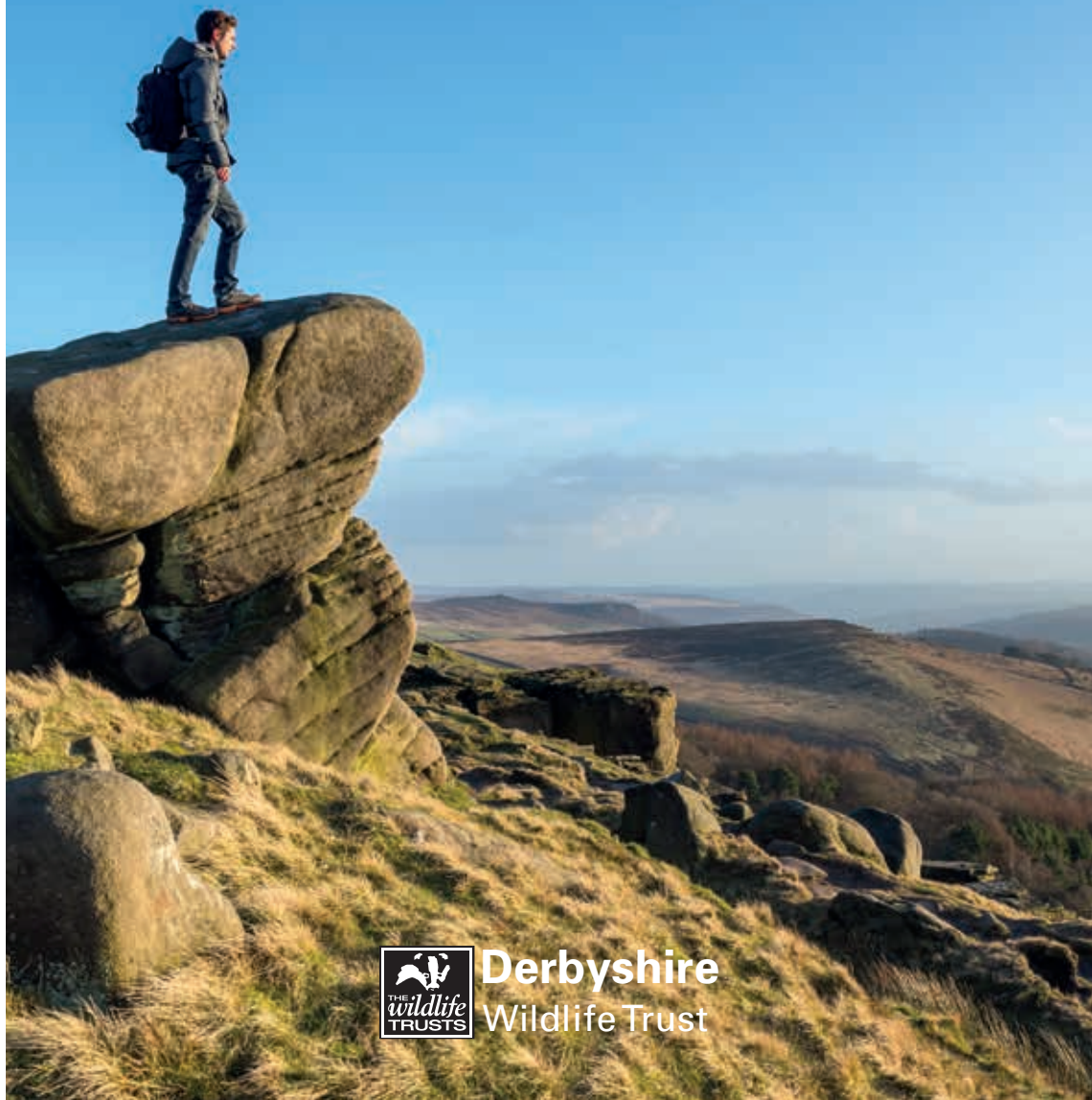




DERBYSHIRE



Derbyshire
Wildlife Trust



Save
the date

Saturday 25th September 2021
Woodside Farm, Shipley, DE75 7JL



Derbyshire Wildlife Trust's 59th Annual General Meeting

This year we would like to welcome you to our Woodside Farm Nature Reserve for a series of activities before our AGM later in the afternoon. Join us for a day in wildlife. Bring a picnic and a reusable mug, and we will provide the tea/coffee!

