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If you would like to find out more about the ways in which you can get involved, please complete the form below and send it back to the Development Department, c/o Lucy Cannock, Zoological Society of London, Regent's Park, Outer Circle, London NW1 4RY. Alternatively, please contact us on 020 7449 6583 or email lucy.cannock@zsl.org for more information.

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ZSL
LIVING CONSERVATION

The Zoological
Society of London
Registered Charity in
England and Wales:
no 208728

Regent's Park
London NW1 4RY
and at
ZSL Whipsnade Zoo
Dunstable
Bedfordshire LU6 2LF

www.zsl.org

The Zoological Society of London 2008

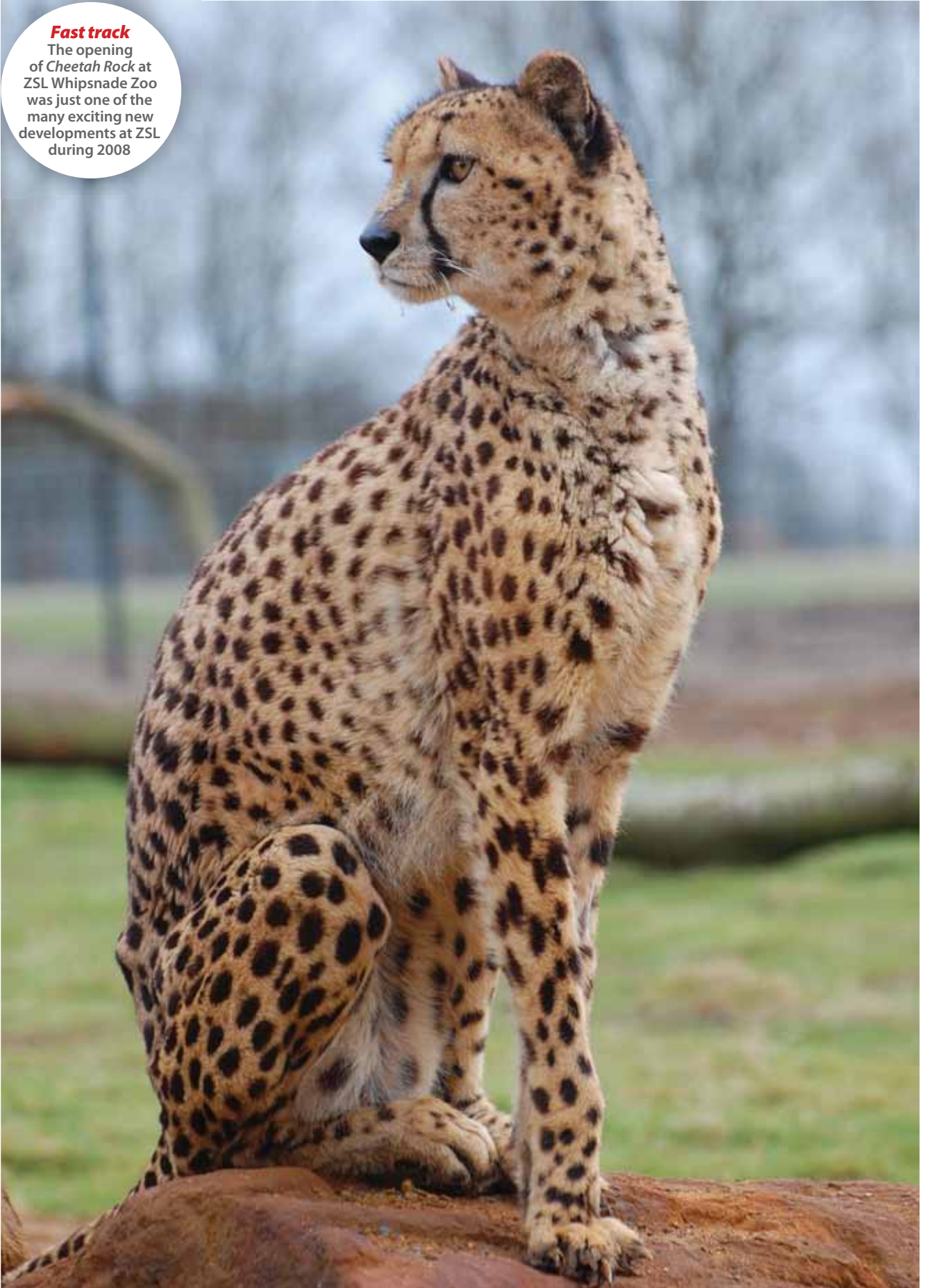
ZSL
LIVING CONSERVATION

THE YEAR IN REVIEW

2008

Fast track

The opening of *Cheetah Rock* at ZSL Whipsnade Zoo was just one of the many exciting new developments at ZSL during 2008



Sir Patrick Bateson reflects on ZSL's many extraordinary achievements during 2008, across the various aspects of conservation, science, education and the Zoos.

Full speed ahead for ZSL in 2008

It is among the many pleasures granted to the role of President to be able to bring you our Annual Review. In 2008, that pleasure is even greater than usual.

The year has been an exceptional one for ZSL. We have seen significant conservation developments and successes around the world, we have witnessed great strides by our researchers and scientists in the Institute of Zoology, and we have enjoyed wonderful new attractions at ZSL London Zoo and ZSL Whipsnade Zoo.

First, however, I would like to pay tribute to our many staff, supporters, members and volunteers.

.....
This was a year of great progress. But without your enthusiastic support and dedication we would not be able to achieve all that we do
.....

The enthusiasm and dedication they display year upon year is the backbone of our work. Without you all, we could not achieve everything that we do.

The year was one of exciting progress at the Zoos. The beautiful creature you see opposite is a denizen of ZSL Whipsnade Zoo's wonderful new *Cheetah Rock* exhibit, while the *Blackburn Pavilion* at ZSL London Zoo is now full of a magnificent array of glorious tropical birds.

Both new exhibits have offered a fine opportunity to develop the educational side of our work, and the interactive interpretation at *Cheetah Rock* as well as the fascinating 'digital book' at the *Blackburn Pavilion* are both good examples of what our Discovery and Learning team can achieve.

Science and conservation combined once more this year in the launch of a brand-new EDGE programme which, similarly to last year's mammal programme, focuses on amphibians that are not just endangered but also genetically distinct.

As before, the long-term aim is to create conservation programmes in

the animals' range countries to protect those whose futures are in peril.

EDGE Fellowships will add to our growing conservation and scientific network around the world. In these fields in 2008 we became the first organisation to photograph the elusive okapi in the wild, discovered more about the pygmy hippo of West Africa than was previously known, established new programmes to protect the tiger, discovered a new fish species in the Thames, and led and participated in literally hundreds of other programmes of conservation importance.

You'll discover much more about these many projects in the pages ahead. I'm sure you will agree with me that, across the board, 2008 was a year for ZSL to be proud of.



Sir Patrick Bateson FRS
President, Zoological Society of London

As the human population continues to increase, and our use of resources grows at a similar rate, so the chance of long-term survival for wildlife and habitats lessens. How can ZSL meet this growing threat?

The challenge that lies ahead

The growing human population and the accompanying increasing need for resources, have been putting intolerable pressures on the planet's wildlife in recent decades. A mere 50 years ago that population stood at under three billion. By 2000 it had reached six billion. In less than a decade since then, a further three-quarters of a billion have been added.

The world isn't getting any larger to accommodate our increasing numbers, and so something has to give. Today it's the wildlife and their habitats. Tomorrow it could be the human race itself.

As a result, maintaining sustainability is no longer just about trying to preserve what already exists. As the human population continues to grow, our emphasis has to be on finding a way in which humankind and nature can more successfully coexist.

Signs that the fabric is already beginning to tear lie everywhere. As climate change forces polar bears further south, they're now beginning to come into conflict with other wildlife and humankind itself. As deforestation continues to devastate huge swathes

of ecosystems, so entire habitats are beginning to disappear, and the natural barriers against the effects of climate change are starting to fail. As global traffic increases, so does the international spread of disease, and many amphibian species are disappearing faster than we can track them.

The latest IUCN Red List of Threatened Species (the world's most comprehensive inventory of the global conservation status of plant and animal species), with great input from ZSL, shows that at least 1,141 of the 5,487 known mammal species are now



Left The growing human population leaves less room for wildlife **Above** The tiger struggles to live alongside humankind

threatened with extinction – and there could be many more.

This may seem a very gloomy picture, but it is a realistic one. This planet is, in fact, quite capable of housing many more billions of people alongside all its current wildlife, but only if we can find a way to coexist more successfully and with far less consumption.

There is a way, but it will take thorough research, powerful lobbying, practised conservation skills and a deep understanding of wildlife and its needs in order to develop it.

ZSL is uniquely placed to spearhead the search for a solution. With more than 180 years of experience in science and conservation, an extensive network of conservation projects around the globe, internationally recognised scientific leadership and the presence to educate and inform, ZSL can – and must – play a leading role.

Today the wildlife is struggling. Tomorrow it will be humanity itself. ZSL, along with many partner organisations and the support of people around the globe, is working very hard to stop that happening.

How ZSL is meeting the challenge The challenge ahead is clear and the problem is increasing, but what does that mean in reality? How does ZSL focus to achieve the greatest impact on the conservation of animals and their habitats? Our overall mission is defined by four strategic aims, which help us to focus resources and efforts to achieve the greatest result.

