

Wildlife World

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people's
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UK

Make a log pile!

Hedgehog Street

Dartmoor's dormice

DNA science helping rare mammals

Stars in stripes

Bringing Grevy's zebra back from the brink of extinction

Overseas

Persian leopards

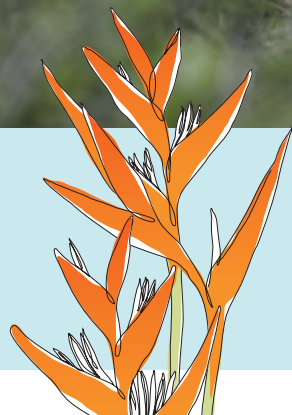
Madagascar's lemurs

Tamarins of Colombia

The cichlid fish of Lake Victoria

Bat houses

How your generous donations are helping us to create new roost holes for rare Bechstein's bats and barbastelles.



Focus on Briddlesford

A special report on our reserve in the Isle of Wight and why it provides a home to four of the UK's rarest mammals.

Green renaissance?

PTES has received funding to expand its hedge conservation work as part of the post-covid recovery plan.



Bringing the wild back to life

Wildlife World is published by People's Trust for Endangered Species

Our wildlife is disappearing. Almost two thirds of species in the UK have declined in the past 50 years. There's nothing natural or inevitable about this. It can be stopped. And everyone can play a part. That's why People's Trust for Endangered Species exists.

 [Find out more
www.ptes.org](http://www.ptes.org)

EL RINCON STREAM FROG

Meet the frog that bathes in thermally-heated waters. El Rincon stream frogs are only found in a 2km² area of Argentinian Patagonia, where temperatures plunge to -15°C. But thanks to thermal activity, the river never drops below 19°C, making it habitable for the frogs all year round. Predatory, invasive rainbow trout and livestock which damage the river banks are threatening their survival, however, so PTES is funding an initiative to exclude both the fish and the cattle from the river and surrounding land.





Welcome

How on earth would we have coped over the last year without the natural world to cheer us up? And aren't signs of spring a joy?

To celebrate nature on our doorstep this year, our *Living with Mammals* survey has a lovely fresh website (ptes.org/LwM) making recording your sightings even easier. Do please take part if you can, it's so important. Find out more in Conservation News (p7).

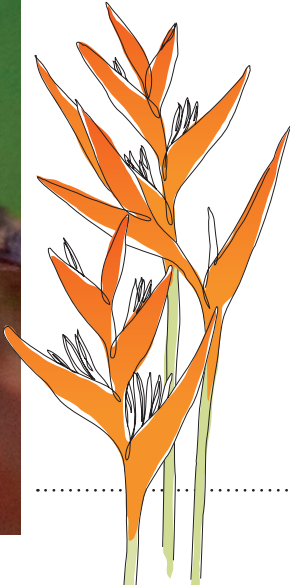
And we're about to launch another garden-focused campaign to encourage everyone to make a log pile and tell us about it. We've lost so much dead wood, which provides shelter and food for many species by being too tidy. It's vital we restore it where we can.

Meanwhile Ali Hussein, our partner in Kenya, is busy ensuring the zebras, giraffes and hirolas in his backyard have shelter and food too. Despite danger from nearby trouble spots, Ali is doing an amazing job putting these elegant, grassland grazers on the conservation map. It's really gratifying that we're still able to do so much around the world, despite the challenges the pandemic has brought. A real testament to the commitment of the conservationists we work with and the supporters like you who make it all possible.

Thank you. We couldn't do it without you.



Jill Nelson is the Chief Executive of People's Trust for Endangered Species.





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By making films about wildlife conservation for his YouTube channel, **Alex Collins** is determined to raise awareness about the threats facing our rare species.

My passion for nature has always been with me. I spent much of my childhood outdoors – building dens, damming streams and scrambling around badger setts. Moving on to studying life sciences at school and university, I began to realise what an important role this had played in the views I hold and that I wanted to play an active role in fighting for the recovery of the natural world.

But it was the national lockdown that made me think about making films through which I could communicate my love of wildlife and raise awareness about the importance of conservation. I decided to focus on why we should save rare species, because our failure to protect them is representative of our mindset towards wildlife in general.

Even though I know that my first efforts left a lot to be desired, I was pleasantly surprised to find the videos had been well-received, with lots of supportive comments from those who watched them. It made me want to improve as much as I could.

Six months later, my determination is still there. Alongside my degree studies, I have continued to create regular video content, not just for my YouTube channel, but also for organisations such as Cheshire and Gloucestershire Wildlife Trusts, NatureWatch Foundation and One Voice for Animals UK.

The work that PTES does to protect species such as the beautiful water vole, which I cover in my 'Britain's Rarest' series, is vital. I hope I can play a role in communicating the importance of its and other organisations' work in protecting our wildlife. ●



It was the national lockdown that made me think about making films through which I could communicate my love of wildlife.



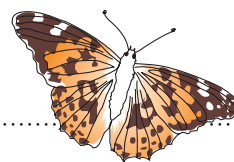
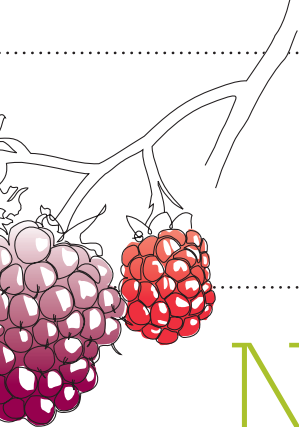
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 **Watch Alex's videos**
<https://www.youtube.com/c/AlexCollinsWaC>



No time to hedge our bets on a green recovery

PTES is one of many green groups to receive funding for post-pandemic conservation efforts. Good news, but it will take more than that to restore our wildlife, says **James Fair**.

Stories in the press during the first lockdown last year suggested that the restrictions placed on people had been a boon for wildlife in both Britain and abroad. Wild goats, that normally roam the Great Orme in North Wales, invaded the deserted streets of nearby Llandudno, with videos showing them giddy with excitement in their new environment, like school children let loose at Legoland.

The National Trust reported, among other comebacks, that peregrine falcons had nested in the ruins of Corfe Castle, an attraction normally buzzing with tourists. Further afield in South America, pumas found wandering the streets of Santiago in Chile had to be caught and relocated. The natural world, it seemed, was bouncing back.

But the truth is rather more complex and sombre. It isn't just that temporarily empty city streets or tourist attractions can only offer limited respite for wildlife threatened by increasing incursions into, and fragmentation of, their habitat. In reality, anything that detracts from the focus on wildlife conservation, and removes observers of habitats and wild places, is likely to be negative in the long run.

Forest authorities in India, Nepal and Pakistan, for example, reported increased poaching of rare species ranging from demoiselle cranes to one-horned rhinos at the start of the coronavirus pandemic. The absence of boots on the ground in the shape of rangers and wardens was allowing criminal activity to go undetected.

Other developing countries found deforestation rates increasing as people lost jobs and left cities to return to their home villages, putting natural resources in these areas under greater pressure. In the UK, PTES and some wildlife trusts found an increase in fly-tipping and vandalism in their reserves.

So, it's great news that the Government is talking about the need for a 'green recovery' as we gradually emerge from the unprecedented chaos created by the covid pandemic. At the end of 2020, it announced the first tranche of projects that would receive a share of £40 million from a challenge fund. Even better, PTES was one of a coalition of groups that was successful with its bid for money for a hedge conservation project called 'Close the Gap'*.

