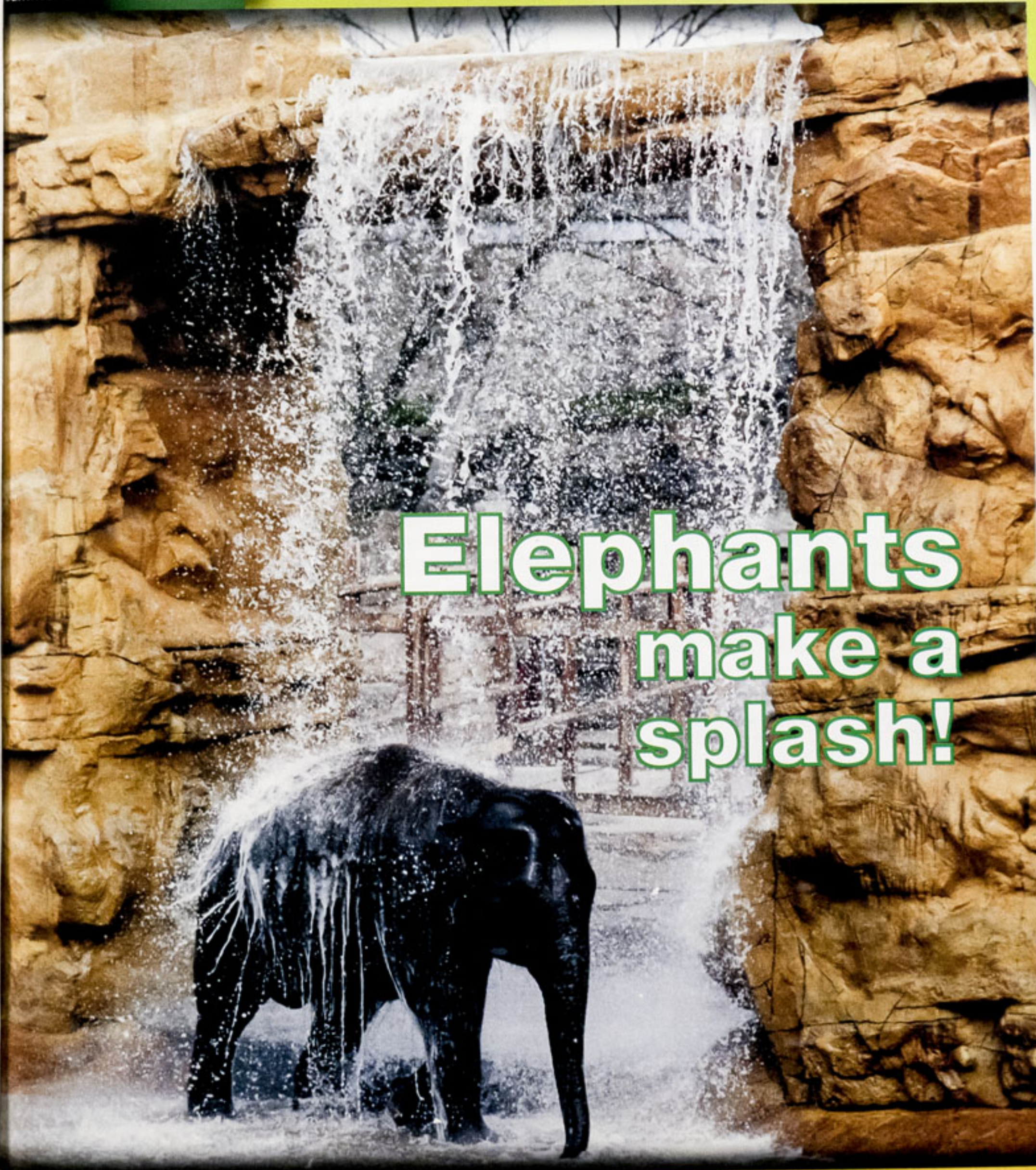




Zoo Life

Summer 2000 - Issue 2

CHESTER ZOO'S MAGAZINE FOR MEMBERS AND ADOPTERS



**Elephants
make a
splash!**

Inside this Issue: Free competition - win a trip to Mauritius! • Islands in Danger • Chimpanzee Forest

From the Director's Desk

Professor Gordon McGregor Reid



Celebrity Visit

DAVID and Victoria Beckham recently came on a visit to the Zoo with their young son Brooklyn. This was to give us the opportunity of showing them the Zoo's work and to celebrate Victoria's birthday.

The visit was widely reported in the national media amid some controversy. Members of the public have since been in contact with the Zoo over the visit – some to express congratulations and others to voice concern or indignation.

I must warmly thank those who have been supportive and provide some helpful background to those who remain concerned. I could share some of their annoyance if the press reports were accurate. They are not.

David and Victoria are internationally known celebrities who have previously received threats from unstable persons against themselves and their son. They both like animals and wanted a quiet, peaceful family visit to the Zoo.

I cannot comment on the private arrangements that were made in relation to the visit. I can say, however, that the Zoo has a

responsibility for the security of *all* of our visitors and so attempted to keep their visit a secret and took other appropriate precautions.

Unfortunately, there was tabloid press intrusion which we tried to limit. The press did not like being kept at 'arms length' and so some (but not all) of the press coverage was undeservedly negative.

The Beckhams arrived at 3.30pm when many of our other visitors were leaving. Nevertheless, for safety reasons (including that of their own child and other children), two of the smaller inside animal areas were briefly closed (Chimpanzees and Giraffes) for five or so minutes each. There were no queues outside and no one was inconvenienced for more than a few minutes.

Contrary to press reports, the Zoo itself was not closed, nor were any of the main houses such as Monkeys, Elephants or the bat cave. There were no hordes of upset people either. The Beckhams were very pleasant to both staff and visitors and signed autographs as they toured around.

In recent years other celebrity visits have greatly enhanced the public profile of the Zoo and this has been one factor in our success. In some cases this has also led to celebrities giving us their time for opening ceremonies for Zoo exhibits, or they have provided additional support or sponsorship for the Zoo's mission in conservation.

I greatly value the open and honest opinions of our members and visitors. I do hope, however, that my account of the actual circumstances sets matters in perspective.

Elephant Heaven!

The new elephant paddock is now open. The main highlight is the new pool and waterfall.

Visitors over the Easter weekend were thrilled to watch three of the elephants enjoying themselves in the pool. See the delightful pictures on page 10!

Many thanks to all of the staff and contractors who worked hard to get this opened by Easter.

Dragons at the Zoo!

Regis, the male Komodo Dragon finally arrived on 20th April and is settling into his enclosure in the new *Islands in Danger* exhibit.

He has already been on TV and is causing a stir among the visitors.

The bronze Komodo figure outside the building is proving a popular attraction for children who clamber onto the figure, providing a photo opportunity for parents.

Many thanks to all of the staff involved in producing this excellent exhibit.

Mike Johnson

I would like to add a personal note of thanks to our Financial Controller, Mike Johnson, who retired in April.

Mike was a tremendous help to me when I was appointed Director, steering me through all the financial complexities of the Society.

Mike's support in investing in impressive new attractions – such as *Twilight Zone*, *Monkey Islands*, *Islands in Danger* – has led to the substantial increase in visitor numbers over recent years.

Every good wish, Mike, to you and Hilary.

Front Cover: *Upali* enjoys a shower on the new *Elephant Island*. Photo by Steven Price of Viewfinder Pictures, Chester.

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Notice Board

Update your diary with the following events

Members' Meetings

Saturday 28 October 2000 - 2.30 in the Lecture Hall. *Professor Volker Sommer.*
Our Wild Kin: Research amongst monkeys and apes at Gashaka (Nigeria).

Saturday 25 November 2000 - 2.30 in the Lecture Hall.

Dr Roger Wilkinson/Chris West.

Chester Zoo's Outreach Conservation Support.

Saturday 9 December 2000 - 2.30 in the Lecture Theatre.

Zoo Director Gordon McGregor Reid.

African Biodiversity Hot Spots: Pangolins, Mandrills and Electric Fishes!

Members' Christmas lunch will be held prior to this meeting, at 12 noon in the Oakfield Restaurant.

Computer Concerns

Membership and Adoptions Officer Maureen Allsopp is still finding herself on the receiving end of phone calls from puzzled and irritated members over the problems with the new computer programme.

We do understand the complaints, and we are doing everything we possibly can, together with the company that designed the programme, to get things right. In the meantime, we greatly appreciate your patience.

We know that some of the direct debit payments have not yet been withdrawn from your bank accounts but they will be shortly!

Adopter Days

This year's special days for all our animal adopters are Saturday 7th October and Sunday 15th October. Full details and tickets will be sent to all current adopters with the Autumn magazine in September.

Save the Orang prize draw

The recent prize draw in aid of Orang-utan conservation raised £717. The winning ticket was from R. Scrivens of Upton-by-Chester, whose prize is the opportunity to be a Zoo Keeper for a Day! In addition, the Orang-utan evening in the Lecture Hall raised £2,198 - making a staggering total of almost £3,000!

Chester Zoo 100 Club

The winners of recent prize draws:

JANUARY

- £100 Mr G Weston, Mold
- £100 Mrs K Pickersgill, Vicars Cross
- £ 50 C Herbert, Liverpool
- £ 50 K Roberts, Meols
- £ 50 Mrs T White, Newcastle

FEBRUARY

- £100 Mrs E. Wilson, Chester
- £100 Mrs P Jackson, Great Sutton
- £ 50 Mr S. Hamlett, Wirral
- £ 50 Mrs A. Buglass, Todmorden
- £ 50 Mrs R. Thompson, Littleton

MARCH

- £100 Miss S. Tissyman, Crosby
- £100 Mr D L Lloyd, Leamington Spa
- £ 50 Mrs J Williamson, Runcorn
- £ 50 Mrs O Griffiths, Crewe
- £ 50 Mrs E Norman, Chester

Theme Evenings

Join us for one of these special summer evening events. Dinner is included, and there's the chance for an exclusive look at areas of the Zoo after the gates are closed.

Friday 23 June. Big Cats Tour and Dinner. £18.50pp

Enjoy a guided tour of our 'Big Cats' including Asiatic Lions and Amur Tigers, followed by dinner in the Oakfield Restaurant.

Friday 7 July Picnic and Quiz £18.50pp

Collect your picnic basket and select your favourite spot in the gardens. A bottle of wine per couple is included. See how many of the quiz questions you can answer - there's a prize for the winner.

Saturday 22 July Twilight Zone £18.50pp

Take a guided tour into the world of our free-flying endangered Fruit Bats, followed by a stroll through the gardens to the Oakfield Restaurant for dinner.

Friday 4 August Garden Tour £18.50pp

One of our knowledgeable staff will guide you through the award winning gardens, including the stately new Roman Garden and the tranquil Glorious Grasses. Followed by dinner in the Oakfield Restaurant.

All bookings should be made through: The Events Office, Chester Zoo, Upton-by-Chester, CH2 1LH

Disability Awareness Evening

Our annual Summer evening event for disabled visitors will be on Wednesday 28th June this year. From 4pm - 8pm the Zoo will welcome people with disabilities, together with their immediate carer, as our guests. Accompanying family and friends will be admitted for just £2.00 each.

This event has proved hugely successful in the past - last year over 7,000 people attended. Please spread the word!

