiltshire, Birkenhead

All prize winners will be notified by post and will be listed in the next edition of Chester Zoo Life. Membership of the 100 Club is still invited. Please contact Lynsey Jones or Maureen Allsopp, Membership and Adoptions Secretary, if you wish to participate.

Adopter Days

Mark your diaries! This year's special days of appreciation for our adopters will be on Saturday 5 October and Sunday 13 October.

Details will be sent to all adopters with the September issue of *Zoo Life*.

A TRIP to EDEN


If Sarah Bird's report on her visit to the Eden Project in the last issue of *Zoo Life* stirred your interest, then join us

on a trip to Cornwall's exciting, hugely successful new attraction. The Education Division is arranging a members' trip to the Eden Project on 12/13 October this year. A visit to Newquay Zoo is also included. Overnight accommodation is in a centrally located ETC 4 diamond hotel. The cost is just £75 per person, to include coach travel, dinner, bed and breakfast at Priory Lodge Hotel, Newquay; Entrance and guided tour to Newquay Zoo and entrance to the Eden Project. If you would like to join us, then

please complete the coupon below and return it with your cheque made payable to Chester Zoo, no later than Friday 28th June. Please enclose a stamped addressed envelope for booking confirmation, which you will receive within 10 working days.

Please note, we can issue no refunds for cancellations unless we can re-sell the seats.

If you would like further information, please contact KATE BRANKIN on 01244 650249

CUT ALONG THIS LINE 

MEMBERS' TRIP TO THE EDEN PROJECT 12 - 13 OCTOBER 2002



Number of places required:

Name(s):

Address:

..... Post Code

Daytime phone no: Evening phone no:

Any special dietary or disability needs:

Cheque enclosed @ £75 per person: £

PLEASE RETURN THIS FORM, WITH YOUR CHEQUE AND S.A.E TO:

Members' Trip
The Education Division
Chester Zoo
Upton-by-Chester CH2 1LH

Photocopies accepted if you don't want to cut up your magazine.

Zoo Review

Ruth Rendell Visits the Zoo



▲ Baroness Rendell.

AUTHOR Ruth Rendell, famously described by Time Magazine as 'the Queen of Crime Fiction' has become an enthusiastic supporter of our *Asian Elephant in Crisis* campaign. Her interest was sparked when she attended a reception at the House of Lords to highlight the campaign. Ruth Rendell was elevated to the House of Lords in 1997, where she sits as a working peer with the title Baroness Rendell of Babergh.

She is perhaps best known for the *Inspector Wexford* stories, dramatised for television with George Baker playing the title role. She has written over 50 novels, including the acclaimed psychological thrillers under the name of Barbara Vine.

Ruth paid her first visit to Chester Zoo at Easter, and enjoyed a guided tour, including, of course, a visit to the elephants.

BOOK REVIEW

BUSHCRAFT by Ray Mears
 Hodder & Stoughton £18.99

Ray Mears is well remembered here at Chester Zoo for a fascinating talk on *The World Through Native Eyes* in November 2000, and is patron of our fundraising campaign *The Asian Elephant in Crisis*. John Edwards reviews his latest book.

Can you tell a good 'feather stick' from a poor one? Can you find and prepare a tasty and nutritious meal in the Outback? If not (...and should you ever need to), Ray Mear's *Bushcraft* will be of interest.

In this single volume, Ray, well-known through his highly successful television series *Ray Mears' World of Survival* and *Ray Mears' Extreme Survival Stories*, takes the reader through the skills needed to survive in the wilderness. His basic, easy to follow style, translates well from screen to page.

Included are the survival basics such as finding food and water, as well as creating fire and shelter. All are dealt with in an accessible and entertaining

style. This book should impress seasoned adventurers and armchair explorers alike.

STAFF NEWS

Welcome To:

Ian Bodsworth, Retail Stores Supervisor; Tracey Bryan, Secretary in the Estates Division; Merl Pumford, Architectural Building Technician; Dr Andrea Fidgett, in the new post of Nutrition Officer.

Welcome Back!

Kate Brankin, who has returned to her old job as Secretary in the Education Division.

Congratulations To:

Scott Wilson, formerly of Stores, who has been appointed Conservation Assistant in the Animal and Plant Division.

Farewell To:

Chris Vere, Marketing Manager and Pat Cade, Public Relations Manager, who both retire this summer.

Nigel Wood and Rob Duncan, from Horticulture and Amenities, who have both moved on to other jobs.

Summer Programme with the Presenters

THE Presenters have devised a new series of talks around the Zoo for the summer months. If you want to learn more about the species in general, as well as about the individual animals, make sure you are in the right place at the right time!

- 10:30 Tapirs and capybara (new talk)
- 11:00 Rhinos (revised to highlight construction of the new exhibit)
- 11:30 Elephants
- 12:00 Lions (revised)
- 12:30 Andean Condors
- 12:45 Coatis
- 2:15 Sealions
- 2:30 Chimps (revised)
- 3:15 Penguins
- 3:30 Sealions
- 4:00 Macaws and Capuchins (to highlight the EAZA Atlantic Rain-forest campaign - see Page 6)
- 4:30 Jaguars

TOP MARK!



MARK Pilgrim has swapped his General Curator, Operations badge to a new one bearing the title of Chief Curator! The appointment was made in March this year.

STAFF NEWS

Welcome To:

Amanda Wright, who joins us as Head of Marketing in early June. Amanda was previously the UK Tourism Manager at Edinburgh Woollen Mills.

AWARD

As this magazine went to press, we heard that the Zoo was a highly commended finalist in the 'not-for-profit' category of the Duke of Westminster awards. The awards recognise business excellence in the North West.

LEGACY PLEDGE NEWS

THE Zoo was grateful to receive a bequest from the estate of Mr Geoffrey Singleton, of Thornton Clevellys in Lancashire, who died aged 72.

Mr Singleton had a wide range of interests and was generous in his estate to many other organisations. His legacy to the Zoo was in special memory of his pet parrot called *Polly*, who shared his life for 31 years. He was a keen visitor to the zoo over a number of years and he has left us a sum, estimated to be in the region of £17,000.

We set up the *Legacy Pledge Club* in order to recognise and acknowledge all those who have the foresight and



Education + Interpretation = Commendation

THE inter-active interpretation in the Spirit of the Jaguar received a commendation at the national Interpret Britain awards. Stephen McKeown, Head of Education, visited Glasgow for the presentation, along with education officers Sara Ruks and Gill Wells. Photograph shows Stephen accepting the certificate from Loyd Grossman.

kindness to remember the Zoo when making their will. Amongst other benefits, members are invited to various events through out the year.

For further information on the **Legacy Pledge Club**, please contact Hazel Russell on 01244 650220 or by email at h.russell@chesterzoo.co.uk.