STRATEGIC AIM 1

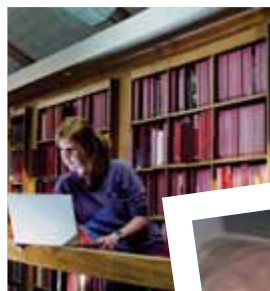
We will undertake and promote relevant high-quality zoological and conservation research, to help us achieve our conservation objectives and to inform and influence conservation policy

ZSL will achieve this strategic aim by:

■ Encouraging and rewarding excellence in the performance and communication of science, conservation and animal husbandry

■ Using our unique convening role as a leading learned society to foster and achieve international excellence in science relevant to our core conservation priorities

■ Managing and developing a relevant and useful body of zoological knowledge



■ Attracting and engaging a diverse range of people and organisations in the science of zoology and conservation – from students to leaders in their field

■ Raising the profile of conservation issues and priorities, and ensuring they are well represented at policy level and in the media

■ Providing policy makers, conservationists and the general public with the information needed to make informed decisions on conservation issues

STRATEGIC AIM 2

To encourage and motivate all our stakeholders to support and engage in conservation

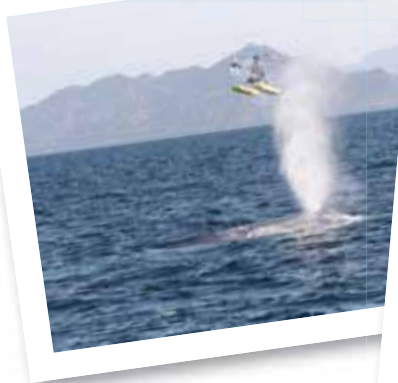
ZSL will achieve this strategic aim by:

■ Enabling and inspiring all ZSL staff, students and volunteers to become ambassadors for our conservation mission

■ Running world-class Zoos with the highest standards of animal welfare, husbandry and exhibit design

■ Ensuring that all visitors have an enjoyable, inspiring and educational experience

■ Communicating science-based conservation messages



■ Improving and developing our contributions to the education and conservation awareness of groups of all ages and to education providers

■ Raising and maintaining our profile among target audiences

■ Using our research and field activities to inspire and educate people about conservation

■ Enhancing the value delivered to ZSL members

STRATEGIC AIM 3

To implement and achieve effective and appropriate *in situ* and *ex situ* conservation programmes for priority species and habitats

ZSL will achieve this strategic aim by:

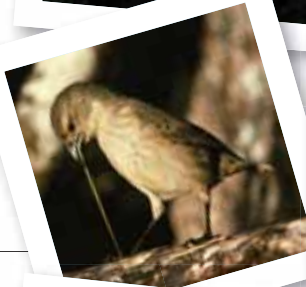
■ Ensuring that conservation efforts are informed by the best science

■ Applying objective criteria for setting priorities for our conservation activity and measuring against successful outcomes

■ Predicting, prioritising and responding effectively to new conservation issues

■ Working with other organisations and across disciplines to achieve our common conservation objectives

■ Working with government and industry in support of conservation



■ Measuring conservation efforts and evaluating their outcomes to enable more effective management

■ Developing our own and others' capabilities, expertise and resources in order to build capacity in zoology and conservation

■ Engaging and working with communities in support of conservation and sustainable livelihoods



STRATEGIC AIM 4

To further ZSL's mission by maximising opportunities to generate funds

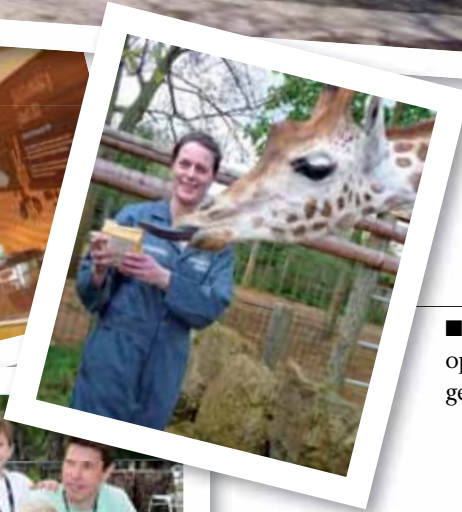
ZSL will achieve this strategic aim by:

■ Making continued investment in our sites and infrastructure

■ Developing our business acumen

■ Building up and extending our supporter base

■ Utilising ZSL assets and resources to generate funds within the framework of a registered charity



■ Developing innovative opportunities to generate revenue

■ Raising our profile to increase funding to ZSL

2008

the year in review

JANUARY

Highlights

Launch of EDGE Amphibians

ZSL launched the EDGE (Evolutionarily Distinct and Globally Endangered) Amphibians programme, a conservation initiative, which highlights some of the world's extraordinary creatures threatened with extinction.

Stocktaking at both Zoos

All keepers are involved in this annual event and we had a bumper year in 2008 for babies and new arrivals at both Zoos.

New elephant calf at ZSL Whipsnade Zoo

Donaldson, born to mother Azizah, arrived quickly after a short labour, while keepers kept a close eye on the proceedings. The calf was born after a 630-day gestation period and the birth was the first daytime delivery of an elephant calf at the Zoo. He is 24-year-old Azizah's second-born calf and he weighed in at a healthy 103kg (220lb).

EDGE is a unique ranking system for highlighting animals in dire need of conservation focus, based on a combination of their Evolutionary Distinctiveness (ED) and their Global Endangerment (GE). It helps us to pinpoint animals that are close to extinction, and which once lost leave behind nothing similar.

Following on from the great success of EDGE Mammals in 2007, **EDGE Amphibians** was launched on 21 January to huge media coverage. Features in national newspapers and BBC programmes helped to highlight the plight of many of the world's amphibians to millions, and it wasn't long before strong funding started to arrive. Already, four EDGE Fellows have been identified for the EDGE Amphibians programme and they are due to begin receiving support in early 2009. The programme will focus on the Sagalla caecilian (Kenya), purple frog (India), South African ghost frog and Chile Darwin's frog.

This latter species is of particular interest, and Helen Meredith, Sally Wren and James Reardon undertook a three-week expedition to central Chile late in the year to survey for this possibly extinct focal species. They also sought to elucidate the reasons for its decline and train EDGE Fellow Claudio Soto-Azat in amphibian surveying and long-term conservation techniques.

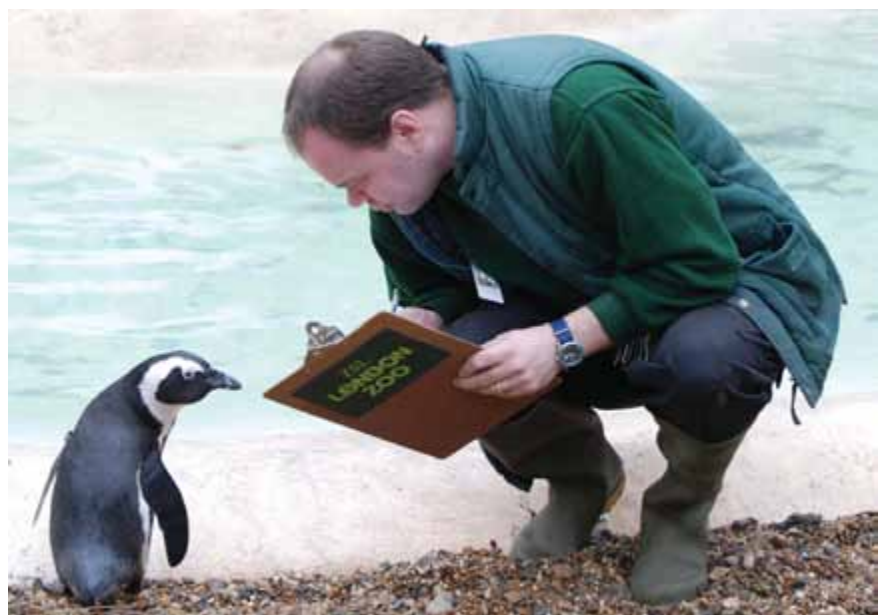
Meanwhile, the **EDGE Mammals** programme moved on in leaps and bounds in 2008. There was an EDGE Fellows training course in late summer at ZSL London Zoo to provide training on various aspects of conservation, including practical monitoring skills, project planning, environmental education, fundraising, communicating conservation and conservation action planning. A host of expeditions were also held throughout the year.

One particularly caught the media's eye, when the Institute of Zoology's Ben Collen, Janna Rist and Olivia Daniel travelled to Sapo National Park in Liberia. They established a monitoring programme using camera traps, focusing on the pygmy hippo and other rare and threatened species in the area. Unique images of pygmy hippos were quickly captured, and the new evidence has been fed into a wider biodiversity monitoring programme at the park, run by the Liberian Forest Development Agency.

Other **conservation work** included a trip by Kate Jones to Thailand where she ran an iBats workshop on monitoring bat populations using vehicle-mounted bat detectors; a visit by Raj Amin and Carly Waterman to Sri Lanka where they met potential EDGE collaborators and Fellows to initiate the red slender loris project in the country, an important area rich in biodiversity; two expeditions to the Boni Forest in northern Kenya by EDGE Fellow Grace Wambui to carry out an inventory of mammal fauna in the area (which resulted in the possible discovery of a new species of elephant shrew); and an expedition to China by the Institute of Zoology's Sam Turvey to investigate possible causes of extinction in Yangtze freshwater cetaceans.



EDGE Amphibians was launched in 2008 with great success, while the EDGE Mammals programme moved on in leaps and bounds



Top Donaldson was an exciting and popular new addition to the herd at ZSL Whipsnade Zoo **Centre** Malagasy rainbow frog, one of the EDGE amphibians **Bottom** Stocktaking at both Zoos was carefully monitored

January was also the month in which ZSL Research Fellow Trent Garner was awarded £1.5m from EU BiodivERsA for **European chytrid surveillance** and amphibian conservation work.

Furthermore, Chris Ransom organised a meeting at Portcullis House, chaired by Jonathan Baillie and attended by Barry Gardiner MP, CEOs and directors of NGOs and businesses, to discuss additional legislative options to combat **illegal logging**. A second meeting was held a few months later in the

The year began with a major planting of the *Clare Rainforest Lookout*, using plants from a sustainable nursery in Costa Rica

year to discuss draft legislation on illegal timber ahead of its first reading in April as a Private Members' Bill.