Together with the Tree Council, Hedgeline, the Farming & Wildlife Advisory Group and others, we'll be working to increase the extent and improve the health of the UK's hundreds of thousands of kilometres of hedgerows. PTES was already committed to hedge conservation through our *Great British Hedgerow Survey* and –

thanks to this extra funding – we'll now be extending our reach to more farmers and other landowners.

Most farmers want to see wildlife thriving on their land, says PTES Key Habitats Officer **Megan Gimber**, and just need better information on how they can make that happen. Hedges offer all sorts of benefits for livestock and crops. 'Dairy cows require shade, and good hedges provide that in abundance on a hot day', she says. 'Heat stress reduces milk yields and fertility.'

That's not all. Hedges store carbon, reduce flood damage and act as a source of pollinators for farm crops, as well as being biosecurity barriers and screens that reduce opportunistic crime – and that's all without pointing

out the importance of hedges as places where a range of species, from bats to dormice, can feed, take cover or use as navigation aids.

'Close the Gap' is an apt metaphor for what we need to do for British wildlife in general. We aspire to have flourishing insects, birds and wildflowers, but they continue to decline in the face of government policies that are frequently in direct opposition to a green renaissance. Let's hope that this time talk of a green recovery can be translated into real action and lasting change. ●



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*Close the Gap is funded by the Green Recovery Challenge Fund, delivered by the National Lottery Heritage Fund, Natural England and the Environment Agency.



James Fair is a journalist specialising in wildlife conservation stories and editor of *Wildlife World Magazine*.



Your donations are essential to keep our monitoring programmes going, to help us promote our new 'dead wood' campaign and for all the brilliant work done by our international partners.

Six steps to hedge heaven

Hedges have been around for thousands of years and our new app for farmers and landowners should help to ensure they'll be around for thousands more.



© Magsan Gombot

A new app that we're launching in the early summer will help farmers and landowners to health-check their hedges. Through asking just six simple questions, *Healthy Hedgerows* will provide instant advice to users about how best to manage their hedge, according to where it is on its lifecycle.

Fortunately, no matter what condition a hedge is currently in, it's always possible to return it to its full glory so that it can provide the full range of ecological, environmental and economic benefits.

Hedgerows have been with us in some form since the Bronze Age and have weathered some pretty turbulent times. But now we are recognising the wealth of benefits they bring us, and there is a growing interest in making sure they have a healthy future. The way they're managed has a huge impact on both their capacity to sustain wildlife and to act as effective wildlife corridors. ●

Hedgehog campaign has the street smell of success

Thanks to more than 90,000 volunteers, our campaign to help hedgehogs in urban areas is proving a great success.



© Alison Tackler



© Steve Carlton

Hedgehog Street, the campaign we run with the British Hedgehog Preservation Society, celebrates its 10th birthday this year. In that time, it has recruited more than 90,000 volunteer 'champions', showing just how well-loved hedgehogs are.

As part of the celebrations, we're asking even more of you to get involved – there are 10 asks, including creating wild corners in your gardens, not using chemicals and linking your garden to others through hedgehog highways. More information is on our website.

We're also delighted that the major UK house-builder Taylor Wimpey has committed to creating hedgehog highways on all new developments, thereby ensuring hedgehogs can move around gardens freely and easily. *Hedgehog Street's* Grace Johnson welcomed the move. 'We hope that this will encourage other housing developers to follow Taylor Wimpey's lead,' she said. ●

▶ [Take our Hedgehog Street garden challenge](http://www.hedgehogstreet.org/garden-challenge)
www.hedgehogstreet.org/garden-challenge

Calling all vole-unteers

Longer days, April showers, the Easter bunny: all signs of spring, and for all you fantastic vole-unteers out there, we can add the start of the water vole survey season to this list



© Mark Bridger / Shutterstock.com

Now in its 7th year, the National Water Vole Monitoring Programme (NWVMP) collects valuable data about the distribution of the iconic Ratty from *The Wind in the Willows*.

Sadly, due to loss of suitable habitat and the introduction of American mink, water voles have undergone a staggering decline in recent years. To try to stop the decline, we need to find out where they are and how populations are faring across the country, which is where you come in.

Between 15th April and 15th June each year, we ask volunteers across England, Scotland and Wales to go out to look for signs and sightings of water voles. You don't need to have any previous experience, because we will provide you with all the information and training materials you need. ●

▶ [Find out more](http://www.ptes.org/watervoies)
www.ptes.org/watervoies



Roe, a deer, a female deer . . .

Once again, we're asking you to survey everything from wood mice to roe deer, either in your garden or a local green space.



© Marwan/Shutterstock.com

As we stayed at home or went out on daily walks last year, green spaces such as gardens, allotments, playing fields and churchyards took on extra significance. The smells, colours and noises of nature took us away from the worries of the covid pandemic.

Perhaps as a result, our *Living with Mammals* survey, which collects sightings and signs of wild mammals around our homes and places of work, had more people than ever take part in 2020. More than 1,500 of you participated, helping us to build a clearer picture of how their numbers are changing across the country.

The survey launched again at the end of March. We've created a new website so you can record common species such as grey squirrels and wood mice, as well as those, like hedgehogs and water voles, that are at risk. Please do take part if you can – every record counts. ●

▶ Find out more and record your sightings
www.ptes.org/lwm.

Make a mess of your garden!

Don't tidy away that dead wood – use it to make log piles that can provide a home to all manner of insects and other invertebrates.



© Chris Smith

Building on the success of our 2020 Stag Weekend, PTES is now asking the public to create and map log piles. Dead wood provides food, shelter and nesting sites for insects, mammals and amphibians. Stag beetles couldn't survive without rotting wood that is underground or in contact with the soil. Females lay their eggs in the soil next to decaying wood, and larvae feed on it for several years.

Though it's tempting to get rid of tree stumps and fallen branches, we're asking people to retain or create dead wood habitats and tell us about them. You can map your stump or log pile from the beginning of June. Even if you haven't got stag beetles in your area, a huge range of other species will appreciate your efforts! ●

▶ Log your log pile
www.ptes.org/stagbeetle.

Fungus completely new to science found in PTES reserve

Renowned for its dormice and red squirrels, Briddlesford on the Isle of Wight has now found fame as home to an entirely new species of microscopic fungus.



© Jan Cox

A University of Oxford student has discovered a species of fungus entirely new to science in our Briddlesford Reserve on the Isle of Wight. George Greiff, who specialises in mosses, liverworts, lichens and the fungi that live on them, made the find in 2019 and it was announced in the *Kew Bulletin* at the end of last year.

The new species is tiny, only lives inside a moss called Kneiff's feather-moss and is said to be particularly hard to find and identify. Greiff gave it the scientific name *Bryostroma popei*, in honour of the former county ecologist of the Isle of Wight, Dr Colin Pope. Visitors are welcome at Briddlesford (see p18), but the new fungus is microscopic, so don't be disappointed if you don't run across it. ●

Reducing carnivore conflict with Africa's very own Paw Patrol

Our partner in Botswana is helping farmers protect their livestock by providing them with specially trained guard dogs, thereby reducing conflict with predators.



© CCB

Great news from our partner in Botswana. Rebecca Klein, of Cheetah Conservation Botswana (CCB), says they are stepping up the numbers of guard dogs being trained to protect livestock.

The idea behind the programme is that robust Anatolian sheep dogs deter attacks by cheetahs and other predators on cattle, goats and sheep. This reduces the threat of retaliation killing by farmers – a key cause of big cat declines in much of Africa is conflict with herders.

