



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

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

zsl.org

For a closer look at ZSL's work, look out for our other annual publications at zsl.org/about-us/annual-reports



ZSL Conservation Review 2012
An in-depth look at our conservation fieldwork and research, showing how we're achieving our key targets at home and abroad.



ZSL Institute of Zoology Review 2012/13
All our research activities, collaborations, publications and funding in one yearly report.

THE YEAR IN
REVIEW 2012





OUR VISION:

A world where animals are valued, and their conservation assured

OUR MISSION:

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

Welcome

The President and Director General of the Zoological Society of London introduce our review of the year and look back on the highlights of 2012.



As President of the Zoological Society of London (ZSL), it gives me great pleasure to bring you our 2012 Annual Review. The year has witnessed some remarkable successes, with significant conservation developments,

ground-breaking research by our scientists in the Institute of Zoology and exciting developments at ZSL London Zoo and ZSL Whipsnade Zoo.

First, however, I would like to pay tribute to the many staff, supporters, members and volunteers who continually and enthusiastically support ZSL's mission. Without you, we could not achieve everything that we do.

Inspiring people to care and protect the natural world is an essential thread that runs throughout all of our efforts and continued to do so in 2012. From working with local communities to create sustainable livelihoods, and releasing important research that reaches millions of people around the world to the engaging talks at our zoos and the interactive classes led by our education officers, instilling excitement about the natural world is essential if we are to protect it.

Throughout this review you will also read more about the work carried out for our new Sumatran tiger exhibit. *Tiger Territory* opened in March 2013, which is an excellent example of the Society pulling together in a bid to inspire people. As well as being the perfect exhibit for our tigers, *Tiger Territory* provides an ideal base to tell people more about the fieldwork in Indonesia that they are helping to fund through the cost of their zoo tickets.

Alongside these projects, you will discover much more about our work in the following pages, and I'm sure you will agree with me that 2012 was a year for ZSL to be proud of.

Sir Patrick Bateson, President



Counting pygmy sloths, revealing the hidden lives of penguins and welcoming an abundance of new arrivals to our zoos are just some of the projects you can read more about in our 2012 Annual Review.

We hope this review leaves you as passionate about animals as we are and provides you with a taste of our work at the Zoological Society of London (ZSL). From our zoos to our field conservation and research work in far-flung corners of the globe, the daily lives of our staff may be very diverse, but we all share one common goal and passion: to promote and achieve the worldwide conservation of animals and their habitats.

A particular highlight of mine during 2012 was the launch of the ZSL Animal Photography Prize. Open to amateurs and professional photographers alike, we were astounded by the thousands of entries that came flooding in to us. As part of the judging panel, I had the pleasure of reviewing the many entries that truly captured the beauty of the natural world, and we're looking forward to seeing what images the 2013 competition will bring.

Other highlights of the year included the Society getting into the UK's list of the top 100 best-known charities for the first time, meeting staff from our projects all over the world at a two-week training course in London, and the ZSL Council approving our plans for a fabulous new restaurant at ZSL London Zoo.

The achievements you will discover more about on the following pages were made possible not only thanks to the unwavering dedication of our staff and volunteers, but through the many people and organisations that continue to offer ZSL their support. Thank you. Each and every one of you is helping us protect animals for future generations.

Ralph Armond, Director General

Our global reach

From rescuing gorillas to conserving mangrove forests, ZSL's conservation work is truly international in scope. These are just a few of our 2012 highlights – turn to page 16 to read more about our fieldwork.



PANAMA



ANTARCTICA



UK



EQUATORIAL GUINEA



KENYA



CAMEROON

1. PANAMA

In May 2012, a conservation team visited the island of Escudo de Veraguas to conduct surveys of the pygmy three-toed sloth, work that will help form an action plan to ensure its survival (see page 7).

2. MONTSERRAT

We are fighting to save the critically endangered mountain chicken frog, with a bumper brood of tadpoles born at ZSL's London Zoo Aquarium in 2012 and conservation efforts continuing in the wild (see page 13).

3. ANTARCTICA

ZSL has been helping to deploy advanced remotely triggered cameras to monitor

populations of penguins in this ecologically sensitive part of the world (see page 7).

4. IRELAND

By using the latest geo-tracking technology, we have been able to monitor puffins on the island of Skellig Michael, near Ireland, learning more about these characterful and little-known birds.

5. UK

ZSL is protecting UK wildlife by shaping Marine Protected Areas, carrying out conservation breeding and reintroductions, and monitoring threatened species such as the harbour seal (see page 20).

6. TURKEY

In Turkey, our Fish Net consortium is working to save the Anatolian killifish from extinction, with breeding programmes at ZSL London Zoo aiding conservation efforts in the wild (see page 14).

7. CAMEROON

Our Wildlife Wood Project is helping timber-logging companies in the Congo Basin adopt low-impact practices and improve wildlife management in their concessions (see page 30).

8. EQUATORIAL GUINEA

ZSL works with industry and government in Equatorial Guinea to address bushmeat

hunting and the wildlife trade, which in 2012 resulted in the rescue of young gorilla Afangui (see page 8).

9. KENYA

ZSL has a long history of working in Kenya, and over the next year we will be displaying some of the innovative technological conservation tools that we are using in the Tsavo East National Park.

10. SAUDI ARABIA

As part of ZSL's long-running project at the King Khalid Wildlife Research Centre, we assist with desert monitoring and the reintroduction of species such as Arabian and sand gazelles.



SAUDI ARABIA



NEPAL



INDONESIA



THAILAND



MONGOLIA



PHILIPPINES

11. CHAGOS

Our scientists and conservationists are studying and protecting biodiversity in the Chagos Marine Protected Area, and undertook two research trips in 2012 (see page 21).

12. BANGLADESH

ZSL scientists recently released a new study of the Sundarbans, the largest expanse of mangrove forest in the world, helping us understand this ecologically priceless habitat and the threats it faces.

13. NEPAL

We're protecting the greater one-horned rhino in Chitwan National Park and Bardia, with poaching rates dropping significantly since

we introduced smarter patrolling and trained local rangers in our techniques.

14. THAILAND

Along with our partner, the Elephant Conservation Network, we're protecting Asian elephants in the Salakpra Wildlife Sanctuary by tackling human-elephant conflicts and restoring forest habitat.

15. MONGOLIA

ZSL is providing local and global conservationists with the tools to protect Mongolia's unique and fragile ecosystems, running a summer field course for future leaders as part of our Steppe Forward programme.

16. INDONESIA

Indonesia is a stronghold for the critically endangered Sumatran tiger. We're working to protect it by addressing human-tiger conflicts (see page 18) and reducing the impact of the palm oil industry on its habitat (see page 19).

17. PHILIPPINES

As part of Project Seahorse, ZSL has helped to set up more than 30 Marine Protected Areas in this diverse nation to combat the trade in precious marine life. Our other local successes include Net-Works (see page 19).

18. RUSSIA

As part of our work with the Amur leopard and tiger, we initiated Forest Eyes in the Lazovsky

Nature Reserve and Zov Tigra National Park – a network of 30 camera traps to help catch trespassers and poachers (see page 9).

19. CHINA

Our EDGE scientists are creating a holistic programme to encourage the sustainable management of the Chinese Giant Salamander, currently number two on our EDGE Amphibians priority list.

20. NEW ZEALAND

The hihi, a small, distinctive bird, has become extinct from most of its former range in New Zealand. ZSL scientists are trying to understand why, and re-establish a self-sustaining population.

Our 2012 highlights

From new conservation projects to a new photography competition, there was plenty to celebrate in 2012. With the help of the ZSL Directors, we look back on some of the most memorable moments of the year.

★ JANUARY ★

↓ TAKING STOCK

Armed with clipboards and tally charts, ZSL London and Whipsnade Zoos' keepers braved the chill for a mammoth animal counting session in front of the press. The stocktake made front-page news in *The Times* and *The Guardian*.



A TRIO OF TWINS

Keepers at ZSL London Zoo were astonished when three sets of twins arrived almost simultaneously at its Rainforest Life exhibit. The line-up included baby cotton-topped tamarin monkeys, grey slender lorises and giant jumping rats.

★ FEBRUARY ★

→ FIRED-UP FUNDRAISERS

Our supporters were encouraged to take up the challenge of a lifetime at ZSL London Zoo's first ever Fire Walk. Seventy intrepid fundraisers braved the embers to clock up more than £33,000 for our work.



★ MARCH ★

EYE IN THE SKY

Monitoring protected habitats from space allows scientists a grand view of the effects of climate change, according to research published by ZSL. The study used satellite imagery to map protected areas in 33 African countries over 27 years.

↑ DIVING RIGHT IN

As Olympic fever hit the capital, the residents of ZSL London Zoo's Penguin Beach got involved in the action with their very own diving board. To celebrate the Zoo being awarded an official Inspired by London 2012 mark for its Animal Athletes, our 50+ colony of Humboldt and rockhopper penguins gave Tom Daley a run for his money.



★ APRIL ★



↑ ZOO ACADEMY CONTINUES

David Field, Zoological Director
“When asked to present the

graduation certificates at Zoo Academy I never expected to be so completely blown away by the graduates themselves. These people had just spent time working to prepare themselves for possible future careers as zookeepers or vets. What I never expected was how motivating and brilliant they all were – truly the conservationists of the future.”



A NIGHT AT LOOKOUT LODGE

Rich Storton, Commercial and Communications Director

“My 2012 highlights included a stay at Lookout Lodge, the new overnight camping experience at ZSL Whipsnade Zoo, which offers guests a once-in-a-lifetime chance to experience the zoo after dark. It was the launch week and I was with a number of journalists who left raving about how great ZSL was, and how the zoo, the overnight experience and the staff were all excellent.”



PRICELESS OR WORTHLESS?

Professor Jonathan Baillie, Conservation Programmes Director

“It was wonderful to see our book *Priceless or Worthless?* released at the IUCN World Conservation Congress, reaching a global audience and igniting a debate over whether a species of little economic value should be viewed as worthless. It was also rewarding to see the book resulting in a number of plants, animals and fungi on the verge of extinction receiving additional conservation attention.”

↑ CAUGHT ON CAMERA

The ZSL Animal Photography Prize opened to the public for the very first time. Created to find the most amazing animal photography in the world, competition categories included *Last Chance to See* and *The Human Animal*, and received thousands of top-class entries, including this shot of the critically endangered gharial by Robert Heischman.

PENGUINS IN SECRET

Sixteen hidden cameras planted by scientists in Antarctica revealed parts of the penguin life cycle that normally go unseen. Researchers from ZSL and the University of Oxford journeyed more than 9,000 miles to set up the time-lapse cameras, in a bid to learn how we can best conserve these charismatic creatures.

★ MAY ★

A RIGHT ROYAL MENAGERIE

Photographs of Her Majesty The Queen playing with penguins and welcoming new animals were just some of the items on display during ZSL's Diamond Jubilee exhibition. Commemorating ZSL's Royal Patron The Queen, the event featured some previously unseen mementos from the archives.