Extra Benefit

If any Members are planning a trip to Scotland or Bristol this year, make sure you take your Chester Zoo membership card with you. We now have a reciprocal arrangement with Edinburgh Zoo and Bristol Zoo, allowing their members free entry to Chester, and our members free entry to Edinburgh and Bristol.

Roman Garden Opens



The imposing Roman Garden, adjacent to the Oakfield beer garden, is now open, and is already proving a popular resting and picnic spot for visitors.

It is complete with statuary, water features and carefully researched plants, making it as authentic as possible.

Zoo Review

Claire's Chair

CLAIRE Holtaway from Upton, Wirral spent her 8th birthday at the Zoo as a VIP. Claire has cerebral palsy and she was invited to be the first youngster to use the new child's electric wheelchair.

This is the latest addition to the Zoo's fleet of transport options for visitors with disabilities. It gives children with walking difficulties the opportunity to get around the Zoo without having to rely on a wheelchair pusher.

Wearing a broad smile, Claire took the chair on its inaugural drive, before returning to the Oakfield for a surprise birthday cake. Our photograph shows her with big sister Emma.



Mike's Retirement

Mike Johnson retired at the end of April, after a long association with the Zoo. Mike took the post of Financial Controller five years ago, when Alan du Cros retired. He had previously been a member of the Zoo Council.

Presentations were made to Mike by the staff. Council members commissioned a specially designed glass plate, and our photograph shows Mike (centre) accepting this from Council Chairman Keith Maybury (left) and Brian Coles.

The new Financial Controller is Alan Sykes, who has been the deputy to this post since 1992.



P-p-popping the Question!

The Public Relations desk gets some strange requests - usually to cuddle a tiger or hire an elephant - but a phone call from a young man in April was certainly a first! He planned to bring his girl friend to the Zoo for her birthday, and intended to make a surprise marriage proposal during the visit.

Could we, he wondered, possibly get a chimpanzee to give her the ring? The thought of what *Boris* might do with a precious engagement ring is not a happy one!

We offered an alternative animal experience, and agreed that he could take the young lady onto the penguin island, to help with the feeding, and pop the question at the same time. Happily the answer was 'Yes!'

STAFF NEWS

Congratulations to MARK ORMEROD on completing his NVQ level 2 in Catering and Hospitality. This entitles him to call himself a qualified Chef! MATT LEWIS joined the Zoo on 17th April as Lead Presenter. Painter GRAHAM HUMPHREYS also started on 17th April and Joiner JEREMY FERGUSON started on 24th April.

A warm welcome to you all!

Tall Order Wish!



Teenager Richard Brunt of Connah's Quay has had a long-held wish to get close to a giraffe. So when Chester's Grosvenor Shopping Centre launched a 'Wish Upon a Star' competition, his Mum, Yvonne, nominated him.

'I wished for Richard to spend a day at Chester Zoo with the giraffes,' she said. 'Whenever we visit the Zoo he just stands in awe watching them!' The panel of judges picked this as the winning wish. Richard and his family were taken to the Zoo in a chauffeur driven car, where he received a Giraffe adoption certificate from Team Leader Tim Rowlands.

The 14-year old enjoyed making the very close acquaintance of the Giraffes, and helped to feed them. 'I love the way they move and look,' he said. 'But when you are in the enclosure with them, it can be a bit scary because they are so big! It was very exciting.' To add to the excitement, Granada Television were there to film the event, which was later used in their bulletins at lunchtime, teatime and late evening.

Welcome to Liz Child

The Zoo restructuring exercise carried out last year recognised the need for a new division for Visitor Services. The successful applicant to head the new division is Liz Child, who joined the Zoo at Easter.



Liz will be in overall charge of retail, catering, the events office and all the peripheral services that combine to give our visitors a top quality day out.

She comes to us from Eurocamp, where she was an Area Manager. 'I'm looking forward to the challenge of my new role,' said Liz. 'I have loved the Zoo since I was a child and it's wonderful to be working here!'

Fostering Foster

The life of a baby Kangaroo was at risk when his mother died soon after his birth. So Team Leader Alan Woodward stepped in to become surrogate Mum to the infant, and Alan has been hand rearing the tiny Joey at his home close to the Zoo. He has named the baby *Foster* – not because he is being fostered, but after *Fosters Lager!*

In the early months, *Foster* had to be bottle fed several times a day, and spent much of his time in a pillow case 'pouch' lined with one of Alan's woollen jumpers. During the day he spends his time in a small paddock by the main kangaroo area, so that he gets the chance to see and recognise other Kangaroos.



Interpretation Award

Chester Zoo received a special award in the 'Interpret Britain' annual competition for the Monkey Islands interpretation.

The notes in the judges' comments said: 'Interpretation in zoos has lagged behind that in museums and other visitor attractions.'

As someone who has struggled with Latin names, vague maps showing countries of origin and very little else ('But why is its bottom red, Mummy!'), this informative, interactive interpretation is a very welcome addition to the Zoo. It's a pleasing mix of sturdy panels, low-tech hands-on activities and themed outdoor play areas. It is to be hoped that projects like this will continue around Chester Zoo and other zoos in the country. And yes, now I do know why some monkeys have red bottoms!

▼ Our picture shows Head of Education, Stephen McKeown, receiving the award from Viscountess Cobham.



Gently Bentley!

▲ Bentley, our youngest Giraffe.

Bentley, our youngest Giraffe, left the Zoo at the end of March, to join a newly established bachelor group at the South Lakes Wild Animal Park.

The move was co-ordinated to fit in with the travel arrangements of *Etango*, a giraffe from Emmen Zoo in Holland, also bound for South Lakes. Once *Etango* was safely delivered, the lorry and crate continued to Chester to collect *Bentley*. The huge lorry could get no closer than the Chimpanzee house and it needed a forklift truck, some sterling work from Tony Hutchinson, and the driving skills of Tim Rowlands to get the crate in position.

With everything in place, *Bentley* was walked along the race and into the crate, with the keepers following with a large kick-board, to prevent him retreating.

Tim describes it as 'A nice, smooth, relatively stress free exercise!'

Two of the giraffe keepers followed the

lorry, stopping only to pick up a girlfriend in case of emergencies! 'I'd better explain that bit' said Tim. 'The folk from Holland didn't speak much English, the keepers not a whole lot of Dutch - but our colleague's girlfriend is Dutch and is fluent in English!'

Happily it was an uneventful journey. When the crate was positioned in front of the new giraffe house, *Bentley* strolled sedately into his new home. Seconds later, he was gently sniffing, grooming and generally nuzzling at *Etango*. Giraffes are a new species for South Lakes. Chester's Giraffe team was consulted on the design of the new enclosure, and when it was completed Mark Pilgrim, General Curator: Operations

and Tim Rowlands visited the site and gave it their approval. Some of the South Lakes keepers spent time at Chester before the move, getting to know *Bentley*. This careful approach by both zoos is paying off, as we are told that *Bentley* is settling in very well - indeed they consider him something of a star!

◀ Bentley meets *Etango*.





▲ Not the real thing! The life-size statue of a Komodo, outside *Islands in Danger*.

Islands in Danger

OUR magnificent *Islands in Danger* opened at Easter, giving visitors the chance to see some rare and critically endangered island species – some of which cannot be seen anywhere else in the country.

Outside *Islands in Danger* is a life-size bronze statue of a Komodo Dragon. As visitors enter the building, they find themselves in Indonesia, to see *Regis*, the real-life Komodo in a spacious, custom built enclosure. It was a very close call to have the long-awaited adult Komodo in time for the Easter weekend – he



▲ The spacious Komodo Dragon enclosure.



▲ Elephant Bird egg - sadly now extinct.

flew in from Cincinatti and landed at Manchester Airport on Maundy Thursday, and was on show for the first time on Good Friday!

Because Komodos like to spend much of the time in water, the raised heated pool has been built by the window. Close by are heated basking rocks, as this is a creature that loves warmth!

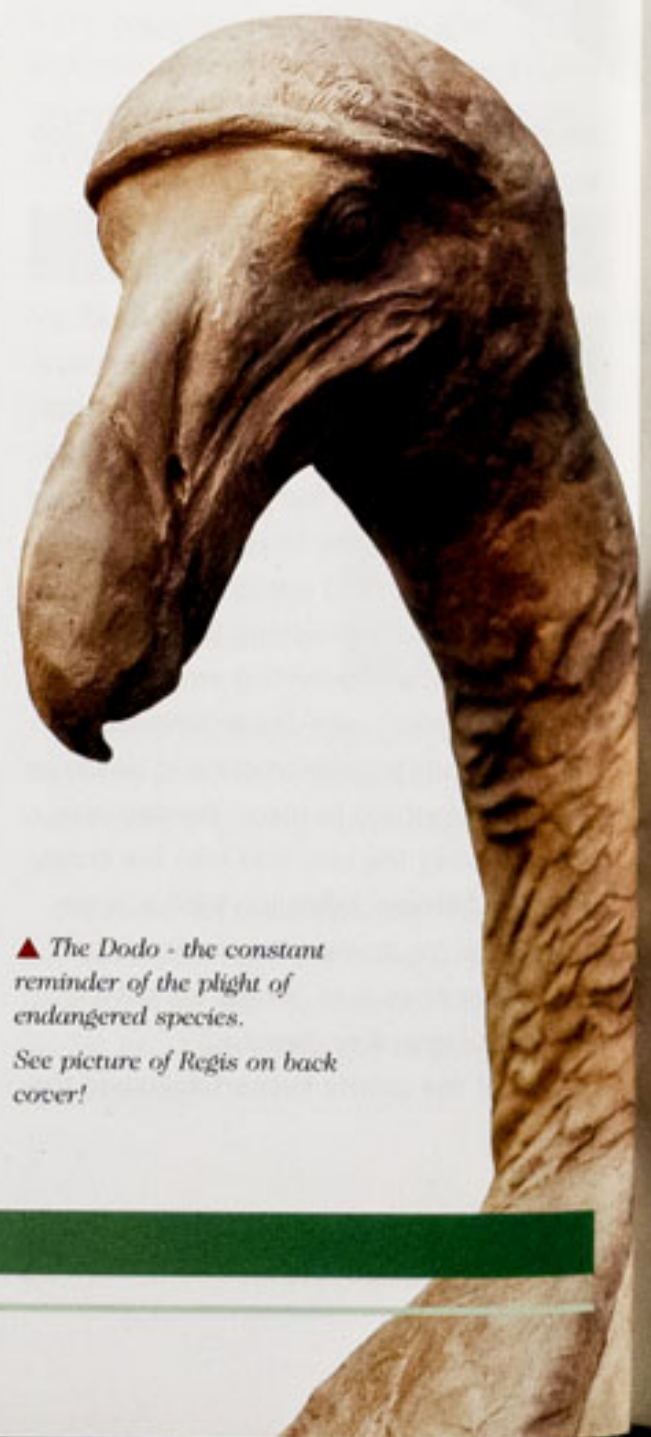
Follow the Komodo footprints as they lead you from Indonesia into Papua New Guinea.

On the way, don't miss the huge coco de mer seed – the biggest seed in the world; the Elephant Bird egg – a creature extinct since 1600's – and the Easter Island statue. This is a sombre reminder of the dangers of cutting down forests.

The Easter Island inhabitants chopped down all the trees to get rid of evil spirits. The consequence was that the people themselves became critically endangered.