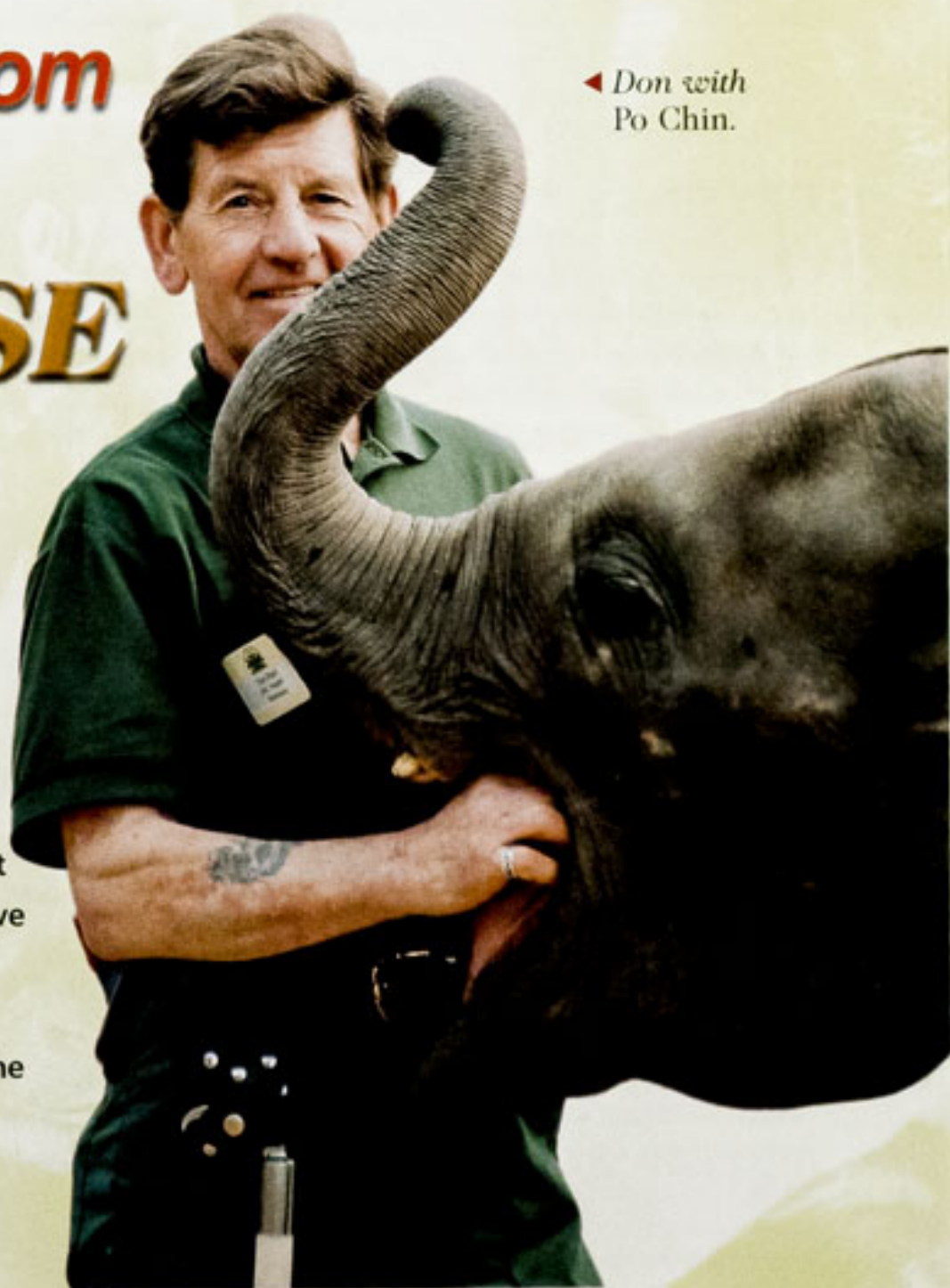
JUMBO Support from CHESTER RACECOURSE

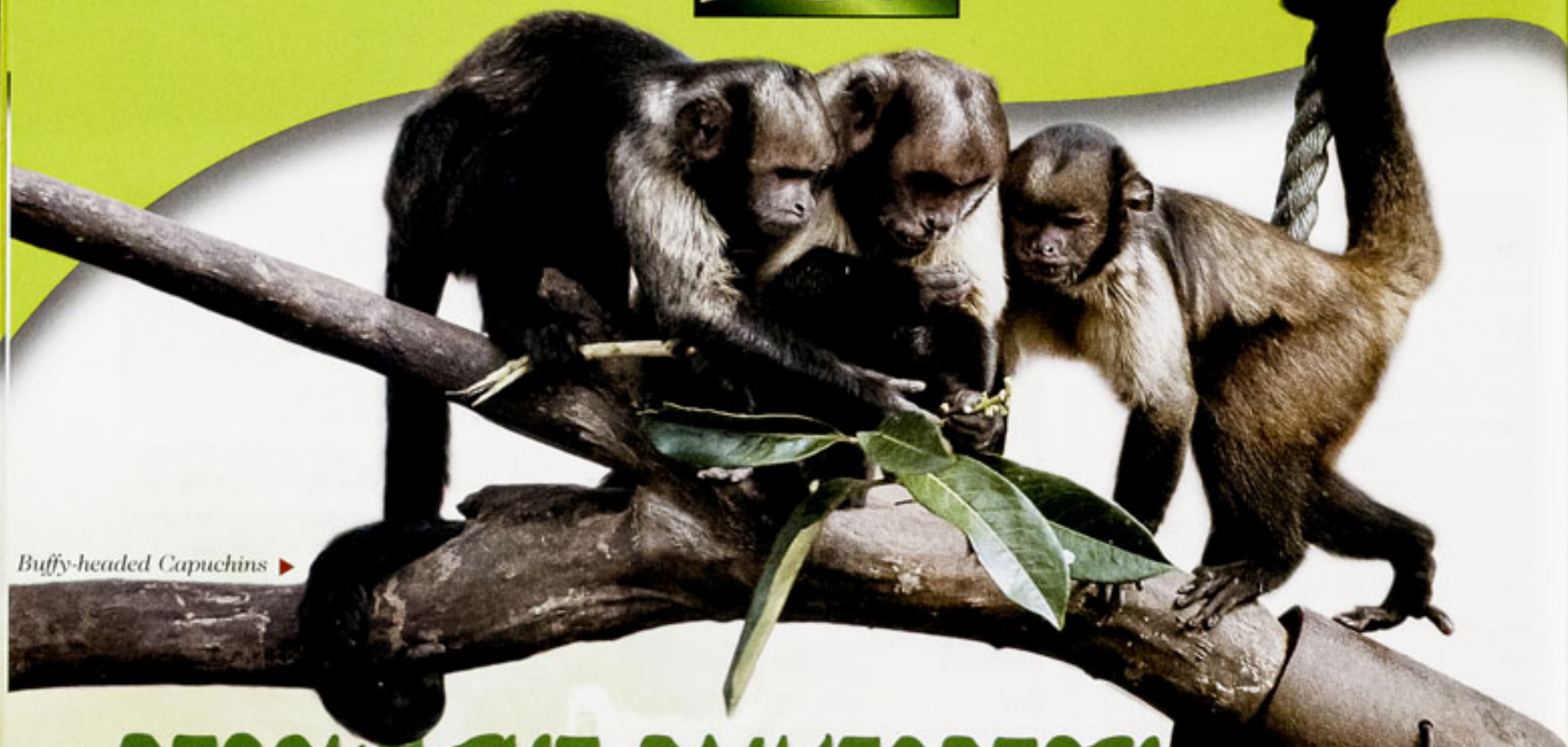
◀ Don with Po Chin.

WHEN the Chester Racecourse team offered to support the Zoo's *Asian Elephant in Crisis Campaign* they were not aware of the particular link between the two organisations. Senior Elephant Keeper Don Plant had a previous career as a jockey, and 30 years ago rode a winner at The Roodee! It was 1972, and Don remembers it well. His horse, *Sovereign Quest*, won by eight lengths.

Chester Racecourse Chief Executive Richard Thomas was delighted to hear of this connection. 'The Zoo's Asian Elephant project is a most important campaign, and we are proud to give it our support. Don's background in riding and then training racehorses was a very happy coincidence.'

The Racecourse made the campaign the official charity for the first day of the new season at Chester, on 7 May. Other dates this season are *Roman Day*, 29 June; 12 & 13 July; *Family Funday* 4 August; *August Festival* from 29 – 31; and 25 September.





Buffy-headed Capuchins ▶

RESCUE THE RAINFOREST!

Each year EAZA - The European Association of Zoos and Aquaria - concentrates its fund raising efforts on a particular campaign. Last year's campaign successfully raised the awareness of the bushmeat crisis. This year, as Dr Roger Wilkinson explains, the attention is on the plight of the Atlantic Rainforest.

THE Federation of Zoos of Great Britain and Ireland is joining EAZA in the 2002 campaign, and as Chester Zoo is a member of both organisations, we will be taking an active part in the fundraising. The aim is to increase public awareness of the unique fauna and flora of these forests and their threatened status. Additionally, with fund raising efforts from each member zoo, the campaign will support South American Atlantic forests through purchase of land, planting of corridors connecting fragmented reserves and funding of important research programmes.

Brazil is home not only to the Amazon rainforests but also to the much more immediately threatened but less well known Atlantic rainforest or *Mata Atlântica*. The Atlantic Rainforest runs alongside the Atlantic coast of Brazil and also extends inland into south-east Brazil, Paraguay and northern Argentina.

These rainforests are special as they are habitats for many animals and plants found nowhere else in the world. These species include the endangered Buffy-headed Capuchins, Red-tailed Amazons and Red-billed Curassows that we hold at Chester Zoo as participants in the managed European zoo breeding programmes (EEPs) and studbooks (ESBs).

Atlantic rainforests are now highly fragmented and occupy less than 10% of their previous range. Threats to the remaining forests include continued logging and clearance as well as hunting for the wildlife trade. Collection of orchids, tree ferns and other flora for international trade also poses a major threat.

GOLDEN WONDERS!

The flagship species of the campaign are the Lion Tamarins and especially the Golden Lion Tamarin, which has been a focus of *in-situ* and *ex-situ* co-operation resulting in their successful and widely publicised reintroduction. Funds raised through the campaign will be directed to the *Lion Tamarins of Brazil Fund* and will support the Tamarins and other threatened fauna and flora through the protection of the rainforests in which they live.

Whilst Chester Zoo does not currently maintain Lion Tamarins, these are on our collection plan and highlighted for the development of a new exhibit in the near future. Other animals in this collection found in Atlantic rainforest include Jaguars, Maned Wolves, Blue-winged Macaws, Blue-throated Conures, Spectacled Owls, Yellow-footed Tortoises and Rainbow Boas. These and the special plants of the region will be the focus of our educational campaign programme with a trail devised by the Education Division and a specially tailored talk given by our presenters.

