



ANNUAL REVIEW

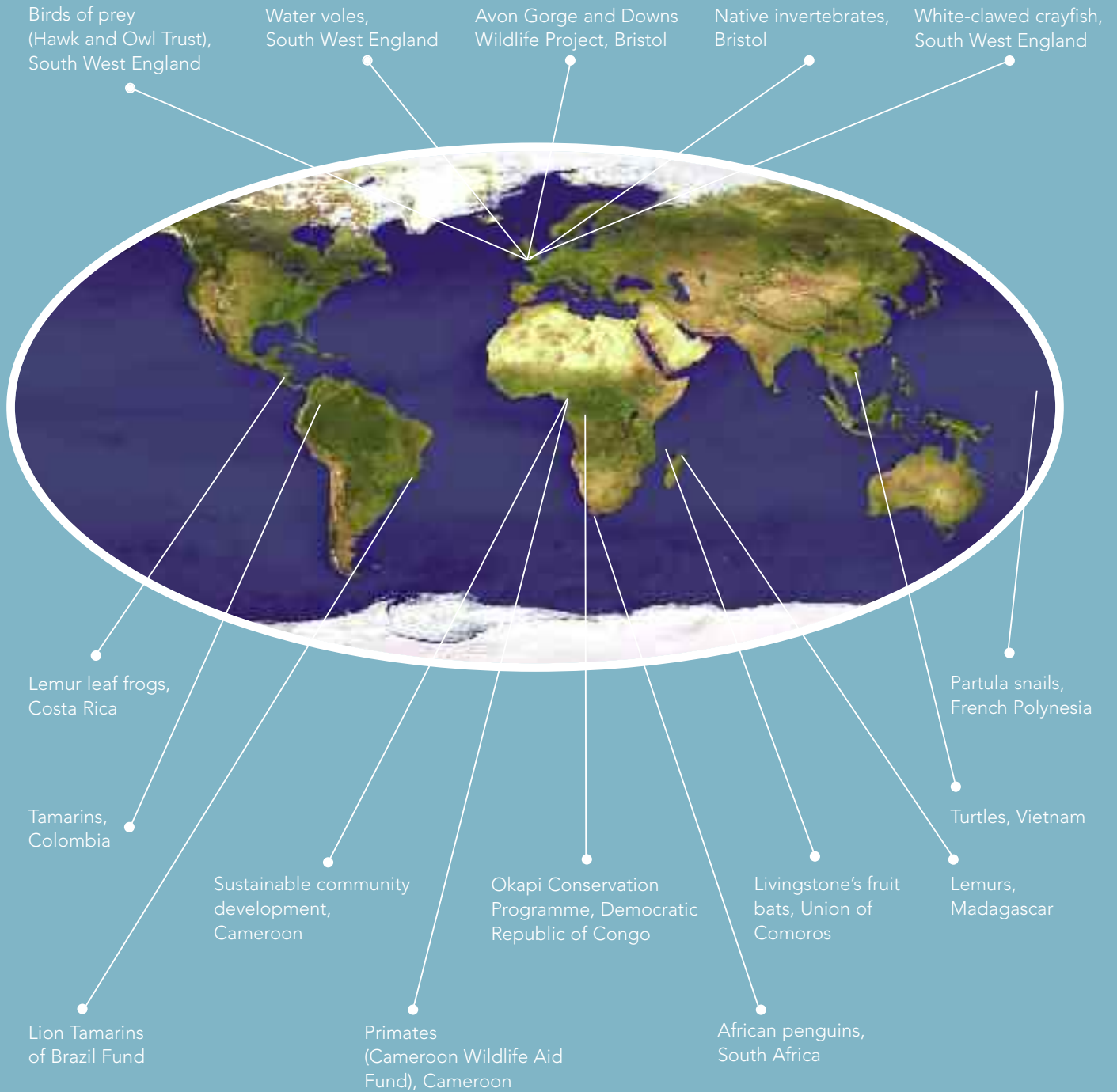
for the year ended 31st December 2008

Bristol, Clifton and West of England
Zoological Society Ltd



a conservation and education charity

Field conservation projects 2008



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The Zoo's first Bangless Bonfire Night.



2008 once again saw us winners of a Bristol in Bloom award.



a conservation and education charity

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Chair of Trustees' foreword

It is my pleasure to be able to introduce the 2008 Annual Review and comment briefly upon the Society's achievements during the year across the wide range of its activities.



Martin Davies Jones

In September, we submitted the detailed planning application for the National Wildlife Conservation Park project at Cribbs Causeway and we are hopeful that planning permission for the project will be granted later this year. During the year, we were granted a separate planning consent, which in effect secures the means of access to the Park, thus resolving what might otherwise have proved to be a major issue in determining the full detailed application. An immense amount of work went into the preparation of the planning application and our thanks must go out to all those involved, not least to the benefactor whose generous gift enabled us to complete the design.

In the Zoo Gardens, attendances have held up well notwithstanding another poor summer and the current economic malaise. Butterfly Forest has proved to be a popular new exhibit and demonstrates what can be achieved for a relatively modest outlay. This year's programme of evening and other special events included not one but three evenings with John Cleese which provided valuable funds for our Foundation projects, as well as much entertainment and amusement for all those who attended the events. We are very grateful to John for his continued interest and support.

In October, we officially launched the Bristol Conservation and Science Foundation, our Operating Unit responsible for our fieldwork and research. Research, both in the zoo and in the field, continued to develop. In the

field, we employed our first overseas field officer increasing our efforts to save the critically endangered Livingstone's fruit bat in the Republic of Comoros, and continued to expand our other overseas projects. We also increased our investment in native species conservation and are expanding our focus to include a major project on the endangered white-clawed crayfish in the South West.

The current year is bound to be difficult since the fortunes of the Zoo undoubtedly run in parallel with the prevailing economic climate, but the Society is well prepared to deal with whatever may come our way.

In closing, I must, as always, thank on behalf of the Trustees all of those involved in the running of the Society's activities for their efforts over the past year.

Martin Davies Jones
Chairman of Trustees
30th March 2009

Director's report

The Bristol, Clifton and West of England Zoological Society Ltd



Jo Gipps

The Society's Mission is to maintain and defend biodiversity through breeding endangered species, conserving threatened species and habitats, and promoting a wider understanding of the natural world.

The Society's Charitable Objects (as stated in its Constitution) are to advance:

- a) the public understanding and the conservation of wildlife and the natural environment; and
- b) the scientific study of plants and animals.

The Society is the overarching governing body for its three Operating Units – Bristol Zoo Gardens (BZG), the Bristol Conservation and Science Foundation (BCSF) and the proposed National Wildlife Conservation Park (NWCP). The Society also has a trading subsidiary, Bristol Zoo Enterprises Ltd (BZE).

Bristol Zoo Gardens' vision is to be the best city zoo in the world for fun, for families and for young people to build the foundations of wildlife and conservation awareness.

The Bristol Conservation and Science Foundation's vision is to be an internationally recognised authority on wildlife conservation and science, in the context of sustainable development.

The National Wildlife Conservation Park's vision is to be the world's leading wildlife conservation-led visitor attraction and Europe's centre for conservation action and leadership, mobilising and harnessing mass action to conserve biodiversity and the natural environment.

Our objectives for 2008 and plans for 2009

Bristol, Clifton and West of England Zoological Society Limited

In the Annual Review for 2007, we said 'we will again aim to improve financial performance against budget and against 2007. We will develop departmental short-term action plans and medium-term strategies that show how the Society's 10 year Strategic Plan will be put into effect.'

In 2008, we had another difficult year, largely the result of poor weather in July and August and the economic crisis that afflicted everyone towards the end of the year. We developed and completed departmental medium-term action plans to deliver the Society's Strategic Plan published in 2007.

In 2009, we will once again aim to improve our financial performance against budget and against 2008. Given the extremely poor financial climate prevailing at the end of 2008, tough budgets have been set for all parts of the Society.

Bristol Zoo Gardens

In the Annual Review for 2007, we said 'we will build and market a major new attraction for visitors (Butterfly Forest). We shall continue to market the zoo as a great family day out, building on our vision for BZG. We shall continue to expand our daily and special events for visitors focusing on increasing visitor numbers, dwell times and spends per head. We shall appoint a permanent Head of Human Resources to build on the valuable work done in 2007.'

Director's report (continued)

In 2008, we opened the new Butterfly Forest on time and on budget, and this has proved hugely popular with our visitors. The new building is heated with biomass boilers and during the year we have continued to develop our sustainability agenda, including the drafting of a sustainability manifesto for the Society and continuing work by the Green Team on ISO 14001 matters. Like all outdoor visitor attractions, we were again hit by poor weather in the middle of the summer, but better performance in the latter half of the year has helped to pull some of that deficit back. The Volunteer and Presentations Teams, both part of the Learning Department, now co-ordinate all daily activities in the Zoo including enclosure talks, the Amazing Animals presentations, the management of the Lemur and Butterfly walk-throughs and the management of seals. We appointed Sue Gregory as our permanent Head of Human Resources.

In 2009, we shall open 'Explorers' Creek', a new combined set of interactive experiences and exhibits, including Splash, (a wet play area), Feed the Lorikeets, Forest of Birds and a revamped play area with new catering facilities. The Presentations Team will continue to develop their repertoire, including new animals and more shows. We will finalise our five-year business and financial plan and our 10-year Masterplan, enabling us to prepare for building a major new animal exhibit in 2010/2011.

Bristol Conservation and Science Foundation

In the Annual Review for 2007, we said 'we shall continue to develop our major programmes in Cameroon and the Comores. We propose to reinvigorate our involvement in a project on penguins in South Africa and will continue to develop proposals for field projects and research to link with BZG and NWCP exhibits. In the case of NWCP exhibit areas in particular, we shall start the process of liaison with local NGOs, developing partnerships to start field projects in the ecosystems illustrated by the exhibits. We will continue to extend our research programmes and look for further national and international partners.'

In 2008, our projects in Cameroon continued to develop strongly, particularly the United Nations Environment Programme (UNEP)-funded community engagement project in the Dja biosphere reserve in South East Cameroon. Hugh Doulton, our new permanent Field Officer in the Comores, started to work with local communities developing alternative sources of income (e.g. market gardens) to help alleviate the pressure on forests and therefore fruit bats; this project is now entering its second year and we believe has a bright future to act as a model for similar projects elsewhere in the world. As predicted, our project on penguins in South Africa has gained new momentum, particularly investigating the site fidelity of penguins and their responses to recent changes in food availability (almost certainly a consequence of climate change, affecting sea temperature and currents).

Although we did not predict it at the end of 2007, in October 2008 we formally launched the Bristol Conservation and Science Foundation with a day-long symposium on 'Evidence-based Conservation' and an evening debate (the 5th Annual Bristol Zoo Gardens Conservation Debate) on the relationships between conservationists, government and businesses. Both events were a great success and both will become annual fixtures.

In 2009, we shall continue to develop our existing successful projects and to look for new areas of work, both in conservation action and research. As part of our fundraising activity, we shall seek to secure funds to support, at least in part, the core activities of the Bristol Conservation and Science Foundation.

National Wildlife Conservation Park

In the Annual Review for 2007 we said 'we shall complete the design process to allow us to apply for planning permission early in the year. The remainder of the year will be spent working with South Gloucestershire Council and the local stakeholders towards determination of our application. During 2008, we aim to have secured a significant number of pledges of substantial financial support for the project.'

In 2008, we finally applied for planning permission in mid-September. The delay from our intended date of 'early in the year' was caused by circumstances largely outside our control, including a late requirement to do extensive archaeological research on site. However, during the year we did obtain planning permission for the access roundabout to

the site (a separate application from the main one for the Park itself) following extensive consultation and debate with local residents, whose chief concern about NWCP is its possible effect on local traffic conditions; they are largely supportive of the notion of the Park itself, and we are convinced that our impact will be less than they fear.

Our fundraising success was less dramatic; we raised full funds for Phase 1 (leading to the planning application) and that budget is now closed. However, given the sharp decline in the economic climate in the second half of 2008, we decided to scale down our fundraising activities for the Project until the economic upturn arrives.

In 2009, we shall continue in-house development of our designs (assuming planning permission is granted early in the year). We shall also continue to be actively on the lookout for suitable funding opportunities and will match these to exhibit and construction possibilities.

In summary, therefore, the Society has moved strategically and steadily forward, along the lines described in last year's Annual Review, with some important milestones passed, particularly the formal formation of the Society's third Operating Unit, the Bristol Conservation and Science Foundation. The continuing integrated and strategic development and management of the three Operating Units, with the Society overarching them, looks firmly set for the future.

Dr Jo Gipps
Director
30th March 2009

Summary of objectives

The Society's Strategic Plan lists a series of statements of strategic intent relating to each of the chapter headings in 'Building a Future for Wildlife' in the World Zoo & Aquarium Conservation Strategy (2005); the list is reproduced here. It summarises the philosophical positions being taken by the Society in each of these areas. A full copy of the Society's Strategic Plan is available upon request.

1 Integrating conservation into all that we do

- To integrate conservation, sustainable activities and social and environmental awareness into all aspects of our work.
- To promote these values widely through partnerships, learning and commerce.

2 Population management of animals and plants

- To become a world leader in sustainable population management by focusing our resources on securing sustainable populations of animals and plants through integrated co-operation with zoos, botanic gardens and strategic partners.

3 Conservation of wild populations

- To initiate and support an increasing number of field conservation activities worldwide, all delivering substantial sustainable conservation impacts.

