



# Action

THE MAGAZINE FOR WWF MEMBERS

SPRING 2020

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DAVID ATTENBOROUGH  
FILM PREMIERE  
See page 30



## FORESTS IN CRISIS

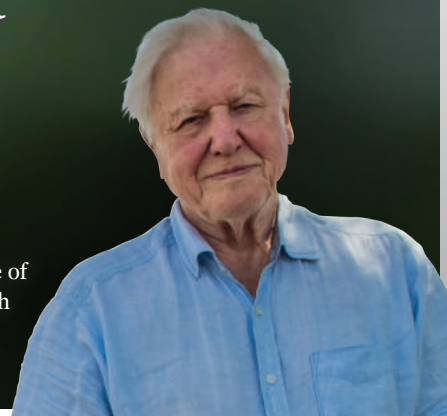
A planet without forests is a planet without life – but there's still time to protect them

### PLANTING OCEANS OF HOPE

How you're helping grow amazing undersea meadows of seagrass, home to abundant marine life

### UP CLOSE AND PERSONAL

We're celebrating the launch of a new film with a powerful message of hope from Sir David Attenborough



# “IF WE LOSE THE AMAZON, WE LOSE THE FIGHT AGAINST CLIMATE CHANGE”

Between January and November 2019, more than seven million hectares of land in the Brazilian Amazon were burned. The huge spike in fires is a result of accelerated deforestation caused by land grabbing and illegal felling. This is not yesterday's news – it's an ongoing crisis

## WORLD ON FIRE

Our home is on fire. Every year, precious landscapes like the Amazon are being burned. But did you know that food production is the leading cause of deforestation? The problem is buried deep in our food supply chain, for example when soy is grown on deforested land to feed animals, such as British-reared chicken or pigs.

This has devastating consequences for more than a billion people, who depend on forests for their livelihoods, and well over half the world's land-based species of plants and animals which call them home.

Forests are crucial allies in the fight against climate change as they absorb carbon from the air and store it in their trunks, stems, leaves and soils. But if they are cleared, or their delicate balance disturbed, that carbon is released back into the air as carbon dioxide and other greenhouse gases – worsening the climate crisis.

Now more than ever, we need innovative solutions and urgent action to safeguard our forests and ensure they can continue to provide critical ecosystem services while meeting the growing demands of humanity. Find out how you can get involved on page 10.

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### MEET THIS ISSUE'S GUEST CONTRIBUTORS



**TANYA STEELE** is WWF's chief executive. She visited Brazil to see the Cerrado. She says: "I was shocked by the scale of the habitat destruction. Nature has been replaced by an ocean of crops as far as the eye can see. We all need to think about where our food comes from."



**STEVE BACKSHALL** is a naturalist and presenter. He hosted a WWF event about the recent IPCC report on climate change. He says: "Our local actions have global consequences. The poles are suffering more extreme changes than anywhere else."



**DR RICHARD UNSWORTH** is the director of Project Seagrass and works for Swansea University. He says: "Seagrass can store carbon 35 times faster than a tropical forest. So our planting programme will help tackle the climate emergency."

### GET IN TOUCH

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# TOGETHER, WE DID IT!

Thanks to your membership, we can help protect wildlife and wild places. Here are some of the great things supporters like you have helped achieve

## 1 ANTARCTICA

### YOU HELPED ADVOCATE FOR EMPERORS

With your support, we funded a study that demonstrates emperor penguins need better protection. An international team of scientists reviewed over 150 studies on these iconic birds and their environment. The study recommends large-scale marine protected areas, upgrading the penguins' IUCN conservation status from 'near threatened' to 'vulnerable', and listing them as a specially protected species under the Antarctic Treaty. Emperor penguins depend on sea ice to breed, so a warming climate is a big threat to their survival. Some studies suggest their numbers could fall by more than half over the coming century. We need more research to understand how they'll cope with the unprecedented changes in Antarctica. With your help, we'll push for stronger protection of the Antarctic and urgent action to tackle the climate crisis.



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## 2 KENYA

### YOU HELPED CUT RHINO POACHING IN KENYA

Thanks to you, the number of rhinos lost to poachers in Kenya fell by over 40% from 2017 to 2018. The results were gathered last year. Your support helped in many ways, including

providing rangers with training and equipment such as tents, handheld GPS devices and binoculars. It also helped efforts to identify and monitor rhinos through ear notching, microchipping and DNA analysis. This not only allows us to look after rhinos more effectively, but also provides vital evidence if they're poached. Our dream is to stamp out poaching.

One way we're doing this is by installing high-tech thermal-imaging cameras in rhino sanctuaries that detect poachers from afar in the dark. This has led to over 100 arrests so far.



© GETTY

## 3 SCOTLAND

### YOU HELPED SCOTLAND LEAD ON CLIMATE LAWS

Your support persuaded the Scottish Parliament to pass a new climate change law that puts Scotland at the forefront of global efforts to beat the climate emergency. Thanks to more than two years of campaigning by WWF and others, the country now has some of the toughest climate laws in the world, showing the ambition that's needed to limit global warming to 1.5°C. The new law sets a target for net-zero greenhouse gas emissions by 2045 at the latest – five years earlier than the UK overall. Crucially, it demands early action: by 2030, the aim is to cut emissions by 75% compared to 1990 levels. To keep on track, annual targets have been set for different sectors, and the government must report on its progress. Scotland previously set a world first by including emissions from international aviation and shipping in its targets. It's also included new measures to cut emissions from agriculture, and to assess the climate impact of new infrastructure.



© GETTY

“WHAT WE DO IN THE NEXT 10 YEARS WILL PROFOUNDLY IMPACT THE NEXT FEW THOUSAND YEARS... NATURE ONCE DETERMINED HOW WE SURVIVE, NOW WE DETERMINE HOW NATURE SURVIVES”

SIR DAVID ATTENBOROUGH, WWF AMBASSADOR



# 8 million

A staggering eight million tonnes of plastic waste leaks into our oceans each year, threatening nature and people



1

## 4 NORWAY

### YOU HELPED MAKE A NOISE ABOUT PLASTIC

Together, we're getting world leaders to take action against plastic pollution. So far, 1.5 million WWF supporters around the world have signed a petition calling for governments to introduce a legally binding global agreement to stop plastics ending up in the ocean. World leaders are starting to listen. Governments in the Nordic countries, the Caribbean and the Pacific have formally joined a call – led by our colleagues in Norway – for a UN treaty to tackle global plastic pollution. And politicians have moved to introduce new measures that will stop rich countries dumping their plastic waste on poorer ones. Together, we'll keep up the pressure.

© CLIFF NEVELT / GETTY



## 6 BORNEO

### YOU HELPED ORANGUTANS HANG ON

With your support, we've completed a four-year survey of Bornean orangutans across the Malaysian state of Sabah. While orangutans are declining elsewhere in Borneo, our research found the population in the central forests here has remained stable over the past 15 years. This follows significant efforts by the Sabah state government to protect forests and promote responsible logging practices. The orangutan population has stabilised in large forest areas, but numbers continue to decline in landscapes dominated by palm oil plantations. With your support, we're working with growers to create wildlife corridors that allow animals to move more freely, helping to reduce crop damage and ensure people and wildlife can thrive together.

If you'd like to do more to help, adopt an orangutan: [wwf.org.uk/orangadopt](http://wwf.org.uk/orangadopt)



Sabah's large forests are perfect for critically endangered orangutans. In a recent survey, we found populations remain stable in sustainably managed areas

© NATUREPL.COM / TIM LAMAN / WWF © NATUREPL.COM / ANDY ROUSE / WWF

## 5 INDIA

### YOU'RE HELPING MONITOR SCHEMES TO REDUCE CONFLICT WITH TIGERS

No tigers have been killed by farmers in and around Corbett tiger reserve in India over the past six years. This is what we found when we assessed a scheme being implemented in partnership with the Corbett Foundation. Tigers preying on livestock is a real problem. Thanks to your generosity, we've supported livestock insurance schemes and financial relief schemes in other areas, which help local people cope with the loss of livestock to big cats. We also help people care for their livestock in ways that reduce the risk of tiger attacks, such as avoiding grazing in tiger territory and switching to rearing a smaller number of more productive cattle that are kept safely inside. On the rare occasions livestock are killed, farmers receive prompt financial support, keeping everyone happy.



# WWF IN ACTION

How we've been fighting for wildlife and our world

The animals that live below the forest canopy are crucial to a healthy, functioning forest. When they are lost, the vital roles they perform are lost with them, with severe implications for forest health, the climate and more than a billion humans who depend on forests for their livelihoods

## LOOKING BELOW THE CANOPY

The world's forests have lost more than half their wildlife in the past 50 years, according to our pioneering new report, *Below the Canopy*

Forests are home to well over half of all species found on land, so we know deforestation is a massive threat. But until now, we haven't had a clear picture of how wildlife is doing in our remaining forests.

With our friends at the Zoological Society of London and the UN World Conservation Monitoring Centre, we analysed the data on populations of mammals, reptiles, amphibians and birds that depend on forests. And the results are worrying.

Globally, populations of forest-dwelling species have shrunk by 53% on average since 1970. The declines are greatest in tropical forests like the Amazon, where there's the most wildlife to lose.