↓ SEARCHING FOR PYGMY SLOTHS

A group of pygmy three-toed sloths, unique to a remote island near Panama, was surveyed for the first time by our conservationists. The team undertook the nine-day expedition to Isla Escudo de Veraguas to learn more about the population of this critically endangered species, which is ranked at number 16 on ZSL's EDGE of Existence list of the world's most at-risk mammals.

OUR LIVING PLANET

Astronaut André Kuipers helped launch our *Living Planet Report 2012* from the International Space Station. Produced by ZSL, WWF and the Global Footprint Network, the biennial publication highlights the pressure humankind is placing on the planet. Showing that declines in biodiversity are highest in low-income countries, the 2012 report demonstrated how the most vulnerable nations are subsidising the lifestyles of wealthier countries.





★ JUNE ★

← OLD NETS, NEW CARPETS

Conservationists from ZSL began an exciting new venture with carpet manufacturer Interface to recycle discarded fishing nets in the Philippines. The Net-Works project aims to rid the area of the nuisance of old nets by recycling them into environmentally friendly carpet tiles, generating income for local communities along the way. See page 19 for the full story.



★ AUGUST ★

↑ A BABY ZEBRA

ZSL Whipsnade Zoo celebrated the arrival of a new Grévy's zebra. The lively foal often gives his mum the run-around in the zebra paddock. In the wild, this rare zebra has suffered declining numbers due to commercial hunting, and continues to be affected by habitat loss.

GORILLA RESCUE

Afangui was an orphaned gorilla being kept illegally to attract tourists to a beach restaurant in Equatorial Guinea. ZSL helped secure her removal to a wildlife sanctuary in neighbouring Cameroon, and is working closely with the government and other partners to prevent other wild animals suffering a similar fate.



★ JULY ★

↑ ZOO LATES

Zoo Lates continued to provide a night out like no other, with more than 60,000 tickets sold to these popular ZSL London Zoo events. Taking place every Friday in June and July, silent discos, cabaret performances and a host of animal talks ensured Zoo Lates were the wildest nights of the year.

★ SEPTEMBER ★

→ AN ELEPHANT CELEBRATION

Whipsnade's very own pachyderm Picasso picked up a paintbrush and showed off her artistic skills for our elephant appreciation weekend, Elephantasia. Talented Karishma used her trunk to paint a wooden elephant with splashes of colour



to mark the event, which raised around £10,000 for conservation and research projects.



WHAT A HULLABAZOO

Mike Russell, Finance Director
 "Hullabazoo, Whipsnade's brand new animal-themed adventure play centre, opened for

the autumn half-term, attracting more members and driving up catering spend in only two months. Such successes really add credibility to our plans for the trading arm of the charity and give our Trustees the confidence to authorise further investment, such as for the major refit, now underway, of the main London restaurant."

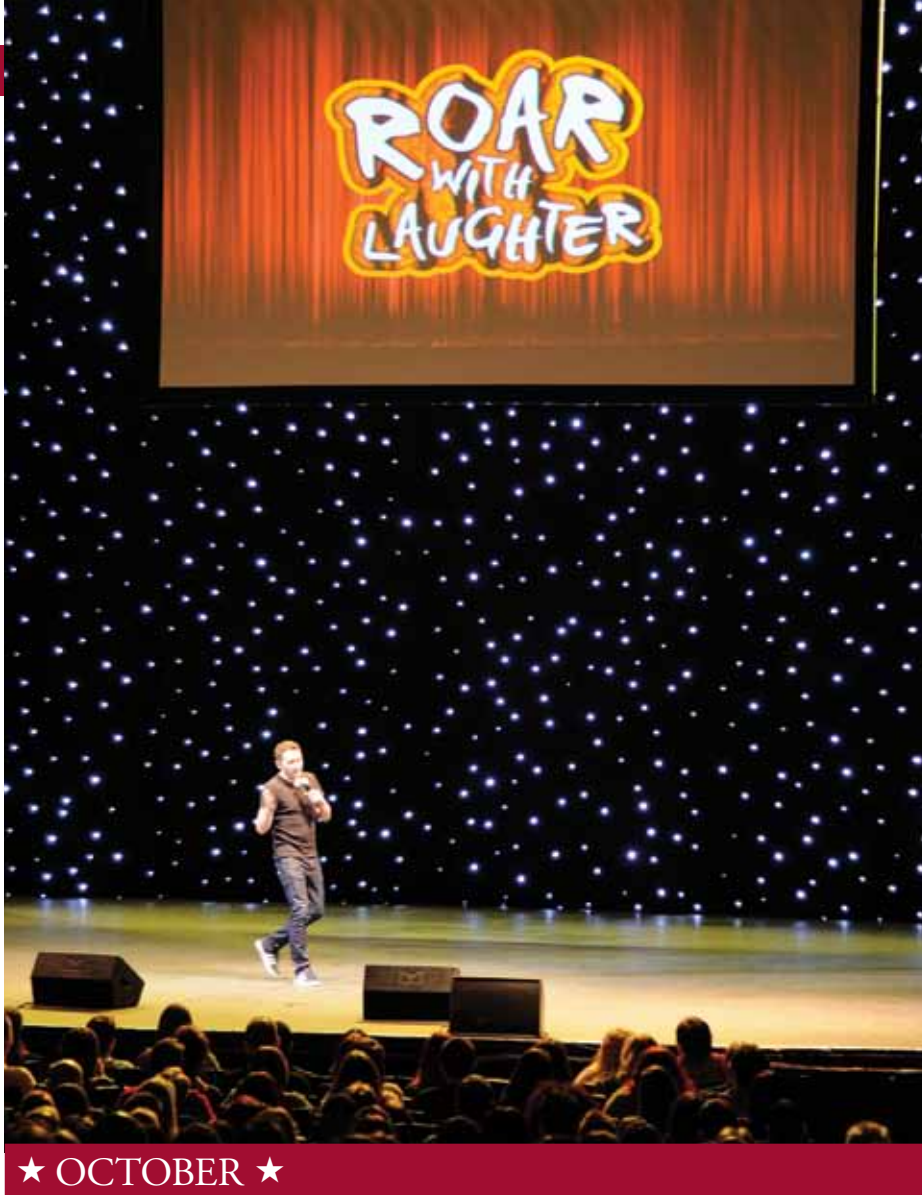


DINNER WITH USAIN BOLT

James Wren, Development Director
 "Fresh from the London Olympics, the fastest man on

the planet, Usain Bolt, helped us raise thousands for the fastest land mammal on the planet, the cheetah, by hosting a fundraising gala at ZSL London Zoo. Activities like this bring more of ZSL's supporters together to help us with our work to conserve our planet's amazing wildlife."





★ OCTOBER ★

↑ ROAR WITH LAUGHTER

Top comedians helped ZSL raise more than £50,000 at our Roar with Laughter comedy evening in aid of the Sumatran tiger. More than 2,000 people crammed into the HMV Hammersmith Apollo to be entertained by the likes of Phill Jupitus, Lucy Porter and Ed Byrne.



↙ TIGERS IN TRANSIT

ZSL London Zoo welcomed two new tigers, who travelled more than 14,000 miles courtesy of DHL to meet after some serious matchmaking efforts. Male Jae Jae from Akron Zoo in Ohio and female Melati from Perth Zoo, Australia, were paired up through the Sumatran tiger studbook, a global breeding programme coordinated by ZSL, and will take up residence in London's new *Tiger Territory* (see page 13).



★ NOVEMBER ★

↑ FOREST CCTV

ZSL and the Russian Government installed 30 camera traps in a nature reserve in the Russian Far East to protect endangered Amur tigers from poaching and other threats. Apart from ZSL's Forest Eyes project, these camera traps can capture remotely activated photos of would-be poachers entering the reserve.



★ DECEMBER ★

↑ CHRISTMAS COMES EARLY

Seasonal festivities arrived early for residents and visitors alike at ZSL zoos. Visitors lined up to meet Santa in his grotto, while children became Keeper's Little Helpers for the day and got stuck into preparing festive treats for the animals.



NO TO BADGER CULL

*Professor Tim Blackburn,
Institute of Zoology Director*

"For me, the highlight of 2012 was seeing

Parliament vote overwhelmingly against the proposed badger cull. Research by the Institute's Professor Rosie Woodroffe (see page 24) had shown that the cull was likely to be ineffective in preventing bovine tuberculosis in cattle, and she was instrumental in briefing MPs on the arguments against the cull. I only hope that this is more than a temporary reprieve for the UK's badger population."



WELCOMING APPRENTICES

Ian Meyrick, Human Resources Director

"Expansion of our pilot apprentice scheme at ZSL London Zoo to include animal keepers and horticulture this year was an important step forward, and has created exciting opportunities for young people to enter the zoo world."

Our zoos

From nurturing new life to continually monitoring and improving welfare, our London and Whipsnade zoos continued to lead the way in animal care and conservation in 2012.

Our reputation as world leaders in animal husbandry means that we continually push forward research into breeding and enrichment techniques and best practice. A new research strategy for our living collections was launched in March, and by the end of the year more than 60 projects were underway, looking at everything from how we can best assess the health of our oryx to monitoring the growth rates of young seahorses.

Making sure that each and every one of our animals receives exemplary care is at the heart of our work at ZSL London and Whipsnade Zoos. In 2012, we embarked on several projects to raise our already high standards of care further, including a new welfare audit led by our zoo curators.

By introducing these audits we are ensuring that our husbandry techniques are world class and that we continue to lead the way in animal care. Their recommendations have already resulted in all kinds of advances, from simple additions such as heated outdoor shelves to keep our chimps comfortable, to major investments including better filtration systems for our sea lions and a brand new area for amphibians in the Reptile House at ZSL London Zoo.



ZSL zookeepers also have an outstanding and well-deserved reputation for their training skills, as visitors to our popular animal talks can testify. Away from the crowds, this expertise is also put to good use to look after our animals and support their veterinary care. Approaching a large, powerful zoo animal with a needle isn't everyone's idea of a good day at work, but in 2012 our team

successfully trained Mjukuu the gorilla to accept injections for health checks, while tigers at both zoos were taught to present their tails for routine blood samples. These impressive advances mean that our animals can receive the care they need with no need for darts or anaesthetics.

As well as leading the way in animal husbandry and care, our keepers and vets have had some fantastic conservation successes, including the breeding of 79 corncrakes, one of Britain's most threatened farmland birds, for release into the Nene Washes in Cambridgeshire. It was also a good year for our invertebrate initiatives, with 161 rare fen raft spiders being raised by ZSL keepers and released into suitably marshy sites in Norfolk and Suffolk, as part of a collaborative rearing-and-release effort involving more than 2,500 baby spiders.