4 Science and research

- To carry out fundamental and applied *ex situ* and *in situ* research to support and enhance the zoo-based and field conservation of threatened animal and plant species.

5 Ethics and animal welfare

- To advance best practice animal husbandry, health and welfare that ensures the physical and psychological well-being of the animals in our care.
- To act ethically in all areas of our operations, management, fundraising and investment.

6 Integrated learning

- To engage and empower our audiences to act in ways that benefit wildlife conservation and create a sustainable future for both wildlife and people.

7 Communication

- To communicate, through internal and external means, the values, Mission, objectives and activities of the Society and its Operating Units.

8 Partnerships and community involvement

- To ensure that all of our partners and those with whom we have relationships support our conservation and education Mission.

- To develop relationships that help deliver best practice in all our activities.
- To develop mutually beneficial partnerships, both in the UK and worldwide, with like-minded conservation, development, political and commercial organisations.

9 Sustainability

- To use the latest technologies and successes to ensure continual improvement of sustainable practices.
- To reduce our environmental impact by implementing a clear environmental management system, and to promote the scheme through our business and other partners.

10 Commercial activities and the visitor experience

- To deliver two first-class visitor attractions that advance the public understanding and the conservation of wildlife and the natural environment, and that raise funds through their operation and profitability to support the conservation and care of plants and animals.

11 Governance and management

- To ensure that clear and effective arrangements are in place that align us to best practice in management and charity governance.

12 Human resources

- To recruit, employ, value, develop and retain people with the necessary knowledge, skills, motivation and flexibility to achieve the Society's Mission.

13 Development

- To use all available skills, knowledge and enthusiasm to generate maximum financial and other support for our Mission, from a wide range of sources, in an ethical and efficient manner.

14 Administration, finance and support services

- To develop and maintain efficient and effective systems to support us in achieving our Mission.
- To provide support systems that enable new and better ways of working, simplify tasks and enhance our image.

Integrating conservation into all that we do

'Integrating conservation' was the first chapter of 'Building a Future for Wildlife – the World Zoo and Aquarium Conservation Strategy' (WZACS) (World Association of Zoos and Aquariums 2005). We based the Society's Strategic Plan, 2008 – 2018 closely on the WZACS; indeed, the first nine chapters of our Strategy coincide precisely with the nine chapters of WZACS.

The Society and its Operating Units do, and will continue to, adhere to the WZACS Vision for Integrating Conservation – 'WAZA recognises that the fundamental elements of each organisation's culture will be the values of sustainability and conservation, and social and environmental responsibility. These values will permeate all areas of their work and will be understood and promoted by all those working within the WAZA network.'

In summary, the Society's Strategic Plan states that:

The Society will ensure that its Operating Units are active in conservation in the Zoo and in the field at home and abroad to the highest standards of economic, social and environmental sustainability.

Bristol Zoo Gardens will be active in conservation breeding programmes around the Clifton site to benefit native species and actively work to reduce the carbon and ecological footprints of all its

operations in Clifton, including the impact of its visitors. Major species exhibits will continue to be limited to our field conservation and research programmes.

The National Wildlife Conservation Park will be developed to the highest standards of sustainable design and engineering. All exhibit areas will be linked to ecosystems of conservation importance around the world where the Society can be engaged in field conservation and research that makes a real difference. Like Bristol Zoo Gardens, species held will be part of co-operative breeding programmes. Through its learning programmes, visitors will be actively engaged in all these processes and invited to make their own contributions to environmental improvement.

The Bristol Conservation and Science Foundation will base all its work on the notion of sustainable development and will engage in conservation action and conservation research projects with direct links to exhibits at Bristol Zoo Gardens and the National Wildlife Conservation Park.

1. Log piles to encourage native invertebrates.
2. The 'Heap of Trouble' exhibit encourages our visitors to reduce, re-use and recycle.
3. Education Officer, Dave Naish and many other members of staff cycle to work.



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HIGHLIGHTS OF THE YEAR



Our new 13-year-old male lion, Kamal, came to us from Twycross Zoo. He was introduced to Moti just a few days after his arrival and they are now very relaxed together. We hope there will be the patter of little paws before too long.



Bristol Zoo Gardens became the third zoo in the country to achieve the ISO14001 certification – the international standard for environmental management systems. To reach the standard, we had to make a critical appraisal of our environmental impact and develop a robust environmental management system to continually improve our 'green' performance.



May saw the birth of a southern pudu, the world's smallest species of deer. Born weighing just 1kg (2.2lbs), the tiny youngster is part of an international conservation breeding programme.



Our annual festival Boogie for Brizzle again proved to be a very successful fundraising event, this year raising the profile of the Year of the Frog and, with sponsorship from Wall's, raising over £7,000 whilst doing so.



August saw the hatching of a tiny Chinese box turtle, also known as a yellow-margined box turtle. It weighed just 15 grams and measured around 4cm long.



In the summer we played host to Sierra Maestra (in association with St George's Bristol). One of Cuba's most famous ensembles and the greatest exponents of Afro-Cuban 'son' music or 'salsa', Sierra Maestra had the crowds up on their feet dancing.



Rachel Hogan, manager of an orphan primate sanctuary supported by Bristol Zoo, was recognised for her incredible work for the Cameroon Wildlife Aid Fund. Rachel was given an Animal Action Award by the International Fund for Animal Welfare (IFAW) at a ceremony at the House of Lords.



The Bristol Conservation and Science Foundation was launched in October. This new venture focuses on saving threatened species and habitats across the world and will link to the exhibits on show to the public at Bristol Zoo, emphasising the importance of good, modern-day zoos in global wildlife conservation.



Our fantastic new gorilla-cams were installed this year. We now have a live feed from Gorilla Island, and an indoor camera in the gorilla house itself. Visit www.bristolzoo.org.uk and follow the links.



From garden walks and talks, and an exhibit on really useful plants, to talks on the medicinal value of plants, and a rare orchid display by Chelsea gold medal winners, Writhlington School, Plant Conservation Day in May enabled us to highlight the importance of plants to people and the planet.



Our tropical rainforest-themed butterfly house opened this year, featuring spectacular and striking butterfly and moth species from across the world, as well as tropical plants and flowers.



The fifth Bristol Festival of Nature took place at Bristol's Harbourside. This well attended event was a celebration of the natural world and its conservation.



Television and film star John Cleese, along with presenter Chris Serle, helped to raise publicity for our lemur conservation programmes with three 'in conversation' evenings held at the Zoo.



Kera, a hand-reared orphan gorilla, arrived from Stuttgart Zoo, where she has been living in a group with other young, orphan gorillas. As a result of her past, she is very fond of human contact, but is being steadily and fully integrated into our social group of gorillas, until her need for human company is lost. Pictured here with Assistant Curator of Mammals Mel Gage.



Our main fundraising campaign for 2008 was the 'Year of the Frog' - in aid of the worldwide amphibian crisis. Various activities were organised in the Zoo to raise awareness and funds for this vital conservation programme.



A three-year sponsorship agreement with the international aircraft manufacturer Airbus began in May. Airbus's local base in Filton committed significant support for our Livingstone's fruit bat project.



The Zoo's in-house veterinary team won the award for Significant Advances in Zoo and Wildlife Medicine at the British and Irish Association of Zoos and Aquariums (BIAZA) awards ceremony, in recognition of their pioneering use of a test to detect avian malaria in penguins and Inca terns.



Once again our carol evenings proved to be a popular place to get festive. This year we welcomed 2,473 visitors over the two evenings.



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The Bristol Conservation and Science Foundation

Launching the Foundation: 30th October 2008



Dr Bryan Carroll
Deputy Director

It is now widely accepted that we are in the midst of an extinction event that is the most severe since the demise of the dinosaurs, some 65 million years ago. The difference is that this is a human-made crisis, brought about by our unsustainable use of the planet's natural resources. We believe strongly that zoos have a great role to play in helping to fight this potential catastrophe, by communicating the severity of problems, by researching the threats faced by wildlife, and by working on the ground to overcome those threats.

Over the last 10 years, Bristol Zoo Gardens (BZG) and the Society have become recognised for the quantity and quality of field conservation and science that we carry out. In order to grow further, to attract more funding and to be clear about the costs and benefits of this work to the Society, we decided to create the Bristol Conservation and Science Foundation (BCSF), a dedicated Operating Unit focussing exclusively on our conservation action and conservation research studies. This year we launched the new Foundation with a one-day symposium on 'Evidence-based Conservation'.

The first session of the symposium was dedicated to one of our own projects, based in the Republic of the Comoros, working with local communities to prevent forest loss that affects the endangered Livingstone's fruit bat, *Pteropus livingstonii*. The coordinator of the project, Hugh Doulton, talked about its progress, and we were also extremely fortunate to have two Comorian speakers: Said Mohamed, from the Government of the Comoros, and Mohamed Moutui, who leads our field team on the island of Anjouan. Both made it clear that not only

do they wholeheartedly welcome our contribution to the conservation of their native fauna, but that they also feel tremendous pride in being involved with the project.

The next two sessions had speakers from across the UK talking about the importance of evidence-based conservation programmes. In the past, too many projects have been based on 'feelings' about what is needed to address the issues, with little emphasis on measuring the effects of those interventions, and reporting on their success or failure. Sometimes, simple basic information on the species or ecological community is lacking, while in other cases it might be evidence on the effectiveness of a technique. We heard examples ranging from Indonesian fish communities to African bushbabies, but the consistent message was the need to use scientific evidence as the basis for developing conservation measures, and then to use evidence from evaluation to assess and refine those measures.

The day summed up how we see the future of the Foundation, as an independent Operating Unit, but intellectually integrated with BZG and the National Wildlife Conservation Park, within the Society, and which uses good scientific evidence to develop and refine its programmes. The Foundation brings together scientists and communities in the search for solutions to the great challenges that lie ahead for the planet's threatened wildlife and wild places.

1. *The endangered Livingstone's fruit bat.*
2. *Indian Ocean Conservation Officer Hugh Doulton and Mohamed Moutui at the BCSF launch symposium.*
3. *Community involvement in our conservation project in the Republic of the Comoros - market gardening.*

Conserving wild populations

While the UK may not have the complex biodiversity of tropical countries, we are nevertheless committed to maintaining as many of our native plant and animal species and ecosystems as possible, so that future generations can enjoy the richness of our wildlife.



Neil Maddison
Head of Conservation
Programmes

The white-clawed crayfish is one of the most endangered animals in the UK; freshwater rivers and streams have long been a crucial refuge for this species, and now it is facing extinction because of the presence of an invasive, non-native, species (the American signal crayfish). As well as being bigger and stronger (and more able to compete for territories), these new arrivals have brought the native species to many instances of local extinction. This year, working with partners, we started a three-year project to increase the numbers of individuals and sites for the native white-clawed crayfish throughout the South West.

Another native species with which we work is the greater water parsnip (*Sium latifolium*), a UK Biodiversity Action Plan species. Changes in land management have resulted in large areas losing this fragile plant, with the result that the species has become very rare in the South West. Working with Natural England, we bred and re-introduced over 400 water parsnips to Shapwick Heath on the Somerset Levels, in areas where they are safeguarded for the future.

We continued to be a partner in the very successful Avon Gorge and Downs Wildlife Project, which was set up to highlight and interest people in the fascinating and rare wildlife found at one of Bristol's most iconic conservation sites.

Over the years, there have been many successes with this project including in

particular, the Education Programmes Coordinator (based at the Zoo and funded by the Society) who holds many summer events on the Downs, where people can see and learn about the amazing range of animals and plant species found there. The project's education programme is very popular with the public, so in 2008 we employed an Avon Gorge and Downs Summer Education Assistant for the first time, to help meet demand for education events and activities over the busy summer period and to increase the number and diversity of people participating in the programme. The post was part-funded with money raised at one of the Zoo's Boogie for Brizzle events.

Overseas, we continue to work in countries that are high in biodiversity but low in resources, often working with disadvantaged communities, which live alongside highly endangered wildlife, so that they can benefit from, rather than be victims of, conservation efforts.

In the Comoro Islands, we are supporting villagers who live around the Moya forest area, which is one of the last patches of primary forest remaining on the island of Anjouan. This forest contains several important roost and feeding areas for Livingstone's flying fox, one of the largest fruit bats in the world. The survival of the forest is also critical for the livelihoods of the villagers that live in and around the area. During 2008, our team worked with

1. A conservation event for families on the Downs in Bristol with the Avon Gorge and Downs project.
2. The greater water parsnip (*Sium latifolium*).
3. Sahamalaza sportive lemur.
4. The white-clawed crayfish.



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village groups to find new, sustainable ways of improving their livelihood without destroying the forest, starting projects such as market gardening and improving agriculture practices.

Our United Nations Environment Programme-funded Great Ape Survival Partnership project in Cameroon concluded at the end of 2008, although we intend to continue the work after this phase has been completed. We are working with communities around the western and southern boundaries of the Dja Biosphere Reserve, which is home to a large population of western lowland gorillas and central African chimpanzees. One of the biggest threats to the apes' survival in the wild is the illegal commercial bushmeat trade, and our work has concentrated on engaging the people who live there with the process of

protecting the apes. We have also continued our support for Cameroon Wildlife Aid Fund's work with confiscated apes.