While the loss of wildlife is a tragedy

in itself, it's also bad news for the future of forests – and for us. Animals play a crucial role in forest ecosystems, including pollinating plants and dispersing seeds. Without wildlife, forests can't regenerate and soak up our carbon emissions.

“Forests are complex systems that depend on the wildlife that lives in them to stay healthy. The rapid decrease in forest wildlife in recent decades is an urgent warning sign,” says Will Baldwin-Cantello, our global lead on forests. “Not only are forests a treasure trove of life on Earth, they're also a vital natural ally in the fight against climate breakdown. We lose them at our peril. We need global leaders to immediately kickstart action to protect and restore nature and keep our forests standing.”

Habitat loss and degradation remain the biggest threat to forest wildlife. But the research reveals that wildlife is declining even where forest cover is stable. The message is

clear: we need serious action to protect and restore not only our forests, but also the wild species that live in them.

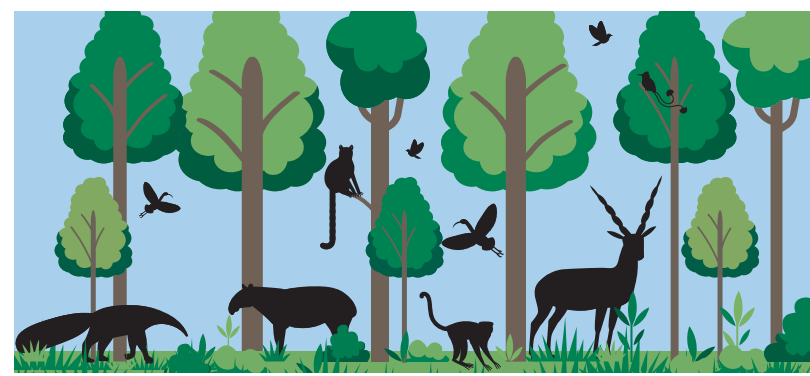
“To reverse the decline in wildlife and the health of our forests, we must address the pressures on forest species, including deforestation, illegal wildlife trade, climate change, unsustainable hunting, invasive species and disease,” Will adds. “If we don't address threats below the canopy we risk the ‘empty forests’ syndrome, where trees stand but much of the wildlife is lost.”

The good news is forests can bounce back and wildlife populations can recover. Wild mountain gorillas are starting to show signs of recovery, thanks to your support. When we protect forests, we protect all who depend on them – and the planet too.

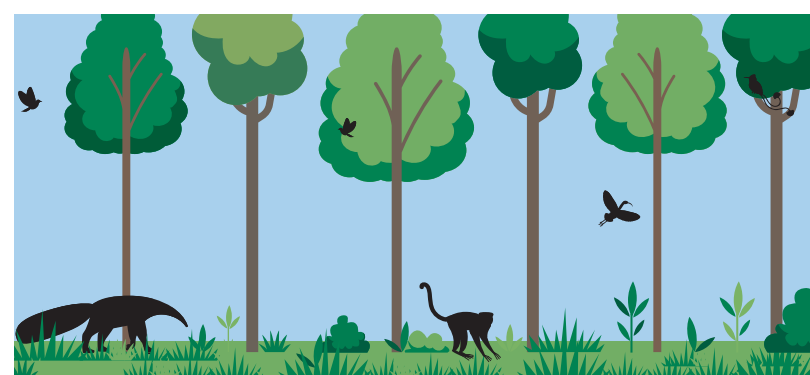
To discover how we're tackling threats to forests, turn to page 10 or watch our video at [wwwf.org.uk/lookingbelowthecanopy](http://wwwf.org.uk/lookingbelowthecanopy)

## THE IMPORTANCE OF LOOKING BENEATH THE CANOPY

Forest animals are essential to natural, healthy forests. By looking below the canopy, we can identify changes in the forest wildlife community and take action to prevent the loss of large-bodied vertebrates



Looking at the forest from above (top), it looks intact with forest cover. Large-bodied vertebrates (below), such as tapirs, lemurs and giant anteaters, are still present



The forest looks intact from above (top). But with less biodiversity (below), large-bodied vertebrates are lost and seeds of carbon-dense trees stop being dispersed

### NEWS IN BRIEF



© RICHARD BARRETT / WWF-UK

### PROTECTING THE LAST ICE AREA

In a move that will benefit wildlife and people in the Arctic, Inuit communities and the Canadian government are taking steps to protect an area almost the size of Germany from threats such as oil and gas development. Tuvaivjittuq – meaning ‘the ice never melts’ in the local language – is part of the ‘Last Ice Area’, a region where scientists predict sea ice is likely to persist the longest in a rapidly heating Arctic. We're working to protect this vital climate refuge for ice-dependent species such as polar bears, walrus and belugas, as well as the under-ice algae that fuels Arctic food webs.

### NEWS IN NUMBERS

£870K

Thank you for supporting our emergency appeal during last summer's devastating Amazon forest fires. So far, more than £870,000 has been raised for our work in Brazil and Bolivia, providing training for volunteer firefighters and helping local communities to protect their land from fires and land-grabbers. But we still need your help to protect forests (see page 10).

6 *Our Planet* has scooped six top awards. The Netflix series made in partnership with WWF was crowned top documentary at the Emmys, where Sir David Attenborough won the award for ‘outstanding narration’. The project won four awards at wildlife media event Jackson Wild. More than 33 million households watched *Our Planet* in its first month, making it the most-watched Netflix original documentary series ever.

NEWS IN BRIEF



© ANDRÉ DIB / WWF-BRAZIL

**'JAGUAR ISLAND' CATS COLLARED**

We hope to reveal the secrets of jaguars living on an uninhabited island off Brazil, thanks to a new satellite collaring project with the Onça-Pintada Institute and Chico Mendes Institute for Biodiversity Conservation. A recent camera trap survey identified at least 27 individuals on the island. But how the jaguars got there and whether there's any connection between them and populations on the mainland is unclear. We've collared three cats so far and hope GPS data will reveal more about their movements to assist efforts to protect them.



© SUZIE HUBBARD / WWF-UK

**PEDALLING FOR PANGOLINS**

Twelve-year-old Izaak and his dad, Greg, cycled an incredible 710 miles from our HQ in Woking to our global office in Switzerland to support WWF's work on the illegal wildlife trade. Izaak decided he wanted to help after hearing that pangolins are the most trafficked mammals in the world. The gruelling bike ride took two weeks and, despite the heat, the hills and the sore legs, every day Izaak finished with a smile on his face. He raised over £10,000 and was thrilled to receive a message from Sir David Attenborough, who wrote "Congratulations on such a splendid result for your epic bicycle trip!"

**CLIMATE ACTION HEATS UP**

**On 20 September, millions of people around the globe took to the streets in the biggest-ever mobilisation on climate change**

In the UK, more than 375,000 people took part in over 250 events. Worldwide, four million people joined the global climate strike, with around 7.6 million taking part during the week of action.

Since Greta Thunberg walked out of school in 2018, millions of young people have joined her protest against world leaders' failing response to the climate emergency. Young people are the generation who will be most affected by the climate crisis, and have a right to demand that their governments start acting. This time, they asked adults to join them in demanding climate justice ahead of the UN Climate Summit in New York, where Greta's speech at the UN General Assembly made headline news.

We were in New York too, rallying world leaders behind our call for an 'emergency declaration for nature and people' to tackle the climate crisis and nature's catastrophic decline. Boris Johnson drew heavily on our message in his keynote

address to the UN, promising ambitious funding for work on both climate change and restoring nature.

Sadly, the prime minister's words aren't yet being matched by action at home. The UK government has set a target for net-zero emissions by 2050 – but it's nowhere near on track. In fact, so far it's implemented only one of the 25 policies recommended by the Committee on Climate Change.

We're keeping up the pressure on the government to take the action necessary to prevent climate breakdown – including putting at least 5% of government spending towards addressing the climate and nature emergencies.

The UK has a real chance to show leadership, as later this year Glasgow will host a major UN climate change conference. This is where countries are expected to agree new, binding plans to reduce greenhouse gas emissions. Scientists agree that we need to limit the average global temperature rise to 1.5°C to avoid catastrophic impacts on people and nature, but current pledges will lead to at least 3°C.



Thousands of people from right around the country have come together to tell world leaders that the time to act is now

**7.6M** 7.6 MILLION PEOPLE TOOK TO THE STREETS IN SEPTEMBER 2019 TO STRIKE FOR CLIMATE ACTION. IT WAS THE BIGGEST CLIMATE MOBILISATION IN HISTORY

© LAUREN SIMMONDS / WWF-UK



This young gorilla was born into the Umubano family. Amina Mohammed, the deputy secretary-general for the UN, named it Ingoga, which means courage

**NAMING THE NEXT GENERATION**

**Twenty-five mountain gorillas born in the past year were welcomed to the world in Rwanda's annual gorilla naming ceremony in September**

The tradition, known locally as Kwita Izina, has been going for 15 years. It celebrates the importance of mountain gorillas to the country, and the people who work tirelessly to protect them.

Celebrities, politicians and conservationists are often invited to name the young gorillas. Last year they included supermodel Naomi Campbell and R&B singer Ne-Yo, as well as WWF director-general Marco Lambertini. He named a gorilla 'Ikirenga', which means 'exceptional' – because, he said, it was exceptionally lucky to be born in a country committed to conserving mountain gorillas and their forest habitat.

