



WWF

MAGAZINE

FEBRUARY

2015

Action

THE EXCLUSIVE MAGAZINE FOR WWF MEMBERS

#29



BEAR NECESSITIES

Discover how we're protecting giant pandas in the wild

FRAGILE FORESTS

BE FOREST FRIENDLY

Help us tackle the threats to the world's forests and their iconic species



CELEBRATING CHALK STREAMS

They're clean, serene and full of life – find out what makes England's chalk streams so special

10 FUN THINGS TO DO

From dressing up to switching off – try these easy ways to help the planet



FRAGILE FORESTS

Forests are home to well over half of the world's land-based animal and plant life – and provide food, shelter, fuel and a source of income to a billion people. They also help regulate our climate and rainfall cycles.

But our forests are in crisis. The world has lost half its forests, and only a tenth of what remains is protected. Each year we lose another 130,000 sq km – an area the size of England. In Asia, the orang-utan's forest home is quickly disappearing, felled for timber or burned to make way for oil palm plantations and other agriculture.

So we're working around the world to protect forests from the many threats they face and to secure their long-term future.

Find out about our latest forest campaign at: wwf.org.uk/actionforests

CONTENTS

WWF IN ACTION	4	POWER OF THE PANDA	24
Conservation news from around the globe		As good news is expected any day from a new survey, we consider the importance of this iconic bear. By Henry Nicholls	
BIG PICTURE	8	OVER TO YOU	28
A breathtaking image from one of the world's finest photographers		Your views, letters and photos, plus all the chat from online	
TOGETHER, WE DID IT!	10	GIVEAWAYS & WWF SHOP	30
A celebration of our recent successes, thanks to you		Win a limited edition mountain gorilla print or a copy of <i>In Search of Lost Frogs</i> . Plus see what's new in our shop	
FRAGILE FORESTS	12	CROSSWORD	31
How, with your support, we're tackling threats to the world's forests. By Mike Unwin		Solve our brain-teasing wildlife crossword and win a colourful bird feeder for your garden	
10 THINGS TO DO	18	NOTES FROM THE FIELD	31
There are so many fun ways you can support WWF this spring		What happens when a herd of elephants bumps into a pride of lions? Drew McVey reveals all	
CHALK STREAMS	20		
Charles Rangeley-Wilson enjoys a stroll beside England's beautiful but fragile chalk streams			

MEET THIS ISSUE'S CONTRIBUTORS



Mike Unwin
Mike is an award-winning travel, wildlife and conservation writer. He has explored the world's forests, but he's never happier than among the woodland creatures of his native Sussex.



Nicola Loweth
Nicola is WWF's regional officer for China. She recently visited our panda project and said: "It's so inspiring to see first-hand our fantastic work to protect this rare species."



Henry Nicholls
Henry is a journalist who specialises in conservation and science, a broadcaster and author of several books, including *The Way of the Panda: The curious history of China's political animal*.

GET IN TOUCH

✉ supportercare@wwf.org.uk
☎ 01483 426333

WWF-UK Living Planet Centre,
Rufford House, Brewery Road,
Woking, Surrey GU21 4LL

FOLLOW US

f [wwf.org.uk/facebook](https://www.facebook.com/wwf.org.uk)
t [wwf.org.uk/twitter](https://twitter.com/wwf.org.uk)
+ [wwf.org.uk/googleplus](https://www.google.com/+wwf.org.uk)
p [wwf.org.uk/pinterest](https://www.pinterest.com/wwf.org.uk)
globe [wwf.org.uk/news](https://www.wwf.org.uk/news)
yt [wwf.org.uk/youtube](https://www.youtube.com/wwf.org.uk)
ig [wwf.org.uk/instagram](https://www.instagram.com/wwf.org.uk)

MEET THE ACTION TEAM

Acting editor Liz Palmer
editor@wwf.org.uk
Loyalty marketing manager Ruth Simms
Picture editor Kate Foreshew
Senior editor Guy Jowett

For Immediate Media Co.

Consultant editor Sophie Stafford
Art director Will Slater
Account manager Celia Beale
Editorial director Dan Linstead

THANKS TO OUR CONTRIBUTORS

Hannah Blackburn, Nathalie Claes, Jen Clements, Katie Dogra, Damian Fleming, Emma Hamm, Kathy Hughes, Fruzi Kozma, Nicola Loweth, Abi Nichol, Vickie Richards, Ben Stafford, Drew McVey, Eleanor Viita, Wan Hui, Beverley Wilson.

FRONT COVER: © ERIC BACCEGA / NATUREPL.COM

Produced in association with **Immediate Media Co.** www.immediatecontent.co.uk



JOIN OUR READER PANEL

We'd love to know what you think of *Action* magazine. By becoming an online 'Action Adviser', you'll be part of an exclusive group who are passionate about conservation and want to help us spread the word more effectively. To join in, fill in the registration survey at wwf.org.uk/actionadvisers

WWF IN ACTION

Our recent challenges and triumphs for wildlife and the environment



EARTH HOUR

Celebrating the UK's green heroes

OUR NATIONWIDE search to discover Britain's unsung champions of the environment came to an extraordinary close last month when we announced the winners of our Earth Hour 2015 'Hidden Heroes' competition.

We invited the public to nominate someone they know who is going above and beyond to make a difference to the future of our planet. There were three categories to choose from: Young Superstars (under 25s), Workplace Wonders and Community Champions.

We had an overwhelming response, with more than 70 fantastic entries from across the UK. Our three final winners each received £500 to put towards their green work, donated by players of People's Postcode Lottery.

The ceremony took place at WWF's Living Planet Centre with comedian Alistair McGowan, England football legend Graeme Le Saux and young YouTube sensation Lex Croucher presenting the awards. Joining them on the judging panel was Simon Jakeman,

a firefighter whose dedication to making Surbiton Fire Station the greenest in London won him the Workplace award in 2013.

WWF ambassador Alistair McGowan said: "Across the UK, green projects are bringing people together. I'm pleased to be able to recognise the inspiring people who are leading the way."

WWF's head of public engagement, Rachel Bloodworth, said: "It's been heart-warming to see that there are so many incredible people out there who really care about our environment."

The Hidden Heroes competition was launched as part of Earth Hour, the world's biggest celebration of our amazing planet. It's a brilliant reminder that together we can make change happen and help create a brighter future.



Join millions worldwide who care about our planet and switch off your lights for one hour at 8.30pm on Saturday 28 March. Sign up and join the fun at: wwf.org.uk/earthhouraction

MEET OUR 'HIDDEN HEROES'

Our judges selected the lucky winners from more than 70 nominations.



Young Superstar winner

Eight-year-old Jessie Autie is always looking for ways to help the planet and inspiring kids at her school to support our animal adoptions. Last year, she cycled 150 miles from her home in Seascale to Whitby with her mum, raising over £1,000 for WWF.



Workplace Wonders winner

Cook Diane Lamont encourages the children at Edinburgh's Strawberry Hill Nursery to think about where their food comes from and helps them to grow their own vegetables in the nursery's eco-garden.



Community Champion winner

When Jen Gale, from Wiltshire, decided to spend one year without buying anything new, she began a blog called *My Make Do and Mend Year*, inspiring others with tips on how to recycle almost anything.

Congratulations to all our winners and thanks to everyone who nominated a 'Hidden Hero'.



GENERAL ELECTION

Eight ways that politicians can help the environment

THE COUNTDOWN TO the UK's general election has begun. We believe the election on Thursday 7 May matters for the things we all care about. The next government – whatever its political make-up – will have to make important decisions that will affect the future of our environment and the success of the global battle against climate change. So we need action on the environment to be a priority for all parties. We're calling for strong commitments from our politicians to:

Keep our climate change promises

- Make a strong commitment to our targets for cutting climate-changing emissions.
- Be ambitious in supporting clean energy and prioritising energy efficiency in homes.

Act for healthy rivers and seas

- Prevent too much water being taken from our rivers, and restore damaged waterways.
- Insist that water is used more efficiently.
- Create a coherent network of marine protected areas in the seas around the UK.

Save the world's forests and wildlife

- Close the loopholes that still allow illegal wood products to be sold in Europe.
- Ensure that crimes against wildlife are treated as serious offences.
- Give long-term funding to the UK's National Wildlife Crime Unit so that it can do its job.

HOW YOU CAN HELP

There's lots for politicians to do – and you can help by asking MPs how they're going to support these priorities. To find out more about the general election and take action, visit: wwf.org.uk/ge2015

NEWS IN NUMBERS

2,500 

The number of WWF penguin adoptions sold in the month following the launch of our partnership with John Lewis and their TV advert 'Monty's Christmas'. All profits from the CD sales of the soundtrack – *Real Love* by Tom Odell – will support our adoption programme, which is protecting Adélie penguins in the Antarctic. Learn more: wwf.org.uk/penguinadopt

12 

The number of critically-endangered San Salvador rock iguanas that were flown home to the Bahamas last summer. They were being smuggled in socks, but were rescued by border force officers at Heathrow.



CLIMATE CHANGE

Thousands march for action on climate change

LAST SEPTEMBER, 700,000 people around the world joined the biggest demonstration for climate action ever seen. Marches took place in around 150 cities, from New Delhi to New York.