NEWS BY NUMBERS

1.5 million visits were made to ZSL London and Whipsnade Zoos in 2012

Our new amphibians exhibit is home to rare species like this mossy frog, and left is an example of a veterinary health check





CREATING A HULLABAZOO

At Whipsnade, the year drew to a close on a playful note with the opening of Hullabazoo in October. This fun indoor play area encourages children to take inspiration from their favourite zoo animals. Swinging like chimps and hopping like wallabies have proved to be some of the most popular activities, and Hullabazoo has been such a success with visitors and members that plans are now underway for a new outdoor play area to open in 2013.



ZSL Whipsnade Zoo's Hullabazoo play centre opened in October



Pickle the penguin gets a full health check by a ZSL vet



TRAINING NEW VETS

Teaching zoo and wild animal medicine continues to be one of our veterinary department's core activities. Last year saw a fresh intake of students from around the world on our hugely popular Wild Animal Biology and Wild Animal Health MSc courses, for which we provide clinical and pathological rotations, as well as lectures and practical sessions. Veterinary undergraduates from London's Royal Veterinary College also joined the department for three-week blocks as part of their studies, while our expert vets offered courses ranging from pathology investigations to tiger health and handling (not for the faint-hearted!).



The Wild Bite Café is serving homegrown produce



SUSTAINABILITY SUCCESSES

In recent years we've been working harder than ever to minimise ZSL's impact on the environment, and 2012 was no exception. The year saw us turn our attention to reducing waste – from restaurant leftovers and defunct computers to animal droppings – with the aim of bringing our landfill rate down to just 2%. Over the course of the year we collected 17,000 tonnes of zoo poo from our herbivores to turn into high-quality fertiliser, while other compostable waste was sent off to help produce energy. By the end of the year we were thrilled to have reached our 2012 target, with 98% of waste being composted, recycled or reused.

ZSL staff came up with two excellent sustainability projects in 2012, with a little help from our relaunched 'Make ZSL Greener' fund. The astonishing rainwater harvesting project in our London Aquarium has already produced nearly 20,000 litres of water for use in our aquarium tanks, collecting rainwater from the heights of our Australian outback exhibit and storing it in underground reservoirs. Over at Whipsnade, an inspiring locally grown foods project has supported the development of an onsite herb and vegetable garden just behind our Wild Bite Café, meaning that fresh, homegrown produce can now be used in our restaurants. It doesn't get more local than that!

A WELFARE WIN

ZSL London Zoo won a BIAZA award for Significant Advance in Husbandry and Welfare for its work with grey slender lorises



Jae Jae the Sumatran tiger is settling into his new home



AMPHIBIAN ADVENTURES

The opening of a new Amphibians exhibit at ZSL London Zoo's Reptile House and some amazing first-time breeding successes with near-extinct frogs made it a landmark year for ZSL's herpetology team.

From fish that 'walk' to toads with midwifery skills, Amphibians tells the remarkable story of the world's frogs, toads, salamanders, newts and caecilians, shedding light on their fantastic diversity and the threats they face. As well as getting up close to the 11 species of amphibian on display, visitors can also watch our keepers and scientists in action in the exhibit's conservation lab, where the team is monitoring and researching species to help inform our field conservation projects.

In particular, our work with the critically endangered mountain chicken frog achieved a major breakthrough in 2012. With the frogs facing extinction in their natural home of Montserrat and Dominica, ZSL has long been working to establish a breeding population at the zoo. Mountain chicken frogs are notoriously difficult to breed, but two of our females successfully reared 76 juveniles. While the London team was hard at work rearing the frogs, our project staff in Dominica were also busy setting up an effective breeding facility for frogs on the island. Thanks to all their efforts, we will soon be ready to release the London frogs back into their native habitat in Montserrat, and commence breeding in Dominica.



Find amphibians such as the salamander at London's new exhibit



"Every tiger is important"

Paul Kybett, Senior Keeper at ZSL London Zoo, oversaw the arrival

of our new male Sumatran tiger Jae Jae from Ohio in October: "The courier company DHL transported Jae Jae from the US for us and I was with him every step of the way. It was a long journey, first by road and then by cargo flight from Cincinnati to London via Leipzig, but Jae Jae is such a laid-back cat he slept through most of it! He settled in very quickly at London, but we took our time to introduce him to our new female, Melati. Neither had met a member of the opposite sex before, and we were worried that she might feel nervous around an animal 45 kilos heavier than herself and lash out. But it couldn't have gone better: when Jae Jae trotted up to her, making a friendly 'chuffing' noise, Melati chuffed right back and they had a big head rub. It was magical. Sumatran tigers are so rare in the wild that giant pandas outnumber them about eight to one. With only 300 or so left in the wild, every single Sumatran tiger birth is important. With them getting on so well in their new *Tiger Territory* home, there's absolutely no reason why Jae Jae and Melati shouldn't breed."



LOOKOUT LODGE

Brand new for 2012, ZSL Whipsnade Zoo's Lookout Lodge gave visitors the chance to experience the magic of the zoo at night, including a special keeper-led evening tour to see some of Whipsnade's 2,500 animals. During the year, 2,900 adults and children stayed in the lodges, with 98% of guests rating the experience as excellent or very good. Lookout Lodge is also helping to generate some extra funds for ZSL, raising an additional £63,000 profit in 2012.

WILD NIGHTS

2,900 guests enjoyed a stay at Lookout Lodge, Whipsnade's new overnight experience



FISH NET SAVES SHOALS

ZSL London Zoo's team of aquarists came to the rescue of five critically endangered species of fish in October. As part of our Fish Net conservation programme, which helps protect freshwater species around the world, the team travelled to the Anatolian lakes in Turkey to collect five species of the region's last remaining pupfish. Working with colleagues from Istanbul and Ankara, the team safely transported more than 300 fish to Faruk Yalçın Zoo in Istanbul, where they helped create eight specially designed aquariums to house the precious delivery. As numbers of these lively fish dwindle in the wild due to invasive species and habitat loss, our newly established groups are beginning to flourish and breed, helping create a vital back-up population for the future.



PERFECT PLANTING

From planting new exhibits and caring for protected grassland to maintaining our zoos' grounds, our horticulture teams had a busy year in 2012. In particular, ZSL London Zoo's new flagship exhibit *Tiger Territory* saw the team pull out all the stops, recreating the natural habitat of our Sumatran tigers. The 2,500sq m exhibit is split into three areas, including tropical rainforest, edge habitat and marginal water planting. A staggering 12,125 plants and trees were used and, with two years' planning to perfect the design, *Tiger Territory* is set to wow visitors in 2013.



NEW FOR 2012

From tortoises to tigers, we welcomed some very exciting newcomers to both our zoos last year.

→ BIRTHS

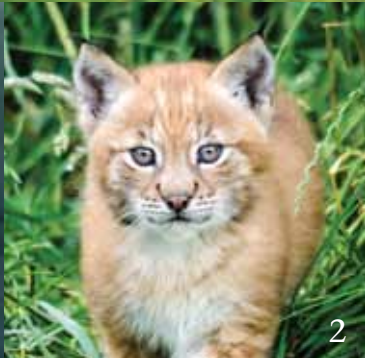
Greater one-horned rhino, pygmy hippo (1), Partula snails, scimitar-horned oryx, moose, silvery marmosets, scarlet-chested sunbirds, bongo antelope, Sulawesi crested macaque, jungle nymph stick insects, purple-spotted gudgeon fish, chameleon (3), giraffe (4), lynx (2), red pandas (8), saki monkey (7), sitatunga antelope (6).

→ ARRIVALS

Amur tiger, Sumatran tigers, ferrets, Galapagos tortoises (5), Bactrian camel, sitatunga antelope (6), Australian lungfish, two-toed sloth, leaf-cutter ants, moholi bushbabies, Philippine water monitors, palm pit viper, Boelen's pythons, Mallorcan midwife toads, Sardinian brook salamanders.



1



2



3



4



5



6



7



8

Our field conservation

With projects conducted in more than 50 countries across 12 regional centres in Asia and Africa, it was another busy and impressive year for ZSL field conservation in 2012.

ZSL's current field conservation work is shaped by seven key initiatives. These include our flagship EDGE of Existence programme, a scheme that prioritises evolutionarily distinct and globally endangered species – in short, the rarest, most unique creatures in the world. We are also working to secure key habitats for top predators. To date, this action has concentrated on tigers, but it will be expanding to include cheetahs, lions, African wild dogs and sharks.

Driven by our partnership with Microsoft Research and University College London, our third initiative is on technology for nature – developing revolutionary new technologies to enable the remote monitoring of wildlife and allow conservation organisations to measure and report on the success of their activities.

ZSL is a recognised authority on the creation of Marine Protected Areas (MPAs), another key plan we are keen to build on. Our work in the marine realm also includes the restoration and protection of mangrove forests across Africa and Asia.

Unfortunately, mining and agribusiness are huge drivers of biodiversity loss, and for this reason our sixth initiative involves developing best-practice guidance to reduce the impact of the business world on the natural one. Finally, we also assist countries in monitoring the status and trends of their biodiversity, and provide guidance on how to factor this information into policy. Our commitment to bringing together

conservation theory and practice – enhanced by links between our field projects and our Institute of Zoology – affirms ZSL's position as one of the strongest science-based conservation organisations in the world.

Just some of our many highlights of 2012 included: participating in international conferences such as the Rio+20 United Nations Conference on Sustainable Development and the International Union for Conservation of Nature (IUCN) World Conservation

Congress; completing our Wildlife Picture Index project mapping species in Mongolia; the arrest of four poachers in Russia through our Forest Eyes surveillance project; launching our new platform for the sustainable palm oil industry; and establishing several new specialist groups at the Species Survival Commission of the IUCN. We also exposed governments' empty promises on ocean

protection; released the first league table charting progress toward 2020 MPA targets; published a groundbreaking Living Planet Report; carried out aerial surveys of wildlife in Saudi Arabia; and helped create one of Africa's largest protected areas in Niger's Termit and Tin Toumma National Nature Reserve. Our successful events calendar included gala dinners for EDGE and with Zeitz Foundation Ambassador Usain Bolt, as well as the first annual dinner for our ZSL Honorary Conservation Fellows. Many congratulations are due to our staff for the tremendous work carried out in 2012.



From work in the field to the Rio+20 summit (left), it was a busy year for ZSL conservationists, working with species such as this hermit crab





PRICELESS OR WORTHLESS?

For the first time, more than 8,000 scientists identified the 100 most-threatened animals, plants and fungi on

the planet. The results were published in a book, *Priceless or Worthless?* Produced by ZSL and the IUCN Species Survival Commission, the title was warmly welcomed by HRH the Duke of Cambridge, who noted that it “challenges us to commit to safeguarding our priceless natural heritage for future generations”. *Priceless or Worthless?* was launched at the IUCN World Conservation Congress in South Korea and generated media coverage reaching more than 70 million people worldwide. At the same conference, we unveiled *Spineless*, our cutting-edge report on the conservation status of invertebrates – those small things that run the world. Meanwhile, several important political motions led or supported by ZSL were adopted at the congress, including proposals for developing national and regional red lists of threatened species, halting the loss of evolutionarily distinct species and advancing the idea of biological security.



