

LIVING CONSERVATION

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 reflect on just a handful of the highlights of 2014.



As President of the Zoological Society of London (ZSL), it is my great pleasure to introduce our 2014 *Annual Review*. I would like to take this opportunity to thank my predecessor, Sir Patrick Bateson, for his support and guidance

while I familiarise myself with life at the helm of such a unique and revered organisation. After years of visiting the Zoo and contributing to ZSL's conservation programmes, I am looking forward to helping shape the future of this magnificent Society. And, if the coming year proves half as successful as 2014 for our Zoos, scientific research and conservation work, I shall be very pleased indeed.

We were delighted to welcome the births of three Sumatran tiger cubs in ZSL London Zoo's Tiger Territory, a testament to ZSL's commitment to securing a future for these brilliant, and critically endangered, big cats. United for Wildlife, our alliance with six other leading fieldbased conservation organisations, continued its work to tackle the illegal wildlife trade. ZSL hosted a symposium, chaired by the Duke of Cambridge, aimed at finding solutions to this threat. Towards the end of the year, ZSL conservationists and scientists travelled to Sydney for the World Parks Congress, a once-a-decade conservation gathering, where the results of the global Space for Nature survey we carried out in conjunction with the IUCN were announced. Amazingly, those surveyed said they wanted 50% of the planet protected for wildlife – a real validation of the work we do each and every day.

The endless dedication of our staff, supporters, members and volunteers is what makes ZSL's many achievements – just a few of which are highlighted in the *Annual Review* – possible. Thank you to all who support ZSL's work and strive to preserve the natural world for future generations.

Sir John Beddington, President



The past year at ZSL has been one of collaboration and innovation. Highlights for our Institute of Zoology (IoZ) included the launch of the Garden Wildlife Health project, a partnership with a number of organisations to drive

Britain's biggest public-led investigation into the health of native wildlife. We were also delighted that IoZ's output, which in 2014 included research identifying a chytrid fungus as a major cause of amphibian population decline, was judged world-leading by an independent panel.

ZSL's conservation programmes have had an eventful year, too. Our award-winning Net-Works project in the Philippines has to date seen more than 40 tonnes of discarded fishing nets removed from the marine environment by local communities, a remarkable achievement – and we were tremendously excited to launch our Sustainable Palm Oil Transparency Toolkit (SPOTT), to a very positive reception from stakeholders worldwide. With palm oil in around half of all supermarket packaged products, engagement with the industry to minimise its damaging environmental impacts has become a crucial part of ZSL's work. The free online tool represents a new era of transparency, allowing investors to easily assess oil palm growers' biodiversity commitments.

Both our Zoos had extremely successful years, with ZSL London Zoo achieving its highest visitor numbers in 27 years, and ZSL Whipsnade Zoo the most visitors since 1973. Throughout 2014, we continued to use our Zoos to invite potential and existing supporters to hear about our work.

None of these successes would be possible without the organisations with which we collaborate worldwide, and our devoted employees and volunteers. To all who helped us make 2014 another great year for ZSL: thank you.

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Ralph Armond, Director General

ZSL's global reach

From rescuing fish in Greece to saving the last wild population of Asiatic lions, ZSL carries out conservation work all over the world. Here, we look at just a few highlights of 2014.





1. PANAMA

The EDGE (Evolutionarily Distinct and Globally Endangered) of Existence programme supports EDGE Fellow Dr Diorene Smith Cabellas to facilitate participatory and sustainable management of the pygmy three-toed sloth's island home.

2. MONTSERRAT

ZSL is fighting to save the island's critically endangered mountain chicken frog through a long-term breeding, release and field programme, making a valuable contribution to the conservation of this species as well as building capacity through local staff training.

3. ANTARCTICA

Using innovative remote camera-trapping technology, ZSL is monitoring the size and health of penguin populations to gain insight into environmental change in the Antarctic.

4. UK

Since 2005, ZSL has worked to conserve the European eel using our aquatic conservation expertise. Our research and conservation programme focuses on eel migration and behaviour, policy and reintroduction.

CAMEROON

5. CAMEROON

ZSL's Cameroon Programme is working with partners to fight the illegal hunting and trade of threatened species such as elephants, great apes and pangolins through support to protected areas, engaging with the private sector and empowerment of local people.

6. CHAD

ZSL is working with national and international conservation partners on major projects such as the rehabilitation of the Ouadi Rimé-Ouadi Achim Faunal Reserve and the reintroduction

CHAD

of scimitar-horned oryx; we contributed two

females from ZSL Whipsnade Zoo to the founder

herd in Abu Dhabi, and participated in work to

identify a release site and planning pre- and

post-release monitoring. We have also been

gazelles, and a unique study comparing the

genetic status of wild and captive animals.

ZSL's Fish Net project in southwest Greece is

species, Valencia robertae and Valencia

focusing on two critically endangered endemic

letourneuxi. The aim is to move these fish from

an area suffering from habitat destruction to a

place where they can start to breed again.

Our long-standing Tanzania carnivore

programme provided training for customs

8. TANZANIA

7. GREECE

involved in establishing the status of wild dama

GREECE

3

TANZANIA

and security officers in intercepting wildlife crime, supported the government in mitigating conflict between humans and large carnivores and helped to produce a National Conservation Action Plan for Cheetah and Wild Dog.

9. KENYA

ZSL and the Kenya Wildlife Service are working together to decrease the threat from the illegal wildlife trade, through the deployment of cutting-edge anti-poaching technology in a critical area for elephants and rhino.

10. SAUDI ARABIA

ZSL has run the King Khalid Wildlife Research Centre (KKWRC) in Saudi Arabia for over 27 years. We manage the world's largest collection of Arabian ungulates, have successfully reintroduced gazelles and have research and monitoring programmes in protected areas.





KENYA

11. CHAGOS ARCHIPELAGO

The Chagos Archipelago is the world's largest marine reserve and one of the most pristine parts of the ocean. ZSL is working with other international organisations to deliver the science needed to inform the conservation and management of this marine reserve.

12. INDIA

We are working with the Gujarat Forest Department and the Wildlife Institute of India to conserve Asiatic lions through strengthening security and monitoring of the Gir Forest, encouraging local communities to support lion conservation and facilitating 'lion hotlines' to reduce human-wildlife conflict.

13. NEPAL

ZSL launched a project in Parsa Wildlife Reserve,



focused on securing the tiger population through protection, monitoring and outreach, working with government, national and international partners and local communities.

14. THAILAND

ZSL's work in Thailand now covers tigers as well as elephants, with a first camtrap photo of a tiger in Salakpra Wildlife Reserve obtained encouraging news.

15. MONGOLIA

We're inspiring the next generation of conservation leaders worldwide through our annual field training course for early-career conservationists from Mongolia and around the world. See page 16 for more details.

16. CHINA

The Chinese giant salamander is one of 10

highly unusual and endangered amphibians to be targeted by the EDGE of Existence programme. We are working with Chinese partners to better understand the status of and threats to this incredible species, and we welcomed a giant salamander to ZSL London Zoo in 2014 (see page 13).

17. INDONESIA

NEPAI

ZSL is working to conserve the Sumatran tiger through direct protection and work to mitigate the effects of the palm oil industry.

18. PHILIPPINES

ZSL's work in the Philippines focuses on marine and coastal conservation. We support communities to protect and restore mangrove and beach forests, establish and expand marine protected areas and provide livelihood opportunities such as Net-Works.

We continue our seahorse conservation work

through Project Seahorse.

PHILIPPINES

19. RUSSIA

INDONESIA

Thanks to continuing conservation efforts by ZSL and partners in Lazovsky State Nature Reserve since 2006, the Amur tiger population in Lazovsky State Nature Reserve is breeding well. We are tracking tiger poaching and are building relationships with local people to increase awareness of these magnificent animals. Read about our work with top predators on page 19.

20. NEW ZEALAND

ZSL is closely involved in New Zealand's hihi conservation project, with our scientists carrying out research that supports programmes reintroducing this rare bird to areas in which it has been wiped out.

ZSL's 2014 highlights

With the help of the ZSL Directors, we look back on some of 2014's most exciting moments – from breeding success with tigers and gorillas, to ivory seizures and pop-up shops.

★ JANUARY ★

ZSL ANIMAL PHOTOGRAPHY PRIZE

ZSL's wildlife photography competition launched for its third year with a £10,000 prize fund. Judged by presenter Kate Humble and ornithologist Bill Oddie, the competition gave winners the chance to have their images shown in an exhibition at ZSL London Zoo.



NURTURING NATURE

Britain's biggest public-led investigation into the health of native wildlife began with the launch of the Garden Wildlife Health project, a partnership between ZSL, the British Trust for Ornithology (BTO), Froglife and the Royal Society for

★ FEBRUARY ★

PAWS FOR POLITICS

To mark the anniversary of the 1832 Reform Act, when voter registration was first introduced, the British and Irish Association of Zoos and Aquariums (BIAZA) teamed up with Bite the Ballot, a social enterprise on a mission to empower the Protection of Birds (RSPB). The first collaborative citizen science project of its kind, the initiative relies on reports from members of the public to monitor the wellbeing of species commonly found in Britain, from amphibians to hedgehogs.

young voters. The aim? To encourage the 25 million zoo visitors in the UK, including those who enjoy a day out at ZSL London Zoo and ZSL Whipsnade Zoo, to use their votes and get their voices heard on environmental issues.

★ MARCH ★

↓ TIGER TRIO

Three of the world's rarest tigers entered the world at ZSL London Zoo. The triplets, two male and one female, were born to five-year-old Sumatran tigress Melati on Monday 3 February 2014, after a 106-day pregnancy. Keepers gave them plenty of space, but closely monitored their first moments on hidden cameras.