The **horticultural team** oversaw the planting in the *Blackburn Pavilion*, designed and carried out the soft landscaping for the new *Outback* exhibit, and oversaw a developing role for plants in animal enrichment techniques and exhibit furnishings. At ZSL Whipsnade Zoo the planting around the new elephant arena, as well as the meerkat exhibit, were high on the team's list for 2008. The *Butterfly Garden* was successfully revamped by a weekly horticultural volunteer.

At ZSL London Zoo, the year began with a major planting of the **Clare Rainforest Lookout**, using plants sourced from a sustainable nursery in Costa Rica.

Good progress was also made with the work on the **Zoo Plant Wiki**, a British and Irish Association of Zoos and Aquariums (BIAZA) Plant Working Group project that was initially trialled at ZSL. The team and contractors also nearly completed all recommendations made in the December 2006 tree risk assessment survey of the grounds and the car park. ☺



FEBRUARY

Highlights

Opening of Rhinos of Nepal

The new *Rhinos of Nepal* exhibit at ZSL Whipsnade Zoo highlights ZSL's work with the Nepalese government and provides a fantastic new home for these giants. The £1m development features indoor heated pools so the rhinos can enjoy wallowing in muddy water all year round. A spacious viewing area allows the public to get a close-up view of the rhinos indoors.

Thermal imaging

A set of thermal images taken around ZSL London Zoo showed the variety of ways that animals use or reserve their own body heat, from hot-headed penguins to cold-nosed sloths.

Titi monkey makes an appearance

A tiny red titi monkey was the first baby to be born in ZSL London Zoo's new rainforest biome.

Above left Thermal images, such as these showing tamarins in the *Clare Rainforest Lookout*, provided useful information for vets and keepers alike **Above right** That same exhibit also produced its first baby, a tiny titi monkey



It's a fact

Most of the many species of titi monkey are monogamous – once they've paired up, they stay with each other for life

The birth of the titi monkey in the *Clare Rainforest Lookout* was just one of a host of **significant births** at ZSL's Zoos during the year. Mammals included Panay bushy-tailed cloud rats, a warthog, two Sulawesi crested macaques, two white-naped mangabeys, two guereza colobus and a Malayan tapir at ZSL London Zoo, while ZSL Whipsnade Zoo welcomed a southern white rhino, a Przewalski's horse, a scimitar-horned oryx, a reticulated giraffe, a Persian onager and a gemsbok. In addition to Donaldson, the new baby elephant, Karishma the elephant was also confirmed as pregnant, while Kaylee's foetus appeared to be doing well. The new elephant arena was completed during the year, too, and the animals' demonstrations went down very well with the public.

There were plenty of exciting chick **hatchings** across the two Zoos too, including toco toucans, a parent-reared hyacinth macaw, Mindanao bleeding-heart dove, Abdim's stork, hooded pitta, Mount Apo lorikeet, hammerkop, Stanley cranes, smew, black-billed whistling ducks and rosy flamingo.

Significant breeding achievements with reptiles and amphibians included beaded lizards, red-tailed racer snakes, bicolored dart frogs, Saharan spiny-tailed lizard, blue poison dart frogs, Himalayan newts, rhinoceros rat

snakes, plumed basilisk, death adders, emerald tree boas, Gila monsters, and Philippine and sailfin lizards.

Breeding trials were established for the ZSL Whipsnade Zoo Annam pond, Kwangtung River and striped box turtles.



Above The red tape was nearly cut in advance at the opening of the new *Rhinos of Nepal* exhibit

Not to be outdone, the invertebrates provided 108 daughter colonies of various corals in the aquarium, *Partula rosea* (extinct in the wild), Hercules beetles, imperial scorpions, Bermudian land snails and red barbed ants.

Great progress has also been made on the **native species front**, with an extra grant from Natural England being approved for fencing off the Site of Special Scientific Interest area at ZSL Whipsnade Zoo.

Research is key to ZSL's scientific endeavour, and an example of the kind of work undertaken by our teams was the paper published by ZSL's Kate Jones and colleagues in *Nature*. It analysed spatial and temporal global patterns in emerging infectious

human diseases and revealed that most diseases come from areas where large human populations come into contact with areas of high biodiversity. This highlights the importance of managing human-wildlife interactions to minimise the risk of future outbreaks, and emphasises again the importance of conservation to human health and well-being.

It is important for scientists to publish in **key journals**, and ZSL produces two such publications itself. **Animal Conservation**, now in its 12th year, provides a forum for the rapid publication of peer-reviewed research on the conservation of animal species and their habitats.

The **Journal of Zoology** is a monthly publication dedicated to academic zoology. In 2008 ZSL launched the **Journal** podcast, which features interviews with authors of recently published papers.

The **International Zoo Yearbook** is an international forum for the exchange of information on the role of zoos in the conservation of biodiversity, species and habitats, and the timely focus of 2008's *Volume 42* was the global extinction crisis facing amphibians, and the coordinated response of zoos and aquariums, governments, museums, universities, botanical gardens and private-sector collaborators. All volumes are now available online.

The **Conservation Science and Practice** book series has continued apace, with each title in the series addressing the multidisciplinary aspects of conservation.

Being published is one thing – giving speeches is another. Helen Meredith's talk to 200 people at the 'Life in Cold Blood' event at the University Museum of Zoology in Cambridge was just one example of many **presentations** given by ZSL staff throughout the year, both in the UK and around the world. ☺

MARCH

Highlights

Sprinters speed in to open Cheetah Rock

British Olympic sprint hopefuls, Chris Clarke and Joey Duck, cut the red tape on ZSL Whipsnade Zoo's new £1m exhibit, *Cheetah Rock*. Visitors have close-up views of the fastest land mammal on their landscaped rock lookout.

Secrets of the sky revealed

The new £2.5m tropical bird experience, *Blackburn Pavilion*, brought the beauty and tranquility of the tropical skies to the heart of London. Its opening day was widely covered in the press.

Pygmy hippos survive two civil wars

ZSL conservationists set up a network of camera traps to monitor the endangered pygmy hippo, and discovered it had survived in Liberia despite two civil wars.

Rhinos counted from elephant-back

ZSL and in-country partners carried out a Nepalese national greater one-horned rhino count. More than 200 field personnel, with 50 elephants, implemented a standardised system for counting, and found 408 rhinos.



Above Camera traps revealed pygmy hippos in Liberia



Above A lookalike Queen Victoria, and a lilac-breasted roller, at the opening of the *Blackburn Pavilion*

The opening of the *Blackburn Pavilion* was a true highlight of the year, and to date, even though the building has only been open for a short period, the exhibit has produced excellent breeding results. The building's restoration, generously supported by the Blackburn family, has retained elements of the historic nature of the building while providing an excellent visitor attraction and upgrading the facilities for both birds and staff. The operation of moving the birds back into the house ran smoothly and the first bird released into the free-flight area was a Socorro dove, an iconic first species – due to it being extinct in the wild – to celebrate the building.

Work began to refurbish the **aquarium** too. Reproduction was very successful in the aquarium during the year, with six spiny seahorse fry being reared.

There were also the first eggs from the newly arrived endangered Charco pupfish, Corfu killifish hatchlings, significant reproduction of programme livebearers, pupfish and native seahorses, with spawning also observed in black bar myleus for the first time.

ZSL staff were busy attending meetings around the world. These included input into a new Shark Trust strategic plan and application to the Esmée Fairbairn Foundation, Brian Zimmerman's presentation on 'Aquarium Freshwater Fish Conservation' in Chester, a sustainable acquisition workshop at the International Aquarium Congress in Shanghai, discussions on coral trade issues, and Heather Koldewey's presentation at the first Wildlife Reintroduction Symposium at Lincoln Park Zoo, Chicago, USA. 🐾

APRIL

Highlights

Secret seahorses in the Thames

The discovery of short-snouted seahorses in the Thames during routine conservation surveys proved that the water quality of the river was improving – and it was also a reminder to people how important it is to maintain the cleanliness of British waterways.

Precious monkey gets to grips with surrogate mum

The tiny white-naped mangabey monkey, Conchita, who took YouTube by storm, was born at ZSL London Zoo and was hand-reared by keepers after an emergency caesarian.

The decline of India's **white-backed vultures** has been shocking in its acceleration. Research carried out by ZSL's Andrew Cunningham and collaborators revealed that its population has fallen by more than 40% each year,



Top A short-snouted seahorse was a fascinating discovery in the Thames
Above White-backed vultures

and has plunged by 99.9% since 1992. The cause of the catastrophic decline is diclofenac, an anti-inflammatory treatment for livestock. Captive breeding is now the last hope for these vultures and, encouragingly, two oriental white-backed vultures were hatched in Pinjore captive breeding centre and fully reared – the first recorded successful breeding of this species in captivity in the region. ZSL's Andrew Routh has been a **technical adviser** on this programme. Meanwhile, construction of the first phase of the vulture centre in Kasara, Nepal was completed, with 14 white-backed vultures introduced there.

Another Asian creature, the long-eared jerboa, featured highly in the news in April when its appearance in ZSL's **newly launched video feature** on www.zsl.org caught the imagination of the public.

The surveys that revealed seahorses in the Thames were just one example of the **underwater projects** that formed a vital part of ZSL's conservation work in 2008 – work that is increasingly drawing support from funders around the world. Alex Rogers, for example, was awarded £358,397 from the Natural Environment Research Council (NERC) to assess the benthic biodiversity of seamounts in the south-west Indian Ocean. Seamounts



Above Conchita, the baby white-naped mangabey – already a YouTube star

host spectacular communities of corals, sponges and other attached fauna, along with a high diversity of associated species. This project will deploy the UK's remotely operated vehicle, capable of diving to 6,500m depth, to film, photograph and sample species.