LIFE ON THE EDGE

Find out how to get involved in our EDGE (Evolutionarily Distinct and Globally Endangered) programme at zsl.org/edge



TIGERS IN CONFLICT

With fewer than 300 individuals thought to remain in the wild, the critically endangered Sumatran tiger is under increasing threat due to conflicts with humans. Persecuted by poachers hoping to sell

their bones and other parts to the Chinese medicine trade, tigers can also be badly injured by snares set for pigs and deer. Tackling these situations is crucial if we are to maintain survival rates, but requires a special set of skills. To empower Indonesian vets to assist in rescuing or relocating these tigers, ZSL ran a practical training course in partnership with Taman Safari Indonesia (TSI, a Java-based zoo with good hospital facilities), Wildlife Vets International (WVI), the Indonesian Forestry Ministry and HarimauKita (the Indonesian Tiger Conservation Forum). Dr Tai Strike of ZSL London Zoo teamed up with vets from WVI and TSI to train participants in tiger anaesthesia and basic first aid. The work led to the publication of the world's first government guidelines for tiger conflict resolution, including vital veterinary advice.



“New conservation technology tools”

Olivia Needham,

Conservation Technology Projects Co-ordinator, is helping to develop the latest technology: “We need to be creative in how we collect data. The new conservation technology tools we’re developing will help us to gather information faster and respond more quickly to threats. Raising awareness of these tools and training our staff on the ground in how to use them is vital. I’m very involved in Instant Wild, a system designed to send real-time photographs taken by our wildlife camera traps for identification via web and smartphone apps. We’ve been expanding the project in 2012 and had some exciting sightings, including a mountain mouse-deer in Sri Lanka and a Javan leopard in Indonesia. Another highlight has been our



TRAINING TOMORROW'S CONSERVATION LEADERS

Training future conservation leaders is a key part of ZSL's flagship EDGE of Existence programme. Our Conservation Tools course in Kenya's Coast Province brought together 13 early-career conservationists with experts from ZSL, the Kenya Wildlife Service and CORDIO (Coastal Oceans Research and Development in the Indian Ocean) for a month's intensive training in how to design, execute and manage successful conservation projects. Eight participants were awarded EDGE Fellowships and will receive support from ZSL over the next two years as they spearhead action for some of the world's most neglected species.



SUSTAINABLE PALM OIL

The growth of plantations producing lucrative palm oil is a major factor in the disappearance of Indonesia's tropical forests and the unique species that inhabit them. ZSL has been working to reduce the negative effects of the global palm oil industry for a decade, providing conservation advice and pushing for improved standards. In October 2012, we launched our new Sustainable Palm Oil Platform at sustainablepalmoil.org. Packed with useful guidance and resources, the site is a valuable tool for anyone involved in the palm oil industry.



Opposite: ZSL Vet Tai Strike during a practical workshop. Above: the graduates of ZSL's EDGE of Existence Conservation Tools training course in Kenya. Right: ZSL's Biodiversity & Oil Palm Programme aims to protect Indonesia's tropical forests and the species that live there



CREATING NEW NET-WORKS

Communities in the fragile coral ecosystem of Danajon Bank in the Philippines discard miles of old fishing nets each year. Such nets can entangle marine life and pollute the shoreline for years to come. Net-Works, a groundbreaking project between ZSL and carpet makers Interface, is giving these nets a new lease of life. The old nets are purchased and recycled into nylon yarn, which is used by Interface to make carpets. Net-Works has cleaned up 50 to 60km of beach while providing a sustainable product for the manufacturer and extra income for villages. ZSL hopes to expand the project to other communities worldwide.

involvement in SMART – an anti-poaching software tool that allows users to manage, search and analyse data from wildlife patrols. SMART has been developed by leading conservation organisations and is the first attempt to develop a global law-enforcement monitoring tool in the battle against poaching. In 2012 the SMART consortium held its first international Training of Trainers event to kick-start the testing of SMART. It's been a great year for these projects and there are more developments ahead."



RIO+20 UNITED NATIONS CONFERENCE

A key event at the Rio+20 conference was the GLOBE International World Summit of Legislators – a gathering of more than 300 legislators from 86 countries. Jonathan Baillie, ZSL's Director of Conservation Programmes, delivered the keynote address at this event, highlighting ways of incorporating natural capital into national accounting systems and thereby recognising the true value of our natural systems. We chose this moment to present our Pledge for a Better Planet, generated through our recent youth campaign with ClientEarth. Following an impassioned speech by a youth representative, the legislators in the room queued to sign the pledge, agreeing to honour the commitments they had made. Four other ZSL staff also attended Rio+20, delivering a range of sessions on marine conservation and engaging young people.



WILD ABOUT ANIMALS

More than 800,000 animal sightings have been identified and logged on our Instant Wild app – to get involved, visit zsl.org/instantwild



SEAL TAGGING IN THE THAMES

The UK's harbour (or common) seal has seen a major population fall, with numbers declining by more than 50% since 2000. The reason is unknown, but may be due to climate change, shifts in prey species, disease, disturbance or competition. Understanding the species' patterns of movement and foraging behaviour is critical if we are to develop a management plan. Last year ZSL, along with the Sea Mammal Research Unit of St Andrews University, deployed 10 satellite-tracking tags on harbour seals in the inner Thames Estuary, and collected blood samples to gain an insight into their health, diet and feeding patterns. Visual counts from the shore, boats and light aircraft, all carried out by local community groups, added to the information from the tags and, crucially, involved Londoners in the conservation of their local seals. Maps generated are now helping to ensure that development in the area avoids impacting on these fascinating mammals.



The unspoilt Chagos Archipelago is home to a rich variety of island and marine species, such as the red-footed booby



EXPLORING THE CHAGOS ARCHIPELAGO

At 640,000km², the Chagos Archipelago is the world's largest fully protected marine reserve. Thanks to its remote Indian Ocean location, the rich sea life of Chagos has remained undisturbed by human influence and largely undiscovered. In 2012, ZSL scientists took part in two expeditions to this extraordinary wilderness. A highlight of the first was video footage from the newly discovered Sandes Seamount – an underwater mountain peaking below the surface. The resulting images, teeming with marine life, showed just what our oceans should look like. Our second expedition focused on the most neglected area of the ocean – the 'big blue' open water. Trialling new camera technology, the team developed new ways to monitor top predators such as sharks and tuna. Meanwhile, ZSL's work with Chagos continued closer to home, with an outreach programme to promote the protection of this priceless archipelago among the UK's Chagossian community (see page 30).



Our conservation science

The Institute of Zoology, ZSL's scientific research wing, carries out world-class research and education to help conserve animal species and their habitats.

Funded primarily by the Higher Education Funding Council for England, the body that supports universities, the Institute of Zoology (IoZ) also receives support from other UK research councils and charities. Our work tackles a wide range of conservation issues and is organised into four key themes.

Our Biodiversity and Macroecology research theme examines regional and global patterns in the biology, ecology and distribution of species and their habitats and tests hypotheses about the processes that may cause and maintain such patterns. For example, we have been looking at how to make the most of our camera-trap data – images of wildlife that are captured by automated cameras linked to movement sensors. This research has shown that the position of animals relative to the camera in these images can be used to assess the sensitivity of the traps. Taking this camera sensitivity into account allows researchers to produce unbiased estimates of animal abundance. Another study looked at patterns of animal movement in front of the cameras, revealing that traditional radio-tracking studies have underestimated the distances that some species cover due.

Behavioural and Population Ecology research theme aims to test key theories in behavioural and population ecology, and use knowledge of these areas in both wild species and the human populations that interact with them, to inform conservation policy

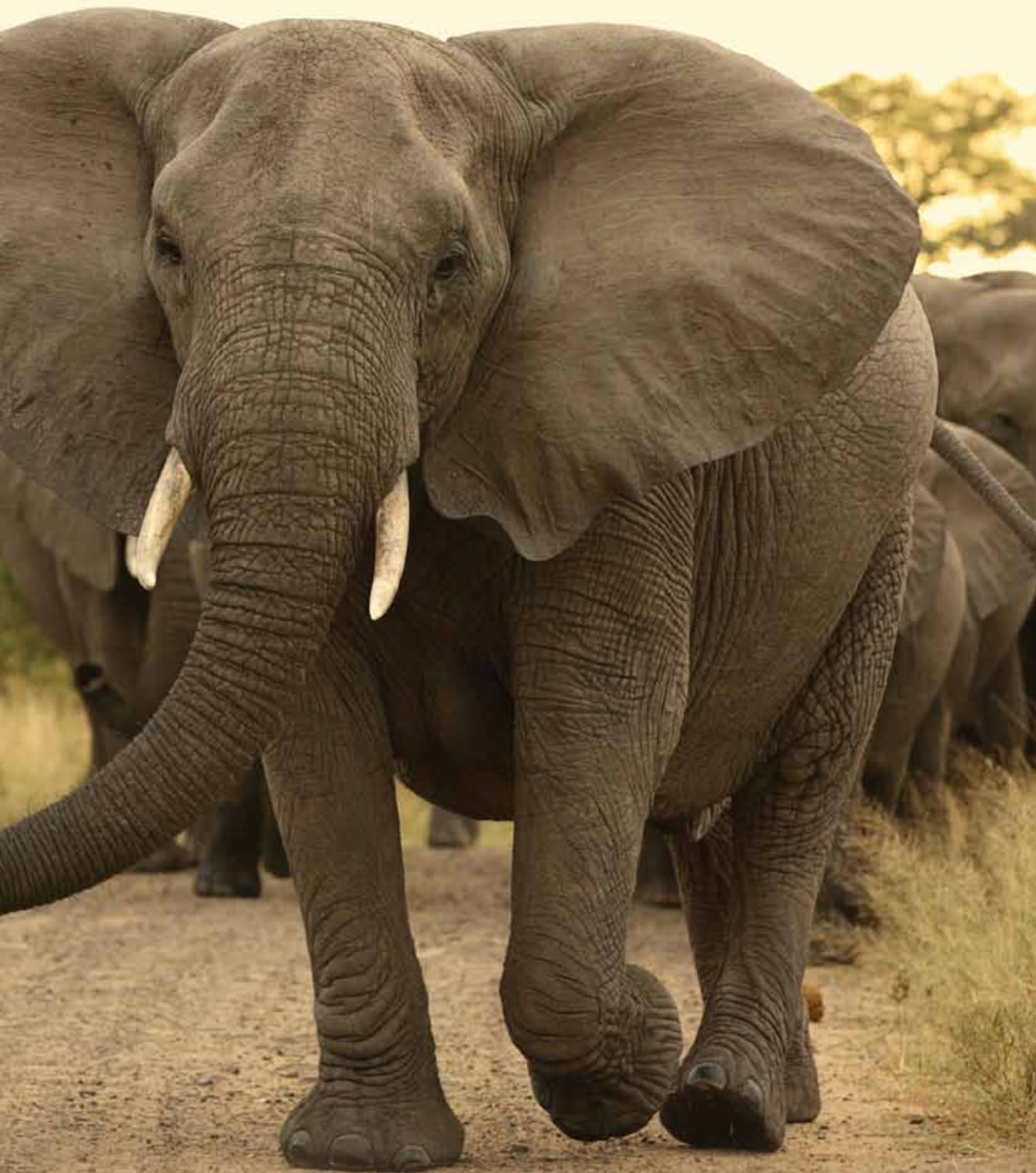


and management. Included in 2012 research was a study on natural population die-offs in land mammals. Extreme climatic events are expected to occur more frequently in the coming years, with potentially devastating effects on wildlife. Our research has provided a working definition of such population die-offs and created a framework for assessing the vulnerability of mammals to natural and man-made disasters. With this, we hope to identify the animal populations most at risk from climate change.