▶ MEET MORE ANIMALS

ZSL London Zoo launched six new Meet the Animals experiences, giving visitors the chance to get closer to more animals than ever before. Hosted by ZSL's expert zookeepers, these encounters give guests behind-the-scenes access and the opportunity to meet (among others) lions, meerkats and aardvarks.





↑ MILESTONE ACHIEVEMENTS

Jonathan Baillie, Director of Conservation Programmes

"This has been a great year for ZSL's conservation programmes. The United for Wildlife Symposium, hosted at ZSL, welcomed The Duke of Cambridge as chair and brought together key figures in the global conservation community to address critical matters in illegal wildlife trade. Alongside this we launched the top 100 list of EDGE birds, a real milestone for ZSL's EDGE team, and launched the Living Planet Report, which highlighted a massive 50% decline in the world's vertebrate populations since 1970."



RECORD REVENUE

Rich Storton, Commercial and Communications Director "Following on from a very

successful year, we have continued to grow visitors to both zoos, and also increased visitor spending on site. Visitor numbers at ZSL London Zoo were over 1.2 million, and at ZSL Whipsnade Zoo exceeded 617,000 – the highest since 1973 and a milestone only reached 11 times in its history. This enabled ZSL to achieve its best-ever revenue figures and will ensure we can continue to invest in all areas of our charitable work, both here and overseas."



MAKING A DIFFERENCE

Fiona Evans, HR Director "2014 has been a tremendous year for staff engagement. Our recent

staff survey results indicated an amazing 92% of staff are proud to work for ZSL and understand the Society's mission and goals. We are truly fortunate to have such a committed workforce who are making a tangible difference to conserving animals and their habitats."



× APRIL ×

↑ FARMYARD FUN

Just in time for Easter, ZSL Whipsnade Zoo threw open the barn doors of its latest children's exhibit. At Hullabazoo Farm, kids can meet and greet (and pet and feed) animals including pygmy goats, Gloucester old spot pigs – and miniature donkeys Trevor and Tulip (see above).

\rightarrow A WING AND A PRAYER

To help ensure some of the planet's most unusual birds are here for generations to come, ZSL scientists ranked hundreds of species by evolutionary distinctiveness and how globally endangered they are. The resulting EDGE Birds list captures 100 species that are not only threatened with extinction, but are also highly unique – and, it is hoped, will help focus conservation efforts to protect these idiosyncratic avians.



Philippine | eagle |

★ MAY ★



← JUVENILE SLOTH

ZSL London Zoo celebrated the arrival of a baby two-toed sloth – the first to be born at the Zoo – in our Rainforest Life exhibit. Jeff's father, Leander, arrived in 2012 to live with resident female, Marilyn. Sloths have an 11-month gestation period, but sometimes take decades to bond and mate.

→ SAFARI IN THE CITY

To launch our Lions400 campaign, ZSL put on our inaugural gala, hosted by wildlife expert and TV presenter Simon King. With the heart of ZSL London Zoo transformed into an Indian-themed wonderland, complete with a giant safari tent, London's elite came flocking – and we raised funds to help bring the critically endangered Asiatic lion back from the brink of extinction.



★ JUNE ★



↑ ROARING TRADE

We launched our first-ever pop-up shop on Carnaby Street (press event for launch pictured above) as part of our Lions400 campaign. Open for three months, it proved a great success.

★ JULY ★

↓ PHILIPPINE CROCODILES

ZSL London Zoo was delighted to welcome the first Philippine crocodiles ever bred in a UK zoo. The six juveniles, each named after the species' native Philippine islands, began life weighing less than a Mars Bar. The critically endangered crocodiles are a crucial addition to the European Breeding Programme, and mean we can share the secrets of our success to help other zoos.



↑ SCALY SURVIVAL

ZSL teamed up with the IUCN Red List to help pangolins. Working together, we launched an action plan to clamp down on the illegal trade of the species in Asia.

★ AUGUST ★



↑ ANNUAL WEIGH-IN

ZSL London Zoo and ZSL Whipsnade Zoo demonstrated the lengths keepers go to ensure the animals are fit and healthy. Press photographers were invited to the Annual Weigh-In to watch keepers measure some of the Zoos' tallest and smallest residents, noting down vital statistics for the International Species Information System (ISIS).

COMMEMORATING MARTHA

On 1 September, our bird keepers gathered to stop the hands on ZSL London Zoo's iconic clock tower and mark 100 years since the death of the world's last passenger pigeon, Martha. The act remembered one of the fastest and most dramatic extinctions ever witnessed, and helped draw

attention to the

other species

today.

plight of countless

facing extinction

★ SEPTEMBER ★

SEAL SIGHTINGS

Conservationists and volunteers took to the skies, boarded boats and tiptoed across marshland for the second year of our annual seal survey. The results? Year-on-year, the number of harbour seals and grey seals living within the Greater Thames Estuary had increased from 685 to 938.

↓ ELEPHANT INFANT



ZSL Whipsnade Zoo celebrated the arrival of Asian elephant calf, Sam. The little heavyweight – born to fourth-time mum Azizah in one of the Zoo's large grassy paddocks, with other members of the herd nearby to show their support – showed impeccable timing, arriving the very week of our Elephantastic weekend festivities.



OUTSTANDING IMPACT

Professor Ken Norris, Director of Science

"The past year has been an excellent year for the conservation impact of the Institute of Zoology's (IoZ's) science. We published more than 100 papers and produced significant reports that are reshaping the way people view conservation around the world. Most rewarding of all, an independent assessment of our science described its conservation impact as 'outstanding."



▶ PROFESSOR WU

David Field, Zoological Director "It has to be the arrival of the first giant salamander at

ZSL London Zoo since 1923. Professor Wu exemplifies the role of ZSL, allowing people to experience one of the wonders of the natural world up close, and linking directly to the work that we are doing in the wild in China. It's also a testament to the transferable skills of the amphibian keepers, working in zoos and in the field."





× OCTODER ×

↑ LIVING PLANET REPORT

We made headlines with the *Living Planet Report 2014* by WWF and ZSL. The groundbreaking report established that global wildlife populations have halved in just 40 years, describing a 52% decline in average populations of the world's mammals, birds, reptiles, amphibians and fish.



∠ MILESTONE BIRTHDAY

Our oldest female gorilla celebrated a milestone birthday with a Bake Off bash. Great British Bake Off runnerup Richard Burr whipped up a unique creation for the western lowland gorilla – including all Zaire's favourites, from sugar-free jelly to apples, carrots and nuts.

\star NOVEMBER \star

▶ TURTLES GET THE BENDS

Scientists from ZSL's Cetacean Strandings Investigation Programme (CSIP) were part of the team that discovered loggerhead turtles suffer from decompression sickness, or 'the bends'. If caught in fishing nets, many die because they are brought to the surface too quickly.





A tip-off from an intelligence network supported by ZSL led to a seizure of ivory worth more than \$190,000. During one of the largest single seizures made in Cameroon, eco-guards in one of the country's protected areas found 39 forest elephant tusks concealed beneath cocoa bags.

\star DECEMBER \star



↑ GORILLA ARRIVAL

Keepers announced the arrival of a critically endangered western lowland gorilla at ZSL London Zoo. Following an eight and a half month gestation period, 15-year-old Mjukuu gave birth to a healthy baby girl, named Alika – the first offspring of the Zoo's silverback male Kumbuka, who came from Paignton Zoo in May 2013 as part of the European-wide conservation breeding programme.

WELCOME, PROFESSOR WU

When the world's largest amphibian arrived at ZSL London Zoo, he became the ambassador for ZSL's EDGE of Existence conservation project. Named after one of ZSL's collaborators in China, 19-year-old Professor Wu is the only Chinese giant salamander in the UK. His purpose-built exhibit features rocky caverns from which he likes to 'ambush' food.

☑ MUSSEL-ING IN

ZSL's marine and freshwater team discovered an invasive species of a rare freshwater mussel in

the Thames. The quagga mussel, named after the extinct zebra in reference to its striped shell, was found at Richmond – prompting concern for native species.





UNWAVERING SUPPORT

James Wren, Development Director "We experienced many successes in 2014. One notable highlight, in the summer,

was the Society reaching a record 100,000 members and supporters; with more supporters helping, our successes as a Society will continue to increase. Another highlight was the launch of our Lions400 fundraising campaign in May, with a target of £5.7m; it launched on the same day as our inaugural annual fundraising gala, held at ZSL London Zoo. By the end of the year we had reached £3.7m of our campaign target."



AN EXCITING TIME

Amanda Smith, Finance Director "My highlight of 2014 was joining the Zoological Society

of London at a really exciting time. The coming year will see ZSL re-brand, and there are lots of great new projects in the pipeline, from conservation work in the field to fantastic new exhibits at both Zoos. I'm looking forward to building on our successes and doing my bit to work for wildlife."

ZSL Zoos

We highlight a handful of the many breeding successes celebrated at ZSL London Zoo and ZSL Whipsnade Zoo during 2014.

Success in animal care and breeding comes with investment in facilities and, above all, patience. Last year, our persistence paid off with the success of two of our major longterm breeding plans.

In March, we celebrated the birth of cubs, Budi, Nakal and Cinta, to Melati, our Sumatran tigress; in December, a female baby western lowland gorilla, Alika, to mother Mjukuu. These highly welcome arrivals were a commendation of our teams' dedication and expertise – as were the births of a giraffe calf and European bison at ZSL Whipsnade Zoo, where we also augmented our antelope with new species such as besblok, impala, nilgai and Thomson's gazelles (the only ones in the UK).

Clearly, breeding vulnerable and endangered species as part of global management programmes is of tremendous importance, but never is patience more necessary than in that other pivotal role of ZSL zoos: researching how to breed some of the more challenging species. One of the highlights of 2014 was the birth of a Linne's two-toed sloth. This represents a great success for ZSL, and a welcome addition to Rainforest Life - where, following the arrival of a male from São Paulo last year, we also hope to breed southern tamandua in coming months.