Our work to save wild populations is not only people-focussed. In South Africa, penguins are known to be seriously affected by oiling both from accidental spills and the washing of oil tankers. The main issue, however, is now thought to be a lack of food due to the movement of fish stocks away from the nesting beaches. Evidence from recent research suggests that the (re)introduction of fledgling chicks can have a significant impact on conserving wild penguin populations (see page 17 for more information on our Project Penguin).

In Madagascar, we continue to work with people living in and around the Sahamalaza National Park, which is the only known habitat of the blue-eyed black lemur. As well as supporting communities in managing natural resources, we are studying various aspects of the lemurs' ecology so that we can better understand ways to protect them from extinction.

We continue to work with other zoos around the world on initiatives such as the Amphibian Ark to try and save many of the world's amphibians from extinction owing to the Chytrid fungus; conservation of the silvery-brown tamarin in Colombia, okapi breeding in the Democratic Republic of Congo, breeding and release of the golden lion tamarin of Brazil and the conservation of several Asian species of bird and terrapins.

Science and research

The Society continued to carry out fundamental and applied research to support and enhance the zoo-based and field conservation of threatened animal species and habitats.



Christoph Schwitzer
Head of Research

Our conservation research work continues to expand

In 2008 we secured conservation research grants from the Conservation International Primate Action Fund, the European Association for the Study and Conservation of Lemurs (AEECL – a consortium of European zoos dedicated to protecting Madagascar’s endangered lemurs) and the International Fund for Animal Welfare (IFAW). We hosted the second UK and Ireland Regional Environmental Enrichment Conference in April, which was attended by more than 80 delegates and included 10 presentations by Bristol Zoo staff members. We also hosted a symposium on the responses of primates to habitat alteration at the International Primatological Society XXII Congress in Edinburgh in August, and a symposium on ‘Evidence-based Conservation’ at the official launch of the Bristol Conservation and Science Foundation in October. (See page 11). The monthly research colloquium at Bristol Zoo had fascinating talks from invited conservation scientists as well as from some of our own students and was attended by zoo staff, students and academic staff of different universities.

Research Department staff and students attended various national and international conferences and gave 13 oral and three poster presentations over the course of the year.

Our Head of Research, Dr Christoph Schwitzer, served on the organising committee of the 5th European Zoo Nutrition Conference held at Chester Zoo in January, and in March he hosted the annual general meeting of the AEECL, of which he is the Secretary. In addition, Christoph and our Research Officer, Dr Sue Dow, gave several invited talks at different universities and zoos.

We won a commendation from the British and Irish Association for Zoos and Aquariums (BIAZA) in the ‘best research project’ award category for our study on the density and habitat preferences of the Sahamalaza sportive lemur. This was the first scientific study to be carried out on this highly endangered lemur species.

Research at the zoo

Forty-three research projects took place at Bristol Zoo or through the Bristol Conservation and Science Foundation over the course of the year, including 21 undergraduate projects, 5 MSc dissertations and seven (parts of) PhDs. Several students received distinctions and merits from their respective universities for projects under the co-supervision of our research staff.

Our focus on nutrition and digestive efficiency of captive wild animals saw several studies on food intake and digestibility, including our endangered Livingstone’s fruit bats, aye ayes, mongoose lemurs and prehensile-tailed skinks.

Two undergraduate physics students from the University of Bristol built a metabolic chamber to measure oxygen consumption non-invasively in our mouse lemurs.

Research in the field

Our work with AEECL continued with research on the remaining habitat size and quality of the highly endangered Sahamalaza sportive lemur (*Lepilemur sahamalazensis*) in northwest Madagascar. A PhD student, who had already spent three months in Madagascar in 2007, went back to the field to collect additional data on the lemurs’ population density in differently-degraded forest fragments. Together with three other students, she produced a detailed Geographical Information System (GIS) map of the study

site and an educational booklet with information about our research and conservation work in Sahamalaza, which we distributed to 3,000 local schoolchildren.

In 2008 we initiated a conservation research project in the South African Western Cape, investigating the factors that determine breeding site fidelity in the African penguin. This penguin species has seen a dramatic decline in population size in recent years, which is thought to be due to a movement of the birds' main food resources (sardines and anchovies) away from the remaining nesting sites. By finding out what makes the penguins return to their colony of origin, rather than to any other colony when they start breeding, we hope to establish a methodology for creating new breeding colonies in places closer to the fish and thus more suitable for the penguins' survival.

Veterinary research

Our Head of Veterinary Services, Sharon Redrobe, continued supervising two three-year veterinary residency programmes leading to the Royal College of Veterinary Surgeons (RCVS) Diploma in Zoological Medicine, financed through grants from the RCVS Trust and the Rabbit Welfare Association. Our RCVS Trust resident is completing a research project on primate calcium metabolism while our Rabbit Welfare

Association resident is beginning a project on Encephalitozoonosis, a common disease of pet rabbits. Two University of Bristol vet students were taught as part of their final year elective and completed research projects on 'radiographic analysis of liver size in three dove species' and 'bone maturation timing in five lemur species'.

Presentations were given throughout the year at various zoo and veterinary meetings, and lectures delivered at different universities. Sharon Redrobe was awarded the 'Oliphant Jackson Award' from the British Chelonia Group for a paper on the diagnosis of pericardial effusion in tortoises. We also published a paper on the first reported case of lungworm in a red panda, and there is now a research project underway to investigate further the role of this parasitic illness in red pandas throughout Europe.

1. African penguin and chicks.
2. Giant tortoises.
3. Our ongoing research work on the conservation ecology of the blue-eyed black lemur yielded alarming data on the vulnerability of the species to habitat alteration, and resulted in its inclusion on the International Union for the Conservation of Nature and Natural Resources (IUCN) Primate Specialist Group's list of the world's top 25 most endangered primates 2008-2010.



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Population management of animals and plants



John Partridge
Senior Curator of Animals

From the successful breeding of the tiny *Partula* snail to the internationally coordinated managed breeding programme of the mighty western lowland gorilla, we have continued to work closely and collaboratively with other zoos and organisations in building sustainable populations of animals and plants.



Eddie Mole
Curator of Horticulture

2008 began with the construction of our new butterfly house and the associated planting and conversion of the adjoining rose garden into a nectar garden. Butterfly Forest opened in May and provided our visitors with an exciting walk-through experience showing several species of butterfly from Costa Rica and East Africa.

Our off-show bird breeding facility, formerly next to the rose garden, was moved from the Zoo to a more secluded area at the Hollywood Tower Estate.

A new aviary was built for our expanding colony of endangered black-cheeked lovebirds and a turtle breeding room was completed in the Reptile House where we will concentrate on breeding endangered species of box turtle.

A really important event involved *Partula* snails – there is one sub-species, *Partula taeniata simulans*, where only five

specimens exist in the world and they are all in Bristol Zoo, including two that hatched in 2008.

Other significant births and hatchings included sea horses, dragon fish, lemur leaf frogs, Chinese box turtles, keas, a howler monkey and a pudu. Some of this important breeding work goes on behind the scenes in specialist areas like the Aquarium's breeding room.

New animals coming into the collection included a male gila monster (a venomous lizard) from Rotterdam, yellow armadillos from France, a male de Brazza monkey from Spain, a male sloth, three agoutis (a South American rodent) and several bird species including a flock of rainbow lorikeets. Especially significant arrivals were a male Asiatic lion and a four-year-old female western lowland gorilla; both animals came to us as part of managed breeding programmes for these critically endangered species. Kera the gorilla came from Stuttgart Zoo where she had been hand reared with other young gorillas. When the time came to move her into a breeding situation, Bristol was chosen for her so that she could join an existing gorilla family. Introducing her to this family has had to be done very gradually and we hope that, in time, she will breed with Jock, our resident adult silverback gorilla.

We contributed to several breeding programmes by sending animals to other zoos including two Brazilian tapirs, several bird species and some dwarf crocodiles.

1. New arrival Kamal, a male Asiatic lion.
2. The critically endangered *Partula* snail.
3. Kera our new female gorilla.



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A significant death during the year was that of our female pygmy hippo, Lise.

Many of the animal team continued to be involved with the coordination of important breeding programmes by managing studbooks, sitting on advisory committees and conducting population surveys. The monitoring of the silky wave moth population in the Avon Gorge and Downs was a particularly important local activity, underlining the fact that Bristol Zoo works with native species as well as with those living further away.

We significantly improved all our animal and veterinary record keeping procedures by employing a full time registrar, Alice Warren.

Recognition and accolades for our botanical gardens

Bristol Zoo Gardens once again won an "In Bloom" award and helped Clifton to win a RHS Silver Gilt national award in 2008. The judge's comments reflecting on the zoo were as follows:

On Floral Displays:

'The judges were particularly impressed with the Zoo'

On permanent landscaping including shrubs:

'The Zoo and the change of emphasis in the interpretation of the use of plants, particularly the nature plantings. All of high quality'

Another horticultural highlight was the long-awaited official recognition of our Hedychium collection as a National Collection.

Plant Conservation Day (18th May) gave us the opportunity to focus on plants and the importance of their conservation. We had a series of events and displays such as the Really Useful Plant Quiz and Writhlington School's orchid project. The event helped us to strengthen and build relationships with other conservation organisations. It also helped us to contribute to national and international plant conservation action plans such as the UK Plant Diversity Challenge and the Global Strategy for Plant Conservation and through them the International Union for Conservation of Nature's Countdown 2010 targets. This resulted in good press coverage and gained support from the National Botanic Garden of Wales and Botanic Gardens Conservation International.

We were also able to play a more direct plant conservation role by growing 400 greater water parsnip (*Sium latifolium*) plants for a joint Bristol Zoo/Natural England reintroduction project at Shapwick Heath. *Sium latifolium* is under threat in the UK and is a UK Biodiversity Action Plan species.

4. Dragon fish.

5. A woven willow 'garden room' was constructed on the West Lawn. Sculpted grass curves and a spiral were created with a series of beds of colourful native annuals to complement the grass sculptures.

6. An Atlas moth in our new Butterfly Forest.



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Ethics and animal welfare

We continue to contribute to the advancement of best practice in health and welfare standards, through the expert care of our own animals, and the dissemination of best practice via training programmes, lectures and publications.



Dr Bryan Carroll
Deputy Director



Sharon Redrobe
Head of
Veterinary Services

The Welfare and Research Advisory Board 2008

The Welfare and Research Advisory Board (WRAB) is chaired by trustee Professor Allen Goodship and consists of both internal staff and external members with expertise in animal welfare and ethics. Part of the remit of this group, which meets four times a year, is to monitor ethical issues faced by the Society and to conduct an annual review of ethical matters that have come to its attention.

The Board carries out regular visits to areas of the Zoo to see working practices and animal housing first hand. In 2008, visits took place to Twilight World, Butterfly Forest, the Reptile House, the Wallace Aviary and Seal and Penguin Coasts.

Throughout 2008, discussion of animal health and welfare matters allowed refinement of techniques ensuring best practice. The Board also reviewed the Society's selection process for animals to be held at the National Wildlife Conservation Park, and an assessment of our policies and practices concerning the use of animals in our Learning Department was carried out. These animals are handled regularly either for teaching purposes or for training, and are used in our public presentations and Animal Encounters. The Board agreed a policy and a review system to ensure that our high welfare standards are maintained.

The annual review found that all cases of euthanasia during 2008 were carried out for appropriate reasons. There had been no adverse ethical issues arising from any of the research proposals reviewed through the year, most of which were purely observational studies of social behaviour.

The Board concluded that it was satisfied that ethical matters had been dealt with appropriately throughout 2008.

The veterinary department

The clinical cases this year were varied, as usual, as the on-site vet department deals with all species of invertebrate, fish, amphibian, reptile, bird and mammals held at Bristol Zoo. The team is led by Sharon Redrobe, who is a Royal College of Veterinary Surgeons (RCVS) Specialist in Zoo & Wildlife Medicine. The department dealt with around 300 cases of routine health checks and cases requiring treatment leading to 318 anaesthesia records in 90 species with 450 blood samples taken, and over 250 faecal parasite examinations. Given that the Zoo has a large, actively breeding and ageing animal collection, it is inevitable that the vet work also includes around 200 post mortem examinations; this aspect yields important information that we can use to manage our animal collection and share with European colleagues who maintain the same rare species.

Clinical cases of note in 2008 included instituting assisted feeding techniques to support the hand-rearing of an aye aye infant, treating the female okapi for severe pneumonia over many weeks (she has now fully recovered) and anaesthetising both adult female gorillas and their infants to perform full health checks for various reasons. We confirmed that Romina's (one of our adult female gorillas) new lenses, following cataract surgery in 2005, continue to function well and the condition has not been inherited by her youngster Namoki.

Following the discovery of a turtle parasite that had caused the death of a snake (fortunately, rapid treatment saved the others), a new room was constructed to facilitate turtle breeding and separate them permanently from the snakes.

Thirty-two bird, reptile and mammal diets were reviewed during the year and a new general bird diet for many of the mixed aviaries was devised and, following trials, implemented. We hope this will improve our breeding results in the coming years.

1. A large bladder stone was identified in a pancake tortoise on routine x-rays taken during health screening; surgery was carried out by our vet team and the event yielded national press, TV and radio attention.
2. Salome, our adult female gorilla, was found to have an infected tooth, which explained her recent change in behaviour and this was treated by a specialist dentist under a later anaesthetic.
3. The veterinary team perform a full health check on our infant gorilla Namoki.



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Integrated learning

We have engaged and empowered our audiences to act in ways that benefit wildlife conservation and help create a sustainable future for both wildlife and people.