Our Evolution and Molecular Ecology research seeks to deepen our understanding of the evolutionary processes that shape biodiversity. Recently, we have been using habitat suitability modelling to predict the global distribution of deep-sea octocorals, showing that this group of corals thrive in calcite-rich waters as they use the mineral to build their skeleton. However, this has worrying implications for their future, as the increasing acidity of the world's oceans is known to reduce calcite saturation. Our work suggests that only 3.5% of the ocean is a suitable for these corals.

Wildlife Epidemiology research investigates the threat of disease to the persistence of wildlife populations. One study looked at the role of the southern house mosquito in the spread of West Nile virus in the Galápagos Islands. Our work on infection and transmission rates revealed that the mosquitoes are a carrier of this dangerous disease, and should be treated as a threat to animal and public health in the archipelago.

This page: ZSL's research is helping us understand land mammal populations. Left: Camera trap images are shedding new light on species' movements





“Badger culling is a distraction”

Professor Rosie Woodroffe of the Institute of Zoology has been at the forefront of research into the link between badgers and cattle tuberculosis (TB): “We know that badgers transmit TB to cattle, so it makes sense to expect culling badgers to help control bovine TB. However, our research showed that culling increased the spread of TB in the badger population because the remaining animals roamed more widely. The overall benefits of culling are so small, and the risks and costs so high, that it has become a costly distraction from the serious business of tackling cattle TB. Yet the Government is still planning a cull. I’ve gone from advising Defra to influencing the debate in other ways. In Wales, I was an expert witness in the court case that legally halted a cull. Wales is now taking the lead on vaccinating badgers instead.

“Too much management is put in place with no evidence as to whether it’s going to work. People trust their common sense above science – but science is needed because sometimes common sense isn’t enough, and management intended to help actually makes matters worse.”



SCIENTIFIC AWARDS

Some outstanding successes in conservation and zoological research were celebrated in ZSL’s 2012 annual awards and prizes. These recognise all levels of achievement, from the Prince Philip Award and Marsh Prize for the best ALevel or Higher student project (awarded to Shona Ann Crawford-Smith and Dee Webb), and the Charles Darwin Award and Marsh Prize for best undergraduate thesis (Marius Wenzel) to the Thomas Henry Huxley Award and Marsh Prize for an exceptional PhD thesis (Kate Jordan). Significant achievements by professional zoologists are acknowledged with the Scientific Medal (Tom Little and Jon Slate) and Frink Medal for British Zoologists (Paul Harvey

COMMUNICATING SCIENCE

Our varied programme of meetings and events is another important way for ZSL to get its vital conservation success stories across.

Our symposia

ZSL’s expert symposia bring together leading international voices in conservation science, giving them an opportunity to share their research and exchange ideas on best practice. The May symposium (Economics as if life mattered: can we shape economic policy to save species?) explored the ways in which today’s global market economy hinders conservation and discussed whether practical incentives, such as assigning market values to species, could help bring about economic change. Our November symposium (Protected Areas: are they safeguarding biodiversity?) reviewed the effectiveness of the world’s protected areas in conserving species and ecosystems, identifying promising new tools and technologies for preserving biodiversity in these areas.



CBE FRS), while the Marsh Awards for Conservation Biology (Jane Hill) and Marine and Freshwater Conservation (Brendan Godley) recognise advances in fundamental science and its application to conservation. The Thomson Reuters/Zoological Record Award for Communicating Zoology and ZSL's Silver Medal are awarded for distinguished contributions to the communication and understanding of zoology and went to Nigel Paterson for the BBC's *Planet Dinosaur* and Martin Fisher, editor of the international journal *Oryx*, respectively. The Stamford Raffles Medal for work by an amateur zoologist was presented to teacher Dan Danahar, while Jeremy Mallinson of the Durrell Wildlife Conservation Trust won the ZSL Award for Outstanding Contributions to the Zoo Community.

JOIN IN

Want to attend a ZSL lecture or event? Check out our latest programme at zsl.org/science/events

Public lectures

ZSL's popular Science and Conservation lectures are free and open to the public. Held regularly throughout the academic year, each event provides an insight into the very latest zoological and conservation research, with 2012's topics including: the decline of mangrove swamps; the life history of parasites; the catastrophic effect of extreme natural events on biodiversity; the Sargasso Sea; innovative ways to save tigers; and how to tackle knowledge gaps and bias in scientific work. We also teamed up with the Wellcome Collection for 'Surviving the century: a key species debate', a thought-provoking look at the interdependence of the human and animal worlds.

The Stamford Raffles Lecture

Our annual keynote lecture is delivered by an eminent speaker from the world of zoology. In 2012 we welcomed Professor Tim Birkhead FRS from the University of Sheffield (left), for a fascinating talk on 'Darwin, sex and sexual selection'. Examining Darwin's misconception that females are less promiscuous than males, it looked at the diversity of animals' reproductive behaviour.





The ZSL Library's prized collection of art works includes this beautifully painted zebra family



THE ZSL LIBRARY

It was another busy year for our Library in 2012, with more than 3,100 book titles added to the online catalogue, 2,363 journal issues accessioned, and 2,124 loans made to ZSL Fellows, staff and volunteers.

We celebrated the bicentenary of the birth of artist and writer Edward Lear in May 2012 with a special display of his nature watercolours, as well as loaning three of our twelve paintings to the Royal Society's exhibition *Edward Lear and the Scientists*. The BBC also filmed our Lear collection for their antiques show *Flog It!*

To mark The Queen's Diamond Jubilee, our royal charter featured as artefact of the month on the ZSL website, while photographs of The Queen visiting ZSL London Zoo in 1976 and 1990, and other memorabilia, were put on display in the Library.

Recent gifts to our collection include 55 animal drawings from the collection of naturalist Charles Hamilton Smith (1776-1859), presented by former ZSL Secretary Professor R McNeill Alexander. The family of the late Bernard Owens kindly donated an 1887 ZSL silver medal formerly owned by an Indian maharaja, and a Queen Victoria golden jubilee medal dating from the same year.

We are very grateful for the help of our dedicated volunteer team, as well as the many Fellows and Members who support the Library with their time, gifts and funds.



Sally Lightfoot crab

READ ON

Find out more about the Institute of Zoology's work and see our review of the year at zsl.org/science/publications

OUR PUBLICATIONS

Publishing scientific journals and books is just one of the ways in which ZSL is encouraging the communication of cutting-edge science between researchers, zoologists and the public.

Journal of Zoology

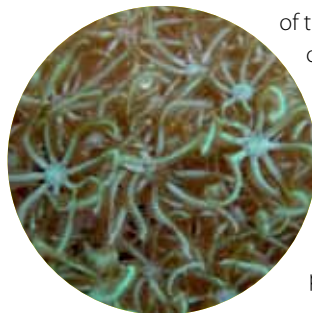
Published monthly, our Journal includes hypothesis-driven studies that advance our knowledge of animals and their systems. During 2012, the Journal enjoyed its highest-ever impact factor, with a large number of citations in other academic work.





MONITORING BIODIVERSITY

Global environmental agreements such as the international Convention on Biological Diversity (CBD) have set stringent and ambitious goals for biodiversity conservation. Scientifically robust indicators are needed to track progress towards these goals and define the status and trends of biodiversity; our Indicators and Assessments Unit was formed in 2006 to provide exactly that. This year, the work



of the unit's staff and students has expanded to build our understanding of wildlife population dynamics in the Arctic, develop new methods for forecasting the impact of environmental policy changes on wildlife, and help us assess how much we really know about invertebrate biodiversity patterns in the face of uncertain data. Many of the unit's projects are providing the science to shape global biodiversity policy for the CBD's 2020 strategic plan.

Animal Conservation

Our forum for the rapid publication of new research papers and commentaries on species and habitats was as well-received as ever in 2012, with two virtual editions in 2012 on camera trapping and protected areas.



International Zoo Yearbook

The 46th volume of the Yearbook continued to uphold its reputation as an invaluable resource for researchers, animal managers and anyone with an interest in wildlife conservation. With a dedicated section on New World primates, it highlighted advances in the maintenance, husbandry and breeding of at-risk species.

Conservation Science and Practice books

The titles in our Conservation Science and Practice series published by Wiley-Blackwell address the multidisciplinary side of conservation, looking at how biologists and ecologists are collaborating with social scientists to deliver long-term, sustainable change.

Our engagement work

Our educators and communicators have enjoyed a busy and successful year, with some wonderful activities designed to enlighten and inspire the public about ZSL's work.

A restructure at the start of 2012 helped coordinate the work of our Communications and Discovery and Learning teams to ensure that everyone in contact with ZSL receives clear, consistent communications – whether they're visiting our website, talking to a volunteer or reading about us in the press.

A key focus during the year was the creation of a new Discovery and Learning strategy. The strategy not only covers formal learning opportunities at ZSL, but also includes our long-term aims for interpretation and engagement, evaluation, arts and culture, and highlighting the social factors of conservation programmes.

School trips to ZSL zoos continued to be popular, with 84,958 educational visits to ZSL London Zoo in 2012, despite the stopping of financial support from local government, and 33,631 visits to Whipsnade. Facilities for visiting schools have also been improved at the latter, with a second teaching space and a new lunchroom.

Another big step forward was the introduction of an evaluation process for our Discovery and Learning activities, using evidence-based research to help us understand what's working well and what needs improving. A dedicated evaluation coordinator is now working with the department, and throughout ZSL, to track the development and success of



our projects, including flagship exhibits such as Penguin Beach and Amphibians. Visitor studies were also conducted to assess events such as Zoo Lates, Special Children's Day and our Chagos Family Open Day.

Meanwhile, the Communications team enjoyed some great successes over the year and tackled some important challenges, too. Our PR team oversaw the filming of the second series of ITV's *The Zoo*, which featured some well-known faces from the original run, as well as some new stars.

Our Interpretation team completed work on the new Deadly Birds arena at London, where our keepers' demonstrations are held. The team carried out an update of visitor information at Sealion Splash at Whipsnade, and at London more than 2,500 signs were recorded on our database.