Additionally the Zoo will be organising special activities and events during *Atlantic Rainforest Week* scheduled for the second week of August. This will be co-ordinated through the Animal and Plant Conservation Division.

This campaign will complement the conservation and research programmes for Atlantic rainforest supported by Chester Zoo. As part of our commitment to the Buffy-headed Capuchin EEP, Chester Zoo has already contributed funds to help initiate an important field research programme. The Buffy-headed Capuchins in the Zoo (see photograph above) are now in their new accommodation, as part of the *Forest Zone*.

Chester has also supported an ongoing project on Blue-winged Macaws in *Mata Atlântica* fragments in São Paulo state by Brazilian researcher Flavia Nunes and has agreed to support a new research initiative this year on Red-tailed Amazons, which are endemic to a narrow stretch of the remaining Atlantic coastal forests.

The EAZA campaign will be an important focus for our own activities and those of other EAZA zoos. Working together we will be able to make a most significant contribution to the survival of these forests and their unique and diverse fauna and flora.

BUY A TICKET!

A visit to the Zoo will provide you with several opportunities to make a donation to the cause, including the chance to win a giant Jaguar soft toy! Please buy a £1 raffle ticket from the *Ark Shop* on your next visit! If you would like to make a contribution by post, please make cheques payable to Chester Zoo Rainforest Campaign, and send to Richard Barnett, Chester Zoo, Upton-by-Chester CH2 1LH.



CHESTER ZOO 2002 Photographic Competition

THIS year there are more opportunities than ever before for great photography in the Zoo! The Red Pandas, in their treetop home; Prairie Marmots and children in the new *Marmot Mania* or the Capuchin Monkeys in their new accommodation. Soon, the new *Tsavo Black Rhino Experience* will open. So instead of just keeping those photographs in a drawer at home, send them in for a chance to win a valuable prize.

Anyone who has visited the **McArthur Glen Designer Outlet** at Cheshire Oaks will know of the great bargains to be found - up to 50% discount on leading fashion brands and homewares. The photograph judged to be '**Best in Competition**' will win a £500 voucher to spend in any of the stores on the site. The winner will also receive the *Dr David Cooke* trophy to be held for one year.

The Print section always attracts the greatest number of entries, and the first prize winner in this category will win a three night holiday for two people, including bed, breakfast and evening meal, at the UK **Holiday Inn** of their choice. With so many hotels in this chain right across the country, the choice will be a difficult one! *The Eric Kirkland* trophy for one year goes to this winner. **Calumet** are the suppliers

of quality photographic equipment to the Zoo, and they have generously donated a £100 voucher for the runner-up in this section.

The Slide section winner will have the opportunity to try another branch of photography, with the prize of a **Kodak** digital camera. The **Kodak** digital range makes this a fun and creative way of taking pictures. This winner also holds the *Ken Green* trophy for a year. The runner up in this category will have the chance of spending £75 in their nearest **Jessops** store - the UK's leading photographic retailer.

Bridgemere Garden World is one of the biggest and best garden centres in the UK, with a huge variety of plants, garden equipment, quality clothing and gifts. It also has a superb tea shop! Once again, **Bridgemere** have sponsored the Gardens section of the competition, with a £100 gift voucher for the best print and the winner will hold the **Bridgemere** trophy for one year. The best slide in the garden section wins a £75 voucher from **Jessops**.

Borders Books, at the Coliseum, Cheshire Oaks, is the largest single storey book shop in the North West, and a place where many zoo staff spend a happy hour or two on their way home! **Borders** have sponsored the

Junior section of the competition, with a £100 gift voucher for the winner and £60 voucher for the runner-up. *Emma's* trophy - named for our first Black Rhino calf - goes to the Junior Photographer of the Year. Ten more entries in this section will each win a one-use camera from **Max Spielmann**.

The number of entries in our Digital section increases each year, and so does the creativity of the entries! **3C Imaging** of Liverpool, who produce much of the high quality reprographics in the Zoo's displays, have offered a generous £75 as first prize in this section. **The Colour Centre** in Ellesmere Port, who handle all the Zoo's developing needs, are offering £50 worth of digital memory to the Digital runner-up.

In addition, **Outdoor Photography** magazine will give one-year subscriptions to the runners-up in the Prints, Slides, Gardens and Digital Sections.

To encourage early entrants, we are offering merit prizes of Zoo family tickets and Kodak film vouchers for the best photographs received each month.

Make sure you bring your camera every time you visit the Zoo - it could lead to great things!

Entry forms in the Zoo shops, or send a sae to Photo Comp, Chester Zoo, Upton-by-Chester, Cheshire CH2 1LH.

KEA - THE KING OF NEW ZEALAND BIRDS

Anne and Paul Morris continue our series on Environmental Enrichment, looking at the charismatic Kea!



'Each of the world's major mountain ranges has an avian monarch; a native bird that has come to symbolise the wild beauty of the region. Like the Condor of the Andes or the Golden Eagle of the Rockies, the Kea represents New Zealand's Southern Alps.'

THAT is a quote from *The Parrot that Plays*, an article by Judy Diamond and Alan Bond – and they could not have been more imaginative. Keas are native to the South Island of New Zealand, which comprises hundreds of mountain peaks covered in perennial snow, above a well demarcated tree line. In this rigorous and unforgiving environment, the Kea has evolved a level of intelligence and flexibility that rivals that of the most sophisticated monkeys.

To devise and develop stimulating enrichment for our Chester Zoo Keas, we need to study their habits in the wild. Keas adapt their diet in accordance with the seasonal availability of their food. In spring they forage on the various insects and plants uncovered by the melting snow in daisy-filled alpine grasslands. In summer, they converge on the alpine shrubs for fruit, foliage, seeds and flowers. After Beech trees, Coprosma berries are their most

important food source. Keas feed readily from flowers, lapping up nectar and pollen and also catch and eat significant numbers of grasshoppers, beetle grubs and other insects. In autumn, they turn their attention to the buds of the Mountain Beech and forage on roots, berries, bulbs, stems, fruit and seeds.

In the stark New Zealand winter, from June to September, the greatest mortality of Keas is due to starvation. Often feeding below the tree line on the forest floor, Keas scrounge for remnants of fallen fruits and berries. They also seek animal fat and will tear open carcasses to consume meat and internal organs. They scrape dried meat from bones before cracking and extracting the nutritious marrow. The larger male Keas have an advantage over the smaller females here, in that their upper mandibles can be up to 15% longer.

In the wild, it is these adaptations, plus a bold, inquisitive and exploratory nature, that has brought them into conflict with the more adventurous New Zealand population. Keas are regularly found around garbage dumps, parking lots, ski lodges and back country cabins, where they wreak havoc on human property. Here they shred tents and hiking boots, rifle through backpacks and pull the rubber from car windscreen wipers. They have even been known to enter buildings through chimneys in order to steal food – but their widespread reputation for killing sheep is somewhat exaggerated.

At Chester Zoo, enrichment is based on both the investigative nature and the



▲ The Kea shows great agility when presented with suspended flowering branches.



▲ A sharp beak is the perfect tool for prising seeds from pine cones.

dextrous ability of the wild birds. When foraging, our birds are encouraged to rip and tear into superfluous objects such as cardboard rolls stuffed with food. They will also manipulate pinecones studded with seeds and nuts. Egg boxes or cardboard boxes filled with bark chip or similar substrate, allow the Kea to use beak and feet to grip, pull, prise and generally demolish these food parcels for choice titbits. Natural foods, such as leafing or budding willow and poplar branches and flowering shrubs, such as Currant, Mahonia and Forsythia are all easily presented and utilised. To encourage digging and grubbing for food, we provide heaps of soil or shavings containing hidden items.

By making use of studies of Keas in the wild, and by diligent use of materials to hand, we can greatly enhance the lives of these inquisitive, intelligent and entertaining parrots.

RESCUED TURTLES FIND SANCTUARY IN CHESTER ZOO

The Asian market for exotic foods is putting a very serious pressure on wild populations of several species. One of the animals at risk from this market is the Freshwater Turtle. Herpetologist Isolde McGeorge explains the background to 20 new arrivals in the Zoo.



▲ Spiny Turtle

In China there are 17 species of Freshwater Turtle, but intensive hunting of these animals has meant that fewer may be found and hunters have moved further afield, crossing borders into Vietnam and other South East Asian countries to supply the demand for this delicacy. Not only does it make good eating but it is also believed to have medicinal qualities promoting good health and a longer life.

Each year 20 million animals are taken for the exotic food market and that adds up to a cool £2.2 million for the turtle food industry. *As a result of the pressure on wild turtle populations, it is believed that of the 80 Asian species, 15 will be extinct in the near future.* Many of the Asian species are currently listed as endangered or vulnerable on the IUCN Red Data List and that includes the critically endangered River Terrapin (*Battagur baska*).