In the Papua New Guinea aviaries, you can see the UK's only Red Birds of Paradise. Opposite a model of the Dodo, is the aviary for the beautiful Blue Crowned Pigeons. These lovely birds are in danger of being eaten to extinction, by man, in the same way as the Dodo.

The last aviary is home to a pair of St Lucia Amazon Parrots. There are only around 350 of these colourful Caribbean birds left in the wild, and the only other breeding pair in the UK is at Jersey Zoo.



▲ The Dodo - the constant reminder of the plight of endangered species.

See picture of *Regis* on back cover!

▼ Sarah with her baby son, Jethro.
Photo by Stephanie Wehnelt.



Sarah's Son

In the morning of the 8th of February I arrived at the chimp house to start a day of observation as usual. I noticed that Sarah, a young, heavily pregnant female, was receiving more attention than usual from the others in the group.

She seemed uncomfortable, frequently bending over, and was being watched closely by her four-year-old daughter and by several other young females.

When Sarah moaned as she bent over I suspected she was in labour, and abandoned my attempts at the usual data collection of the males.

Sarah moved restlessly on the indoor climbing frame and was followed closely by at least five interested onlookers.

Clare Caws is a Research Student from Liverpool John Moores University, who is monitoring the development of the current hierarchy changes within our chimpanzee group. She was thrilled to be present when our chimpanzee Sarah gave birth and writes about this exciting event.

Half an hour later, Sarah delivered her baby whilst still on the climbing frame, straight into her waiting hand and immediately clutched the little male to her chest.

After delivering, Sarah lay down quietly with her new baby and cleaned him up. All the Zoo staff were delighted that our new arrival, who was given the name Jethro, is a baby boy since he is the first male born into the group for 12 years!

Two weeks after the birth Sarah was allowing her daughter to baby sit, but keeping a very close eye on her baby.

By six weeks old, several young females were keen to hold and look after Jethro, although he is getting too heavy and gripping too tightly for some of the younger baby sitters. However, this experience is important for the young females.

Learning to take care of young infants is excellent training for when they are mothers themselves.

Seeing Jethro's birth was an amazing experience, and we will all enjoy watching him develop and becoming part of the chimpanzee community.

BIRD REVIEW 1999



▲ Red Bird of Paradise.

THE arrival of a pair of Red Birds of Paradise on loan from the Bronx Zoo/Wildlife Conservation Park, New York, was one of the highlights of 1999. Wayne McLeod and Darren Langford flew to the Bronx Zoo and spent time working with the birds before returning with them to Chester. These birds, bred at New York in 1998, were held in our purpose built off-show Bird of Paradise breeding area and are now on show in the new *Islands in Danger*.

Two White-eared Catbirds, bred at Stuttgart Zoo, have also recently been sent to Chester and will also be occupying one of the *Islands in Danger* aviaries. Another aviary in the new attraction holds New Guinea Blue Crowned Pigeons, Duyvenbode's Lories and Stella's Lorikeets. A pair of St Lucia Amazon Parrots have recently been received on loan from Jersey Zoo, and they have also been introduced to their spectacular new enclosure.

Another important species received in 1999 was the Vietnamese Pheasant. A pair of these recently discovered endangered pheasants was received on loan from the World Pheasant Association. The male was bred at Antwerp Zoo

By Roger Wilkinson

and the female at the Old House Bird Gardens, Reading.

Mountain Peacock Pheasants were especially productive in 1999. After a barren year in 1998, when no eggs were laid, the female laid nine eggs.

Despite our best efforts to screen with planting the area where she made her scrape, she chose not to incubate any of these eggs and we were obliged to remove all for artificial incubation.

Six chicks hatched, of which four were successfully reared. Other pheasants bred in 1999 included Malay Crestless Fireback, Satyr Tragopan and Golden Pheasants. One Blyth's Tragopan hatched but this died shortly after. Four Common Peafowl were reared but although two Green Peafowl chicks were hatched, neither was reared.

Five Roulroul Partridges were reared, including four that were parent-reared. Two Red-legged Partridges were reared from eggs laid in 'Europe on the Edge'. Chinese Painted Quail hatched but failed to rear two chicks in the 'Finch Flight'.

As in 1998, we followed the Humboldt's

▼ Mountain Peacock Pheasant.



Penguin breeding programme co-ordinators' request and only bred from the genetically under-represented birds. Four penguin chicks hatched, of which two were successfully reared.

Waldrapp Ibis successfully reared eight chicks. There are now over 700 Waldrapps in zoos and bird gardens in Europe and this is another species which we have to actively manage to control breeding in our collections. This is a very different situation to that only ten years ago when we were hand-rearing Waldrapps to maintain our breeding colony. The European Spoonbills in *Europe on the Edge* laid for the first time, but although the eggs were fertile, these failed to hatch. Also for the first time at Chester two pairs of Dalmatian Pelicans built nests. One of the Pelicans laid and incubated an egg but, as with the Spoonbills, this fertile egg failed to hatch.

Caribbean Flamingos bred particularly well in 1999, with a total of eight birds reared. Chilean Flamingos laid later in the year and reared two chicks. From 1990 to the end of 1999 the Chilean Flamingo flock increased in size through breeding from 28 to 48 birds and the Caribbean flock from

40 to 59 birds. Careful egg management is practised by the Flamingo keeping staff.

Eggs are removed and dummied with wooden eggs. Because of loss of eggs and dummies by being knocked off the nest by other Flamingos, each wooden egg is spiked into the nest with a thick nail. Despite the parents then being unable to turn these dummies, they are accepted by them and maintain incubation behaviour of the birds until, normally, their own egg is returned. This also permits many other management options.

For example if their own egg proves infertile the dummy may be removed encouraging the pair to relay or the fertile egg from another pair may be fostered to them.

Many waterfowl were bred including Black-necked Swans, Cuban Whistling Ducks, a Ross's Snow Goose, 13 Marbled Teal, Northern Shovelers, Ferruginous Ducks, Carolina Wood Ducks, Mandarin Ducks and three Smew.

We also have some important pigeons and doves at Chester. Superb Fruit Doves, Jambu Fruit Doves, Golden Heart Pigeons, Speckled Pigeons, Rock Doves and Diamond Doves, all reared chicks. A Pink Pigeon was successfully foster-reared by Java Doves. Nicobar Pigeons and Mindanao Bleeding-heart Pigeons also hatched chicks, but sadly this year neither were reared.

A Tawny Frogmouth, two Spectacled Owls, three Snowy Owls and a Barn Owl were bred. Because of reduced demand for Snowy Owls from other collections we had planned not to breed this species in 1999. Once the eggs were laid, they were removed and replaced by dummies. However the female laid further eggs, adding to the dummy clutch and this was undetected until after they had hatched! After much searching, homes have finally been found for these unexpected arrivals.

Highlights on the Parrot Section included the successful parent-rearing of three Mount Apo Lorikeets, a Yellow-backed Chattering Lory and a Duyvenbode's Lory. The Greater Vasa laid four eggs but because of lack of interest in this species from other zoo collections, we removed and discarded two of the four eggs. The remaining two eggs hatched under the parents and both were reared. Because they were already well represented, with many youngsters in the managed zoo populations, we decided not to breed from the Green-cheeked Amazons, Red-fronted Macaws or Blue-eyed Cockatoos in 1999.

Threatened parrots bred included three Cuban Amazons, a Thick-billed Parrot, three Slender-billed Conures and a Golden-capped Conure.

Chester Zoo had its first success with breeding

Wrinkled Hornbills in 1995 when four chicks was successfully parent-reared. Wrinkled Hornbills are threatened in the wild and are the subject of a European zoo breeding programme.

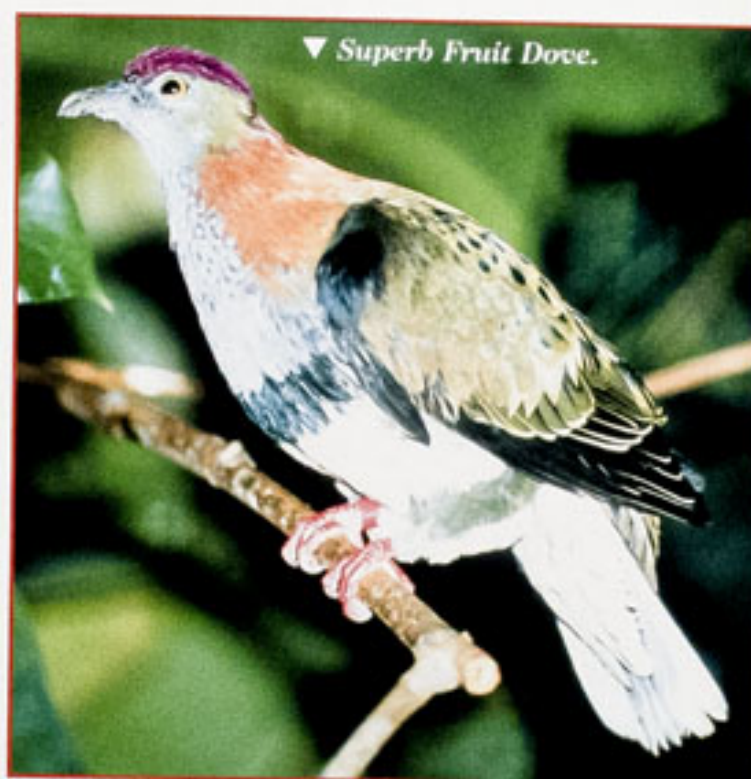
In 1997 the female emerged from her last nesting attempt in very poor physical condition. She died shortly afterwards from what post-mortem indicated to be a liver problem. In December 1998 we were pleased to receive an adult female on loan from Antwerp Zoo.

This female was separately quarantined before being introduced to the male. Our male was extremely attentive, trying to feed her immediately, but she wanted only to hide from him and initially appeared very unrelaxed in his company.

After several unsuccessful attempts at introducing these birds, the female was again introduced to the male on 8 February 1999, and only 10 days later was seen being fed by the male and mudding up the nest. She remained in the nest box from 26 Feb and emerged 110 days later with two strong chicks, and a third, equally healthy, chick fledging, three days later. One of these youngsters, a male, has been transferred to the Tropical Bird Gardens, Rode, where it is now paired with a female that had been bred at Paultons Park, Ower, Romsey. The two 1999-bred female Wrinkled Hornbills have been sent to Heidelberg Zoo, where a group is being assembled to facilitate natural partner choice in the expectation that this may increase the number of pairs successfully breeding.

Lilac-breasted Rollers successfully reared three chicks in their aviary in the *Tropical Realm* but the pair of Green Wood Hoopoes made no breeding attempts following the transfer of their previous year's offspring to Paradise Park, Hayle. Perhaps as co-operative breeders in the wild, the Wood Hoopoes would have been more inclined to breed had the family group remained intact. The Laughing Kookaburras reared a single chick and our Blue-winged Kookaburras made their first breeding attempt after six years in the collection. The female Blue-winged Kookaburra laid a clutch of two eggs but these proved infertile. Three Violet Plantain Eaters, four Schalow's Touracos, a Red-crested Touraco and four White-cheeked Touracos were bred.

New arrivals were a pair of Magpie Robins and two Pope Cardinals bred at London Zoo. These were initially housed in the free flight area of the *Tropical Realm* but the Magpie Robins have proved to be such accomplished escape artists that they are now confined to barracks in one of the aviaries in this building.



▼ Superb Fruit Dove.