And our 2014 success extended well beyond Rainforest Life. The Reptile House

saw the Lake Oku frogs (an EDGE priority species) spawn several times, and our herpetology team scored another notable success in June, with the hatching of six critically endangered Philippine crocodiles. Weighing only 37g and measuring just 24cm, they are the first of their kind to be bred in a UK zoo, and an invaluable addition to the European breeding programme.

In the Aquarium, too, efforts focused on breeding species that have not previously reproduced at ZSL. Among many successes, it was great to see breeding and larval rearing of the golden damselfish, a marine

species only occasionally bred in captivity. We also celebrated success half a world away, when some of the wild Mangarahara cichlids transferred last year to a private breeding facility in northern Madagascar produced more than 3,000 fry. In the Blackburn

Pavillion, keepers needed to be inventive when our green woodhoopoes bred for the first time

since 2011. The adult birds require constant stimulation to prevent parental aggression towards their young – but the team devised slow-release live food feeders that proved sufficiently distracting, and the two chicks were reared to independence.

Two hornbill species, the Von der Decken's and the red-billed, also bred well – and, as the only zoo in the world to regularly breed the species, we welcomed a male scarlet-chested sunbird, to be introduced to our female next season.

DISCOVER OUR ZOOS

- Visit zsl.org/london and zsl.org/whipsnade

Kepers at ZSL London Zor clebrated the arrival of three Sumatran tiger cubs, born to lae Jae and Melati, as well as breeding success with Sulawesi cested macaques (left)







CHINESE GIANT SALAMANDER ARRIVAL

Of the many additions to our living collections last year, one of the most exciting was undoubtedly the arrival in December of Professor Wu, the only Chinese giant salamander to be housed in a UK zoo. But he is not the first of his species to live in Regent's Park – ZSL's relationship with these amazing amphibians began almost a century ago. Our original Chinese giant salamander was presented to ZSL in 1923. Today's Chinese giant salamander exhibit showcases our work with the species in China, where we are surveying wild and farmed populations and engaging with locals to learn more about, and share the need for conserving, the world's largest amphibian. Some of the education materials we've used in Chinese schools can be seen around Professor Wu's new home. Read Ben Tapley's account of Professor Wu's arrival on the opposite page – and turn to page 26 for Andrew Cunningham's overview of the work we're doing in the field.





FEEDING TIME AT THE ZOO

We're constantly looking at our nutrition standards to ensure our animals have the best-possible diet, and in 2014

comprehensively reviewed the diets of 17 species. One of the most significant changes resulting from our research has been the improvement we've made to the diets of some of ZSL London Zoo's primates. Because commercially produced fruit is high in sugar and low in fibre, with little significant nutrition, our monkeys and apes now eat either none at all, or very little. Instead, we're feeding them plenty of fresh, healthy vegetables. This change will help prevent obesity, diabetes and dental problems, and may even have a positive impact on behaviour – which is why we plan to roll out this healthier diet to all our primates in the future.



SUSTAINABLE SOLUTIONS



We're always aiming to further reduce our environmental impact, and in 2014 made some great improvements in sustainability at our London and Whipsnade sites. In March,

our work to minimise waste, boost recycling and increase landfill diversion was recognised with two accolades from the Sustainable City Awards, reflecting our efforts in both responsible waste management and resource consumption. Later in the year, we were given the first Greener Path Award for Landfill Diversion by environmental waste management company ACM Environmental, in recognition of the work we put into finding innovative, sustainable ways to handle the 22 different types of waste we produce.

One of the most exciting developments of the past year was the installation of the first renewable energy technology at ZSL London Zoo. Part of our new pygmy hippopotamus exhibit, it comprises an 8kW solar panel array linked to an air-source heat pump, and is used to heat the internal pool and give our hippos a warm place to wallow (see below) – without contributing to global warming.







INTO THE WILD

Successful breeding initiatives are always a cause for celebration, and never more so than when animals born and raised under ZSL's auspices make their way

into the wider world. Whether it's to other institutions, to participate in valuable breeding programmes, or into the wild to help bolster populations, it's a tremendous commendation of the work we're doing to safeguard vulnerable species on a global scale.

In 2014, among other releases, we sent scimitarhorned oryx to form part of a founder herd being

created in Abu Dhabi ahead of a planned reintroduction; released 60 corncrakes in the Cambridgeshire Nene Washes; and transferred five London-bred Edwards's pheasants to Prague, in collaboration with the World Pheasant Association and Hanoi Zoo, to help breed this critically



endangered species in Europe or its native Vietnam. In the same year that our herpetology team helped develop a 20-year conservation action plan for the species, ZSL and the Durrell Wildlife Conservation Trust released mountain chicken frogs bred at ZSL London Zoo on their native Montserrat. We have also been busy with extensive preparations for the reintroduction of Partula tree snails on the French Polynesia island of Tahiti, with a reserve now almost ready for the release of the species in 2015.





'There's no better way to showcase the superb work we're doing in the wild"

I've been keen for some time to have a Chinese giant salamander (CGS) here in London. There's no better way to showcase the superb work we're doing with this critically endangered and evolutionarily distinct species in the wild, and our efforts in China highlight a lot of ZSL's expertise - in conservation, including field surveys, capacity building and local and industry engagement; in science, including disease monitoring and genetics (see page 26); and in education through interpretation in the exhibit and the extensive Communication, Education and Public Awareness (CEPA) work being carried out in China.

Our CGS, a 19-year-old captive-bred male we've named Professor Wu, after one of our collaborators in China, came to us at the end of 2014 from Rotterdam Zoo. His arrival presented the herpetology team with several important considerations. One was water quality. Because the species is found in very disparate regions of China, different populations may be accustomed to different water parameters. Nobody knew where the founding stock of this particular group of salamanders originated, so we decided to use the parameters set at Rotterdam Zoo, combined with data we collected during field surveys in China; visiting the species'

natural habitat was key in the development of this exhibit. We also worked with the ZSL London Zoo aquarium team to develop the aquatic life-support system. We're using remineralised reverse osmosis water to counter the hardness and added chlorine in London tap water, and biological and UV filtration to break down nitrogenous waste products and control bacterial and algal growth, with a filter to remove suspended particles. The rocks in the tank are fibreglass - real rocks risk affecting the water quality.

In the wild, the CGS lives in fast-moving water, so we've installed a spout to provide the high oxygen content Professor Wu requires. There's a cave at the back of his tank for him to hide in, and to provide shade. What you can't see, as a visitor, is the second area behind the sliding hatch at the back of his tank. If we ever get a female CGS to breed with Professor Wu, she'll need an off-show nesting area.

Professor Wu left Rotterdam early one morning and was with us by the end of the day, having crossed by ferry in a huge plastic crate in a special van. Getting him into his tank was tricky - he weighs 15 kilos, and has highly lubricated skin, so it's like carrying a giant, squidgy bar of soap. It took three of us to carry him into his new home.

Herpetology team leader Ben Tapley



ZSL VETS

With plenty of births and new arrivals in 2014, our vets were kept very much on their toes. They were helped in their work by the digital radiography technology

we installed the previous year at both ZSL London Zoo and ZSL Whipsnade Zoo.

Flora, ZSL Whipsnade Zoo's female pygmy hippopotamus, has been battling cancer for some time. In 2014, we anaesthetised her and, assisted by the Royal Veterinary College, used radiography to assess the tumour growth in her jaw. Although the tumour had regrown, it did not appear to be causing clinical problems; our team were confident in allowing Flora to breed, and she became pregnant in the first half of the year. Throughout her pregnancy, the veterinary department and animal team kept a very close eye on her – and, despite the need to administer antibiotics at one point, Flora gave birth to a male calf on Boxing Day.

We also received a new equine digital radiography system, which enabled our veterinary department and the Royal Veterinary College to examine Azizah, one of our Asian elephants. In 2014 she was pregnant with Sam, and our vets monitored his gestation through ultrasonography and blood progesterone analysis. Sam, the eleventh member of our Whipsnade herd, arrived in September 2014.



NEW DEVELOPMENTS

In April, we were delighted to throw open the doors of our new pygmy hippo exhibit in the Into Africa area of ZSL London Zoo. Since they've moved in, Thug and Nicky have been managed with a different style of husbandry: placed together when Nicky is in heat, but otherwise housed in adjacent areas of the paddock, separated by a large tree trunk installed from the start for this very purpose. Following this change, we've observed Thug climbing on top of the trunk – behaviour seldom seen in pygmy hippos.

At ZSL Whipsnade Zoo, meanwhile, our focus was on the redevelopment of the Hullabazoo children's farm, creating more opportunities for children to engage directly with animals. We unveiled the improved exhibit at Easter, to a great response from visitors; the pygmy goat walk-through was a particular success, as were the animalhandling sessions that let children learn more about species including our miniature donkeys.

We've also been busy behind the scenes, completing off-show facilities for breeding cranes and building a more substantial facility for housing carnivores and primates, a vital long-term investment. The latter has already been put to good use, housing ZSL London Zoo's Asiatic lion pride while our new exhibit – Land of the Lions, due to open in spring 2016 – is under construction.



BIRTHS AND ARRIVALS

Births included: Caribbean flamingo (d), colobus monkeys (c), European bison, Francois' langur monkeys, gazelle, giraffes (e), hooded pitta (f), Humboldt penguins, Lake Oku frogs, Linne's two-toed sloth (g), Lodero pupfish, Mangarahara cichlid (in Madagascar), Monterey platyfish, Philippine crocodiles (above), pygmy hippo, red-bellied piranha, red-billed hornbill, scimitar-horned oryx, shortsnouted seahorse, squirrel monkeys (b), Sulawesi crested macaque, Sultan Sazlıgı toothcarp, Sumatran tigers, Von der Decken's hornbill, western lowland gorilla (a), white-naped mangabey monkey. Arrivals included: blesbok, Chinese giant salamander, impala, nilgai, scarlet-chested sunbird, Southern tamandua, Thomson gazelles (h), wattled cranes.