There was a further award of £344,680 from the European Commission for

.....
The post of Volunteer Programmes Manager was created to show our recognition of the important role they play
.....

the CoralFISH project, which will assess the interaction between corals, fish and fisheries, in order to develop monitoring and modelling tools for ecosystem-based management in the deep waters of Europe and beyond. The project is a consortium of 16 European partners from academia and industry.

April was also the month in which a new six-session evening class on the animal kingdom was launched for all new **volunteering recruits** at the two Zoos. Volunteers are an integral part of the Society, and a new post of Volunteer Programmes Manager was created to demonstrate our recognition of the important role they play.

Throughout the year, 123 'Learning' volunteers and 95 'Assistance' volunteers were recruited, each receiving

full induction before launching into their many vital aspects of work, which in 2008 included a presence in *Meet the Monkeys* and the *Clore Rainforest Lookout*, as well as *Gorilla Kingdom* and *Butterfly Paradise* public areas, providing live interpretation.

A similar role was carried out in ZSL Whipsnade Zoo's *Lemur Island* exhibit, where two roles – Horticulture Volunteer and Graphics Volunteer – were created.

Groups of volunteers are always welcome, and this year the RAF and volunteering organisation Yu-Act provided one-day volunteer events to refurbish the railway station, remove scrub from the penguin pool and clear bamboo for the new butterfly garden at ZSL Whipsnade Zoo. ♻

MAY

Highlights

Painless technique for blood-sampling zoo animals

Vets at ZSL London Zoo employed kissing bugs as part of a revolutionary pilot project, to suck blood samples from animals who would normally need to be anaesthetised for the simple procedure. Kissing bugs successfully took blood samples from a hippo, cheetah, giraffe, elephant and white rhino.

Recycled Sculpture Show

ZSL London Zoo showed that modern art is rubbish, showcasing 21 remarkable sculptures made of recycled materials, including discarded hubcaps, plastic bags and old tyres, as part of the Love London Recycled Sculpture Show.

New female gorilla joins Gorilla Kingdom

New addition Mjukuu, affectionately known as Jookie, joined *Gorilla Kingdom* and proved popular with all the gorillas on the island. She was a hit with the late silverback, Bobby – the pair consummated their relationship 17 times in just four days.

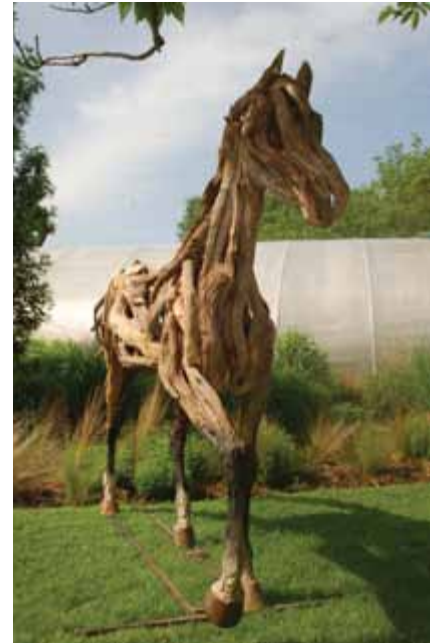
At the Mikongo Conservation Centre in central Gabon, habituation and research into gorilla ecology and health was ongoing throughout the year. A total of 254 tourists visited the site in 2008. Meanwhile, Stella Kondylas, a successful applicant to the ZSL Field Conservation Fund, spent three weeks in Gabon working on an eco-tourism strategy for Mikongo. The findings of this work and the eco-tourism strategy were presented later in the year.

Also in west-central Africa, collaborations with timber companies and local universities continued for the Wildlife Wood Project (WWP) in Ghana and Cameroon, with new MoUs signed with Pallisco and SFID companies in Cameroon. The WWP is supervising MSc students' field projects and training them and timber company

staff in **wildlife-monitoring techniques** and socio-economic investigation, ahead of making wildlife management recommendations to the companies later on in the three-year Darwin Initiative-funded project.

May's pilot blood-sampling project was just a part of the expansive role of **ZSL's vets** this year. Among the many intriguing projects was major surgery on a Jamaican boa that had failed to give birth, insulin injections for a diabetic crested macaque, surgery for a rhino's abscess and continued veterinary care for the ravens at the Tower of London!

Research continues to play an important role in the veterinary department and, this year, management of the meerkats and their diets has been one example of ongoing research, in particular with



Top Recycled artwork at ZSL London Zoo
Bottom A kissing bug, part of a new technique for blood sampling

respect to their cholesterol levels. The department submitted a summary of this work for consideration of an award with BIAZA and received a commendation. Other ongoing research includes the use of a thermography camera to detect seats of lameness in larger mammals, troponin as a marker of cardiac disease, assessment of UV light supply to a number of species, faecal hormone levels in the female giant anteater and the value of sainfoin as a food for forage.

On the international scene, ZSL took part in the formation of a new **Wildlife Health Conservation Programme**, which focused on enabling countries throughout the world to address the growing number of conservation-related wildlife health challenges. Meanwhile, Richard Kock completed a six-week consultancy in

Gondar, Ethiopia, to produce a wildlife health module for the University Veterinary Faculty. He also spent time in Gujarat State, India, on request of the state government and Indian Forest Department, to examine the problem of nilgai antelope, crop depredation and advise on potential solutions, including capture and translocation.

In May Nepal was declared a republic. Despite ongoing political upheaval the **Nepal Darwin Initiative** project produced a number of key outcomes, including: a major census of rhino (and invasive species); introduction of new policy initiatives on anti-poaching and rhino sanctuaries; and a revitalised education output in the Bardia National Park communities, including the development of a significant community theatre initiative in Nepal performed locally in Kathmandu and around the Terai parks, attracting many thousands of people. The play was also performed in London and at the World Conservation Congress in Barcelona.

Also in May, ZSL hosted an international symposium – ‘Avian Reintroduction Biology: Current issues for science and management’.

A second symposium was held later in the year – ‘Halting the Global Decline in Amphibians: Research and practice’.



Above Mjukuu, the new addition to *Gorilla Kingdom*

JUNE

Highlights

Corncrakes calling again

Hand-reared corncrakes, bred at ZSL Whipsnade Zoo, were successfully reintroduced at the Nene Washes reserve in Cambridgeshire. The distinctive call of this bird that had become scarce in England can now be heard again thanks to the successful breeding programme at ZSL.

Giant butterflies land at ZSL London Zoo



An exhibition showcasing giant butterfly prints, photographed in microscopic detail, revealing features like cells, hair and scales, launched in BUGS as part of National Insect Week.

Keeper swaps Father's Day for feathers day

ZSL London Zoo bird keeper Darren Jordan became a surrogate dad to three young owlets. The first-time father, who's worked at the Zoo for eight years, rescued the burrowing owl chicks from their underground nest box after heavy rains threatened to flood it.

For the first time in the **corncrake project**, chicks were blood-sampled for sexing. Eventually 94 chicks were released and 15 were kept behind for overwintering at ZSL Whipsnade Zoo for release next spring. The fantastic result of 14 males returning to the Nene Washes is hopefully the start of a sustainable population of corncrakes in South East England.

ZSL Whipsnade Zoo also saw the introduction of **meerkats**, in a new exhibit funded by Sir Donald Gordon. Four moved up from ZSL London Zoo, dubbed John, Paul, George and Ringo after the Fab Four.

Meerkats are extremely popular with schoolchildren, who flocked to both Zoos this year. In total, 102,388 pupils visited ZSL London Zoo during 2008.

This is a record and exceeded the previous record set in 2007 by 4%. Meanwhile, 33,698 pupils visited ZSL Whipsnade Zoo during 2008, an increase of 7% over 2007 figures. At ZSL London Zoo, 431 outreach sessions were delivered to 17,115 pupils at 137 schools from 16 Local Education Authorities. A small number of outreach sessions were also delivered from ZSL Whipsnade Zoo.

There was a big move at both Zoos to introduce more experiential **learning** sessions – to get out of the traditional classrooms and use the unique resources of the collections. At ZSL London Zoo, new sessions included a safari at *Into Africa*, a look at birds in the *Blackburn Pavilion*, and the use of teaching areas in the *Clore Rainforest Lookout*. The Zoos continued to offer an Edexcel A-level



Top Three burrowing owl chicks take a liking to their surrogate father **Above** A meerkat explores its new home at ZSL Whipsnade Zoo

course where students interact with 'real' scientists from the Institute of Zoology. A number of Animal Encounter days were run for schools from deprived areas. Classrooms at both Zoos were completely redesigned, with exciting new graphics, models and, at ZSL Whipsnade Zoo, lifesize animal banners.

Teaching training programmes were further developed at ZSL London Zoo, with sessions for Postgraduate Certificate in Education students and links with London University's Institute of Education.

Rosie Davison, a ZSL Education Officer, won the BIAZA annual award for the best formal education project for her work with a clinical psychologist on phobias. Commendations were received for the Edexcel programme and the Climate Change exhibit in BUGS.

A growing Discovery and Learning department needs funding and ZSL is pleased to report that the Mayor of London's scheme to fund visits by Greater London state schools entered a new three-year agreement in 2008. The new Mayor, Boris Johnson, strongly supports the scheme as did his predecessor, Ken Livingstone.

June was also the month of the **AGM and Sir Stamford Raffles Lecture**, delivered this year by Jeffrey Sachs, Director of the Earth Institute at Columbia University and Special Adviser to the UN Secretary-General. 'Common Wealth: Economics for a crowded planet' examined the challenges of sustainable development in the twenty-first century.