Last December, an attempt to smuggle 10,000 Asian Turtles into China was thwarted when the shipment was seized in Hong Kong by Customs

officials. It is an offence to import endangered species into Hong Kong (the main port of entry) without a special permit issued by the Agriculture, Fisheries and Conservation Department. The maximum penalties are heavy fines and one year imprisonment for offenders. The turtles had been smuggled in appalling conditions and were in extremely poor physical health, further weakened by the cooler climate in Hong Kong. The situation was declared an international crisis to which the zoos of the world responded. Zoos from the USA collected 7,000 of the turtles and 1,000 were received by European collections. Chester Zoo responded immediately to the crisis by pledging support and offering homes to 20 animals of two separate species.

It was an incredible feat organising the packing and distribution of all of the turtles but all countries rallied around and with such massive support the turtles were eventually sent to the various organisations offering homes. Chester's turtles arrived on the 18th January. Their journey had begun at Kadoorie Park and Botanic Garden in Hong Kong, where they had received some medical attention. They were then flown to Schipol Airport, Amsterdam where they were sorted and packed and then travelled by road and ferry to their final destinations.

After unpacking,

◀ River Turtle.

each turtle was assessed visually before introduction to an isolation facility. As all the turtles were by now deeply traumatised, it was felt the best course of action would be unobtrusive observation before starting a regimen of treatment for each one.

Guidelines had been issued via our European co-ordinator at Rotterdam Zoo as to the best ways of treating these animals, which we found extremely helpful and information has passed freely between organisations in a combined effort to save these turtles from death.

The two species we committed to were the Spiny Turtle, a shy, terrestrial animal of around 20cm in length, and the Fat-headed River Turtle, a good-natured but secretive aquatic animal of similar size. Both species occur in the tropical forest areas of South-East Asia (Indonesia, Sumatra, Malaysia and Thailand). They are both now in critical danger in the wild and there has never been a more urgent need to develop conservation-breeding programmes for South-East Asian Freshwater Turtle species.

Worldwide plans are in place to secure the future of these animals by providing a safety net in the form of established and co-ordinated captive breeding programmes.

Although much has been done to generate public interest and awareness of this situation, of which the severity can only be likened to the 'Bushmeat Crisis', the continuation of the exploitation of the turtles will eventually lead to their extinction. That day could be now!



Photographs by Isolde McGeorge.

Tracking Bats on RODRIGUES ISLAND

In last autumn's issue of Zoo Life, Vicki Powell wrote about her first field season on Rodrigues Island carrying out a study on the ecology and conservation of the critically endangered Rodrigues Fruit Bat. She has recently returned from her second visit, to continue the study.



THE second field season was really a continuation of the first few months I spent on the island. During my three months back in the UK I started to develop the radio tracking part of my study. The famous naturalist Gerald Durrell went to the island in 1976 and caught 18 bats for conservation breeding to provide a safety net for the wild population. Since then infrequent population censuses have been carried out on Rodrigues, although little has been done to assess the habitat of the bats and their utilisation of the remaining forest patches on the island. This is obviously crucial information if we are to decide on future conservation actions for the species.

I was lucky enough to receive funding from *Bat Conservation International* to buy radio telemetry equipment for this part of my study. Whilst back in the UK I spent some time speaking with *Biotrack*, a firm specialising in the design and construction of radio tracking devices. The Rodrigues Fruit Bats had never been radio tracked before and *Biotrack* were happy to take up the challenge of developing a collar that could be used for this species. After much deliberation we came up with a design that was very light and would hopefully have a minimal effect on the bats. A problem with many studies that involve radio tracking is that it is difficult to know what effect the radio collar is having on the animals' behaviour and therefore whether they are behaving in a natural manner while being studied.

ZOO TRIALS

I tested my collars on the bats at Chester

Zoo and this enabled me to have a run-through of the attachment of transmitters under the watchful eye of our skilled veterinary team. I was then able to monitor the bats very carefully for any problems or change in behaviour related to the collars. This was extremely beneficial to my work and showed that the bats' movements were not inhibited at all by the collars and within 24 hours their behaviour had returned to normal. With slight alterations made to the collars and all equipment prepared I was ready for my return trip to Rodrigues.

Once again Air Mauritius generously donated flights and I flew out with a research assistant, Gemma Thomson, who had spent some time at Chester Zoo gaining work experience in the *Twilight Zone* and working as a presenter. We arrived on Rodrigues in October for five months of research. The initial few weeks on the island were spent checking for any new roost sites, carrying out counts of the population and monitoring fruiting and flowering times in each of the forest patches. We were also on the look out for the best place to erect mist nets in order to catch the bats.

NIGHT WATCH

The plant nursery run by the *Mauritian Wildlife Foundation* (MWF) on Rodrigues is surrounded by many important food species of the Fruit Bats. On many consecutive nights we had seen up to 50 bats flying into this area while foraging and so we decided this would be an ideal place to set up mist

▲ Radio Tracking the Bats

nets. We noticed the bats always flew into the nursery just above the tree line and so an 18m net was erected between fruiting trees with the bottom of the net running along the tops of the trees. As with all aspects of my work, the Rodriguan staff of the MWF provided valuable assistance while we were catching bats. Every night 3 members of the team joined us to help raise and lower the nets and process each of the bats. Nets were raised at 5.00pm because although bats are nocturnal, the large flying foxes do tend to leave their roosts during the late afternoon to start their nightly forage.

From the moment the nets went up, the five of us sat watching the gap between the trees not daring to take our eyes off it for a second. Although bats have eyesight adapted to see in the dark, flying foxes also have very good vision in daylight, comparable to our own. As soon as the bats started to fly into the nursery we realised how good their vision actually was! They swerved above the net that was barely visible to our eyes. We reassured ourselves that as soon as the light started to drop, they would begin to lose sight of the net. Of course, as the saying goes, a watched pot never boils. As soon as I got up to check through equipment for the umpteenth time, a cry of BAT! came from behind me. I turned around to see four people sprinting towards the net. Within seconds we brought the bat down, untangled its feet and had it on the table ready to attach the collar and take measurements. After three years of working with the bats at

Chester Zoo, I was stunned by how quiet the large male was. He hardly moved at all and unlike our zoo bats made no vocalisations at us. Gemma wore very thick leather gloves to hold him carefully, as I attached the leather collar using a metal rivet that would rust over time and eventually allow the collar to fall off.

The MWF staff provided much needed torchlight and helped by recording all the information on each bat. Although we suspected that the wild bats might be slightly smaller and lighter than the zoo bats, to our surprise this male was actually heavier. All weights and measurements of the bats we subsequently caught were reassuringly very similar to the Chester bats. We obviously wanted to keep handling time to a minimum, so once all measurements were taken, the bat was quickly released into a nearby guava tree and we were very happy to see that handling time was only just over five minutes. In our eagerness to raise the net again, a small hole made by the previous bat quickly expanded into a much larger one, about one metre across. Not wanting to stop for the evening to replace the net, we assured ourselves that the likelihood of a bat flying straight through without touching the sides at all was very, very small. Of course, 10 minutes later, after settling down in our net watching positions, we sat stunned as a bat gracefully flew through the hole, skimming the sides by a few centimetres! We learnt not to underestimate these animals again and were very careful to fix any further holes!

CATCH AND COLLAR

Over the next week we caught and collared all six individuals needed for this pilot radiotracking study. The bat catch had gone extremely well, but unknown to us, the hardest part was yet to come. The transmitter on each collar had its own frequency, allowing us to identify each individual as it came into range. So for the following weeks we scoured each forest patch to identify the roosting location of each bat we had caught. We were able to locate most individuals that had been collared, although we realised very quickly that we didn't have a big enough range on the transmitters to locate individuals at a distance. Due to the very hilly topography of the island, we had to get



▲ The Mauritian Wildlife team love their Chester Zoo caps.

very close to the collared bats in order to get a clear signal. Unfortunately as soon as they left their roost sites in the evenings we could not get back to the car quickly enough to enable us to follow them to their feeding sites. Despite these problems we were able to get a good idea of their roost site locations and the distances they were travelling to reach feeding sites.

The pilot study proved to be very beneficial (problems included) and before I return to Rodrigues in June this year, I will be making a few more alterations to the radio collars, in particular increasing the range of the transmitter and lowering the battery life (in order to keep the weight of the collar to a minimum). During the next field season up to 20 individuals will be radio tracked in order to get the necessary information on the species' distribution and habitat utilisation. All in all the second field season was a big success and we achieved all the aims we set out to do. This included vegetation transects in all forest patches on the island to make a comparison of roosting and non-roosting sites. Gemma carried out the first in-depth behavioural study of the wild bats, with some very interesting results and with the help of the MWF staff a simultaneous count of all roost sites was carried out each month. All this information will subsequently be used for the future conservation action plans for the species.



▲ Taking bat measurements.



▲ Fitting the radio collar.