ZSL field conservation

Conservation Programmes Director Professor Jonathan Baillie shares the initiatives, launched last year, that are helping ZSL raise the bar for protecting species and ecosystems worldwide.

In 2014, the Living Planet Index released, to global media interest, the news that the world's vertebrates had declined by more then 50% since 1970. This statistic makes clear that current efforts to address threats to our species and ecosystems are woefully inadequate; if the global conservation response does not dramatically improve, we will witness a major extinction crisis. Such a response must come from all sectors of society, but organisations such as ZSL have a leadership role to play in raising the bar for conservation.

At the start of 2014, we hosted the United for Wildlife symposium, a high-profile international meeting focused on the illegal wildlife trade. With the Duke of Cambridge, the United for Wildlife partners committed to addressing this trade on a scale never before seen in conservation. ZSL's major contributions to this effort in 2014 have included helping develop and implement a patrol-based monitoring system called SMART, a technology that, essentially, creates an alarm system for protected areas. Having received a grant from Google's Global Impact Awards, we've been able to work with the world's best tech companies to produce remote units that use camera traps, seismic sensors and metal detectors to identify illegal activity (see page 20). This information is sent directly to park managers by satellite, allowing them to respond immediately. If deployed worldwide, these systems could transform our ability to assess the effectiveness of protected areas.

Agriculture is one of the greatest drivers of biodiversity loss. In 2014, we launched an

exciting initiative to promote best practice and transparency in a key industry: palm oil. Information is provided to investors and the public on how well oil palm companies are upholding their biodiversity commitments (see page 18). The public can look at concessions on a map and monitor company proximity to protected areas and incidents of forest loss and burning. It is a new era of transparency, and an approach that could be rolled out to all production and extractive industries, with major benefits for biodiversity.

Funding is another critical element in scaling up the conservation response, and ZSL has been working with the Global **Environment Facility** (GEF), United Nations Development Programme (UNDP), Social Finance and United for Wildlife to develop an innovative financing mechanism: the Rhino Impact Bond (see page 20). If successful, this will result in long-term funding for a large-scale collaborative response to rhino conservation across Asia and Africa.

Finally, because scaling up the global conservation response will be impossible without a large, dynamic group of leaders, in 2014 ZSL launched an initiative with United for Wildlife to train future leaders from all over the world – online. This will begin with a Massive Open Online Course (MOOC), and build towards creating something close to a global university for conservation leaders.

These are just a few of the large-scale, highly collaborative initiatives we launched last year. The conservation community is working together like never before – and together we will raise the bar.



In 2014, efforts were stepped up to tackle the illegal wildlife trade, now at crisis levels for species such as the pangolin. ZSL hosted a United for Wildlife symposium aimed at addressing the problem



TIGERS IN THAILAND

Shrinking habitat, poaching and conflict with people mean tigers are in decline across Asia – but, in

2014, ZSL and the Thai government were delighted to report a possible increase in tiger range, obtaining the first photos of tigers in southern parts of Thailand's largest forested area, the Western Forest Complex (WEFCOM). Camera traps set along wildlife pathways in ZSL's base,

Salakpra Wildlife Sanctuary, captured the first tiger image in early 2014. By matching stripe patterns to photos taken a few years ago, the tiger was identified as a female born in Huai Kha Khaeng National Park to the north -



SUSTAINABLE PALM OIL

With palm oil in around half of all supermarket

packaged products, engagement with the industry to minimise its damaging environmental impacts has become a crucial part of ZSL's work. Only 18% of global palm oil production is certified by the Roundtable on Sustainable Palm Oil (RSPO), and the effectiveness of this certification remains difficult to verify. Meanwhile, although investors and financiers increasingly recognise the importance of including sustainability criteria when selecting investments, they are often unable to access this information in a useful format, limiting their ability to support responsible growers.

ZSL is addressing the information gap. In November, we launched our online Sustainable Palm Oil Transparency Toolkit (SPOTT) to great acclaim at the annual



a sign that forest linkages to Salakpra and

adjacent protected areas are still open, indicating potential for a significant

increase in tiger numbers in Thailand.

A second tiger photographed

subsequently in adjacent Chaloem Rattankosin

National Park turned

out to be a male,

also seen in Huai

Kha Khaeng. This is

very positive news:

if ZSL, along with

our key partners, the Thai Department

of National Parks and

Panthera, can keep up

current levels of patrolling

and monitoring to ensure forest

there is real potential to restore a tiger

population to southern WEFCOM over

connections remain operational,

the next few years.

RSPO meeting in Malaysia. Embedded within ZSL's Sustainable Palm Oil Platform website, SPOTT scores 25 of the world's largest oil palm growers on the information they make publicly available, and displays their concession boundaries on an interactive map that also highlights recent fires and forest loss alerts. The aim is to create a positive feedback loop between best practice and transparency, providing guidance on innovative action for all industry stakeholders, so everyone can make informed decisions – whether investing in shares or simply shopping for dinner.

SPOTT: THE DIFFERENCE

Discover more about SPOTT, and the stakeholders it concerns, at sustainablepalmoil.org/spott





MANGROVE REHABILITATION

ZSL has been operating in the Philippines for nearly 20 years. We are working to

establish and expand community-managed marine protected areas to protect and restore marine life, while providing additional income to local people through Net-Works, an innovative inclusive business model that recycles discarded fishing nets into carpet tiles (see page 20). Our mangrove rehabilitation work, begun in 2007, aims to empower local communities to restore mangrove forests.

Typhoon Haiyan, which struck the central Philippines on 8 November 2013, was the strongest ever to hit land, killing more than 6,000 people and making one million homeless. A number of ZSL sites were affected. ZSL's Philippines team worked closely with development agencies, notably Oxfam GB and the International Institute for Rural Reconstruction, to provide immediate assistance to vulnerable sectors in Northern Cebu and Panay, and to assist in efforts to recover community livelihoods. In addition to supporting the disaster relief effort, the ZSL Philippines team mobilised a rapid assessment of mangroves, with two teams (from NGOs, academia and local government agencies) simultaneously deployed across 14 sites in Eastern Samar and Leyte in early 2014. Assessments of mangrove damage revealed that, although there was severe damage at sites that were directly hit or in the path of the strongest surge, most mangrove stands had suffered only partial damage. The team documented recovery potential, and found trees defoliated by the typhoon showing new leaves just two-and-a-half months later. These findings emphasise the importance of coastal greenbelts.







HARBOUR SEAL COUNT

Our second annual harbour seal population count in the Greater Thames Estuary was completed in August 2014. This is the peak

harbour seal moult period, during which seals spend more time hauled out on sand banks, making them easier to spot and giving a more accurate count of the population. Using boats, a fixed-wing aircraft and land-based transects, our team covered more than 4,000sq km of the Kent and Essex coastline and outer estuary sandbanks, and counted a total of 489 harbour seals and 449 grey seals.

The harbour seal count was very similar to that in 2013, suggesting the population had remained stable – but the number of grey seals had more than doubled from the 2013 survey, indicating more may be using the region. An extra survey was carried out in December to find out whether grey seals breed in the Greater Thames Estuary; we found no evidence of this, which suggests they use the region in the summer months to feed and rest, but return to the east coast of England or mainland Europe during winter. We aim to continue these surveys each year to better understand seal population dynamics in the region.

"We're continually working with the government to curb tiger poaching"

Last year, we began a very important project – working in Nepal's Parsa Wildlife Reserve to help make it a more viable habitat for tigers. The species is very high on the Nepalese government's list of conservation priorities – they've committed to doubling the number of tigers by 2022, from 121 (the 2009 count) to 250 – and we're committed to helping them achieve that goal.

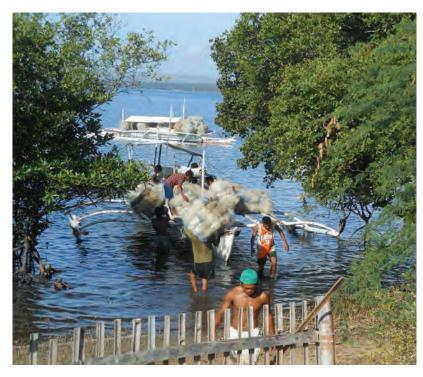
We decided to work in Parsa because no other conservation partners were focusing their work here, and we knew there was potential for us to support government initiatives and increase the number of tigers in the reserve. It's connected to Chitwan National Park, which has the largest number of tigers in the country – 98, at last count. But, when we started working here, Parsa – although at 499sq km it is more than half the size of Chitwan - had only four.

There are lots of factors limiting tiger numbers in the reserve. The main one is the relatively poor quality of habitat here, but poaching - of both prey and tigers themselves - is also an issue, as is more generalised disturbance from human activity. We're working to improve the quality of habitat, managing the grasslands and wetlands that are so vital to tigers - and this in turn helps us increase the number of prey species, supporting greater tiger numbers. We're also continually working with the government to curb tiger poaching. In Parsa, that means increasing the capacity of the army in



the patrol area, helping make patrols more vigilant and giving them more systematic coverage of more areas. We now have six permanent members of staff here, and we've implemented our surveillance and enforcement monitoring software, SMART, for the first time in the reserve. We've been working with the community, too, to address livelihood issues and human-tiger conflict. Many locals have abandoned their homes and the fields they farmed to make way for conservation, so this is the least we can do to thank them.