Until now, the CCB team has trained the puppies at their own farm. Now they have three farmers in the community who can also do it – not only does this increase the supply of guard dogs, it also shows other farmers this isn't just the responsibility of conservationists. This sort of peer-to-peer learning is very effective in helping to change behaviour. ●





Putting rare bats in the spotlight

All bats in the UK are highly protected, but while those such as the common and soprano pipistrelles are relatively common and widespread, others are very rare. Two especially scarce species are Bechstein's bats and barbastelles, both of which are heavily reliant on trees for roosting sites. This means they're harder to monitor than those that happily use buildings or other artificial habitats and, as a result, we know comparatively less about these species. If conservation efforts are to be successful, first we need to understand our bats better.

© Adam P. Photo Agency/Shutterstock



To the bat tree!

Our partner Jim Mullholland is trialling camera traps to monitor woodland bats and seeing if he can help rare species by creating artificial roost holes.

The ecology of tree roosting bats is complex and little understood, partially due to the difficulties in accessing bat roosts in trees. Furthermore, these bats move home frequently – tree-dwelling bats have between 30 to 50 holes they can roost in on any night and they constantly move from one to another. One researcher has calculated that, in the summer, it's necessary to visit any one tree on 63 consecutive nights in order to be absolutely certain whether bats are using it or not.

Bats on film

That's why PTES, along with the Arboricultural Association and the chainsaw manufacturer STIHL, is funding arboriculturist and bat researcher **Jim Mullholland** to assess whether using camera traps to monitor roost holes is more efficient than standing beneath a tree trying to spot bats flying in or out. Jim says he has shown that it works, but he still has to refine the process. In an ideal situation, he says, the camera trap can tell you three things – whether bats are present or not, how many are using the roost, and allow you to identify which species.

Hole creation

Jim is also looking at whether it's possible to create holes in living trees that will become new spots for bats to roost in – he's hoping this will benefit rarer bats such as Bechstein's and barbastelles that are almost solely reliant on trees for roosting sites. The trees that have the right holes for bats are often old or damaged in some way and therefore considered unsightly or even dangerous. They are more likely to be taken down and, as a result, Britain is slowly losing trees with suitable roost spots.

Bechstein hotel?

Though creating artificial roost holes has been tried on an ad hoc basis before, it's never been properly monitored. Jim will use his camera traps to see whether newly created holes entice any lodgers in. 'We are looking to do this on 30 trees,' he says. 'And then we'll see if they are used. It would be great if we could show these features are used by the species we want, but I suspect we will end up with others in there – Bechstein's often share roosts with noctules and Natterer's bats as a kind of timeshare, for example.' We look forward to hearing about the results of your work, Jim! ●



LEFT: Jim Mullholland with one of the camera traps rigged to take photos of bats coming out of a roost hole.

MAIN PICTURE: A Bechstein's bat, one of Britain's rarest species.

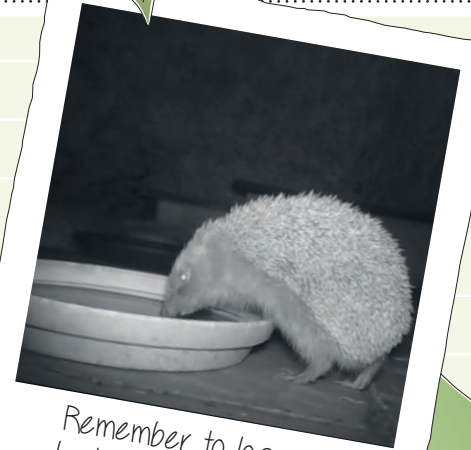
Scrapbook

We love hearing from PTES people, whether you're a supporter or project leader.

Pictures, reports, emails, web posts and letters give a great sense of your passion for wildlife, so please keep them coming!

Wildlife-garden upgrades

We recently asked you to tell us what you've been doing to support wildlife during lockdown, and it's been so lovely to see all the wonderful changes you've made to your gardens and local green spaces. Look at this cosy hedgehog house built by Wendy, wildlife pond put in by Mike and five-star insect hotel made by Julie. Adding such features to your garden makes a huge difference for wildlife, offering them space to feed, mate and nest. Tell us what's in your garden and submit your photos at ptes.org/mygarden. We'd love to see what you've done!



Remember to log your hedgehog sightings on www.BIGhedgehogmap.org



Dear PTES,

I wanted to share the good news that I have just registered my very own Non Government Organisation in India I have called it Asian Elephant Conservation Foundation and I have received my registration certificate.

I'll now be able to work more effectively to protect both elephants and people from harm.

Best regards

Samya Basu



Joey's game to help hedgehogs

One of our most creative Hedgehog Champions, Joey (right) had the great idea of making a new board game, called Hedgehog Highways. The idea is that you are a hedgehog and travel round the board, in and out of gardens, looking for food, water and a mate, before returning home. But beware! In some gardens there might be hazards like slug pellets, netting, strimmers or bonfires. And to make it even more perilous for the poor 'hogs, during the game, some of the hedges between the gardens are cut down and turned into impenetrable fences. Then you must cross a busy road, but if you're a lucky hedgehog you might find a hedgehog highway! Just like in real life, hedgehog highways give you a safe passage through a fence and into other gardens safely, allowing you to carry on with your journey. We think Joey deserves top marks for his hard work on Hedgehog Highways. Find out more more on his website www.helpingtheplanet.co.uk





All whites at Briddlesford

Last year was fantastic for butterflies at our reserve, Briddlesford. The combined effects of warm weather and the ongoing coppice management opening up the woodland created the perfect conditions. A total of 3,206 butterflies of 24 species were recorded during the 20-week survey. The highlights were a marked increase in green-veined whites (*Pieris napi*, above right) and double the numbers of Briddlesford's flagship butterfly, white admirals (*Limenitis camilla*, above left). A huge thanks to Jim Baldwin who carried out the survey for us.

A day in the office with...

Nida Al-Fulaij,
Grants Manager



As grants manager, the main part of my job is overseeing our research and conservation programme. We support researchers and conservationists around the globe and closer to home. My role is to help decide which conservation projects are a priority to support. That can be really difficult because so many species are facing threats – I wish we could support many more. We have to decide where our money will make the most impact and which people have the skills and tenacity to really make a difference in their communities and for their wildlife. You can read about their inspiring work in PTES in Action.

Closer to home, I represent PTES on groups that bring like-minded organisations together to work towards common goals. Working alongside the IUCN, the Conservation Evidence team and the State of Nature partnership offers a chance to share ideas and experiences so we can make conservation initiatives more effective and more efficient.

Seeing our impact on the ground is also really important and satisfying. Visiting projects and meeting the people running them gives me a chance to learn what works and what doesn't. Radio-tracking hedgehogs in rural Norfolk recently was both exciting and important for me to understand how they use rural gardens and buildings to safely forage at night. And it wasn't any less fun for getting a flat tyre driving home at 3am.



Nida helping reintroduce hazel dormice



Samya is helping to protect elephants in West Bengal



Samya's registration certificate

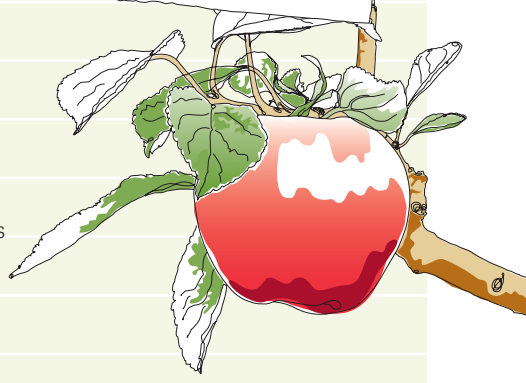
Open for business

Our charity shop in Egham finally reopened in April after a long, enforced closure. Our amazing shop managers made a special effort to liven up the shop window by celebrating the joys of spring. Despite the challenges of social distancing, we hope our loyal customers will be delighted to be able to return and find some new bargains to help our work.