The ZSL website went from strength to strength in 2012, converting an increased number of visitors into customers. We also launched a mobile version of the site. Work to update the main website management system got underway, in a long-term project to improve the customer experience. ZSL's social media channels proved increasingly popular, with our Facebook, Twitter and YouTube accounts gaining more than 20,000 new followers.

PHONE SUPPORT

Our new Supporter Services Team on 0844 225 1826 is receiving up to 600 calls a day

A second series of ITV's *The Zoo* was filmed in 2012, with a third series in production



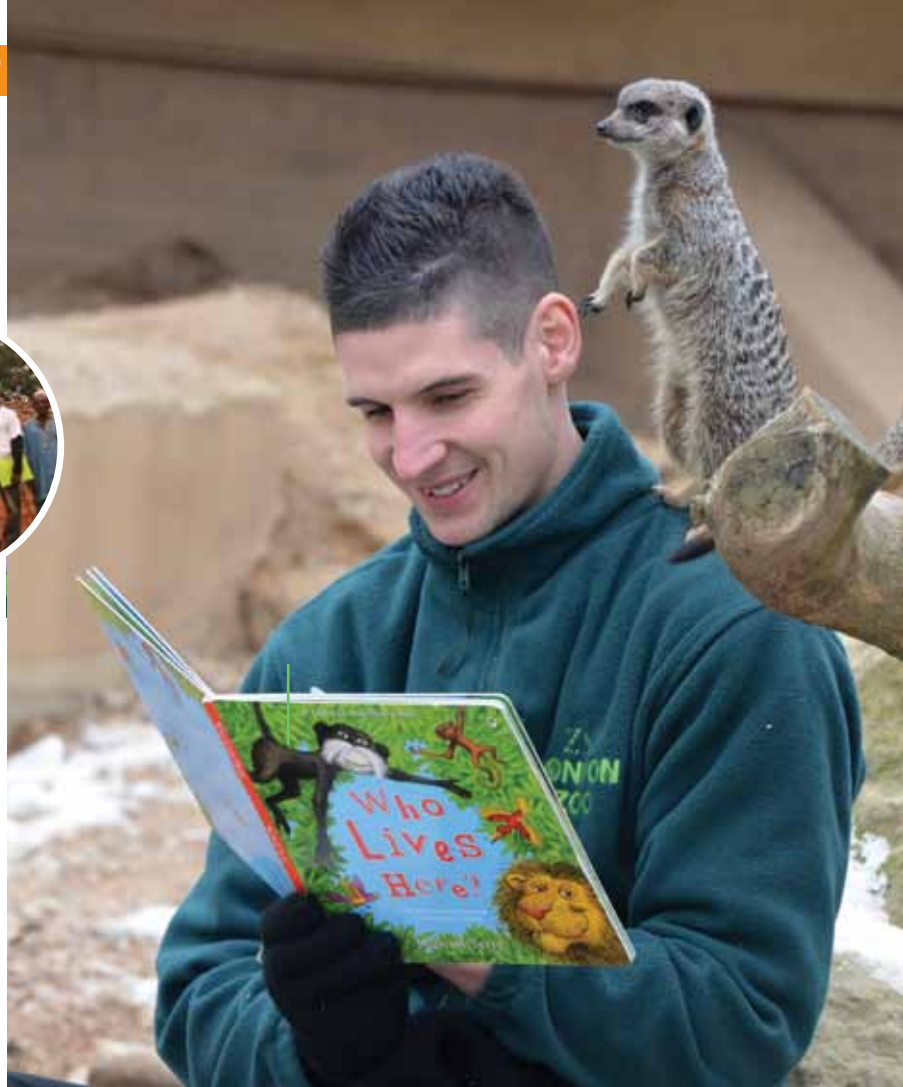


LINKING WITH CONSERVATION

Discovery and Learning have been working with ZSL Conservation Programmes to embed social science (such as education, anthropology, sociology and psychology) into their projects – so, for example, our EDGE Fellows were supported and trained in the more social aspects of their work, such as engaging with local communities. Research was carried out on how best to engage local communities with our Cameroon Wildlife Wood Project, which aims to reduce the impact of the logging industry in the Congo Basin, and we worked with Save the Rhino International to evaluate its education programme in Zambia and develop new learning resources.



Complementing our fieldwork in the Chagos marine reserve, a community engagement project was set up to encourage Chagossians in the UK to learn more about the archipelago and its wildlife. Family open days were held at ZSL London Zoo and Manchester Museum, along with a nine-week environmental training course for 13 enthusiastic young Chagossians, who are now acting as ambassadors to promote the protection of this priceless archipelago in their communities.



SPECIAL CHILDREN'S DAY

Special Children's Day 2012 welcomed nearly 5,000 children with special needs and their families to London Zoo in May.

For the second year running, the event was financially supported by Barclays, with 36 of their employees on hand to help out alongside our own ZSL volunteers. New multi-sensory activities were developed for 2012, including storytelling, a rainforest experience for children with sight impairment and an art session. ZSL presenters also played a key role for the first time, developing and running the sessions. The event went on to win an award from BIAZA (the British and Irish Association of Zoos and Aquariums) for Best Educational Project in the Public and General Visitor.



STORIES FROM THE ZOO

Early in 2012, ZSL hosted a book launch for our first children's titles, released as part of a seven-year deal with Harry Potter publisher Bloomsbury. The launch was supported by a week of activities organised by ZSL London Zoo's presenters, including storytelling and creative writing workshops. Meticulously checked and approved by our zoological experts, the captivating animal stories have since been hitting the shelves of Waterstones, WHSmith and Sainsbury's. The runaway success so far has been *Poo at the Zoo*, which has sold more than 3,500 copies within months of publication.

Above: ZSL children's books have been a huge success. Above left: our work with communities in Cameroon continues. Left: Special Children's Day took place in May, with help from Barclays employees



"An experience I will never forget"

Rudy Pothin, Chagos Outreach Assistant, is educating the UK's Chagossian community about ZSL's work in Chagos, and joined our

research expedition to the islands in 2012: "When I saw the advert for the outreach job at ZSL online I jumped at it. I'm originally from the Seychelles and my mum was born in Chagos, so being a part of this project was very exciting on a personal level. To go out there and experience the amazing wildlife for



ZOOS IN THE NEWS

Press coverage secured by ZSL's PR team is measured in equivalent advertising value, an estimate of how much we would have needed to spend on advertising space to achieve the same result. The team broke all previous records in 2012, generating press coverage worth an estimated £38.2m throughout the year, including 10,043 articles and broadcast news items. Coverage was split fairly evenly between our conservation messages, breeding news, new zoo developments and expert commentary. A significant percentage (£2.6m) was focused on our science and research advances.

ZOOS ON TV

Five million people watched ITV's *The Zoo* series in 2012



Above: ZSL's sealions enjoying attention from the cameras – just one of the many ways the PR team broke previous records



INSPIRING YOUNG PEOPLE

Our popular Zoo Academy courses welcomed 144 youngsters aged 15 to 17 in 2012. Through eight days of theoretical sessions and practical activities, the course aims to help young people take their first steps towards a career with animals. In London, we also offered learning programmes for groups from a pupil referral unit in Camden and children from the Kids Company charity for inner-city children, both of which were funded by finance company Bloomberg.



MEMBERSHIP

Away from the publicity spotlight, ZSL is sustained by its regular, loyal supporters. ZSL Patrons contributed almost £70,000 to our work in 2012 – enough to feed all of ZSL London Zoo's mammals for more than a year – and made further generous donations to individual projects. Our members' vital support also extended beyond the cost of the membership, with numerous people participating in events, zoo experiences and exciting fundraising challenges (turn to page 36 to find out more).



CHAMPIONING VOLUNTEERS

With the spotlight very much on volunteering last year thanks to London 2012's Olympic Games Makers, it was a great time to scrutinise our own volunteer programmes and make some changes and improvements at both zoos.

At Whipsnade we are supporting the Government's New Horizons strategy by offering volunteering opportunities to adults with learning difficulties. This has been a very rewarding joint venture, with our enthusiastic group of horticulture volunteers helping to keep plant life around the zoo flourishing. In London, we set up regular evening meetings for our volunteer team leaders to get together and discuss issues, while several inspirational events were arranged for volunteers to learn about ZSL's conservation and zoo developments directly from the people involved in them. A helpful new website for our volunteers is also being developed for a 2013 launch.

myself was an experience I'm never going to forget. We saw everything from sharks to birds to crabs, but I think one of the best moments was coming across a hawksbill sea turtle stuck between some rocks – we were able to free the turtle and he swam away unhurt. As well as helping the scientists, my role was to report back on the trip through blogs, news and talks. Most of the Chagossian community don't know much about the work going on, so passing that message on and running our training course has been very rewarding."

Our finances

Despite a tough economic climate, our financial performance in 2012 once again exceeded its targets, while our recent commercial investments really began to pay off.

In 2012, ZSL recorded a consolidated surplus on operations of £2.8m (2011: £4.2m) and a total surplus, before movements on the pension fund, of £3.1m (2011: £4m), after a £0.2m gain (2011: £0.2m loss) on investments. The actuarial gain on the pension fund was £0.3m (2011: £1.1m loss).

This leaves a net movement in funds as a surplus of £3.4m (2011: £2.9m).

Total incoming resources decreased by £1.2m in the year, which primarily related to lower levels of animal collections income (£0.7m) and subsidiary trading turnover (£0.7m) resulting from lower visitor numbers to our zoos due to poor spring and early summer weather and the impact of the London 2012 Olympic and Paralympic Games in London. Voluntary income was also reduced by £0.2m, with income from our science and research activities up by £0.3m and conservation programmes up by £0.2m.

ZSL remains dependent on its two zoos for the bulk of its incoming resources. In 2012, ZSL London Zoo visitor numbers reached 974,433, a decrease of 116,308 (11%) on 2011. ZSL Whipsnade Zoo visitor numbers for the year were 476,226, a decrease of 26,559 (5%) on 2011. The total number of visitors to the two zoos in 2012 was 1,450,659 (2011: 1,593,526). Incoming resources included Gift Aid recoveries on day entry to our zoos, which amounted to £1.6m (2011: £1.6m), while, in total, all sources of income amounted to £2.2m (2011: £2.3m).

Both the Institute of Zoology and our conservation programmes increased their revenues with new grants received in 2012. However, these were mainly connected to specific research and conservation projects and, while they supported ZSL's mission, they did not contribute to the unrestricted

funds of the Society to fund future development. Resources expended increased by £0.2m in the year, which primarily related to an increase in conservation programmes (£0.5m), offset by a reduction in trading subsidiary costs due mainly to lower sales volumes.

