



# Zoo Life

Winter 2001 - Issue 8

CHESTER ZOO'S MAGAZINE FOR MEMBERS AND ADOPTERS



**Inside this Issue: Spirit of the Jaguar: Stephanie Powers Opens**  
• Rearing Maned Wolves • Rhino Enrichment •

## From the Director's Desk

Professor Gordon McGregor Reid



**T**O borrow a phrase from Her Majesty, 2001 has been a terrible year, something of an *annus horribilis*. The six week closure due to Foot and Mouth disease was an extremely worrying time for the Zoo. We had no idea how long the epidemic would last and were deeply concerned at the possibility of our animals contracting the disease and about running out of the money needed to feed our animals and pay our staff! The staff took voluntary pay cuts and worked extra unpaid hours – despite knowing that if the situation continued, we would have to face the prospect of redundancies. As Director, I must say that it was heart warming, and rather overwhelming, to have such loyal, unified and determined support from the staff. Without it the Zoo would not have pulled through. I must pay the highest tributes to our excellent staff and thank them very much. I must also warmly thank the many Zoo Members, individuals, community groups and businesses who rallied round to give us moral support, and also vital donations of cash and animal food.

Happily, the disease risks began to subside, and we were able to re-open just in time for Easter; but with full biosecurity precautions such as disinfectant foot baths. Getting back to normal visitor numbers was slow at first, but by the time the school summer holidays began, it was clear that we were well over the worst. Indeed, September and October turned out to be the best for visitors since the Zoo opened some 66 years ago! So – although we have sustained substantial economic damage and 2001 won't be as good as 2000 – we are confident that we will end the year with over 950,000 paying visitors; and will probably reach the 'magic million' including the non-paying under three year olds! This is a quite extraordinary recovery from a very severe blow.

### SPIRIT OF THE JAGUAR

There is no doubt that this stunning new attraction is one reason for our successful recovery. The official opening by Stefanie Powers (covered on pages 12/13 of this magazine) was a great occasion for everyone. Stefanie is a charming and lovely lady, clearly dedicated to conservation of endangered species in a very personal way. She is most enthusiastic about the work of Chester Zoo (and of our close partner the Wildlife Conservation Society based at the Bronx Zoo, New York); and she is the perfect ambassador

for the field conservation programme supported by Jaguar Cars for Jaguar cats. Other guests of honour were Jonathan Browning, Chief Executive of Jaguar Cars, Dr Alan Rabinowitz of WCS – a world authority on Jaguars – and Professor Yolanda Matamoros of the National Zoo, San José, Costa Rica. With Chester Zoo support, Yolanda has kindly organised a practical workshop in Costa Rica on Jaguar conservation (alongside the IUCN Conservation Breeding Specialist Group).

### NEW YEAR

We begin another new year – one that brings far more problems to Britain and the world than did Foot and Mouth Disease. The horror of 11 September has affected everyone, and the consequences will be far reaching and persist for a long time. When there is armed conflict, animals and nature usually suffer – and yet a return to animals and nature by individuals, communities and nations, can often serve as a healing balm. There are also economic issues for the tourism and leisure industry, of which zoos are a part. London tourist attractions and hotels suffered an immediate and substantial drop, as American visitors cancelled and the anticipated bookings did not materialise. In the North West, we are less dependent on overseas visitors than our South East cousins. Most of the coach tours stop just one night in Chester on their way to the Lake District and Scotland. The general belief is that more people will decide to stay in the UK for their leisure time – and so we hope that the zoo visits upon which we depend will not suffer. We are working closely with the North West Tourist Board and tourism units in Cheshire County and Chester City, to publicise the region and its attractions to the domestic market.

### ENVIRONMENT AWARD

It is always nice to get an award! Receiving the Gold Award in the *Tourism and the Environment* category from the North West Tourist Board was a particular pleasure, because this is really what the Zoo is all about. We believe that an organisation committed to saving animal species from extinction must be equally committed to environmental issues. The judges were most interested in our conservation work with British native species, particularly Sand Lizards. The breeding and rehabilitation programme for these

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Telephone: (01244) 380 280  
Director:  
Professor Gordon McGregor Reid  
Editor: Pat Cade

beautiful reptiles has been described in past issues of *Zoo Life*. Similar programmes are in place for Harvest Mice and Dormice.

We also have a dedicated Environmental Policy Development Committee (ENPOC), with representatives from all sections of Zoo staff. This committee is working towards 'greening the zoo' – the implementation of an environmental management system to gain accreditation of an International Standard (ISO 14001). Of course creating environmental awareness locally is a very worthwhile step towards 'greening the planet'. I believe that responsible zoos are well placed to foster this process. *Care for the Environment* is a key part of Chester Zoo's mission and a priority for wider communication.

On behalf of all the Staff and the Zoo Council, I want to wish you all a very Happy Christmas. Again, my grateful thanks for your unflinching support during this most difficult year. Let us all hope that 2002 sees a return to *Peace on Earth and Good Will to All Humanity – and to Animals and Nature*.



Zoo Director Gordon McGregor Reid proudly displays the Gold Award – a handsome engraved glass plate.

*Gordon McGregor Reid*

Front Cover: Wise Man and camel follow a star at Chester Zoo! Mamed Wolf, photo courtesy Adrian Allan; Salvador finds the new Jaguar X type very tasty! (photograph courtesy Forever Portraits)

## MEMBERS' MEETINGS

**Saturday 12 January** – 2.30 pm in Lecture Hall Dr Heather Hall – 'Tales of Pregnant Fathers and Traditional Medicines – Seahorse Biology and Conservation'

Dr Hall is Curator of Lower Vertebrates at London Zoo and Associate Director of Project Seahorse.

**Saturday 16 February** – 2.30 pm in Lecture Hall Anne Morris, Karen Davies, Simon Marsh and Alan Littlehales 'Keepers in the Field'

The involvement of four Chester Zoo Keepers with various outreach programmes in Mauritius, South Africa, Namibia and Zambia.

**Saturday 23 March** – 2.30 pm in Lecture Hall Professor Richard Fortey – 'Trilobite: Eyewitness to Evolution'

Richard Fortey is a distinguished palaeozoologist and geologist and the author of more than 150 publications. His work has made a major contribution to the public understanding of science. The title of his talk is also the title of his latest book, which received glowing press reviews, and was shortlisted this year for the top non-fiction prize, the Samuel Johnson Award.

**Saturday 20 April 2002** – 2.30 pm in Lecture Hall Deborah Cadbury – 'The Dinosaur Hunters'

Deborah Cadbury is an award winning TV science producer and director for the BBC. She has made many award-winning documentaries for the BBC's Horizon series and other strands. Her recent programme 'Assault on the Male,' investigating chemicals in the environment which mimic our own hormones and could be harmful to human health, won her an Emmy. She is also the acclaimed author of 'The Feminisation of Nature.'

**Saturday 27 April 2002** – 2.30 pm in Lecture Hall Colin Tudge – 'The Variety of Life – and What Conservation ought to mean.'

Colin Tudge was trained as a biologist in the 1960s

and has earned his living as a writer ever since. He has worked for the *New Scientist* and the BBC, and in recent years has written for *The Times*, *The Independent*, *The Daily Mail*, *Nature*, *the New Statesman*, the British Council, the Archbishop's Council, and the *Royal Shakespeare Company*. For the past five years he has been a Visiting Research Fellow at the Centre for Philosophy at the London School of Economics. But mainly he writes books about evolution and genetics, agriculture and conservation. His magnum opus, *The Variety of Life*, has just been published in paperback and this is the basis of his talk today.

**Saturday 18 May 2002** – 2.30 pm in Lecture Hall Annual General Meeting followed by Zoo Review The Director and Divisional Heads review recent and future developments.

**Saturday 1 June 2002** – 2.30 pm in Lecture Hall Douglas Palmer – 'Neanderthals'

From stones to bones – for over 20 years Douglas Palmer lectured in Trinity College Dublin and researched on a group of fossils few people have ever heard of – graptolites – although there are plenty of them beneath our feet in Wales and the Welsh Borders. After putting on a major exhibit on *Mammoths and the Ice Age* for the National Museum of Wales in Cardiff, Douglas became a free-lance science writer and lecturer. He has written books on fossils and prehistory and has a particular interest in human prehistory.

**Saturday 8 June 2002** – 2.30 pm in Lecture Hall Samantha Weinberg – 'A Fish Caught in Time'

Samantha Weinberg was born in London and educated at Trinity College, Cambridge. She has worked as a journalist in southern Africa, the United States and London, and is the author of 'A Fish Caught in Time'. The *Mail on Sunday's* review of Samantha's book said 'The discovery of the coelacanth, as told in Samantha Weinberg's thrilling new book, reads like some classic Spielberg creation – Indiana Jones let loose in a real-life Jurassic Park.'