In London, 40,000 participants, including hundreds of WWF supporters, took to the streets. "It's incredible to be here with lots of like-minded people who care about the same things we do," said one WWF supporter, Nathalie Claes. Another added: "It's important that [climate

change] is not ignored, because one day we'll regret it."

You made your voices heard, and in response 120 world leaders meeting at the UN climate summit in New York promised that they'd do what it takes to protect our climate for future generations.

But this is just the beginning. In November 2015 our leaders will meet again in Paris to sign a landmark deal on climate change. In a recent speech, Prime Minister David Cameron said: "I would implore everyone to seize this opportunity over

the coming year... We can reach this historic deal".

Thank you for helping us to make history. Together, we can tell our leaders that 2015 is the year to take strong action.

HOW TO GET INVOLVED

- Watch a video of the fun we had in London: wwf.org.uk/climateaction2014

- Add your voice to our campaign at wwf.org.uk/fortheLoveof

- Find out about our plans for the Paris summit by emailing: ClimateAction@wwf.org.uk



ACTION INTERVIEW

STEVE BACKSHALL

Action is delighted that Steve Backshall, naturalist and presenter of the BBC *Deadly 60* series, is championing our forests campaign. We asked him a few questions:

Why do forests matter to you?

Forests are the most biodiverse of all environments, laden with untold biological treasures. They are ecosystems still ripe for exploration, replete with fecundity, majesty and wonder.

What's your favourite forest in the world, and why?

It would be a tie between the temperate forests of North America's Pacific coast, and the Amazon rainforest. The first has a moss-embalmed richness that feels ancient and mythical; the latter has such diversity that every day spent there brings some new discovery.

What threats do forests face?

The threats to forests are manifold, but all relate to human overpopulation and greed. Increased regulation and awareness is needed if we are to preserve these amazing places for future generations.

Can forests be saved?

That depends on what you mean by 'saved'. Can they be returned to their pre-industrial glories, or even maintained at current levels? No. Can we target the most important and most practical areas of forest and ensure they have sufficient protection to make them viable? With great will, yes, I believe we can.

What can we do to help?

Everyone can help to ensure that the products we use here in the UK come from sustainable sources, and check the origins of the items we use in our daily lives.

Read more about the world's most fragile forests on page 12.

© STONEHOUSE PHOTOGRAPHIC / WWF-UK

© ADAM WHITE

LEGACIES

SECRET LEGACY REVEALED AFTER 100 YEARS

A BOX containing a 100-year-old bottle of brandy bequeathed to WWF and the RNLi was opened at a ceremony in Poole last summer.

Mary Sennett, a valued WWF supporter, left the bottle to both charities in her will. We received the bottle in 1990 along with strict instructions that it be held in trust and sold only when it reached its 100-year anniversary. Mary wanted the proceeds to be divided equally between the RNLi and us.

In accordance with Mary's instructions, the brandy was secured in a wooden box and locked in a safe at the RNLi's HQ for 23 years until it reached 100 years old.

At the grand opening, the box was unscrewed and the brandy revealed. The bottle carried the original wax seal from 1914 and a wine consultant from a specialist firm of auctioneers confirmed that the bottle looked in excellent condition. The brandy was sold at auction in November for £520.



WWF's Debbie Considine and RNLi chief executive Paul Boissier (right) saw the 100-year-old bottle of brandy unveiled



Katie Dogra, who runs our gifts in wills programme, said: "These donations are really important to us: they account for 20% of our income. Every legacy helps us to safeguard the natural world, and any gift – big or small – makes a difference."

HOW YOU CAN HELP

To find out more about leaving us a gift in your will, visit wwf.org.uk/gifts

20% OF OUR VOLUNTARY INCOME COMES FROM GIFTS IN WILLS

IN 2014, THAT WAS OVER **£10 MILLION** TO PROTECT AMAZING WILD PLACES

GIFTS IN WILLS ARE SO IMPORTANT TO US

Gifts in wills support our work in priority places around the world, from saving the Amazon to counting pandas. Your legacy will protect the future of our incredible planet.

For help making or updating your will, call Maria Dyson in our supporter care team on 01483 426333 or email her: maria@wwf.org.uk



VOTING RESULTS

WWF credit card design revealed

THANK YOU to everyone who voted for a new image to adorn the WWF credit card. We're delighted to unveil the winning photo – a stunning snow leopard. This beautiful design will be available from April to new cardholders*.

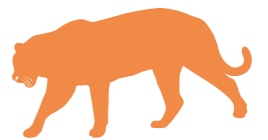
Using your MBNA credit card is a wonderful way to give even more to WWF and help us protect rare wildlife and threatened habitats around the world, at no cost to you. To discover all the benefits of taking out a WWF credit card visit: wwf.org.uk/mbna

*Representative 18.9%APR variable



The WWF Credit Card is issued by MBNA Limited, Registered Office: Stansfield House, Chester Business Park, Chester CH4 9QQ. Registered in England and Wales under company number 02783251. Authorised and regulated by the Financial Conduct Authority. MBNA Limited is also authorised by the Financial Conduct Authority under the Payment Services Regulations 2009, Register Number: 204487 for the provision of payment services. Credit is available, subject to status, only to UK residents aged 18 or over. WWF-UK (World Wide Fund For Nature) Trading Ltd is acting as a credit intermediary, Registered Office: The Living Planet Centre, Rufford House, Brewery Road, Woking, Surrey, GU24 4LJ, Registered in England and Wales number 00892812. It only offers credit cards provided by MBNA Limited.

NEWS IN BRIEF



INTERNATIONAL TIGER DAY

Thank you! You helped us to raise £4,494 for International Tiger Day during a week-long collaboration with the *Independent*, to raise awareness of the threats tigers face. The funds will support WWF's work to double tiger numbers in the wild by 2022.

ANNUAL REVIEW

Our latest online annual review celebrates all you've helped us achieve in the past year. It's packed with highlights, videos, photos and first-hand experiences from our staff and people who support us. And there's a summary of the essential funds you helped us to raise. You'll find it at wwf.org.uk/annualreview2014



© GREG ARMFIELD / WWF-UK

AMUR LEOPARD SURVEYS

Recent surveys of Amur leopards in parts of the Jilin and Heilongjiang provinces in north-east China have estimated there to be about 20 of these perilously rare cats in those areas. This brings total estimates of wild Amur leopards in the Russian Far East and north-east China to about 70.

SUPPORTUS

Make a choice that matters

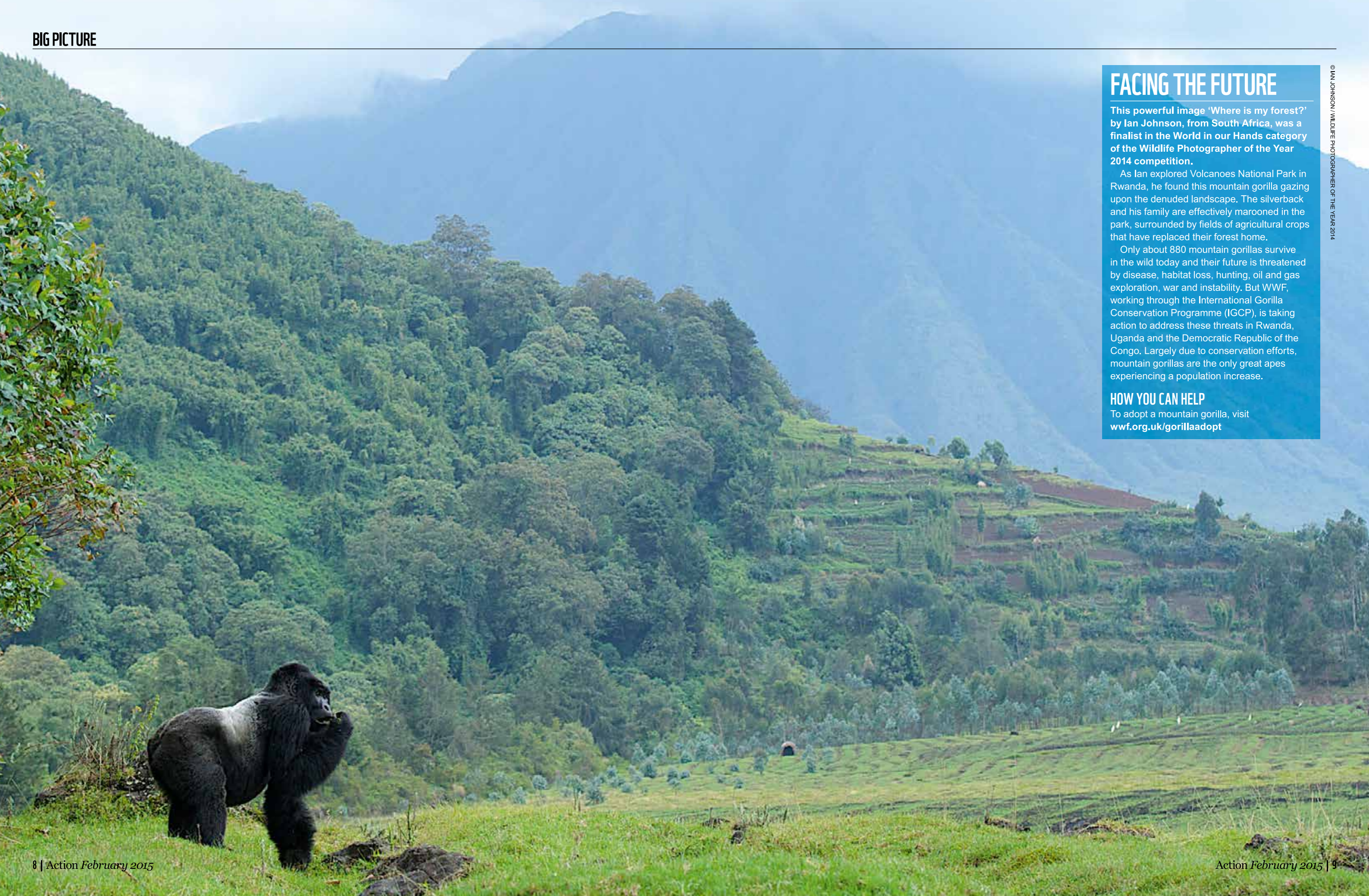
Your membership enables us to do a huge range of vital work worldwide, but if you'd also like to support a particular WWF project or campaign, now you can. Thanks to your feedback, we've introduced WWF Collectives.