Birds bred in the *Tropical Realm* in 1999 included Emerald Starlings, Scissor-billed Starling, White-rumped Shama, Red-billed Leiothrix, and Silver-beaked Tanager. Two of the critically endangered Bali Starlings were hand-reared. Yellow-throated Laughing Thrushes and Red-winged Laughing Thrushes hatched chicks in the free flight area of the *Tropical Realm*, but these were left with the parents and none were successfully reared. Food competition and disturbance in this mixed species area may have contributed to these nest failures and some chicks may be taken for hand-rearing in 2000.

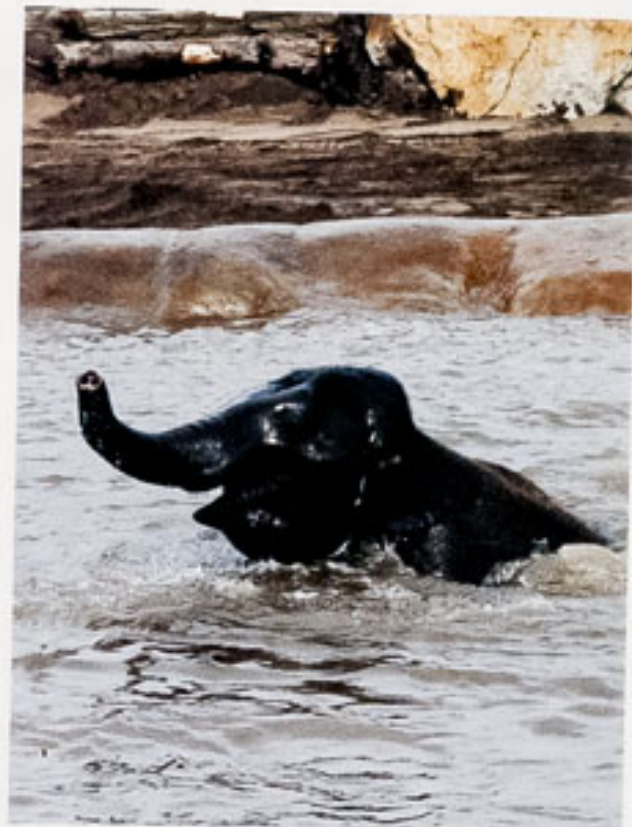
Elsewhere in the collection Azure-winged Magpies hatched chicks and two were hand-reared. Three Red-billed Blue Magpies, four African Pied Starlings, ten Zebra Finches and two Orange-cheeked Waxbills were also bred contributing to a total of nearly 200 birds in over 60 species reared in 1999.



▲ Golden Heart Pigeon.

Elephants make a Splash!

These lovely pictures were taken by Steven Price of Viewfinder Pictures, Chester.



AT last, the massive earth moving operation that has greeted visitors as they enter the Zoo is over.

The National Elephant Centre is finished! It was essential to have it ready by Easter – and

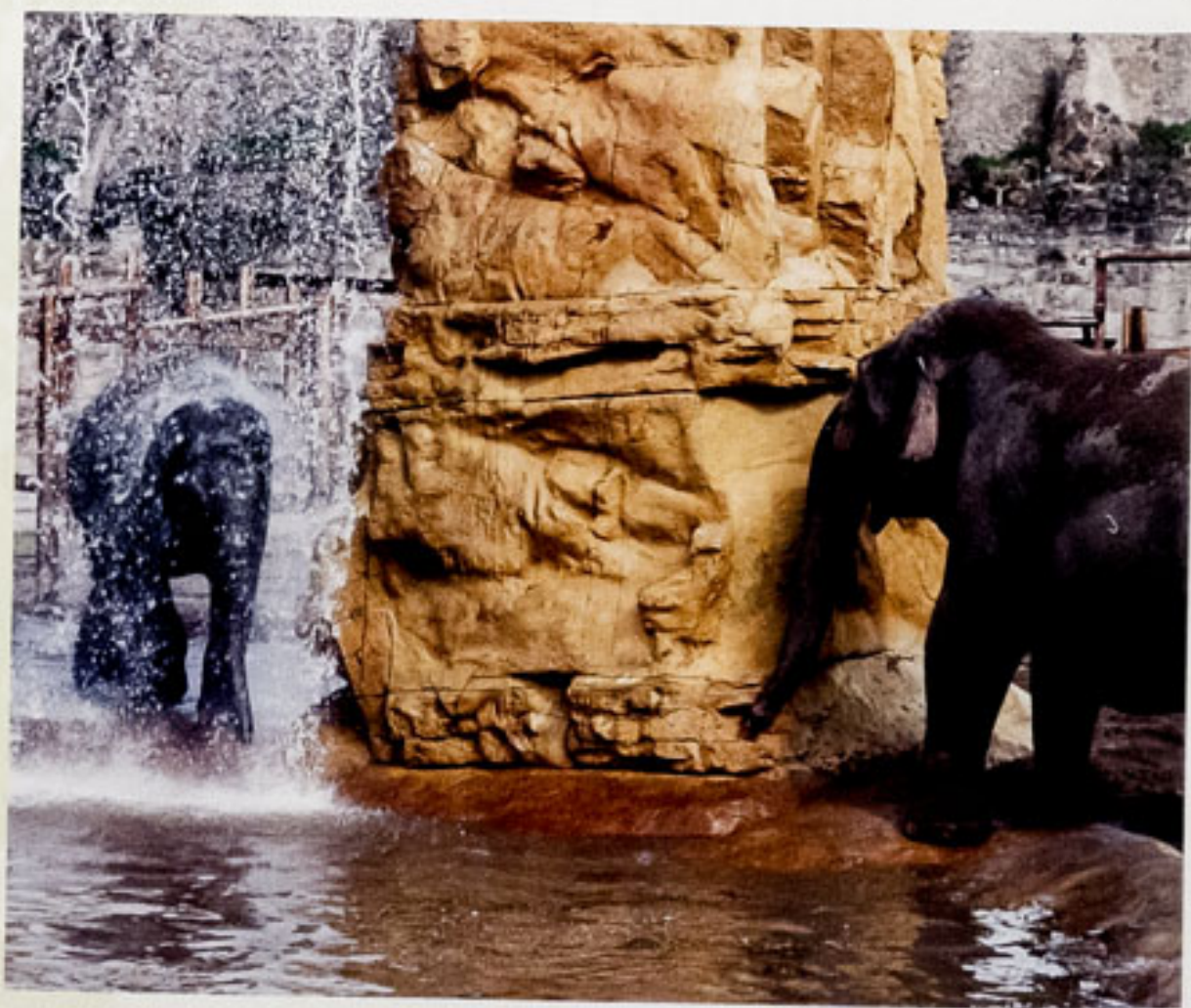
this deadline was just managed.

The elephants went out onto their new island for the first time on Good Friday.

The island has almost doubled in size to two acres, and the elephants are clearly

enjoying the new features provided – particularly the pool and the waterfall.

The conical shaped pool is 2.154 metres deep at the centre and it holds 133,000 litres of water, a good sized swimming pool.





14th – 18th August 2000

This year's activity week for children in the Zoo will be titled 'Islands Week'.

Each day will focus on a particular island, or island group and will feature a wide variety of activities, mixing arts and crafts with games.

We will also be featuring a group of animals on each day, learning about them and their conservation. At the time of going to press, we are still planning the exact content of the programme.

See below for early details of each day, and contact us nearer the time for more information.

Monday 14th August 'The Ocean World'

We start our voyage at the islands of the Pacific Rim, including the Philippines, Easter Island and Tahiti amongst others.

A volcanic start to the week as we take a look at how islands are formed, how animals and plants reached them and why so many island animals are endangered.

Tuesday 15th August 'The Red Island'

Featuring Madagascar, as well as its slightly smaller cousins, Mauritius and the Seychelles.

Madagascar is unique in countless ways. We will find out about some of its animals during a boat trip around the Zoo's canals and will have a go at making some 'genuine' Malagasy paper.

This is likely to be the messiest day of the week!

Wednesday 16th August 'A Taste of the Caribbean'

Crossing the Atlantic, we stumble across the countless islands of the Caribbean, from giant Cuba in the north to little St Lucia in the south.

There's a carnival atmosphere in the air today. Music, dance and a genuine taste of Caribbean food are on offer, as well as a look at some of the Zoo's most colourful inhabitants, the flamingos and parrots.

Thursday 17th August 'Into Indonesia'

We continue our voyage as we cross the Pacific and stop at the Indonesian chain of islands, stretching 4000 miles, linking Asia with Australia.

Chester Zoo is home to many Indonesian animals, including our most recent additions, Komodo Dragons and Birds of Paradise. We'll link the animals with the cultures that have grown up around them.

Friday 18th August 'Bringing it all back home'

After a week of island hopping, we return to Britain, the eighth largest island in the world. What can we do to save the animals in our own backyard?

Britain is home to a wide range of animals and, just like animals all over the world, many of them are endangered.

We'll have a Birds of Prey workshop and take a look at some of the Zoo's less visible residents.

The days are open to children aged between 7 and 11 years and will run from 10 am to 4 pm.

Costs: £20 per day; £95 for the whole week.

If your travel appetite has been whetted by any or all of the days, give us a call for further information, on 01244 650205.

We are also hoping to have island-themed events for general Zoo visitors. Watch out for more information when you visit the Zoo during this week.



CHIMPANZEE FOREST SWINGING SUCCESS!

A combination of imagination and hard work by our Primate Team has resulted in the stunning new *Chimpanzee Forest*.

This magnificent climbing structure has turned the whole island into a complex 'forest' which enriches the lives of the Chimpanzees to a great extent and also makes a much better display for the public.

The structure of the island encourages typical behaviours of the Chimps in the wild.

This 'zoo-forest' of logs, ropes, nets,

bushes and allows for a more complex use of their climbing, tool-using skills and they have more of their environment in the wild.

This includes and sticks as tools, such as drumming or using raised points in the surrounding area and us!

The 'forest' Chimps to show their 'fusion'

organisation as known from wild Chimpanzees.

Because this is a three-dimensional structure, the group can split into small parties and gain more privacy from other chimps and visitors.

This is very important for females with infants, as they have been observed to prefer a more solitary and reserved life.

However, visitors will be able to spot youngsters easily, since they enjoy vigorous play high up in the 'zoo-forest'



◆ Pictures by Zoo Staff.



When the Chimps came out to see their new island for the first time, there was great excitement, and, as these pictures show, they were very quickly investigating every corner with enthusiasm!

A two-minute time lapse video of the construction – speeded up 600 times – will be shown at members' meetings.