## OBITUARY

### MURIEL FLORENCE McCANN (nee Mottershead)

December 1916 – October 2001

With sadness we learned of the death of Muriel McCann, elder daughter of George and Elizabeth Mottershead, the founders of Chester Zoo. The Mottershead family came to live in Oakfield House on 7 December 1930, which was also Muriel's 14th birthday. When the *North of England Zoological Society* was formed in June 1934, Muriel was promoted to Curator of Animals, and she held this position until she joined the WRNS in 1940.

After her discharge from the Navy, she returned to work in the Zoo. Her first love was chimpanzees, and she was delighted when in 1949, Dr Eaton contacted the Zoo. He had been working in Sierra Leone, and offered to send five chimps to Chester Zoo. The chimps had been on sale for food in a local market, and Dr Eaton had bought them to save their lives. When the chimps arrived they were small, pathetic babies, in need of a lot of love and care if they were to survive. Muriel provided that care and the chimps became the nucleus of the colony of chimps we have to-day. One of the original five was Meg, who had many babies of her own in the Zoo and died just last year in her early fifties.

Muriel had Keeper Ziggy Dixon to help with the chimps, and knowing that she could leave them in good hands, she asked for a sabbatical year off to travel the world. During a stop in New Zealand, she met Charles McCann, a Curator at the Wellington Museum. They had a mutual interest in natural history, and they married in 1956. Muriel never returned to England. She is survived by her son Robert and three grandchildren.

### Dr DAVID COOKE

As this magazine went to press, Zoo staff and Council were saddened to hear that Dr David Cooke died on 29 October. David had served on the Zoo Council for many years and was a member of the Scientific and Veterinary Committee. He was a keen natural history photographer with a special interest in birds. His other great interest was swimming and he was an Honorary Advisor to the Great Britain and England Amateur Swimming teams.

A fuller appreciation of David's life and work will be included in the next issue of *Chester Zoo Life*.

### New NMGM Director

The Trustees of National Museums and Galleries on Merseyside have appointed Dr David Fleming OBE as their new Director.

Dr Fleming was Director of Tyne & Wear Museums and took up his new position at the beginning of October 2001.

## LEGACY FROM PROFESSOR KING

In July this year we were pleased to learn that the Zoo received a bequest from the estate of the late Professor Oliver King. We are extremely grateful to Professor King for remembering the Zoo in his will.

Professor King was Chair of the NEZS Council from 1972 to 1986 and had been closely involved with the Zoo and its founder George Mottershead since the 1940s. He was a distinguished scientist and veterinarian and was Professor of Animal Husbandry at the University of Liverpool.

He sadly died in December 2000, aged 85, and is remembered with respect and affection by everyone who knew him and who had worked with him.

Details of how you can leave a gift to the Zoo in your will are available from Hazel Russell in the Development Office. You can contact her confidentially on 01244 650229 or at [h.russell@chesterzoo.co.uk](mailto:h.russell@chesterzoo.co.uk).

## CHESTER ZOO 100 CLUB

The winners of latest monthly prizes are:

### JULY 2001

£100	Mr Paul Townsend, Wrexham
£100	Mrs Elizabeth M Tozer, West Kirby
£50	Miss Audrey F Tillman, Pensby
£50	Mrs Dorothy Allen, Ellesmere Port
£50	Mrs Lillian M Hughes

### AUGUST 2001

£100	Mrs Phyllis M Keay, Blacon
£100	Rev Ronald Berry, Oldham
£50	Mrs Meryl P Finch, Shrewsbury
£50	Mrs Olive D Murtagh, Wilmslow
£50	Mr Matthew Bird, Wrexham

### SEPTEMBER 2001

£100	Mrs Dorothy Allen, Ellesmere Port
£100	Miss Marcella Milan, Rhyl
£50	Mr David Gellvear, Bebington
£50	Mrs Mary Doogan, Chester
£50	Mr Paul Townsend, Wrexham

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, Development Officer or Maureen Allsop, Membership and Adoptions Secretary, if you wish to participate.

# Zoo Review

## ELF Visitors!

### BLOOMING GARDENS

At the 2001 *Chester in Bloom* awards ceremony, Chester Zoo received a special award, given for the first time this year. The Judge's comments for this award were:

*'The Zoo is undergoing a process of continual change, moving away from traditional bedding and rose garden display, to introduce and establish plantings, both outside and in the enclosures. Indigenous plant species from different parts of the world are used to reflect the natural conditions in which the animals would be found.'*

*'I was impressed by the recently opened Roman Garden, which is authentically planted with herbs and vegetables to illustrate a typical Roman garden. This is a peaceful and tranquil area, even amidst the bustle of a typical day at the Zoo. I would recommend that a special award be made to the Zoo authorities to recognise the development of this innovative work.'*

### TV SERIES

From April to September this year, a crew from the television production company 'Tigress' were filming in the Zoo to make a 13 week series for Discovery Channel's *Animal Planet*. The series is to be called *The*



Getting ready for the Zoo's Christmas events meant turning the Wildlife Activity Centre into an Elf Resort! Pictured making the close acquaintance of a couple of animatronics are Head of Visitor Services, Liz Child (right) and her assistant Chris Connor.

*Birthday Zoo* and will start in Spring 2002. The programmes will be shown all over the world, and feature all the new births, arrivals and activities in the Zoo throughout the spring and summer. Worth subscribing to satellite television, if you don't already have it.

### WISH YOU WERE HERE?

Comedian Vic Reeves visited the Zoo in the autumn with a film crew from the TV programme *Wish You Were Here* to be screened in the Spring. Vic is pictured

(below left) on Lemur Island with Keeper Chris Yarwood.

### COUNTDOWN

*... To a land and sea richer in wildlife by the year 2020*

The latest edition of the *Countdown Programme* is now available. *Countdown* is the Cheshire region Biodiversity Action Plan, or BAP. BAPs were started as a result of the Rio Earth Summit in 1992. The Cheshire region has one of the most active BAPs in the UK, with over sixty species and habitat plans in place. Hundreds of organisations and members of the general public are now doing nature conservation work in our local area to implement these plans. More help is always needed; whether your speciality is Bats, Barn Owls or Bog Moss, we need you! New this year is a section of *Countdown* detailing ways for organisations, companies, local groups and individuals can get involved. You could also win a day at Chester Zoo!

To learn more you can find a copy of the *Countdown 2001 CD-ROM* in your local library or order a free copy from Laura Holmes at the Cheshire Wildlife Trust on 01270 610180 or email [Lholmes@cheshirewt.cix.co.uk](mailto:Lholmes@cheshirewt.cix.co.uk)



## Cash for Rhinos

The Zoo Members' trip to Kenya in July, reviewed on pages 14/15, raised £2,700 for the Black Rhino project there. The photograph shows Zoo Council Member Kath Edwards handing the cheque over to David Stirling of *Save the Rhino International*. Photograph courtesy Ashley Ashwood.

## ANIMAL HEALTH CENTRE

Our veterinary team are looking forward to their dream of an Animal Health Centre finally becoming reality! Work is due to start in the New Year, and the centre will be built on the site of the old car park, near to *Spirit of the Jaguar*. Our thanks to all those members and adopters who have made donations to help equip the centre.

## STAFF NEWS

### Warm welcome to:

Suzanne Thomas, who returns to the Zoo to work in the Education Department. Sandra Latchford who has joined the Accounts Team. Clare Morris who works as Senior Keeper in the Reptile House. Mike Nesbitt and Yvonne MacDonald who join the Amenity and Gardens section. Mathew Jenkins as Horticulturist in the Horticulture and Botany section. John Winward, our new Safety and Environment Manager.

### Fond farewell to:

Sue Davies, from Accounts – retiring after a quarter of a century of Zoo service. Phyllis Keay – Catering Supervisor, retiring after 16 years at the Zoo. Animal Keepers – Steve Nash, Claire McAra and Sarah Cox. Teachers Dominic Briffa and Jason Sheridan. Myffy Griffiths, one of the Presenter Team. Pauline Wynne, First Aider in the Amenity & Gardens section. Keith Wood, Project Engineer in the Estates Department

We would like to send them all our best wishes in their new jobs.

## A GREAT PLACE TO WORK



Meet the 2001 team of work placement students, who have spent a year working in the animal division. From right, Gill Bailey, Elephants; Karen Baldwin, Parrots and Apes; Chris Holloway, Birds; Beverley Lewis, Carnivores; Claire Daniels, Primates.

### Warm Congratulations to:

Parrots Team Leader Andrew Bagnall on his marriage in August to Mhairi. We wish them a long and happy life together.

### Apologies

Apologies to Sabina Blackbird, for wrongly attributing her photograph of Jake the Asiatic Lion published in the last issue of *Zoo Life* to someone else.