With three collectives to choose from – Climate Change, Wild Places and Wildlife – you can now pick an aspect of WWF's work that inspires you, and become part of a collective force for change.

You'll gain exclusive insights into the issue you care most about. Our community managers and resident experts will delve deep into the science of WWF's work and provide you with entertaining, inspiring and educational reports. We believe that, collectively, we can make a difference.

HOW TO JOIN A COLLECTIVE

Find out more: wwf.org.uk/actioncollectives



© IAN JOHNSON / WILDLIFE PHOTOGRAPHER OF THE YEAR 2014

FACING THE FUTURE

This powerful image 'Where is my forest?' by Ian Johnson, from South Africa, was a finalist in the World in our Hands category of the Wildlife Photographer of the Year 2014 competition.

As Ian explored Volcanoes National Park in Rwanda, he found this mountain gorilla gazing upon the denuded landscape. The silverback and his family are effectively marooned in the park, surrounded by fields of agricultural crops that have replaced their forest home.

Only about 880 mountain gorillas survive in the wild today and their future is threatened by disease, habitat loss, hunting, oil and gas exploration, war and instability. But WWF, working through the International Gorilla Conservation Programme (IGCP), is taking action to address these threats in Rwanda, Uganda and the Democratic Republic of the Congo. Largely due to conservation efforts, mountain gorillas are the only great apes experiencing a population increase.

HOW YOU CAN HELP

To adopt a mountain gorilla, visit www.wwf.org.uk/gorillaadopt

Together, we did it!

Thanks to your membership and WWF supporters around the world, we continue to protect wildlife and wild places. Here are some of the great things supporters like you have helped to achieve:

1 SCOTLAND

You helped protect Scotland's marine life

Thirty new Marine Protected Areas (MPAs) were designated off the Scottish coast last year, following many years of policy and advocacy work by us, our supporters and our NGO partners. The 30 new sites, which double the size of Scotland's MPA network, are welcome news for Scotland's underwater landscapes. They'll cover seacliffs in Caithness, deep ocean beds, sandeel colonies and coldwater reefs, as well as providing extra protection for rare and threatened species such as flame shells, the common skate and ocean quahog (a shellfish). But the work isn't over. Now careful management will be needed to ensure that the MPAs actively help our sealife to recover.

FIND OUT MORE Learn how MPAs improve ocean health worldwide at wwf.org.uk/mpas



© ANUP SHAH / NATUREPL.COM

2 NEPAL/INDIA

You helped to count tigers

In June 2013, we told you we were supporting the first ever transboundary survey of tigers in India and Nepal. This landmark study was carried out in 5,300 sq km of the Terai Arc landscape. It used camera trap photography to monitor the distribution and movement of tigers within and between forests in the area. The images enabled experts to identify 239 individual tigers, and the survey highlighted the importance of protected areas and habitat corridors for tigers.

ADOPT A TIGER wwf.org.uk/tigeradopt



3 AMAZON

Saving the 'Star of Colombia'

The Inirida Fluvial Star in eastern Colombia – one of the most important wetlands in the world – will be protected from mining threats after it was declared Colombia's sixth Ramsar site by Colombian president Juan Manuel Santos in July 2014. The 253,000-hectare area is one of the most biologically diverse in the world. It features a mosaic of tropical forest, savannahs, rivers and wetlands, and is home to threatened species such as river dolphins, jaguars and tapirs.

The new Ramsar site is in the Orinoco river basin, and includes the confluence of four different river systems, making it a vital fishing region for both Colombia and Venezuela. We've been working for more than a decade to ensure this area is protected, and to prevent extractive industries moving in to mine for potential reserves of gold and cobalt.

ADOPT A JAGUAR wwf.org.uk/jaguaradopt



© BRUNO PAMBOUR / WWF-CANON

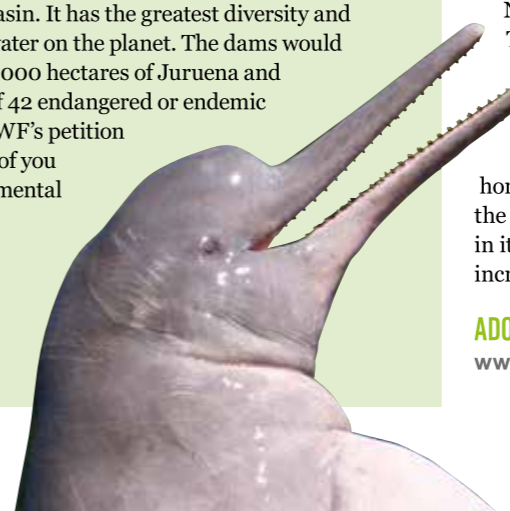
4 BRAZIL

Halting the threat of hydroelectric dams

Thanks to our supporters worldwide, Brazil's fourth-largest national park is safe from hydroelectric dams until 2023. Juruena National Park is part of the largest river system in the country, the Tapajós basin. It has the greatest diversity and productivity of fresh water on the planet. The dams would have flooded about 40,000 hectares of Juruena and affected the survival of 42 endangered or endemic species. We believe WWF's petition in Brazil, which many of you supported, was instrumental in halting the dams.

FIND OUT MORE about sustainable hydropower at wwf.org.uk/amazonriver

© NATUREPL.COM / MARK CARWARDINE / WWF-CANON



5 NEPAL

You stopped snow leopards being killed

We're delighted to report that, between July 2013 and July 2014, no snow leopards were killed in retaliation for attacks on livestock in Nepal's Sacred Himalayan Landscape. This is thanks to our pioneering livestock insurance schemes, which mitigate conflict between local people and the cats by providing compensation for loss of yaks, horses, sheep and goats. Degradation of the snow leopard's habitat and a decline in its natural prey has resulted in increasing attacks on livestock.

ADOPT A SNOW LEOPARD wwf.org.uk/snowleopardadopt



© NATUREPL.COM / FRANCIS SAUNIER / WWF-CANON



"When I look back over our recent challenges, battles and wonderful successes, it strikes me how strong we are when we combine forces. You help us make a world of difference. Thank you!"

David Nussbaum, WWF-UK chief executive

6 CHINA

Restoring the Yangtze river - and its finless porpoises

With support from HSBC, we've made significant steps towards restoring the Yangtze river to health by reconnecting many of its 'lost lakes' to the main channel. In Dongting lake, a recent survey found that numbers of medium and small fish have increased six-fold in the past two years, mainly owing to our efforts to reduce illegal fishing by raising awareness and supporting anti-poaching patrols. This is good news for the 100 critically-endangered Yangtze finless porpoises that live here and rely on healthy fish stocks. Today, only about 1,040 of the porpoises survive, mainly in Dongting and Poyang lakes and the Yangtze. Their numbers have been decimated by overfishing and pollution. It's feared the species could go extinct in five to 10 years unless urgent action is taken.

WATCH A VIDEO about finless porpoises and why they need our protection: wwf.org.uk/porpoises



This finless porpoise is part of a captive-breeding programme. Several individuals will be relocated to the wild in 2015

© WANG XIAOLIANG

DID YOU KNOW? The Yangtze finless porpoise is known for its smile and is affectionately called the 'river pig' by local people

The Amazon is simply amazing. Hundreds of thousands of species live here and its forests play a vital role in stabilising the global climate, by trapping carbon and circulating life-giving rain

FORESTS ARE ESSENTIAL TO LIFE

Forests are essential to life on Earth, but today they're in greater danger than ever. As we launch a new campaign to save the world's forests and their rare wildlife, **Mike Unwin** explores how, with your help, we're tackling the threats ▶



Industrious leaf-cutter ants are the Amazon forest's gardeners

Imagine walking through a huge, green cathedral made entirely of trees. You clamber over buttress roots, while forest giants tower overhead, their trunks disappearing into a leafy ceiling of epiphytes and lianas. From the canopy above comes the crash of spider monkeys and screech of macaws, and a shaft of sunlight illuminates an iridescent blue morpho butterfly. On the forest trail at your feet, a steady stream of leafcutter ants carry their cargo of leaf fragments back to the nest.