Diggers and dreamers

Volunteers in Wiltshire have been busy planting up Hazeland community orchard in Wiltshire with help of a grant from PTES. Eventually, the orchard will extend over nearly 14 hectares and be home to 10,000 trees! We help people buy new trees on vigorous rootstocks to put into old orchards or even to create entirely new community orchards. For a relatively small investment by PTES, these orchards should provide a valuable habitat for a hundred years or more, provide a community greenspace and be a source of healthy local food.



The **zebras** *the world* **forgot**

The rarest of the three species of zebra, Grevy's is quite distinct in having thinner (and more) stripes, a white belly, and fuzzy ears. They are the largest, too, noticeably taller than either plains or mountain zebras.

PTES is supporting a new project to survey and protect a small population of the very rare Grevy's zebras – a population that, until now, has been ignored by mainstream conservation efforts.



Where did the zebra get its stripes?

There are a number of theories as to why zebras have their bold black-and-white stripes. Three of them – that they protect them against disease-carrying and irritating insects, that they confuse predators, and that they provide the animals with a degree of temperature control under the heat of the African savannah – are discussed below. A fourth idea – that they provide social cohesion for zebras – has not been widely researched and appears to carry little weight.

INSECT DETERRENCE

This theory has gained a lot of ground in recent years. A study published in 2019 found that where zebras and plain horses were in the same space, horse flies were far more likely to land on the horses. The same number of flies were seen approaching the zebras as the horses, but they didn't land on the animal's skin. Scientists speculate that the stripes somehow deter the flies from being able to land, but it's not clear what is causing this.

PREDATOR CONFUSION

It's been suggested the stripes on a group of zebras create an optical illusion that confuses predators. For example, when a herd starts to run, do the stripes on the zebras' bodies make it more difficult for a lion to pick out a single individual? This theory is largely based on a study where human 'predators' were challenged to 'capture' prey moving across a computer screen and which found that high contrast patterns made this activity harder.



THERMOREGULATION

The third theory is that the black part of the coat heats up the animal in the morning, but as the day gets hotter, the white stripes help to cool it down. One report even suggested that the temperature difference between the two causes air movement and increases heat loss through evaporation. Unpublished data suggests zebras in mixed herds have lower surface temperatures than other animals.



With its unique black and white stripes making it one of Africa's – if not the world's – most distinctive mammals, it can often be forgotten that there is more than one species of zebra. There are in fact three.

Anyone who has travelled to Africa and been on safari is most likely to have seen the plains zebra, the most common species, which is found throughout a broad swathe of the continent from South Africa through to Ethiopia and South Sudan in the north of the continent.

The population of mature adults is estimated to be anywhere between 150,000-250,000 and, though numbers have declined in recent years, the plains zebras are not regarded as being threatened with extinction in any way.

The mountain zebra is found in scattered populations in South Africa, with its real stronghold in Namibia and a very few in Angola. While considerably rarer than the plains, it's nevertheless reasonably safe from the threat of extinction. Its population is thought to number about 35,000 mature individuals and is stable.

Grevy's zebras – the largest of the three species – are on a knife edge, however. Mainly found today in central and northern Kenya (with some spillover into southern Ethiopia), they number between 2,000 and 2,500 mature individuals in the wild and are classed as Endangered.

Though fossils found in China, Uzbekistan and South Africa suggest an ancient Grevy's zebra was once widespread across much of

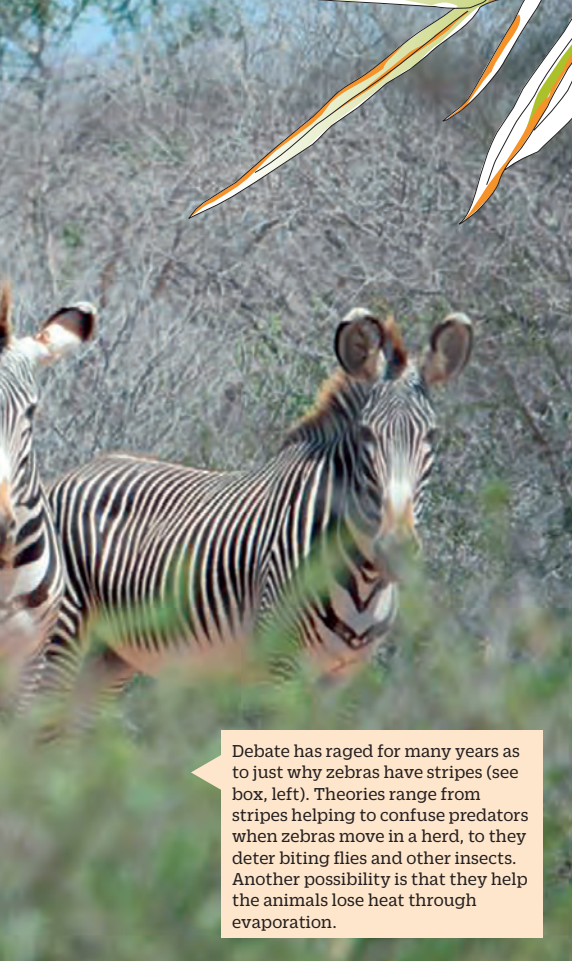
Africa and Asia, in the more recent past they've been confined to Central and North Africa. Their range would once have also included Egypt, Sudan, Eritrea, Djibouti and Somalia, but hunting for meat and their coats was probably the key reason why they've been eliminated in these countries.

Some conservation work is protecting the zebras in central Kenya, but there's a smaller and largely ignored population in the east of the country, close to the border with Somalia. Indeed, this population of Grevy's zebras is so disregarded that the IUCN Red List, the world authority on threatened species, doesn't even acknowledge they exist.

That's why we're funding our longstanding partner, **Dr Ali Hussein**, to kickstart a project looking at the conservation of Grevy's zebras in this remote part of northern Kenya. Ali has been working to protect one of the world's rarest antelopes, the hirola, in this part of the world for many years, and he recently turned his attention to the also rare reticulated giraffe, the species only found in a small corner of the north-eastern countries of Ethiopia, Kenya and Somalia.

And now also to Grevy's zebras. Ali knows there's a small population in the counties of Garissa and Wajir, and the first task for him and his team is to try and establish exactly where, and how many, there are.

'The mapping is still ongoing as our team members are in the field identifying where the zebras still occur and also taking photos,' Ali says. 'So far, we are learning that the population is sparsely distributed, they



Debate has raged for many years as to just why zebras have stripes (see box, left). Theories range from stripes helping to confuse predators when zebras move in a herd, to they deter biting flies and other insects. Another possibility is that they help the animals lose heat through evaporation.