## Bankers' Graft

Chester Zoo Member, Suzanne Jones works for Barclays Bank at their IT Operations Centre at Radbroke Hall, Knutsford. In October she found a great way of spending a working day at the Zoo instead of in the office! The Bank has an *Employee Volunteer Scheme*, designed to help working relationships and produce team bonding. Once a proposal is agreed, the team is given a day out to accomplish its project, with some useful funding – £500 – to help. Naturally, Suzanne chose *Chester Zoo*, and had a great day working alongside the Botanical and Horticulture Team, led



by Mark Sparrow, planting out winter beds alongside *Islands In Danger*. Bonus for the Zoo – five man/girl days of hard graft, plus £500 to help buy some new garden tools! There was a second Zoo Member in the team, Jackie Gibson, whose daughter Ailsa – now at college – was a former Junior Member.



**Y**OU may not have seen them and unless you live close to the Zoo, you probably won't have heard them; but if you have visited the Zoo since the spring of 1997, you must have smelled them! However, if you haven't seen our Maned Wolves you are missing something very special.

These elegant animals are a beautiful colour; their bodies are a shade of rusty red known as 'pelage'; their muzzles and lower legs are black, and their throats, inside ears and the tips of their tails are white. They are relatively tall, standing at 90cm to the shoulder, and so you may be wondering why you have not seen them. They are crepuscular, which means that they are most active at dawn and dusk. That makes it harder to catch a glimpse, but if you visit during the summer, you will often be rewarded for your patience by a sight of them curled up asleep in the long grass.

Our first wolves arrived in the spring of 1997. The male came from Port Lymne and the female from Belfast.

## REARING MANED WOLVES

*Tim Rowlands, Team Leader on the Giraffe Section, writes about a very shy and rather odoriferous species!*

They settled in together very well and our first year was dedicated to learning about the animals. We tried to gear our second year for breeding; the animals

▲ *This will hurt me more than it hurts you!* Tim prepares to inoculate one of the cubs.

were left very much to their own devices. Beds were left alone, and the paddock was allowed to grow longer in order to provide cover and keep the animals at their ease. All was looking good for the spring of 1999. Our wolves had been getting on well together for some time when the female started to show some signs of being restless. Our hopes were substantiated when we noticed that her teats were swollen and showing when she walked. The next couple of days were tense and no one dared enter the paddock for fear of disturbing our expectant pair. Every day as we fed them was somewhat of an anti climax, as the female came out to eat showing that she still had not given birth! Then, only a couple of days after we first noticed the imminent signs, she failed to appear one feeding time.

A careful watch was kept on the paddock throughout the day, but there

were no signs of the female. By the time the Zoo closed we decided that we had to take a look, in case she was in any difficulties, and so with trepidation we opened the door of her cubbing den.

Much to the delight of the whole of the giraffe section, a faint high pitched whining was heard, and there lying proudly was our wolf with four new born pups feeding from her. Another first for Chester Zoo!

## EXTRA DENS

Research told us that if a female wolf feels at all at risk in her den she moves, taking one pup in her mouth at a time, and so three dens had been prepared. It was no surprise that she felt uneasy at times, particularly as the bull elephant pen was being built nearby. Newly born Maned Wolves are born black, blind and very small, which led for some confusion over the next few days, as observant members of the public saw her moving her pups only to call the nearest member of staff to tell them that the wolves were eating moles!

At this time we were slightly concerned about the possible behaviour of our male, as reports from some zoos had recommended separation of the parents to avoid any aggression. However, as a proportion of other collections advocated leaving the pair together, the very difficult decision was ours to make. We decided to leave them together, which I would recommend to anyone in the same situation. The male plays a very important role in the rearing of the pups. Not only does the father guard the remaining pups as the female is moving one of them, but he also brings food to the female in the first few days and then to the pups for the whole time that they are dependent on the adults.

At around four weeks old, they started to venture out of the dens. At this point, if you were lucky enough,

you would have seen our female carrying one pup back into the safety of a den as another one scuttled under her legs in a bid for freedom. Keeping an eye on the pups by the keepers was no easy task either - it was a fine line between making sure we had seen them enough to check that they were fit and healthy, and making sure we did not upset the adults.

## HANDS ON

When our pups were six weeks old it was time to get our hands on our new arrivals, as we needed to sex, microchip and inoculate them against parvovirus

scurrying for cover whenever they heard a warning yelp, but getting bolder as the day turned to night and the public disappeared for the day.

## JAB IN THE DARK!

At 12 weeks came their second inoculation, and this proved to be a lot harder than the first. They clearly had not forgiven us for their first jabs, so catching them up was difficult and the adults were fiercely attentive, so getting them away was no easy task. Eventually however, we managed it and we were ready to inoculate the pups. This experience was quite unlike the first

time. As I crawled into the darkness of their den, I realised that these animals had grown quite considerably in size and confidence! Moving around their den in complete darkness, trying to feel for my four very noisy, reluctant patients, I was glad of the gauntlets bought after the first inoculations. The process once complete had been a long one, and it was a relief to know that this would only have to be done again in order to send the pups to their new homes at around 12 months old. This we did, sending one to



▲ You need to be up early to catch a sight of the Maned Wolves out on their paddock.

and distemper. Their parents were separated into the adjoining enclosure and the pups were locked into their shed. One by one they were checked out by the vet team after which they were placed carefully back into their den, only allowing the adults back after all four were done.

From around seven weeks onwards the pups could be seen almost every day exploring their enclosure, chasing anything that caught their attention - leaves, beetles, frogs and even the occasional pigeon that had the misfortune to land in the wolves' domain. All the time they were constantly watched by both parents,

Jersey Zoo, one to Colchester Zoo and the last one, after a great deal of hard work from the animal division, was flown to a zoo in the Ukraine.

The next year we started all over again, with another four pups born, all of which we have secured homes for. As so few Maned Wolves are being successfully reared in Europe, the studbook has recommended that we continue to breed with our pair for at least another year, and so we look forward to new challenges in the year ahead.

**So, if on your next visit to the zoo you still miss our wolves, either you are not trying hard enough or you are looking in the wrong enclosure. Happy hunting!**

Charles Mackenzie, Shane Blake and the Rhino team continue our series on environmental enrichment for our animals.

# Enrichment FOR RHINO

**O**VER the last couple of years the Rhino Section staff have been thinking of enrichment devices and ideas to encourage a wide variety of natural behaviour of the Black Rhinos. With the upcoming new Rhino exhibit we have a chance to implement these ideas into the new project. These are some that we have tried.

## SCATTER FEEDING

To coincide with the Presenter talks, we decided to spread various foods around the paddocks. These included carrots, apples, whole cabbage, oak browse, fresh cut grass and maize. We want to encourage the Rhinos to spend more time searching for their food, as they would in their natural habitat. We also want the watching visitors to see how the animals use their prehensile lips to manipulate their food. We found the Rhinos to be more active when using this feeding method rather than having food put into one area, and the search for food occupies a larger part of their day.

## HANGING DEVICES

Inside the main Rhino building, we occasionally suspend a chain from the roof above a pen, and attach a whole cabbage to it. The height is adjusted so the Rhino can only just reach the food source. This means the animal has to reach up using its prehensile lip to grab and bite to gain the food reward. We have found this keeps the Rhinos busy for between 30 minutes to 1 hour! We hope to change the chain for something more natural looking, or camouflage it using vines or honeysuckle type

creepers. The hanging device can also be utilised for hanging browse.

## LOGS AND STUMPS

Before we introduced *Kitani* to *Manyara*, we decided to put a fairly big tree stump into her pen as a toy/feeder/rubbing implement. The stump was left in the pen for a day to allow *Kitani* to get used to it. The next day she was rubbing her head, horn and body all over it. We then drilled holes into the stump and inserted Willow browse. *Kitani* would then browse the Willow and rub herself intensively. After a week she was moving the stump around the pen using her head and horn. Over all, a big success! In the near future we plan to peg the stump to the floor to stop it being moved, as retrieving it from the ditch is not good for one's back!

## POSTS

Over the last ten years, large telegraph posts have been 'planted' on the outside paddocks. These posts have been used enthusiastically by the Rhinos as scratching/rubbing posts. Over a period of time some of the posts have been knocked down and used as toys. The Rhinos push them around the paddocks or use them for horn rubbing. A possible idea for the new exhibit is to place sprinklers on top of the posts for use on hot days to help keep the Rhinos cool. This idea has still to be investigated. Again, the posts could be utilised for hanging browse or other food supplements.

## MUD WALLOWS

Rhinos cannot sweat and need to cool

down by covering themselves in mud. Our Rhinos tend to make their own wallows with a little help from keepers, who fill them generously with the much needed water. The Rhinos can spend a large part of the day wallowing. When satisfied, they tend to go indoors and rub themselves all over the pen walls. This ensures the staff earn their keep by spending a large part of the next day cleaning the mess up! We keepers also need to be enriched . . .

## SHRUBS AND BUSHES

Rhinos can be quite destructive of their surrounding area. Shrubs and bushes tend to be flattened without time to establish themselves. After visiting the zoo at Port Lympne, we found the shrubs and bushes were planted behind the paddock barriers so they could be browsed by the Rhinos but not flattened. This idea we hope to utilise in the new Rhino project.

## JOUSTING POLE

By using a big tree stump as a base and putting a horizontal log on top, we have made a natural looking toy which the Rhinos play with by pushing the log around. This is an idea borrowed from another zoo!