The trees thin and you emerge beside a broad river. Printed on the sandbank are the telltale, four-toed tracks of a jaguar. Could the great cat be watching you? As you ponder this, a breathy exhalation – like hydraulic brakes – betrays the presence of a pink river dolphin. Its arched back breaks the surface then disappears again beneath the dark, tannin-rich waters.



“Printed on the sandbank are the telltale, four-toed tracks of a jaguar. Could the great cat be watching you?”

Jaguars require large areas of tropical rainforest and riverbank to survive. Hunting and deforestation threaten their survival

You're in the Amazon, the world's greatest natural treasure trove. You're no doubt familiar with some of the statistics. This vast expanse of green covers over 6.7 million square kilometres, spanning nine different countries. And, with an estimated 390 billion individual trees, it constitutes some 40% of the rainforest left on Earth. All that rainfall drains into 100,000km of rivers and streams, including the mighty Amazon itself – the largest river on Earth. Indeed, the Amazon basin holds some 15% of all the water flowing through the world's rivers.

LIFE FORCE

The diversity of wildlife is equally mind-boggling. The forest is home to no fewer than one in 10 of all known species on Earth. Incredibly, scientists have discovered 441 new species in just the past four years, including the caqueta titi monkey, whose babies purr like cats when content.

Scientists already know of more than 100,000 insect and other invertebrate species in the Amazon, but they think the actual figure could be much higher. “The richness of the Amazon's forests and freshwater habitats continues to amaze the world,” says Damian Fleming, head of WWF's Brazil and Amazon programme. “The discovery of these new species reaffirms the importance of stepping up commitments to conserve its unique biodiversity.”

The value of the Amazon extends far beyond its wildlife. The health of this vast

AMAZON IN NUMBERS

9 the number of countries the Amazon spans: **Bolivia, Brazil, Colombia, Ecuador, French Guiana – an overseas territory of France, Guyana, Peru, Suriname and Venezuela.**

The Amazon basin covers **6.7 million** square kilometres. This is about **40%** of South America.



The Amazon is home to one in 10 of all the species we know about on Earth (and likely to many we don't). These include:

- More than **400** mammal species
- 1,300** types of bird
- 40,000** plant species
- 3,000** fish species
- more than **370** types of reptile
- more than **30** million people

The Amazon forest stores an estimated **140 billion** tonnes of carbon, helping to stabilise the world's climate.

Brazil's deforestation rate decreased by **75%** between 2000 and 2012 due in part to our Amazon Region Protected Areas (ARPA) programme, which has protected more than 128m hectares since 2002.

SIX PRIORITY FORESTS AND THEIR MOST ICONIC SPECIES



With your help, we're working to secure the long-term future of forests worldwide. But in the short term, certain forests are of greater concern than others: some, because they're under more immediate threat; others, because they harbour a greater concentration of wildlife, including species that occur nowhere else and are often highly endangered. At WWF, we prioritise the forests in which we work according to the wealth and variety of life they support, the threats they face and our ability to make a difference. The following are just a few...



© JEFF FOOTI / WWF-CANON

1. TERAI ARC ONE-HORNED RHINO
Spanning Nepal and India in the eastern Himalayan foothills, the Terai Arc landscape is home to many of the last 3,000 greater one-horned rhinos. These solitary grazers are threatened by habitat loss and poaching for their horns. We're working to restore the landscape and improve security in protected areas.



© JEFF FOOTI / WWF-CANON

2. BORNEO ORANG-UTAN
The global demand for oil palm and timber is one of the biggest drivers of deforestation in Borneo. As a result, the number of Bornean orang-utans in the wild has plummeted to between 45,000 and 69,000. We're working to restore and conserve their habitat, and promote sustainable forestry and agriculture.



© NATUREPL.COM / LYNN M. STONE / WWF-CANON

3. AMUR-HEILONG AMUR LEOPARD
These vast temperate forests in north-eastern China and far eastern Russia are considered some of the most biologically diverse in Asia. They're home to an estimated 70 critically-endangered Amur leopards. We're helping to improve habitat protection and management, and prevent poaching.



© NATUREPL.COM / ANDY ROUSE / WWF-CANON

4. CENTRAL AFRICA MOUNTAIN GORILLA
Civil unrest, hunting and habitat destruction have devastated mountain gorilla populations in central Africa. Threats persist but, thanks in part to our work through the International Gorilla Conservation Programme, mountain gorilla numbers have slowly increased to about 880.



© ZSL & KWS

5. KENYA ADERS' DUIKER
The world's largest known population of Aders' duiker, a critically-endangered antelope, lives in the coastal forests of Boni-Dodori in north-east Kenya, alongside other rare species such as hirola and African wild dog. We're working with local communities to protect these forests and support sustainable livelihoods.



© STAFFAN WIDSTRAND / WWF

6. THE AMAZON JAGUAR
The jaguar – South America's top predator – is severely affected by the fragmentation and loss of forests, and persecution caused by its reputation as a livestock predator. We're analysing data from jaguar projects in Colombia, assessing the species' needs and creating an effective monitoring system.



© PERNS ANDREWS PETERSSON
We help local people make a more sustainable living from the rainforest by finding new, improved ways of harvesting and processing wild rubber

forest is critical to the health of the planet. By soaking up carbon dioxide and other greenhouse gases from the atmosphere it acts as a 'carbon sink', helping to slow global warming and stabilise climatic patterns worldwide. It also serves as a 'hydrological engine', storing and releasing huge amounts of water that both powers rainfall and influences ocean currents. Without the Amazon, the climate would become drier, the land more prone to drought and fire, and the soils would be washed away.

What's more, this vast natural drug store is packed with plant compounds that boast multiple medicinal applications, from treating toothache and diarrhoea to epilepsy and, potentially, cancer. Indigenous people have been harnessing these plants for their medicinal properties for millennia. This knowledge could benefit people worldwide.

While we in the west tend to think of humans as agents of the forest's destruction, it's easy to forget that for more than 30 million people – including 350 different indigenous and ethnic groups – the Amazon is home. In one way or another, they all depend on the forest for their food, shelter and livelihoods.

AMAZON UNDER ATTACK

Sadly, the Amazon is in trouble. The forest has shrunk by some 17% in the past 50 years and is getting smaller every day. Deforestation is the most serious threat. As the global demand for products such as beef and soy increases, more trees are cleared to make way for grazing and crops. Big ranches displace small farmers, who then fell more forest in order to support themselves. Cleared land brings problems, such as fires, soil erosion and contaminated run-off.

Meanwhile, the illegal and unsustainable exploitation of resources is rampant, with weak law enforcement unable to prevent everything from logging to oil extraction and gold mining. And poorly planned infrastructure developments also have far-reaching consequences: new roads expose



Every two seconds an area of forest the size of a football pitch is destroyed. Here in the UK you can still buy furniture, books and other products made from illegally or unsustainably sourced wood



ARE YOU BUYING ILLEGALLY SOURCED WOOD?

Our new campaign aims to tackle the destruction of forests by preventing illegal or unsustainably sourced wood from coming into Europe

In the UK we may be far from forests in the Amazon, Indonesia and Africa, but we still have a major impact on them. We're one of the largest importers of timber in Europe, yet many of the wooden products sold here are made from illegally or unsustainably sourced wood. For example, illegally-logged ramin (a tropical hardwood), taken from the forest home of the critically-endangered Sumatran tiger in south-east Asia, could be used in furniture and other home accessories we buy.

In 2013 the EU Timber Regulation came into force. It aims to stop illegally-sourced timber from entering EU markets. But trees felled 'legally' aren't always sustainably managed, and a bewildering variety of wood-based products, such as chairs, musical instruments and charcoal, aren't covered by the legislation.

This regulation is up for review in 2015, so we're seizing the opportunity to make sure it prevents illegally-logged timber and timber products from entering the EU in the future.

But unfortunately legality is only part of the story. Even legal wood isn't always sustainably logged, and vice versa. So our ultimate goal is to ensure that businesses only deal in timber from both legal and sustainably managed forests.

SUPPORT OUR CAMPAIGN

Tell businesses and governments to support healthy forests by making all our timber legal and sustainable. Add your name and help us to #saveforests at www.org.uk/

“From Sumatra to the Congo, rainforests – havens of biodiversity and providers of ecological services – are under attack. And with the forests goes the wildlife.”

virgin areas to logging, while hydroelectric dams harm river systems, depleting biodiversity and damaging local fisheries.

Looming over everything is the spectre of climate change. In 2005 and 2010, the Amazon suffered its worst droughts in the past century, withering crops, destroying fisheries and sparking devastating forest fires. The loss of the forest perpetuates this problem: deforestation releases 340 million tonnes of carbon into the atmosphere every year, fuelling global warming worldwide.

The Amazon is not the only rainforest under threat. From Sumatra to the Congo, these havens of biodiversity – and vital providers of ecological services – are under attack. And with the forests goes the wildlife. Some scientists estimate that more than 130 species are disappearing every day. Even a creature as celebrated as the orangutan may have fewer than 25 years left, squeezed out by the palm oil plantations that are overtaking Borneo and Sumatra.

And, of course, many other types of forest are also under threat. Each has its own unique and irreplaceable community of plants and animals – from the temperate rainforests of southern Chile, home to the 3,000 year-old alerce tree, to the old-growth forests of Amur-Heilong, on the border between China and Russia – the last refuge of rare Amur leopards and Amur tigers.