Simon Garrett
Head of Learning

Bristol Zoo Gardens is an educational charity, with a learning remit embedded throughout its thinking and operation. A wide cross-section of the population chooses to engage with us in a variety of ways, and we respond by providing opportunities to deepen their engagement with the natural world and their desire to help us in its conservation. We always try to offer active solutions to any conservation issues that we raise.

Learning for pupils, students and other groups

Yet again, in 2008 the Education Section smashed all records, teaching 37,119 learners (in 1,523 sessions) either in the Conservation Education Centre, or in schools. This increase in numbers was paralleled by work to tailor education sessions in line with the new school curriculums and specifications. A new session, 'Sustainability in the zoo', has proved particularly popular. However, not all sessions are for schools; many Brownies and Cubs achieved badges through sessions and activities at the Zoo, and we continued to run our successful spider phobia classes.

Filton College has had tremendous success at the Zoo this year. Students continue to progress well, achieving higher grades and with numbers increasing. Two students carried out conservation work in Florida as part of an internship. Eight students have

progressed to higher education on degree programmes including Veterinary Nursing, Zoology and Animal Behaviour. In addition, one student has become the Animal Technician for the Zoo's Education Section and another now works as a keeper at Exmoor Zoo.

Together with Filton College and the University of the West of England, work has continued on the development of a new Foundation Degree in Integrated Wildlife Conservation, which should see its first students enrolling in 2009.

Learning around the Zoo

The Presentations section added the Butterfly Forest to their complement of staffed walk-throughs this year, passing this over to a large team of dedicated volunteers after the busy summer season. The Volunteer section worked particularly hard to recruit enough volunteer rangers to look after visitors in Butterfly Forest and the lemur walk-through in Monkey Jungle, as well as recruiting library and fundraising volunteers, and constructing and staffing another magnificent Christmas grotto.

Summer saw the 'Year of the Frog' campaign raising awareness about the global amphibian crisis. Research showed that, after taking part in the campaign activities, visitors had significantly increased their knowledge of the amphibian groups and of the threats facing amphibians.

1. A new member of the Amazing Animals presentation team, Archie the armadillo.
2. Activities in the Bristol Zoo tent at the Bristol Festival of Nature.
3. Dressing up in support of the Year of the Frog.



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We are working with our caterers, Milburns, and with the Marine Stewardship Council, to promote awareness of sustainable seafood. We conducted the first survey amongst our visitors as a baseline so that when we complete the new interpretation in the Aquarium in 2009, we can assess its impact.

Amazing Animals continued to develop, welcoming a second red ruffed lemur, two harris hawks, two barn owls, two kookaburras, two racoons and a six-banded armadillo to the team. Colin, the male lemur, was a great asset both promoting and appearing (with staff) at the John Cleese fundraising evenings at the Zoo.

The Graphics section continued to provide a huge range of communication materials: Pirate Trail cards and posters; new signage for Butterfly Forest; brochures for National Wildlife Conservation Park and the Bristol Conservation and Science Foundation launch; 'Year of the Frog' campaign signs, trails and fundraising materials; Bangless Bonfire fireworks night posters and banners; Hallowe'en Witch Trail cards, as well as designing the Society's Strategic Plan, and the redesigned Zoo Matters. All this was in addition to designing and producing much marketing, promotional and events material.

Learning outside the Zoo

This year we showcased Bristol Zoo's support of conservation programmes in the wild at the Bristol Festival of Nature in a tent bursting with family-friendly activities, and the Volunteer Section conducted a further 136 outreach visits

including to the Mid-Somerset Agricultural Show, St Paul's Adventure Playground, Wells Cathedral School and Rolls-Royce Family Fun Day.

Simon Garrett, Head of Learning, and Rick Newton, Presentations Manager, were filmed for a Bristol City Council initiative, 'My Future, My Choice', to raise aspirations in Bristol's school pupils, and Simon took part in the associated stage shows.

Further afield, Dave Naish, our Education Manager, continued to support the Cameroon Wildlife Aid Fund's (CWF) education programme, and we steered the recruitment and deployment of a CWF Outreach Education Officer.

Developing our thinking and action through collaboration

We hosted many relevant meetings at Bristol Zoo, including Volunteering Bristol and a British and Irish Association of Zoos and Aquariums (BIAZA) Educators' regional meeting, as well as attending and co-organising many outside the Zoo, most notably the BIAZA ACE and Volunteer Coordinators' meetings, the Visitor Studies Group conference and the Bristol Natural History Consortium's 'Communicate' conference.

Involvement in these external activities not only advances and shapes our own thinking, but influences the way that other zoos (and other conservation organisations) operate and collaborate with each other. Thus our learning mission is extended beyond individuals, to many of our partners in conservation.

4. Volunteer Annette Cowhig taking an outreach education session at a local secondary school.

5. Sadie Atkinson, one of our summer assistants giving a pond talk on 'How to make your garden amphibian-friendly'.

6. Education Officers Andy Moore and Amy Bye leading a session in the Conservation Education Centre at the Zoo.



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Environmental sustainability

We believe that environmental sustainability is an essential component of any successful conservation-led organisation and we strive to manage all our operations so as to minimise our environmental impact.



*Dave Harley
Head of Estates*

We were very proud in February to become only the third zoo in the country to achieve ISO14001 accreditation – the international standard for environmental management systems. To demonstrate compliance with the standard, we had to carry out a critical appraisal of our environmental impacts. We then had to develop a robust environmental management system (EMS) to demonstrate compliance with all relevant legislation, and to demonstrate continual improvement in our environmental performance. A key component of our ability to do this work leading to ISO 14001 accreditation was the involvement of the Green Team, composed of staff from all departments and levels within the Society.

We first established what the significant environmental impacts associated with our activities were and then targeted improvements aimed at delivering marked reductions. This was achieved, and is maintained, using a basic four step process 'PLAN ~ DO ~ CHECK ~ REVIEW' with regular performance audits being carried out internally by trained staff, which are then reinforced by two visits each year from our external auditors.

The process of achieving the ISO14001 standard has already delivered real benefits in terms of our energy and resource efficiency at Bristol Zoo Gardens, a clear example being the new Butterfly Forest exhibit which is heated using biomass in the form of wood pellets. The new boiler has saved 6.5 tonnes of carbon dioxide emissions in the first six months of operation compared with a more traditional gas powered heating system.

Other steps taken by the Zoo this year include a significant increase in recycling, including plastic bottles as well as cardboard and glass, with new recycling points all around the grounds for our visitors.

For some time we have been working with a London-based environmental consultancy, Carbon Plan, to develop and refine an environmental accounting system that can calculate the carbon footprint of an animal-based visitor attraction like us.

This tool has been heralded as so innovative that other businesses in the South West have started using it and the project has earned Carbon Plan and Bristol Zoo Gardens an environmental excellence award nomination; Europe's largest environmental website, Environmental Data Interactive Exchange (EDIE) recognises the good work done by environmental consultancies as part of the wider efforts to reduce organisations' global impact.

The ecological and carbon footprint measuring system, named 'Salome' (after one of our female gorillas), enables us to measure and report our environmental impact, get a clear picture of the effect of our environmental management systems and use this information to target future work.

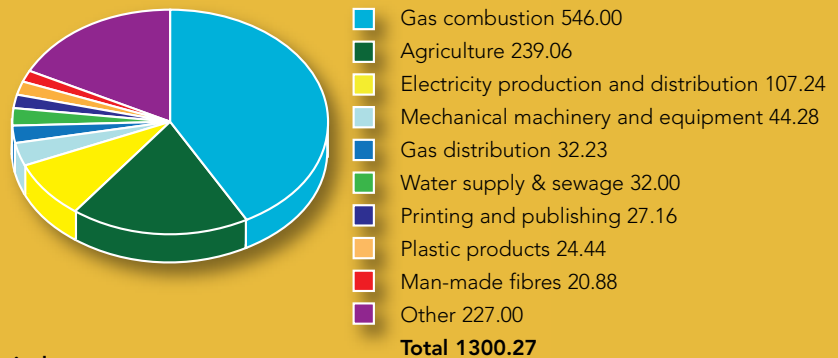
Given the poor economic forecast for the next few years, we plan to build on this work to decrease our utilities consumption, reducing both our environmental footprint and our operating costs.

We will continue to work closely with staff and suppliers and incorporate more of our environmental management successes in our education work, showing visitors how the Zoo and their actions can help reduce the negative impact we all have on the planet.

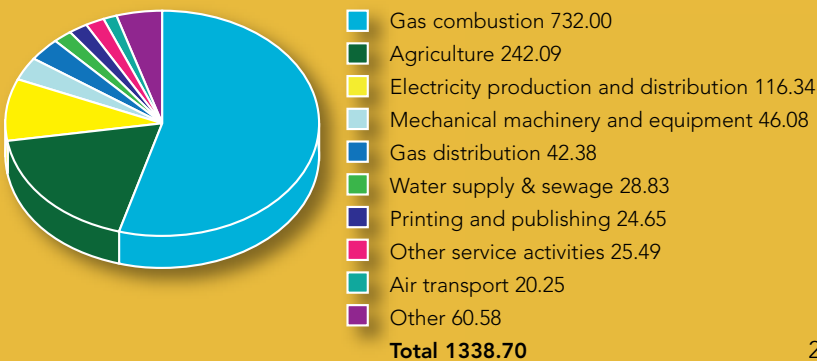
Bristol Zoo Gardens' carbon footprint

(excluding staff and visitor travel)

BZG carbon footprint 2006 in tonnes CO₂ equivalent



BZG carbon footprint 2007 in tonnes CO₂ equivalent



We report a 2.9% increase in our total Carbon footprint for 2007, compared with 2006.

The top 10 categories of footprint are shown in the attached diagrams. The 10th category is 'Other' and is made up of a composite of around 480 categories in addition to the nine split out; the Salome method measures the carbon footprint of around a total of nearly 500 categories. It is our systematic attempts to reduce the footprint of individual elements, particularly the largest for maximum effect, that will ultimately drive down our total Carbon footprint.

The overall increase can largely be attributed to greater use of gas. First, an area of the Zoo has been included in

2007 that had been inadvertently omitted from the 2006 figures. Second, the replacement of the old primate house with the significantly larger Monkey Jungle building (but with a much more efficient heating system and substantially more insulation) also increased the overall gas consumption. Increases in gas distribution and electricity footprints can also be attributed to the new exhibit.

The significant decrease in the 'Other' category is largely due to a major import of stock for the shop in 2006, not required in 2007 (around 80 tonnes of eCO₂), wood and wood products (around 10 tonnes of eCO₂) and repair and maintenance items (around 12 tonnes of eCO₂).

The Salome system is now well established at Bristol Zoo Gardens and we feel confident that future, significant and absolute reductions in our Carbon footprint will be achieved.

Governance and management



Nick Higgins
Head of Finance and HR

In 2008, the Society published its 'Strategic Plan 2008-2018'. This marked the culmination of a lengthy period of work for the Strategic Management Group, which comprises the Director, Senior Management Team and the Heads of Department. This Strategic Plan was reported on in the Society's 2007 Annual Review, as most of the preparation had been carried out in that year. The final colour version was printed and distributed in early 2008 to the shareholders, staff and other interested parties. The Plan describes the activities to which the Society and its three operating units intend to devote their energies and skills over the next ten years.

In order to convert the Strategic Plan into action, each department has produced a short- to medium-term plan. This outlines the steps that will be taken by each department in fulfilling its part of the Strategic Plan.

During the year, development also took place of a five year financial plan. Given the economic turmoil that is currently taking place, it is vitally important that the Trustees and management are aware of the likely effects of their policies and actions on the financial performance over

the next few years. The plan will attempt to address (as best it can, given the high level of uncertainty and unpredictability affecting the economy), how the Society can 'weather the storm', for example by having a robust reserves policy. Attention has been, and will be, focused on ensuring that resources are available to enable the Society to achieve its charitable objects. The Society's management spent much time in 2008 on reviewing all areas of activity with a view to ensuring good value for money, and cutting costs wherever possible.

The Trustees said goodbye to one of their number, Sally McMillan, who retired after many years of service. The Trustees are extremely grateful to Sally for her invaluable contribution over the years. She is replaced by Paul Kearney, a local businessman, who rejoins the board after a period as a Council member of the Society from 1994 – 2001. In order to aid the process of succession planning for Trustees, a matrix of skills was produced during the year. This enables us to identify any gaps in the range of knowledge that could be filled by future recruits to the Board.

A number of important issues were addressed by the Trustees in 2008. For example, an ethical fundraising policy was approved, and work commenced on a review of the final salary pension scheme, with a view to mitigating future financial risks to the Society.

A selection process was carried out for the position of Investment Manager to the Society. Smith & Williamson Investment Management were appointed with effect from January 2009, to replace the current incumbent, Gerrard Investment Management.

1. Members of the Strategic Management Group in Jo Gipps' office.



Commercial activities and the visitor experience

An internal reorganisation put in place a strong foundation for the delivery of a first class attraction with the ability to raise funds and public awareness of animal and plant conservation.



Alex Page
Head of Commercial
Operations

We introduced a new visitor-facing department in 2008. This Front of House team encompassed car park supervision, amenities, retail, admissions, reception, membership, adoption and group sales and is managed by three Front of House Managers and supported by a team of administrators. This new department is intended to guarantee that our visitors receive a consistently high level of service and have a positive experience. We have received very positive feedback regarding the new structure, both internally and externally, and have performed well in mystery visits and visitor research.