## MAIZE

Towards the end of the year, maize is cut and fed out around the sections. For the Rhinos, we are planning to build a holding device, submerged below the ground, where the maize can be inserted to create a small maize patch. The Rhinos can then eat the maize *ad-lib*. When finished it is replenished.



▲ *Rhino Mother and Calf. Photo courtesy Manchester Evening News. Top right – an impression of the new development.*

## RHINO PROJECT PHASE 1

**P**LANS for the new Rhino Exhibit are now well under way. These animals are solitary and require separate housing for the majority of the year with good quality, indoor heated accommodation as well as large

paddocks. There is a Rhino/public crossover point to allow the building to serve two paddocks – and to provide an interest for visitors. Additional planting and landscape is included together with access for visitors with disabilities.

The concept for the building is a circular African mud hut, or rondavaal, with a pitched roof. There will be two pens for public viewing and an off-show pen for veterinary use. Two of the paddocks will be planted out to give cover for the Rhinos and hopefully this will allow them to use the planted areas as beds.

All paddocks will be interconnected so

we can move the Rhinos around. As in the wild, there is a certain amount of crossover between territories. The barriers between the paddocks will allow a controlled amount of contact between the animals. Larger paddocks lead to less aggression, and a greater breeding potential. The males will be kept in paddocks adjacent to the females. In the wild male territory will overlap with that of the females.

Mixing of other species where possible may lead to some social interaction. Possible species to be mixed with the Black Rhinos are Red Lechwe, Warthogs and Meerkats.

# Quest TO Paradise!

## PAPUA NEW GUINEA

*Curator Roger Wilkinson finally makes a trip he dreamt of for 40 years!*

**B**LAME David Attenborough and his Zoo Quests. Papua New Guinea and Birds of Paradise have held a fascination for me for 40 years. I met up with some friends when birding on the Isles of Scilly last year and when they suggested a birding trip to Papua New Guinea and New Britain, my immediate reply was an unqualified YES! I am the European studbook keeper for Palm Cockatoos and Blue-eyed Cockatoos and the chance of seeing them, and many other birds that we work with at Chester Zoo, could not be missed.

Port Moresby, the capital of New Guinea, was our base and the main means of transport to outlying areas was by small planes. Our first stop, was Varirata National Park. Blue-winged Kookaburras (bred for the first time at Chester this year), Fawn-breasted Bowerbirds and Dumonti's Mynahs greeted us on arrival at the rather downbeat Kokoda Trail Motel. Over the next three days we found an amazing variety of birds. Amongst the more unusual were huge Papuan Frogmouths (much larger than the Tawny Frogmouths we keep at Chester), Barking Owls, the poisonous Hooded Pitohuis and several species of Kingfisher.

A female plumaged Raggiana Bird of Paradise - my first - was seen briefly on a forest trail. Many were later seen noisily mobbing a Barking Owl. Watching several full plumaged males displaying at a lek was truly special.

Forest birding is hard work and many more birds were heard than seen. These included noisy growling Eastern Rifle-birds and plaintive Chestnut backed Jewel Babblers. Open country birding is much easier and we had the pleasure of watching Green Pygmy Geese, Pied Herons, Comb-crested Jacanas and many other water birds. Mangrove habitat at Hisiu produced specialists including Robin, Fantail and

Gerygone. Papuan Harriers and Lesser Frigatebirds were much more obvious.

We flew over extensive lowland forest to a Second World War jungle landing strip at Kikori, a small town on the border of Irian Jaya. Our quarters for the next four days were at the *Chevron Oil* base called Kopi camp. This was extensive lowland rainforest, away from human hunting pressures. From a single fruiting tree we counted 39 Blyth's Hornbills and over 50 Torresian Imperial Pigeons. Notable birds included the little known Yellow-eyed Starlings. Hooded Pittas were heard and I glimpsed a Blue Jewel Babbler. Getting brief views of this ground bird's wagging blue tail, was perhaps the best view of this shy bird. Birds of Paradise included Crinkle-collared and Glossy-mantled Manucodes. King Birds of Paradise were also found but no adult males were seen. We greatly enjoyed being shown a Spotted Cuscus kept as a pet by one of the townsmen.

We were meant to fly to Kiunga, a forest township on the Fly River, via the mining hill town of Tabubil. This is the wettest place in New Guinea, set amongst hills by a vertical cliff face. Bad weather delayed our departure and low cloud prevented the pilot finding Tabubil. What followed was one of the most frightening flights of my life, including four dives down through clouds with alarms ringing! I was relieved when the pilot decided to fly direct to Kiunga and even happier when we landed safely despite the atrocious weather.

Forest outside Kiunga offered more Palm Cockatoos and Pesquet's Parrots as well as a trail which led to a lek site for Greater Birds of Paradise. We also saw a Raggiana male and several birds that may have been hybrids between these. The visiting females all appeared to be Greater Birds of Paradise and one magnificent male Greater was twice



▲ Roger at Ekame Lodge - muddy but happy after a successful tracking some of the most difficult forest birds.

observed copulating with two of these female after his display. Copulation was a relatively brief affair with the male extending his wings down on each side of the female and retaining balance by flapping these whilst mating her.

A three-hour boat trip to Ekame Lodge, situated in undisturbed lowland forest, offered opportunities to track some of the most difficult forest birds. We saw tracks indicating the presence of Southern Cassowary. I was fortunate to see one of these magnificent birds, curious to get a distant look at the human visitors, before shooting back deep into the forest. Thanks to the skill of the local guide we also had excellent views of Southern Crowned Pigeons, Little Paradise Kingfishers, displaying male Twelve-wired Bird of Paradise and male King Bird of Paradise. An unexpected bonus was a Hooded Pitta that flew in to perch only a few metres away.

On the drive to Tabubil, we stopped to watch a dark Peregrine Falcon and several Little ringed Plovers of the distinctive local form as well as a Golden-backed Whistler. The following day, in a rare break in the rain, we had an amazing morning with up to ten Carola's Parotias, including full colour males with reflective breast shields, a male Magnificent Riflebird, and sub-adult Superb and Magnificent Birds of Paradise. We also enjoyed excellent views of the recently



Village. Lots of Birds of Paradise were found and on the journey back we were at last successful in finding a rare Salvadori's Teal. Also, around Ambua, we enjoyed watching a shy Mountain Cuscus before it disappeared into thicker foliage and saw a Boelen's Python that had been captured by the local villagers.

Back at Port Moresby we explored Lea Mudflats, this time extricating our bogged down vehicle from the mud, before checking off a number of waders and several less expected birds including two Orange-footed Scrubfowls.

◀ We greatly enjoyed being shown a Spotted Cuscus kept as a pet by one of the townsmen.

uncommon and Eclectus Parrots abundant. Other parrots seen included Purple-bellied Lorries, Red-flanked Lorikeets and three delightful Bismark Hanging Parrots. Pokili Wildlife Management Area included an area of hot sulphurous springs, close to which Melanesian Megapodes tunnelled into the earth to lay their eggs and leave them to be incubated by the geothermal heat.

A stomach churning boat trip took us to a number of islands surrounded by coral reefs. Here we eventually found Nicobar Pigeons, seen first only in flight but then found perched high in trees, not as I had expected, on the ground. A long stop over in Port Moresby on the way home gave time for a visit to the University Botanical Gardens.

Here I was delighted by a very inquisitive tame and talking Raggiana Bird of Paradise, which clearly enunciated 'Hello', 'Goodbye' and 'hahahaha'. There were five Blue-eyed Cockatoos, one of which repeatedly called "Cocky Kaikai". Kaikai is pidgin for food and that is food for thought. I hope to write more on Blue-eyed Cockatoos in a later short article devoted to that very special bird.

▼ Highlander with head-dress, Ambua.

Papuan Lorikeet – this photograph was taken in the Zoo's Islands in Danger.

re-discovered Obscure Berrypecker, Dusky Lorries, Orange-breasted Fig Parrots and many species of fruit doves.

Kumul Lodge, Mount Hagen, was a one-night stopover but in less than a couple of hours birding around the grounds at dusk then dawn, we had close encounters with a splendid male Brown Sicklebill and a male Ribbon-tailed Astrapia. Throughout the world I most enjoy cloud forest birds and birding highland New Guinea was no exception. We then flew to Tari from where we were driven up to Ambua Lodge.

Birding here was exceptionally good with Musschenbroek's, Papuan and Whiskered Lorikeets, Brehm's Tiger Parrots, Blue-capped Ifritas, Archbold's Bowerbirds, Princess Stephanie's and Ribbon-tailed Astrapias, Brown Sicklebills, Short-tailed Paradigalla, Lawe's Parotias, and Lorias, and King of Saxony Birds of Paradise being the star birds. Driving beyond Tari Gap our vehicle became bogged down and we were forced to begin the 20 km walk back to the lodge, leaving our driver with his bus. Thankfully after two hours hard walking, getting closer to dark and being warned of 'rascals' we were pleased to be caught up by our bus which had been towed out.