Forests, in all their forms, are essential for life on Earth. Not only do they provide habitat to well over half of land-based species and a home to 300 million

people, they also protect our watersheds, supply us with oxygen, and provide timber and countless other resources. And yet, worldwide, forest is disappearing at the rate of 36 football fields every minute.

With your help, we're working hard to protect forests such as the Amazon. It's a big challenge – people need

The Amazon is home to more than 1,000 different species of birds, including the beautiful

to use forests and their resources, as they always have done. But we can help find better ways to look after forests and manage them more sustainably. That's why we're working across the world, with everyone from governments and non-governmental organisations (NGOs) to logging companies and indigenous communities, to bring about change.

TAKING ACTION

So far, we've supported the creation of protected areas – which preserve forests and their wildlife – in more than 100 countries. Our programmes also range from promoting zero net deforestation – so countries plant as many trees as they fell – to developing carbon-offset schemes to reduce emissions of greenhouse gases. We help to combat illegal logging and promote responsible forestry through our Global Forest & Trade Network, and work to promote sustainable bio-energy, using scrap wood, oil and other waste products as alternative cooking fuels.

Our projects range from helping to assess how river dolphins respond to hydroelectric schemes in the Amazon, and creating community groups in Nepal that allow villagers to restore their forests, to training government rangers in coastal Mozambique to identify illegal logging.

Thanks to your continued support, we're really making a difference. We've launched our forests campaign to ensure that all timber products in the UK come from legal and sustainable sources. It is, after all, the demand all of us create that fuels so much of the destruction elsewhere.

By making forest-friendly decisions at home, and continuing to support WWF's work, you're helping us secure a future for jaguars, river dolphins and the countless other threatened animals and communities that depend upon their precious forest home. ■

DONATE AND HELP US SAVE FORESTS

We're so grateful for your support of our work to protect the Amazon and other forests. If you'd like to do even more, you can make an extra gift to help protect the animals and people that depend on these forests at: www.org.uk/sosforests



Supporting us is not just worthwhile, it's also great fun. Whether you have a minute or a weekend, here are some of the other things you can do to help

1. ...IN ONE MINUTE TELL US WHAT YOU LOVE

Unless politicians know that climate change is something we all care about, they won't act. We need to show them that this issue is important to us because it could affect many of the things we hold dear: our children's future, our hobbies, our favourite treats, wild animals and places we care about. Tell us what you love: wwf.org.uk/fortheLoveof



If you want to leave a beautiful green planet for your children, tell us



© TIEN THANH TUOI TRE

2. ...IN ONE HOUR CELEBRATE EARTH HOUR 2015

Join millions of people around the world and switch off your lights for one hour at 8.30pm on Saturday 28 March to celebrate our amazing planet. More than just a lights-out event, Earth Hour is a chance to think about the small things we can do every day to help create a brighter future. It's a brilliant reminder that, together, we can make change happen. To join in, visit: wwf.org.uk/earthhouraction



3. ...IN ONE AFTERNOON HELP SURVEY THE SEASHORE

Shoresearch is looking for volunteers to survey marine life within important areas along the shores of the English Channel. It runs from March to May 2015 and our partners at the Cornwall, Hampshire, Dorset and Kent Wildlife Trusts need more volunteers. Anyone can get involved – have fun, learn about marine biology and help protect our shorelife. Sign up now: wwf.org.uk/shoresearch



© TRISTAN FEMINGS / WWF-UK

4. ...IN ONE DAY WEAR IT WILD FOR WWF

We're using nature's gifts as if we had more than just one Earth at our disposal. So let's show our wild sides for our one and only planet. We're asking you to wear your wildest outfit on Friday 5 June – World Environment Day – to raise awareness and funds to help save our beautiful planet.

Paint your fingernails in tiger print, wear a leopard print tie, daub a panda on your face or even snuggle in your favourite animal onesie! Ask your work colleagues, your children's school, friends and family to Wear It Wild and help us safeguard the future for generations to come. For full details, visit: wwf.org.uk/wild



© TRISTAN FEMINGS / WWF-UK

5. ...IN ONE WEEKEND JOIN OUR TEAM PANDA EVENTS

Sign up for the Surrey Half Marathon, 8 March
Take part in Surrey's biggest closed-road half marathon as part of Team Panda! This flat and fast half takes you on a scenic route through the countryside around Woking. It's a must for all runners' diaries.

Be seen at the Brighton Marathon, 12 April
The Brighton Marathon – one of the most picturesque marathons – is now a major date in the marathon season, especially for Team Panda! With incredible coastal views and a true community spirit from all the crowds, this marathon is not to be missed.

Lead the way in the London Marathon, 26 April
The Virgin Money London Marathon is the race everyone wants to tackle at least once. So if you were lucky enough to secure a place for 2015, why not run as part of Team Panda?

Take the London2Brighton Challenge, 24-25 May
The London2Brighton Challenge is one of the UK's greatest endurance events – 100km from capital to coast and two-thirds of it off-road. Complete this epic journey at your own pace – walk, jog or run either 100km or 56km. Go for it!

FIND OUT MORE: wwf.org.uk/events



6. SAVE ENERGY

Try to reduce the amount of energy you use in the home. Not only will you cut your energy bills but you'll be doing your bit to help tackle climate change. Find more money-saving eco-tips at: wwf.org.uk/saveenergy



7. ADOPT AN ANIMAL

Help us to protect nature by adopting an animal you love, be it a snow leopard, polar bear or tiger. Every penny helps us to protect wild animals and their habitats around the world. wwf.org.uk/adopt



8. EAT FOR THE PLANET

The food we eat has a huge impact on our wellbeing and on the health of our planet. So we've developed six 'LiveWell' principles to eat healthily and help the environment. Tip one is to eat more fruit and veg. wwf.org.uk/livewell




9. CHOOSE GOOD WOOD

When you're buying paper notebooks, garden furniture or timber for DIY, it's easy to make sure you're not contributing to deforestation – just look for the FSC logo to spot good wood: wwf.org.uk/goodwood



10. SAVE THE DATE

Now's your chance to stand up for the things you care about. Join our day of action in London on 17 June and tell new MPs you want them to act on climate change. For details email yrosenfeld@wwf.org.uk



Chalk streams have characteristic plant communities. Dense swaths of stream-water crowfoot – which sports dainty flowers from April to July – are an important structural feature, providing food and cover for fish and invertebrates

JOURNEY INTO THE ENGLISH AMAZON

Beautiful, serene and rich in wildlife, England's chalk streams are national treasures. As we release a new report highlighting the importance and fragility of these unique rivers, **Charles Rangeley-Wilson** explains what makes them so special

Chalk streams are paradisiacal rivers. Their special qualities – clear, cool water, serene flows and abundant wildlife – derive from that qualifying word *chalk*. We're all familiar with it from school blackboards. Chalk is common geologically, too: great swaths of it cross Eastern Europe. But the particular topography of the English chalk – how it lies in the ground, the clays and sands above and below it, and how it was shaped by the last Ice Age – gives England eight-tenths of the world's chalk-streams. The rest are found in northern France. English chalk streams rise from, and flow

across, a band of chalk that runs from the south-west corner of Dorset through the Wiltshire Downs, the Chiltern Hills west of London and the Gog Magogs of East Anglia, to the wolds of Lincolnshire and Yorkshire. England has 224 chalk streams in total.

Their names have grown out of the history of the landscape as much as the rivers themselves and read like an alphabet of landscape poetry: the Alre, the Babingley, the Colne, the Darenth, the Ewelme, the Frome, the Glaven, the Hiz...

These poetic rivers are created when rain falls on chalk hills and sinks into the porous rock, where it converges into innumerable

rivulets and trickles. Eventually it springs to the surface again and a chalk stream is born. But, underground, the water has changed – it is now purified, cooled and enriched by minerals in the rock.

It is the constant and equable flow of this fresh and fertile water that defines a chalk stream. Naturally, it does not flood, nor dry up. This unique flow regime, combined with the landscape the water slides over – a hard, flint bed of glacial outwash and thin layer of peaty topsoil – creates the unique shape, brightness and blowsiness that make chalk streams so beautiful. They meander through meadows, open and filled with ▶



Chalk streams grace even urban environments with their unique charms. They bring with them a host of invertebrate life – such as rare fine-lined pea mussels, mayflies and beautiful demoiselles (above) – all attracted by the quality of the water and gravel beds

light, and in their languorous flows and wet margins wildlife abounds.

A chalk river's calcareous waters – rich in calcium because of the chalk – feed the exoskeletons of mayflies, freshwater shrimp and rare white-clawed crayfish. Its clear and steady flow allows water plants to flourish, creating billowing clouds of starwort, water parsnip and water crowfoot. In the nurturing habitat of this underwater greenery, insects thrive, feeding fat grayling, brown trout and salmon, and water-loving birds. The fish, in turn, feed otters.

But the gentle nature of chalk rivers makes them malleable. No other type of river can have been more used and abused over the centuries: chalk streams have driven mills, been straightened for navigation and corralled to make water meadows and irrigate crops and cities. Every change is permanent: chalk streams are not powerful enough to erase such human imposition.