In addition, Scientific Meetings were held monthly throughout the academic year, covering diverse topics ranging from 'Shark Biology and Conservation' to 'Biodiversity and Oil Palm: Integrating science and policy' and 'Saving Africa's Athletes: Conserving cheetahs and wild dogs'. These increasingly popular meetings were extremely well attended by Fellows, conservation practitioners and scientists, and a lively programme of meetings is already underway for 2009. 🐾



JULY

Highlights

Health checks for the nation's frogs

ZSL and Froglife called on the public to look for and report sick and dead frogs in an attempt to expand research into the state of the nation's amphibians. The UK's amphibians are being affected by two significant diseases – ranavirus and the chytrid fungus. Ranavirus kills thousands of frogs, toads and newts in the UK each year and the chytrid fungus, implicated in extinctions of amphibian species around the world, has been identified in the UK.

Zoo Nights at ZSL Whipsnade Zoo

Dom the sea lion was the star of the show at Zoo Nights, which was his first late-night experience. Tiger talks, acrobatics and a breathtaking fire dance finale made for a memorable night.

ZSL works to understand strandings

ZSL veterinary pathologists were in the spotlight after 26 dolphins stranded around the south Cornwall coastline. Post-mortem examinations were carried out on 11 dolphins at the scene and more dolphins were transported back to the pathology lab for further investigation.

The Cornish **dolphin strandings** this month received huge media coverage, and this year the Cetacean Strandings Investigation Programme (CSIP), coordinated by ZSL and project managed by Rob Deaville and Paul Jepson, received significant funding from Defra to develop a web-accessed database to allow the integration of all data collected on strandings of cetaceans (whales, dolphins and porpoises) in the UK since 1990. The database will enable partner organisations to enter information on strandings directly via a web portal.

Elsewhere this month, ZSL contributed to the first-ever monitored translocation of **wild 'problem' tigers** for Indonesia (and only the second in the world) by lending our satellite radiocollar to the Indonesian government for use on one of two tigers translocated from Aceh.

Also in **Sumatra**, in 2008 ZSL established a base in Berbak National Park, Indonesia, and carried out exploratory survey work. Berbak is a peat swamp and extremely important for carbon sequestration. As well as basic protection and survey work in the park, ZSL is leading the Berbak Carbon Value Initiative, which is the subject of an application to Darwin for 2009-2012 and of a partnership with



Left Night-time at ZSL Whipsnade Zoo Centre Mountain chicken **Above** ZSL's Library is developing information resources

ERM Indonesia, which is assisting us with the politics and economics of the project. The goal is to establish a scientifically robust carbon-trading programme that will generate sufficient funds to run the national park as well as help Indonesia meet its emission reduction targets.

Each month, the **ZSL Library** runs an Artefact of the Month exhibition, and in July it was the turn of the landmark papers that launched Darwin and Russel Wallace's work to get the spotlight, celebrating 150 years since they were read to the Linnean Society.

During 2008, almost 2,500 books were added to the online catalogue at the Library, 3,500 journal issues were received and 3,600 loans were made to Fellows and ZSL staff. The online catalogue now lists more than 23,000 books and all our journal holdings. The catalogue was accessed almost 27,000 times during the year.

Through generous funding from the Michael Marks Charitable Trust, ZSL was able to install a 'Turning the Pages' kiosk in the *Blackburn Pavilion*, enabling visitors to digitally leaf through the pages of some of our most rare and delicate publications. 🔄

AUGUST

Highlights

Zoo Nights at ZSL London Zoo

Another fantastic night-time bash, showcasing the Zoo to an evening audience. With a popular bar area on the main lawn and regular talks and feeds to show off the gorillas, tamarins, penguins and hunting dogs, there was plenty for everyone to see and do.

First Green Fair at ZSL Whipsnade Zoo

ZSL Whipsnade Zoo was the place to have fun and learn about how to be green. The Zoo's first-ever Green Fair had plenty to inspire and inform, including green trails.

Excelsior turns 100

The *Jumbo Express* celebrated the 100th birthday of the engine *Excelsior* with a special time-warp trip featuring explainers dressed in period costume.

A cold spot where polar bears once roamed was heated up in August after becoming a new home to wallabies and emus. The Mappin Terrace, once home to ZSL London Zoo's polar bears, now plays host to the Zoo's very own **Outback** exhibit – marking a new phase for the historic landscape. The Terrace, built in 1913, has been transformed into a sweeping Australian plain and is home to a mob of more than 20 wallabies and four emus. The

exhibit demonstrates how difficult it is for animals to survive in harsh, dry conditions.

In 2008, major animal care **facility upgrades** were realised in the Reptile House and for the invertebrates at both Zoos. 2008 saw tropical butterflies re-established in the Discovery Centre, *Butterfly Paradise* refurbishment, a stick insect exhibit and improved aquatic exhibit quality. 🔄



Above The Mappin Terrace, once home to ZSL London Zoo's bears, now resembles Australia's outback, emus and wallabies included

SEPTEMBER

Highlights

Flexible elephants

The ZSL Whipsnade Zoo herd participated in a study with the Royal Veterinary College about elephant joints and demonstrated their flexibility and movement by enjoying a kick-about with giant pilates balls.

Okapi caught on camera for the first time

Camera traps set up by ZSL and the Congolese Institute for Nature Conservation (ICCN) in the Democratic Republic of the Congo (DRC) captured landmark pictures of the mysterious okapi in Virunga National Park – proving that the species is still surviving there despite more than a decade of civil conflict.

BIAZA awards

ZSL scooped a handful of BIAZA awards at the annual ceremony, taking away three awards for Best Field Conservation Project for Project Seahorse, Best Education Project for the development of the post-16 phobias session at ZSL London Zoo and Best PR Campaign for the *Blackburn Pavilion*. ZSL was also awarded seven commendations, including one for Best Sustainable Collection for the eco-friendly *Rhinos of Nepal* exhibit at ZSL Whipsnade Zoo.

During a special event hosted by Sir David Attenborough, ZSL scientists reported that half of Europe's **amphibians** could be extinct by 2050, due to factors including climate change, habitat destruction and disease, unless important steps were made in planning for future amphibian conservation. With generous support from Professor John Beddington, a new display was produced for the mountain chicken frog unit at ZSL London Zoo to highlight ZSL conservation and research into this species.

With **climate change** one of the main threats to amphibians, the Climate Change Impacts Group was particularly busy in 2008. The 'Climate Change

and Biodiversity' database was further developed and distributed, a ZSL site-based mosquito-monitoring project was implemented, a display at ZSL London Zoo on the effects of climate change was created, and ZSL was commended in the BIAZA awards for our climate change visitor engagement feature in BUGS.

Back on the amphibian front, there was ongoing research at the Institute of Zoology into *Batrachochytrium dendrobatidis*, the agent of **chytridiomycosis**, the disease that has caused amphibian species declines and extinctions around the world. The

research revealed the emergence of the pathogen in up to nine countries in Europe. A new Institute of Zoology collaboration with Zirichiltaggi SWC, a Sardinian-based NGO, led to the discovery of the pathogen in the endangered Sardinian brook newt. This discovery was cause for great concern, as the Sardinian amphibian fauna is the most distinct and highly endemic in Europe and *B. dendrobatidis* has the capacity to spread with alarming speed. Surveillance has now been established across Sardinia in order to monitor progress of the disease.

Following a three-month joint ZSL-ICCN survey of okapi and other wildlife of the Watalinga Forest in the northern sector of Virunga National Park, ZSL held a workshop in Goma to discuss the study's results and produce an action plan for okapi conservation in the park. This was detailed in a report published by ZSL, available at www.zsl.org/virunga, where you can also read the DRC project blog.

Over 300 of Britain's rarest ants were released back into the wild this month on Chobham Common, Surrey, after being reared in a specially-designed quarantine facility at ZSL London Zoo. **Red barbed ants** only survive on the Isles of Scilly and in Surrey and were reintroduced as part of a three-year project. By the end of the year it was confirmed that around 10 of the 20 released colonies were still surviving.

Additionally this month, the process of **Field Conservation Education** was included in the EDGE Fellows training course. The programme is a new

one, and it aims to help Conservation Programme Managers, and others throughout ZSL, integrate human elements into their conservation programmes and projects. Understanding the human elements of conservation is central to the success of almost all ZSL conservation projects and this is now a main strategic theme in the new ZSL Discovery and Learning Policy. ☺

It's a fact
Despite its size, the okapi was not discovered until 1901, by Sir Harry Johnston, who had strong connections with ZSL



ZSL held a workshop in Goma to produce an action plan for okapi conservation in the Virunga National Park



Top This was one of the very first photographs of an okapi in the wild, taken by camera trap during a joint ZSL and ICCN survey in the northern Virunga National Park **Left** EDGE Fellows get together **Right** Sir David Attenborough draws attention to the plight of amphibians worldwide

OCTOBER

Highlights

New fish species discovered in the Thames

ZSL discovered a new species of fish in the tidal Thames – the greater weever fish. The fish was found as part of a two-year monitoring programme looking at fish populations.

New hope for the red squirrel

Scientists at ZSL discovered that a number of red squirrels have developed an immune response to the squirrelpox virus, responsible for huge declines in red squirrel populations.

New home for Kenyan rhinos

A milestone was reached in Kenyan black rhino conservation when the Tsavo Intensive Protection Zone was set up and a free-ranging rhino population was re-established in the park by the Kenya Wildlife Service (KWS), ZSL and partners.