2008 has been a challenging year due to the poor weather and economic downturn, which have had a negative impact on most commercial activity, especially the number of paying visitors, and retail and catering secondary spends. The Front of House, Milburns and Marketing teams have worked extremely hard to drive visitors and maintain sales. We have improved operations to maximise efficiency and profitability and have been creative with promotions, marketing, PR and income-generating schemes.

Carol Vorderman helped us raise awareness of the current world-wide extinction crisis for amphibians, and also helped us raise funds for a purpose-built amphibian breeding centre (the Amphipod) as part of the 'Year of the Frog' campaign; our annual evening

fundraiser 'Boogie for Brizzle' in July further highlighted this cause. John Cleese also lent his talent and celebrity status to support our conservation work and we hosted three public events entitled 'John Cleese in conversation with Chris Serle' where he discussed his life, his passion for zoos (and in particular for lemurs), and answered questions from the audience. The evenings achieved international media coverage for Bristol Zoo Gardens and our conservation work and raised substantial funds.

Christmas saw the arrival of two reindeer. The purpose of introducing these animals was twofold; to test the logistics of bringing the animals into the Zoo on a temporary basis; and to test the visitors' response to this interactive exhibit (visitors were encouraged to feed lichen to the reindeer by hand). We were pleased to find that in both cases we achieved positive results with 1,600 bags of lichen sold, and response from the media was also very good; given the success of this temporary exhibit, we propose to investigate further, and develop similar initiatives for 2009 onwards.

1. Feeding moss to the reindeer.
2. John Cleese and Colin the red ruffed lemur.
3. 'Welcome to the Zoo' from the Front of House team.



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National Wildlife Conservation Park

September 22nd was a fantastic and important day, when we delivered the planning application for the National Wildlife Conservation Park to the offices of South Gloucestershire Council.



*Sallie Blanks
NWCP Client
Representative/
Project Manager*

The submission of the planning application for the National Wildlife Conservation Park (NWCP) represented many months of hard work during which a dedicated team had worked alongside our design team specialists to produce the plans for a first-class conservation-led visitor attraction fit for the 21st century.

The Park in outline

Based on specific, threatened ecosystems around the world, each exhibit seeks to thrill and inspire visitors and enable them not only to enjoy the magnificence of a wide variety of animals, but also understand further the interaction between human behaviour and the natural environment and to change their behaviour for the good of the natural world.

Underground tunnels, underwater viewing, hides and covered walkways will bring our visitors 'up close and personal' to animals in unique and dramatic ways. Minimal use of visible fences and maximal use of moats and ha-has will give visitors the impression of entering the animals' world, making the issues facing these beautiful creatures more relevant and urgent.

In addition to amazing animal viewing, the modern animal hospital will provide top-quality care to the wide range of animals

on site, as well as offering teaching facilities to students and practitioners in veterinary-related disciplines. Research laboratories and offices will support an ongoing programme of scientific studies into animal behaviour, veterinary science, husbandry techniques and diets.

An integral theme of the design process has been sustainability. Although many of the sustainable elements will go unnoticed by visitors, every aspect of the Park has been reviewed during the design process to check its 'green' credentials. An in-vessel composter will manage the compostable waste; biomass boilers will provide heating; water will be drawn from a borehole, with only the drinking water treated to potable quality; construction materials have been chosen carefully to ensure that the most environmentally-friendly have been used in each case; and green roofs and rainwater harvesting will support both biodiversity and manage drainage issues. All in all, the Park will not only look green, but will fully demonstrate affordable sustainable best practice.

Next steps

It is very much hoped that the planning application will be granted by the summer of 2009. The planning consent will provide a firm foundation for the next phase of the project.

1. The tiger enclosure and Ranger Station within the Sumatran Rain Forest exhibit.



Fundraising

As a registered charity, we are grateful to have been able to rely on significant financial and other support over the past year to help us meet our conservation and education objectives.



Sam Mant
Head of Development

In 2008, the Corporate Partnership Scheme continued to be a major source of income for Bristol Zoo. Our thanks go to all our partners for their ongoing support, especially as they continue to be so generous during difficult times.

As well as organising a series of successful profit-making corporate events within the Zoo grounds in the summer season and at Christmas, we secured sponsorship for the Zoo's public events in 2009 and several field conservation projects. We also gained much-valued volunteer hours and pro-bono work and equipment.

We were delighted to start a three-year sponsorship agreement with the international aircraft manufacturer Airbus, whose local base in Filton has committed significant support towards Bristol Zoo's Livingstone's Fruit Bat project. We will be working together to produce innovative educational materials, so that visitors to the Zoo will have the opportunity to learn about the similarities and differences between animal and mechanical flight.

We received generous sponsorship from Wall's, who sponsored Boogie for Brizzle and the Schools Activity Week; from Bristol in Bloom, who continued their support of the Pumpkin Carving Festival; and from Clifton Photographic Company.

Yet again, we continued to receive fantastic support from the employees of local companies such as Bank of Ireland, Arco, Osborne Clarke, NatWest, Bristol & West, Pindar, Norwich Union and HSBC, who donated their time by getting stuck in with some of our manual projects. In 2008, a total of 135 employees completed 810 hours of volunteer work and were involved in a range of projects, from helping to paint Santa's Grotto to woodland management at the Hollywood Tower Estate.

In 2008, we launched our annual campaign, 'Year of the Frog'. Public support and grant applications gave us

over £44,000 towards a much-needed amphibian breeding facility.

In 2009, our focus will shift to building long-term unrestricted funding, which will allow us to direct funds to projects with the most need. Work has already started and will continue in the areas of legacy campaigning, trusts and foundations and, most importantly, looking to individuals to pledge support.

Thank you

We are extremely grateful to our members, partners and supporters and would especially like to thank:

Individual supporters

T C Arrowsmith-Brown, H Arrowsmith-Brown, V Arrowsmith-Brown, J Barrand, N Battle, J H Bettey, P Branigan, S Braun, R I Carter, M F B Christie, M Q Cooper, B Y Cooper, M Edge, L Godwin, K Goodfield, A Harris, J A Hodgkin, M Hoyle, H E Hynan, I Jones, R D Kenney, T M King, J Leakey, D Morgan, E G M Niblett, P F Nolan, J W Organ, A R Osborne, G J Plumley, R Salter, R J Sanders, N H Shokoohy, T Skelton, C Soleas-Canham, H Timperley, C Vorderman, J S Wait, C Walters, A Yeoman

Corporate partners

Beachcroft LLP, Bristol & West, Burleigh Press Ltd. Edis International, Gerrard, IOP Publishing Ltd. King Sturge, Merrell, Norwich Union Life, Osborne Clarke, Roland DG (UK) Ltd, Sanderson Recruitment plc. Serco, TLT LLP, Turner & Townsend, White Young Green

Organisation supporters

Airbus, Archers Marquees, Arco, Autologic, Bank of Ireland, Bristol in Bloom, Bureau van Dijk, Clifton Photographic Company, Costco, Cosalt International Ltd, Filton Firestation, Grenville College, Milburns, NatWest, HSBC, Lloyds TSB Bank plc, Oceana Nightclub – Bristol, Pindar, Sainsbury's, The Royal Bank of Scotland, TLT LLP, Unipath Ltd, Wall's

Trusts

The Treasure Charitable Trust, The Reed Foundation, The Walker 597 Animal Trust, Restore UK

Administration and human resources

2008 saw a wealth of new projects, focussing on improving internal communication, recruitment, training and job evaluation.



Nick Higgins
Head of Finance and HR



Sue Gregory
Head of Human Resources

Human resources

The year began with Gill Minns in post as interim Head of Human Resources until May, when Sue Gregory was appointed to take over the post on a permanent basis.

A job evaluation exercise started with a simple review of job descriptions and person specifications and grew into a total review of job roles and new salary band ranges. There is still yet more work to be done in 2009, including external salary benchmarking and a project that will look into the formulation of a new pay mechanism process and salary progression system.

The Society renewed its IIP accredited status in February 2008. We launched the Staff Forum and quarterly All Staff Meetings to enhance the internal communication systems. The recruitment and selection process was also reviewed. Our website has proved to be an invaluable and effective recruitment tool, cutting out the need to use more expensive outside advertising bodies; in 2008, the Zoo received an average of 50 CVs for any Keeper position. As a result of the evaluation of the recruitment process, there is now a tighter authorisation procedure, more accurate equal opportunities monitoring, plus a consistent Criminal Records Bureau process for any identified 'at risk' job roles.

This year, training has ranged from the Advanced National Certificate in Management of Zoo Animals (ANCMZA), to PhD studies, Manager Appraisal training, delivery of a consistent induction programme for all, health and safety training, NVQ and external IT courses. Currently, the Zoo has four NVQ programmes running: NVQ Level 2 Business Administration, NVQ Level 2 Team Leading, NVQ Level 2 Customer Service and NVQ Level 2 Cleaning.

Administration, finance and support services

This year we changed the way in which support services are delivered to departments within the Society. Much of the administrative work, particularly visitor-facing, has passed to the newly-created Front of House Department. The Estates Department, in addition to its role in project management and maintenance services, also assumed responsibility for information technology, health and safety, and pest control.

Maintaining Zoo exhibits, property and infrastructure accounts for a significant proportion of the Society's operating costs. We pride ourselves on maintaining high standards but, faced with the reality of poor summer weather and the credit crunch causing a reduction in visitor numbers and income, we decided to prioritise our maintenance activity more rigorously. Essential work was carried out, but non-urgent work was deferred. It is not ideal to create a maintenance backlog in this way, but a significant in-year saving resulted. This is not something that can be, or should be, repeated year-on-year but given the difficult circumstances, it was considered acceptable.

We are proud to be reporting a further annual reduction in the number of reportable accidents (to both staff and visitors) occurring on Zoo premises. Our insurers are sufficiently impressed with our more proactive health and safety management systems that they have reduced the excess we have to pay on each claim from £10,000 to only £250.

We recognised that further resources were required within the Finance Department, and in July, appointed the newly-created position of Management Accountant. We have streamlined procedures within the department, and speeded up the production of management accounts.

Communication

During 2008 the Zoo had a number of 'firsts' to launch, starting with the opening of a new butterfly house and ending with the astonishingly popular Bangless Bonfire Night. Each event relied on team work to develop exciting promotional information that would tickle the imaginations of different potential audiences.



Heather Holve
Head of PR and Marketing

For Valentine's Day, love was in the air for Bristol Zoo's Asiatic lioness Moti as she awaited the arrival of a new mate. The timeliness of Asiatic lion love and Valentine's Day encouraged the national press and local TV to relay the story of how this critically endangered species is part of an internationally co-ordinated conservation breeding programme. We are keeping our fingers crossed for a litter of cubs in the near future.

During May, we launched Butterfly Forest, home to spectacular butterfly and moth species from across the world. Some of the first visitors to the new exhibit were the pupils of Ashton Gate School who starred, alongside the tropical butterflies, in one of the Zoo's award-winning billboards. This 'Animals in the City' poster campaign, developed with our design agency 375, was given a bronze award for Best Outdoor Poster Campaign at the Fresh Awards, a national competition that attracts nearly a thousand entries.

In July, Monty Python star John Cleese and television presenter Chris Serle hosted three fundraising 'in-conversation' evenings for the Zoo. During the sell-out evenings, they entertained and highlighted the threats faced by lemurs, one of John's favourite animals, and profiled the lemur research and conservation work undertaken by the Bristol Conservation and Science

Foundation. John Cleese and his lemur side-kick, the Zoo's Amazing Animals star Colin, proved an irresistible combination for Richard and Judy, who invited them on their show.

Bristol Zoo's annual summer festival Boogie for Brizzle was back for another year, this time in support of 'Year of the Frog'. Jam-packed with music, theatre, circus acts, cabaret, food, drink and fun for all ages, the evening raised funds to support the development of a specialist amphibian breeding facility that will contribute to the world-wide fight against amphibian extinction.

The year of firsts came to a close with a silent bang and big sparkle. The 'first ever Bangless Bonfire Night for beginners' proved an amazing and somewhat over-whelming success. This toddler and animal-friendly event, designed to test audience interest, was attended by around 2,000 people; the low-key PR and listings information captured the public imagination and the Zoo discovered an un-tapped audience; word of mouth and pick-up by local news did the rest. The evening turned out to be the busiest night of the year.

1. The annual fundraising festival, Boogie for Brizzle.
2. Children with lanterns at the Bangless Bonfire Night.
3. This award-winning billboard formed an integral part of the promotional campaign to launch Butterfly Forest.



1



2



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The people who make the Charity



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2



3



4



5

1. Zoo staff at Bristol Festival of Nature.
2. Members of the Staff Forum.
3. Annual loyalty awards.
4. Taking part in the 'Leap Frog' event for Year of the Frog.
5. Gardeners weaving a willow fence.

Partnerships and community involvement

The Bristol, Clifton and West of England Zoological Society prides itself on its partnerships with a wide range of diverse organisations locally, nationally and internationally. We believe that flourishing partnerships are a major key to success, particularly in conservation activity at home and abroad, but also within the greater Bristol city region.



Summarised financial statements

Trustees' statement accompanying the Group Summarised Financial Statements at 31st December 2008

The summarised financial statements are not the full annual report and financial statements but a summary of information derived from both the group's Statement of Financial Activities and the charity's and group's Balance Sheet. The summarised financial statements contain additional information derived from the report of the trustees, but that information is not the full text of that report.