While some changes are symbiotic, part of the textured history of our landscape, other recent changes are parasitic. The worst of these are dredging and abstraction. Today, it is almost impossible to find a stretch of English chalk stream that flows flush with its meadows as nature intended. They have almost all been dredged and widened. And with abstraction, rivers made twice as deep and wide as they should be now produce only half their natural flow.

MEET THE WILDLIFE OF A CHALK STREAM

WATER VOLE

The water vole, Britain's fastest-declining wild mammal, spends its entire life at the water's edge and England's slow-flowing chalk streams are a vital refuge. Their well-vegetated banks support the vole's network of burrows and, since chalk streams do not flood easily, young in the nest are safe from flooding and potential drowning.

OTTER

This elusive mammal prefers healthy rivers with an abundance of fish and lush bankside vegetation for cover, so chalk streams are an ideal habitat. The root cavities of waterside trees provide secure sites for its holts. Like other creatures at the top of the food chain, otters suffered from the use of pesticides, but today they're returning to every county in England.

KINGFISHER

Water quality is key to the survival of the kingfisher. It feeds on fish such as minnows and sticklebacks so the water needs to be clean enough for the bird to see its prey as it skims the surface or peers from a branch. It also needs high vertical banks, with little or no vegetation, for its nest chambers.

WHITE-CLAWED CRAYFISH

Chalk streams are an important refuge for Britain's only native crayfish, providing clean water that's rich in calcium carbonate to build its exoskeleton and abundant crevices to shelter in. The species provides food for many other species, from trout to otters. But it's been lost from many waterways due to pollution, insecticides and competition with the non-native American signal crayfish.

BULLHEAD

This little fish, also known as the miller's thumb for its large head, is just one of the many species that love the clean water and gravelly bottoms that characterise chalk streams. During the day it hides under stones and in crevices, darting out at night to feed on the abundant aquatic insects and their larvae.

ATLANTIC SALMON

The cool, well-oxygenated water of a chalk stream makes it perfect for breeding salmon. Some of the largest fish enter rivers in spring, but it is in autumn that most salmon begin to 'run', travelling upstream to spawning grounds in the headwaters. Salmon eggs are highly sensitive and die in dirty water or when the temperature or water level fluctuates, so the crystal-clear, stable environment of the chalk stream is ideal.

© STUART JACKSON-CARTER / SKILLTRAINING.COM

Pollution, terrible in itself, is magnified in a dredged, abstracted river. Saddest of all, some chalk rivers have dried up altogether. WWF has worked with companies such as Coca-Cola to increase awareness among politicians and key decision-makers that English chalk streams are a globally rare ecosystem that's ours to treasure and preserve. They are as critical to Britain as the Amazon river is to South America. But to be proud of our guardianship, we must all take urgent action to protect and repair our unique natural heritage. ■



CHARLES RANGELEY-WILSON

is an adviser to WWF-UK and an ambassador for chalk streams. His most recent book *Silt Road: The story of a lost river* is the history of an urban chalk stream.

HOW YOU CAN HELP

READ OUR NEW REPORT

In the first report of its kind in a decade, *The State of England's Chalk Streams* examines their current health and finds them in a shocking state. Read the full report and learn how our chalk streams can be restored to full health: wwf.org.uk/chalkstreamsreport

WATCH OUR FILMS

Find out more about how we're working to protect the UK's precious chalk streams and other waterways by watching our fantastic films. Visit wwf.org.uk/ukriverfilms



SUPPORT OUR CAMPAIGN

The Environment Agency is asking you to comment on draft river basin management plans, which will determine how our waters – from lakes and streams to beaches and wetlands – are managed for the next six years. This is your chance to stand up for the places you love and make sure they're restored to health. Add your voice by supporting the Save Our Waters campaign. Visit saveourwaters.org.uk

THE POWER OF THE

PANDA

DID YOU KNOW?
 Pandas have similar digestive systems to carnivores, but they've adapted to a vegetarian diet of bamboo

© NATUREPL.COM / EDWIN GIESBERS / WWF-CANON



Once a decade, China counts its wild giant pandas – and we're optimistic the latest survey will show an increase in numbers. Here's how your support is helping these much-loved bears



In 1961, the founders of WWF were looking for an animal that could communicate beauty, fragility and endangerment. It took just 20 minutes to agree on the giant panda – an animal confined to a tiny crescent of mountainous habitat in the heart of China and, even there, virtually impossible to see.

Yet today just about everyone around the globe is familiar with this elusive bear. Thanks to our efforts, the panda has come to speak for endangered species everywhere, for all the world's threatened habitats and precious ecosystems.

But how is the panda itself faring? We'll soon know. The results of the Fourth National Giant Panda Survey are expected to be published by the Chinese government any day now. This is the latest in a series of once-a-decade reviews of the wild giant panda population, its distribution and habitat, which we have supported.

From a low of 1,114 in the 1980s, the last survey published by the Chinese forestry administration in 2004 suggested the

panda population had increased to 1,596. "At WWF, we're optimistic that the number of pandas and their geographic range may now have increased further," says Nicola Loweth, our regional officer for China. If so, it will be a hugely encouraging sign – proof that decades of effort by WWF supporters and others have paid off.

GIANT STRIDES FOR A BEAR

When Chinese leader Deng Xiaoping announced his intention to open up China to foreign interests in 1978, we seized the opportunity and were the first non-governmental organisation to be invited to work in China. We began the first-ever field study of giant pandas in the wild, a groundbreaking collaboration with China that revealed many of this extraordinary bear's secrets.

Since those early days, we've taken giant strides to protect pandas. "With our support, China's State Forestry Administration has expanded its network of protected areas that contain pandas ▶



Nicola Loweth recently visited our Chinese panda programme. She's pictured here with Wan Hui, who leads our giant panda programme in China

from 40 in 2003 to 67 today," says Nicola. "Thirteen of these reserves have been upgraded to national nature reserves, which means more resources are available to improve them. There are now more, better-trained forestry staff and a national patrolling and monitoring system for wild pandas – a first for China. As a result, data collection, analysis and management is now more standardised. We hope all these significant actions will have a positive impact on giant panda numbers in the wild."

In Sichuan province, where most of the world's remaining wild pandas live, protecting these bears means protecting thousands of other species, many of them endangered in their own right, such as red pandas, golden monkeys and snow leopards. The region embraces habitats from 580m to



HOW DO YOU COUNT WILD GIANT PANDAS?

Pandas are notoriously hard to spot in their forested, mountainous homes, so survey teams rely heavily on panda droppings to count them. Chinese researchers have found that pandas have varying average bite sizes. So by measuring the average bite size of the bamboo fragments in droppings (inset), they can determine the minimum number of pandas in a given area.



Because of China's growing population, many panda groups are isolated in narrow belts of bamboo no more than 1.2km wide – and their habitat is continuing to disappear

an incredible 6,250m above sea level – a range that explains why this is the richest botanical treasure trove outside the tropics. "This is why protecting wild pandas makes such abundant sense," says Nicola. "By conserving this important ecosystem, it not only safeguards the future of the panda but protects many other species too."

Over the past few decades, it's become increasingly clear that protecting pandas can benefit people, too. In 1998, thousands perished when the Yangtze river basin was flooded, a tragedy widely attributed to decades of deforestation in panda country upriver. Since then, the Chinese government has enforced a logging ban, shoring up the panda's stronghold in the mountains and guarding against future floods.

IMPROVING HABITAT QUALITY

But there remain significant challenges. "There's limited scope to extend the network of nature reserves – but there's a lot that can be done to protect panda habitat managed by state-owned forests and local communities," says Nicola. Habitat fragmentation, caused by roads, railways and other development projects, is of real concern. The rapid expansion of protected areas and the logging ban have also necessitated a change in livelihoods for local people, and we have an important role to play in helping to bring about that change in a sustainable manner. "Our job now is to create an integrated protection network that ensures panda populations are

reconnected," Nicola adds.

Such work is vital for an even more far-reaching reason. Thanks to our efforts and with the help of supporters like you, the giant panda has become the face of global conservation. This symbolic role is particularly important in China, home to nearly a fifth of the world's people.

"The panda has a huge role to play in changing the attitudes of the people and government in China to the natural world and conservation," says Wan Hui, leader of our panda programme in China. "The species represents a huge opportunity to raise awareness and influence attitudes, one that we'll be ready to support."

So if the new census figures show that wild panda numbers have increased, it will be wonderful news not just for the bears – but for conservation. ■



We now use camera traps in over 20 reserves to better understand the pandas and other wildlife that inhabits the forest and educate local people about its secret life

FIVE WAYS WE'RE HELPING GIANT PANDAS



© ZHANG TAO

1. ESTABLISHING MIGRATION CORRIDORS

Owing to habitat degradation, the giant panda population is fragmented into 18 isolated sub-groups. Most of these contain fewer than 100 individuals. To reconnect isolated groups and encourage genetic exchange, we've been working to establish 13 migration corridors. These strips of specially-managed panda habitat will reconnect populations and help to prevent the extinction of some groups.



© DENG JIA

2. MONITORING PANDA HABITAT

We've helped to develop a sound scientific system to monitor ecological trends in giant panda areas. This includes using camera traps to improve our knowledge of regional wildlife in over 20 nature reserves in Sichuan and Shaanxi provinces. We've also provided training for conservation staff at panda reserves to teach them how to monitor wildlife, identify any problems and take action.