NEW ARRIVALS

Penguin Chicks

THERE'S been a lot of activity behind the rocks on the penguin pool island! In the private areas, beyond the scope of public viewing, the Humboldt colony have been busy with their own breeding programme. Almost 20 chicks have been parent hatched this year. The mother birds raised no objection to Keeper Karen Davies gently removing their offspring for a few minutes each day for weighing and health checks. The one in our photograph was just 2 days old when he posed for the camera!



Picture: Chris Vire

Spot the Otters

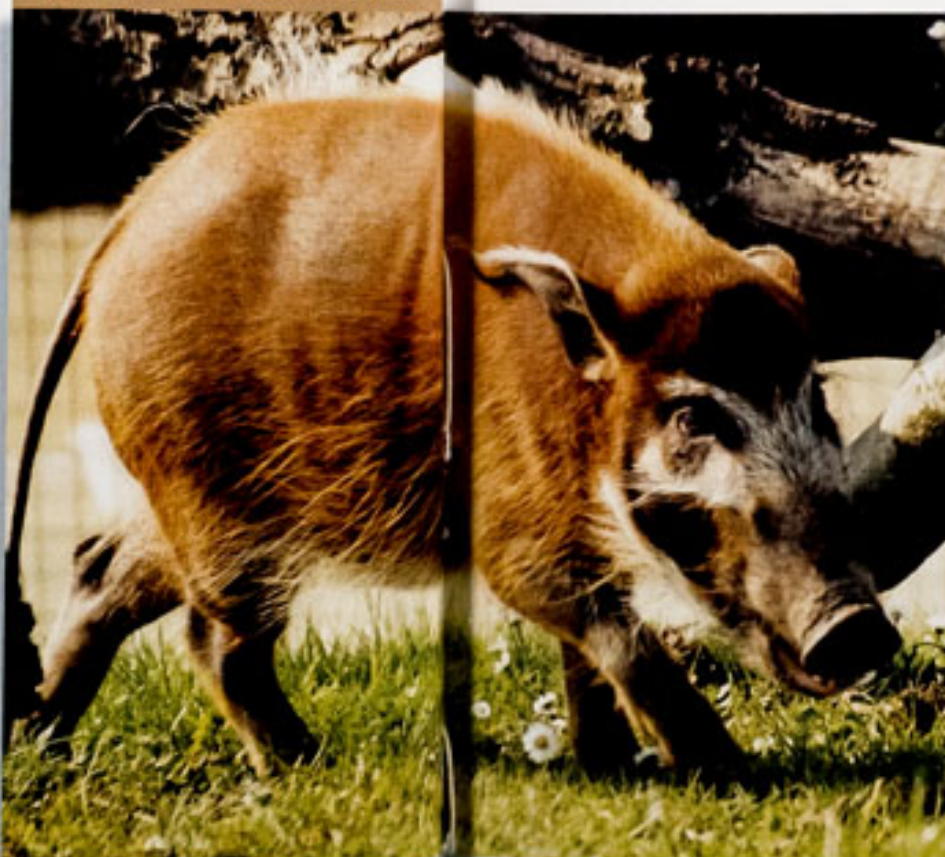
FOR a few weeks following the demise of the last elderly pair of otters, the pool has been unoccupied. But in the Spring a male Asiatic Small-clawed Otter called *Khuma* arrived from London Zoo, and was introduced to *Malecca*, a female from the Otter and Owl Sanctuary in the New Forest. The introduction has been very successful, and as the gestation period is only about 9 weeks, we hope to see some cubs in the very near future! This species is the smallest of the otter family, and the newly born youngsters weigh only 40 – 50 grammes at birth.



Picture: Stephen Jenner

MEET PUMBAA!

THIS handsome creature is Pumbaa, our first Red River Hog! She arrived in March from Colchester Zoo, and has quickly become a great favourite with staff and visitors. She has enormous energy, and runs around her enclosure at great speed. In the wild, this African species will feed on almost anything, including vegetable matter, insects, eggs and carrion. Its main predator is the leopard, and as leopards become rarer and rarer, the future of the Red River Hog becomes more certain. It is however under huge pressure due to the bushmeat trade.



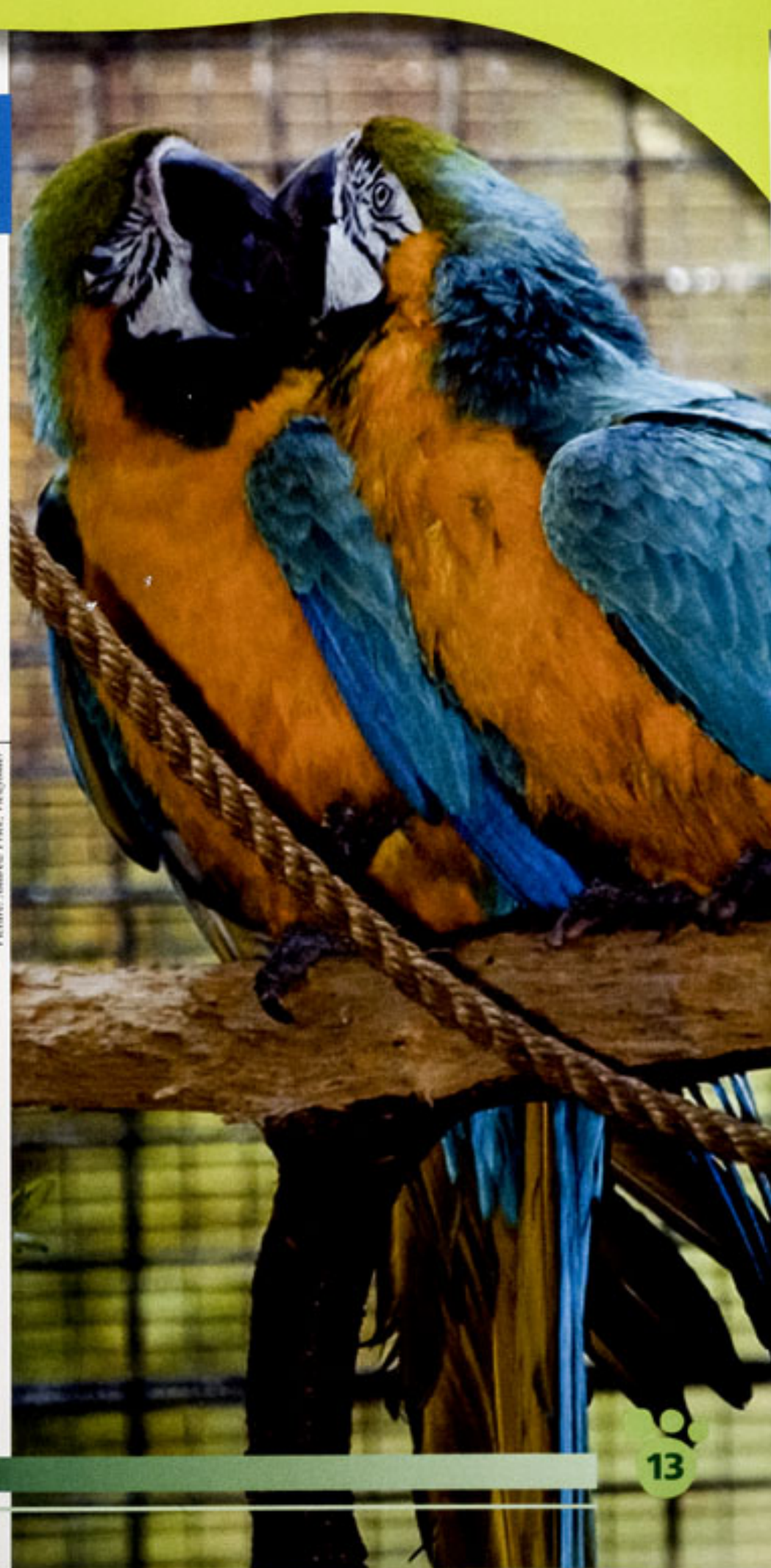
Picture: Pat Cade

Fine Feather Friends

THE Blue and Gold Macaw is a spectacular bird, with its brilliant colouring. Our elderly pair have been together for more than 30 years, but as this photograph demonstrates, they are still devoted.

Keeping staff were delighted to discover a newly hatched chick in another exquisite species – the Great Indian Hornbill. Hornbills are a fascinating group of birds. They look stunning and they have a bizarre breeding behaviour. The female is sealed into her nest chamber where she remains for several months, relying on the male to bring food for her and her offspring.

The Great Indian is the largest of this magnificent family. We have two pairs in the Zoo – one in Tropical Realm and the other in the Elephant Centre. With only a handful of zoos having ever reared this species and only four chicks successfully reared in Europe in the past five years, this chick's arrival is a significant and important event.



Picture: Andrew Price, Vireofinder

MUNDA WANGA LINKS MADE STRONGER



Chrispin Ntitima is Head Keeper at Munda Wanga Zoo in Zambia. Earlier this year he travelled to Chester to spend a month working with our staff.