Next morning saw us watching a male blue Bird of Paradise in the company of exotically ornamented wigmen at Daula



After about three weeks on mainland Papua New Guinea I had seen nearly 300 species of birds including 16 species of Lorries and Parrots, 25 of pigeons, 13 of Kingfishers and 20 different species of Birds of Paradise. Quite a successful quest with so many of the birds we work with at Chester, and especially Palm Cockatoos, being seen on their own territories. But New Britain offered yet more.

No Birds of Paradise occur on New Britain but it is home to a number of birds found nowhere else. We flew to the small town of Hoskins and stayed at Walindi in West New Britain. From here we visited a number of forest sites where birds included Knob-billed Fruit Doves, Red-knobbed Imperial Pigeons, Black Imperial Pigeons, New Britain Kingfishers and Black-headed Paradise Kingfisher. Blue-eyed Cockatoos were not





## JAGUAR CAR MEETS JAGUAR CAT!

Hazel Russell reports on the official opening of Spirit of the Jaguar by Stefanie Powers

**A**FTER the precautionary six week closure in the spring, it was a huge boost to our re-opening publicity to have the brand new, world class Spirit of the Jaguar ready to welcome visitors.

Jaguar Cars were keen to join the Zoo for an official ceremony to celebrate the successful completion of what we believe is the biggest and best Jaguar enclosure in the world; a perfect illustration of synergy between an internationally renowned company and one of the UK's leading conservation charities.

Who then, better to perform this ceremony than Stefanie Powers, internationally acclaimed actress and one of the world's leading conservationists?

Stefanie is President of the William Holden Wildlife Foundation and is especially committed to the plight of the Jaguar. Having worked on Jaguar conservation in North America, she was keen to accept an invitation from Jaguar Cars to see what we are doing in England!

Stefanie arrived early in the morning, looking very elegant in a skirt suit, which she wore with . . . a very white pair of trainers! This eclectic mix was not a fashion statement, but due to an accident the previous day, when she suspected she had a broken toe. You will notice our photographs do not include her feet! Being a Hollywood star, of course, she was very brave and did not let that stop her enjoying the day.

Stefanie was clearly impressed by Spirit of the Jaguar and congratulated everyone who had helped with the concept, design and construction of this innovative exhibit. She emphasised the need for everyone to recognise that zoos play a critical part in conservation.

She also added - Chester is such an excellent Zoo, but a zoo is only as good as

its staff and here, they are among the best!

The weather was overcast and rainy, but that did not stop Salvador's star performance! The ultimate publicity photograph everyone wanted was a Jaguar cat on a Jaguar car. Keepers had introduced the car into his outdoor enclosure some weeks before the big day, and with the help of some strategically placed meat, he was happy to pose! He even managed to bite off one of the wing mirrors and take it away.

(Please, please, no more offers for 'a slightly battered and scratched X type; one wild owner.' We have been overwhelmed by such bids and Jaguar Cars have 'helpfully' removed it now!)

The official opening ceremony took place inside the building, with Stefanie ably assisted by Jonathan Browning, Managing Director of Jaguar Cars, and Zoo Director, Gordon McGregor Reid. Seven year old Hannah Gordon made a beautiful job of presenting a bouquet to the actress - and received a warm hug in return.

After the ceremony, the official party disappeared under a canopy of Chester Zoo umbrellas as they made their damp way to a marquee on the Oakfield lawn. Here they enjoyed refreshments and addresses from Stefanie Powers and NEZS Chairman, John Makinson. Alan Rabinowitz, from the World Conservation Society in New York, who had flown over especially for the occasion, also gave an inspiring address.

Professor Yolanda Matamoros of the National Zoo, San José, Costa Rica was another distinguished guest.

Among the guests were many of the Zoo's supporters, including members of Council and members of the Legacy Pledge Club.



Main picture: Salvador gives a star performance, by posing for photographers on the X-Type Jaguar car.  
Above right: Stefanie Powers with Jaguar Cars Managing Director Jonathan Browning.  
Left: Stefanie Powers  
Bottom right: Stefanie with little Hannah Gordon, Zoo Director Gordon McGregor Reid and Jonathan Browning.



▲ Look carefully! This was our first sighting of a rhino.

**A**FRICA, Tsavo – two words that have given me a buzz of excitement for just about as long as I can remember.

My father was in the Royal Navy and in the 1950s sailed to the Kenyan port of Mombassa. From there he went on safari to Tsavo. I remember well the stories and the souvenir drawer of his travels. There was a Tsavo National Park pass, with the red dust trapped in its plastic cover. Also in the drawer was a rhino tooth, which he picked up in the park. I was inspired by these objects and was thinking about them when our bus pulled up outside the gates to Tsavo National Park. It had been a long and uncomfortable night flight and an extremely bumpy, four hour ride from Nairobi. During the drive we witnessed Africa awakening. Just minutes outside the hustle of Nairobi we were in scrub bush. We passed the locals on their way to work, walking for miles. Further back from the road, Hartebeest and Thompson's Gazelle watched us pass and three giraffe were elegantly browsing. Less than 12 hours from leaving Manchester, this was *Africa!*

The impressive gates to Tsavo East National Park feature large black rhino silhouettes, face to face. After a great deal of raised voice negotiations between our drivers and park officials, we were allowed to enter. I later

realised that this shouting match was perfectly normal and just a part of the African way of life! As we entered the park, there was the red dust, just as I remembered it from the drawer. It looks unnatural, particularly when built into termite mounds, which are bright orange in the morning sun. Inside the park there is no more traffic, no more people, just miles and miles of acacia scrub. Although exhausted, I fought the urge to sleep for fear of missing something. It was not long before we spotted pairs of Kirks' Dik Dik, (a tiny and not at all road-shy antelope) and a magnificent male Greater Kudu.

### RED ELEPHANTS

Our first overnight stop was Voi Lodge, perched high on a kopje. The view over the plains was incredible. Thirty elephants had gathered in and around the water hole outside – a stunning sight. Because of the dust, the Tsavo elephants are bright red, making them even more impressive.

There were 19 members of the group and I desperately tried to remember everyone's name. At this stage we were strangers, but the group soon began to 'gel' – the characters emerging rather like a travelling 'Big Brother'.

Later that evening, with Zoo Council member Kath Edwards (who initiated

## BLACK & RED RHINO & ELEPHANTS

*In July General Curator Mark Pilgrim was delighted to lead the Chester Zoo Members' tour of Kenya. He was especially keen to visit the anti poaching unit in Tsavo East National Park, where Chester Zoo helped to fund a Black Rhino translocation (see Zoo Life, Winter 1999). The Zoo continues to support the anti-poaching unit through Save the Rhino International and the Kenyan Wildlife Service. A contribution from each member on this tour went to SRI providing direct benefits to African rhino.*



▲ Mark Pilgrim with Oliver Myambo.

the trip), I met Oliver Myambo. Oliver is head of the Rhino Anti-poaching Unit at Tsavo. He visited Chester last year and it was good to see him again. He gave a presentation on the history and ecology of the park, explaining that Tsavo was once a stronghold for the Black Rhino, but due to a huge poaching problem during the 70's and 80's, they were completely wiped out. Today the 11,000 square kilometres of prime Black Rhino habitat contains only 51 animals, all brought in to the park from elsewhere. The most recent were 17 translocated to Tsavo in a Save the Rhino International project, part funded by Chester Zoo. Oliver explained the appallingly high rate of poaching in the past and the efforts of his highly trained team of rangers who track the Rhino and intercept any poachers. Poachers are

now very rare, due to the reputation of Oliver's team and its 'shoot to kill' policy. The anti-poaching unit is trained to a very high military standard; these are hard men with a tough job. Oliver believes that one day Tsavo could again be a stronghold and safe haven for the Black Rhino holding as many as 8000. This dream will only be achievable with huge continued support from conservation organisations and from people who care passionately about the rhino's future.

### A RHINO CALLED MARIA

After explaining the hardships and difficulties he and his men faced, Oliver told us of *Maria* his favourite rhino in the park. Oliver bonded with her while she was in the *boma*, (the holding pens where the rhinos recover from their

journey before being released). He told us she still responds to his voice and that he could call her out of the scrub.

The following morning we left well before dawn to arrive at the anti-poaching unit's headquarters. Following introductions to the rangers we set off on foot in search of a rhino. The low thorny scrub at Tsavo is very dense and visibility is rarely more than 20 metres. It was already warm and we were travelling quickly over difficult terrain. The tracker soon picked up the fresh trail of a rhino; finding footprints on the hard substrate is not easy. I really envied the skills of these trackers and their ability to read the subtle signs of the bush. We moved quickly over difficult terrain in the increasing heat. At one point the three-toed tracks of the rhino became confused with the four-toed tracks of a Hippo that had shared the path. We came across a rhino midden – they often defecate in the same spot. This is a signal to other rhinos that the territory is occupied. After three hours the group was getting tired and it was becoming very warm. Extremely disappointed, we gave up the attempt for the day. We all agreed that the following morning we would begin even earlier, leaving the lodge at 5am. I was delighted that another very early start was so eagerly agreed.