Working through the International Gorilla Conservation Programme, we're helping change attitudes to conservation efforts in Rwanda and neighbouring countries. And the 25 young gorillas named last year join a growing population.

"This success is due, in part, to gorilla tourism, and ensuring local people benefit from their presence," says our regional manager for Africa, Cath Lawson. "We're also working to ensure tourism is sustainable and has minimal impacts on populations."

© CAEL RUBENKA VANDEWEGHE / RDB

**GROUND ZERO FOR CLIMATE CHANGE**

**A billion people could be affected by climate-induced risks to oceans, polar and mountain regions by 2050, according to a recent report from the Intergovernmental Panel on Climate Change**

More than 100 authors from 36 countries contributed to the report, which weighs in at over 900 pages. They examined around 7,000 scientific publications on how climate change will affect our oceans and the cryosphere – the frozen parts of the planet like polar regions and high mountains.

The ocean has absorbed 90% of the extra heat trapped in our atmosphere by greenhouse gases since the 1970s, and absorbs around 30% of the CO<sub>2</sub>, leading to ocean acidification. This is already having an impact on marine wildlife and habitats. Heatwaves in the sea have doubled this century, putting huge stress on ecosystems such as coral reefs. A shocking 70%–90% of reefs are expected to die out by 2100, even if we keep global heating to 1.5°C.

The report also warns that sea levels – which are already rising 2.5 times faster than during the 20th century due to melting glaciers and ice caps – could rise by a metre by 2100, and that flooding,



© JAMES MORGAN / WWF-UK

storm surges and tropical storms will become more frequent and intense.

But, the authors say, we can avoid the worst impacts by taking radical action to reduce greenhouse gas emissions. "Our polar regions are ground zero for climate change," says our polar expert, Rod Downie. "Our planet is losing its ice. And that has dramatic consequences for people living in the Arctic, for polar wildlife, and for people across the world, including here in the UK."

Stephen Cornelius, our chief adviser on climate change, adds: "Leaders must act now to ensure a positive future for the planet, invest in rapid and deep cuts to greenhouse gas emissions and increase funding for resilience and adaptation."

Find out how you're helping us tackle climate change at: [wwf.org.uk/climate](http://wwf.org.uk/climate)

# APPETITE FOR DESTRUCTION

The world's forests are critical to the survival of our planet. If we lose them, we lose the fight against climate change. Yet our food choices are driving forests towards a tipping point. **Paul Bloomfield** finds out how, together, we can keep these irreplaceable landscapes alive ▶

Between August 2018 and July 2019, deforestation in the Brazilian Amazon reached 9,762 sq km, or nearly a million hectares, affecting precious species such as the jaguar. This is equivalent to an area more than six times the size of Greater London and is a huge increase on the previous year's figures



The Chapada dos Guimarães National Park is in the Cerrado region of Brazil. This vast tropical savannah boasts nearly 500 waterfalls and is the source of eight of the country's 12 river basins



Tanya visited the Cerrado to see first-hand the impacts of the global demand for soy production



FOREST FRONT LINES

WWF's *Living Forests* report identified 11 areas that are most vulnerable to deforestation between 2010 and 2030, predominantly in equatorial and surrounding regions. We focus on two of the deforestation fronts in Latin America: Amazon and Cerrado.

AMAZON

The world's largest remaining tropical forest stores up to 140 billion tonnes of carbon. Over 17% of the Brazilian Amazon was cleared between 1970 and 2018, and a worst-case scenario could see over 25% of the Amazon's remaining forests (854,000 sq km) lost by 2030. Primary drivers of deforestation are clearance for livestock farming, large-scale and small-scale agriculture, road and hydropower infrastructure development, extractives and logging.

CERRADO

Over half of the Cerrado's natural vegetation has already been destroyed. In Brazil alone, between 2002 and 2010 almost 100,000 sq km was cleared, an area almost the size of Iceland. Official figures indicate that the Brazilian Cerrado lost 6,657 sq km of native vegetation between August 2017 and July 2018. Primary drivers of habitat loss are clearances for cattle ranching and soy plantations.

"I've never seen such a vast expanse of agriculture before. It was like an ocean of crops as far as the eye could see," recalls Tanya Steele, our chief executive. "The skies were empty – there were no birds over the flat, monotonous landscape. I was shocked by the scale of it." It might sound like Tanya is recounting a visit to a farming region in the US wheat belt or midwest. But the scene of monoculture she surveyed during a visit in 2018 was in a deforested area of the Cerrado, a vast region covering 25% of Brazil's land area. This habitat is often described as 'savannah', though it's far more varied and, historically, rich with plant life than that suggests. "Some parts of the Cerrado look like bush or scrubland, so the region's importance can be underestimated," explains Tanya. "Other areas are hugely forested. We call them 'upside-down forests' because of the depth of their root systems. There are plants here

that are found nowhere else on Earth. They could be invaluable in ways we don't yet understand – for nutrition or even medicine." **LANDSCAPE FOR LIFE** It's not just the Cerrado's flora that makes the region special, though it hosts some 12,070 plant species. It's also rich in animal life, with 837 types of birds, around 90,000 insects, 150 amphibians and nearly one in three of Brazil's 700 mammal species (including the ocelot, pictured right), perhaps 40% of which are endemic. It's the source of water for eight of the country's 12 river basins, and stores an estimated 13.7 billion tonnes of carbon. In short, this is a habitat Brazil – and the world – can ill afford to lose. But it's being cleared to grow the world's crops – and at an alarming rate. Some 50% of the historical area of the Cerrado has gone already and an astonishing 18,962 sq km was lost between 2013 and 2015 alone – an area the size of Greater London every two months. Recent deforestation figures released in

2019 showed an equally worrying trend with almost 6,500 sq km lost in a year. Tanya witnessed the problem first-hand. "We saw fires on the horizon, and evidence of recent deforestation and burning," she reports. "They are huge fires, which generate so much smoke, you can see them from miles away." Fires in Brazil hit international headlines last summer when, in August alone, more than 30,000 individual blazes were detected in the Amazon, nearly three times as many as in the same month the previous year. Less widely reported was that fires in Brazil's Cerrado and Pantanal wetlands, as well as in Bolivia and Paraguay, also soared in 2019. Manmade blazes are common in the Amazon during the dry season (August–October), as fire is a tool used to prepare land



for pastures and agriculture. But the scale and intensity of the fires in 2019 reflected sharp increases in forest clearance by ranchers, land grabbers, illegal miners and farmers. This deforestation is largely unchecked by the Brazilian government. The total area burned in the Amazon from January to November 2019 was 70,647 sq km, 69% higher than the same period in 2018. Though the Amazon is arguably the most visible example, it is just one of 11 deforestation fronts worldwide identified by WWF. These are places where the largest concentrations of forest loss or severe degradation are likely to occur. They include areas in the Congo basin and east Africa, south-east Asia, New Guinea and eastern Australia. Together, these account for over 80% of the forest loss projected globally by 2030 – up to 1.7 million sq km. We're losing 88,000 sq km of natural forest worldwide each year – that's an area the size of a football pitch every two seconds. We know forests are globally

important. They're crucial for locking up huge amounts of carbon, and their loss contributes significantly to climate change – deforestation and forest degradation are the largest sources of CO<sub>2</sub> emissions after the burning of fossil fuels. Forests also moderate rainfall locally and regionally, and the loss or degradation of forests for food production, mining or other industries goes hand-in-hand with reduced water quality and increased flood risk, among other threats to the services nature provides. **THE TRUE PRICE OF CHEAP FOOD** There are more personal impacts, too, as Tanya discovered in the Brazilian Cerrado. "We met families who had lived on the land for generations, but who have now lost their rights to it," she reports. "As global demand for soy production has increased, land grabbing has become a real problem here. Mariene Gomes Lopes, her brother and her 84-year-old parents were displaced from their ancestral home in the Cerrado to make way for food production. Suddenly, they had no

choice but to travel to the city to find work and build a new home." These stories may reflect problems on different scales – vast tracts of forest burned to clear land, contributing to increasing greenhouse gas emissions, versus individual families being displaced – but one troubling aspect links them: as consumers we are unwittingly complicit through our food choices. What we eat has a huge impact on nature in far-flung places, particularly as global diets change to include more meat, dairy and processed foods. The UK food supply alone has been directly linked to the extinction of an estimated 33 species at home and abroad. As Mariene's mother told Tanya: "There's no such thing as cheap food – it has a cost thousands of miles away." Large-scale forest clearance in Malaysia and Indonesia has been driven by demand for palm oil, used in nearly 50% of packaged products found in UK supermarkets. And in west African countries such as Ivory Coast, which supplies 30% of the cocoa beans for

## THE LOSS OF FORESTS THREATENS...

### THE WORLD'S CLIMATE

Deforestation and forest degradation contribute significantly to global emissions of carbon dioxide, the most prevalent of the greenhouse gases linked to climate change. Over 40% of the carbon stored in the world's forests is found in three places: the Amazon, the Congo and south-east Asia.



### LOCAL LIVELIHOODS

Forests provide food, shelter, fuel and income for about a billion people around the world. Forest products on which local people depend are threatened by deforestation – for example, baru nuts, babassu coconuts and pequi fruit and nuts are used by communities including indigenous and quilombola settlements (founded by escaped Afro-Brazilian slaves) in the Brazilian Cerrado. See how you're helping on page 16.