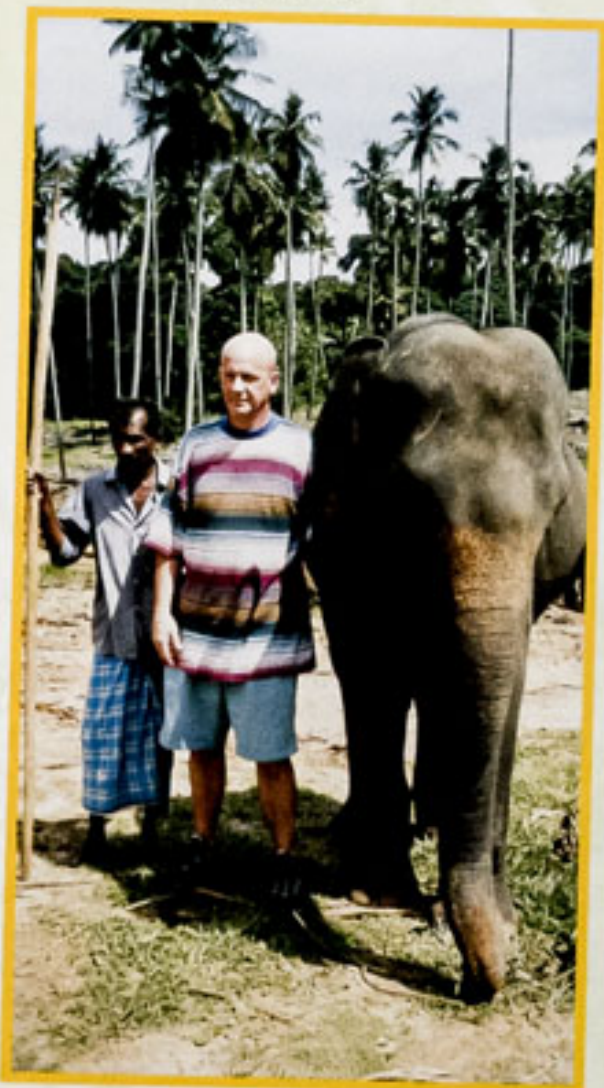
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ELEPHANT
ORPHANAGE

▲ The entrance to the orphanage

For Elephant Team Leader Mick Jones, a trip to Pinnawela, the elephant orphanage in Sri Lanka, was a true holiday of a lifetime. His partner Susanne Stanton, our Assistant Retail Sales Manager, writes about their trip last year.

Photographs by Mick and Susanne

▼ Almost like being at work! Mick Jones meets an elephant calf



A Mammoth Holiday Experience

BEING in the business of elephant conservation, Mick could not wait to visit the well established elephant orphanage at Pinnawela, on the banks of the river Maha Oya, which is home to 62 elephants.

It is estimated that there are between 2-3,000 wild elephants in the national parks and jungles of Sri Lanka, and a further 500 in collections, mostly working and temple elephants. But the increasing human population means the need for more farmland, which in turn creates the need for more water.

Rivers have been dammed and diverted, and the natural habitat of elephants has dwindled. In the search for food, elephants have encroached on areas of human habitation, creating conflict. In the ensuing turmoil baby elephants often get separated from the herd, sometimes injured, sometimes falling into deep storm drains.

Villagers would rescue these babies and a home had to be found for them. In 1975 the elephant orphanage began.

On arrival we made our way down to the river, where the elephants were finishing their morning bath. I had pondered upon what we might find at this place. The Dickensian word

orphanage, conjured up pictures of poor, sad little elephants. We had also been told that it was home to a three-legged elephant and one who was blind. I wondered if I was going to find this visit distressing. But the sight that greeted us as we reached the river bank, could not have been further from my fears.

In a deep pool, with the hot sun beating down, more than 50 elephants were enjoying the cool water, each in its own way. Older elephants stood quietly, occasionally swishing water over their backs with their trunks, others lay almost submerged.

Juveniles played around like children; a pair of young males playfully sparred, trunks entwined high in the air, and a tiny baby, wet and slippery, generally made a nuisance of himself, squeezing in and out of the groups of other elephants.

At midday it was time for the elephants to go back to the park. They assembled on the river bank, whilst their mahouts (keepers) cleared the path of onlookers. When everyone was at a safe distance the elephants were commanded to go forward, and they set off at a brisk pace up from the river towards the park. I noticed the elephant with only three legs. She had no problems in keeping up with the rest of the herd, and she looked fit and well. Her name was *Sarma* and she

was about 12 years old. She had been found in the wild with the bottom of one leg blown off by a mine. The orphanage nursed her back to health.

Back in the park the elephants slowly wandered around and found shelter from the hot sun beneath trees. We met the chief mahout, Mr Sumanabanda, who has been taking care of elephants here since it began and he introduced us to the tiny baby elephant and his mum.

Sitting in the shade of a palm tree, we were amazed to find that a mahout had climbed to the top of a neighbouring tree and king coconuts were landing all around us. I found the water of a king coconut much more refreshing than the milk of an ordinary coconut.

Either smelling or seeing what we had, the whole herd was soon standing right in front of us, headed by the nursing mother. She could have reached out and taken my coconut, but she and the others waited patiently until they were thrown the empty shells, which quickly disappeared.

At the time of our visit there were six calves needing seven bottles of milk, five times a day. The babies are taken to an open sided barn and a large vat of milk is brought in.

The mahouts fill a large wine bottle with the milk, put on a large teat and offer it to the baby. If you count slowly, one, two, three, that's the time it takes for one bottle to be emptied! Since the orphanage started, 16 babies have been born here. Just before leaving Sri Lanka,

we heard that yet another baby had been born.

We walked onto the river bank, to try to find the bull elephants whose turn it was for a bath. We saw a mahout at the water's edge but could not at first see any elephants – until we identified the two small, wet mounds in the water,

with the occasional trunk tip appearing like a periscope. The mahout commanded one of the elephants to stand, and slowly, with water pouring from its back, an enormous elephant with a wonderfully long pair of tusks, rose from the river.

This was *Raja*, and he was blind. He too, had been found in the wild, possibly blinded by a poacher's gun, and brought to the orphanage. Seeing this huge and beautiful creature at close quarters was awe inspiring.

Mick took off his shoes and joined the mahouts at the waters edge and they were soon all in deep conversation. Mr Sumanabanda's family have been looking after elephants for four generations.

Later we wandered back to have a look at the elephants' night time quarters. There were two long, open sided barns, with places for about 12 elephants in



▲ 'Seeing Raja, this huge and beautiful creature at close quarters, was awe inspiring.'

each. Further along we came to two circular barns divided like the spokes of a wheel, one with eight places and the other with twelve.

The remaining elephants had allotted places amongst the trees to the left and right of the path leading into the park. Some of the elephants had been left behind to carry the evening feed to each place. Every elephant had its own pile of kittul palm, jak leaves, and coconut branches.

Bathing finished, the elephants entered the park at a brisk run, each going immediately to its allotted place to tuck into the evening meal. All except one female, who seemed to be more interested in joining the boys than having her food, but she was eventually persuaded to her own spot.

It was now dusk and time to leave the orphanage. Taking a last look at this wonderful place, where these orphaned elephants are loved and cared for, we reluctantly boarded our vehicle for the journey home, vowing to return!

Part of the proceeds of this year's Elephant Experience evenings will be sent to help the work of the orphanage. With thanks to Amitar Perera, Curator at the National Zoo, Colombo for his help during our stay in Sri Lanka.

◀ Bath Time



The Mediterranean Monk Seal

Europe's rarest marine mammal

A holiday in Greece sparked a new enthusiasm for Animal Records Administrator Dave Brunger



Photograph courtesy of MOM and Paflos Dendimias

WHILST island hopping in Greece last year, I visited Alonissos, hoping to see amongst other things, dolphins, but I was even luckier to see a Monk Seal. It was just a brief glimpse as it came to the surface, but the thrill of seeing such a rare mammal is impossible to describe. It determined me to find out more about the critical status of this graceful creature.

There are 21 species of seals world-wide, and only three live in warm waters – the Mediterranean, Hawaiian and the Caribbean Monk Seal. Efforts to save the Caribbean species came too late. The last sighting was in 1952 and it is considered extinct.

The name comes from the Greek word for monk – monachos – because the animals have several folds of fat which resemble the folds of a Catholic monk's robe. It is Europe's most endangered marine mammal and one of the world's six rarest mammals. Once there were probably thousands of seals in the

Mediterranean, but to-day's estimate is 400 – 500.

The biggest threat to the Mediterranean Monk Seal is man. Although historically it was hunted for its fur, oil and meat, the effects of pollution, overexploitation of fish resources, deliberate killings due to damage to fishing nets and human disturbance have all taken their toll. They seek refuge in caves with underwater entrances where they give birth to their pups during August and December. More recent threats include disease and toxic algae. In the summer of 1997, this wiped out two thirds of the largest surviving population within two months, on the Côte des Phoques in the Western Sahara.

In an effort to prevent the Mediterranean Monk Seal from following the Caribbean species into extinction, the development of Greece's first national marine park occurred in 1992 by presidential decree. The National Marine Park of Alonissos and the Northern Sporades (NMPANS) is an important refuge

not only for the Monk Seal, but for other rare species. The park is divided into two zones. The 1587 square kilometres of Zone A receive strict protection. Hunting is strictly forbidden and special permission is necessary to approach certain islands, to prevent unnecessary disturbance to the seals and other fauna. Zone B is a protected area of 678 square metres and is free from restrictions apart from free camping and lighting fires.

MOM – the Hellenic Society for the Study and Protection of

Key to Map:

- A. National Marine Park of the Northern Sporades.
- B. Dodecanese (Karpathos and Kassos).
- C. Cyclades (Minos, Kimilos, Antihilos and Polyaiagos).
- D. Eastern Aegean (Samos, Ikaria and Fourni).
- E. Ionian Islands (Western and North Western coasts of Zakynthos).

the Monk Seal – is a non-profit, non-governmental organisation, established in 1988. Its goals are to understand the biology, ecology and behaviour of this species and to work for its protection with all legal means, including the raising public awareness. MOM are also actively involved with surveillance and guarding of the National Marine Park and the operation of the Seal Treatment and Rehabilitation Centre, established in 1990 at Steni Vala, Alonissos. MOM is pursuing its EU funded Conservation in Action project to establish Natura 2000 reserve areas elsewhere in Greece. Together with the NMPANS, these are seen to be building blocks for an eventual network of protected areas. The project is being implemented in those geographical areas where research has shown the presence of Monk Seal populations.

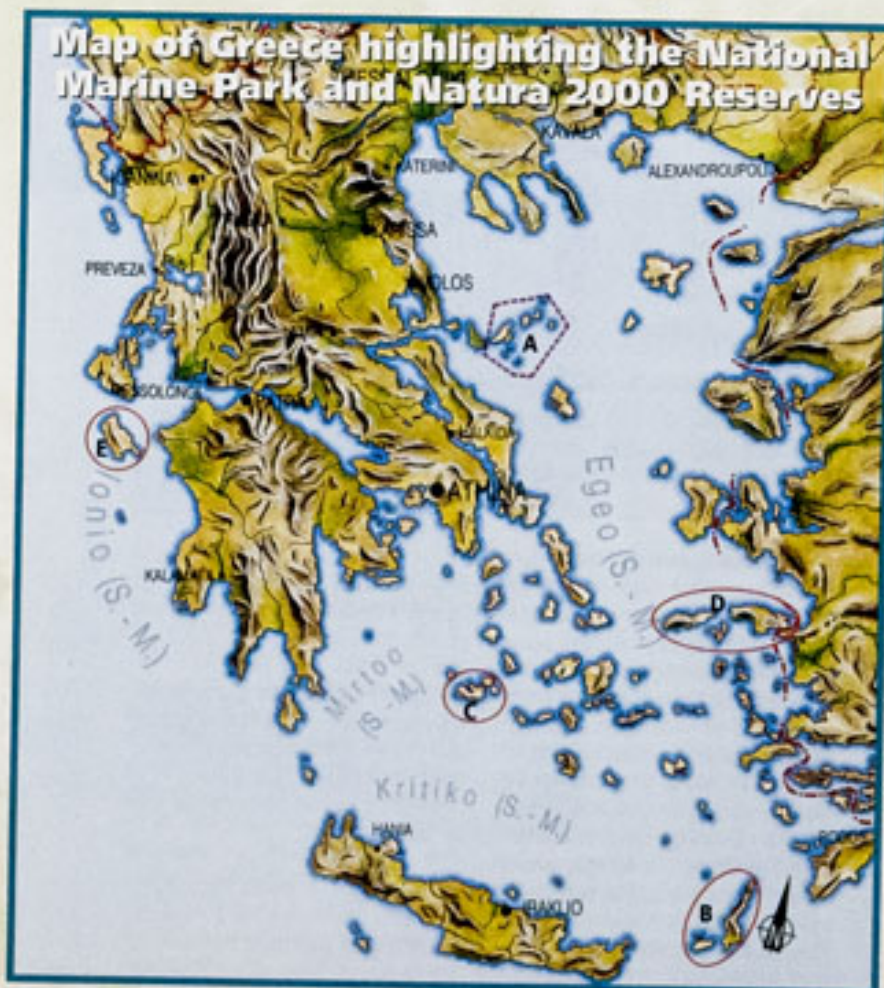
These 'Special Conservation Areas' are designed to conserve ecosystems that contain numerous vulnerable, rare and endangered flora and fauna, including the Monk Seal.