Booking is essential Time: 10:30am – 4:00pm Price: Free

Arrival: Please feel free to arrive on site from 10:30am.

11-1pm: Take part in our on-site activities, including: Bush Craft, Pond Dipping, Mindfulness, Grazing for Wildlife, Self-Guided Walks

1-2pm: Bring your picnic and enjoy the surroundings

2-4pm: Formal AGM proceedings

- | | | |
|--|--|---|
| 1. Apologies for absence | 5. Trustees' Annual Report and Accounts for the year ended 31st March 2021 Annual Report & Financial Accounts 2021 | 7. Election of committee |
| 2. Welcome and introductions | 6. Re-Appointment of BHP Chartered Accountants as the Trust's auditors for the year ending 31st March 2022 | 8. Any Other Business – Question and Answer session |
| 3. Achievements and future plans | | |
| 4. Approval of previous AGM minutes Previous AGM minutes held on Saturday 12th December 2020 | | |



To register your interest:

For more information and to register your interest for the event please see:
www.derbyshirewildlifetrust.org.uk/agm-2021

If you require information to be provided to you via post please call 01773 881188



Jo Smith
Chief Executive
Officer



Join the Conversation

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/derbyshirewt

On the cover

Stanage Edge, Peak District © iStock

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Derbyshire Wildlife Trust

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Company Number 715675

Sandy Hill, Main Street
Middleton, Matlock. DE4 4LR
Tel: 01773 881188
E-mail: enquiries@derbyshirewt.co.uk
Web: www.derbyshirewildlifetrust.org.uk



Derbyshire
Wildlife Trust

www.derbyshirewildlifetrust.org.uk

WELCOME

2021 has been described as humanity's "last chance" to do something meaningful about climate change. In November the UK will host the 26th UN Climate Change Conference of the Parties (COP26) in Glasgow. The decisions made at this event are crucial.

COP26 will bring more than 190 world leaders to Scotland, along with tens of thousands of negotiators, government representatives, businesses and citizens for 12 days of talks on accelerating action towards tackling the climate emergency.

COP26 is a massive milestone, both for policy change but also for public engagement with the climate crisis. The event has the opportunity to turn public concerns into tangible political decisions and most crucially political action.

Inside this special edition of Wilder Derbyshire you can find details of the potential local impact of the nature and climate crisis. You will also find nature-based solutions that we can and must deliver to lessen the damage to us, and to nature.

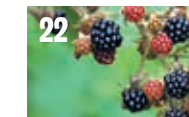
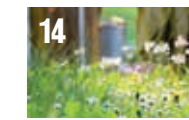
To make sure Derbyshire residents and nature lovers have their say, we are running a series of events, activities and campaigns that you can support. You could spot and share species, campaign for local political action, take part in the Big Wild Walk, get your street to "Go Potty" with planting or start and share your own action.

Whatever you choose to do, I hope that you will join people across the county in showing that we support strong international action and rapid local measures that place the recovery of nature at the heart of our response to the crisis.

Thanks as always for your support.

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SPOTTED

Share your images with us
www.derbyshirewildlifetrust.org.uk/wildlife/record-sighting

Emerald Damselfly – Carr Vale

Photo: July 2021 © Peter Calvert



Dryad's Saddle – Kedleston

Photo: July 2021 © Nick Brown



Peacock Butterfly Caterpillars – Avenue Washlands

Photo: July 2021 © Kayleigh Wright



Orchids – BASF site Derbyshire

Photo: July 2021 © Ellis Charlesworth



Curlw – Derbyshire Bridge

Photo: June 2021 © Alan Johnson



The Cromford Canal & Codnor Park Reservoir Group have been awarded the Queen's Award For Voluntary Service!