### BIODIVERSITY

Forests are home to well over half of the world's land-based species. Recognised as a global biodiversity hotspot, Brazil's Cerrado has an abundance of species, many of which are found nowhere else on Earth. They include 12,070 native plant, 252 mammal, and over 800 fish and bird species.



### WATER

Deforestation affects water cycles and quality. Trees absorb groundwater and release it into the atmosphere in a process called transpiration; deforestation impacts the climate locally and further afield, making it drier, and also affects the water table. The removal of trees close to waterways leads to more soil eroding into rivers, increasing sedimentation. Along with pollution from agriculture or mining, this causes changes in water quality and flows.



From toucans to poison dart frogs (below), the remarkable wildlife of the Amazon, and Brazil's other biodiversity hotspots including the Cerrado, is threatened by deforestation and habitat loss

the world's chocolate market, tropical forests are typically cleared to plant new cocoa trees rather than reusing the same land. It's been estimated that 70% of the country's illegal deforestation is related to cocoa farming.

In Latin America, one of the biggest problems linked to a global increase in meat and dairy consumption is clearance of natural habitats for cattle pasture in areas such as the Amazon. And, in the Cerrado particularly, there's a further issue – soya bean agriculture. The UK consumes some 3.3 million tonnes of soy each year, over 75% of it 'hidden' in the animal products we eat, such as meat, dairy and eggs. Right now, we have no way of knowing where the deforestation is found. It's buried deep in our food supply chain. For example, soy can be grown on deforested land abroad and then fed to British-grown chickens and pigs. Soy can be grown sustainably, but 77% of UK soy imports currently come from Brazil, Argentina and Paraguay – countries where there's a high risk of deforestation, weak governance and poor labour standards. And our food supply chain rarely distinguishes between sustainable soy and that which drives deforestation.

## “THERE IS NO CHEAP FOOD – IT ALL HAS A COST THOUSANDS OF MILES AWAY”

The tragedy, but also the opportunity, is that it doesn't have to be this way. “The real crime is that there's no need for even one more tree to be chopped down. Existing cleared land can still be farmed productively,” says Tanya, referring to soy farming in the Cerrado. “We already have more than enough land to feed the world's growing population and we don't need to destroy any more precious habitats. But the nature of the incentives for some farmers, and the way in which they're managing stewardship of that land, means that it's cheaper for them to deforest the next stretch of trees than to look after the soil and the land they already have.

## WHAT'S ON YOUR PLATE?

You might be surprised just how much impact your food choices have on the planet – not least because some of the environmental footprint associated with food is hidden. Understanding the real costs of these ingredients can help inform what you buy

### BEEF

In some regions, such as the Amazon, clearance for new cattle pasture is one of the main drivers of deforestation. Most intensively farmed beef consumed in the UK is produced domestically or imported from Ireland but has a sizeable carbon footprint, partly because a lot of animal feed contains imported soy grown on cleared land in regions such as Brazil's Cerrado. Pasture-fed beef has a lower carbon footprint.



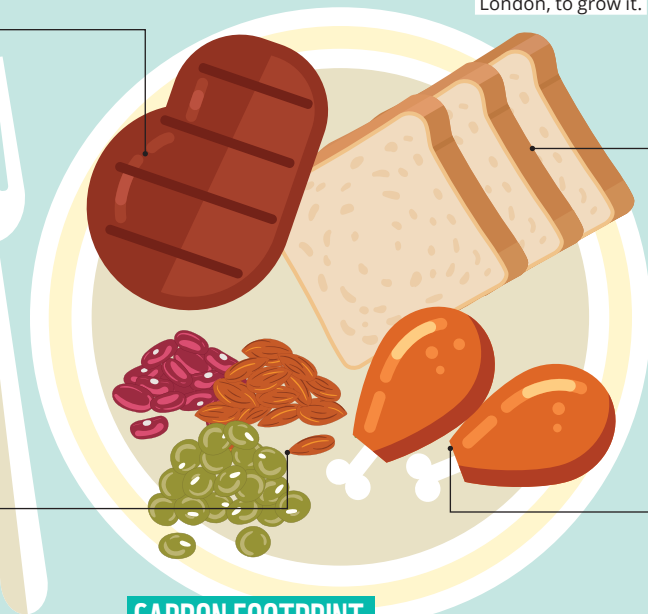
### BEANS

Beans, peas and nuts are healthy and low-carbon sources of protein. A daily 150g serving of beans contributes just 36kg of greenhouse gas emissions each year, almost 80 times less than eating beef every day.



### CARBON FOOTPRINT

By following WWF's Livewell diet, UK adults could reduce their carbon footprint by 30% by 2030 compared to 1990 levels. [www.wwf.org.uk/livewell](http://www.wwf.org.uk/livewell)



### ANIMAL FEED

The UK imports around 3.3 million tonnes of soy for animal feed per year, requiring an overseas land area of 1.68 million hectares, nearly 11 times the size of Greater London, to grow it.

### BREAD

Palm oil is used in nearly 50% of packaged products in supermarkets, including dried noodles, chocolate and bread. Forest clearance for oil palm plantations is a major driver of deforestation in Malaysia and Indonesia. It's expanding in Colombia, too. However, palm oil is an incredibly efficient crop, and can be produced sustainably.



### BEEF CONSUMPTION

Average UK beef consumption (three 75g servings per week) contributes 1,325kg to greenhouse gas emissions annually per person – equivalent to driving 3,380 miles, or four return flights to Málaga.

### CHICKEN

Chicken has a smaller carbon footprint than beef – 364kg of greenhouse gas emissions per person annually, based on an average person eating five 75g servings a week. But chickens are often given feed that contains imported soy, grown on cleared land in regions such as Brazil's Cerrado.



So we're looking at how we can work with those agricultural producers – many of whom want to change – to take better care of the land that's already cleared.”

In practical terms, that means changing the way soy is farmed: being more mindful about the use of the land, leaving buffer zones in place for wildlife corridors between some of the large-scale agricultural areas, and not farming right up to the edges of rivers, to provide space for wildlife and reduce chemical run-off that could enter rivers and poison fish.

### TACKLING OUR FOOTPRINT

We're also working with local cooperatives harvesting non-timber products such as pequi, baru nut, cashew and babassu coconut, helping them to make a living and encouraging conservation of those trees. There's no time to lose: if the destruction of Cerrado habitat continues at recent rates, 150,000 sq km could be lost by 2030, and some 480 of its plant and animal species could become extinct by 2050.



Working with local farmers is just one part of the puzzle; we need to ensure it's viable for them to improve their farming practices. “Many farmers feel a huge pride in and connection to their land. They're already looking at ways to manage their crops in a more sustainable way,” observes Tanya. “One of the things we've been asking retailers, big businesses and agricultural suppliers is to create a level playing field – a fair system so farmers can do the very best for their own land and investment.”

Importantly, the choices we make in the UK have an impact right along the supply chain. So we're pushing the UK government to develop policy frameworks to ban the sale of any food that causes deforestation. In 2019, partly in response to a WWF report, the UK government launched the Global Resource Initiative taskforce. Its objective is to identify actions to drive more resilient and sustainable food systems that avoid deforestation and environmental degradation overseas, while supporting jobs and livelihoods. In other words, it's aiming

to find ways to reduce the UK's environmental footprint from international food imports – especially by avoiding deforestation (and other environmental degradation overseas). We'll be following its progress and calling on the UK government to adopt legislation that results from this initiative.

We're also asking businesses to do their fair share to make our supermarket shelves deforestation-free. In 2017, an alliance of more than 60 NGOs in Brazil, including WWF, released a Cerrado Manifesto calling for companies purchasing meat and soy from this region, as well as investors, to take action.

To date, over 140 companies – including UK retailers Aldi, Lidl, Morrisons, M&S, Sainsbury's, Tesco and Waitrose, as well as numerous manufacturers – have signed a statement of support, confirming that they're committed ‘to halting forest loss associated with agricultural commodity production, and to working with industry, producers, governments and civil society to protect globally important natural landscapes within a framework of good governance and land planning policy’.

There are other ways we can help reduce our impact, too. “Think about where your



With your support, we're helping family farmers to harvest and market sustainable Cerrado fruits, such as pequi



Eva Aparecida Santos returned to the region thanks to a cooperative project

## HOW YOU'RE HELPING PEQUI PRODUCERS

Pequi might be the most important fruit you've never heard of – for communities in the Cerrado, at least. The yellowy flesh of the *Caryocar brasiliense* fruit has a sweet-but-cheesy flavour that's popular in Brazil, served with chicken or rice. The skin of the fruit is edible but the stone inside is surrounded by sharp spines. It contains a seed that can be dried and roasted, or cold-pressed for oil.

For centuries, the pequi has been harvested in the Cerrado. With its high yield, it has the potential to provide a good income, but today those making their livelihoods from its products face two major challenges. The first is the loss of pequi trees as land is cleared for cattle ranching or soy production. The second is how to sell enough to get by.

Addressing the second issue can help tackle the first, so our colleagues in Brazil are working with cooperatives in the Cerrado to help them improve the way they market their products, reducing the need to clear more land. "The traditional skills needed to make

products with fruits or nuts can be passed on," says Karina Berg, our regional manager for Latin America. "But finding markets large enough to provide a living, and enable people to stay in rural communities, is a challenge. So we're helping to increase marketing expertise within cooperatives."