We're now trying to establish how much our work has helped. We've just completed a three-month camera-trapping survey in Parsa, in collaboration with Nepal's National Trust for Nature Conservation, Panthera and the government and park authorities. Our monitoring efforts have been well planned - we spent a month carefully choosing where to put cameras. We have been strict throughout to maintain standards of work and methods, and the work we've done in Parsa has been the most rigorous survey ever carried out in Nepal. **ZSL country manager for Nepal Dr Hem Baral**





SUCCESSFUL NET-WORKS

Just over 40 tonnes of discarded fishing nets have now been removed from the

marine environment by communities in the Philippines through our awardwinning Net-Works project – enough to stretch around the world and more. A unique collaboration with carpet tile manufacturer Interface, Net-Works tackles the growing environmental problem of discarded fishing nets in some of the world's poorest communities and most fragile ecosystems. This community-based supply chain recycles the nets into nylon yarn for carpet tiles, providing local people with additional income and cleaning up their environment at the same time. Turning the nets into carpet involves hours of hard work, baling them up and juggling the logistics of moving the bales from multiple island communities to Cebu's international port.



We're proud to say that in 2014 Net-Works won four international awards, including Best Business-NGO Partnership at the Responsible Business Awards, and the European Commission's European Business Award for the Environment. In September 2014, Interface and ZSL made an ambitious commitment at the Clinton Global Initiative: to expand Net-Works into three new locations over three years and, by 2020, engage 10,000 people in the supply chain. We will begin to make good on this commitment in 2015, when net collection will begin in Northern Iloilo in the Philippines and Lake Ossa in Cameroon, with more new sites planned from 2016 onwards.

NET-WORKS ON THE NET

Find out more about Net-Works, and the impact it is having, at Net-Works.com



Rhino Impact Bond

The illegal trade in wildlife parts is now an international crisis, endangering some of the world's most iconic species, including rhinos, tigers, elephants and pangolins. The traditional approach to funding conservation, with short-term aims and a focus on paying for specific inputs, is no match for the well-organised and well-financed poaching gangs operating across Africa and Asia. To change this, we must provide reserve managers with sufficient long-term funding they can deploy according to changing threats on the ground.

Working with Social Finance, UNDP, the Royal Foundation, the Global Environment Facility and IUCN and other United for Wildlife partners, ZSL has been developing a ground-breaking



PIONEERING TECHNOLOGY

Protecting iconic, economically valuable species such as rhinos and elephants is a

challenging task, and ZSL is pioneering new technologies to help combat poaching of these species across Asia and Africa. The new Instant Direct surveillance system, created in partnership with Cambridge Consultants, Seven Technologies Group and Iridium, funded by our Google Global Impact Award, provides real-time intelligence on poacher movements through cameras and ground sensors. The cameras transmit photographs instantly, via satellite, to computers at park headquarters, while the sensors send data on vibrations caused by passing vehicles – backed up with metal detectors to help distinguish a poacher jeep from a herd of elephants. These systems mean rangers can react quickly and effectively to intruder alarms, and will give anti-



Rhino Impact Bond project to change the way conservation is funded. Private investors will provide seven- to eight-figure capital to finance massive increases in protection, accompanied by rigorous monitoring of effectiveness and rapid adaptive management practices; if reserve managers meet agreed conservation targets, donors committed to saving endangered species will repay the investment – with interest.

Frontline conservationists gain more secured funding and better management practices, impact investors get a conservation impact dividend, and the taxpayer pays only for conservation success, increasing the likelihood of securing further funding. Everybody wins – especially the rhinos! The project launches in summer 2015.



poaching security forces a much-needed advantage over poachers, increasing the chances of successful arrests.

During 2014, ZSL worked with the Kenya Wildlife Service (KWS) in a critical area for Kenya's black rhino and elephant populations to test this new technology. The systems are now fully operational, and make use of more than 40 cameras and 60 ground sensors to provide daily intelligence to KWS's security operations.



UNITED FOR WILDLIFE

The issue of illegal wildlife trade took global centre stage in ZSL's packed conference theatre in early 2014, when the newly appointed ZSL Vice Patron, Prince William The Duke of Cambridge, officially

launched the 'United for Wildlife Solutions' at our Illegal Wildlife Trafficking symposium. Four major solutions (see box, below) were identified by the United for Wildlife partnership to combat the illegal wildlife trade in rhino, elephant, tiger and pangolin.

ZSL is leading on the 'Strengthening site-based protection' solution, rolling out the anti-poaching software SMART and innovative conservation technology in 200 sites, as well as developing and implementing new United for Wildlife standards for protecting high-value species. Through building anti-poaching capacity, strengthening protection management and improving ranger performance, we are raising the bar: this standardised global approach, combined with our pioneering conservation technology surveillance system (see facing page), will revolutionise the protection and monitoring of these charismatic endangered species. We are also building on our existing training materials and expertise to develop a Massive Open Online Course (MOOC) aimed at inspiring and developing the next generation of conservationists by making conservation education available to anyone, anywhere in the world.



United for Wildlife (UfW) is an innovative partnership between seven of the most influential conservation organisations (Conservation International, Fauna & Flora International, the International Union for Conservation of Nature, The Nature Conservancy, the Wildlife Conservation Society, WWF-UK and ZSL). It is led by Prince William through The Royal Foundation of The Duke and Duchess of Cambridge and Prince Harry, and is tasked with increasing the global response to the conservation crisis in illegal wildlife trade.

SOLUTIONS: Strengthen protection on the ground, with a strong emphasis on community incentives
Reduce demand for illegal rhino horn, ivory, big cat and pangolin products
Create a 'zero-tolerance' approach towards illegal wildlife trade in the private sector
Strengthen criminal justice responses in supply-and-demand states

ZSL conservation science

Director of Science Professor Ken Norris, who joined us in 2014, reflects on the importance to conservation of provocative, challenging science conducted to the highest possible standards.

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The strapline of the Institute of Zoology (IoZ) is 'Science for Conservation'. This means much more than publishing papers in academic science journals – yes, this is a critically important step, but conservation knowledge generated by science needs to be accessible to people who can use it, and use of this knowledge needs to make a difference. In other words, the science we do needs to have significant conservation impact.

In 2014, IoZ was part of the Research Excellence Framework (REF). This is a periodic assessment of the quality of science carried out by universities and similar research organisations in the UK. For the first time, REF 2014 went beyond assessing the quality of UK science to also

consider its impact. To take part, we submitted details of the best science papers published over the past five years, three impact case studies describing how our science has made a difference to conservation, and details of our research environment (our strategy, organisation, funding and facilities).

When our submission was assessed by an independent panel of experts in environmental science, the majority (85%) of our 65 outputs (mostly papers) were judged to be internationally excellent or worldleading. Two of our three impact case studies were judged to demonstrate outstanding impact. To place this performance in context, of the 45 institutions assessed by the environmental sciences panel, IoZ was placed 13th. Even better, we were ranked fourth – ahead of Oxford and Cambridge universities and University College London – based on the impact of our science.

The panel made some very complimentary comments about our research environment, describing loZ as a unique institution with a well-defined research remit, clearly focused

research strategy, significant research income and good commitment to staff development. They said they were especially impressed with our broad range of international collaborations, and it's easy to see why; loZ currently works in more than 70 countries and on every continent - a truly global 'Science for Conservation' operation. The panel also observed that, while our existing infrastructure is good, it needs further

investment; we recognise this need, too. Science should be provocative and challenge existing thinking and ideas. In conservation, this helps us better understand threats to animals and their habitats, and design effective action to address these threats – but science can only play this role if it is conducted to the highest-possible standards. Fortunately, although we have room for improvement and can't be complacent, the outcome of REF 2014 suggests that IoZ is currently in really good shape.

loZ scientists have helped identify a novel chytrid fungus as a major cause of decline in amphibian populations; ZSL Library visitors loved these beautiful bookmarks (left)



ZSL ANNUAL REVIEW / SCIENCE





MASTERING CONSERVATION **SCIENCE**

Our MSc programme reached a milestone in 2014 as the Masters course in Wild Animal Health completed its 20th year. It's one of two Masters we operate in collaboration with the Royal Veterinary College (RVC), the other being the increasingly popular Masters in Wild Animal Biology. The publications produced by students on both courses, covering crucial topics in conservation and wild animal health science, are a particularly important dividend - and more than 110 scientific papers have now been published as a result of our students' work. We are also very proud of the valuable global network of wild animal health professionals made up of our graduates. Now numbering 387 alumni from 54 countries, including 27 developing nations, they are contactable through the ZSL and RVC association, Wild Animal Alumni.



EXTINCTION RISK AND BIODIVERSITY CHANGE

Scientists at the Institute of Zoology led the development of the IUCN Red List, the foremost tool for assessing species extinction risk. We also developed systems to evaluate the status of biodiversity at the national level (National Red Lists), guantify population changes (Living Planet Index), robustly measure changing biodiversity (Sampled Red List Index) and provide global indicators of the status of biodiversity for the Convention on Biological Diversity (CBD). These systems are used to drive conservation policy and public engagement by inter-governmental and non-governmental organisations and national governments, and underpin measurement of adherence to CBD Targets for 2010 and 2020.



ZSL LIBRARY

Not content with adding 1,700 new titles to our Library, in 2014 we also finished uploading details of all the books in the Reading Room to our online catalogue, and have been busy adding thumbnail images of our artworks, too. Accessible at http://library.zsl. org, the catalogue is available 24/7 and contains details of our holdings, as well as acting as a portal to resources both within and outside ZSL, including other informative websites. We were delighted that it was accessed 18,746 times last year.

The ZSL librarians also began a blog on the artefacts displayed, in monthly rotations, within the Library. Of particular note were those that remembered the First World War: on Edward Grey and the outbreak of war

SCIENCE AND CONSERVATION EVENTS

Our varied programme of lectures for scientists and the public helps communicate our science and conservation work to a wider audience. See zsl.org/science/whats-on for our current listings.