The total capital spend of £7.3m (2011: £3.3m) included significant progress on

Tiger Territory, our major new animal exhibit for 2013, and the start of a major refit of our main catering facilities (completion planned for summer 2013), both at ZSL London Zoo, and the completion of our Hullabazoo indoor soft-play centre, which opened in October 2012 at ZSL Whipsnade Zoo.

We continue to invest in our infrastructure to improve visitors' experiences and our facilities for research and ensure the Society is compliant with disability discrimination legislation and its sustainability profile.

The June 2011 triennial actuarial valuation of the ZSL 1988 defined benefit pension scheme showed that it remains fully funded. This was confirmed on the basis of the Accounting Standards Board's Financial Reporting Standard 17, where it had a £0.5m surplus at the end of 2012 (2011: £0.4m deficit). Funding levels continue to be monitored by ZSL and the pension fund trustees on a regular basis. While this scheme is now closed to employees joining after 30 June 2011, a new stakeholder defined contribution scheme is available for those employees.

Our main trading subsidiaries, Zoo Enterprises Limited and Whipsnade Wild Animal Park Limited, produced lower results than in 2011, largely due to the lower visitor volumes, some outsourcing of ZSL London Zoo day visitor catering in the final quarter of the year, and also the continuing difficult economic conditions. Turnover at £9.3m was £0.7m behind 2011's, and cost reductions, aided by the outsourcing of the catering activity, helped keep down the net profit decrease from £2.3m in 2011 to the £2m achieved in 2012.



HAPPY SHOPPING

Our London gift shop achieved record sales per visitor in 2012

Group Summarised Financial Statements

Summary group statement of financial activities for the year ended 31 December 2012

	2012 £000	2011 £000
Incoming resources		
Incoming resources from generated funds:		
Voluntary income	3,072	3,238
Activities for generating funds:		
Subsidiaries' trading turnover	9,329	10,010
Interest and investment income	344	446
Incoming resources from charitable activities:		
Animal collections	24,417	25,139
Science and research	5,350	5,084
Conservation programmes	2,118	1,928
Total incoming resources	44,630	45,845
Resources expended		
Cost of generating funds:		
Costs of generating voluntary income	795	641
Fundraising trading:		
Subsidiaries' cost of goods sold and other costs	7,328	7,732
Charitable activities:		
Animal collections	23,734	23,667
Science and research	5,623	5,731
Conservation programmes	4,113	3,654
Governance costs	199	181
Total resources expended	41,792	41,606
Net incoming resources before other recognised gains/(losses)	2,838	4,239
Other recognised gains/(losses):		
Gain/(loss) on investments	223	(223)
Actuarial gain/(loss) on pension scheme	300	(1,100)
Net movement in funds	3,361	2,916
Reconciliation of funds		
Total funds balance brought forward	50,415	47,499
Total funds balance carried forward	53,776	50,415

The above results are all in respect of continuing operations.

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

Group Summarised Financial Statements (continued)

Summary group balance sheet at 31 December 2012

	2012 £000	2011 £000
Fixed assets		
Tangible assets	38,790	35,179
Investments	3,930	3,687
	42,720	38,866
Current assets		
Stocks	689	730
Debtors	4,084	3,396
Short-term deposits	4,005	6,000
Cash at bank and in hand	<u>7,933</u>	<u>7,622</u>
	16,711	17,748
Creditors: amounts falling due within one year	(6,155)	(5,799)
Net current assets	10,556	11,949
Net assets excluding pension scheme asset/(liability)	53,276	50,815
Defined benefit pension scheme asset/(liability)	500	(400)
Net assets	<u>53,776</u>	<u>50,415</u>
Funds		
Unrestricted – General	7,734	7,619
– Designated	<u>39,182</u>	<u>36,209</u>
Unrestricted funds excluding pension asset/(liability)	46,916	43,828
Unrestricted – Pension reserve/(liability)	<u>500</u>	<u>(400)</u>
Total unrestricted funds	47,416	43,428
Restricted – Endowments	694	640
– Other	5,666	6,347
Total funds	<u>53,776</u>	<u>50,415</u>

TRUSTEES' STATEMENT ACCOMPANYING THE GROUP SUMMARISED FINANCIAL STATEMENTS

The group summarised financial statements are not the statutory accounts but a summary of information relating to the group statement of financial activities and the group balance sheet.

The full Trustees' Report and financial statements, from which the summarised financial statements are derived, have been externally examined by Baker Tilly UK Audit LLP and its audit report on them is unqualified.

The full Trustees' Report and financial statements and Baker Tilly UK Audit LLP's audit report on them were approved on 16 April 2013 and 18 April 2013 respectively and will be submitted to the Charity Commission.

Copies can be obtained from the Finance Director at The Zoological Society of London, Regent's Park, London NW1 4RY.

Signed on behalf of the Trustees on 19 April 2013



**Paul Rutteman CBE BSc
(Econ) FCA
Treasurer**

**INDEPENDENT
AUDITOR'S STATEMENT
TO THE TRUSTEES OF
THE ZOOLOGICAL
SOCIETY OF LONDON
(AN UNINCORPORATED
CHARITY)**

We have examined the summarised financial statements of the Zoological Society of London set out on pages 33 to 34.

**Respective responsibilities
of trustees and auditor**

The trustees are responsible for preparing the summarised financial statements in accordance with applicable UK law and the recommendations of the charities Statement of Recommended Practice.

Our responsibility is to report to you our opinion on the consistency of the summarised financial statements in the summarised Annual Report with the full annual financial statements and Trustees' Annual Report.

We also read the other information contained in the summarised Annual Report and consider the implications for our report if we become aware of any apparent misstatements or material inconsistencies with the summarised financial statements. The other information comprises only the financial review ('Our Finances').

We conducted our work in accordance with Bulletin 2008/3 issued by the Auditing Practices Board.

Opinion

In our opinion the summarised financial statements are consistent with the full financial statements and the Trustees' Annual Report of the Zoological Society of London for the year ended 31 December 2012.

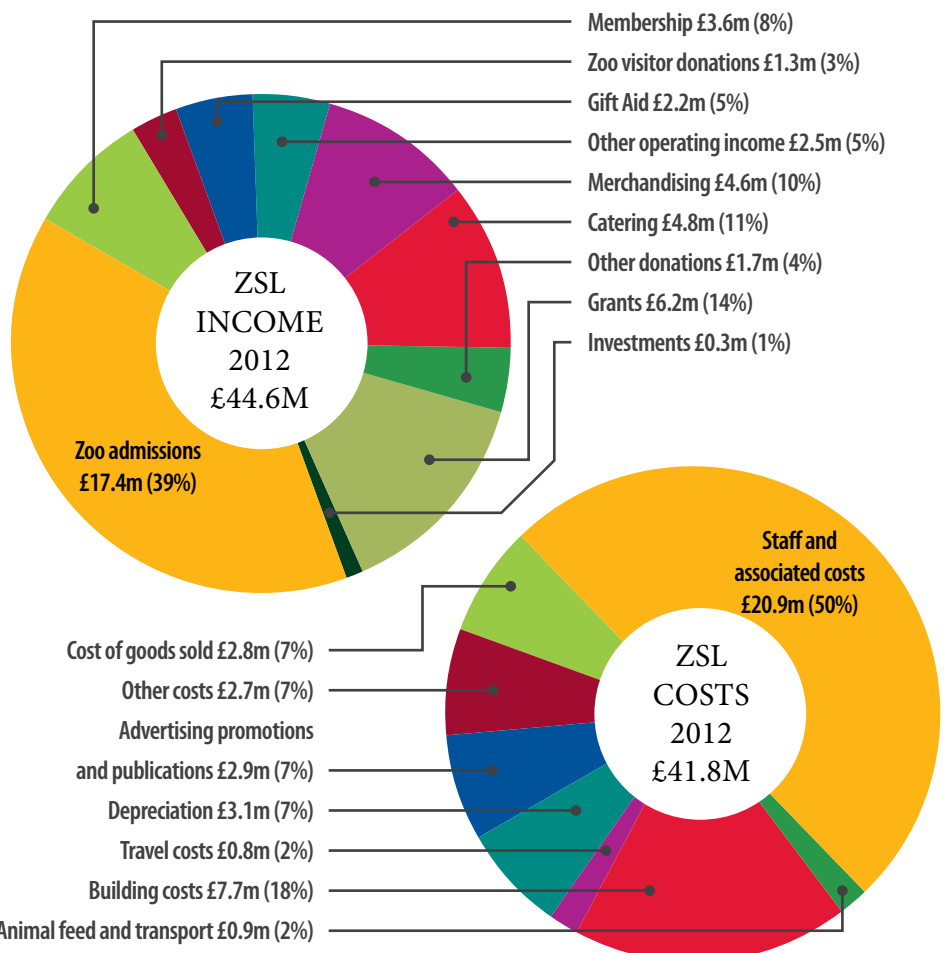
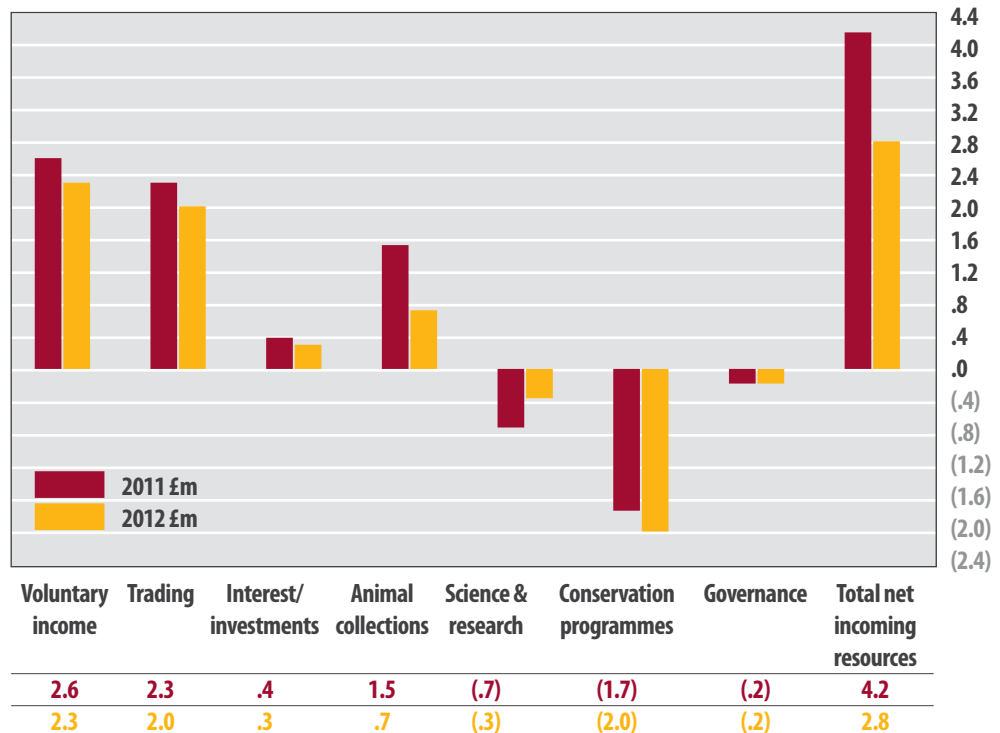
We have not considered the effects of any events between the date on which we signed our report on the full annual financial statements (18 April 2013) and the date of this statement.