This time I felt there was an even greater determination by the trackers to find us a rhino. We learned more field skills including how to stay up wind of the rhinos – important if they are not to detect your presence. The trackers would climb on top of a termite mound and scan the bush cover. They were not looking for rhino directly – they are well hidden in the dense scrub – but for the tell tale signs of ox-peckers, the 'tick birds' that accompany all large animals, removing their external parasites. I could see the birds about 100 metres away – we were getting close. Oliver told us that Black rhino often charge on sight and can surprise you as they emerge from the scrub at speed less than 10 metres away. The advice, if this happened, was to get behind a termite

mound. I am sure I was not the only one making a mental note of every termite mound we passed, wondering just how all 25 of us would 'hide' behind a mound just one and half metres high and two metres wide! We were moving ever more quickly and in complete silence; the rhino we were tracking was keeping just ahead of us. Suddenly the lead tracker's hand shot up and we all stopped in our tracks, hearts pounding as he pointed. There she was. It was *Maria!* It was a fantastic moment to see a magnificent Black rhino in the wild, an incredible sight that I'll never forget. We crept closer. Eventually we were all able to get within ten metres of her, while Oliver quietly called her name to reassure her. Then, suddenly, she shattered the silence with a loud snort and a scuffle. My worries about everyone getting behind the termite mound were unfounded; we all instantly managed it with ease, much to the amusement of the rangers!

### CLOSE ENCOUNTER

On the way back we passed a broken water pipe where a solitary bull elephant stood under a tree, eyeing us with suspicion. He was huge and bright red from the Tsavo dust. He stood his ground and then purposefully moved towards us flapping his enormous ears. Our driver reversed at a speed that made me realise he was worried. The elephant followed, breaking into a trot. Then to our relief he stopped and powerfully moved off into the bush. The thrill of Africa to me was never knowing what was around the next corner.

I will write about the second part of our trip in the next issue. As we left the park I was again thinking of the objects that inspired me from my father's brief time in Tsavo. I collected some red dust, a sun bleached land snail shell, and some of the white quartz rock for my son, Ryan. No Rhino teeth lying about these days! Perhaps in turn, these items may inspire Ryan to visit Tsavo in years to come, when with luck and a great deal of hard work and continued support I hope that he may witness the 8000 Black rhino at Tsavo of Oliver's dreams.

# LIVING WITH GORILLAS



**B**ANGUI is the steaming capital of the Central African Republic, sitting right in the heart of the African Continent. From here I began the long journey south west to the Ndoki NP, where the borders of the CAR Cameroon and Congo kiss and their dense forests merge, to my home for the next six months, the *Mondika Research Centre*. The purpose was to assist with a Western Lowland Gorilla habituation programme, the first stage of a long term study being conducted by leading U.S. primatologist Dr Diane Doran, on their social organisation and behavioural ecology.

Of the two species and five subspecies of Gorilla known, the Western Lowland is the most widely distributed and numerous and the only one with a healthy and viable zoo population. Until relatively recently, it has been little understood in the wild state. Many generalisations about its behaviour are based solely on the studies of the Mountain Gorillas, made famous by Diane Fossey. After a gruelling journey that included a 13 hour drive, 12 hour boat ride and 15 mile walk through torrential rain, I literally fell into my tent at our simple but pretty camp. The next morning I was woken abruptly by surely the most unique alarm call in the world – the taut, drum-like *pok-a-pok-a-pok* chest beat of an adult male gorilla, less than 100 meters from camp!

After quickly acclimatising to the heat and humidity, I soon got into the swing of the habituation programme. The aim was to track the gorillas from nest site to nest site, with the aid of BaAka pygmy trackers (the indigenous tribe of the area) and to contact them as frequently as possible. During this process, data

*Stuart Nixon was one of the students to receive a Chester Zoo Conservation Research Grant last year, to work on a programme for Western Lowland Gorillas in Africa.*

Photographs courtesy  
Jef Oonk & Marleen Azink,  
Fotonatura



▲ *Adult Silverback male feeding in a bai.*

was collected on trail signs, food remains and nest sites.

The protocol may sound straight forward, but I soon found out why the Western Lowland Gorilla is so difficult to study. Compared to

Mountain Gorilla habitat, Western Lowland habitat is much sparser in herbaceous ground vegetation (the primary food source) and has a higher seasonal fruit availability. This results in the Gorillas travelling much further in a day than Mountain Gorillas (up to 3km as compared 500m!) through heavy vegetation. Not only is this vegetation dense but it is thorny, ridden with biting ants, elephant ticks, and home to the occasional Gaboon Viper. The gorillas frequent the dense swamps bordering the Ndoki River and large marshy forest clearings known locally as *bais*. Long thought of as evaders of water, Western Lowland Gorillas use these areas almost daily, sitting chest deep in the swamp and eating the succulent aquatic vegetation.

Such difficult terrain makes it hard to hold the trail, get close enough to contact them, and on contact, for observer to see gorilla and vice versa. Thus most contacts result in a group flight on hearing observers approach, or even a full-blown Silverback intimidation display and charge. (On one occasion to within 3ft!) The sheer density of gorillas at Mondika (at least 10 groups and 15 lone males) coupled with the difficulty of visual identification, made it hard to determine whether we were even tracking our focal group. Fortunately our focal group Silverback had a very distinctive alarm bark, that made him sound like a 400 lb rottweiler. This earned him the charismatic BaAkan name *Kingo ya bule* which means 'big voice.' His placid and patient nature allowed successful contacts, where he either came forward to look at us, or continued to feed with his group of nine, unconcerned of our presence. A truly magical experience. Throughout the six months



▲ *Who is watching who? Female gorilla watches from her tree perch.*

he became less and less concerned at our presence, leading to some wonderful contacts and the sense of belief that our efforts were working.

Occasionally we would hear a group of chimpanzees whilst tracking the gorillas, which the pygmies would 'call in' by mimicking a duiker (a small forest antelope) alarm call. As chimps are avid hunters of monkeys and duiker at Mondika, this call is somewhat like ringing a dinner bell. Within seconds of hearing the call the chimps would be screaming in excitement, charging towards the sound – **us!** The chimps were stunned to see three strange apes where they expected an easy meal and following a prolonged and explosive set of intimidation displays by the males, would often settle in the trees around us and lounge about for several hours – watching us – watching them for several hours. At Mondika, these are completely unhabituated chimps, their inquisitiveness being grounded in naivety as opposed to familiarity to humans, an almost unique occurrence in central Africa where most ape populations have been hunted to the brink of extinction.

As well as a high density of gorillas, the *Ndoki National Park* harbours probably the largest population of Forest elephants in Africa. These are somewhat smaller and have rounder ears than their Savannah cousins, but are nonetheless enormous animals. Despite their bulk they are practically impossible to see and hear in the forest. Also present in high numbers (but no easier to see!) are Forest buffalo, bongo, sitatunga, Giant Forest hogs, Red River pigs, several monkey species, leopards and Golden cats. Fortunately for researchers, many of these animals are frequent visitors to the

*bais*, where they can be viewed without obstruction. Indeed it is now believed that the formation and maintenance of these clearings relies solely on their use by large herbivorous mammals. On one day at Mbeli Bai in the Congolese section of the park I witnessed three large gorilla groups, 15 elephants, six sitatunga, two Forest buffalo, two bongo, a herd of Red River pigs and a Dwarf crocodile! The swamps are reputedly the home of the legendary Mokele mbembe, a dinosaur like creature that (according to the BaAka) kills and eats elephants by spearing them with a large nose horn. Thankfully I did not encounter this supposedly ferocious beast!

Outside the protected zones the situation for wildlife is extremely bleak. The majority of unprotected Central African forests will be

logged within the next few decades and whilst the secondary forests are favourable habitats for many forest species, especially Gorillas and Elephants, the huge rise in the commercial bushmeat trade means that very few animals will be left to repopulate these forests. It is estimated, that over a million metric tonnes of bushmeat are being removed from the forests of West Central Africa every year a disturbing rate that **WILL** result in the extinction of many species, including the Western Lowland Gorilla within the next two decades unless rapid and sustained action is taken. The indigenous BaAka pygmies are under great threat of losing their homes and cultural identity. About 30,000 BaAka still live in the Ndoki region, and live a truly nomadic hunter-gatherer lifestyle, dependent both physically and spiritually on the forest. Even the youngest BaAka trackers are inherently zoologists, botanists and animal behaviourists. With the loss of their forest will go a loss of their knowledge and fewer people to introduce the complex biology of this region to western science. The Ndoki forest is a vision of undisturbed African tropical forest that is literally teeming with gorillas, elephants and chimpanzees; a place where local people can experience and realise their natural heritage. It is a testament to the conservation efforts of the governmental departments and NGO's who established the parks and the staff that maintain them. May long it thrive and serve as a model for conservation efforts elsewhere in Africa.