My interest of the species and MOM's work was spurred that rare sighting last year. Since my return, the North of England Zoological Society has made a donation to MOM to help their efforts. I am planning to compile an information board to place at the Californian Sealion exhibit at the Zoo, highlighting the Monk Seals' plight to our visitors.

So, next time you think of your holidays in Greece, spare a thought for Europe's rarest marine mammal. Remember how much a bottle of Retsina cost you? Your donation can help the Mediterranean Monk Seal survive. You can help MOM's conservation work by joining the Hellenic Society for the Study and Protection of the Monk Seal. It will save you a hangover and ultimately help to save a truly endangered species!

For more information contact: MOM, The Hellenic Society for the Study and Protection of the Monk Seal, 18 Solomou Str, GR-106 82, Athens, Greece. Tel: 0030(1)5222888. Fax: 0030(1)522450 e-mail: mom@eexi.gr.

All information kindly supplied by:



CHESTER Zoo has been home to numerous Californian Sealions over the last 30 plus years and they have bred successfully. Up until recently, these animals have received no kind of formal training, but now with the arrival of two new young females, training has become an integral component of their husbandry.

WHAT DO WE MEAN BY TRAINING?

The term 'training' is defined as bringing about behaviours through instruction and practice. That is to teach a behaviour and have that behaviour executed by the animal on command. For example 'stationing' where each animal is taught to remain in a certain place when asked to do so by the keeper.

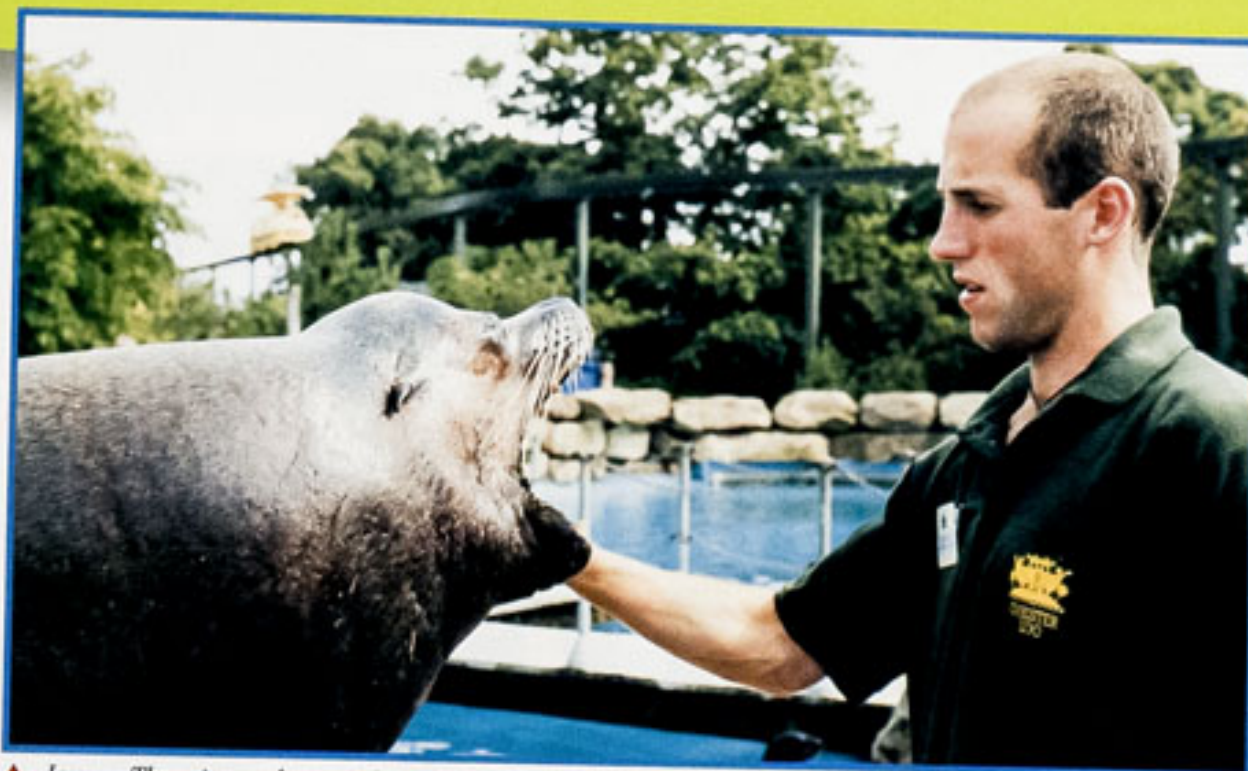
The methods used in training sealions, and many other animals (including pet dogs), is based upon 'operant conditioning' or 'associated learning' where an animal comes to associate a cue with a particular behaviour through positive reinforcement and reward.

WHY TRAIN THE SEALIONS?

The sealions are trained to improve their welfare in a number of ways. The animals become more familiar with the keepers, enabling their health to be monitored more closely. Veterinary examinations can be carried out with the full co-operation of the animals, entailing very little stress and, if necessary, treatment can be administered easily. For example:

- 1 To have the sealions open their mouths to allow inspection of their teeth, mouth, gums and throat.
- 2 Eye problems are common amongst sealions and training them to readily accept saline and medication in their eyes is beneficial.
- 3 Flippers can be damaged and so training a sealion to hold its flipper over an x-ray plate can facilitate diagnosis of possible future problems.
- 4 Body measurements, including weight, can be taken for growth and health monitoring.
- 5 Ultrasound scans for pregnancy monitoring.
- 6 Collection of blood samples if necessary.

Sealions actively participate in training sessions and are consequently enriched, stimulated and show increased levels of fitness and attentiveness. The keeping staff involved in the training are also rewarded through increased responsiveness of the animals as training progresses.



▲ James Thwaite makes tooth and mouth checks for one of his charges.

School time for Sealions!

Senior Keeper James Thwaite learns new training techniques and welcomes two young sisters to the Sealion Pool

OUR TWO NEW SEALIONS

The two new Sealion additions to the zoo are two year old *Phoebe* and one year old *Rio*. They are full sisters and were born and raised at Chessington World of Adventure in Surrey.

Chessington World of Adventure allowed me to spend a week there last summer learning training techniques used for sealions and, just prior to transportation of *Phoebe* and *Rio*, Suzanne Thomas and I spent another week at Chessington, familiarising ourselves with the two youngsters so that their training could be continued in a similar

manner at Chester Zoo. *Phoebe* has been trained to execute some of the behaviours previously mentioned, and *Rio* has just begun her training, showing much enthusiasm, promise and character.

A progressive training programme for *Nemo*, *Fergie* and *Trudy* – our three resident sealions – has been set up and with persistence combined with patience, even older adult animals can be trained to execute some, and hopefully all, of the desired behaviours.

Phoebe and *Rio* made the transition to their new home very smoothly. When they first arrived they were released into the beach and shed area and, almost immediately, *Nemo* came to investigate. After which the youngsters ventured into the pool and were soon enjoying being back in the water after their journey. Now the two youngsters have bonded well with *Fergie* and *Trudy* and can be found close to them most of the time. In a few years' time we hope that our new sealions will successfully have young pups of their own.

Over the coming months, along with the developing training programme, work to improve the sealion area will be undertaken. This is likely to include providing more land area in the form of a landscaped beach and an improved isolation and pupping area.



▲ Our adult females are enjoying the company of the two young new arrivals.

Namibia Trip

Neil Spooner
concludes his
report of the

Members' trip to Namibia last year



▲ The luxury of the Desert Express.

THE final leg of our journey finds us crossing an on-going repository of wild desert landscapes that eventually give way to the Atlantic sea board and one of the most inhospitable coastlines on earth. Portuguese sailors referred to it as 'Areias do Inferno' or the 'Sands of Hell', as once a ship was washed ashore and wrecked here, there was little hope of the crew surviving the unforgiving and relentless desert backdrop.

We arrive in the small seaside town of Henties Bay situated at the mouth of the Omaruru River which reminds one of Fleetwood without the docks. The sea mist is chilly and the sky is grey for the first time since our arrival in South West Africa, and it is to remain this way until we leave the Coast and head back inland, returning towards our starting point, Windhoek.

Back on the bus we trade the air conditioning for the warmth of the heater as we move South towards what is billed as Namibia's most popular holiday destination, Swakopmund. There is a single feature that makes this region highly interesting and very significant. Neither plant nor animal, Namibia's huge lichen fields are considered amongst the most important in the world. Lichen comprise two components: an algae and a fungus.

They combine to provide the most perfect examples of a symbiotic relationship between two living organisms one can imagine. The fungus acts as a sponge and absorbs water from the air, while the algae contains chlorophyll which produces starch and sugar for energy. Generally, lichen resembles thickets of small dead shrubs. However, with the addition of water they uncurl and bloom, taking on rich colours of blue, green and orange.

By dusk we are booked into the palatial splendour of the Swakopmund Hotel. It is an atmospheric place that has been renovated from an old railway station.

The historic port of Walvis Bay is a short drive from 'Swakup' and is the jumping off point for an early morning boat trip to Pelican Point – a massive sandspit that creates a superb natural harbour. This has allowed the town to grow in importance by

providing safe anchorage for shipping bidding to escape the pounding of the Southern Ocean.

Today the port is principally involved in fishing and the transportation of salt and off-shore guano. However, tourism, in the form of sea trips to view dolphins and sealions, is on the increase, which is exactly what we are there to do.

As we move out to sea we are flanked by dolphins; one or two at first, then a dozen or more. They seem attracted to the ship's wake as we cruise leisurely towards the spit and a colony of Cape Fur Seals.

At this time of year most Cape Fur Seals are out at sea. However, a remnant population of several thousand stay inland, mostly further south at Cape Cross. During the summer months, an estimated quarter of a million animals come ashore to breed. These are not true seals; they have external ears which makes them sealions. Each animal eats about 8% of its own body weight daily and the colonies along the west coast of Southern Africa consume more than an estimated million tonnes of fish and other marine life annually, which is 300,000 tonnes



▲ Close encounter with a Cape Fur Seal.

more than is taken by the combined fishing fleets of Namibia and South Africa put together.