This is the story of his visit, as told to Suzanne Thomas.

I WAS so excited when I was told that I would be coming to Chester Zoo for one month. I could hardly believe it and my family and friends were also very happy for me. I got to know about Chester Zoo when Alan Woodward, Team Leader Carnivores, and Stephen McKeown, Head of Education, came over and gave us lots of help and advice on how to improve the Zoo in Munda Wanga, Zambia, where I work as the Head Keeper. I was told that Chester Zoo had offered to pay for my travel expenses and provide me with work experience, something I could never

have afforded to do on my own. I have always had a dream that if I worked hard and trained myself well, I could one day become a curator. I knew this trip would help me fulfil that dream.

When I first saw Chester Zoo I was amazed. It looked huge! The Zoo in Zambia is very small so I thought all zoos were small. During my stay I spent a few days on every section. I worked with animals that I had never seen before, like the Congo Buffalo, Black Rhino and Giraffes. Now, if we ever acquire some of these animals at my Zoo, I will know how to look after them. It was also

important for me to gain more experience with the big cats on the Carnivore section, because they are my favourite animals.

I have learnt so many things to tell my work mates at home. They will want to know all about my time here and I can teach them everything I have learnt about diets, enrichment and veterinary care.

I have thought carefully about the things I would like to change in Munda Wanga now that I have acquired this new knowledge. I am going to change the way enclosures look and make areas safer for my staff. I realize now how strong

fences and barriers need to be.

Having done so much in such a short space of time, I have kept a diary in order to make sure I remember everything. One day especially stands out in my mind – the day I worked with the vets and helped them to treat some turtles. I had never seen turtles before, they were sick and I helped the vet to tube feed them. It was very rewarding. I have to apply some medications at home and I received lots of advice on how to treat animals before the vet arrives. (See article on page 9).

The best part of my visit has been working in the Zoo, but I have also enjoyed sightseeing. The staff at Chester Zoo have been taking very good care of me, making sure that I get the most out of my time here. I will never forget seeing the sea – it was an enormous pleasure. I had never seen the sea before; it was like a dream. I made sure I took lots of photographs, so that I remember it. I can show my children and they

▼ 'Food preparation is an important job'



will also know what the sea looks like. It was great!

I have also been to London. I thought Chester City had lots of people, but I couldn't believe the number of people there! I loved seeing the tall buildings and I even saw the Crown Jewels. I was amazed all day, but my favourite bit was going to 'Madame Tussaud's'. I had my photograph taken with nearly every model there. My family will love the pictures!

There are some things about Britain I will miss very much, especially television. I do not have one at home; we listen to the radio. I am a keen sportsman and play football, so I have been watching the football on Sky TV. I have loved it!

Spending time at Chester has given me lots of confidence. In Munda Wanga, I will be well-known and respected for my work experience and my workers will be looking to me to tell them how to care for our animals.

■ I would like to take this opportunity to say a very big thank you to the Director of Munda Wanga Zoo, Bill Thomas and our Manager, Lee Stewart for making it possible for me to come to Britain. Plus a huge **thank you** to Chester Zoo for having me and giving me this opportunity to fulfil so many of my dreams. The staff made me feel so welcome and comfortable during my stay. I cannot express how much it has meant to me.



(Above and below) 'I have never seen turtles before and helping the vet was very rewarding'



Conserving Coral

By ELIZABETH WOOD

MANY coral reefs around the world are in dire straits, so it is good to report on a project in Malaysia, which is the focus of a conservation programme aimed at establishing the largest Marine Park in the State of Sabah (Borneo). This site lies at the centre of biological diversity in the Indo-Pacific, and is an enormously important resource for the local community. Many people fish, farm seaweed or grow mango, maize and other crops. Most look forward to developing the site as an eco-tourism destination. However, if these dreams are to be realised, there are problems to solve – such as fish blasting and serious over-exploitation of reef resources.

The Semporna Islands Project (SIP) began in 1998, with the aim of ensuring a better future for the islands and reefs and the people who depend on them. Phase One of the project (1998-2001) was run jointly by the Marine Conservation Society (MCS), Sabah Parks, WWF Malaysia and Nature Link, and was funded by the European Community under its global environment budget line. The outcome of this research and survey programme, combined with ideas from workshops and consultations, led to the proposal for a State Park incorporating eight islands and their surrounding reefs. The proposed Park covers approximately 350sq km. This is a larger area than

▼ *Dendronephthya* – one of Semporna Island's beautiful corals.



Pictures: Elizabeth Wood.

Dr Wood, of the Marine Conservation Society, is the Project Leader for the Semporna Islands Project, to protect the reefs and islands in Sabah, Malaysia. Coral Reefs are amongst the most threatened and biologically diverse habitats in the world. Our aquarium gives a glimpse of the variety of life they support. Chester Zoo was especially happy to assist the important community based Semporna Islands reef project as one part of our involvement in supporting conservation worldwide.

originally anticipated because, the environmental awareness programme was so successful, islanders initially placed outside the first park boundary wanted to be inside.

Phase Two, currently supported by Chester Zoo, London Zoo, London Aquarium, DJ Solutions and PADI Aware, is looking to implement the management plan, promote sustainable resource use, conserve biodiversity and develop opportunities for local people to make a better living. There are high hopes that the Park will be gazetted soon, and the conservation programme can begin. An Action Plan will ensure that the management strategy for people, wildlife and the environment is developed.

Included in the plan is a zoning scheme recommending certain reef areas are set aside as No-Take Zones to allow recovery of fish populations. But if fishing activities are curtailed, it is essential that fishermen have opportunities to make a living that do not entail destructive and over-use of natural resources. The *Alternative Livelihoods Initiative*, starting this year, is a practical solution. The aim is to establish a giant clam



▲ A diver monitors the line.

farm and pelagic fishing programme to provide jobs and food, reduce direct pressure on reef resources, stop the practice of fish blasting and promote reef recovery. The farm will have the added benefit of providing stocks of these endangered clams to re-populate the reefs.

Development of eco-tourism will be a part of the Initiative. Local people believe it is possible that tourism generated jobs, such as diving, could provide better opportunities and income than fishing. This is another argument for setting up No-Take Zones in the Park where marine life can recover. At the moment, divers have to go elsewhere to see big fish in large numbers, but they would be attracted to the Park if the fish populations at Semporna recover.

It will take several years before any improvements are seen, but Park staff and MCS scientists will be carefully recording what happens. A monitoring programme has started, with divers making measurements and counting the numbers of fish and other animals that act as indicators of reef health, such as giant clams. This is the only way of tracking the changing condition of the reefs and hopefully the beneficial long-term effects of protective management. The programme will reveal how the reefs are coping with 'natural' ecological disturbances such as reef bleaching and outbreaks of crown-of-thorns starfish. With so many unknown or unpredictable factors, it is impossible to forecast the future. But at least the monitoring programme will document what is happening and help managers to take the best course of action.

marmot mania



THIS proved to be an appropriate name for the new attraction by the *Children's Farm*! As soon as it opened in Easter week, it was clearly going to be a big hit with young visitors. The **Prairie Marmots** don't seem at all alarmed at these human heads suddenly appearing in their territory. In fact, they seem to find them objects of great curiosity!

In their previous accommodation, now part of the new *Tsavo Rhino Experience*, it was not often possible to get a close-up view of the marmots. Now, in their new quarters, children and adults can really get close to these engaging small mammals.

▼ Does anyone recognise the little boy in the photograph? Pat Cade took it on 26th March, but he had disappeared before she could get his name. We'd love to give him a copy of this picture.





◀ Andrew Fowler and Hamounde Gurusa wear the yellow hats to alert the primates of their presence. Photo by V. Sommer.

Primate Paradise!

Chester Zoo's support has helped fund research and conservation in Nigeria. Professor Volker Sommer the Project Coordinator, writes about the work of the Gashaka Primate Project.

PERHAPS it was you who helped us buy the yellow hats – if you donated to Chester Zoo's conservation appeals. We look quite silly wearing them. And so will you, if you visit us in West Africa. And yet, the bright head cover is as important as your binoculars. It might make you even more uncomfortable to know that the nearest telephone is 200 miles away. The next place to buy beer is 30 miles away, but the next Puffadder could be hissing at your toes. It might console you to see your fellow trekkers also don funny yellow caps and that you might spot the elusive Chimpanzees. After all, that is why you follow researchers of the *Gashaka Primate Project* through one of the last remaining jungles of Nigeria.

But shouldn't we try to approach the apes quietly, instead of advertising our presence with a gaudy colour? That is exactly what we thought when we started to study the Chimpanzees of Gashaka. But we quickly realised that the apes don't like people sneaking up to them – because tiptoeing humans might be up to no good. They like to know who is coming – and our yellow

hats seem to function as a passport into their secret world.