■ *Thanks to everyone who helped make this study possible, particularly to Kingo ya bule for letting me share time with him and his gorilla family as they wandered the forest of Ndoki.*

▼ *Stuart with BaAka (trackers) contacting Kingo's group.*



# GROWING CONCERNS

**Mark Sparrow, Curator of Botany and Horticulture and his Deputy, Sarah Bird, report on what has been happening in the Zoo Gardens!**

**W**E were very pleased with the overall standard of the horticultural displays we maintained throughout the Zoo this summer. A big thanks to all my team, and the staff of the Amenities and Gardening Section. Certainly the judges of *Chester in Bloom* were impressed (see page 4).

We tried one or two new ideas with the bedding displays, including using a more diverse mixture of flowering plants in one area, some of which we had not tried before. We hope you liked it.

Our most innovative new project is the *Grow Zone*, which opened in the autumn. It is located to one side of the Ark Restaurant. Here, for the first time, we are allowing public access to two of the greenhouses in our nursery. A selection of the plants that we grow in the Zoo are on display. Most of them are labelled, as one of the most frequent questions our gardeners are asked is 'What's that plant called?' Now, if you see a plant in one of the bedding schemes, or indoor display areas, you



▲ Inside the *Grow Zone*

will be able to find out what it is in the *Grow Zone*.

*Grow Zone* also allows us to showcase some of the plants we grow that are of conservation value, i.e. our rare orchid collection, and a range of economic plants: we have tea, coffee, lemon, tangerine, cardamom, and date palms.

Signs and labels in the zone tell some interesting plant stories. *Why do plants have smelly flowers and why are some pleasant while others are nasty? How are plants named? Can you guess how they get their common names, like 'Mother in Law's Tongue' for instance?*

So, on your next visit to the Zoo, come and visit the *Grow Zone* and learn more about the wonderful world of plants.

## CORNER CONSERVATION

We all use wood in lots of ways at home and at work; as furniture, and paper, etc . . . when you think about it wood plays a very significant

part in all our lives. But where is that wood coming from and how it is grown?

- Is it from natural forests where the trees are an irreplaceable part of a complex ecosystem?
- Is it from managed forests where trees are harvested and replaced in a sustainable way, and the ecosystem is maintained?

- Has it been transported over long distances, or produced locally?
- Is it new or recycled?

These are questions we are now asking about some of the wood we use at the Zoo. In particular we are doing trials using timber from trees felled for safety reasons by a local tree surgeon. This wood has been used for new signs at the *Grow Zone*, *Sealion Beach* and *Arara Lodge*, and for rustic furniture in the *Arara Lodge Picnic* area. If the wood lasts well, and doesn't need too much maintenance, we will use more in the future. The tree surgeon also supplies whole tree trunks and branches for landscape features in animal enclosures.

You can make choices about the wood you use too.

1. **Reduce** the amount of new wood and paper products used. Try to buy 100% recycled paper products when you

can. Look out for the 'tick tree' logo (below) of the *Forest Stewardship Council* when buying new wood and paper products.

2. **Re-use** wood and paper products as many times as possible. E.g. write on both sides of paper, use 're-use' labels on envelopes, and use second-hand or reclaimed wood items like furniture and doors.

3. **Re-cycle** paper and wood – old comics, magazines and newspapers, furniture, building timber etc.

If we all stick to this simple 3-point plan, fewer trees will have to be cut down to supply our paper and wood needs.



Forest Stewardship Council A.C.

PLANT OF THE MONTH

**DECEMBER:** Holly, *Ilex aquifolium*  
**Look out for:** Most people recognise the shiny, spiny leaves and red berries characteristic of holly. Traditional in our Christmas decorations, holly has been used for celebrations for many centuries. Romans carried it in processions and adorned images of their gods with its striking leaves. (See it in various locations including around Oakfield House)



▲ Holly



▲ Pampas Grass

**JANUARY:** Pampas Grass, *Cortaderia sellowiana*  
**Look out for:** Big clumps of coarse grass with feather-like, silvery-white flower spikes up to 12 feet tall. Pampas grass comes from Brazil, Argentina and Chile. Its common name comes from the grassy plains of South America, which are called the 'Pampas'. It is a stunning

garden plant. (Find it by Condor Cliffs and Penguins)

**FEBRUARY:** Snowdrop, *Galanthus nivalis*  
**Look out for:** Snowdrops, also known as 'Fair-Maids-of-February', are often the first flowers of the year. They frequently emerge through frost and snow in late winter and early spring. The small white bell-shaped flowers hang downwards, and the petals are usually dabbed with green. (Find them in the Rock garden beyond Oakfield lawn, and Cheetah lawn)



▲ Snowdrops



## Tourist Board Award

The new Grow Zone was the ideal spot to display the 'Tourism and the Environment' Award received from the North West Tourist Board. From left: Sarah Bird, Director Gordon McGregor Reid, Mark Sparrow and Mark Hargreaves.

2001 – a South American Odyssey



at Chester Zoo

*WE'VE already done Africa and island-hopped around the world so this summer the Education Division decided to make South America our destination. This huge continent is home to the largest rainforest in the world, with the greatest range of species to be found on Earth. Many of our regular travelling companions joined us on our South American Odyssey as we explored the wildlife, culture and conservation.*



**Monday 13th August – The Odyssey Begins**

Dave and Sue Shaw's Rainforest Roadshow kicked off the week in spectacular style. They provided a wonderful introduction to this fascinating land with artefacts, games and live animals. Our brave

adventurers came face to face with a Stag Beetle, Scorpion and Tarantula!



**Tuesday 14th August – Los Animales**

An energetic game of hunt the Poison Arrow Frogs started our day! Suitably rested our intrepid explorers spent the rest of the morning on safari, visiting the Zoo's own South American inhabitants. A

change of tempo saw us in the *Wildlife Discovery Centre* using microscopes to look at birds' feathers. These were the inspiration for the badges and zoetropes we made.



**Wednesday 15th August – Culture Vulture**

A wonderfully messy day! Face painting, pottery and jewellery making helped our travellers to understand the culture of the South American Indians. Dave and Sue returned with an array

of beautiful artefacts used by the Waorani and Cofan tribes. There was no shortage of volunteers to try out the blowpipes (minus poison darts!), but it proved to be more difficult than it looked.



**Thursday 16th August – Roots and Shoots**

Plants are vitally important to life in South America and we spent an interesting day studying the plants (and residents!) of *Spirit of the Jaguar*. Expert help, in the shape of Mark Sparrow and

Sarah Bird, was on hand. They patiently answered questions and brought a variety of plants for us to examine. Our would-be gardeners had a fabulous time planting chilli and pepper seeds; digging up and cooking potatoes; arranging airplants on bark; grinding maize and making popcorn. Paper flower making and weaving appealed to the artists among us!



**Friday 17th August – Jungle Beats**

We finished the week with a bang as Carlos Munoz, from the band *Caliche*, brought the music and culture of South America to life. Our budding musicians were enthralled as they tried to coax sounds from a

range of unusual instruments and passing Zoo visitors were entertained to some lively rhythms!