Mooring our boat at the farthest extent of the sand spit, we too have fishy things on our minds. A champagne and oyster lunch awaits us. With seals playing in the surf and the Atlantic Ocean crashing upon a pristine deserted beach, the Disney-type fantasy has become a reality.

Back at Henties Bay our afternoon options are varied. Some of us take to the air in a tiny plane of claustrophobic proportions, with an alarmingly young pilot who appears not to own a razor blade. This is not a confidence boost for us fear-of-flying types. We scream along the Skeleton Coast viewing the Cape Cross seal rookery at close quarters, turning full circle and crossing the Spitzhoppe which is an ancient volcano rising mirage-like above the dusty plains of the pro-Namib of Southern Damaraland. The perfect end to a perfect day is a fleeting glimpse of a single Black Rhino running for cover as we pass by, heading west towards a magnificent sunset and what turns out to be an electrical storm of pyrotechnic proportions.

The final treat is boarding the famous Desert Express back to reality, as we leave the coast for Windhoek. At 1.00 p.m. precisely this relic from a bygone era pulls out of the station. We toast our guide and driver, Neil, and Neels, who have been excellent throughout and have become our friends.

In the late afternoon we make a short trip to the Spitskoppe region. This is a truly beautiful place, proving the point that location, location, location is everything. There are arches and natural bridges cut out of the landscape and as the sun sets brilliantly in the West, the eastern sky has become blackened and foreboding, with rain clouds gathering and distant thunder rumbling across the far horizons.

It is hard to imagine that within 36 hours we will be back in London. But for now, we enjoy this last moment of Namibia and wonder how Wordsworth or other Romantics would have immortalised this scene in poetic rhyme.

Photographic Competition 2000

THE entry forms for this year's photographic competition are now available, and there are some great prizes to be won. Once again Air Mauritius and Sun International have generously sponsored the competition with the offer of a week's holiday for two on this beautiful island, with accommodation at one of the superb luxury hotels in the Sun International Group.

Sun International has five properties on Mauritius, all of them 5 star, and all of them in the most beautiful setting. The flight will be from Manchester and can be taken throughout the year 2001, subject to availability, except for peak

periods. This prize will go to the photograph judged 'Best in Competition' from any category.

Last year's winner, Maria Johnson will be flying to Mauritius in September on honeymoon – with her fiancé David Woolverton, who by great coincidence, won the print section of the 1999 competition.

As usual, there are categories for prints, slides, gardens, juniors and digital photographs. Prize for the best print is a superb Leica camera sponsored by Jaguar Cars. This is part of the Jaguar collection, and is a special limited edition of the Leica Z2X 'point and shoot camera' styled with a silver Jaguar logo. Second prize is free film and processing every month for a year from Max Spielmann.

In the slides section, the first prize is a Kodak digital camera. With technology in this field changing rapidly, Kodak can't give details on what model this will be when the prizes are awarded in January next year – but they promise an up-to-the-minute camera! Second prize will be vouchers from Ness Photo Laboratory and KJP/Calumet. These two companies have supported the competition since it began, and will also provide prizes in the Garden and Junior sections.

The best print of the Zoo's gardens will win £100 voucher to spend at one

of the UK's leading garden centres – Bridgemere Garden World.

Our Junior winner – for the best entry from children under 16 – will win a £75 voucher to spend in any Jessops store – the UK's biggest photo chain. The best photograph taken with a digital camera will also receive Jessops vouchers.

The closing date is 31st October – but get your entries in as soon as possible, as we will be awarding merit prizes of Zoo family tickets and Kodak film each month.

Pick up your entry form in the Zoo, or send a stamped addressed to:

**Photo Competition,
Chester Zoo,
Upton-by-Chester,
CH2 1LH.**

'You gather the idea that Mauritius was made first and then heaven, and that heaven was copied after Mauritius'

Mark Twain 1863-1910



Sponsored by

AIR MAURITIUS





▲ Starters at the top – pudding at the bottom!

Tropical Realm

Environmental enrichment improves the welfare of the animals in our care. Also for the Softbills in the Tropical Realm there are several possibilities to increase certain natural behaviours, e.g. foraging, locomotion and preening. Forms of enrichment are to offer food in a such a way that the birds have to work to obtain it; or to provide a variety of different, seasonal fruits.

The most successful enrichment device, however, is the live food dispenser made from 4cm diameter hollow bamboo canes. These are drilled with 5.5mm holes, then half filled with mealworms and giant

amused for hours! Fruit is halved and speared onto branches or threaded onto wire like kebabs, and tied securely to the aviary roof.

Birds love rain bathing and we therefore offer them a shower. This is a sprinkler system that is operated when the weather becomes hot and sunny. They will become very vocal and flap their wings with great gusto when the shower starts.

Thick-billed parrots eat mainly pine cones in the wild. We therefore constructed a disc shaped piece of wood in which holes have been drilled so that pine cones filled with sunflower seeds and pine nuts can be placed on the disc.

Our White-tailed Black Cockatoos are very inquisitive and love to investigate anything new. A robust seed tray is filled with bark chips and pine nuts are hidden in it. The birds get just as much enjoyment playing with the bark as they do eating the nuts.

A great hit with all the birds are pineapple heads filled with seeds – they eat the leaves as well as the seeds.

In using these enrichment devices, the birds show their great degree of flexible movement, from the dexterity of their feet when holding fruit, to their aerobatics at hanging upside down from the roof to reach their food.

Giving the birds plenty to do in their aviaries by offering branches, rope, browse and complex planting gives them a better quality of life. And there is nothing more enjoyable than seeing the "joie de vivre" of a lorikeet having a bath in the leaves of their foliated aviary!

Bird Enrichment

In previous issues of zoo life, mammal keepers have written about new ideas to enrich the environment for their animals. This time Keepers Wayne Mcleod and Anne Morris write about what has been happening in the Bird Teams.



▲ A platter for the parrots.

morio worms. The worms crawl out and the smaller birds pick them off. This is a task the larger birds cannot do, thus giving the smaller species a rare advantage. The live food dispenser is also beneficial during the breeding season. Because of the slow release of the live food, feeding time is extended which is crucial in rearing chicks.

Parrots

As well as giving them a good variable diet we also want our birds to lead an active and enriched life. Our parrots are given willow branches to chew and whilst they make a great mess, it keeps the birds

European Zoo Educators' Conference 1999

by Dominic Briffa

ALL zoos should ensure that every visitor leaves knowing more about conservation of the natural world, and this educational role is resulting in a rapid growth of interest in zoo education.

Last year's Zoo Educators' Conference was held in Holland, at Safari Beekse Bergen and was titled Education and Exhibit Design: Affordable Solutions. Considering the long list of exhibits being planned at Chester Zoo, this was a valuable opportunity to see how our European colleagues achieve exhibits with an integrated educational message.

Stephen McKeown (Head of Education) and I flew to Holland, where we heard about a wide range of new educational exhibits, such as London Zoo's Web of Life, Amersfoort Zoo's Ancient City, Givsgud Zoo's Boma Zoocamp and many other modern approaches to educating zoo visitors.

Talking about education and exhibit design is one thing: it is quite another to see how the theory has been put into practice. The post-conference tour was a (seemingly) non-stop journey throughout Holland and northern Belgium. Ten zoos and aquaria were visited in four days. Each one offered the opportunity

to see new and sometimes highly original ways of designing exhibits and, through them, educating visitors.

Some of the highlights: Planckendael's ethnographic emphasis; Arnhem Zoo's Burger's Bush rainforest experience; Rotterdam's interactive interpretation (especially the urinating tapir!); the breathtaking new aquarium at Artis in Amsterdam; the Orang utan developments at Apenheul; the sculpture at Wissel; the museum-style exhibits at Emmen . . . and so on.

At the end of a hectic eight day schedule, we returned, bringing with us lots of chocolate and, more importantly, a raft of ideas for the future.

For zoo enthusiasts, a visit to Holland is a must. There are probably more zoos per capita in The Netherlands than anywhere else in the world, all individual and most, if not all, well worth a visit. With the abundance of low cost airlines, a return flight to Amsterdam can work out cheaper than a return train ticket to London. Coupled with Dutch hospitality and linguistic ability (the latter putting every British delegate to shame), Holland has so much more to offer than windmills and tulips.



▲ Apenheul (NL) At Europe's finest primate collection, Apenheul, the rebuilt orang utan enclosure is the newest and arguably best exhibit.

THE Upper Guinea forest of Africa is a unique ecosystem that is considered a 'global hot spot' for conservation. Diversity is high with up to 15 primate species found in the region. The western Ghana and eastern Ivory Coast forests are thought to have three unique endemic primate species – the Roloway Guenon, White-collared Mangabey and Miss Waldron's Red Colobus.

The Western Chimpanzee is also found here. But human activities have drastically reduced their numbers. Three of the species are endangered and the fourth, the Red Colobus, is critical.

Recent surveys have raised concerns about the level of protection in the national parks. Surveys in eleven different reserves detected only one of the endemic primates – the Roloway Monkey – and just one call of a Chimpanzee. The conclusion is that Miss Waldron's Red Colobus is possibly extinct in Ghana, and the other species, including Chimpanzees, are rapidly on their way to extinction in the region. However, a recent survey of Krokosua Hills forest reserve, in the western region, identified Roloway Guenons, Mangabeys and Chimpanzees. Due its hilly nature, logging has been less intense, and Krokosua has been spared the fate of some of its neighbours.

The Survey

The Ghanaian authorities asked me to carry out more detailed surveys in Krokosua. Fiona Berry, a student from Aberdeen University, joined me and we worked closely with the Ghanaian Wildlife Department and the Ghana Protected Area Development Programme.

Last Summer the project surveyed 72 km of forest for primate species. To help us find and identify the species (and make sure we didn't get lost!) we worked and lived with two wildlife guards and two local hunters, whose wealth of knowledge and experience was invaluable. We lived in tents, and had water brought in from a local village.

Poaching Problems

Our major problem was the high level of hunting in the reserve. Frequent gun shots were heard, wire snares were abundant and every day we saw a trail of dead animals, including primates, being taken for bush-meat. The effect of this became obvious. Loud alarm calls were rarely heard, sightings

Ghana's Forest Primates

One of the Society's studentship grants in 1999 was awarded to Hazel White. It enabled her to join an expedition to the Krokosua Hills Forest Reserve, to carry out a primate survey.



▲ Hazel White – with research assistant!

were rare, primates fled rapidly on detection and groups moved off to inaccessible feeding areas early after waking. The wildlife guards officially had the power of arrest for poachers, but keeping good relations was paramount to ensure collaboration of the local hunters. I had to stay neutral, especially as the locals were at first very wary, assuming that as I was white I carried a lot of weight.

Species Found

During the survey, Campbell's Monkey, Spot-nosed Monkey and Olive Colobus were encountered fairly frequently. These have the advantage of being less conspicuous, often hiding in thick undergrowth. White-thighed Black and White Colobus were seen four times. With effective anti-poaching protection, it is likely that Krokosua could support a viable population of this species.

Krokosua has provided the first positive sightings of Chimpanzees in Ghana in recent years, and we found four of their nests. This region may contain the best Chimpanzee population at present and this could be the ideal 'flagship' species for this area.