The full annual report and financial statements, from which the summarised financial statements are derived, were approved by the trustees on 30th March 2009 and copies have been filed with the Charity Commission and with the Registrar of Companies.

The independent auditors have issued an unqualified report on the full financial statements and on the consistency of the report of the trustees with those financial statements. The statement in the independent auditors' report, under section 496 of the Companies Act 2006, was unqualified. The full independent auditors' report contained no statement under sections 498(2)(a) and (b) or 498(3) of the Companies Act 2006.

The full annual report and financial statements are available free of charge from the Company Secretary, Bristol, Clifton and West of England Zoological Society Limited, Guthrie Road, Clifton, Bristol, BS8 3HA or by email from nhiggins@bristolzoo.org.uk.

Martin Davies Jones
Chairman of Trustees
30th March 2009

Independent auditors' statement to the members of Bristol, Clifton and West of England Zoological Society Limited

We have examined the summarised financial statements which comprise the Summary Financial Review and Results for the Year, the Summary Consolidated Statement of Financial Activities (including the Summary Consolidated Income and Expenditure Account) and the Summary Balance Sheets.

Respective responsibilities of directors and auditors

The directors are responsible for preparing the summarised annual review in accordance with applicable United Kingdom law and the Statement of Recommended Practice: Accounting and Reporting for Charities (revised 2005). Our responsibility is to report to you our opinion on the consistency of the summarised financial statements within the summarised annual review with the full annual financial statements and the report of the trustees, and their compliance with the relevant requirements of section 251 of the Companies Act 1985 and the regulations made thereunder.

We also read the other information contained in the summarised annual review and consider the implications for our statement if we become aware of any apparent misstatements or material inconsistencies with the summarised financial statements. The other information comprises only the chairman's statement and the other items listed on the contents page.

This statement, including the opinion, has been prepared for and only for the company's members as a body in accordance with section 251 of the Companies Act 1985 and for no other purpose. We do not, in giving this opinion, accept or assume responsibility for any other purpose or to any other person to whom this statement is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

Basis of opinion

We conducted our work in accordance with Bulletin 1999/6 issued by the Auditing Practices Board. Our report on the company's full annual financial statements describes the basis of our audit opinion on those financial statements and the Directors' report.

Opinion

In our opinion the summarised financial statements are consistent with the full annual financial statements and the report of the trustees of Bristol, Clifton and West of England Zoological Society Limited for the year ended 31st December 2008 and comply with the applicable requirements of section 251 of the Companies Act 1985, and the regulations made thereunder.

PricewaterhouseCoopers LLP
Chartered Accountants and
Registered Auditors
Bristol,
31st March 2009

Summary financial review and results for the year

The charitable income of Bristol Zoo Gardens increased by 10%, from £4.58 million in 2007, to £5.058 million in 2008. However, within this category, direct income from Zoo visitors and members rose by a more modest 2.8%. The remainder of the increase was accounted for by a VAT refund of £351,000, resulting from the long-running case involving charitable zoos and HM Revenue & Customs regarding exemption of admission income from VAT.

The modest increase in visitor-related income includes a combination of a 4% average admission price increase with a 2.5% drop in the number of paying visitors. The drop in visitor numbers appears to be mainly explained by poor weather in April and August. Membership income was stable, and other Zoo income rose as a result of increased car park charges.

The income of the Bristol Conservation and Science Foundation increased as a result of the receipt of a higher level of grants for conservation projects.

Income relating to the Bristol Natural History Consortium fell substantially in 2008 because this activity ceased on 30th June 2008 when it was taken over by a newly-formed charity. Expenditure under this heading likewise fell for the same reason.

The large drop in voluntary income is because the 2007 figure included £1,490,000 of funding towards the NWCP Project from the South West Regional Development Agency (SWRDA) and a private individual. In 2008, the funding from SWRDA and others for the NWCP project dropped to £428,000, reflecting the completion of much of the design and development work in the early part of the year.

Activities for generating income produced less in 2008 than in 2007. There was a noticeable drop in secondary spend by Zoo visitors during the year, leading to lower revenues from the onsite shops and catering. The same applied to other sources of income such as corporate events and hospitality catering in the Clifton Pavilion.

The reduction of 'fundraising trading; cost of goods sold' reflects the lower cost of sales of retail products sold at the Zoo, reduced costs of staging corporate events, and a cutback in Zoo marketing expenditure.

A substantial effort was made to cut Zoo operating costs in the year as a response to the drop in income arising from lower visitor numbers and reduced secondary spend. For example, all non-essential maintenance work was deferred. However there were some areas of unavoidable increase, notably energy and pensions.

Expenditure on the Bristol Conservation and Science Foundation increased substantially in the year, largely due to an increase in spending on two conservation projects – fruit bat conservation in the Comoro Islands and the Great Ape Survival Partnership Project in Cameroon.

The Society's land and buildings were revalued in 2008. The land and buildings at Clifton were valued at £29.3 million, and the Hollywood Tower Estate was valued at £3.9 million. The net gain on revaluation is £8.3 million. The Society's investments fell in value by £930,000 in 2008, reflecting the dramatic drop in world stock markets during the year.

The fall in debtors during the year is because there was a large grant payment due from SWRDA for the NWCP Project at the previous year end, which was paid in 2008. Creditors falling due within one year fell by £945,000. The main reason for this was a reduction of £721,000 in the bank overdraft. Creditors falling due after more than one year rose by £360,000 resulting from draw downs on the Bank of Ireland loan for the NWCP Project.

The overall position for the year appears satisfactory, with net income before recognised gains and losses amounting to £517,000, compared with £1,138,000 in 2007. However it should be noted that in both of these years, the net income was largely accounted for by funds raised specifically for the NWCP project, with the corresponding expenditure capitalised as an asset in the balance sheet.

Summarised financial statements

Summary consolidated statement of financial activities (including the summary consolidated income and expenditure account) for the year ended 31st December 2008

Continuing operations	Unrestricted funds £'000	Restricted funds £'000	Total 2008 £'000	Total 2007 £'000
Incoming resources				
Incoming resources from charitable activities				
Bristol Zoo Gardens	5,058	-	5,058	4,580
Bristol Conservation & Science Foundation	14	154	168	105
Bristol Natural History Consortium	22	-	22	231
Incoming resources from generated funds				
Voluntary income	33	707	740	1,839
Activities for generating income	1,657	7	1,664	1,784
Investment income	135	-	135	133
Other income	15	-	15	-
Total incoming resources	6,934	868	7,802	8,672
Resources expended				
Costs of generating funds				
Costs of generating voluntary income	246	9	255	220
Fundraising trading: costs of goods sold	1,487	-	1,487	1,650
Investment management costs	10	-	10	14
Total costs of generating funds	1,743	9	1,752	1,884
Charitable activities				
Bristol Zoo Gardens	4,646	196	4,842	4,970
Bristol Conservation & Science Foundation	182	232	414	283
Bristol Natural History Consortium	53	23	76	239
National Wildlife Conservation Park	16	34	50	42
Governance costs	151	-	151	116
Total resources expended	6,791	494	7,285	7,534
Net incoming resources before transfers	143	374	517	1,138
Gross transfers between funds	42	(42)	-	-
Net income for the year before recognised gains and losses	185	332	517	1,138
Actuarial (losses)/gains on defined benefit pension scheme	(173)	-	(173)	504
Gain on revaluation of fixed assets	8,330	-	8,330	-
Loss on revaluation and disposal of investments	(930)	-	(930)	(35)
Net movement in funds	7,412	332	7,744	1,607
Total funds brought forward	29,260	1,832	31,092	29,485
Total funds carried forward	36,672	2,164	38,836	31,092

All gains and losses recognised in the year are included in the statement of financial activities. There is no material difference between the net income for the period as stated above and their historical cost equivalents.

Summary balance sheets at 31st December 2008

	Group		Society	
	2008 £'000	2007 £'000	2008 £'000	2007 £'000
Fixed assets				
Tangible assets	38,661	29,864	30,782	23,728
Investments	2,621	3,666	2,621	3,666
Investment in subsidiaries	-	-	-	-
Animals	1	1	1	1
	41,283	33,531	33,404	27,395
Current assets				
Stocks	73	115	17	26
Debtors due in more than one year	-	-	-	63
Debtors due in less than one year	540	1,190	655	696
Cash at bank and in hand	228	78	129	51
	841	1,383	801	836
Creditors: amounts falling due within one year	(1,192)	(2,137)	(1,198)	(1,977)
Net current liabilities	(351)	(754)	(397)	(1,141)
Total assets less current liabilities	40,932	32,777	33,007	26,254
Creditors: amounts falling due after one year	(1,647)	(1,287)	-	(62)
Net assets before pension deficit	39,285	31,490	33,007	26,192
Pension deficit	(449)	(398)	(449)	(398)
Net assets after pension deficit	38,836	31,092	32,558	25,794
Capital and reserves:				
Called up share capital	-	-	-	-
Unrestricted funds				
Foundation Reserve	1,000	1,000	1,000	1,000
Fixed asset reserve: Hollywood Tower Estate	3,900	3,200	-	-
Fixed asset reserve: Clifton site	30,782	23,728	30,782	23,728
Other unrestricted funds	1,439	1,730	1,028	1,205
Total unrestricted funds before pension deficit	37,121	29,658	32,810	25,933
Pension deficit	(449)	(398)	(449)	(398)
Total unrestricted funds after pension deficit	36,672	29,260	32,361	25,535
Restricted funds	2,164	1,832	197	259
Total funds (including a revaluation reserve of £7,751,000 (2007: £351,000))	38,836	31,092	32,558	25,794

Animals in breeding programmes and monitored species

A full list of animals at Bristol Zoo Gardens can be found on www.bristolzoo.org.uk

- Column 1 Number of animals in collection at 1st January 2008
 Column 2 Number of animals received in 2008
 Column 3 Number of animals born or hatched in 2008
 Column 4 Number of animals died during 2008
 Column 5 Number of animals transferred out in 2008
 Column 6 Number of animals in collection at 31st December 2008

Key to abbreviations

European Endangered Species Programme (EEP)

A managed programme of the European Association of Zoos and Aquaria.

European Studbook (ESB)

A managed programme of the European Association of Zoos and Aquaria.

Monitored Species (Mon) – A species that is monitored by a Taxon Advisory Group (TAG) through surveys examining general population trends rather than through a studbook. The work is undertaken by a Species Monitor.

Scientific name	Common name	Management status	Inventory					
			1	2	3	4	5	6
Mollusca								
<i>Partula affinis</i>	Partula snail	EEP	61			35		26
<i>Partula dentifera</i>	Partula snail	EEP	309		53			362
<i>Partula suturalis strigosa</i>	Partula snail	EEP	133			24		109
<i>Partula taeniata simulans</i>	Partula snail	EEP	8					8
<i>Partula tohiviana</i>	Partula snail	EEP	100			43		57
<i>Partula tristis</i>	Partula snail	EEP		30		6		24
Insecta								
<i>Dynastes hercules hercules</i>	Hercules beetle	ESB	1	36	84			121
<i>Polposipus herculeanus</i>	Fregate Island giant beetle	EEP	220			57		163
Amphibia								
<i>Dendrobates azureus</i>	Blue poison dart frog	ESB	7		3	4		6
<i>Leptodactylus fallax</i>	Mountain chicken frog	ESB	2	4				6
Reptilia								
<i>Cuora amboinensis</i>	Malayan box turtle	ESB	3					3
<i>Siebenrockiella crassicollis</i>	Black marsh turtle	ESB	6		2	1		7
<i>Malacochersus tornieri</i>	Pancake tortoise	ESB	11					11
<i>Testudo kleinmanni</i>	Egyptian tortoise	EEP	7		1	1	3	4
<i>Osteolaemus tetraspis tetraspis</i>	West African dwarf crocodile	ESB	6				4	2
<i>Phelsuma klemmeri</i>	Yellow-headed day gecko	ESB	4	1		1		4
<i>Heloderma suspectum suspectum</i>	Reticulate Gila monster	EEP	4	1				5
<i>Cyclura cornuta cornuta</i>	Rhinoceros iguana	ESB	2				1	1
<i>Varanus prasinus prasinus</i>	Green tree monitor	ESB	8				4	4
<i>Epicrates angulifer</i>	Cuban boa	EEP	3					3
<i>Sanzinia madagascariensis</i>	Madagascan tree boa	ESB	2					2
Aves								
<i>Casuarus casuaris</i>	Double-wattled cassowary	ESB	2					2
<i>Eudyptula minor novaehollandiae</i>	Little penguin	MON	1	2			1	2
<i>Spheniscus demersus</i>	African penguin	EEP	62		17	8		71
<i>Pelecanus rufescens</i>	Pink-backed pelican	MON	6			1		5
<i>Phoenicopterus roseus</i>	Greater flamingo	MON	28					28
<i>Branta ruficollis</i>	Red-breasted goose	MON	1					1
<i>Anas melleri</i>	Meller's duck	EEP	4	1				5
<i>Polyplectron emphanum</i>	Palawan peacock pheasant	EEP	1	2		1		2
<i>Rollulus rouloul</i>	Crested wood partridge	MON	23		39	38	3	21
<i>Recurvirostra avosetta</i>	Pied avocet	MON	16			2		14
<i>Tringa totanus</i>	Common redshank	MON	2					2
<i>Philomachus pugnax</i>	Ruff	MON	4					4
<i>Larosterna inca</i>	Inca tern	ESB	21		1	2		20
<i>Caloenas nicobarica nicobarica</i>	Nicobar pigeon	MON	14		4	4	1	13
<i>Columba mayeri</i>	Mauritius pink pigeon	EEP	3	1				4
<i>Ducula aenea paulina</i>	Chestnut-naped imperial pigeon	MON	8				2	6
<i>Ducula bicolor</i>	Pied imperial pigeon	MON	10		10	2		18