Symposia

At ZSL's symposia, international experts exchange ideas, present research and discuss important topics in conservation science. In February, HRH the Duke of Cambridge joined the United for Wildlife organisations at a symposium to discuss the coordinated international effort required to combat illegal wildlife trade. Our May event, 'Remote sensing for conservation: uses, prospects and challenges', highlighted the potential for synergies between remote sensing science and ecological research, describing how integrative approaches allow a better understanding of mechanisms shaping changes in biodiversity patterns. 'Turning the tide on mangrove loss', our November symposium, brought together stakeholders from the mangrove community, including researchers, conservation NGOs and policymakers, to focus on improving conservation success and influencing policy.



(August 2014), the 1914 Annual Report detailing ZSL's preparations for war (October) and the arrival of Winnie the bear when her owner, Lieutenant Harry Colebourn, was sent to the front (November). Other artefacts on show have celebrated 150 years of the Zoological Record and, on a more sobering note, commemorated the centenary of the passenger pigeon's extinction. We have also put on special displays – notably, a celebration of giraffes to coincide with the science and conservation meeting on the species held in July, and 'hippomania' displays to commemorate 160 years since the arrival of Adhela, the first female hippopotamus at ZSL.

We welcomed David Lowther, a PhD student at the University of Newcastle, as our Visiting Scholar. Researching the early years of ZSL, his particular focus has been the generation and dissemination of scientific theory in the decades immediately preceding the 'Darwinian revolution'.

OUR

AMPHIBIAN CHYTRIDIOMYCOSIS

WORK Amphibian population declines are recognised as one of the largest biodiversity crises in modern history. Scientists at the Institute of Zoology led work that identified a novel chytrid fungus

at the Institute of Zoology led work that identified a novel chytrid fungus as the major cause of amphibian population declines and species extinctions. Our work is the basis for the scientific and conservation responses to this disease, and led to the fungus being listed by the World Organisation for Animal Health. We have established national surveillance programmes for the pathogen across the EU and elsewhere, identifying species at risk and developing mitigating measures to prevent pathogen introduction and species extinction.



We have also been delighted to host visits by a number of external groups, including Wikimedia editors, members of The Bartlett Society, A-level students from nearby schools and animal management students from Sparsholt College. A talk for Fellows focused on women and their contribution to the development of zoology, and we have organised several introductory library tours to encourage Fellows to make more effective use of our resources. As part of the ZSL poetry weekend in October, we hosted a poetry reading in the Library for the first time – an important forum to help us engage with a wider audience.

We remain, as ever, extremely grateful for the help of our team of volunteers, as well as the many ZSL Fellows and members who generously support the ZSL Library with their time and by donating books and zoo ephemera.

Public lectures

Our ever-popular Science and Conservation lectures are free and open to all. Held on the second Tuesday of every month during the academic year, each talk gives an insight into the latest developments in zoological research and conservation. Our 2014 programme included 'Biodiversity and conservation in the Middle East', 'Pricing nature for biodiversity conservation:

opportunities, challenges and limitations', '50 years of Red List: past, present and future' and 'The devourer of newts: a novel chytrid fungus on Britain's doorstep'.

Stamford Raffles Lecture

Our keynote lecture last year was given by Professor Callum Roberts of the University of York, on 'The past and future of life in UK seas'. We are lucky to be surrounded by some of the most productive seas on the planet – but in the last two centuries, the expansion and industrialisation of fishing has triggered a transformation of the environment. Prof Roberts reviewed the loss of biodiversity, including the disappearance of large species such as bluefin tuna and wolfish, and critically examined the policies introduced to protect marine species.



"It's not cheery, but it's hugely important"

Human, wildlife and livestock health are all interconnected – and many of the projects I'm involved in aim at understanding these interactions and how human activities drive disease emergence in both wildlife and people.

Take our work on the little-understood Chinese giant salamander (CGS). With Darwin Initiative funding, we teamed up with Chinese partners to investigate threats to this critically endangered species. We found the collapse of wild populations due to over-exploitation has led to the recent development of a large and intensive CGS farming industry. It lacks controls such as biosecurity, resulting in devastating ranavirus outbreaks that threaten wild salamanders through the discharge of contaminated waste water and restocking of farms with wild animals. Last year, we embarked on a series of field and questionnaire surveys across the known range of the CGS. This will provide crucial data on its status and threats to inform the development of a conservation strategy.

It wasn't just a watershed year for giant salamanders, but for their smaller European cousins, too – and not in a good way. In autumn 2014, a paper on which we collaborated with colleagues at Ghent University was published in the journal *Science*, and established that, if the fungus *Batrachochytrium salamandrivorans* gets into the UK, it is likely to prove lethal to some amphibians, including protected species such as the great crested newt.

Such studies highlight the importance of disease surveillance and show that this often-neglected area of research can produce quality science of high impact. In 2014, our Garden Wildlife Health project found that a small proportion of human salmonellosis cases come from direct or indirect contact with garden birds; that Psittacine beak and feather disease is present in the British wild population of ring-necked parakeets; and that a new virus, of a type known to cause problems for the poultry industry, is killing magpies in the UK. It might not sound the cheeriest subject, but understanding which diseases occur where, in which species and how they spread is hugely important to conservation and, often, to public health. **Professor Andrew Cunningham**



ZSL AWARD WINNERS

Above, left to right:

lain Couzin, Judith

Tim Birkhead FRS,

Mank, George Monbiot,

David Hosken, Andrew

Cunningham, David

Mallon, Sir Patrick

Bateson FRS, Brian

Helen Leggett, Ken

Sims, Carly Brown,

Pain and Michael

Akam FRS

James Penny, Debbie

Marsh, Kristin Vehrs,

Our annual awards celebrate achievement in conservation and zoological research at all levels – from the Prince Philip Award and Marsh Prize for the best A-Level or Higher student project (awarded to Carly Brown) and the Charles Darwin Award and Marsh Prize for best undergraduate thesis (Mark Scherz), to the Thomas Henry Huxley Award and Marsh Prize for an exceptional PhD thesis (Helen Leggett).

Significant and original contributions by professional zoologists are acknowledged with the Scientific Medal (lain Couzin, David Hosken and Judith Mank) and Frink Medal (Michael Akam FRS), while the Marsh Award for Conservation Biology (Debbie Pain) and the Marsh Award for Marine and Freshwater Conservation (David Bilton) recognise contributions to fundamental science applied to the conservation of animal species and habitats. The Thomson Reuters/Zoological Record Award (George Monbiot) and ZSL's Silver Medal (Tim Birkhead FRS) are awarded for contributions to the communication, understanding and appreciation of zoology and wildlife conservation. The Stamford Raffles Medal, rewarding contributions outside the scope of professional activities, was presented to David Mallon, while the ZSL Award for Outstanding Contributions to the Zoo Community went to Kristin Vehrs. The ZSL Honorary Fellowship was given to Ken Sims and the ZSL Staff Medal to Andrew Cunningham (see left).

ZSL would like to thank the Marsh Christian Trust and Thomson Reuters for their generous support of the awards programme.





CETACEAN STRANDINGS

OUR Work

The UK Cetacean Strandings Investigation Programme (CSIP), led by scientists at the Institute of Zoology, first identified accidental entrapment in commercial fisheries (by-catch) as the cause of mass

mortality of UK common dolphins. Those by-catch diagnostic criteria are still widely used (UK and overseas). CSIP investigations led to a ban on naval exercises around the Canary Islands and modification of Royal Navy exercises to reduce harm to cetaceans. CSIP research on brominated flame retardants in porpoises led to an EU-wide ban.

SCIENTIFIC PUBLICATIONS

ZSL publishes a range of scientific journals and books that feature the latest international research in zoology and conservation science.



Journal of Zoology

Our monthly Journal includes hypothesis-driven studies that advance our understanding of animals and their systems. In April 2014, we published a special issue on current research and future trends in palaeoethology; two virtual

issues, on sound production in animals, and women in zoology, are available at **onlinelibrary.wiley.com**.



Animal Conservation

Animal Conservation provides a forum for the publication of quantitative research on the conservation of species and habitats. A special issue on reptile and amphibian translocations is available on

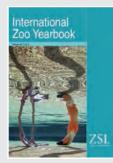
the journal homepage at **onlinelibrary.wiley.com**.



Remote Sensing in Ecology and Conservation Remote sensing has the

potential to significantly advance ecology and conservation. ZSL's new journal, *Remote Sensing in Ecology and Conservation*, aims to provide an outlet for

innovative thinking and promote the collaborative development of new sensors, methods and tools.



International Zoo Yearbook

An invaluable resource for researchers, animal managers and anyone interested in wildlife conservation, the latest *Yearbook* (volume 48) focuses on the problems faced in the management of avian species in zoos, as well

as the potential conservation impact our collections can have on wild birds.

ZSL engagement work

Our Discovery & Learning and Communications teams have been as busy as ever, finding lots of new and exciting ways to inspire people about animals and encourage them to support our work.

It was a bumper year for school visits, with more than 169,422 children attending the Zoos on educational trips - over 20% more than the previous year. As well as the wonderful special activities we offer that link directly to the national curriculum, the regular live talks from our presenters are very popular with school groups and family visitors. New talks at ZSL London Zoo this year included a tropical bird tour in the Blackburn Pavilion during winter, and an Early Birds talk in the African Bird Safari for the summer months; the team also added a pygmy hippo talk following the opening of the new exhibit. At ZSL Whipsnade Zoo we introduced very successful talks about the Przewalski's horse, European bison and the scimitar-horned oryx. These events are a great way to engage visitors in the animals, conservation and the work of ZSL, and we were thrilled that last year a vast number of people attended a talk or listened to live commentary on ZSL

Whipsnade Zoo's Jumbo Express. We were delighted to open our doors to a prime-time audience for series four of ITV's *The Zoo*, filmed on both sites during the first half of the year and broadcast in August. Stories covered by the programme ranged from elephant births to chimp training (at ZSL Whipsnade Zoo) and departing lions to tiger cub vaccinations (at ZSL London Zoo). The three-part series featured staff from across the Society and, with an average five million viewers per episode, was a priceless opportunity for ZSL to showcase our work, animals and the dedication of all our staff and volunteers.