Red Colobus, Roloway Guenon and Mangabey may be hanging on in very small numbers, but we found no positive evidence. With protection, viable populations may be

possible. Otherwise extinction from the reserve is the likely and imminent outcome.

Solutions

Working with the hunters allowed me to see things from their perspective. It is easy to question their wisdom in poaching all the animals to extinction, leaving nothing for their children. But the situation is complex. Overpopulation and shrinking forest patches result in the 'every man for himself' mentality. Local people need other options for income, such as ecotourism, if the poaching of endangered species is to stop. The needs of local people must come hand in hand with the conservation of biodiversity. Only in this way can the long-term sustainability be ensured.

Mandrill Behaviour

The Zoo's 1999 Research Associate was Lois Bassett, who completed her studies on the Mandrill Group. Her research shows how successful the policy of keeping the Mandrills in a mixed exhibit has been in promoting natural behaviour in the animals. Her report on this research is available in the Zoo library.



Zoo Life

JUNIOR MEMBERS



Meetings and Field Trips



Sunday 25 June 2000 – Hilbre Island

A popular venue! We'll spend some time rock pooling and investigating caves before arriving at Hilbre Island for some bird and seal watching. Open to 10 year olds and over – and places will be strictly limited.

Depart Zoo at 9.00am – Return at 4.30pm.

Wednesday 26 July 2000 – Day with a Keeper

Because the work can be strenuous, we have to limit this to 12 year olds and over. Please come prepared for hard work, wearing wellies and with good picnic! Meet outside the Oakfield at 10.30am, finish at 4.00pm. Bookings, on first-come-first-served basis, will start on Wednesday 12th July when the phone will be manned from 8.30am.

Friday 18 August 2000 – Summer Barbecue

It's fun to see the Zoo at night after all the visitors have left. Over 8's are invited to this informal social evening, which will offer a few surprises including a talk about wolves which will be very entertaining. Come to the staff entrance and walk through to the new restaurant for 7.00pm. Parents are requested to collect from there at 9.45pm.

Saturday 23 September 2000 – Hawkstone Park and the Follies

This amazing Shropshire Park has masses to see and the follies, some set in the hillside, are great fun. Bus leaves staff car park at 10.30am, returning at 4.30pm. Over 8's invited. Bring a picnic and a torch.

Saturday 14 October 2000 – Liverpool Museum

The Natural History section is well worth a visit and we'll be taken behind the scenes to give Juniors some idea of how exhibits are prepared for show. Staff car park at 11.00am, returning at 4.00pm. Over 8's are welcome, and a picnic will be needed.

Saturday 18 November 2000 – Martin Mere

November is a brilliant time to visit the Wildfowl and Wetlands Trust. We will see the migratory geese and swans as they pass through this haven. It can be chilly – so dress warmly to see the spectacular sight of thousands of birds. Bus leaves staff car park at 11.00am, returning at 4.00pm.

Over 8's welcome – picnic needed.

Bookings must be made for all events. Please ring Penny at the Zoo on 01244 650215, not more than two weeks before the event. Places may be limited and it will be 'first-come-first-served.' In exceptional circumstances we may have to alter dates and venues and changes will be printed in Zoo Life – not by individual letter. A small charge will be made for events involving transport, material or food.

▼ *Bella is proving a very tender mother to baby Bengari, born last Christmas Eve.*



Competition Time

ISLAND HOPPING!

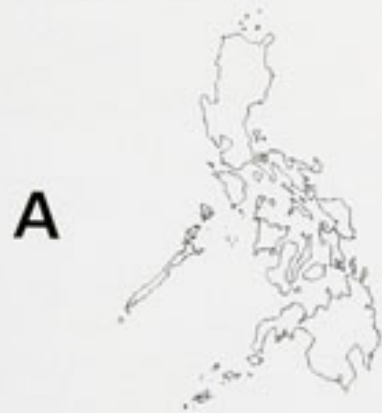
Islands are in the news at the moment, with the opening of our great 'Islands in Danger.' All the animals in this quiz are at risk on their island homes.

How good is your geography? Get out your atlases and match the animal with its island and national flag. The first one has been done for you.

NB: The islands are not drawn to scale.

Answers on a post card please to:
Junior Competition, ZooLife,
Chester Zoo,
Upton-by-Chester,
CH2 1LH

Closing date is 3rd July 2000. Prize this time is a set of the wonderful 'Horrible History' books.



SPRING ISSUE WINNER

The Animal Dingbats competition was very popular – lots of entries and nearly all correct!

The answers were:

- | | |
|---------------------------|-----------------------------|
| 1. Panda Catfish. | 2. Blue and Yellow Macaw. |
| 3. Chilean Flamingo | 4. Philippine Spotted Deer. |
| 5. Peacock Goby. | 6. Blue Crowned Pigeon. |
| 7. Western Grey Kangaroo. | 8. African Bull Frog. |
| 9. Red Bird of Paradise. | 10. Four-horned Chameleon. |

First correct postcard out of the bag was from Felicity Owen, who wins a £10 voucher to spend in the Zoo shops.

Animal	Island	Flag
St Lucia Amazon Parrot	B	VI
Red Bird of Paradise		
Philippine Spotted Deer		
Red-ruffed Lemur		
Jamaican Boa		
Sand Lizard		

Arrivals, Births and Hatchings

February, March and April 2000



▲ Komodo Dragon



▲ Californian Sealion

MAMMALS

Small Madagascar Hedgehog Tenrec	<i>Echinops telfairi</i>	0.0.2	Arrival
Coati	<i>Nasua nasua</i>	1.0.0	Arrival
Californian Sea Lion	<i>Zalophus californianus</i>	0.2.0	Arrival
Red-necked Wallaby	<i>Macropus rufogriseus</i>	1.0.0	Birth
*Rodrigues Fruit Bat	<i>Pteropus rodricensis</i>	0.0.1	Birth
*Ring-tailed Lemur	<i>Lemur catta</i>	5.2.2	Birth
*Black and White Ruffed Lemur	<i>Lemur variegatus variegatus</i>	1.2.0	Birth
*Colombian Black Spider Monkey	<i>Ateles fusciceps robustus</i>	0.0.2	Birth
*Chimpanzee	<i>Pan troglodytes</i>	1.0.0	Birth
Bactrian Camel	<i>Camelus bactrianus</i>	1.1.0	Birth
*Sitatunga	<i>Tragelaphus spekei</i>	0.0.1	Birth
*Gemsbok	<i>Oryx gazella gazella</i>	0.0.2	Birth
*Blackbuck	<i>Antilope cervicapra</i>	0.0.4	Birth
*Cotton-top Tamarin	<i>Saguinus oedipus</i>	0.0.1	Birth

BIRDS

*Hawaiian Goose	<i>Branta sandvicensis</i>	0.0.1	Hatched
*Mountain Peacock Pheasant	<i>Polyplectron inopinatum</i>	0.0.3	Hatched
*Red-crowned Crane	<i>Grus japonensis</i>	0.0.1	Hatched
Speckled Pigeon	<i>Columba guinea</i>	0.0.4	Hatched
Blue-eyed Cockatoo	<i>Cacatua ophthalmica</i>	0.0.2	Hatched
Spectacled Owl	<i>Pulsatrix perspicillata</i>	0.0.1	Hatched
Tawny Frogmouth	<i>Podargus strigoides</i>	0.0.1	Hatched
White-rumped Shama	<i>Copsychus malabaricus</i>	0.0.2	Hatched
*Yellow-throated Laughing Thrush	<i>Garrulax galbanus</i>	0.0.3	Hatched
Red-billed Leiothrix (Pekin Robin)	<i>Leiothrix lutea</i>	0.0.1	Hatched
*Bali Starling	<i>Leucopsar rothschildi</i>	0.0.2	Hatched
*Humboldt's Penguin	<i>Spheniscus humboldti</i>	2.0.1	Arrival
Falcated Teal	<i>Anas falcata</i>	0.1.0	Arrival
*Laysan Teal	<i>Anas platyrhynchos laysanensis</i>	0.1.0	Arrival
Smew	<i>Mergus albellus</i>	0.1.0	Arrival
Hooded Merganser	<i>Mergus cucullatus</i>	0.1.0	Arrival
Red-crested Pochard	<i>Netta rufina</i>	0.1.0	Arrival
*Lady Amherst's Pheasant	<i>Chrysolophus amherstiae</i>	1.0.0	Arrival
*Malayan Crestless Fireback	<i>Lophura erythrophthalma erythrophthalma</i>	2.0.0	Arrival
Roulroul Partridge	<i>Rollulus roulroul</i>	2.1.0	Arrival

BIRDS-continued

*Black-winged Lory	<i>Eos cyanogenia</i>	0.0.3	Arrival
Lilacine Amazon Parrot	<i>Amazona autumnalis lilacina</i>	1.0.0	Arrival
*St. Lucia Amazon	<i>Amazona versicolor</i>	1.1.0	Arrival
Common Barn Owl	<i>Tyto alba</i>	1.0.0	Arrival
Ferruginous Pygmy Owl	<i>Glaucidium brasilianum</i>	0.1.0	Arrival
White-collared Kingfisher	<i>Halcyon chloris</i>	1.2.0	Arrival
Azure-winged Magpie	<i>Cyanopica cyana</i>	2.1.0	Arrival
Lilac-breasted Roller	<i>Coracias caudata</i>	0.0.2	Hatched

REPTILES

*Egyptian Tortoise	<i>Testudo kleimanni</i>	0.0.4	Arrival
*Egyptian Spiny-tailed Lizard	<i>Uromastyx aegyptius</i>	0.0.6	Arrival
*Madagascar Day Gecko	<i>Phelsuma standingii</i>	1.0.0	Arrival
*Rhinceros Iguana	<i>Cyclura cornuta cornuta</i>	0.1.0	Arrival
*Komodo Dragon	<i>Varanus komodoensis</i>	1.0.0	Arrival
*Sand Lizard	<i>Lacerta agilis</i>	0.1.0	Arrival

AMPHIBIANS

Yellow Striped Poison Arrow Frog	<i>Dendrobates leucomelas</i>	0.0.3	Metamorphosed
Congo Dwarf Frog	<i>Hymenochirus boettgeri</i>	0.0.19	Hatched
Japanese Fire-bellied Newt	<i>Cynops pyrrhogaster</i>	0.0.2	Presented
Red-eyed Tree Frog	<i>Agalychnis callidryas</i>	0.0.12	Metamorphosed

FISH

*Lake Barombi Mbo Cichlid	<i>Stomatepia sp.</i>	0.0.8	Arrival
Congo Tetra	<i>Phenacogrammus interruptus</i>	0.0.15	Arrival
*Duck-billed Fish	<i>Xenopoeilus sara sinorum</i>	0.0.20	Arrival
Tetra	<i>Hyphessobrycon elaphys</i>	0.0.12	Arrival
Banggai Cardinal Fish	<i>Pterapogon kauderni</i>	0.0.27	Bred
Big-bellied Seahorse	<i>Hippocampus abdominalis</i>	5.5.0	Arrival
Pipe Fish	<i>Corythoichthis intestinalis</i>	0.0.2	Arrival

INVERTEBRATES

Long-spined Sea Urchin	<i>Diadema antillarum</i>	0.0.1	Arrival
Emerald Crab	<i>Mithrax sp.</i>	0.0.3	Arrival
Peppermint Shrimps	<i>Lysmata wurdemanni</i>	0.0.8	Arrival