<i>Gallicolumba criniger</i>	Mindanao bleeding-heart dove	ESB	7	2	9	9	2	7
<i>Gallicolumba luzonica</i>	Luzon bleeding-heart dove	ESB	7	1	14	5	5	12
<i>Goura victoria</i>	Victoria crowned pigeon	ESB	2	3		1		4
<i>Otidiphaps nobilis aruensis</i>	White-naped pheasant pigeon	ESB	3	1				4
<i>Streptopelia turtur</i>	European turtle dove	MON		3				3
<i>Zenaida macroura graysoni</i>	Socorro dove	EEP	3					3
<i>Cacatua haematuropygia</i>	Red-vented cockatoo	EEP	6					6
<i>Lorius garrulus flavopalliatu</i>	Yellow-backed chattering lory	ESB	2					2
<i>Nestor notabilis</i>	Kea	ESB	3		3	1		5
<i>Agapornis nigrigenis</i>	Black-cheeked lovebird	MON	41	1	30	7	9	56
<i>Ara macao</i>	Scarlet macaw	ESB	2					2
<i>Amazona autumnalis lilacina</i>	Lilacine Amazon	EEP	7		2		4	5
<i>Amazona brasiliensis</i>	Red-tailed Amazon	EEP	2	1			1	2
<i>Tauraco erythrolophus</i>	Red-crested turaco	ESB		2				2
<i>Todiramphus chloris</i>	Mangrove kingfisher	MON	1	1				2
<i>Penelopides panini</i>	Tarctic hornbill	EEP	1	1		1		1
<i>Tockus deckeni</i>	Von der Decken's hornbill	ESB	1	1				2
<i>Pitta sordida mulleri</i>	Hooded pitta	ESB	1	1				2
<i>Copsychus malabaricus</i>	Common shama thrush	MON		2		1		1
<i>Copsychus saularis</i>	Magpie robin	MON	1			1		0
<i>Zoothera citrina</i>	Orange-headed thrush	MON		2				2
<i>Zoothera dohertyi</i>	Chestnut-backed thrush	ESB	3	2	13	6	3	9
<i>Garrulax courtoisi</i>	Blue-crowned laughing thrush	EEP	1			1		0
<i>Leiothrix lutea</i>	Red-billed leiothrix	MON	4	3			3	4
<i>Leucopsar rothschildi</i>	Bali starling	EEP	4			2		2
<i>Spreo superbus</i>	Superb starling	MON	4		2	1		5
<i>Cyanopica cyana</i>	Azure-winged magpie	MON	19		13	10	6	16

Mammalia

<i>Potorous tridactylus</i>	Long-nosed potoroo	MON	4			2		2
<i>Choloepus didactylus</i>	Linne's two-toed sloth	ESB	1	1				2
<i>Microcebus murinus</i>	Grey mouse lemur	EEP	5		3	3		5
<i>Eulemur mongoz</i>	Mongoose lemur	EEP	3					3
<i>Hapalemur alaotrensis</i>	Alaotran gentle lemur	EEP	3				1	2
<i>Lemur catta</i>	Ring-tailed lemur	ESB	7		1			8
<i>Varecia rubra</i>	Red ruffed lemur	EEP	5	1				6
<i>Daubentonia madagascariensis</i>	Aye-aye	EEP	3					3
<i>Nycticebus pygmaeus</i>	Pygmy slow loris	EEP	5				1	4
<i>Callimico goeldii</i>	Goeldi's monkey	EEP	2		2	2		2
<i>Callithrix geoffroyi</i>	Geoffroy's marmoset	EEP	4					4
<i>Leontopithecus chrysomelas</i>	Golden-headed tamarin	EEP	2	2	2	3		3
<i>Leontopithecus chrysopygus</i>	Black lion tamarin	EEP	2					2
<i>Leontopithecus rosalia</i>	Golden lion tamarin	EEP	2			1		1
<i>Saimiri sciureus sciureus</i>	Common squirrel monkey	EEP	18			2	5	11
<i>Aotus lemurinus griseimembra</i>	Grey-legged douroucouli	ESB	3		1	1		3
<i>Callicebus cupreus cupreus</i>	Titi monkey	EEP	2					2
<i>Pithecia pithecia</i>	White-faced saki	EEP	2		1			3
<i>Alouatta caraya</i>	Black howler	ESB	3		1			4
<i>Cercopithecus neglectus</i>	De Brazza's monkey	ESB	3	1		1		3
<i>Macaca silenus</i>	Lion-tailed macaque	EEP	6					6
<i>Trachypithecus auratus auratus</i>	Javan langur	ESB	9		1	3		7
<i>Hylobates agilis</i>	Agile gibbon	Proposed EEP	2					2
<i>Gorilla gorilla gorilla</i>	Western lowland gorilla	EEP	5	1				6
<i>Acomys cilicicus</i>	Turkish spiny mouse	MON	46		49	37		58
<i>Pteropus livingstonii</i>	Livingstone's fruit bat	ESB	13		3			16
<i>Felis margarita harrisoni</i>	Sand cat	EEP	3					3
<i>Panthera leo persica</i>	Asian lion	EEP	2	1			1	2
<i>Helogale parvula</i>	Dwarf mongoose	MON	2					2
<i>Suricata suricatta</i>	Slender-tailed meerkat	EEP	6		3	2	1	6
<i>Arctocephalus australis</i>	South American fur seal	ESB	7					7
<i>Ailurus fulgens fulgens</i>	Red panda	EEP	1					1
<i>Tapirus terrestris</i>	Brazilian tapir	EEP	4		1	1	2	2
<i>Hexaprotodon liberiensis</i>	Pygmy hippopotamus	EEP	2			1		1
<i>Tragulus javanicus</i>	Lesser Malay mouse deer	EEP	4			1	1	2
<i>Okapia johnstoni</i>	Okapi	EEP	2					2
<i>Pudu puda</i>	Southern pudu	EEP	2		1			3

Staff affiliations

Key to abbreviations

AEECL	Association Européenne pour l'Etude et la Conservation des Lémuriens	EEP	European Endangered Species Programme
ANCMZA	Advanced National Certificate in the Management of Zoo Animals	ESB	European Studbook
BALPPA	British Association of Leisure Parks, Piers and Attractions	FAITAG	Fish and Aquatic Invertebrate Taxon Advisory Group
BIAZA	British and Irish Association of Zoos and Aquariums	IUCN	World Conservation Union / International Union for the Conservation of Nature
EAZA	European Association of Zoos and Aquaria	SSC	Species Survival Commission, an IUCN commission
EAZWW	European Association of Zoo and Wildlife Veterinarians	TAG	Taxon Advisory Group
		WAZA	World Association of Zoos and Aquariums

Name	Affiliation	Organisation
Mike Adams, Horticulture Manager	Member	Botanic Gardens Education Network
	Member	Plant Life
Rachel Barrow, Senior Keeper	Member	International Marine Animal Trainers Association
Debbie Berry, Education Officer and Sparsholt Regional Coordinator	Regional Coordinator	ANCMZA
Caroline Brown, Overseer Twilight World	Member	BIAZA Mammal Working Group
	Member	BIAZA Small Mammal Focus Group
	National Assessor	ANCMZA
Dr Bryan Carroll, Deputy Director	Chair	EAZA Bushmeat Working Group
	Chair	EAZA Callitrichidae TAG
	Trustee	Cameroon Wildlife Aid Fund
	Inspector	Secretary of State's List of Zoo Inspectors
	Member	Defra-BALPPA-BIAZA Liaison Group
	Member	EAZA Council
	Member	EAZA Conservation Committee
	Member	EAZA EEP Committee
	Member	International Zoo Seminar Group
	Member	IUCN/SSC Chiroptera Specialist Group
	Member	IUCN/SSC Conservation Breeding Specialist Group
Dr Sue Dow, Capital Projects & Science Coordinator	Member	BIAZA Research Group
	Member	BIAZA Terrestrial Invertebrate TAG
	Member	Pacific Island Land Snail Group
Claudy Fox, Senior Education Officer	National Assessor	ANCMZA
	Member	Botanic Gardens Education Network
Melanie Gage, Assistant Curator of Mammals	Co chair	BIAZA Primate Focus Group
	Member	BIAZA Hoofstock Focus Group
	Member	BIAZA Mammal Working Group

Name	Affiliation	Organisation
Simon Garrett, Head of Learning	Member	Bristol Natural History Consortium, Communicate Committee
	Member	Bristol Natural History Consortium, Education and Outreach Committee
	Member	International Zoo Educators' Association
Dr Jo Gipps, Director	Chair	Bristol Natural History Consortium
	Chair	WAZA Conservation Committee
	International Studbook	Giant Panda
	Co-keeper	
	Trustee	ss Great Britain Trust
	Member	WAZA Council
	Member	BIAZA Council
	Member	BIAZA Membership & Licensing Committee
	Member	EAZA Conservation Committee
	Member	IUCN/SSC Conservation Breeding Specialist Group Steering Committee
	Member	Destination Bristol Board
David Harley, Head of Estates	Member	Bristol Partnership Prosperous and Ambitious Board
	Member	Steering Committee, Bristol Green Capital Momentum Group
	Member	Bristol Cultural Development Partnership Board
	Member	Science City Bristol, Executive Committee and Steering Committee
	Chair	BIAZA Sustainability Group
Nick Higgins, Head of Finance and HR	Member	Charity Finance Directors' Group
Heather Holve, Head of PR and Marketing	Member	Marketing Advisory Group, Destination Bristol
Rowena Killick, Veterinary Resident	Member	British Veterinary Association
	Member	British Veterinary Zoological Society
	Member	EAZWW
	Member	American Association of Zoo Vets (AAZV)
	Member	UKZOOVET
Mandy Leivers, Avon Gorge and Downs Biodiversity Education Officer	Member	Bristol Naturalists Society
	Member	Countryside Management Association
Ann Lovell, Manager of Volunteer Services	Secretary	BIAZA Volunteer Coordinator Forum
	Member	Bristol Volunteer Organiser Forum
	Member	Time 4 Bristol
Neil Maddison, Head of Conservation Programmes	Chair	Avon Biodiversity Action Plan Communication Group
	Trustee	Cameroon Wildlife Aid Fund
	Trustee	Hawk and Owl Trust
	Member	Ape Alliance Bushmeat Working Group
Samantha Mant, Head of Development	Member	BIAZA PR and Marketing Committee
	Member	Bristol Junior Chamber of Commerce
	Member	CBI SW Council
	Member	South Gloucestershire Business West Steering Committee
	Fellow	British American Project
Edwin Mole, Head of Horticulture	Chair	EAZA Plant Conservation Network
	Member	BIAZA Plant Working Group
	Member	Bristol Horticultural Training Partnership
	Member	Royal Botanic Gardeners Guild Edinburgh
	Member	UK PlantNetwork

Staff affiliations (continued)

Name	Affiliation	Organisation
David Naish, Education Manager	Education advisor	Cameroon Wildlife Aid Fund
	Member	BIAZA Education Training Committee
	National Assessor	ANCMZA
Jen Nightingale, Native Species Conservation Officer	Member	BIAZA Native Species Working Group Steering Committee
	Member	BIAZA Aquarium Working Group Steering Committee
	Member	Institute of Ecology and Environmental Management
Lucy Parkinson, PR Manager	Member	BIAZA Communications and Development Committee
John Partridge, Senior Curator/ Curator of Mammals	Studbook Keeper	Black Howler Monkey ESB
	National Assessor	ANCMZA
	Member	BIAZA Mammal Working Group
	Member	EAZA Felid TAG
	Member	EAZA Small Mammal TAG
Sharon Redrobe, Head of Veterinary Services	Council Member	British Veterinary Zoological Society
	Examiner and Board Member	Royal College of Veterinary Surgeons Zoological Medicine
	Honorary Senior Lecturer	Exotic Species, University of Bristol
	Lecturer	MSc Wild Animal Health, University of London
	Assistant Editor	Journal Zoo and Wildlife Medicine
	Board Member	Journal of Small Animal Practice
	Inspector	Secretary of State's List of Zoo Inspectors
	Member	BIAZA Veterinary Advisory Group
	Member	Association of Avian Veterinarians
	Member	Association of Reptile and Amphibian Veterinarians
	Member	British Small Animal Veterinary Association
	Member	British Veterinary Association
	Member	British Veterinary Zoological Society
	Member	European Association of Zoo and Wildlife Veterinarians
	Member	Infectious Disease Working Group, EAZWV
	Veterinary Advisor	Cameroon Wildlife Aid Fund
	Veterinary Advisor	EAZA Bat and Insectivore TAG
	Veterinary Advisor	EAZA Pelecaniformes TAG
	Veterinary Advisor	EAZA Pigeon and Dove TAG
	Veterinary Advisor	Sand Cat EEP
	Veterinary Advisor	EAZA Cebid
	Veterinary Advisor	Small Carnivore TAG
	Founder/Moderator	UKZOOVET
Member	UK Government Working Group on the Interpretation of The Council Directive 92/65/EEC	
Member	Zoological Information Management System (ZIMS) development team	
Member	British Veterinary Association (BVA) Avian Influenza Advisory Group	