SECURE HAVEN

Chimpanzees are the closest living relatives of humans and studies of their socio-ecology can shed light on the evolution of our own species. However, their very survival – as that of other monkeys and apes – is increasingly threatened due to habitat destruction and the relentless bushmeat trade. Fortunately, primates near Gashaka are not hunted, since the local Muslim people do not consume their meat and the remote location of the mysterious forests guards them against commercial logging. The Gashaka area is thus a relatively secure haven for thousands of wonderful primates and one of the premier sites on this planet to study our close cousins.

Gashaka is a small village in Nigeria's largest National Park at Gashaka-Gumti (6200 km²) which was established in 1991. Our research concentrates on the Gashaka-Kwano area which harbours flourishing populations of Black and White Colobus, Mona Monkeys, Putty

nosed Guenons, Green Monkeys, Olive Baboons and Chimpanzees.

Our *Gashaka Primate Project*, now in its third year, aims to understand the environmental factors that influence the structure of primate societies. Our current research concentrates on (a) a comparison between the ecology and reproduction of Baboons who dwell in the forest and those who raid crops near villages; (b) activity pattern of Guenons, and (c) nest building and feeding ecology of Chimpanzees.

The project has the authority of the *National Parks Service of Nigeria* and the *Nigerian Conservation Foundation*, and we receive their help with transport, accommodation and local contacts. The academic home of our project is University College London, but we co-operate with other universities in the UK, Germany and Nigeria.

ZOO SUPPORT

The donations from Chester Zoo were crucial in helping us to set up the project. The money was used to build a research station to store data and samples, where researchers can hook up their computers to a generator, tend to ailing stomachs and blistering feet or simply relax. The donations also financed the moulding of 6000 mud-bricks to construct a biodegradable field camp in the home range of the Chimpanzees.

Most importantly, Chester's outreach programme employs local villagers as field assistants and provides bursaries to students from Nigerian universities to study the Gashaka primates for undergraduate projects and degree theses. After all, long term protection of endangered species depends on the involvement of local communities from the habitat countries.

SPECTACULAR APPEAL

We encourage eco-tourism because visitors will create publicity for the unique biodiversity of the Gashaka area, generate income and thus aid conservation. Primates can serve as major ambassadors of this enterprise because of their spectacular appeal.

Primates can be seen at Gashaka throughout the day. Our project established an extensive network of well-marked trails through dark jungles

to scenic viewpoints, picturesque rivers and waterfalls. You will quickly learn to discern the loud 'wao-wao' calls of Baboons from the deep booms of Mona males, the chirps of Putty-nosed Monkeys, and the roaring duels of Colobus males.

Chimpanzees are the highlight of the primate parliament at Gashaka. They belong to the yet unstudied subspecies of *Pan troglodytes vellerosus* whose last stronghold is Gashaka. Our studies aim to compare the Gashaka Chimpanzees with those of well-studied populations in West and East Africa. Do 'our' chimps also hunt monkeys and pigs? Do they wage war against neighbouring communities? Do they have particular habits which attribute a specific 'culture' to them? Many questions – and it will take us at least a decade to answer just some of them.

We have already learned that the Gashaka Chimpanzees use an impressive tool-kit to extract food from their environment. The apes manufacture various types of digging sticks and fishing probes to feed on ants, termites and honey. They also seem to use plants to cure ailments. For example, they will carefully fold and swallow particular leaves with a rough surface. The small parcels pass through the gut and probably aid in shedding parasitic worms.

Although the Chimpanzees are not really afraid of people, it is not easy to locate them in the vast forest. However, their nest sites are easily found, providing clues about their ranging pattern. Moreover, Chimpanzees are known as *biri mai ganga* – 'the monkey with the drum.' Indeed, drumming displays at buttress roots of large trees will often reveal their presence, along with loud screams and hoots.

ADVICE TO CHIMP SEEKERS

If you hear a party of Chimps, head straight towards them – which may be easier said than done, given the hilly terrain. It can be a frustrating experience to return to camp, after an exhausting day of trekking and no sighting of Chimps anywhere – just to learn that the Chimps walked right through the camping area earlier during the day. The likelihood of seeing Chimps after an investment of six to eight hours of trekking is currently around 33 percent. Still, you may have watched nothing more than a fleeting glimpse of

dark shadows. But even that may easily be the experience of a lifetime.

In any case, wear a yellow hat, make your presence known through moderately loud conversation and pretend to chew on vegetation while you are visible to the Chimpanzees. You could be as lucky as some visitors who leisurely studied foraging parties of five or ten Chimpanzees while infants swung playfully in the trees. We took a group of school children on a trail and they were approached by 17 Chimps. The curious expression on the faces of the apes revealed that they were as interested in their strange-looking close relatives as were their *Homo sapiens* counterparts.

Primates may be the highlights of the jungle. But there is, of course, plenty of other wildlife to encounter: Antelopes such as Duikers, Waterbucks, Buffalos and herds of Hartebeest; pigs such as Red River Hogs and some of the last groups of Giant Forest Hogs on this planet; Civets and Leopards; Pangolins and Porcupines; Aardvarks; rivers filled with fish and Hippopotamuses; at least 450 species of birds, clouds of butterflies, orchids and zillions of other spectacular plants ...

If you come and visit, we promise to furnish you with one of the silly but utterly important yellow hats that the Chester donations bought. Or you can ask the local tailor to make one extra for you. 93p is the current asking price.



▲ Olive Baboons. Photo by Y Warren

▼ Jeremiah Adanu received a Chester Zoo Research and Conservation Fellowship. Photo V. Sommer



▲ A visit to the local village school in Gashaka. Photo V. Sommer

GROWING CONCERNS



Mark Sparrow, General Curator of Botany and Horticulture and his Deputy, Sarah Bird, with their quarterly report of what's growing on in the Zoo Gardens!

By the time you visit this summer, our new themed garden called *High Andes* will be completed. This garden will showcase plants from the Andes Mountains of South America, from small alpinos growing on the high peaks, down to lush valley floor vegetation. Large blocks of limestone, up to one metre square, form the rocky landscape. Two streams rush

down the mountainside and join together before cascading into a pool. A rope bridge crosses the streams, allowing visitors to take a closer look at the plants. Signs will explain how plants from the Andes have adapted to survive in the harsh mountain environment. Please make a point of visiting our new garden – it is located between *Condor Cliffs* and the *Coati Island*.

Another very important new plant in the Zoo is bamboo! With the arrival of the delightful Red Pandas, it was essential to have some of their favourite food readily available. They have settled well into their custom-built enclosure, but watching their ability to strip the leaves from the trees, it will be a matter of trial and error to decide which plants will be best suited for this area!

PLANT OF THE MONTH



JUNE: Jerusalem Sage. *Phlomis fruticosa*

Look out for: a shrub with yellow flowers clustered around the stems, and felt-like grey leaves. Coming from the Mediterranean, this plant enjoys hot, dry summers – like many of us! There are examples around the *Europe on the Edge* aviary and between the bridges, near the 'Flight' sculpture.



▲ Jerusalem Sage.

JULY: Common Lime tree.

Tilia x europaea

Look out for: trees with heart-shaped leaves and small creamy coloured flowers hanging down amongst the leaves. When in full flower, the scent perfumes the whole neighbourhood. Aphids also like lime trees and can make the leaves and ground sticky with the honeydew they produce. You'll find them on the avenue between *Asian Plains* and *Monkey Islands*.



▲ Common Lime Tree.

AUGUST: White Water Lily.

Nymphaea alba

Look out for: large, flat, floating leaves and big showy white flowers on the water surface. The flowers open in the morning and then close again by midday. These lilies need water at least one foot deep to grow properly and can cope with depths up to eight feet! The white water lily is a vigorous plant than can take over in small ponds. Look for smaller *Nymphaea* species for your garden pond. Admire them in the moat around *Monkey Islands*.



▲ Water Lilies.

CONSERVATION
CORNER

Britain's rarest native timber tree comes to Chester Zoo.
A thousand years ago, the native Black Poplar

thrived across the lowland flood plains of England. Its huge, often steeply-leaning bulk was almost as common as Oak. But since the start of the 19th century, housing and farming have steadily destroyed its habitat and this great tree has been quietly vanishing from our landscape. There are now around 2,500 trees in England, with about 250 in Cheshire. Cheshire's trees are particularly important as we have lots of females – poplars have separate male and female plants. When mature, Black Poplars can reach 100ft tall and the branches spread to



Photos by Sara Bird

▲ A newly planted sapling . . . that one day will look like this!

70ft wide. They are one of Britain's largest native trees as well as being the rarest native timber species.

A Local Biodiversity Action Plan (LBAP) for Black Poplars has been set up in Cheshire, and Chester Zoo is playing an active part in implementing this plan. In March we planted 15

Black Poplars along the canal bank between *Arara Lodge* and the *Coati Island*. These young trees are cuttings from existing Black Poplars growing around the Chester area. In the future, we plan to gradually replace the hybrid Poplars in the Zoo with specimens of the native tree.