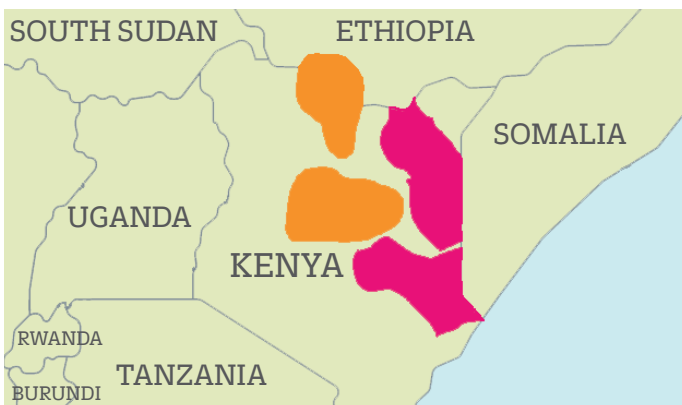
What makes a Grevy's a Grevy?

On its own, a Grevy's might not seem that different from other zebras you are familiar with. But see it side-by-side with a plains zebra (the two species overlap in Kenya), and you can instantly tell just how distinct it is.

- ▶ The first thing that strikes you is those stripes – much thinner, and many more of them, than on their close cousins.
- ▶ Second, you'll notice the Grevy's zebra has a white belly, while the stripes on the plains go all the way round. It has a brown, not black, muzzle.
- ▶ Third, the Grevy's is noticeably taller than the other species and has larger, fuzzy ears.
- ▶ Finally, though you can't see here, it has a black dorsal stripe.

Grevy's zebra

Plains zebra



LEFT: The areas marked orange on the map show the official range of the Grevy's zebra shown by the IUCN Red List. The areas marked pink show the counties of Garissa and Wajir, which Dr Ali Hussein is surveying for their Grevy's populations.

are very shy and it will require a lot of effort to trace them.'

Ali tells us that he relies on the networks of herders developed for his hirola work to help identify those areas the zebras use. 'On a typical day, our scouts traverse these areas in search of the zebras,' Ali says. 'When one is sighted, our scouts record details that include its identity, sex and age.'

They take photos using a GPS-enabled digital camera. Each image will be fed into a software programme called Wildbook that identifies each one by their unique coat pattern, and will generate a location for where each one was encountered.

Over time, the photographic record will allow Ali to build up a picture of the abundance of Grevy's zebras in the region. The resulting database of all individuals will allow the team to track mortality and survival rates in the region. 'This information will also be used to inform and prioritise a comprehensive, conservation action plan for for Grevy's zebra within these

two counties,' Ali says.

The habitat in Garissa and Wajir is mainly open grasslands and acacia thorn bush, and rainfall ranges from 200 to 350mm a year. For comparison, in the UK, it's around 1,500mm a year, so this part of eastern Kenya is very dry, and Ali says rainfall patterns are increasingly unpredictable and fluctuating, leading to an increase in the frequency of drought in the two counties.

This is creating habitat degradation and occasional mass wildlife deaths, an occurrence mainly affecting grass-dependent species such as Grevy's zebras. The scarcity of forage also leads to increased competition with livestock. Zebras, along with giraffes and antelopes, are targeted and killed by illegal bushmeat traders operating along the Kenya-Somalia border.

The long-term plan is to use all the information gathered to establish protected areas in the most important spots for Grevy's zebras in order to give them a fighting chance of survival.

Involvement of local communities will be key. 'We will restore the habitat to ensure availability of food for the population and form an anti-poaching unit to monitor and protect the Grevy's zebras,' Ali says.

The Grevy's zebra acquired its name in 1882 when Menelik II, the then King of Abyssinia (now Ethiopia), gave the French president, Jules Grévy, a gift of one. A French zoologist – noticing its distinct appearance (see 'What makes a Grevy a Grevy', above) – realised it was different from other known species, and named it after him.

But it's not just their appearance that makes Grevy's distinct. Unlike the plains and mountain zebras, Grevy's don't form permanent herds and there are no permanent social bonds between adults. Mare-foal 'units' are the basis of their social structure, with a number of units combining together to form loose coalitions of no more than 10 mares. These herds are not hierarchical and can change at any time. Similarly, male zebras form loose bachelor groups of up to six stallions.

So next time you see a zebra, perhaps in a nature documentary, in a zoo in this country or even, if you're lucky enough, in Africa, remember not all of them are the same. And that, as with most conservation issues, protecting these beautiful and highly distinctive equids is far from being a black and white issue. ●

Conservation Partnerships

Our conservation partners around the world managed to work during the past year, despite the challenges thrown at them by the pandemic. Grants Manager **Nida Al-Fulaij** reports on the latest developments from these projects and how rare species are benefiting.

Persian leopards, Iran Mohammad Farhadinia, Future4Leopards

While many of us have had to slow down and stay at home because of lockdowns, this hasn't been the case for **Mohammad Farhadinia**

and his team from **Future4Leopards** who work in remote, mountainous areas of Iran.

'During 2020, our team carried out 12 expeditions to six reserves in different parts of Iran where leopards exist', Mohammad told us. 'Working closely with rangers and communities, it was important to continue as usual in order to save leopards and their habitats. Though all our team members



in Iran unfortunately contracted covid-19, thankfully they all recovered and were able to carry on their work.'

Wildlife rangers are on the frontline in the fight to protect so many of our endangered species around the world and, in Iran, they've remained at the forefront throughout the pandemic.

With the help of PTES supporters, Mohammad and his team continued to provide essential equipment for rangers in leopard range areas. For example, the funding ensured the availability of six horses for 20 rangers and covered the maintenance of seven motorbikes, a vital resource for getting around in Iran's rugged mountains.

This provision of a variety of transport options means the rangers can safely patrol different parts of the national parks and prevent poachers from accessing the more remote areas.

They weren't just busy in the field either. Mohammad's group organised three



More than half of all Persian leopards live in Iran, which is the stronghold for the subspecies.

Giant otters, Peru Adi Barocas, Giant Otter Conservation Project

The challenges faced last year by conservation

biologists worldwide were especially difficult for those in South America. Despite strict local travel restrictions and quarantine regulations, we're delighted that Adi Barocas tells us that giant otter researchers in Peru managed to visit the remote field sites to count giant otters. Results of their survey are encouraging: 55 otters were found in 11 protected oxbow lakes, including several new individuals, indicating that some giant otter families have successfully raised cubs. ●



bespoke online training courses which were attended by 425 rangers and conservation practitioners from across the country.

Mohammad and his staff also worked with their regional partners to establish proper rescue teams for leopards in distress. Support was provided to build transport cages for teams in two provinces most in need of rescue equipment.

Mohammad was delighted to have had a scientifically productive year too, publishing four scientific papers on Persian leopards in peer-reviewed journals. In addition student associates finished two excellent research projects on leopards, both of which are also awaiting publication. The on-the-ground work is critical, but so too is sharing important findings with the wider wildlife community. This benefits leopards and other large carnivores and the communities that live alongside them across the world.

Mohammad and his team are particularly grateful to PTES. 'Without your help, we couldn't have carried out this vital work during 2020, a period of such uncertainty and fear,' he said. ●



© Giant Otter Conservation Project

Lions, Tanzania

Amy Dickman, Ruaha Carnivore Project



Camera-trap images of spotted hyenas helped one village earn money for its health clinic and primary school.



© Ondrej Prochazka / Shutterstock.com

After a difficult start to 2020, compounded by some serious flooding in its area, the Ruaha Carnivore Project in Tanzania returned to work with a vengeance.

The strength of this project lies in the benefits it provides to communities that live alongside wildlife, and large predators in particular. Through this, the team believes, local people come to tolerate the potentially devastating threat that these animals can pose to their livelihoods. In a recent attack in Kisanga, for example, 12 calves were killed by spotted hyenas after they got lost and were forced to spend the night outside.