Name	Affiliation	Organisation
Dr Christoph Schwitzer, Head of Research	Executive Secretary	AEECL
	Honorary Research Fellow	University of Bristol, School of Biological Sciences
	Nutrition Advisor	EAZA Callitrichidae TAG
	Research Advisor	BIAZA Primate Focus Group
	Co-editor	EAZA Zoo Nutrition Group Newsletter
	Examiner	Konrad Adenauer Foundation Scholarships for talented graduates
	Section Editor	'Zoo Animals', UFAW Animal Welfare
	Member	BIAZA Research Group
	Member	EAZA Nutrition Group
	Member	EAZA Research Committee
	Member	International Primatological Society
	Member	IUCN SSC Primate Specialist Group
	Member	Madagascar Wildlife Conservation
Member	Primate Society of Great Britain	
Nigel Simpson, Curator of Birds	Studbook Keeper	Luzon Bleeding Heart Dove ESB
	Studbook Keeper	Mindanao Bleeding Heart Dove ESB
	Member	EAZA Penguin TAG
	Member	EAZA Pigeon and Dove TAG
Tim Skelton, Curator of Reptiles and Amphibians	Studbook Keeper	African Pancake Tortoise ESB
	Studbook Keeper	Yellow-headed day gecko ESB
	Member	BIAZA Reptile & Amphibian Working Group
	Member	British Dendrobatid Group
	Member	British Herpetological Society
	Member	Chelonian Research Foundation
	Member	EAZA Reptile/Amphibian TAG
Member	Society for the Study of Reptiles and Amphibians	
Jenny Spencer, Senior Keeper	Member	British Herpetological Society
	Member	BIAZA Reptile & Amphibian Working Group
	Member	EAZA Reptile/Amphibian TAG
Warren Spencer, Curator of Invertebrates	Co-Chair	EAZA Terrestrial Invertebrate TAG
	Chair Coleoptera sub-group	BIAZA Terrestrial Invertebrate Working Group
	Regional Collection Plan Officer	EAZA Terrestrial Invertebrate TAG
	Member	BIAZA Terrestrial Invertebrate Working Group
	Member	Amateur Entomological Society
	Member	BIAZA Pacific Island Land Snail Group
	Member	Natural England Barberry Carpet Moth Steering Group
	Member	Natural England Mole Cricket Steering Group
	Member	Natural England New Forest Cicada Steering Group
	Member	
Kellie Wyatt, Head Veterinary Nurse	Member	British Veterinary Nursing Association
	Member	British Veterinary Zoological Society
	Member	UK Zoo Vet Nurse Group

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Mrs	J	Duval	Mr	E G M	Niblett	Mrs	R	Zenker

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Staff list

as at 31st December 2008

Senior Management

Dr Jo	Gipps	Director
Dr Bryan	Carroll	Deputy Director
David	Harley	Head of Estates
Nick	Higgins	Head of Finance and HR
Samantha	Mant	Head of Development
Alex	Page	Head of Commercial Operations

Learning

Simon	Garrett	Head of Learning
Debbie	Berry	Education Officer
Amy	Bye	Education Officer
Dr Malu	Celli	Presenter
Claudy	Fox	Senior Education Officer
Anna	Francis	Graphic Designer
Rob	Goodchild	Senior Presenter
Georgina	Grubb	Weekend Animal Technician
Jane	Haakonsson	Ranger
Phil	Jearey	Graphic Design Manager
Victoria	Jones	Ranger
Kiri	Krych-Smith	Animal Technician
Su	Lees	Illustrator
Mandy	Leivers*	Avon Gorge & Downs Biodiversity Education Officer
Ann	Lovell	Manager of Volunteer Services
David	Naish	Education Manager
Rick	Newton	Presentations Manager
Andrew	Wakefield	Volunteer Services Assistant
Nicky	Weekes	Education Administrator
James	Weston	Keeper (Presentations)
Kimberley	Wilkins	Ranger
Lindsay	Woodard	Volunteer Services Assistant

Bristol Natural History Consortium (BNHC)

Savita	Custead*	BNHC Director
Angela	Congedo*	BNHC Events Manager
Berry	Goddard*	Education Officer

Animals

John	Partridge	Senior Curator of Animals
Kate	Atwell	Overseer
Lynsey	Bugg	Overseer
Peter	Cain	Keeper
Andy	Carbin	Keeper
Yvonne	Collins	Keeper
Leanne	Croker	Keeper
Katie	Cummins	Senior Keeper
Grier	Ewins	Keeper
Trevor	Franks	Keeper
Peter	Furlong	Overseer
Mel	Gage	Assistant Curator of Mammals
Peter	Gardiner	Keeper
Sam	Gleed	Keeper
Kate	Harding	Keeper
Louise	Hayes	Keeper
Dee	Masters	Overseer
Rachel	Moore	Keeper
Joe	Norman	Keeper
Charlotte	O'Shaughnessy	Keeper
Emily	Pugh	Acting Senior Keeper

Simon	Robinson	Keeper
Rob	Rouse	Acting Overseer
Joanne	Rudd	Keeper
Jon	Rudd	Assistant Curator of Aquarium
Toby	Sandmann	Keeper
Nigel	Simpson	Curator of Birds
Tim	Skelton	Curator of Reptiles and Amphibians
Victoria	Snook	Keeper
Carmen	Solan	Keeper
Jenny	Spencer	Senior Keeper
Warren	Spencer	Curator of Invertebrates
Natalie	Stephens	Keeper
Karla	Tucker	Keeper
Alice	Warren	Registrar
Matt	Webb	Senior Keeper

Veterinary services

Sharon	Redrobe	Head of Veterinary Services
Rowena	Killick	RCVS Trusts Senior Clinical Training Scholar
Richard	Saunders	RWAF Veterinary Resident
Kellie	Wyatt	Head Veterinary Nurse

Horticulture

Eddie	Mole	Head of Horticulture
Michael	Adams	Horticulture Manager
Jeff	Attwood	Gardens Supervisor
Andrew	Barnes	Gardener - Hollywood
Matthew	Bufton	Gardens Manager
Ken	Cullimore	Gardener
Carol	Daly	Gardener
Jonathan	Hill	Gardener
Emma	Moore	Horticulture Supervisor
Stephen	Oxenham	Gardener
James	Pocock	Gardener
Kirsty	Sayce	Gardener - Hollywood
Tracey	Sommers	Gardener - Hollywood
Nick	Weeks	Gardener
Mark	West	Gardener

Field conservation

Neil	Maddison	Head of Conservation Programmes
Hugh	Doulton	Indian Ocean Conservation Officer
Jan	Nightingale	Native Species Officer

Research

Dr Christoph Schwitzer	Head of Research
------------------------	------------------

Human resources

Sue	Gregory	Head of Human Resources
Sarah	Eason	Payroll/Human Resources Assistant

* Separately funded

Finance and administration

Sam	Church	Finance Administrator
Karen	Coghlan	Management Accountant
Lynn	Conway	Finance Administrator
Virginia	Davenport	Senior Finance Administrator
Kristina	Haldane	PA to the Director
James	Williams	Assistant Accountant

Estates

Dr Sue	Dow	Assistant Estates Manager
Brian	Colenso	Head of Maintenance
Richard	Bufton	Maintenance Department
Michael	Cole	Maintenance Department
Doug	Garland	Health & Safety Advisor
Toby	Holloway	Mechanical/Electrical Maintenance Technician
Rob	Mulholland	Driver
Kevin	Rosser	Maintenance Department
Eddie	Verinder	Maintenance Department
Tim	Warrilow	IT Manager
Richard	Young	Maintenance Manager

National Wildlife Conservation Park (NWCP)

Sallie	Blanks	NWCP Client Representative /Project Manager
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Development

David	Hetherington	Corporate Fundraiser
Lizy	Jones	General Fundraiser
Sharon	Phillips	PA to Head of Development
Nicola	Ramsden	Senior Prospect Researcher
Debbie	Woolley	PA to Head of Development

Marketing

Heather	Holve	Head of PR and Marketing
Jessica	MacMillan	Marketing Assistant
Lucy	Parkinson	PR Manager
Rebecca	Sawtell	Marketing Coordinator
Rosie	Sims	Product Marketing Coordinator

Front of House (FOH)

Scott	Fessey	FOH Manager (Customer Services)
Roger	Gregorzik	FOH Manager (Visitor Support)
Maggie	Pearson	FOH Manager (Retail)
Derek	Barnes	FOH Visitor Support
James	Baxter	FOH Assistant
Samantha	Boardman	FOH Assistant
Carrie	Bowey	FOH System Administrator
Charles	Campbell	FOH Visitor Support
Henry	Carroll	FOH Assistant
Stephen	Cockle	FOH Visitor Support
Hazel	Dartnall	FOH Assistant
John	Dartnall	FOH Visitor Support
Katy	Edgell	FOH Assistant
Dr David	Evans	FOH Visitor Support
Carla	Gardiner	FOH Supervisor
Anne	Gerrard	FOH Administrator
Gwen	Hanson	FOH Assistant

Samantha	Hooper	FOH Supervisor
Sarah	Hooper	FOH Assistant
Abigail	Johnstone	FOH Assistant
Sahar	Khayatian	FOH Assistant
Francis	McDermand	FOH Assistant
Sally	Merriman	FOH Assistant
Oscar	Peters	FOH Visitor Support
Josie	Rogers	FOH Assistant
David	Shepherd	FOH Visitor Support
Clifford	Smith	FOH Visitor Support
Danielle	Smitheram	FOH Assistant
George	Staley	FOH Visitor Support
Samantha	Stapleton	FOH Supervisor
Kelly	Thomas	FOH Administrator
Stan	Trethewey	FOH Visitor Support
Kelsie	Venn	FOH Assistant
Gordon	Vincent	FOH Assistant
Graham	Webber	FOH Visitor Support
Gavin	Whately	FOH Visitor Support
Ted	Willman	First Aider
Martyn	Wright	FOH Visitor Support

Volunteers serving three years or more

Ceri	Addis	Teresa	Lambert
Victoria	Arrowsmith-Brown	Antje	Lehmann
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Lynne	Burst	Carrie	O'Brien
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Annette	Cowhig	Lucy	Pritchard
Diana	Crabtree	Jo	Purcell
Liz	Curtis	Lucy	Radford
Emma	Davis	Liz	Revill
Janet	Dawson	Moises	Rocha
Colin	Dean	Mary	Rogowski
Roy	Eatock	Margaret	Seaman
Sandra	Elston	Sylvia	Sheppard
Sheila	Fairgrieve	Saijie	Sim
Jill	Field	Edna	Spencer
Sue	Geary	Dennis	Taylor
Linda	Godwin	Joyce	Thomas
Alan	Goldsmith	Margaret	Viner
Mia	Hale	George	Waples
Jane	Hele	Alan	White
June	Hewett	Kerry	Whiting
Sarah-Jane	Howard	Joan	Williams
Val	Howard	Phaedra	Williams
Alice	Hughes		
Tony	Hughes		
Pauline	Kirkpatrick		

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as at 31st December 2008

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BA (Cantab). Solicitor.

Victoria Arrowsmith-Brown. MA (Oxon). Formerly Chair and Director of J W Arrowsmith Ltd, a printing company based in Bristol, now self-employed in largely print and paper-related pursuits. She has been a lifelong shareholder of the Zoo.

Michael Bothamley. BA (Dunelm), Solicitor and Bristol Senior Partner of Beachcroft LLP, a commercial law firm with offices in Bristol, Birmingham, Brussels, Dublin, Leeds, London, Manchester, Newcastle and Winchester.

Richard Clarke. Regional Head of Development at GVA Grimley, based in Bristol. Former Chairman of the House Builder's Federation. His family has over 100 years' involvement with the Zoo.

Professor Robert Cuthbert. MA, MSc, MBA, DipEdAdmin. Professor of Higher Education Management, University of the West of England. Chair of Aimhigher South West, the regional partnership for widening participation in higher education. Former Chair of the Society for Research into Higher Education. (Representing the University of the West of England).

Professor Innes Cuthill. MA (Cantab.), D.Phil (Oxon), President of the Association for the Study of Animal Behaviour, Head of the School of Biological Sciences

and Professor of Behavioural Ecology, University of Bristol (representing University of Bristol).

Professor Allen Goodship. PhD, BVSc, MRCVS. Professor of Orthopaedic Science, University College London and Royal Veterinary College. Director of the Institute of Orthopaedics and Musculo-skeletal Science UCL; Visiting Professor of Biological Medical Sciences, University of Bristol; Visiting Professor in the Discipline of Pathology, School of Medical Sciences, University of Adelaide.

John Howells. JP, FCA. Formerly Partner at PricewaterhouseCoopers, Chartered Accountants.

Paul Kearney. Has spent 30 years in the regional newspaper and media sector and was previously Managing Director of Bristol United Press PLC. He now has a portfolio of interests in the medical, PR and recruitment sectors.

James McArthur. BA (Hons). Sales and Marketing Director of McArthur Group Ltd, one of the largest private companies in the UK, based in Bristol.

Charlotte Moar. MA, FMCA, Finance Director of Wiltshire Primary Care Trust.

Frank Smith. BSc MD FRCS, Senior Lecturer and Consultant Vascular Surgeon, University of Bristol and Bristol Royal Infirmary.

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For further information on how your actions today will help save our planet for tomorrow, please call Lizy Jones on 0117 974 7328 or email ljones@bristolzoo.org.uk



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