Partly due to successful cooperative projects, some people who left rural communities to find work in cities such as São Paulo are now returning to the region. People such as Eva Aparecida Santos, a mother of three in Onça, in the eastern Cerrado. Eva got involved with Cooperuaçu. "This local cooperative provides income for several families, supports the sustainable harvesting of natural products, and works to conserve the habitat," says Eva. "The Cerrado faces a lot of challenges, that's why we need programmes like Cooperuaçu. The Cerrado is our greatest asset."



"WE'RE ASKING BUSINESSES TO MAKE OUR SUPERMARKET SHELVES DEFORESTATION-FREE"



Mass soya bean harvesting at a farm in Brazil

food comes from, and how it's been produced. Ask your local supermarket, butcher or grocer about the source of the food you're buying," says Tanya. "It's not about turning your life upside down. But there's no doubt we have to change our diet and our food choices for the future – to ensure the environment is in good health for our children. By making some changes to our diets we can be a bit healthier, too. It's a positive thing for us all."

## PEOPLE POWER

What does this mean on a day-to-day level? Well, it's true that meat – particularly beef and lamb, and to a lesser extent pork, fish and chicken – has a large environmental footprint, so eating less meat is helpful. But reducing our impact is about eating better, rather than just less. For example, beef cattle raised on deforested land is responsible for 12 times more greenhouse gas emissions than cows reared on natural pastures. And palm oil

can benefit communities and wildlife when it's sourced sustainably.

It's not always easy to know the provenance of our food, but there are tools to help. Look for RSPO (Roundtable on Sustainable Palm Oil) certification on products, or check the WWF Palm Oil Scorecard to see how retailers, restaurant chains and food manufacturers are performing in terms of sustainable sourcing. And the nifty Giki app allows you to scan the barcodes of some 280,000 popular products to obtain information about their environmental and ethical credentials.

We know we must act quickly to halt deforestation. There are enormous challenges – local and global, economic and political, particularly in places such as Brazil, where the current administration has demonstrated a lack of will to tackle climate change, deforestation and loss of biodiversity. But with your help, we can continue to

collaborate with governments, local communities and indigenous groups in other key countries such as Colombia, Peru and Bolivia to combat deforestation in Latin America and elsewhere. And by considering what you eat, and making choices based on the effects of those products, you can have a huge positive impact on nature.

We're realistic about what's required, but also optimistic about what can be achieved. "We need to feed a growing population, and we have to do that as effectively and efficiently as possible," affirms Tanya. "This is a story not only about deforestation or damaging one of the most important biodiverse places on this planet. But it's also about our food choices and food system, and how many of the products we eat have an impact thousands of miles away. Finally, it's about changing the balance of nature and effectively addressing climate change for future generations."

## SAFEGUARDING THE CERRADO

There's never been a more critical time to fight for globally important habitats such as the Cerrado. With your support, we're working to protect remaining forests, and to halt all deforestation and conversion of the Cerrado for sourcing and producing soy. If you'd like to do more, here's how your extra gift could help:

**£10** could help provide soy farmers with technical support to improve their soil fertility and yields

**£20** could help buy seeds to restore six hectares of native vegetation

**£50** could provide training for local communities on how to market their sustainably produced products

**£100** could help fund a survey to identify areas of the Cerrado that are in the most urgent need of protection

Donate today:  
[www.wwf.org.uk/save-cerrado](http://www.wwf.org.uk/save-cerrado)

## FIGHT FOR FORESTS

You can also join our campaign to demand that the UK government commits to a deadline for ending the sale of all goods that have caused deforestation. Visit:  
[www.wwf.org.uk/deforestation-free](http://www.wwf.org.uk/deforestation-free)

## THROUGH ATTENBOROUGH'S EYES

**This April, see a remarkable new film which tells the story of life on our planet – from a man who has seen more of the natural world than anyone else.**

When our ambassador Sir David Attenborough began his broadcasting career in the 1950s, it was a very different world. The global population was a third of its current size, and numerous natural wonders had not yet been discovered, let alone filmed. "Everywhere you turned, you saw something new," he remembers fondly. Since then, his unique insights have delighted and inspired global audiences of all ages.

In the groundbreaking *Our Planet* documentary series – our collaboration with Netflix – Sir David told the story of how humans have had a profound impact on the planet's most precious species and fragile habitats – and how we're now facing a crucial turning point in our history.

In this new film, *David Attenborough: A Life on Our Planet*, Sir David reflects on the devastating impacts of nature loss he's witnessed – and the biggest challenges facing life on our planet. The film offers a powerful message of hope for future generations – that we can turn things around before it's too late.

The film premieres at the Royal Albert Hall on 16 April where Sir David will be joined on stage by some very special guests for a discussion on issues raised in the film. This exciting event will also be screened live in cinemas – you can buy tickets at: [www.attenborough.film](http://www.attenborough.film)

To celebrate the film's release, we're giving you the chance to win a pair of tickets to the premiere – more details on page 30.

# SEEDS OF HOPE

One incredible plant species could boost biodiversity, help human livelihoods and play a role in fighting the climate emergency. That's why we're launching the biggest project of its kind in the UK – to restore seagrass ▶

Many seahorse species – such as this spiny seahorse – live in seagrass meadows around the world. The 'little horses of the sea' rely on their camouflage to hide among the blades from predators

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## RESTORING SEAGRASS



Seagrasses form dense meadows under the sea. Like rainforests, these underwater gardens are full of life and help us fight climate change. But they're threatened. Globally, it's estimated an area of seagrass about the same size as two football pitches is lost every hour. Restoring this special habitat is vital.

**O**n a winter's day, a small boat pushes off a Pembrokeshire beach, bound on an epic journey. Though the people on board will travel almost no distance at all – never going beyond sight of the shore – their mini-expedition is set to have a massive impact.

Within the next few weeks, that first boat launch marks a critical stage in a unique partnership between WWF, Sky Ocean Rescue and Swansea University. Our aim is to grow meadows on the seabed.

Most of us – if we think about it at all – might imagine that what we see of the flat, muddy bottom of an estuary or tidal bay continues in a shallow, featureless drop under the waves and out into the deep blue. But there are brilliant green exceptions, where the bare sea floor is suddenly thick with thigh-high, grass-like leaves.

This is seagrass, the world's only flowering plant that is able both to live in seawater and pollinate itself. The harsh currents of our seas mean that meadows of seagrass (also called eelgrass) are confined to sheltered estuaries, bays and lagoons, where the plants put down their roots in soft sediment. Scientists have only recently discovered that those roots,

swollen into rhizomes, are true climate-savers, allowing seagrass to absorb carbon at 35 times the rate of rainforests. The plants lock up about a tenth of the ocean's carbon under the sea. No wonder seagrass is praised as 'blue carbon'.

This underwater rainforest is home to amazing wildlife in astonishing abundance. Shoals of tiny shrimp-like crustaceans graze the algae that coats the leaves. Crabs patrol

**“THIS UNDERWATER RAINFOREST IS HOME TO AMAZING WILDLIFE”**

the fronds as anemones and stalked jellyfish filter the water for particles of food. Octopus and cuttlefish shoot past, while marine worms and bivalve molluscs create mini-eruptions, burrowing into the sand.

Fish weave through the waving stems: wrasse, pipefish, gobies and – in a handful of southern meadows – even seahorses.

There are also the small fry of species that may one day be caught by humans – among them cod, pollock and plaice. Most of these were borne as larvae by tidal currents into the meadows. A happy accident, for here their chances of finding food on a daily basis are much higher, their chances of being eaten are reduced, and their chances of putting on weight in their crucial first year are much improved. Our commercial fisheries rely on seagrass meadows to sustain populations destined for the open ocean.

### SEAGRASS NEEDS SAVING

These meadows keep on giving. They absorb energy from the waves and trap sediment, reducing erosion; they soak up polluting minerals. But we have shown them little generosity in return. It's thought that something like nine tenths of Britain's seagrass meadows have been destroyed, though we can't be certain of that figure, since mapping underwater habitats up to five metres deep is hard, even with today's technology.

According to global seagrass expert Dr Richard Unsworth of Swansea University: “The timescales of loss are beyond living ▶



### STEP 1: HEADING OUT TO THE MEADOW

Our seed-collecting teams of volunteers go out at high tide to one of our target seagrass meadows in north Wales, Cornwall, Dorset, the Channel Islands or the Isle of Man. Our goal – to gather one million seeds! The boat is filled with both snorkellers and scuba divers.



### STEP 2: THE SEED SNORKELLERS

The first people to jump out of the boat are the snorkelling volunteers. They gather seed-bearing stems from water that may only be a metre deep. It's easier to collect the stems while they're under water.



## HOW WE GATHER SEAGRASS SEEDS



### STEP 3: AT THE DEEP END

Scuba divers plunge off the side of the boat to sink into deeper water further out. There's still enough sunlight for the seagrass to grow down to about five metres in depth, and sufficient light (just!) for the divers to see what they're doing. The blades snap off easily in their hands.

### STEP 4: IT'S IN THE BAG

All of the picked stems are immediately dropped into black mesh nets and the nets are brought ashore. A seagrass bed produces trillions of seeds. Not only are there plenty to choose from, but also collection has no harmful impact on the existing meadows. New blades will regrow next season.