In addition to the discovery of the fish species in the Thames, an MSC research project was completed on the population increase of pipefish in the **Thames Estuary** linked to the population explosion in the North Sea. Further afield, **Project Seahorse**, BIAZA Best Field Conservation Project, also gained a further £40,000 from BBC *Saving Planet Earth* to support 'Rapid Assessment of Seahorse Populations and Habitats Across the Danajon Bank (central Philippines) for Conservation Action'. Heather Koldewey and Alison Debney co-hosted a well-attended scientific meeting at ZSL on UK seahorse and pipefish populations. A series of posters on Project Seahorse's work in Europe was presented, and the documentary film featuring research by its biologists was awarded the Algarve Maximus Award for the media category.

Other fish projects included the Darwin Initiative Sustainable Management of Ornamental Fish in Mamiraua, Brazil, where ZSL is assessing the feasibility of a sustainable trade in ornamental

fish, and a workshop on sustainable acquisition in aquariums at the International Aquarium Congress in Shanghai. In addition, the 11th annual Reef Conservation UK conference was hosted by ZSL.

October was the month that the 2008 IUCN Red List of Threatened Species was released, and showed that at least 1,141 of the 5,487 mammals on Earth are known to be threatened with extinction. ZSL's own **Indicators and Assessments Unit** is directly linked to these issues, and work there in 2008 continued to provide clear evidence of how practical objectives can be underpinned by good-quality research. The unit facilitated the addition of 4,850 newly assessed species to the IUCN Red List, enhancing knowledge of poorly known groups of animals, and setting a baseline from which biodiversity decline can be more accurately gauged.

The development of scientifically robust global biodiversity indicators is essential to provide the information that

underpins national and international conservation planning towards the Convention on Biological Diversity and UN Millennium Development Goals. To further this work, Jonathan Baillie and Ben Collen were awarded £184,800 from the Rufford Maurice Laing Foundation to fund the project 'Delivering the IUCN Red List of Threatened Species and Global Biodiversity'. A website with an online database will also be established for Regional Red Lists, to support nations in understanding the conservation of biodiversity in their countries and at a regional level. The Esmée Fairbairn Foundation also awarded Jonathan Baillie and Ben Collen £271,950 to fund the IUCN Sampled Red List Index.

Finally, in the Democratic Republic of Congo, ZSL's Tim Wachter conducted a two-and-a-half-week training course in **mammal identification**, which was attended by rangers from Virunga National Park. ☺



Top Pumpkins were a great treat in *Gorilla Kingdom Above*. A monitoring programme in the Thames revealed a new species



NOVEMBER

Highlights

ZSL breeds rare snake for the first time

Zookeepers at ZSL London Zoo captured on camera the moment a rare rhino rat snake emerged from its shell. This is the first time that this species of snake has been bred in a European zoo and has greatly helped with the captive breeding programme.

ZSL opens photo archives

Elephant rides through Bedfordshire are just one of the incredible images featured in historic photos released from the ZSL photo archive. The images are on sale through the ZSL print store at www.zsl.org/printstore.

Model helicopter catches whale blows

The inventive work of a scientist from ZSL was showcased on a major BBC TV series, *Oceans*. The innovative method of looking for whale diseases by flying a toy helicopter over whales' blows to collect the gases and mucus that they exhale is groundbreaking. Scientists can use the samples to find out what pathogens are being carried.

Above From ZSL archives: two camels and an elephant are walked through Dunstable on their way to Whipsnade in 1932

ZSL's Jakob Bro-Borgensen discovered this month that **male eland antelopes** use a novel approach to entice females. Not content with the usual muscle flexing, they click their knees. The signal is used to establish mating rights among the males, without the need to resort to physical fights. Also in November, Jon Bielby organised and attended the annual **swift nest box** check at BUGS.

As the year drew to a close, it became clear that ZSL's **technical support** is in much demand. Technical partnerships were initiated with zoos in Ghana and Nepal, with MoUs prepared for a five-year programme, while discussions and planning continued for a proposed Centre of Excellence in Ghana. ZSL provided technical support to a number of other zoos too, including Giza Zoo, Kabul Zoo and Lahore Zoo, through correspondence and visits. Funding was obtained from the Universities Federation for Animal Welfare (UFAW) for a project in the Zanzibar islands. With the European Association of Zoos and Aquaria (EAZA) Technical Assistance and Animal Welfare Committee, Nick Lindsay contributed to programmes in Romania as well as in Belgrade Zoo. 🐾

DECEMBER

Highlights

Review of the academic departments

December saw the release of the results of the government's 2008 Research Assessment Exercise (RAE). The RAE is a six-yearly review of the quality of all UK academic departments and the Institute of Zoology received an excellent score of 2.55, higher than comparable departments at top universities including Bath, Durham, Liverpool and University College London. This score reflects the exceptional quality of research being carried out at the Institute of Zoology.

Adopt a zookeeper in time for Christmas

For the first time ever, two of ZSL London Zoo's zookeepers were put up for adoption to help raise extra funds for animal conservation. Mark Habben and Darren Jordan joined the likes of Lucifer the lion and proved to be successful adoption candidates.

Keepers' Little Helpers return

The keepers at ZSL Whipsnade Zoo were given a helping hand to prepare festive treats for all of the animals at the Zoo. Every weekend throughout December, young visitors were able to become a Keeper's Little Helper and make a unique Christmas treat for a chimp.

There was sad news at the end of the year when Bobby, the male silverback gorilla, died overnight after a number of periods of ill health throughout the year. ZSL was overwhelmed at the response it received from the public.

In Russia, our three-year Darwin grant for **Amur leopards** and Wildlife Health finished on 31 December, although work on sampling continued until the end of March 2009 with additional funds. A major achievement here was the renovation of a wildlife diagnostics laboratory owned by project partner the Primorskii State Agricultural Academy.

ZSL London Zoo opted for a less traditional approach to **Christmas 2008**

and hosted 'Jungle Bells' – a celebration of all things tropical. The explainers led a fun-packed new stage show, and visitors were encouraged to bask in the humid weather of the *Clare Rainforest Lookout*, *Blackburn Pavilion* and *Butterfly Paradise*.

ZSL recognises outstanding achievements in conservation and zoological research through the presentation of **awards and prizes** throughout the year, and we round off our review of 2008 by congratulating the many people out there who are actively furthering our understanding and protection of the natural world around us. The awards are relevant to all levels of achievement, from the Prince

Right Mark Habben, seen here with a kestrel, was one of the adoptable keepers for Christmas

Philip Award and Marsh Prize for best sixth-form project (won by Anthony Ng) and Charles Darwin Award for best undergraduate thesis (Janet Maclean) to the Thomas Henry Huxley Award and Marsh Prize for an exceptional PhD thesis (Dr Tim Hawes). Significant and original contributions by professional zoologists are acknowledged with the Scientific Medal (Professors Tim Coulson and Sunetra Gupta) and Frink Medal (Professor Tom Cavalier-Smith), while the work of eminent amateur zoologists is celebrated with the Stamford Raffles Prize (Professor Ted Benton). The Marsh Awards for Conservation Biology

ZSL recognises achievements in conservation and research through its presentation of awards

(Dr Stuart Butchart) and Marine and Freshwater Conservation (Dr Simon Jennings) recognise exceptional contributions of fundamental science and its application to the conservation of animal species and habitats. The Thomson Reuters/Zoological Record Award (Dr Matthew Cobb) and ZSL's Silver Medal (Ian Andrews, representing the Scottish Ornithologists' Club) are awarded for distinguished contributions to the communication, understanding and appreciation of zoology and wildlife conservation. We would like to thank the Marsh Christian Trust and Thomson Reuters for their continued support of ZSL's awards.

The prestigious ZSL Gold Medal was awarded to Dame Vivien Duffield DBE in recognition of her, and her family's, long-standing and continuing support of ZSL and ZSL London Zoo. The ZSL Honorary Fellowship was awarded to Professor John Beddington CMG FRS, Government Chief Scientific Adviser and Head of the Government Office for Science. ♻



It's a fact

Although keepers are no longer up for grabs, there are at least 17 different animals at ZSL's two Zoos that can now be adopted



ZSL Scientific Awards From left to right: Brian Marsh OBE (Marsh Christian Trust), Ian Andrews, Professor Ted Benton, Dr Simon Jennings, Janet Maclean, Professor Sir Patrick Bateson FRS, Dr Stuart Butchart, Professor Tom Cavalier-Smith FRS, Dr Tim Hawes, Dr Matthew Cobb, Professor Sunetra Gupta, Nigel Robinson (Thomson Reuters), Professor Tim Coulson, Ruth Upsall (Concord College)

ZSL has achieved plenty of success in 2008, but there is still so much more to be done. Here we take a look at how we plan to take our work into 2009 and beyond.

Looking ahead

From 2009 ZSL will continue to build upon the strategic aims established in 2008. At ZSL London Zoo, the new children's zoo, *Animal Adventure*, has been launched with great success. *Animal Adventure* gives children the chance to immerse themselves in the sights, sounds, smells and experiences of life in the animal kingdom. Meanwhile at ZSL Whipsnade Zoo, the *Big 5* is a celebration of five large and amazing mammals.

While the Zoos increase awareness of wildlife and the issues it faces, ZSL's conservation and scientific teams will continue to explore and protect that wildlife across the globe. To showcase just two examples, ZSL will be supporting the Bangladesh government in its Tiger Action Plan through 2009/10.