Working alongside Derbyshire Wildlife Trust this group of local volunteers care for a section of Cromford Canal, part of Erewash Meadows nature reserve. They have absolutely transformed it over the last 6 years, into an incredible wildlife haven full of protected and rare species, as well as completely turning around the local community's attitudes and actions towards the site and wildlife in general.

The Queen's Award for Voluntary Service is the highest accolade that can be awarded to charities and community organisations for our local volunteering, and it is subject to thorough and robust investigation of all nominees before it is finally signed off by the Queen herself. The winners get a certificate and glass dome and will be invited to a royal garden party.

The group was nominated by Kate Lemon, Regional Manager at Derbyshire Wildlife Trust. She said "I feel so proud to have been involved in their efforts and to have been able to support the group and watch it grow and achieve so much. Erewash Meadows is one of my favourite reserves and for other people to care about it as much as I do is just wonderful."

Andy Moon, Group Chair said "When people give their time freely to something they feel passionate



Cromford Canal & Codnoe Park Reservoir Group

about, great things can be achieved. I am absolutely delighted that all of those involved have been honoured in this way. Our plans for the future will see the group thrive and the distinct and measurable impact on our local area continue."

Full details of the award can be viewed here: www.gov.uk/government/news/winners-of-the-2021-queens-award-for-voluntary-service-announced

£552,100 Grant from the Government's Green Recovery Challenge Fund

We have been awarded the grant from the Government's £40 million second round of the Green Recovery Challenge Fund, a multi-million pound boost for green jobs and nature recovery.

In Derbyshire, this will fund the Derwent Connections project – part of a programme that will see the creation of woodlands through River Derwent Catchment in order to connect the National Forest, near the south of the county, to the Northern Forest initiative.

As part of this project we will work with local communities to introduce nature-based solutions to reduce flooding, such as woodland creation and hedgerow planting. As woodland creation takes some time to have an effect on flood risk reduction, the project will also deliver shorter-timescale interventions,



such as the construction of leaky woody dams in woodlands and on open ground, particularly in the uplands. For more information see www.derbyshirewildlifetrust.org.uk/news



The Wildlife Trusts unveil new nature recovery projects

Fleet Moss Restoration – great north bog Photo: © Yorkshire Peat Partnership

These projects are designed to help the UK tackle the changing climate and focus on employing nature-based solutions to increase carbon storage while restoring habitats on land and at sea.

These include a pioneering collaboration to improve huge tracts of fragmented wetlands across four neighbouring counties in England and Wales – paving the way for the reintroduction of beavers. Another project aims to restore precious peatland habitats across Cumbria, Durham, Yorkshire, Northumberland, and Somerset, and a third to expand saltmarsh restoration along the Essex coast.

The projects, which will help the UK achieve its ambition of reaching net zero carbon emissions by 2050, are able to move forward thanks to almost £2 million in funding raised by players of People’s Postcode Lottery.

In other areas, new seagrass habitats will be planted in the Solent, fragmented woodlands will be restored and connected throughout Derbyshire, habitat features to protect temperature-sensitive chalk grassland butterflies in Bedfordshire will be created, and support will be given to a pioneering project to restore a kelp forest off the Sussex coast.

A petition calling for a legal target to halt the decline of nature by 2030

The petition, handed in to Rt Hon George Eustice MP, the Environment Secretary, has been signed by over 208,000 people, and is backed by 70 organisations and prominent wildlife campaigners, including Chris Packham, Steve Backshall and Mya-Rose Craig (Birdgirl).

The campaign is backed by a cross-party group of politicians from across the Houses of Parliament. The hand-in was attended by Lord Randall (Conservative), Baroness Jones (Labour), Baroness Parminter (Liberal Democrat) and Professor Lord Krebs (cross-bench), who have all signed an amendment to the law in support of a target to halt nature’s decline by 2030.

It calls for the target to be set in the Environment Bill, which is currently making its way through the House of Lords.