### STEP 5: LANDING THE CATCH

The boat has brought the harvest in to shore. The seeds are all of the same species – common eelgrass (*Zostera marina*). The seeds on each stem look like runner beans in a pod. In the open sea, an air bubble from photosynthesis would burst the membrane, releasing the seeds.



### STEP 6: PREPARATION IN THE LAB

It wouldn't be practical to separate the seeds on shore, so they are sent to a laboratory where they are removed from the blades. The seeds are then mixed with sand and put in hessian bags ready for planting out on ropes over a Pembrokeshire seabed.

# FIVE SEAGRASS STARS

## SPINY SEAHORSE

This fish with a fleshy 'mane' down its back drifts through the meadow sucking up shrimps and plankton. At the slightest current, it clings to a stem with its prehensile tail.



## COD

When cod larvae are washed into a seagrass meadow, they may be only two centimetres long. In just a year they reach eight or nine times that length, feeding on tiny crustaceans.



## CUTTLEFISH

A bunch of 'black grapes' attached to seagrass are actually the eggs of a cuttlefish. These relatives of squid and octopuses come into the shallows in the spring to lay, then die.



## SLAKELOCKS ANEMONE

One of a whole host of species that holds fast to seagrass stems, this anemone has a nasty shock on the tips of its waving tentacles – a sting that paralyses its prey.



## WIGEON

When the tide goes out, ducks, geese and swans graze on exposed seagrass leaves. It's an especially important source of food in winter for wigeon and brent geese.

The sheltered conditions of a seagrass meadow are perfect nursery grounds for young flatfish and other commercially important species



In the lab, the seeds are separated from the blades. Later, they will be mixed with sand and placed in a hessian bag to be sown on the seabed

memory. Old maps of the coastline show how much has changed – a port here, a sea wall there, reclamation over there. And the Industrial Revolution created an environmental footprint that fundamentally changed so much. Our ports were exporting copper, zinc and other heavy metals, and areas like south Wales had some of the world's biggest coalmines, generating an enormous amount of traffic and pollution. "We've seen the cumulative impact of industrial development, poor water quality, and changes in farming practices, such as the run-off of agricultural chemicals. There are

places such as the Orwell and Stour estuaries in Suffolk where there were hundreds of hectares of seagrass in the 1970s – there are only a couple of square metres there now." Coastal development, and boats with propellers and mooring chains raking the seabed, are major concerns but pollution in its various forms remains the biggest threat to seagrass. Overwhelming quantities of toxic chemicals stunt its growth; cloudy, nutrient-rich water blocks the light and allows less sensitive algae to bloom in its place. Yet there is still potential for recovery. In south Wales, where industrial pollution

completely wiped out seagrass from many coastal bays and inlets generations ago, the coal industry is no more. Seagrass would probably never spread from other distant areas naturally, but we believe it's possible to replant it in today's cleaner waters using seeds from parts of Britain where meadows are thriving. A similar approach has been used in North America's Chesapeake Bay to restore hundreds of hectares of meadows.

## SEAGRASS PILOT STUDY SUCCESS

Last year, we started working with Richard and his team on the first exploratory steps in the UK. "We did small-scale trials with different methods in one Pembrokeshire bay and they were all very successful," he explains. "That told us the nutrient levels and other environmental conditions were suitable to support seagrass there." We decided to create a two-hectare meadow (about the size of two football pitches) from scratch. Nothing at this scale has ever before been attempted in UK waters. And comparisons with Chesapeake Bay can only go so far, as Richard explains: "In the US, they were able to cast their seed upon the water from a boat. That couldn't happen in Britain. For one thing, we have a

# "IN FIVE YEARS OR SO, OUR SEAGRASS MEADOW WILL BECOME A HAVEN FOR A STAGGERING AMOUNT OF WILDLIFE"

big population of green shore crabs that will feast on anything and everything they come across. Chucking a load of seeds out would be like feeding the crabs. In UK waters we also have very strong tidal currents. Those seeds could be out in the middle of the Irish Sea within a few minutes." Instead, our ingenious scientists are practising a rope trick with growbags. Over the seabed, they will lay out little hessian sacks filled with sand and seeds, tied to ropes at metre intervals. Anchored to the bottom and sealed against predators, the seeds will germinate and shoot through the hessian. It could take five years or more for this modest meadow to mature and become a haven for a staggering amount of wildlife – an estimated 160,000 fish and 200 million invertebrates in this patch alone. Small beginnings, big results. And the team already has its eyes on other target areas around our coasts. Patience and cooperation are essential to expanding the project, as Ricardo Zanre, our marine programme manager, emphasises: "We're doing it in a way that works with local stakeholders – everyone from schools to boaters and

fishermen. If we're going to restore seagrass around the country, then it's essential that everyone understands the benefits and local people have the opportunity to be involved." As Ricardo says: "It's providing a nature-based solution to some of the toughest problems we're facing – the climate emergency and the biodiversity crisis in our oceans. It's critical for a whole range of reasons and it really can help with some of the big issues." From tiny seeds great meadows may grow, and with them our hopes of a greener, cleaner future.

See the stunning wildlife of seagrass meadows and watch the Seagrass Ocean Rescue team at work at: [wwf.org.uk/seagrass](http://wwf.org.uk/seagrass) Find out more: [skyoceanrescue.com](http://skyoceanrescue.com)



The charismatic sea hare looks like a sea slug, but has an internal shell. It favours shallow water and feeds on seaweed, which is thought to give each individual its colour

# LIFE IN THE EXTREME

"Places I travelled to for the first time in the early 1990s are now unrecognisable," says Steve, who has travelled pole to pole and seen a surprising amount of polar species



BAFTA-winning British naturalist **Steve Backshall** talks about his experience of climate change, taking action and why he has hope for the future

**What do you love most about nature and why is it everyone's responsibility to protect it?**

I have been besotted with nature my whole life. It's been my joy, my entertainment, even my salvation. Nature should be at the core of everything we do: what could be more important than the land we live on, the air we breathe and the water we drink?

**You have travelled the globe. What human impacts on nature have you seen?**

Almost every place I've visited has been compromised by humans. Even the most remote seas suffer from vast amounts of marine plastic, and forests far from civilisation are polluted by our toxins and under threat from chainsaws and plantations. That said, there are still huge areas of perfect habitat that are worth saving.

**You journeyed pole to pole for a TV series. What makes the polar regions so special?**

There is nowhere else on Earth where we as humans feel so tiny, so irrelevant, so utterly at the mercy of the environment. The conditions can change from blue skies and searing sunshine to brutal winds and driving snow in the blink of an eye. And though we think of them as barren places, a surprising amount of polar-adapted life depends on these wild lands.

**Why are the poles and glaciers so essential for the future of our planet?**

The albedo effect of the poles, as giant white mirrors that reflect the sun's radiation back into space [which helps reduce global warming], is impossible to overstate. Also the fact that the majority of the world's fresh water is found there, bound up in ice. Small changes to these polar regions can have cataclysmic effects for the planet as a whole.

**What signs of climate change have you personally witnessed at the poles?**

I've seen glaciers disappear completely. I've watched sea ice formation and collapse totally change in the

course of a few decades. And I've observed polar bears being forced off diminishing sea ice on to land, where they increasingly come into contact with humans.

**Describe your most thrilling wild encounter**

Diving beneath a jade green Antarctic iceberg with a female leopard seal flashing her teeth into my camera is impossible to beat.

**What changes have you made in your life?**

My personal plan is to do the best I can in all areas of my life, including only flying when essential for the job. My TV programmes offset all their emissions, I offset all my flights like crazy through forest-purchase plans I really believe work, and I've raised over half a million pounds to buy rainforests. It's not enough, but I'm always battling to do better.

**Why did you support the Global Strike for Climate? And what do you think it achieved?**

I've been given great heart, not just by this strike, but all the great efforts of the past year. Even more so by the ones driven by young people. For too long, young people have been portrayed by the media as feckless, lazy, selfish millennials. Suddenly the sleeping tiger has awoken. The press may ridicule and patronise the young activists at the heart of this great movement – but that just means it's working.

**How optimistic are you about the future?**

I believe this period in history will be looked back on and compared with the great civil rights movements of the past. People have taken to the streets for so many reasons to make our societies more fair and equal. Now they're doing it for our planet home. My sincere hope is that the conclusion will be swift, and our fate salvageable.

You can read more about how climate change will affect our oceans and the polar regions in a recent report from the Intergovernmental Panel on Climate Change, on page 9.