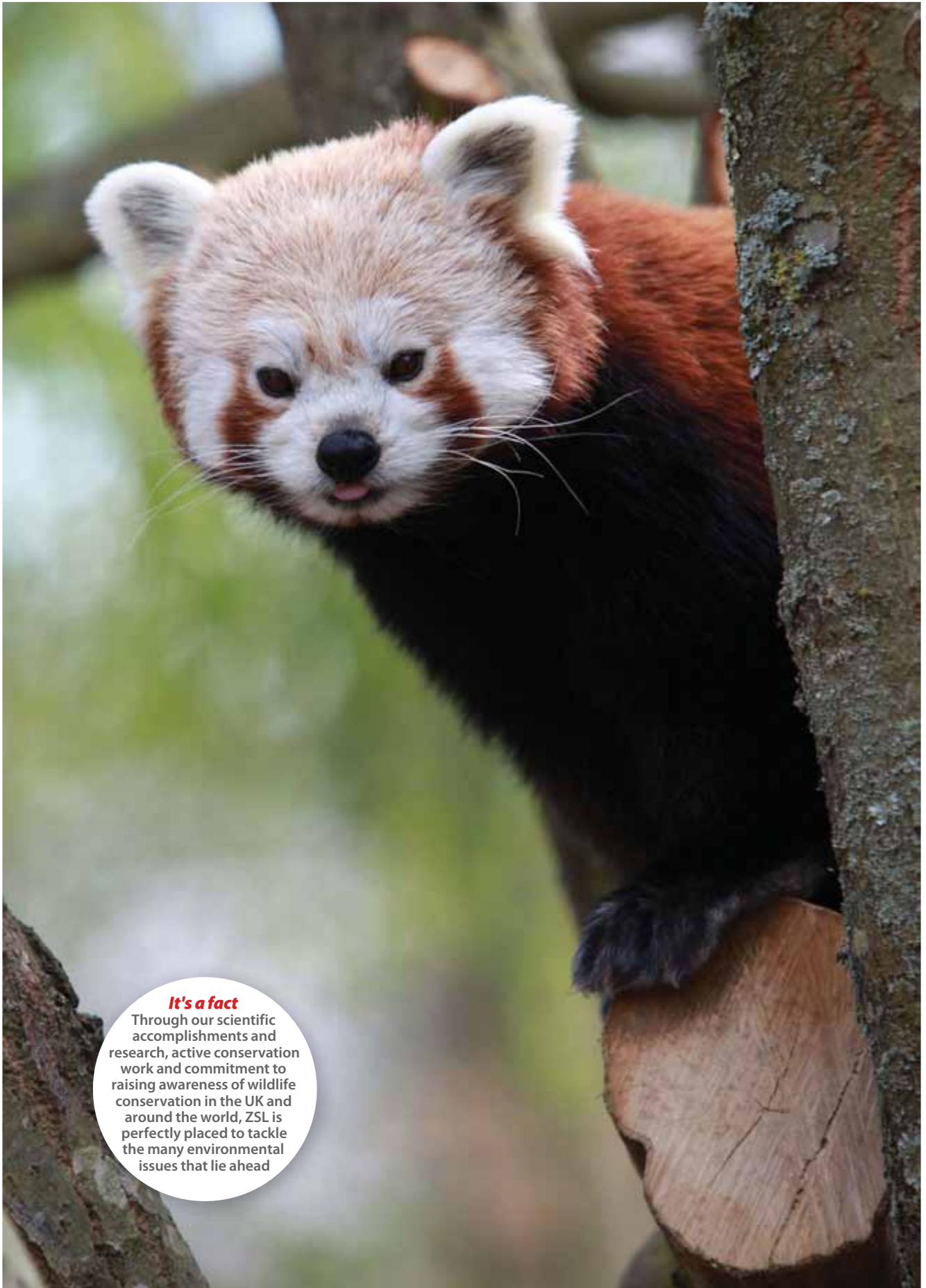
We will also be helping Thailand incorporate our elephant conflict project into the country's environmental plans from 2009 to 2011. In both cases, ZSL's work will be directly impacting the conservation of endangered species at a national level.

In addition:

- By raising our charity profile and improving our customer service, we will maximise our opportunities to generate funds while further striving to improve our cost efficiency.
- The new corporate communication strategy will renew the emphasis on amphibian decline, the state of our oceans and Thames Estuary conservation.
- We will continue our commitment to field conservation initiatives, with focus on the South Asian Vulture Recovery Programme, gorillas in Central Africa and EDGE top 100 priority species.
- Priorities for action in the Zoos are the Galapagos tortoise exhibits at ZSL London Zoo and the improved brown bear enclosure at ZSL Whipsnade Zoo.

- Engaging tomorrow's decision-makers will be a major focus, building on *Animal Adventure* and the launch of a children's zone on the website.
- We will improve visitor experience through better customer care and a new customer relationship database.
- Scientific priorities for the year will continue to include wildlife health and disease, behavioural and population ecology, and The Bushmeat Research Programme.
- We will play an active role in the celebration of Darwin's bicentenary and through this we will enhance our on-site communication of science, in addition to a special programme of scientific meetings, symposia and awards.
- These achievements will only be possible with the continued hard work and dedication of staff and volunteers. To support this we will be continuing training and offering a professional qualification programme.

Left Elephants in Thailand will continue to get our support **Right** Red pandas are just one of the many attractions at *Animal Adventure*



It's a fact

Through our scientific accomplishments and research, active conservation work and commitment to raising awareness of wildlife conservation in the UK and around the world, ZSL is perfectly placed to tackle the many environmental issues that lie ahead

Financial information

ZSL recorded a consolidated surplus on operations of £0.7m, but an overall deficit of £0.3m after £1m losses on the revaluation of investments. These compare with figures of £3.5m for operating surplus and overall surplus achieved in 2007, with only minimal losses on investments. The actuarial loss on the Pension Fund was £4.1m (2007 no loss or gain). This leaves Net Movement in Funds as a deficit of £4.4m.

ZSL remains dependent on its two Zoos for the bulk of its income. In 2008, ZSL London Zoo visitor numbers were 1,039,030, a decrease of 69,511 (6.3%) on the previous year, which was the highest for 15 years. ZSL Whipsnade Zoo visitor numbers were 468,669, a decrease of 6,953 (1.5%) on the previous year, also the highest for 15 years. The total number of visitors for the two Zoos was 1,507,699 (2007 1,584,163).

Income figures benefited from Gift Aid recoveries on day membership, which amounted to just over £1.9m (2007 £1.8m), and in total on all sources of income £2.2m (2007 £2.1m).

Both the Institute of Zoology and conservation programmes maintained their revenues with new grants received in 2008, but these related to specific projects and, while supporting the mission of the Society, they do not add to the overall surplus to fund future development.

Our costs rose compared to 2007, in areas that included utilities, maintenance, depreciation and revenue

expenditure on new and existing facilities to improve the effectiveness of ZSL, as well as general wage and inflation rises.

The total capital spend of £6.4m (2007 £7.9m) included: completion of the new 2008 exhibits – *Blackburn Pavilion* (Tropical Birds) and *Outback* at ZSL London Zoo and *Cheetah Rock*, *Rhinos of Nepal* and Wild Bite Café at ZSL Whipsnade Zoo; continued commitment to improving the Society's compliance to the Disability Discrimination Legislation and its sustainability profile; and significant progress on the *Animal Adventure* exhibit which opened at ZSL London Zoo in spring 2009.

As a result of the stock market turbulence during the credit crunch and economic downturn, the value of investments held in ZSL's Pension Fund decreased significantly and the fund fell into a deficit position. The pension scheme deficit of £0.4m (2007 £3.4m asset) will be held within ZSL's unrestricted Pension Reserve. This leaves the Society's overall General (Free) Reserves at £4.9m. The ZSL Trustees increased the funding to 13% in 2008 and further to 15.5% from 1 January 2009 to fund future liability levels. This will continue to be monitored by ZSL and the Pension Fund trustees on a regular basis.

Our main trading subsidiaries, Zoo Enterprises Ltd and Whipsnade Wild Animal Park Ltd, continued to produce results in accordance with Trustees' expectations. The investment in the

refurbishment and expansion of Wild Bite Café (formerly Café on the Lake) at ZSL Whipsnade Zoo was completed on time and has increased both capacity and our ability to produce improved food choices. Early results are very encouraging.

Trustees' statement accompanying the group summarised financial statements

The group summarised financial statements are not the statutory accounts but a summary of information relating to the group statement of financial activities and the group balance sheet. The full Trustees' Report and financial statements, from which the summarised financial statements are derived, have been externally examined by Baker Tilly UK Audit LLP and its audit report on them is unqualified. The full Trustees' Report and financial statements and Baker Tilly UK Audit LLP's audit report on them were approved on 21 April 2009 and 27 April 2009 respectively and will be submitted to the Charity Commission. Copies can be obtained from the Finance Director at The Zoological Society of London, Regent's Park, London NW1 4RY.

Signed on behalf of the Trustees on
27 April 2009.



Paul Rutteman CBE BSc (Econ) FCA
Treasurer

Group Summarised Financial Statements

Summary group statement of financial activities for the year ended 31 December 2008

	Year to 31.12.08 £000	Year to 31.12.07 £000
Incoming resources		
Incoming resources from generated funds:		
Voluntary income	2,727	2,775
Activities for generating funds:		
Subsidiaries' trading turnover	9,763	10,009
Other	26	12
Interest and investment income	842	1,043
Incoming resources from charitable activities:		
Animal collections	20,053	21,080
Science and research	4,583	4,170
Conservation programmes	1,753	1,018
Other incoming resources – <i>Biota</i>	539	-
Total incoming resources	40,286	40,107
Resources expended		
Cost of generating funds:		
Costs of generating voluntary income	604	591
Fundraising trading:		
Subsidiaries' costs of goods sold and other costs	7,093	6,941
Other	958	865
Investment management costs	28	31
Charitable activities:		
Animal collections	22,220	21,237
Science and research	5,264	4,710
Conservation programmes	2,646	2,062
Governance costs	159	166
Other resources expended – <i>Biota</i>	615	-
Total resources expended	39,587	36,603
Net incoming resources before other recognised losses	699	3,504
Other recognised losses:		
Loss on investments	(972)	(8)
Actuarial loss on pension scheme	(4,100)	-
Net movement in funds	(4,373)	3,496
Reconciliation of funds		
Total funds balance brought forward	50,167	46,671
Total funds balance carried forward	45,794	50,167

The above results are in respect of continuing operations.