One way to bring benefits to villages is through the Community Camera Trapping programme. Local people put camera-traps on their land, and the village receives points for every wild animal that's photographed,

with more points given for threatened species, such as carnivores, that are more likely to cause conflict. Every three months, points are translated into additional education, healthcare and veterinary benefits.

Each village receives some benefits, with the winning one earning \$2,000 (£1,450) worth, the second \$1,500, the third \$1,000 and the fourth \$500. The points are then reset and it starts again. The direct connection with wildlife highlights that its driving the benefits, and so increasing tolerance for these species.

In October, thanks in part to 18 spotted hyena sightings, the village of Kisanga won \$2,000 for their health clinic and primary school. A third of the benefits is reserved for pastoralists, who suffer most of the negative consequences of living with carnivores.

Those in Kisanga received pumps to spray their livestock to deter flies and ticks.

Over the years, villages have used their money to build toilets for a school and even a house for a resident doctor. The last round of benefits was used by the school to contribute towards the living costs of seven volunteer teachers because there is a major shortage of teachers locally. ●

Snow leopards, Mongolia, Bayarjargal (Bayara) Agvaantseren Snow Leopard Conservation Foundation



Last September, the much-anticipated Tost Nature Reserve administrative headquarters (pictured below) opened in Gurvantes, a small town bordering the reserve in Mongolia's South Gobi. The headquarters' staff of eight is financially supported by the South Gobi provincial government.

Tost Nature Reserve is home to a thriving snow leopard population, with camera surveys showing a minimum of 13-15 adults in the reserve. In 2019, five female snow leopards gave birth to at least 12 cubs, the highest number of breeding females and cubs counted during more than 10 years of surveys.

'Having the administration set up is a huge step ahead for the reserve,' says Bayara Agvaantseren, director of the Snow Leopard Conservation Foundation. 'Though it's recognised as a federally protected area, the local government is responsible for

its management. It's wonderful to see such a huge commitment by the local government to fund and secure a permanent administrative headquarters for Tost.' ●



© Snow Leopard Conservation Foundation

Slow lorises, Java Anna Nekaris, Little Project Fireface



Slow lorises may look cute and cuddly, but these large-eyed primates are almost unique among mammals in using venom – the only other ones are solenodons (small insectivores only found on the islands of Cuba and Hispaniola in the Caribbean), shrews, platypuses and vampire bats. Even more intriguingly, they frequently use their venom to injure and even kill other slow lorises.

Between 2012 and 2020, Anna Nekaris and her team from the Little Fireface Project tracked 82 slow lorises using radio collars and discovered both males and females are intensely territorial. Nearly

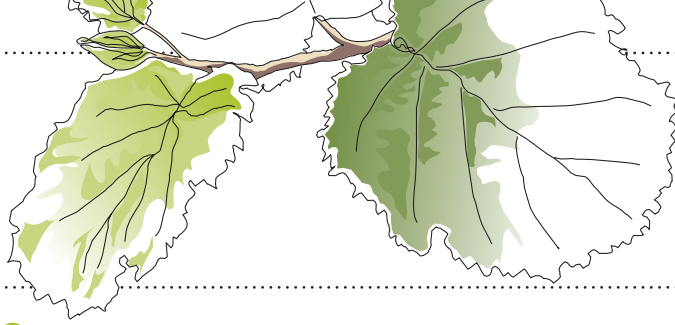
60 per cent of males and 30 per cent of females had signs of at least one venomous bite wound, and 20 per cent of all slow lorises captured showed evidence of intraspecific (within the species) fighting.

'Venom is known to play at least 14 distinct ecological roles [in the animal kingdom], but intraspecific competition is among the rarest,' Anna says. 'Slow loris bites are very distinctive and are unlike those seen in other animals.' ●



Find out more
www.ptes.org/cute-but-deadly-slow-lorises-and-venom

© Little Fireface Project



Ancient treasure



Owned by PTES since the early 1990s, Briddlesford Woods is a real pot pourri of mammals, birds, invertebrates and plants. Visitors are always welcome, once the pandemic is over, of course.

Briddlesford, our nature reserve on the Isle of Wight, is special in many ways, but the fact that it provides a home to dormice, red squirrels and both Bechstein's and barbastelle bats, makes it unique.

It's thought there is no other woodland in the whole of the UK that is habitat for these four rare mammals. Their presence emphasises Briddlesford's status as an ancient woodland, which means that it has had constant tree cover since 1600. It's thought that some areas have been wooded since the end of the last Ice Age.

Covering 120 hectares of woodland and 40 of grassland, Briddlesford is rich in many species of flora and fauna. Woodland wildflowers include bluebells, dog's mercury and green hellebores, and a rare sedge known as the thin-spiked wood-sedge. All of these are ancient woodland indicators, too.

PTES ecological adviser **Jonathan Cox**, who first visited Briddlesford in 1983 when working for the Nature Conservancy Council (NCC, the body which, through various transitions, is now Natural England) says 65 vascular plants indicative of ancient woodland have been recorded, one of the highest number for any site in Britain.

There are both pendunculate and sessile oaks (the latter rare in southern England), as well as a rich diversity of other tree species. Up to 100 species of hoverflies have been recorded. 'The more we look, the more we find,' Cox says. 'It's a real treasure trove.'

Never was this better highlighted than when an entirely new species of fungus was discovered in the woods. (See p6 for more.)

PTES ownership of Briddlesford goes back to the early 1990s, only a few years

'The more we look, the more we find. It's a real treasure trove.'

after it had been designated as a Site of Special Scientific Interest (SSSI). Cox was part of the NCC team that managed this. 'Walking through the site, you realise that if you didn't have a chainsaw and mechanical excavator, it would be very difficult to do anything with the site, and that's probably kept it intact,' he says. Briddlesford has also been protected as a Special Area of Conservation for its bats.

Following the PTES purchase, Cox wrote a management plan that emphasised the need for a proper coppicing rotation in some parts of the site and natural woodland regeneration in others.

Coppicing has helped make these woodlands denser and thicker, which benefits species such as dormice, while opening up some of the forest rides has enriched the ground flora and helped species such as the narrow-leaved lungwort, which is only found on mainland Britain in the New Forest and some parts of Dorset.

'I love going in the early spring, before the leaves come out in the canopy and when the sun can get through to the woodland floor. That's when some of the spring flowers are at their best,' Cox says.

PTES Conservation Officer **Laura Bower** says Briddlesford has a great advantage over other British woodlands in not having any deer (there are almost no wild deer on the Isle of Wight). 'That means after we have coppiced, the new growth doesn't get eaten, so we don't have to spend money protecting it,' she explains. ●

▶ **Find out more**
www.ptes.org/briddlesford

- ▶ Briddlesford is located in the north of the Isle of Wight, just a few km east of Newport.
- ▶ Visitors are welcome to walk around Hurst Copse and Briddlesford Parkland. Spring is an especially lovely time to go.



The DNA detectors

Scientists are trialing a new method of confirming whether rare mammals are present in rivers and streams, thanks to funding from PTES.

The traditional method of monitoring water voles is to walk along a river bank looking for droppings or signs of where they have been feeding and it's very time intensive. Now, however, there's a new technique that could tell us where these rare mammals are present much more quickly and easily.

It's environmental DNA or eDNA for short. Animals shed eDNA in their faeces, urine, skin, hair and mucous, and this can be detected in water for up to 21 days or so. PTES is helping to fund **Dr Allan McDevitt**, from the University of Salford, to assess how well it can identify the presence of species such as water voles, especially when numbers are low.