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# FIGHT FOR YOUR WORLD



2020 will be a turning point for our planet. As global leaders make critical decisions, we're pushing for strong commitments to protect our world. But we can't do it alone. Be part of the change **#FightForYourWorld**



## 1 GIVE FOR YOUR WORLD

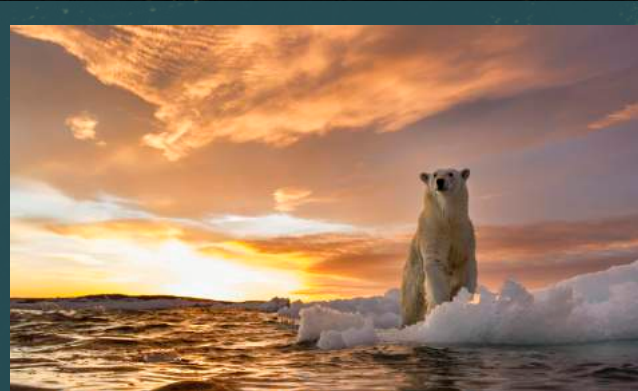
Our successes are only possible thanks to the generosity of members like you

### LEAVE A LEGACY TO WWF

We couldn't do what we do without the support of people who leave us a legacy. Gifts in wills make up about a fifth of all our donated income, and have helped us achieve some incredible wins for people and nature. WWF is a member of the National Free Wills Network, a scheme whereby charity supporters can have a simple will written free of charge by a local solicitor. It's so much easier than you might have thought. After becoming a father, Lang Banks, director of WWF Scotland, decided to give it a try.

"The service provided by the Free Wills Network made writing a will very straightforward," he explains. "The pack provided details of participating solicitors in my area, I arranged an appointment and it only took an hour of my time. The advice was free, the paperwork was handled by the solicitor, and we then got to approve a draft. It was all sorted very quickly. I just wish I'd done it sooner!"

Though gifts in wills are a vital source of funding for our conservation work, there is no obligation to remember WWF or any charity. But Lang wanted to leave a legacy to recognise the amazing work WWF does. "Every penny is important and WWF makes the best possible use of that money," he explains.



**"THERE'S NEVER BEEN A MORE IMPORTANT TIME TO BACK WWF IN YOUR WILL"**

Lang Banks, director of WWF Scotland, with his son

"We can all see the climate and nature crises unfolding in front of our eyes. So there's never been a more important time to back organisations such as WWF who can influence the ambitious actions needed to solve the problems. Having the support of tens of thousands of people behind the charity gives me hope." So what advice does Lang have? "Make a will today. Don't wait. You can trust WWF to use your legacy in the best way at the best time."

**To discuss leaving a gift to WWF in your will, please contact Maria Dyson, legacy supporter manager at [maria@wwf.org.uk](mailto:maria@wwf.org.uk)**



## 2 BUILD A MOVEMENT

Help us build a movement of people by getting your friends and family involved in these planet-inspired events

### EARTH HOUR 2020 - 8.30-9.30PM, SATURDAY 28 MARCH

Earth Hour is the moment millions come together for nature, people and the planet. Iconic landmarks, homes, businesses and political leaders across the world switch off their lights for an hour in a symbolic show of solidarity with the planet.

Last year, millions of people around the world and landmarks from Sydney Opera House to Edinburgh Castle took part to send a clear message: we're fighting for our world.

By coming together for Earth Hour, we've already helped to influence climate policy in Russia, ban plastic in the Galapagos Islands and inspire the world's first Earth Hour protected forest in Uganda. This year, we're uniting to send a clear message to our world leaders: we need nature... now. Our future depends on it.

**To get involved, visit: [wwf.org.uk/earthhour](http://wwf.org.uk/earthhour)**

### WEAR IT WILD - FRIDAY 5 JUNE

In workplaces, schools and homes across the country, people will be donning wildlife-inspired clothing on Friday 5 June for Wear it Wild – raising money to help protect our incredible world. Sign up with your friends and show us your wild side. Brave it. Rock it. Nail it. Boss it. Strut it. We want to see you really work it. Because if we're going to save our world, we need to be fiercer, braver and louder than we've ever been. So, from the playground to the office, no matter how you Wear it Wild, get fierce for your world. **To register for your free Wear it Wild fundraising pack, visit: [wwf.org.uk/wearitwild](http://wwf.org.uk/wearitwild)**



## 4 BE THE CHANGE

Make a pledge to reduce your own impact

### CONSIDER WHAT YOU EAT

The main cause of global deforestation is agriculture. And the food we buy in the UK is part of the system driving this devastation. So how can we reduce the environmental impact of the food we buy?

A simple action we can all take is to be more aware of what's on the packaging of the food



we buy. Look for labels such as MSC and ASC (seafood), and RSPO (palm oil).

However, while looking at labels is a great start, it's far from a perfect system. There's currently no way for consumers to know whether certain foods might be causing deforestation. We don't think it's right that anyone has the option to buy food that's



## 3 DEMAND ACTION

Bring your passion into work

### OUR PLANET: OUR BUSINESS

To help you get your workplace involved in tackling the world's environmental crisis, we've produced a 40-minute online film inspired by the *Our Planet* series on Netflix. It will help you start conversations with staff and stakeholders about the urgency of one of the most important challenges of our time – and the risks and opportunities it presents to businesses.

The film blends clips from the original series with expert opinion from business leaders, scientists and economists. It explores the immense value of nature to our economy, the scale of the challenges we're facing and the critical role businesses can play in creating large-scale solutions.

The film urges businesses to act to preserve what we have left, and to help governments enact policies that protect the planet for future generations. **Contact [ourplanet@wwf.org.uk](mailto:ourplanet@wwf.org.uk) to organise a screening at your workplace and watch it here: [ourplanet.com/business](http://ourplanet.com/business)**

**WIN!**  
TICKETS TO OUR  
EXCLUSIVE FILM  
PREMIERE



© CONOR McDONNELL

## SEE SIR DAVID'S PREMIERE

Win a pair of tickets to the exclusive premiere of our amazing new film featuring Sir David Attenborough

We're thrilled to be able to invite one lucky *Action* reader to the world premiere of the remarkable new film: *David Attenborough – A Life on Our Planet*. The premiere event will take place at the Royal Albert Hall on 16 April (and be screened live in cinemas), featuring a live discussion with Sir David and very special guests. Produced by WWF and Silverback Films, this film is Attenborough's witness statement for the natural world and offers a powerful message of hope for future generations. It will be released on Netflix in spring 2020. To win a pair of tickets for an evening you'll never forget, follow the instructions (below) and mark your entry 'Attenborough Competition'.



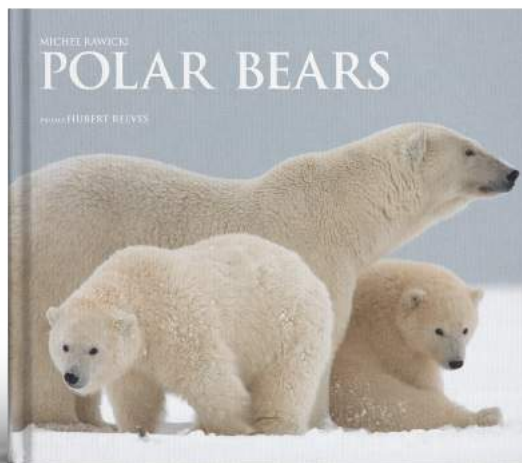
## LYDIA FRENCH COLLECTION

We're giving two lucky members the chance to win an item of their choice from our new 'I'm a keeper' range. This collection of homeware, clothing and gifts is all thanks to an exciting collaboration with Surrey-based graphic artist Lydia French, founder of @thebrightertimes.

The beautiful 'I'm a keeper' range includes cushions, posters and mugs as well as organic tote bags and T-shirts. Each item comes in six designs depicting iconic wildlife from elephants to jaguars and puffins. To be in with a chance of winning, follow the instructions (right) and mark your entry 'Lydia French Competition'.

## A PASSION FOR THE GREAT ICE BEAR

We've got three copies of *Polar Bears: A Life Under Threat* to give away



A symbol of strength and survival against the odds, today the polar bear is also an icon of the climate crisis. Now *Polar Bears: A Life Under Threat* reveals the animal behind the myths. The culmination of 25 years spent visiting the poles, Michel Rawicki transports us to the ever-changing landscape of the Arctic, following bears through the year, from playful cubs to majestic males. As well as hunting seals on the sea ice, polar bears are increasingly foraging in settlements, putting their relationship with local people under strain. Accompanying the images are evocative essays and poems exploring the challenges polar bears face now – and in the future. For your chance to win, follow the instructions (right) and mark your entry 'Polar Bear Competition'.