Baker Tilly UK Audit LLP

Baker Tilly UK Audit LLP

Statutory Auditor, 25 Farringdon Street,
London EC4A 4AB, 19 April 2013

NET INCOME/EXPENDITURE BY ACTIVITY



Getting involved

ZSL's work is only possible thanks to the generosity of our supporters, who in 2012 continued to amaze us with their commitment and creativity – why not take inspiration from their success?

From donating money to undertaking daring physical challenges, ZSL's supporters have been behind our biggest successes, and we're delighted to celebrate their achievements. 2012 was a year of new and exciting ways to support our work. At ZSL London Zoo, more than 120 people dared 800°C temperatures to walk barefoot over burning coals in our first ever Fire Walk, raising more than £33,000 for tiger conservation. Fleet-footed runners rose to the challenge of the London Stampede, a great new counterpart for our ever-popular Whipsnade 10km race. Further afield, support from our corporate partners has been fantastic, from helping to bring our new Sumatran tigers, Jae Jae and Melati, safely around the world to ZSL London Zoo, to providing sustainable flooring for ZSL Whipsnade Zoo's fantastic Hullabazoo indoor play area, to tackling the growing environmental problem of discarded fishing nets in some of the world's poorest coastal communities and contributing time and funding towards Special Children's Day at ZSL London Zoo. These are just some of the ways our corporate partners have contributed towards our work.

It was a year of celebrity events. Hollywood star Edward Norton spoke at a special dinner about his commitment to conservation in Kenya. Comedians Andy

Parsons, Phill Jupitus, Ed Byrne and friends brought the house down at Roar With Laughter, ZSL's first comedy night. The year was rounded off with a visit from sprinting superstar Usain Bolt, who inspired guests at a gala dinner to raise £250,000 to support African landscapes and wildlife.

Away from the glitz and glamour, ZSL is also sustained by regular, loyal supporters, whose commitment encourages us all. ZSL's Patrons this year contributed nearly £70,000 – enough to feed all of ZSL London Zoo's resident mammals for over a year – and many also made further generous donations to their favourite projects. A new initiative, the sponsored pawprint trail in the forthcoming *Tiger Territory* exhibit, also raised more than £65,000. Thanks to regular grants from several trusts and foundations, we were able to carry out vital projects to conserve the Amur tiger, to support sustainable forestry in Cameroon and to improve the health of garden wildlife across the UK. We also remember with gratitude those supporters who so kindly left a gift for ZSL in their will, or whose friends and family donated in their memory.

There hasn't been a dull moment in 2012. To all our supporters, thank you for bringing such fun and enthusiasm to ZSL's fundraising. We can't wait to see what you do next!

BE INSPIRED!

If you would like to support our work,
please phone 0844 225 1826 or
email fundraising@zsl.org



Clockwise from top left: a fundraiser braves our Fire Walk; ZSL's first comedy night, Roar with Laughter; Usain Bolt inspired guests at a gala dinner for African wildlife; the London Stampede; the Dorothy Howard Charitable Trust is supporting our Amur tiger work; gifts received in memory are helping species such as vultures



ZSL would like to thank all our supporters, members, friends, patrons, fellows and volunteers for their continuing commitment in 2012. We simply could not carry out our mission without your ongoing dedication and support. Special thanks go out to those mentioned on these pages, and to our many supporters who wish to remain anonymous.

DEVELOPMENT BOARD

Rupert Hambro
(Chairman)
Nici Audhlam-Gardiner
Professor Sir Patrick
Bateson FRS
David Coffey
Dr David Cohen CBE
Anna Haber
Lord Moser
Lady Solti
Tim Tookey
Grace Wang
Camilla Whitworth Jones

ZSL PATRONS

Robert and Jenny Akester
Maeve Allen and family
Francis and Jo
Beddington
The Blackburn family
Margaret Booth
Simon and Elaine Brown
The Countess of Chichester
David and Ruth Coffey
Dame Vivien Duffield DBE
Mo Duncan
John Edwards
Peter and Katie Flamman
Dame Anne Griffiths
Dennis Ho
Duncan Hockley
Emily Lawson and
Nick Howard
Deanna Ibrahim
Alex Joffe
Martyn and Sylvia Notley
Jay Patel
Rt Hon Lord Paul
and Lady Paul

Family Pfander
Sally Plummer
Bob and Sarah Rihal
David and Alison Slade
Nici and Andrea
Spaccatrosi
The Sir Stamford Raffles
Patron
Adam and Ruth Tibbalds
Tim Tookey
David and Juliana
Wheeler
S Whittam and D Jordan
Nathanial and Sara Zilkha

CORPORATE SUPPORTERS AND MEMBERS

American Express
Ampersand
Bamboo Distribution
Barclays
Bloomberg LP
DHL Express
Ehrmanns
Interface
Kaplan International
Colleges
Kimberly-Clark Professional
Liontrust
Morgan Stanley
Old Vic Tunnels
Painted Wolf
Paper Round
Petplan
Sipsmith
The Last Tuesday Society
Trunki
White & Case LLP
Whole Foods Market
Camden
Woop Studios Limited

STATUTORY AND OTHER GRANT-MAKING BODIES

Big Lottery Fund

CHARITIES, TRUSTS AND FOUNDATIONS

American Friends of
London Zoo, Inc
Arcus Foundation
BBC Wildlife Fund
Bruce Wake Charitable
Trust
Charities Advisory Trust
The Charles Wolfson
Charitable Trust
John S Cohen Foundation
Daytrippers Charity
Dolly Knowles Charitable
Trust
Dorothy Howard
Charitable Trust
The D'Oyly Carte
Charitable Trust
Dr Robert Andrew
Rutherford Trust
The Englefield Charitable
Trust
The Ernest Kleinwort
Charitable Trust
Esmée Fairbairn
Foundation
Lord Faringdon Charitable
Trust
The Hobson Charity
The Mohammed
bin Zayed Species
Conservation Fund

Mrs B L Robinson's
Charitable Trust
The Panton Trust
Synchronicity Earth
The Rose Foundation
The Rufford Foundation
The Sandra Charitable Trust
The Stanley Foundation
The Waterloo Foundation
The Wixamtree Trust
Zeitiz Foundation

DONATIONS IN MEMORY OF

Gordon Dadswell
John Ellis
Jennifer Henderson
David Oxford
Jack Pearce
Joan Smith
Nicola Stack
Caron Wasserman

LEGACIES FROM THE ESTATES OF

Geoffrey Adams
Sameer John Clifford
Bowyer
Pamela Davis
Norman Fenton
Nigel Graves
Pamela Lane
Marjorie Pirrie
Elsie Possnett

INDIVIDUALS

Usain Bolt
Greg Burns
Ed Byrne
Richard Herring
Colin Jackson
Phill Jupitus
Sarah Kendall
Edward Norton
Martyn and Sylvia Notley
Yotam Ottolenghi
Andy Parsons
Phyllida Peake
Lucy Porter
Bob and Sarah Rihal
Jon Richardson
Guests, sponsors and
supporters of ZSL's gala
events in 2012

AMERICAN FRIENDS OF LONDON ZOO DIRECTORS

Barrie Berg
Cynthia Rusis

HONORARY RESEARCH FELLOWS

Professor Andrew Balmford
Professor Malcolm Bennett
Professor Tim Coulson
Dr Peter Daszak
Dr Matthew Fisher
Professor John Gittleman
Prof Katherine Homewood
Professor E J Milner-Gulland
Professor Ian Owens
Professor Andy Purvis
Professor Charles Tyler
Professor Paul Watson

HONORARY CONSERVATION FELLOWS

Rosalind Aveling
Dr Glyn Davies
Emmanuel De Merode
Dr Nick Dulvy
Dr Charles Foley
Matthew Hatchwell
Heribert Hofer
Kate Humble
Dr Jonathan Hutton
Dr Anwarul Islam
Professor David Macdonald
Professor Georgina Mace
Professor Jessica Meeuwig
Dr Maurus Msuha
Edward Norton
Dr Timothy O'Brien
Dr John Robinson
Professor Alex Rogers
Dr Yvonne Sadovy
Claudio Segré
Professor Charles Sheppard
Dr Simon Stuart
Kerry ten Kate
James Thornton
Dr John Veron
Dr Amanda Vincent
Alannah Weston
Nigel Winser

Patron

Her Majesty The Queen

ZSL Council Members 2012

President: Professor Sir Patrick Bateson FRS

Secretary: Professor Geoff Boxshall FRS

Treasurer: Paul Rutteman CBE

Vice presidents:

Ray Heaton+

Elizabeth Passey

Sheila Anderson MBE

Richard Melville Ballerand

Dr Brian Bertram

Michael Bird

Martin Cooke*

John Edwards

The Hon Sir William McAlpine Bt*

Professor Anna Meredith

Dr Ruth Padel+

Mark Ridgway

Sean Rovai

Ken Sims*

Robert Wingate+

Council members:

*to 19 June 2012

+ from 19 June 2012

Directors

Director General: Ralph Armond

Conservation Programmes Director: Professor Jonathan Baillie

Director, Institute of Zoology: Professor Tim Blackburn

Zoological Director: David Field

Human Resources Director: Ian Meyrick

Finance Director: Mike Russell

Commercial and Communications Director: Rich Storton

Development Director: James Wren

Publication acknowledgements

Design and editorial coordination:

Think

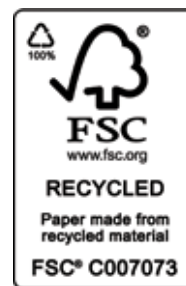
Managing editor: Nicola Kelly

Editor: Claire Sargent

Designer: Dom Scott

This Annual Review is printed on 100% recycled paper. We extend our thanks to ZSL staff and other colleagues for the use of photographs in this publication: Michael Abel, Lauren Bailey, Jonathan Baillie, Tim Birkhead, Chris Carbone, Ben Collen, Nathan Conaboy, David Curnick, James Godwin, Rachel Jones, Linda Kerley, Tessa Knox, Melvin Lear, Nick Lindsay, Sheila Smith, Ruchira Somaweera, Daniel Sprawson, Ben Tapley, Craig Turner

Cover image: *Dendrobates tinctorius* (dmvphotos)



Contact us

ZSL Supporter Services

0844 225 1826

Director General's Office

020 7449 6207

ZSL Membership

020 7449 6228

Development and Fundraising

0844 225 1826

Library

020 7449 6293



LIVING CONSERVATION

Regent's Park
London
NW1 4RY
ZSL Whipsnade Zoo
Dunstable
Bedfordshire
LU6 2LF
zsl.org

Registered charity in England
and Wales: no 208728