Further afield, the Discovery and Learning team continued to provide expertise and staff to support the social dimensions of our conservation and scientific work. Highlights included delivering training to EDGE Fellows in Costa Rica and providing social science support to a Darwinfunded conservation project on eels and the eel trade in the Philippines. The team also applied their education skills to conservation projects in Zambia, engaging with school children in collaboration with Save the Rhino, and projects in overseas territories such as the Pitcairn and Chagos

Islands, where we are working to engage the public with marine conservation.

Bringing the wild back to our zoos, the ZSL Animal Photography Prize invited photographers of all skill levels to share their amazing images of the natural world. This was the third year of the competition and, as ever, we were hugely impressed by the standard of the winning and shortlisted entries exhibited at ZSL London Zoo.

All in all, it was a typically diverse, busy and dynamic year, and we are confident that the work our teams put into communicating our messages and encouraging people to learn about the natural world will reap many benefits for ZSL, and the planet, in the future.







MEET OUR PEOPLE

ZSL is what it is because of the people that make up the organisation. Employees and volunteers often go above and beyond the call of duty, and are truly what

makes the Society great. Here are just a few of our superstar employees and volunteers:



After winning funding from the Royal Society to get students interested in science and biodiversity, Discovery and Learning's Rachel Haydon and the Institute of Zoology's Jon Bielby took ZSL's expertise off piste. ZSL

and Swiss Cottage School won joint funding for classes teaching kids about animals and wildlife. The money has also paid for a number of the pupils to visit ZSL London Zoo for interactive lessons, where Jon and Rachel have introduced them to the Zoo's colourful characters.



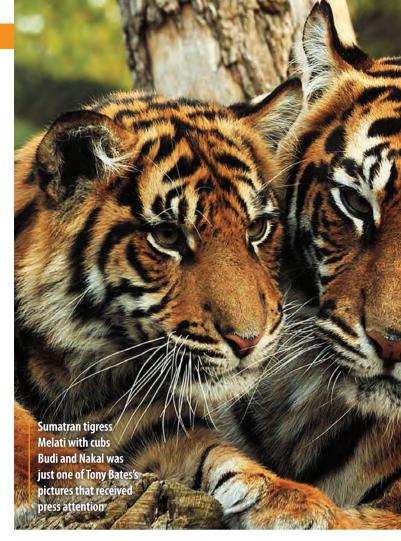
ZSL London Zoo's groundsman Tony Bates had his name in lights in 2014, with national newspaper *The Times* featuring more than one of his fabulous photographs over the course of the year; the above picture of Sumatran tigress Melati with cubs Budi and Nakal made a splash.



ZSL London Zoo learning volunteer Vivienne Sheppard has been volunteering at London since 2007 and is on three different volunteer teams. Vivienne hardly ever misses a day; her dedication and continued support to ZSL is very much appreciated.



ZSL Whipsnade Zoo volunteer Dave Lang does a fantastic job of looking after the cleaning and recycling system – including the reed beds – which cleans the animals' water. Even in the very depths of winter, he gets to work with a smile on his face!



IN NUMBERS

London volunteers Donated a total of **35,383 hours** in 2014. In addition to engaging visitors at exhibits, they collected at Underground stations for ZSL's fundraising campaign Lions400.

Whipsnade volunteers: Contributed 25,094 hours in 2014. Among a host of activities, the team continued to support the New Horizons project, in which young adults with learning difficulties complete tasks for a variety of departments under supervision.



READ ALL ABOUT IT

Last year saw the relaunch of ZSL members' magazine Wild About and children's supplement ZSL Explorers. The zoo guides for ZSL London and Whipsnade Zoos were also relaunched – and an entirely new children's guide was introduced for ZSL London Zoo.

EXTRA-SPECIAL DAYS

Special Children's Day is the flagship event of ZSL's ever-growing inclusion programme. In 2014, it was attended by more than 6,700 visitors, including children with special needs, and their families. The event aims to give children with special needs a chance to socialise, meet others with similar

challenges in daily life and make new friends. Barclays' support of ZSL Special Children's Day means we can continue to reach out and enable these families to experience the Zoo alongside other visitors.



GETTING SOCIAL

Having been completely redesigned and rebuilt, the ZSL website relaunched in February 2014. As more than 50% of our online traffic comes from mobile devices such as tablets and phones, the new site was built to work on all devices – and during 2014 was visited by 5.2 million unique visitors, allowing ZSL to promote itself to an international audience. Online revenue increased to £9m, up 14% year-onyear, and the website has already won independent industry awards, including 'best mobile website'.

We are also continuing to develop our online reach through greater numbers of social media subscribers. During 2014, we gained 150,000 new followers across our social media channels, including Facebook and Twitter, with more than 377,000 interactions (for instance, likes and shares) with our content. We were



ranked 23rd in an independent survey of the top 100 charities' social index, putting our reach and engagement with our social media channels ahead of other, bigger charities, such as Amnesty International and BBC Children in Need.

The new design of the Discovery and Learning section of the website has given teachers and other stakeholders better access to our resources and helped them connect with our learning programmes. Using the Principles of Excellence, all our education sessions were audited and new sessions have been developed to align with changes in the national curriculum.

CONNECT WITH US

Follow us on Twitter @zslofficial or find us on facebook.com/officialzsl



"It's not about how good it is; it's about observing and interpreting"



I joined ZSL in the middle of 2014, and one of the highlights of the past few months has undoubtedly been the Big Draw. This is an international

campaign, based in the UK, that promotes the idea that anyone can draw – it's not about how good it is; it's about observing and interpreting what you see. In October half-term, we worked with visitors in the Aquarium and B.U.G.S! to create, respectively, a nine-metre UV mural of an underwater world, led by artist Alice White, and a collage based on invertebrates (particularly spiders!), led by illustrator Alison Limentani. We had between 3,000 and 4,000 children involved over the whole week, and what they created was fantastic.

Our programme of writers' talks, which brought poets and authors together with keepers and conservationists to discuss a species right next to its exhibit in the zoo, was very well-received. They really succeeded at communicating the conservation message to people who aren't necessarily from a conservation or scientific background. In 2015, we'll be continuing these events under a new name, Authors for Animals, with a fantastic line-up of speakers planned.

Finally, I can't not mention the fantastic installation by Cerith Wyn Evans that appeared over Regent's Canal, and all the preparation we put in for 2015's animal noise bingo at the Southbank Centre. When you find yourself asking a keeper to help you record a gorilla grunt, you know your job is unlike any other!

Talita Jenman, ZSL arts and culture coordinator

ZSL finances

With visitor numbers to our Zoos exceeding 1.8 million, 2014 saw our highest level of income to date.

In 2014, ZSL recorded consolidated net incoming resources from its operations of £4.2m (2013: £6.3m), of which £2.6m (2013: £2.5m) was from our trading subsidiaries, Zoo Enterprises Limited and Whipsnade Wild Animal Park Limited. After investment gains of £0.2m (2013: £0.5m) and an actuarial loss on our defined benefit pension scheme of £6.3m (2013: £1.2m gain), we had an adverse net movement in funds of £2.0m.

ZSL remains dependent on its two Zoos for the bulk of its incoming resources. In 2014, ZSL London Zoo visitor numbers reached 1,263,223, an increase of 28,806 (2.3%) on 2013. ZSL Whipsnade Zoo visitor numbers for the year were 617,555, an increase of 69,687 (12.7%) on 2013. The total number of visitors to the two Zoos in 2014 was 1,880,778 (2013: 1,782,285).

Total incoming resources increased by £3.1m in the year to £55.2m, with animal collections income up £3.5m (11.2%) and our trading subsidiaries' income up £0.4m (4.9%) to £9.2m, both benefiting from the increase in our visitor numbers compared with 2013. Zoo Enterprises Limited also benefited from higher levels of conference and banqueting at ZSL London Zoo and the impact of a full year of operating in our new Terrace restaurant at the site. Voluntary income decreased by £0.9m as we did not see a repeat of the substantial legacy (£0.9m) received in 2013. Science and research income decreased by £0.4m, reflecting a different profile of grant-funded projects carried out in 2014. Conservation programmes increased by £0.2m from a higher level of grants received in the year.

Incoming resources included Gift Aid recoveries on day entry to our Zoos, which amounted to £2.0m (2013: £2.0m), while on all sources of income Gift Aid amounted to £3.0m (2013: £2.8m).

The cost of generating funds increased by £0.4m to £7.5m, although £6.6m of this cost relates to the operation of our trading subsidiaries. Our subsidiaries' costs increased by £0.3m as we made some investment in



our operations to support the growth in our activities, including the operation of our new warehouse facility for our merchandising operation, which became operational in August 2014. Charitable activity expenditure increased by £4.8m to £43.2m, of which £3.1m of the increase represented our continued commitment to enhance our animal collection facilities and welfare, and our increase in the provision of our animalrelated discovery and learning programmes and educational activities. While science and research resources expended were only marginally (£0.1m) higher than in 2013, conservation programmes' costs increased by £1.6m as we continued to expand our international conservation work across our 12 global conservation hubs.