## HOW TO ENTER ACTION GIVEAWAYS

Send an email with your name, address and phone number, along with Attenborough, Lydia French or Polar Bear Competition in the subject line, to [competition@wwf.org.uk](mailto:competition@wwf.org.uk)

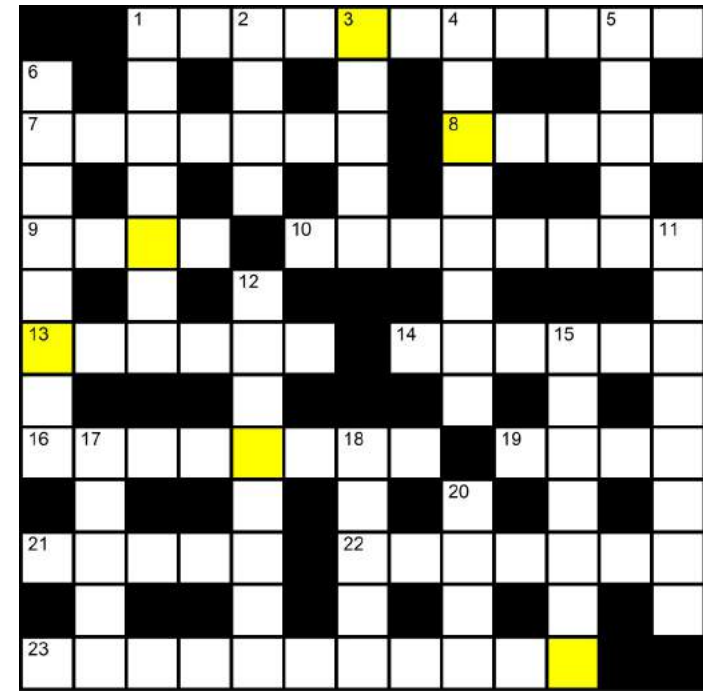
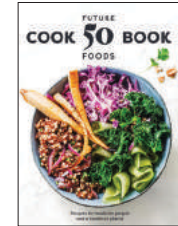
Alternatively, post your entry to **Action Magazine, WWF-UK, Living Planet Centre, Rufford House, Brewery Road, Woking, Surrey GU21 4LL.**

Only one competition per entry please. Closing date: Friday 27 March. For full terms and conditions, visit:

[www.wwf.org.uk/compterm](http://www.wwf.org.uk/compterm)s

## CROSSWORD

Solve our crossword and you could win a copy of the *Future 50 Foods Cookbook*, written by Knorr and WWF, featuring healthy recipes for people and the planet



WWF Action crossword 44: Spring 2020 issue. Compiled by Aleric Linden

After solving the crossword, take each letter from the shaded squares (going from left to right and top to bottom) to spell out the prize word. To be in with a chance to win, just send a postcard with the prize word to the address on page 30, or email it to [competition@wwf.org.uk](mailto:competition@wwf.org.uk). The closing date is Friday 27 March

### Clues across

- 1 Cultivating part of the food industry – a major cause of deforestation (11)
- 7 The (often illegal) gathering of timber – a big contributor to forest degradation (7)
- 8 \_ layer, alarmingly depleted by man-made chemicals (5)
- 9 Snowdonia in Wales is a national one (4)
- 10 Moved forward like non-retreating glaciers (8)
- 13 The world's largest tropical forest (6)
- 14 Sponsors an animal (6)
- 16 Unwooded, like the tundra (8)
- 19 Groups of dolphins or whales (4)
- 21 Large European herd creature also known as the wisent (5)
- 22 Heatwaves are an example of such weather (7)
- 23 Devastating occurrences causing large areas of trees to go up in smoke (6,5)
- 3 Behind bars, like many animals kept in captivity (5)
- 4 Amur \_ , critically endangered creatures (8)
- 5 A series of mountains (5)
- 6 African or Asian victim of the ivory trade (8)
- 11 Natural \_ , an earthquake, for example (8)
- 12 Generally flat regions, not on a high (8)
- 15 These wading birds can be golden or ringed (7)
- 17 The Sumatran and Javan are critically endangered species of which huge animal? (5)
- 18 Continental \_ , shallow-water habitat of marine turtles (5)
- 20 Four \_ , former type of leaded petrol (4)

### Autumn 2019 answers

**Prize word:** OTTERS  
**Across** 5. Nitrous oxide 8. Harpoon 9. White 11. Roar 12. Tails 15. Clean 16. Mane 19. Cobra 20. Biofuel 21. Snow leopards  
**Down** 1. Onshore 2. Motor 3. Lights 4. Delta 6. Threat 7. Sun 10. Lion 12. Tree 13. Jaguar 14. Red List 15. Carbon 17. Coast 18. Soups 20. Bee



Basking shark ahoy! The team spots the two dorsal fins of a passing shark and gets ready to tag it

## THE SECRET LIVES OF SHARKS



"The shark is under our boat!" These are not words from a film, and they may not be words you wish to hear on your average voyage. But this was not a normal day out on the ocean. The shark in question was a basking shark, the biggest fish in our waters, and I was here – near the islands of Coll and Tiree in the Inner Hebrides – on a mission to uncover its secrets.

The Inner Hebrides is one of only a few places where, every summer, large numbers of basking sharks gather to feed on plankton near the surface. Experts believe the sharks may even breed here, which makes it one of the most important places in the world for the species. So it's vital we learn more about these sharks. Last summer, I was part of a WWF team working in partnership with Sky Ocean Rescue, Woods Hole Oceanographic Institution, Scottish Natural Heritage and the University of Exeter to find and tag basking sharks. To do this, we were deploying groundbreaking new technology – an underwater robot camera called SharkCam.

### HIGH SEA ADVENTURE

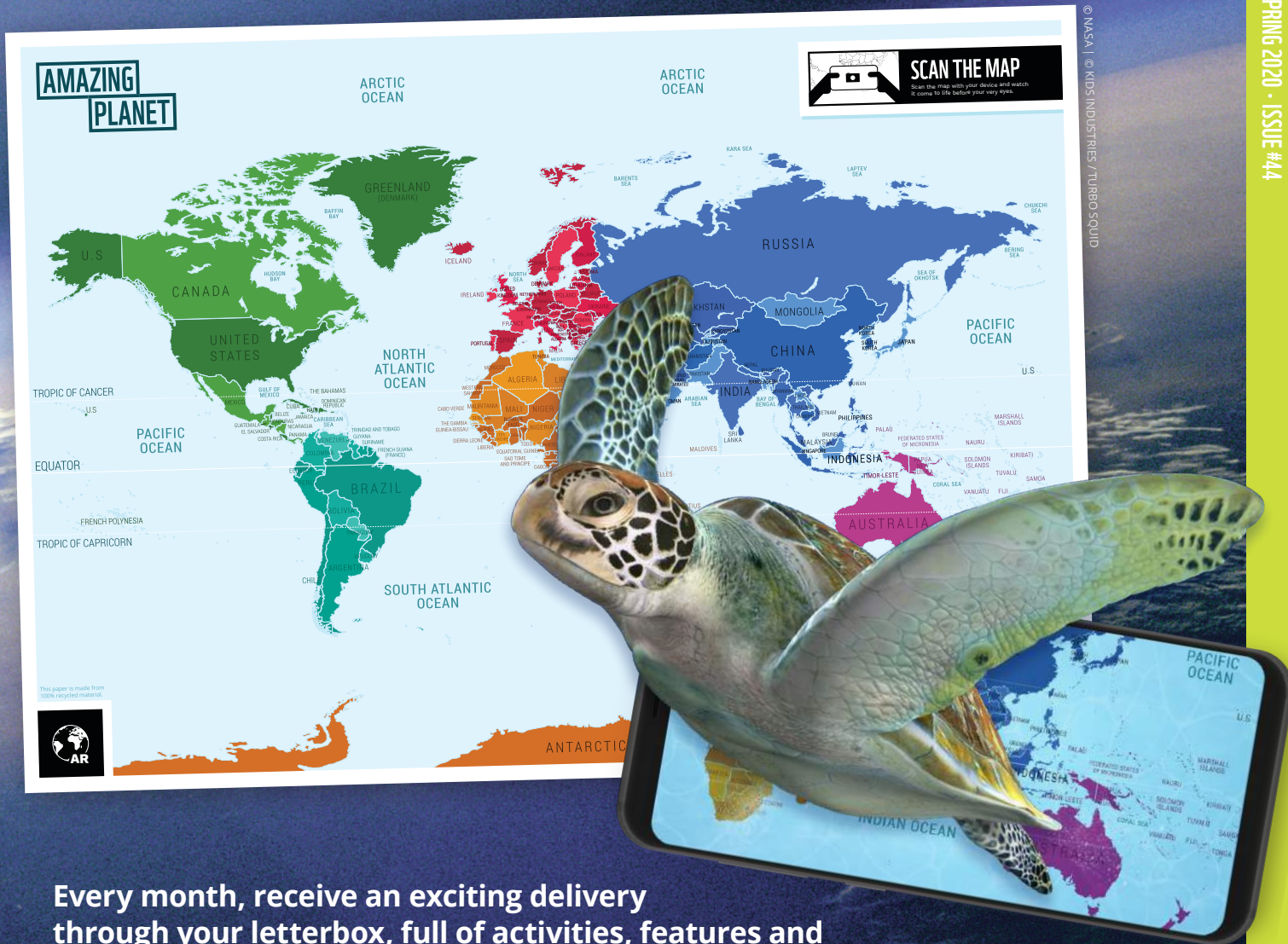
Our expedition started early. Two boats left Tobermory Harbour at 4am, destined for a basking shark hotspot. After hours of travelling and searching, a broad dorsal fin scythed through the choppy water, followed closely by the smaller hump of a tail fin. The team on the tagging boat moved in to fix a tag securely to the shark. It would act like a beacon, enabling SharkCam to follow the fish and film its behaviour. Placing a tag on a moving target is tricky, and the team were only allowed three attempts to avoid causing stress to the shark. Eventually we heard them cheer! Now the boat I was on sprung into action. We winched the robot into the water and it sped off after the shark. The chase was on! With SharkCam relaying real-time information back to the boat, we could follow where the shark went and how deep it swam. The running commentary was thrilling: "The shark is under our boat!" We tracked the basking shark for several hours, gaining a privileged insight into its life. As darkness fell, the air grew cold. It was time to return to the harbour. We'd been on the boat for 21 hours but we were in good spirits as we huddled in the cabin. Long-term, we hope this project will prove how critical these waters are and help us safeguard the basking sharks and their secret sea.

**Tessa**  
Tessa Francis, WWF's content team

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