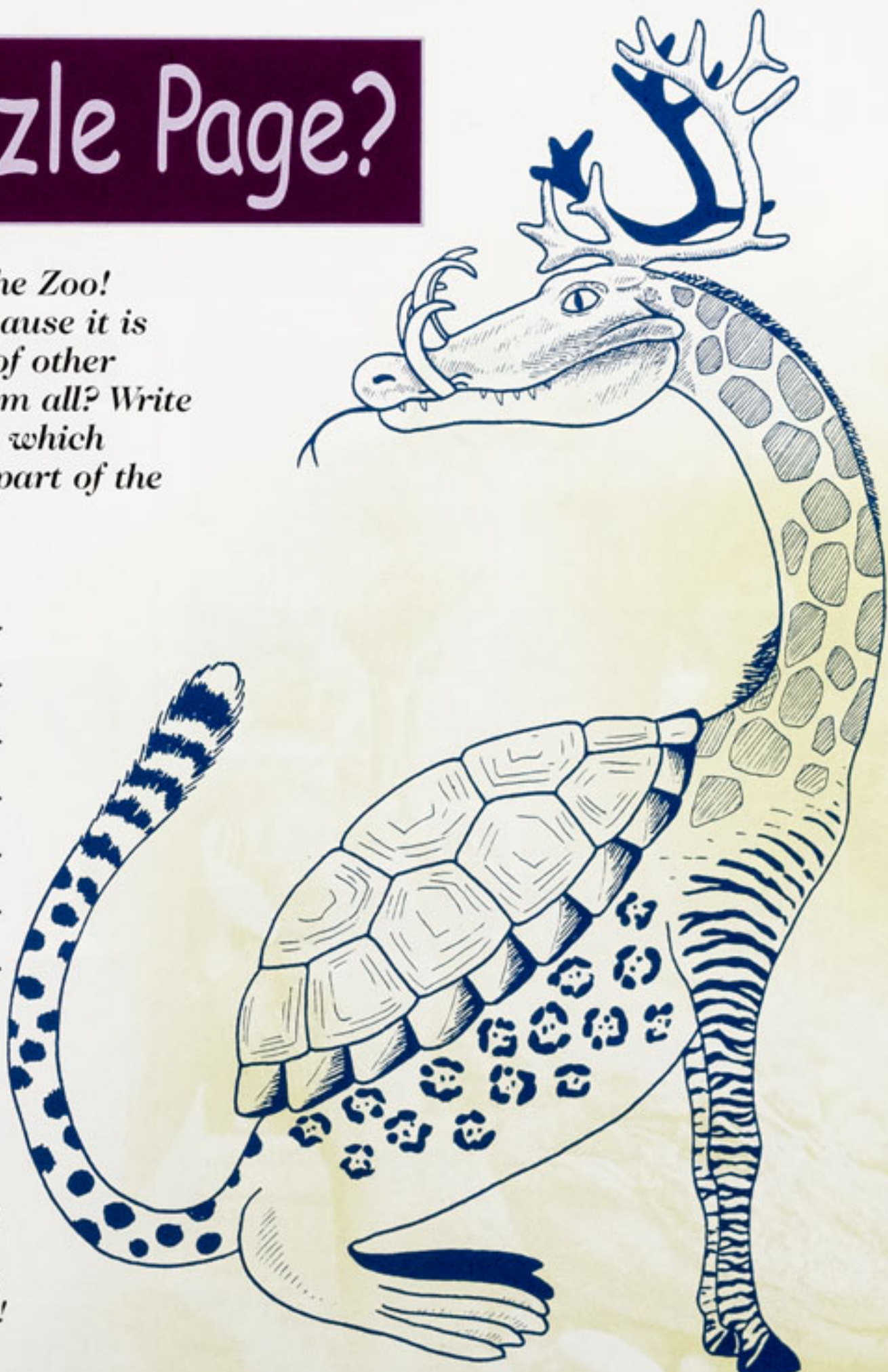
# Junior Puzzle Page?

You won't find one of these in the Zoo! We call it a JIGOSAURUS – because it is made up of ten 'jigsaw' pieces of other animals! But can you name them all? Write by the side of all the body parts which animal you think supplied this part of the jigsaw.

- 1. Tongue .....
- 2. Head .....
- 3. Tusks .....
- 4. Antlers .....
- 5. Neck .....
- 6. Front Legs .....
- 7. Back Legs .....
- 8. Body .....
- 9. Back .....
- 10. Tail .....

We think question 3 – 'tusks' – is the hardest one, so here's a clue:  
*It starts with the name of a children's book elephant and ends with America!*

Write your answers on a postcard and send them to Junior Puzzle, Chester Zoo, Upton-by-Chester, CH2 1JH. Closing date is 11 January 2002. The first correct entry opened will win a £10 voucher to spend in the Zoo shops.



The correct answers to the 'Beware' puzzle in the last issue is  
**PLATYPUS**  
THE WINNER:  
**Sally Benjamin of Fairfield, Buxton.**



# Zoo Life

# JUNIOR MEMBERS



## Meetings and Field Trips

### Saturday 26 January 2002 – The Contact Session

A rare chance to meet some of the Zoo's friendlier residents at close quarters! These are likely to include snakes, spiders, tortoises, rats, guinea pigs, ducks and perhaps a few more. Over 8s should meet outside Oakfield House near the Lions at 2.15 pm and we will walk to our venue. We will back at the Oakfield for 4.00 pm for collection by parents.

### Saturday 23 February 2002 – Manchester Science Museum

When we visited the Science Museum a few years ago, lots of Juniors asked if we could go again soon because there was so much to see and do. So this is your chance to see what is new there now. Over 8s are welcome to join us and the bus will leave the staff car park at 10.30 am, returning at 4.30 pm. Bring a picnic.

### Saturday 23 March 2002 – Tracks and Signs

A popular return for this event after we had to miss it last year. This is the Juniors' opportunity to go into animal enclosures and make plaster casts of animal footprints. We choose March as it is usually muddy then, but this does not put off hardy Juniors who enjoy this unusual day, and most of you will have a 'souvenir' to take home with you! Over 8s are invited to join us when we meet outside Oakfield House at 11.00 am, returning there for collection at 4.00 pm. You will need a picnic lunch, and it is important that you wear very old clothes and wellies.

### Saturday 27 April 2002 – Shugborough House and Home Farm

Shugborough is a beautiful stately home in Staffordshire, and the Spring is a perfect time to visit the Home Farm, to see the wide range of rare breeds of cattle, goats, chickens, pigs and sheep. Juniors will also have the opportunity to meet the Shire Horses and to have a ride on the horse drawn trailer. Traditional cheese making and bakery skills will also be demonstrated. A day not to be missed! Over 8s are invited and we will leave the staff car park at 10.00 am, returning at 5.00 pm. Bring a picnic.

### Saturday 18 May 2002 – The Middlewood Way

As we had to miss this event last year this will be a new experience. We will travel to Macclesfield and walk along a few miles of the well known Middlewood Way, which was once a railway line and which is now a nature reserve. We will be accompanied by a Ranger. Over 8s are welcome to join us, bringing a picnic, when we leave the staff car park at 9.30 am. We should be back at 5.30 pm.

### 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 Palace) 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 Barbeque**

What finer way to spend a summer evening than having a barbeque 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.

*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.*

Happy  
Christmas  
to all our Junior  
Members from  
Penny and all the  
staff at  
Chester Zoo.



# Arrivals, Births and Hatchings

August, September and October 2001

## MAMMALS

American Bison	<i>Bison bison</i>	0.2.0	Birth
*Sitatunga	<i>Tragelaphus spekei gratus</i>	0.1.0	Birth
*Blackbuck	<i>Antilope cervicapra</i>	3.1.0	Birth
*Arabian Gazelle	<i>Gazella gazella arabica</i>	0.1.0	Birth

## BIRDS

*Humboldt's Penguin	<i>Spheniscus humboldti</i>	0.0.1	Hatch
Chilean Flamingo	<i>Phoenicopterus chilensis</i>	0.0.3	Hatch
Caribbean Flamingo	<i>Phoenicopterus rubra</i>	0.0.1	Hatch
*Red-billed Curassow	<i>Crax blumenbachii</i>	1.1.0	Arrival
*Malayan Peacock Pheasant	<i>Polyplectron malacense malacense</i>	1.1.0	Arrival
Speckled Pigeon	<i>Columba guinea</i>	0.0.1	Hatch
Crested Pigeon	<i>Ocyphaps lophotes</i>	0.0.1	Hatch
*Great Argus	<i>Argusianus argus</i>	1.1.0	Arrival
*Illiger's Macaw	<i>Ara maracana</i>	1.1.0	Arrival
Violet Plantain Eater	<i>Musophaga violacea</i>	1.0.0	Hatch
Blue-winged Kookaburra	<i>Dacelo leachii</i>	0.0.2	Hatch
*Tarctic Hornbill	<i>Penelopides sp</i>	0.0.1	Hatch
Hooded Pitta	<i>Pitta sordida</i>	0.1.0	Arrival
*Victoria Pigeon	<i>Goura victoria</i>	1.0.0	Arrival
Common Shama Thrush	<i>Copsychus malabaricus</i>	2.0.5	Hatch
*Omei Shan Liocichla	<i>Liocichla omeiensis</i>	1.0.0	Arrival
Amethyst Starling	<i>Cinnyricinclus leucogaster</i>	2.2.0	Arrival
Emerald Starling	<i>Lamprotornis iris</i>	2.3.0	Arrival

## AMPHIBIANS

Axolotl	<i>Amblystoma mexicanum</i>	0.0.10	Arrival
South African Clawed Frog (Albino)	<i>Xenopus laevis</i>	0.0.43	Metamorp

## REPTILES

*Sand Lizard	<i>Lacerta agilis</i>	0.0.2	Birth
Spiny-tailed Monitor	<i>Varanus acanthurus</i>	1.0.4	Arrival
Mangrove Monitor	<i>Varanus indicus</i>	0.0.2	Arrival
Haitian Boa	<i>Epicrates striatus striatus</i>	1.0.0	Arrival
Sunbeam Snake	<i>Xenopeltis unicolor</i>	0.0.3	Birth
Corn Snake	<i>Elaphe guttata</i>	1.1.1	Arrival
Californian Kingsnake	<i>Lampropeltis getulus californiae</i>	0.1.0	Arrival

## FISH

Red-tailed Catfish	<i>Phractocephalus hemiopterus</i>	0.0.2	Arrival
*Barombi Mbo Cichlid	<i>Sarotherodon linnellii</i>	0.0.54	Bred
*Barombi Mbo Cichlid	<i>Sarotherodon lohbergeri</i>	0.0.28	Bred
Fresh-water Stingray	<i>Potamotrygon motoro</i>	1.0.0	Arrival