© SOH KOON CHING / WWF-CANON

3. MANAGING FOREST FARMS SUSTAINABLY

We've been working to integrate panda habitat conservation into the management practices of state-owned forest farms and forest enterprises. When logging in panda habitat was banned in 1998, forest farms had to change their focus – from logging timber to conservation. We provide advice on sustainable forest management, corridor restoration and anti-poaching activities.



© WWF CHINA

4. SUPPORTING SUSTAINABLE COMMUNITIES

We help communities adjacent to panda reserves become better stewards of their natural resources and develop livelihood and green energy projects that increase their incomes. With our help, thousands of local households have adopted fuel-efficient wood stoves and biogas systems, started keeping bees, planted Sichuan pepper orchards and harvested wild medicinal plants sustainably.



© BERNARD DE WETTER / WWF-CANON

5. PROMOTING ECOTOURISM

To help conserve the forests and their wildlife and generate alternative income for local communities, we promote low-impact ecotourism in giant panda areas. We've helped to develop a sustainable tourism industry that reduces the ecological footprint of tourists and we run workshops to help communities provide services, such as accommodation and nature guides.

HOW YOU CAN HELP

Your membership is already supporting our vital work with giant pandas. But if you'd like to do even more, you can adopt a panda for one of the following amounts:

£3 a month buys a raincoat for a ranger to wear in the field.

£5 a month buys bamboo seedlings to restore 660 square metres of panda habitat to create wildlife corridors to link isolated populations.

£10 a month buys an infrared camera to support monitoring and patrols in nature reserves.

To adopt a panda, visit: www.org.uk/pandaadopt



Over to you!

We'd love to hear your thoughts about WWF, your concerns about issues covered in *Action*, and news of your fundraising activities, so please write to us



Richard's 1,000-mile triumph



At 5.30am on a frosty Saturday in October 2014 I climbed out of bed and into a cold shower. Today I would run 33 miles in Suffolk and take my total 2014 competitive event distance past my target – 1,000 incredible miles!

Over the past year, I have cycled from Paris to Rayleigh, Essex; run 10k on the Olympic mountain bike course, completed two half marathons and three full marathons (one dressed as Disney's Mr Incredible), sweated through three 'ultra marathons', swum 2.2 miles from Chalkwell to Southend, and finished a Half Ironman and – my ultimate challenge – Ironman Wales in Tenby. It's been an epic year – and I've done it all in aid of WWF-UK.

For me, nature is the world's greatest gift and

I want to help protect it, in whatever way I can. I chose to make a difference by taking on a personal challenge and fundraising for WWF-UK, proving that each of us can help save the things we care about.

Read more about my charity challenges on the WWF blog: wwf.org.uk/whittyblog
Richard Whitty, London

WIN A RUCKSACK

The star letter wins a Sativa foldable rucksack from the WWF shop, made of environmentally-friendly hemp and organic cotton, and worth £37.99. For more details visit: wwf.org.uk/shop



PLEASE SEND US YOUR LETTERS

We'd really love to hear from you, so please email your letters and photos to editor@wwf.org.uk. Because space is tight, please keep your letters to 150 words. Though we read every one, we cannot acknowledge them and must reserve the right to edit them for publication.



Jacinta with Raymond Lumbuenamo from WWF

Giving nature a voice

Ever since I was a child, I've had a strong love for nature. So I founded Project Hangup to enable me to use my artistic talents to give nature a voice and share important stories, such as the plight of the critically-endangered mountain gorillas.

Project Hangup's recent exhibition 'Tragically, A Limited Edition' consisted of 880 limited edition prints, representing the last mountain gorillas in the wild.

This magnificent species shares 98% of our DNA and it saddens me that we are the biggest threat to the mountain gorilla's future. It was both love and rage that inspired me to create this piece, which included WWF's battle to save Virunga National Park, home to some of the world's last mountain gorillas, from oil exploration.

I'm proud to be an advocate for endangered species and I strive to inspire people and show them that conservation goes hand-in-hand with sustainable development.

Jacinta Sullivan, Melbourne, Australia

WWF's Hampton Court show garden is 'upcycled'

I thought you might like to know that WWF's 2011 Hampton Court show garden is thriving in Tilford, Surrey.

In 2008 we bought a 10.5-acre site intending to demolish the existing house and build a new one. Once we understood the environmental impact this would have, we chose to restore the old house, and indeed the whole site, to its former glory, sustainably. Buying and upcycling WWF's 'stream' garden in 2011 fulfilled our aspirations perfectly.

The organic gardens now include large flowerbeds, a bee-friendly orchard, vegetable patch, half-acre pond and hundreds of specimen trees. The property benefits from a biomass boiler for heat, a borehole and rainwater harvesting. And the show garden's three-foot 'plughole' breaks up the parkland



WWF's Hampton Court show garden had a watery theme. It can now be enjoyed in Surrey

style garden around the house and provides the delightful sound of running water.

We opened the garden to the public last year, raising over £14,000 for worthy causes including Cancer Research UK. To see when we are open in 2015, search for NGS GU102AL or visit wwf.org.uk/showgarden
Mark and Kerry Reynolds, Tilford, Surrey

From all the wildlife, thank you WWF!

I am a student from Quezon City, Philippines. I'm so thankful WWF works to save endangered species and the environment. Because of you, I've learned about animals I never even knew existed. I now know that giant pandas are losing their habitat to roads, that polar bears are going hungry because the sea ice is melting and that rhinos are hunted for their horns.

All these animals play a vital role in their ecosystems and if they go extinct they will leave a huge void that can never be filled. That's why it's important we all do our best to make the world a better place, for ourselves and for every living animal. And, on behalf of the world's wildlife, I say thank you very much WWF.

Samantha Nicole Perjes Carpio, Philippines



Our Coast2Coast challenge

At first, I planned to run a marathon to raise funds for WWF, but injury forced me to find an alternative and so I hopped on my bike. I planned to do the Coast2Coast cycle route with my sister Amy. She's a super fit cyclist so I knew I'd have to train hard to keep up with her. I was soon regularly cycling 30–40 miles, and when I was ready Amy and I spent a day training together in Edinburgh.

In June 2014, we completed the Coast2Coast from the Irish Sea to the North Sea! It took 13 hours over two days to cycle 140 miles, starting in Workington, Cumbria, and cycling through the Lake District, Pennines and Newcastle all the way to Tynemouth. We were laden down with heavy panniers and the route featured plenty of long climbs and a few very steep ones! It was exhausting but incredibly rewarding, and we raised £372.78 for WWF.

Carrie and Amy Hickman, Jedburgh, Scottish borders

WWF EVERYDAY ACTION HERO



Name: Steph Bennett
Achievements: Bupa Great North Run 2014 for Team Panda, and blogging about WWF's Earth Hour, our work with tigers and 'wild rubber' trainers from the Amazon.
Total raised for WWF: £665

WWF award: Most eventful Team Panda moment of 2014
Reason for award: On her way to Newcastle for the Great North Run, the airline lost Steph's bag including her running kit, race number and some 'panda ears' she'd bought especially. But quick-thinking Steph created a makeshift WWF running vest and found a facepaint artist to transform her into a panda for the race! Steph's bag was later returned by the airline, and she donated her compensation money to WWF.

SOCIAL MEDIA HIGHLIGHTS PICK OF THE ISSUE

(wwf.org.uk/youtube)
"I was there [at the climate march in London]! It was a brilliant day and I'm glad that I got to share it with so many people who had the same feelings as me about climate change." Krystal Kurylo

(fortheloveof.org.uk)
For the love of... "The buzzing bees in the bluebells and apple blossom in my garden." Chosen by Carol Steele

(@[wwf_uk](https://twitter.com/wwf_uk))
@andy_murray: Today I become a Global Ambassador for @wwf_uk tackling poaching and illegal wildlife trade #GoWildForAndy

(/WWF)
"Thank you Team Panda. You gave me the opportunity for the biggest sense of achievement ever. Amazing experience for a wonderful cause. Well done everyone!" Angela Corredor, London Marathon 2014

"I love my orang-utan! I think the adoption pack and toy is a lovely idea. It really makes people feel involved. Thank you." Charlotte Horlock

(wwf.org.uk/blog)
Wildlife photographer Andrew Parkinson talks about his passion for England's chalk streams and the importance of preserving them.





WIN! A LIMITED EDITION MOUNTAIN GORILLA PRINT

We've got 10 beautiful limited edition mountain gorilla prints to give away

In June 2014, we secured a commitment from UK oil company, Soco International, that it would end exploratory activity in Virunga National Park, in the Democratic Republic of the Congo (DRC). The park is home to about a quarter of the world's 880 critically-endangered mountain gorillas. While we've received assurances that the company has dismantled its operations, we continue to monitor the situation closely.

Artist and WWF supporter Jacinta

Sullivan was so moved by our Virunga campaign that she created 880 beautiful limited edition prints to raise awareness of the threats facing mountain gorillas. Find out more about the project on our blog at wwf.org.uk/jacintasblog

As a thank you for your support for the campaign, we've got 10 of Jacinta's prints to give away. Just follow the instructions below in 'How to enter our giveaways' and mark your entry 'Gorilla Comp'.