'The more individuals there are in a system, the more skin cells and faecal cells

they'll be shedding, the more they'll be urinating,' McDevitt says. 'The big question, particularly for rare species, is whether you can then detect them in low densities.'

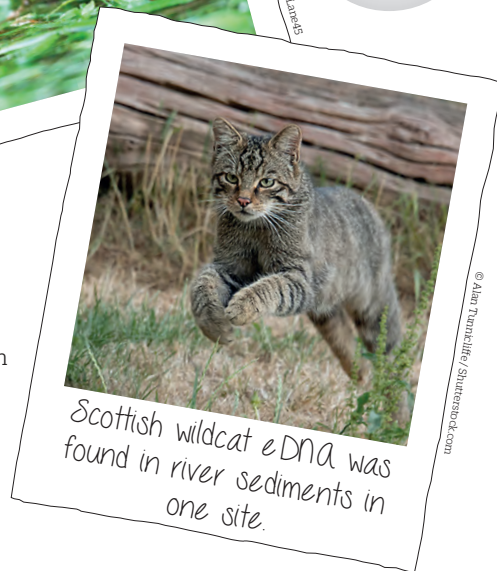
McDevitt and his colleagues have shown they can even pick up the eDNA of non-aquatic mammals such as red deer, hares and field voles.

But how well the technique picks up signs of rare mammals isn't the only question they need to answer. The other is how far the eDNA moves from its source to where it's picked up, which of course will happen to a greater extent in a fast-flowing river. This could be crucial in identifying precisely where the animals are.

'Work on invertebrates suggests eDNA can move quite far,' McDevitt says, 'perhaps 10 or 20km.'



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© Alan Tomkowiak/Shutterstock.com

Scottish wildcat eDNA was found in river sediments in one site.

Samples McDevitt collected in Scotland found Scottish wildcat DNA in river sediments, and this information has been passed onto wildcat experts. eDNA can also identify where non-native species, such as mink, first become present in an area, allowing for prompt action to be taken. ●

Dormouse delight

Clearing a Dartmoor woodland of diseased trees created an empty space quickly colonised by brambles, bracken and dormice.

A woodland conservation scheme that PTES is funding in partnership with the National Heritage Lottery Fund is making new discoveries about how dormice colonise recovering habitat.

The project is located in Fingle Woods, a site jointly owned by the Woodland Trust and National Trust, on Dartmoor in Devon. Its origins date back seven years to when 15 hectares of diseased plantation larch trees were clear-felled.

Brambles, bracken and other vegetation have gradually established themselves in the space, according to the project lead **Matt Parkins**, and this new habitat is proving to be very popular with the area's dormice.

'We're very pleased with this new habitat,' Parkins says. 'There are some unconnected woodland fragments, but what joins them up is this scrubby mass of dense brambles and bracken with some

birch and willow. It's almost impossible for a person to walk through there, giving great protection for small mammals and birds.'

Dormice are usually associated with old coppice woodland, but Parkins believes they can adapt to different environments as



long as there's sufficient food, nesting spots and connectivity between different areas so they can move about undisturbed.

The dormice are usually recorded around food sources. In July 2020, for example, there was a big cluster of activity in those areas where fruiting rowans and young birch trees (a source of aphids) were growing.

It's hoped the discoveries being made at Fingle Woods can be used to help other landowners manage their woods for wildlife. Parkins says what's good for dormice has also benefited bird species such as blackcaps and tree pipits.

Another novel aspect of the work is the use of footprint tunnels, in addition to nest boxes, to monitor the dormice. They provide instant snapshots of where the dormice have been during the past week or two, while nest boxes give a picture over a longer period such as a whole season. ●

© Matt Parkins



Restoring the diversity of Lake Victoria

This project on Africa's largest lake aims to boost numbers of rare tilapia threatened by overfishing and invasive species.

Lake Victoria is famous for, among other things, its great diversity of cichlid fish that are found nowhere else in the world – an estimated 500 species, though many of them have gone extinct and some have never been described and classified.

PTES is funding a project to reverse this tragic decline. Ugandan NGO **Hope for Nature** is breeding Critically Endangered Singida tilapia and reintroducing them into the lake with the aim of recreating a self-sustaining population.

Singida tilapia, and many of the other cichlid species, have been massively affected by the combined impacts of overfishing and non-native Nile perch that predate on them. 'The tilapia', says project leader **William Isebaiddu**, 'are being put back into the lake in shallow areas where the perch aren't found.

The project team has established demarcated zones which have fishing restrictions and which are monitored by the fishers themselves and voluntary committees that promote a catch-and-return approach,' Isebaiddu says. 'The tilapia can co-exist with the perch, but not in the same parts of the lake.'

The initial target is to release 40,000 tilapia fry over the next two years, but Isebaiddu says with additional funding, this number could be increased to 200,000, which would be enough to allow monitored, controlled fishing to begin again.

This could be of tremendous benefit to local people. From the early 1900s until the 1980s, Singida tilapia were the mainstay of Lake Victoria's commercial fishery, providing an income to fishermen and local communities with food. ●



endangered



Singida tilapia are regarded as a delicacy and were once an important source of food for local people

© Anton Wagner

Monkey business

Conservationists in Colombia are racing against the clock to protect one of the world's smallest and rarest primates.

Tiny primates no bigger than a squirrel, cotton-top tamarins are threatened by habitat loss and hunting. Today, there are only an estimated 6,000 left in the wild in north-west Colombia, and the species is classified as Critically Endangered by the IUCN. Less than 5 per cent of their original habitat remains.

Now with the support and help of the area's Arahuac people, Fundación Fuverde's Fabio Cuello is mapping where there's good forest, where it's been degraded and where the tamarins are still found.

Cuello's aim is for the Arahuac community to take the lead in establishing a 32km² protected corridor for the tamarins

and other wildlife. This will not only benefit the tamarins but strengthen community engagement with their natural environment.

The tamarins are also affected by being illegally taken from the wild for the pet trade – many households in rural communities have one as a family pet without realising the impact this has on overall populations.

In the 1960s and 1970s, this species also suffered greatly from being exported from Colombia to the USA to be used in biomedical research. Up to 40,000 individuals are believed to have been taken until a ban was put in place in 1976. ●

- ▶ Cotton-top tamarins live in small family groups of up to 10 individuals. They eat primarily fruit, but will also feed on insects, sap and nectar.
- ▶ Females almost always give birth to twins, and both parents bring up their offspring.
- ▶ Their scientific name is *Saguinus oedipus*. Whether that is a reference to Oedipus from Greek mythology is not clear.



© Marwan House / Shutterstock



© Larissa Barber

The lemurs of Sainte Luce



In the south-east of Madagascar, a reforestation programme is reconnecting fragments of the littoral (shoreline) forests and helping four rare lemur species in the process.

Our partner SEED Madagascar reports an 81 per cent increase in fires within protected areas on Madagascar between March and May 2020, compared with the same period in 2019, suggesting the covid crisis led to a rising need for land to farm, resulting in increased deforestation.

Despite these difficulties, SEED's **Zac Hill** tells us they have been able to keep going with Project Ala which is reconnecting forest areas in the Sainte Luce Littoral Forest in the south-east of Madagascar by replanting corridors between them.

Even by Madagascar's standards, the littoral forests are rich in endemic species – they are home to 1,500 plant species, 13 per cent of the island's total, and one quarter of these are only found in this vegetation type.