FAIRTRADE COMES TO LIFE

THE meaning of Fairtrade (FT) was really brought home to Zoo staff on March 11th, when Guillermo Vargas Leiton visited us. Guillermo, a coffee farmer and manager of a local farmers' co-operative in Costa Rica, was touring Britain with the *Fairtrade Foundation*.

We were able to try samples of FT

coffee, tea, snack bars and chocolate, and sample cakes kindly made by staff members using FT ingredients. After we had eaten rather too much cake, Guillermo told us about his farm and what FT means to him. He grows coffee on a small plantation in the rainforests of Costa Rica. The co-operative he manages sells all its

coffee to the FT market, which only buys coffee from small-scale growers. Guillermo has happy memories of picking coffee as a child on his father's farm. He wants to preserve this way of life for his children.

'We want our children to continue growing coffee, to retain the love and passion for working the land and being part of nature. We

don't want them to leave the land and be dependent on other people for their food.

'If we didn't have Fairtrade sales, most of the farmers would be cutting down their trees. The current price of coffee in the conventional market doesn't even cover the cost of producing the coffee. To me Fairtrade means fair for the producer and fair for the consumer. The people in between – the middlemen – should be the bridge, facilitating the trade. They shouldn't secure all the benefits for themselves.'

Guillermo had a tour of the Zoo and was particularly impressed by our realistic rainforest in *Spirit of the Jaguar*. Wild Jaguars live in the forests around his farm.

Guillermo hopes that his visit to Britain will help to reduce the distance between the producer and the consumer. He feels that 'if we can look one another in the eyes, we can understand each other's needs'

... He certainly made a big impression here at Chester Zoo.



Picture courtesy Chester Evening Leader

▲ Whilst showing Guillermo the Grow Zone, Sarah was able to get some useful tips on growing coffee!



JUNIOR MEMBERS



Meetings and Field Trips

Saturday 22 June 2002 – Anglesey Sea Zoo and Pili Palace

It is always an enjoyable day when we visit the Isle of Anglesey, and both the Sea Zoo and the Butterfly Farm (Pili Palas) have proved very well worth a visit in the past.

The bus will leave the staff car park at 9.00 am, returning at 5.30 pm. Over 8s are invited to come along and bring a good picnic because it is quite a long day.

Wednesday 24 July 2002 – Day With A Keeper

Undoubtedly our most popular event of the year, when Juniors of twelve and over have the opportunity to spend a day working alongside a Zoo Keeper. The work can be tough so we have to strictly limit this event to over 12s. We try to match Juniors to their favourite sections, but places are very limited so this cannot be guaranteed. Please come prepared to work hard, with wellies and 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 not be taken before Wednesday 10 July 2002 from 8.30 am, and will be strictly on a first-come first-served basis.

Friday 16 August 2002 – Summer Barbecue

What finer way to spend a summer evening than having a barbecue at the Zoo after all our visitors have left! There may be a surprise speaker or a tour of the Zoo, but you can be sure to have a relaxing evening.

Over 8s are invited to join us starting at 7.00 pm when you should arrive at the staff entrance and walk over to the Ark Restaurant. Parents are requested to collect Juniors from there at 9.45 pm.

Saturday 21 September 2002 – Twycross Zoo

This is likely to be a fascinating day visiting Twycross Zoo, which houses one of the finest primate collections in England, and will be an excellent opportunity to learn a lot about another Zoo and how they do things. It will also be a long day and so please come well prepared, with a good picnic.

The bus will leave the staff car park at 9.00 am, returning at 6.00 pm. Over 10s are invited to join us.

Saturday 19 October 2002 – Risley Moss Nature Reserve

Risley is not far from Warrington and this visit will be an excellent opportunity to visit a real 'moss' and learn about some of the animals and plants that live in these wetland areas when we are shown around by one of the Moss Wardens.

Over 8s are invited to join us for the trip and should meet at the staff car park at 10.00 am, and we will return to there at 4.30 pm.



Making plaster casts of the big cat footprints.

Bookings must be made for all events. Please ring Penny Rudd 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 any 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 the cost of those events which involve transport, materials or the provision of food and you will be informed of this at the time of booking.

Junior Puzzle Page?



The focus for zoos across Europe this year is the threatened Atlantic Rainforest. This tropical paradise is fast disappearing, and all the thousands of animal and plant species are in great danger as their habitat gets smaller each year. Our competition this time highlights just 11 of these endangered animals. Can you recognise and put a name to all of them?

A £10 gift voucher for the Zoo shops will go to the first correct entry opened after the closing date, 24 June.

SEND TO:

JUNIOR COMPETITION

Zoo Life, Membership Office, Chester Zoo,
Upton-by-Chester, CH2 1LH.

SPRING ISSUE WINNER

We thought the 'Match the keepers and animals' competition was quite difficult, but as usual there were lots of correct entries!

THE ANSWERS ARE:

Anthony: Baboons, pears, 30

Brian: Chimps, mangoes, 25

Caroline: Gorillas, lettuce, 12

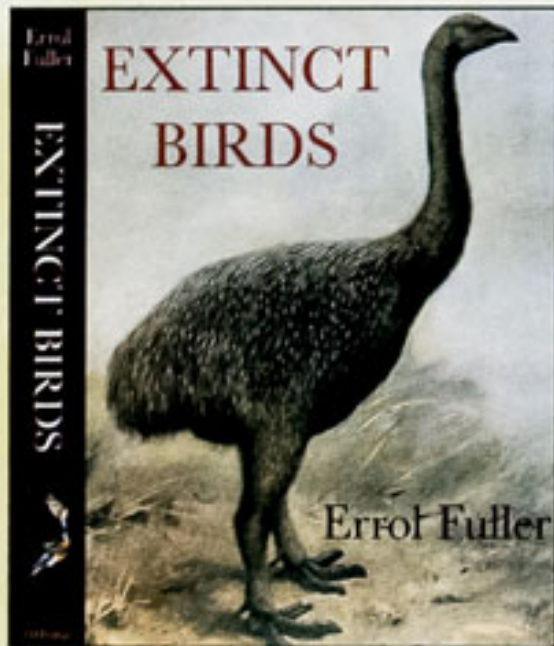
First correct entry came from **Christopher McGrath** of Chester, who wins the special presentation pack of the new Jungle Book stamps.

FREE TALKS FOR MEMBERS & ADOPTERS

All these talks will be in the Lecture Theatre, on Saturdays, at 2.30pm

The Lost Birds, Sabre-toothed Cats and Orang Orphans! Some advance information about the talks planned for the autumn months.

We anticipate that these speakers will attract a wide audience, so as we cannot guarantee availability 'at the door', we advise you to send for your free tickets in advance. Applications to the Membership Office, Chester Zoo, Upton-by-Chester, CH2 1LH, stating which talks you would like to attend, and number of tickets required for each. Please enclose a s.a.e. for return of your tickets. We ask those attending to make a donation of £1.00 per person to cover refreshments.



19 October: Errol Fuller – *Extinct Birds*

Errol Fuller is a painter of sporting subjects, particularly boxing, who lives in Tunbridge Wells, Kent. His interest in the curiosities of natural history has resulted in three books, *The Lost Birds of Paradise*, *The Great Auk* and *Extinct Birds*. A fourth, *The Dodo*, will be published in the autumn.

Extinct Birds is a fascinating insight into the huge number of species of birds recently lost to us. It draws together a number of leading scientific investigations, and succeeds in combining scientific credibility with popular appeal.

26 October: Martin Meredith – *Africa's Elephant*.
(More details in next issue).

9 November: Dr Silvia Gonzalez – *Mammoth Extinction: New Data for an Old Debate*.

Silvia Gonzalez is a geologist working on relatively recent animal extinctions during the end of the Quaternary (around 10,000 years ago) This includes the extinction of megafauna: Mammoths, Giant Deer, Sabre-toothed Cats etc. Her work on Giant Deer extinction has been published recently in *Nature* magazine. The talk will concentrate on mammoth extinction, with new information from sites around the Basin of Mexico, discussing the role of climatic change against human influence. This work was featured last year in the Channel Four Series *Extinct*.



7 December: Suzetta Billington & Becki Lawson – *The Care of Orphaned Orang utans in Borneo*

Suzetta Billington is a vet who worked for five years in a practice responsible for the veterinary work at Bristol Zoo. After taking her Masters Degree, Suzetta undertook fieldwork in Borneo at the care centre of the *Orang utan Foundation International*, where she assisted in the care of orphaned Orang utans. She now works locally in a practice in Tarporley, specialising in exotic species, especially birds.

Becki Lawson is also a vet and spent two years working for the RSPCA at the wildlife hospital, West Hatch. After taking her Masters degree she also worked for six months in Central Kalimantan, Borneo, in the Orang utan Care Centre, funded by Orang utan Foundation International. Beckie now works for the Wildlife Information Network, a registered charity that distributes information on the health and management of wild animals, both free ranging and in zoological collections.