FINANCES IN DETAIL

Download our full financial report from zsl.org/about-us/annual-reports

Group Summarised Financial Statements

Summary group statement of financial activities for the year ended 31 December 2014

	2014 £000	2013 £000
Incoming resources		
Incoming resources from generated funds:		
Voluntary income	3,670	4,518
Activities for generating funds:		
Subsidiaries' turnover	9,199	8,769
Interest and investment income	566	307
Incoming resources from charitable activities:		
Animal collections	34,486	31,006
Science and research	5,265	5,657
Conservation programmes	2,016	1,820
Total incoming resources	55,202	52,077
Resources expended		
Cost of generating funds:		
Costs of generating voluntary income	956	855
Fundraising trading:		
Subsidiaries' cost of goods sold		
and other costs	6,586	6,263
Charitable activities:		
Animal collections	31,100	27,967
Science and research	6,113	5,988
Conservation programmes	6,030	4,472
Governance costs	248	199
Total resources expended	51,033	45,744
Net incoming resources before other recognised gains/(losses)	4,169	6,333
Other recognised gains/(losses):		
Gain on investments	161	492
Actuarial (loss)/gain on pension scheme	(6,300)	1,200
Net movement in funds	(1,970)	8,025
Reconciliation of funds		
Total funds balance brought forward	61,801	53,776
Total funds balance carried forward	59,831	61,801

Group Summarised Financial Statements (continued)

Summary group balance sheet at 31 December 2014

	2014 £000	2013 £000	
<i>Fixed assets</i> Tangible assets	44,092	44,003	
Investments	44,092	4,546	
	48,827	48,549	
Current assets			
Stocks	712	591	
Debtors	4,639	4,694	
Short-term deposits	6,779	5,214	
Cash at bank and in hand	13,273	9,197	
	25 402	40.000	
Conditioned to the second second second	25,403	19,696	
Creditors: amounts falling due within one year	(9,309)	(7,014)	
Net current assets	16,094	12,682	
Creditors: amounts falling due after more than one year	(990)	(1,430)	
Net assets excluding pension scheme (liability)/asset	63,931	59,801	
Defined benefit pension scheme (liability)/asset	(4,100)	2,000	
Net assets	59,831	61,801	
Unrestricted – General	10,289	7,506	
– Designated	45,346	44,725	
Unrestricted funds excluding pension (liability)/asset	55,635	52,231	
Unrestricted – Pension reserve	(4,100)	2,000	
Total unrestricted funds	51,535	54,231	
Restricted – Endowments	807	805	
– Other	7,489	6,765	
Total funds	59,831	61,801	

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 14 April 2015 and 27 April 2015, respectively, and will be submitted to the Charity Commission.

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

Signed on behalf of the Trustees on 27 April 2015.

there

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 35.

Respective responsibilities of the trustees and the auditor

The Trustees are responsible for preparing the summarised financial statements in accordance with applicable United Kingdom law and the recommendations of the charities SORP.

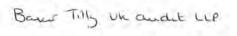
Our responsibility is to report to you our opinion on the consistency of the summarised financial statements within the summarised *Annual Report* with the full annual financial statements and *Trustees' Annual Report*.

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 ('ZSL finances').

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

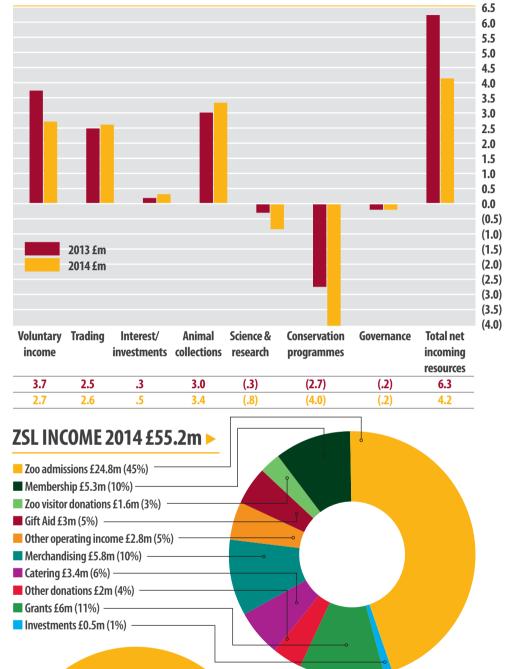
Opinion

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 2014.



Baker Tilly UK Audit LLP Statutory Auditor, 25 Farringdon Street London EC4A 4AB 27 April 2015

NET INCOME/EXPENDITURE BY ACTIVITY



ZSL COSTS 2014 £51.0m

Staff and associated costs £24.4m (48%)
Animal feed and transport £1m (2%)
Building costs £8.9m (17%)
Travel costs £1.3m (3%)
Depreciation £3.7m (7%)
Advertising promotions and publications £3.3m (6%)
Other costs £5.9m (12%)
Cost of goods sold £2.5m (5%)

Getting involved

ZSL's generous supporters continued to inspire and amaze us in 2014. Why not take inspiration from their commitment and creativity?

As a registered charity receiving no government funding for our Zoos, we rely on support from the public, companies and individuals to fund our conservation and research work, and to undertake special projects at the Zoos.

In 2014, much of our focus was on our Lions400 campaign, which aims to raise £5.7m to build a new exhibit and breeding centre at ZSL London Zoo for the endangered Asiatic lion, and fund conservation work in the species' last remaining stronghold in the wild, India's Gir Forest. The campaign was launched in May at our inaugural Safari in the City gala, for which ZSL London Zoo was transformed into an Indian-inspired wonderland. Guests journeyed through the Zoo on tuktuks – surrounded by Indian music, the smells of authentic cuisine and the sights of the animal houses after-hours – before enjoying a luxurious evening of Asian-themed dining and entertainment.

Safari in the City was just one highlight in a very impressive year of fundraising. During 2014, some 2,172 people got involved in various events: organising community activities, taking on one of our challenges - from running in our Stampede or Streak, to doing the Penguin Waddle or braving an abseil - and laughing their socks off at our Roar with Laughter comedy night. And individuals have helped enormously in other ways, too. We were delighted to reach the milestone of 100,000 members and Fellows last year - and we benefited from a number of exceptionally generous donations, including a contribution towards a new home for lemurs, set to open in March 2015, at ZSL London Zoo. In all this, our Customer Relationship Marketing (CRM) team has been a tremendous asset. Thanks to them, we can ensure our supporters continue to be the first to hear about everything from events and births to conservation updates - and how to support us further.

Thanks are also due to ZSL's Patrons, who in 2014 generously contributed more than £100,000 towards vitally important projects. Among a host of privileges, our Patron programme offers a unique insight into the work















undertaken by ZSL – and last year we were delighted and honoured that so many of our Patrons made additional donations to support the elements of our varied work they find particularly meaningful.

We also remember with gratitude all those who kindly remembered ZSL in their will, or whose friends and family donated in their memory.

As ever, we are very thankful to the trusts, foundations and statutory bodies whose grants support all our science and conservation work, at home and around the world. New projects in 2014 included a Heritage Lottery-funded project to conserve the smelt – a little-known fish that smells of cucumber – in the Thames, and work in Greece, funded by the AG Leventis Foundation, to save the critically endangered Corfu killifish. We are always very appreciative of the generous support of our friends in the US, including the Arcus Foundation, the David and Lucile Packard Foundation and the Disney Worldwide Conservation Fund. (A full list of our major supporters is over the page.)

Last, but by no means least, it has also been a fantastic year for corporate support. ZSL was the proud benefactor of Thomson Reuters' global employee photography competition, The World in Pictures - and Thomson Reuters also chose to partner with us for its Innovation Challenge. Tasking employees with developing an automated tool to identify camera trap images containing a spotted cat, it was a celebration of how industry knowledge can make a real difference in conservation science. Bloomberg employees, too, found numerous ways to support us, from volunteering with our Horticulture team to participating in the 10k London Stampede. Asset management company Liontrust extended their sponsorship of our Asiatic lions for the third year running, and we were thrilled to have Barclays return to sponsor our Special Children's Day weekend in May. Their team of dedicated volunteers worked with ZSL staff to provide the best-possible experience for children and their families.

Clockwise from top left: a winning image from Thomson Reuters' The World in Pictures competition, taken by Urszula Wrzesniewska, was displayed in Times Square, New York; children took part in the Kaki Kecil (Small Steps) Education and Outreach Programme in Sumatra, Indonesia, funded by the Disney Worldwide Conservation Fund; Barclays' team of volunteers helped make our Special Children's Day a success; Safari in the City was the first gala event for ZSL in 2014; many brave participants abseiled 70ft down Earl's Court, raising funds for our Lions400 campaign; ZSL Fellow John Hayward presented a cheque from The Parrot Society for work to conserve the Philippine red-vented cockatoo (an EDGE bird); Roar with Laughter had the audience in stitches.

WAYS TO SUPPORT US

Join us and support our global mission to conserve wild animals and their habitats.

As an individual

 ▶ Visit our Zoos ▶ Take part in a fundraising challenge ▶
 Donate to our research and conservation work ▶ Help us create new and exciting exhibits for all to appreciate▶ Become a Member, Fellow or Patron ▶ Pledge a legacy

As a corporate supporter or partner

 You and your organisation can enjoy our tailored
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Get your pet involved!

Take out one of Petplan's pet insurance policies and Petplan will donate 10% of the premium to ZSL, helping support both our Zoos and our conservation work.

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Call 0344 225 1826 or find out more at zsl.org/support-us

Terms, conditions and excesses apply and may be varied on renewal. Petplan is a trading name of Pet Plan Limited and Allianz Insurance plc. The Zoological Society of London (ZSL) is not part of the Allianz (UK) Group.

Support and Governance

ZSL would like to thank all our supporters for their commitment in 2014.

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Managing editor: Nicola Kelly Editor: Laura Evans Designer: Dom Scott Senior sub-editor: Rachel Kurzfield



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LIVING CONSERVATION

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ZSL Whipsnade Zoo Dunstable, Bedfordshire LU6 2LF

zsl.org Registered charity in England and Wales: no 208728



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

Regent's Park London NW1 4RY

and at:

ZSL Whipsnade Zoo Dunstable Bedfordshire LU6 2LF

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 2014 An in-depth look at our field conservation and research, showing how we are achieving our key targets at home and abroad.



ZSL Institute of Zoology Review 2013/14 All our research activities, collaborations, publications and funding in one yearly report.