Sainte Luce is also home to four especially rare species of lemur which are classified by the IUCN as Endangered – the collared brown lemur, Thomas' dwarf lemur, the southern woolly lemur and the anosy mouse lemur. Two of these – the collared brown and southern woolly lemurs – are endemic to the island's south-east.

To date, four corridors have been reforested, which will not only lead to extra

habitat for the lemurs and other species, but eventually allow them to move between patches more easily. Indeed, the programme will increase forest habitat by 58 hectares or more than double what is currently there.

Luckily, the Sainte Luce forests haven't been impacted by increased burning or felling in the last year. 'However with the main local livelihoods of lobster fishing and mahampy reed weaving becoming unviable due to reduced market prices, and trade restrictions leading to rising hunger, it is highly likely that threats to local forests will increase in Sainte Luce too,' SEED says.

Project Ala's goal isn't just to carry out reforestation. A very important part of what it does is to engage with forest management committees and local communities in general and to support anyone who has been impacted by the pandemic.

In the coming months and years, the need for conservation action will be greater, and even though government and other funding is likely to decrease, SEED is determined to keep going. 'No matter how small the action, it will contribute to a wider solution of protecting nature which in return will help protect ourselves,' it says. ●

MORE ON MADAGASCAR

▶ Madagascar has been separated from any other land mass for some 88 million years, leading to many species evolving in isolation – roughly 90 per cent of animals and plants are found nowhere else in the world.



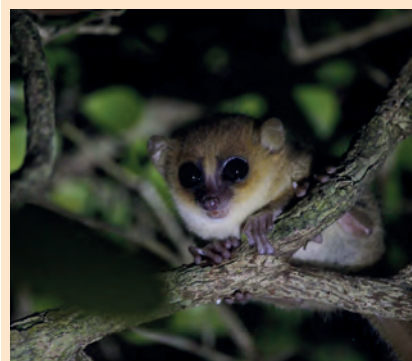
© Project Ala

▶ The island is most famous for its lemurs. They are primates (so in the same order of mammals as monkeys, gorillas and indeed us) that are all endemic and many are extremely rare.



© Project Ala

▶ Madagascar's littoral forests once extended along 1,600km of the east coast, but only 10 per cent of them remain. The Sainte Luce Littoral Forest is one remaining fragment of what was originally there.



© Adam Marks

Thanks to you

Your support makes all the work you're reading about possible. The past year has been tricky in many ways. We're so grateful to have such loyal and caring supporters believing in our work to protect endangered animals. Here are a few things we want to say thank you for.

Stopping the traffic

Back in June last year we ran an appeal about our pangolin conservation work.

Despite all the pressures of lockdown and the pandemic, our donors dug deep and raised £30,000 to support this anti-wildlife trafficking work. An amazing result. Thank you everyone who donated. Pangolins are the most trafficked wild animals in the world and need a great deal of protection. Your support is making a real difference to these vulnerable animals. ●



Nature boxes

Our partner, Robin and Rose Nature, creates the perfect subscription boxes for nature lovers.

Robin and Rose Nature was set up by Dr Jenny Evans, a Cambridge biologist, teacher, mother and nature enthusiast, with the aim of inspiring women to learn about our natural world. Every quarter, Jenny curates a unique subscription box for women who love nature and deserve a self-care treat delivered to their door. Every box contains a nature book, magazine, simple nature craft, art print from a small business and seeds to create a nature garden.

For each box sold, Robin and Rose Nature kindly donates 5 per cent to PTES. Subscribe today to receive your first box at www.robinandrosenature.com ●



A leg up the conservation career ladder

A big thank you to the group of donors who are supporting our PTES Internship Programme.

This unique programme provides graduates with opportunities to gain the vital experience they need to start their conservation careers. Successful applicants are awarded grants of up to £5,000 to carry out worthwhile conservation projects, in association with an academic institution or conservation NGO. In the process they gain extra skills in the lab and in the field that strengthen their employment prospects. Last year, we piloted a virtual Internship Programme event, which saw three of our interns (who are working on hedgehog, kelp and bee projects) present their work to a group of donors who are funding the programme. The event was a great success. Donors enjoyed meeting the interns and taking part in a lively Q&A session after each presentation. Many thanks to all those helping us to make this important programme a reality. ●



Shop for wildlife

Our refreshed online shop was a hit, and raised more than £34,000 over the festive period. Every penny will help conservation work protecting endangered wildlife and habitats in the UK and overseas. Thank you to everyone who bought something!

The new products included bright homewares, crafts for kids and wildlife-friendly treats for gardeners. We also welcomed some new UK-based small businesses, who take design inspiration from the natural world around them and focus on sourcing quality materials that are built to last. We've added some fresh spring products to our shop, along with our popular *Hedgehog Street* signs and *Gifts for Nature*, so enjoy a browse at www.ptes.org/shop ●



A message from India

Our partner Samya Basu is so grateful to everyone who gave a gift to protect elephants in West Bengal, and recorded a video to send his thanks.

Samya said, 'I thank the People's Trust for Endangered Species and all the donors who support our elephant conservation programme at this crucial time, and for their generous support that enabled us to resume our work even in lockdown to minimise human-elephant conflict in the area.' A local villager, Mr Chakraborty, said he'd personally witnessed many changes in the forest and wildlife diversity in his life, and that his village experiences severe damage to crops and houses by the elephant herds. He thanked PTES supporters and Samya for helping to protect village crops, demonstrating humane deterrent methods and for encouraging human-elephant coexistence, all work made possible with support from PTES donors. ●

You can watch Samya on our YouTube channel 'PTESwildlife videos'



Bracelets for hedgehogs

Last year, in response to the catastrophic decline in hedgehogs, we designed our first ever eco-friendly hedgehog bracelet to raise funds.

The bracelets raised a fabulous £9,000, which we're using to fund new research projects to find the most effective ways of helping hedgehogs. In particular, we want to work with developers and managers of green spaces to make their land more hedgehog-friendly and to encourage more people to put a hedgehog hole in their fence.

Our bracelets are ethically sourced and made from white brass, recycled sterling silver and organic cotton hand-dyed with plant-based dyes. ●

To adorn your wrist with one of our unique hedgehog bracelets, donate today at www.ptes.org/bracelet



Divine inspiration

Divine Savages is a luxury interior brand specialising in wallpapers, fabrics and home accessories, with a mission is to encourage people to be braver with pattern and colour in their homes.

The wild signature designs are inspired by the natural world. All the wallpapers are certified by the Forest Stewardship Council (FSC) using environmentally friendly inks and produced right here in the UK, supporting British manufacturing. Even better, the team behind Divine Savages are wildlife lovers, so for each item sold from the Priscilla, Crane Fonda (pictured right), Geometric Aviary and Faunacation collections, they make a donation to PTES. They've already donated a colourful £1,770! You can browse their range at www.divinesavages.com ●





© Casey / Shutterstock.com

Hedgehogs are vulnerable to extinction in the UK. In 20 years, we've lost half our hedgehogs in rural areas and a third from our cities. The causes are complex and include increasingly tidy, fenced-in gardens, busy city roads, habitat fragmentation and intensification of agriculture and pesticide use. But there's hope – the rate of decline appears to be stabilising.

During 10 years of Hedgehog Street, our campaign with the British Hedgehog Preservation Society, we've recruited more than 90,000 champions to help make their neighbourhoods more hedgehog friendly, recorded over 100,000 sightings, persuaded housing developers, park and green space managers to 'think hedgehog' and funded urgent research to understand our prickly friends better.

If you're not already a hedgehog champion you can sign up at www.hedgehogstreet.org

Thank you.

people's
trust for
endangered
species