WIN! IN SEARCH OF LOST FROGS BOOK

We've got 10 copies of Robin Moore's stunning photography book *In Search of Lost Frogs* to give away



A mysterious killer, a series of beautiful victims and a hero on an impossible mission – this book has all the ingredients of a Hollywood blockbuster. But it's not fiction. It is the story of conservation photographer Robin Moore's epic quest to find 100 "lost frogs" that have not been seen since the turn of the century.

His search takes him from the cloud forests of Costa Rica to the land of the living dead in Haiti as he hunts for creatures whose names are as beautiful and bizarre as they are – from gastric-brooding frogs to armoured mist frogs.

This is a beautifully written, intensely personal story of perseverance and passion, discovery and disappointment, but ultimately of hope. With such heroic herpetologists on their side, it's just possible the world's amphibians can be saved. Find out more at: wwf.org.uk/frogs. We have 10 copies of *In Search of Lost Frogs* to give away. Just follow the instructions (right) and mark your entry 'Frog Comp'.

WWF SHOP



WILD WHIMSIES

Don't miss our new range of adorable animal whimsies – and start your collection today!

From an Amur leopard to a sea turtle, an elephant to a penguin, we have 14 beautiful animal whimsies for you to collect. Each one represents a WWF adoption species and is finely crafted with exquisite attention to detail.

The good news is that, since our whimsies are lovingly made from lead-free pewter, purchasing them won't contribute to the worrying levels of lead found in the environment and our water supplies. Lead is toxic to wildlife and even to ourselves, due to its persistent bioaccumulative properties.

We think our whimsies could be the next collectable craze and they can be yours for just £11.95 each – so don't hesitate, adopt one today!

WHY YOU SHOULD BUY FROM THE WWF SHOP

For eco-excelling gifts that are original and organic, fun and forest friendly, look no further than our shop. Every purchase you make will help to support our vital work around the world. Help us to help wildlife by visiting the shop now:

WWF.ORG.UK/SHOP

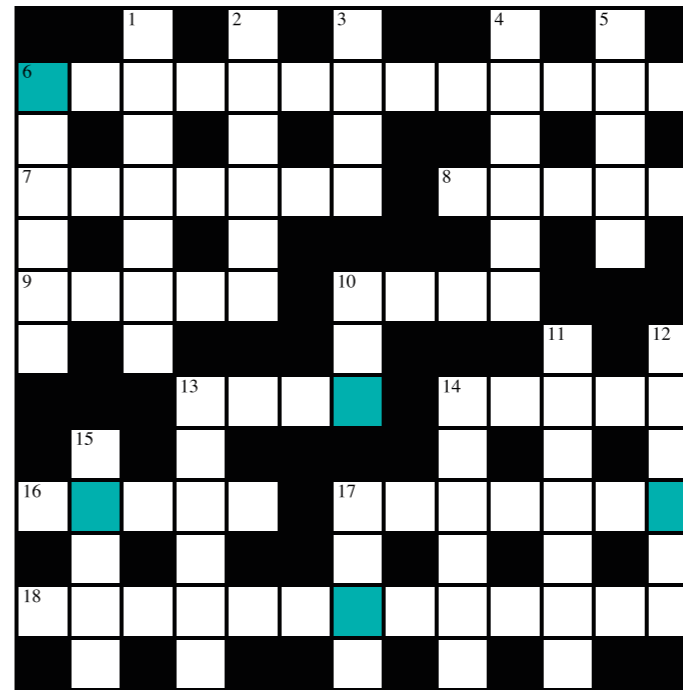
HOW TO ENTER OUR GIVEAWAYS

To enter, please send your name, address and phone number on a postcard clearly addressed to the competition you wish to enter – eg Gorilla Comp or Frog Comp – to Action Mag, WWF-UK, Living Planet Centre, Rufford House, Brewery Road, Woking, Surrey GU21 4LL.

Only one competition per entry please. Or send an email with your chosen competition in the subject line to competition@wwf.org.uk. The closing date for the competitions is: 27 March 2015. For full competition terms and conditions, visit wwf.org.uk/compterm

CROSSWORD

Solve our brain-teasing crossword and win one of three colourful 'birdie bistro' feeders, worth £6.99, from our shop



WWF Action Crossword 29: February 2015 Issue. Compiled by Aleric Linden

After solving the crossword, take each letter from the shaded squares (from left to right and top to bottom) to spell out the prize word – a type of forest. Then send a postcard with the prize word to the address on page 30 or email it to competition@wwf.org.uk – and you could be a winner! Closing date: 20 March 2015

Clues across

- 6 Wood and paper products bearing the FSC's 'tick tree' logo have undergone such scrutiny (13)
- 7 This African country is home to the world's largest remaining cheetah population (7)
- 8 Any material destined for the dump rather than the recycling plant (5)
- 9 Sir _ Scott, WWF founder knighted for his conservation work in 1973 (5)
- 10 Alternative name for the killer whale (4)
- 13 _ erosion, one of the consequences of deforestation (4)
- 14 Renewable form of energy (5)
- 16 King _ , venomous snake classified as vulnerable (5)
- 17 Tableland (7)
- 18 The Earth's forests soak up large amounts of this gas during photosynthesis (6,7)

Clues down

- 1 What type of mammal is the lemur? (7)
- 2 Forest product also known as lumber (6)
- 3 See 5 down
- 4 Layers of sedimentary rock (6)
- 5 & 3 down Home to Tortuguero National Park in Central America (5,4)
- 6 Protective layer of a forest formed by the crowns of trees (6)
- 10 _ spills, form of pollution caused by blowouts, tanker accidents, etc (3)
- 11 Atlantic _ tuna, heavily overfished species (7)
- 12 Spruce and ruffed are species of which forest-dwelling bird? (6)
- 13 Plants prevalent in the Mediterranean maquis (6)
- 14 A word we associate with dry, rainy and mating (6)
- 15 _ reefs, home to approximately 25% of the planet's known marine life (5)
- 17 Groups of whales (4)

OCTOBER 2014 ANSWERS: Prize word: COAST. Across 5. Reefs 6. Sea bass 8. Biomass 9. Congo 10. Rise 12. Habitat 15. Melting 16. Blue 18. Selva 19. Beaches 21. Yangtze 22. Eider Down 1. Zero 2. Asian 3. Rainfall 4. Oslo 5. Robert 6. Sustainable 7. Arctic 11. Shetland 13. Strait 14. Lesser 17. Water 18. Soya 20. Hide

Notes from the field "Lions and elephants don't get on"



© MARALION PROJECT



WWF's adopted lions – the Enesikiria pride – live in the Naboisho conservancy on the edge of the Maasai Mara. When I visited last year, six cubs played boisterously around their mothers, Dada and Spot, as they lay in the shade. Good news for the future of the pride.

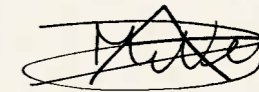
A conservancy is a wildlife reserve owned and run by the local community. This one has been running for only four years (before that the area was small-scale farms), but the lions are already at ease with vehicles. In the past, the cats were killed by cattle herders protecting their livestock. So, at first, Dada reacted aggressively whenever cars drew near the pride. But the guides have patiently gained her trust, ensuring she and her family never feel harassed, and both mums were happy in our presence.

ETERNAL ENEMIES?

As we watched the pride relaxing, a herd of elephants approached, seemingly oblivious to their presence. Lions and elephants don't get on. The big cats occasionally kill baby elephants and some prides have even learned how to hunt the adults. As a result, herds with young rarely tolerate lions in their vicinity and can react aggressively.

These elephants weren't worried about the sleepy lions, but an excitable young bull felt the need to show off. He trundled toward the fascinated cubs in a flurry of dust, ears flapping. Mock charge it may have been, but Dada, a protective mum, was taking no chances and led her family away.

When her male cubs are old enough, they will need to move on and find their own pride. During this time, they'll be vulnerable – they'll almost certainly cross community land and may even kill livestock. So our partners at the Mara Lion Project will watch over them, to see where they go and what happens to them. We want to be sure they make it to adulthood and one day, maybe, have cubs of their own.



Drew McVey East African regional manager

HOW YOU CAN HELP

You can do even more to help us protect the king of the big cats by adopting a lion: wwf.org.uk/lionadopt

GO WILD FOR YOUR PLANET

5 JUNE 2015

WEAR

IT

WILD

DRESS TO EXPRESS YOUR WILD SIDE

WWF.ORG.UK/WILD



Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

wwf.org.uk

WWF-UK, registered charity number 1081247 and registered in Scotland number SC039593. A company limited by guarantee number 4016725 © 1986 panda symbol and © "WWF" Registered Trademark of WWF-World Wide Fund For Nature (formerly World Wildlife Fund)

IN YOUR NEXT ISSUE

CLIMATE WITNESSES

Meet people around the world coping with the impacts of our changing climate – and find out how we're helping them

CONSERVATION'S SECRET WEAPON

Learn why tennis ace Andy Murray is supporting our new sniffer dog programme, which is helping to tackle poaching and illegal wildlife trade in Nepal

EARTH HOUR 2015 SUCCESS

See what happened when millions of people around the world switched off their lights for Earth Hour 2015

PLUS

- Amazing photos
- Your letters & images
- 10 ways to support us
- News from the field