No statement of total recognised gains and losses has been prepared as all such gains and losses have been included above.

Group Summarised Financial Statements (continued)

Summary group balance sheet at 31 December 2008

	31.12.08	31.12.07
	£000	£000
Fixed assets		
Tangible assets	35,573	32,294
Investments	2,862	3,902
	38,435	36,196
Current assets		
Stocks	571	485
Debtors	2,933	3,492
Cash at bank and in hand	8,894	11,365
	12,398	15,342
Creditors: amounts falling due within one year	(4,629)	(4,697)
Net current assets	7,769	10,645
Total assets less current liabilities	46,204	46,841
Creditors: amounts falling due after more than one year	(10)	(74)
Net assets excluding pension scheme (liability)/asset	46,194	46,767
Defined benefit pension scheme (liability)/asset	(400)	3,400
Net assets	45,794	50,167
Funds		
Unrestricted – General	4,949	37,673
– Designated	35,596	3,707
Unrestricted funds excluding pension (liability)/asset	40,545	41,380
Unrestricted – Pension reserve	(400)	3,400
Total unrestricted funds	40,145	44,780
Restricted – Endowments	986	1,220
– Other	4,663	4,167
Total funds	45,794	50,167



Independent Auditor's Statement to the Trustees of The Zoological Society of London

We have examined the group's summarised financial statements set out on pages 33 to 34.

Respective responsibilities of Trustees and Auditors

The Trustees are responsible for preparing the summarised financial statements in accordance with the recommendations of the charities Statement of Recommended Practice (SORP).

Our responsibility is to report to you our opinion on the consistency of the summarised financial statements within the summarised Annual Report, with the full annual financial statements and its compliance with the relevant requirements of the charities SORP.

We also read the other information contained in the summarised Annual Report and consider the implications for our report if we become aware of any apparent misstatements or material inconsistencies with the summarised financial statements.

Basis of opinion

We conducted our work in accordance with Bulletin 1999/6 'The Auditors'

statement on the summary financial statement' issued by the Auditing Practices Board. Our report on the charity's full annual financial statements describes the basis of our audit opinion on those financial statements.

Opinion

In our opinion the summarised financial statements are consistent with the full financial statements of The Zoological Society of London for the year ended 31 December 2008 and comply with the recommendations of the charities SORP.

We have not considered the effects of any events between the date on which we signed our report on the full annual financial statements (27 April 2009) and the date of this statement.

Baker Tilly UK Audit LLP

Baker Tilly UK Audit LLP
Chartered Accountants
1st Floor, 46 Clarendon Road
Watford, Herts WD17 1JJ
27 April 2009

ZSL would like to extend thanks to all our supporters, Members, Friends, Fellows and volunteers for their invaluable contribution and commitment in 2008. We simply could not carry out our vital work without your ongoing dedication and support. Special thanks go to those mentioned on these pages.

Thank you for your support

The Development Advisory Committee

Professor Sir Patrick Bateson FRS
Lord Moser
Max Alexander
Professor John Beddington
The Countess of Chichester
Dr David Cohen CBE
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Stamford Galsworthy
Sue MacGregor
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Honorary Patrons

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Corporate Supporters and Members

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Greggs plc
HA Bennett and Sons pty
Heath Lambert
Mitsui Sumitomo
RWE npower

Statutory and other grant-making bodies

Big Lottery Fund International
Communities Programme
Department of Environment, Food and
Rural Affairs (Defra)
Environment Agency
European Commission
Heritage Lottery Fund (HLF)
Mayor of London
Ministry of Nature and Environment
Natural Environment Research
Council (NERC)
New Zealand Department
of Conservation
The World Bank
United States Fish and Wildlife Service
Asian Elephant Conservation Fund
United States Fish and Wildlife Service
Without Borders



Above The Blackburn family mark the opening of the *Blackburn Pavilion* after generously supporting its redevelopment

Trusts and Foundations

Alan Evans Memorial Trust
 Ambika Paul Foundation
 Bat Conservation Trust
 BBC Wildlife Fund
 Cecil King Memorial Foundation
 The Charities Advisory Trust
 Clore Duffield Foundation
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 Conservation Fund
 The Leslie Mary Carter
 Charitable Trust
 Leverhulme Trust

Michael Marks Charitable Trust
 The National Bird of Prey Trust
 Ocean Park Conservation Foundation
 (Hong Kong)
 Panton Trust
 People's Trust for Endangered
 Species (PTES)
 Rose Foundation
 Rufford Maurice Laing
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 Miss Gladys Winifred Pyman
 Mr Leonard Ashby Monk
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 Marion Towler

Individuals

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 David Allen and Judy Joo
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 Professor John Beddington
 David Blackburn
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 Sir Donald Gordon
 Lady Hobson
 Jay Patel
 Lady Pelham
 Bob and Sarah Rihal
 Armins and Cynthia Ruis

Further thanks

ZSL would also like to thank all of our supporters who could not be named individually and to those who specifically wish to remain anonymous

Non-governmental organisations, societies, zoos and universities

Adelaide Zoological Gardens
 Antwerp Zoo
 Association for the Study of Animal
 Behaviour (ASAB)
 Auckland Zoo
 Australasian Regional Association of
 Zoological Parks and Aquaria
 Blackpool Zoo
 Boise Zoo Conservation Fund
 British Ecological Society
 Cambridge Infectious Diseases
 Consortium (CIDC)
 Centre for Ecology and Evolution
 Chester Zoological Gardens
 Copenhagen Zoo
 Deakin University, Melbourne,
 Australia
 Edith Mary Pratt Musgrave Fund
 (University of Cambridge)
 Environment Canada
 Hull City AFC
 Minnesota Zoo Foundation
 National Centre for the Replacement,
 Refinement and Reduction of Animals
 in Research
 Natural History Museum
 National Institute of Water and
 Atmospheric Research, New Zealand
 The Royal Society
 Shepreth Wildlife Park
 St Louis Zoological Park
 United Nations Environment
 Programme (UNEP)
 The Universities Federation for
 Animal Welfare
 Utah Zoological Society
 World Wildlife Fund (WWF)
 Zebra Foundation for Veterinary
 Zoological Education

As a charity, we are dependent on the generosity of our supporters. There are many ways to get involved and ZSL offers unique benefits in return. For information visit www.zsl.org or contact the ZSL Development Team on 020 7449 6583 or fundraising@zsl.org.

How you can support us

Project support

■ Abbey National plc funded the tipi at *Animal Adventure*



Become a patron

■ Patrons enjoy exclusive insights into ZSL, including a special events programme



Corporate promotion

■ Haven Holidays promotes the importance of conservation to its customers



Trust and statutory support

■ The Mayor of London's free school visits programme continues to go from strength to strength

Unique events

■ Mitsubishi organised an employee volunteering day

Individual support

■ Dame Vivien Duffield DBE received ZSL's Gold Medal in recognition of her, and her family's, support of ZSL London Zoo through the Clore Duffield Foundation

Our Vision

A world where animals are valued,
and their conservation assured.

Our Mission

To achieve and promote the
worldwide conservation of
animals and their habitats.

If you are a company you can get involved in:

- licensing and promotion
- project sponsorship
- event sponsorship
- employee fundraising
- cause-related marketing
- corporate hospitality

If you are an individual you can:

- sponsor an exhibit, a scientist, or a conservation project
- become a Patron
- become a Member or Fellow
- sign up for payroll giving
- take part in one of our challenge events
- become a volunteer
- leave us a gift in your Will

How we can support you in return:

- unrivalled experiences
- access to amazing venues, including our world-famous Library
- visits to field conservation projects
- private previews of new Zoo exhibits
- insights into the minds of our world experts in conservation
- rare animal encounters
- exclusive Patron benefits
- unique events
- the chance to learn about our pioneering conservation science
- commercial benefits such as positive corporate image
- enhanced consumer loyalty
- increased brand awareness
- motivated company staff

Patron

Her Majesty The Queen

Council members 2008

The following were Council members at 24 April 2009 or served during the year to 31 December 2008.

President Professor Sir Patrick Bateson PhD ScD FRS

Secretary Professor Paul H Harvey CBE BA MA DPhil DSc FRS

Treasurer Paul Rutteman CBE BSc (Econ) FCA

Vice Presidents

Sheila Anderson MBE BSc (Hons) FBAASc

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BSc DCoun FLS FRUSI

Robin Bidwell* CBE PhD

Jonathan Boyce DM MA MSc

FRCP FFPH

Martin Cooke MSc MA VetMB MRCVS

Cert VPH(MH)

David Dixon FIBiol

Andrew Greenwood+ MA VetMB

DipECAMS FIBiol FRCVS

Ray Heaton CertEd BEd GIBiol MSc

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Martin Rowson MA

Anthony Sheridan* BSc (Econ)

Ken Sims

Robert Wingate MSc

Professor Roger Wotton+ PhD

+ to June 2008

* from June 2008

Directors

Director General

Ralph Armond MA

Human Resources Director

Ian Meyrick BA FCIPD

Development Director

Jackie Tanner BSc

Finance Director

Mike Russell FCMA

Director of the Institute of Zoology

Tim Blackburn BSc DPhil

Marketing and Communications Director

Rich Storton MA

Conservation

Programmes Director

Jonathan Baillie BA MES PhD

Zoological Director

David Field BSc MBA

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Editor: Malcolm Tait **Designer:** Ewan Buck

Sub-editor: Marion Thompson

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Director General's Office 020 7449 6207

Membership 020 7449 6228

Library 020 7449 6293

ZSL London Zoo 020 7722 3333

ZSL Whipsnade Zoo 01582 872171



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c/o Lucy Cannock
Zoological Society of London
Regent's Park
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