So far, the Government has included a target for species abundance for 2030, but campaigners say that this is weak, because it does not set the level of ambition – to halt the decline of nature by 2030. They say that it falls far short of the “net zero for nature” recently promised by Government in the Environment Secretary’s speech at Delamere Forest on 18th May.



From left to right: Lord Randall, Baroness Jones of Whitchurch, Professor Lord Krebs, Richard Benwell (LINK), Beccy Speight (RSPB), Baroness Parminter, Darren Moorcroft (Woodland Trust), Environment Minister George Eustice, Craig Bennett (The Wildlife Trusts)

Craig Bennett, Chief Executive of The Wildlife Trusts, said:

“Nature has provided us so much over the last year – but it’s declining at a speed never previously seen. One in seven species in the UK are now threatened with extinction. Without real Government action to reverse this trend now, we risk losing some of our wildlife forever. We cannot afford to wait any longer – it’s time the Government matched its promises with real action.”

Wood Warbler Photo: © Andy Rouse 2020/VISION

Cromford Meadow Photo: © Robert Morris



The Climate & Nature Crisis (COP26)

Ben Carter – Director of Income Generation

As a result of the pandemic, carbon emissions actually went down in 2020, a first since records began. However they have since bounced back, and 2021 looks set for a new, bleak record, one matched with soaring temperatures and extreme weather events.

Nobody wants a new wave of Covid-19 to shut down the global economy, but what 2020 has shown humanity is how to live comfortably with lower emissions. The question is now, can the world make a shift to a low-carbon lifestyle in ways that enough of us can accept?

At least some of these changes are exactly the kinds of measure that wildlife lovers have been championing for years. What has now become clear is that **healthy natural systems could provide one-third of the most cost-effective solutions to fighting climate change.**¹

Tree-planting and peatlands restoration draw down carbon from the atmosphere, wilder river catchments (including beavers!) reduce the impact of flooding, low-intensity farming is better for wildlife and reduces emissions. You can see more examples on P10–11.

One of the best things about taking this approach is that, as well as fighting climate change, we will also create thriving green cities and landscapes that are good for people, good for wildlife and good for the economy. Imagine seeing stunning wild places and walking within them, while also knowing that restoring nature in this way has protected our future!

¹<https://www.pnas.org/content/114/44/11645>



Nature's recovery is a local solution to a global ecological and climate crisis.

This means that Derbyshire residents have one of the most powerful tools for fighting climate change right here on our doorsteps. People up and down the county are already taking action for wildlife, creating local wild-spaces big and small, letting gardens grow and campaigning for change.

We know that the majority of people want a greener, wilder future, free from the threat of climate change. Now, through coordinating our actions, it is time for all of us to demonstrate that we are ready to do our part, and to tell our leaders to do theirs.

COP26 Quick Facts

When is it? 1 – 12 November 2021

What is it? COP is the decision-making body responsible for reviewing the implementation of the United Nations Framework Convention on Climate Change.

Who will be there? Leaders from the 197 nations and territories – called Parties – that have signed on to the Framework Convention, along with climate experts, campaigners and the public. A total of 30,000 are expected to attend.

What will happen? The effectiveness of member countries at cutting emissions will be reviewed and plans will be put in place for the next five-year period of the Paris Agreement. NGOs and campaigners will also attend COP26 to highlight their own asks and influence politicians. The public will also be welcome at parts of the conference.

Nature-based solutions Nature is one of the key themes for COP26. This is not just because the climate crisis threatens nature. It is also because managing more land for nature can provide some of the most effective solutions to fighting climate change and mitigating impact.

CBD COP15 Ahead of COP26, October 11–24th sees the Conference of Parties to the UN Convention on Biological Diversity take place in Kunming in China. COP15 is scheduled to agree and adopt a “Post-2020 Global Biodiversity Framework”. The UK is pushing for this to include a target for all countries to protect 30% of their land and seas for nature by 2030.

“The COP26 summit is one of the single biggest priorities that any government could have”

– Boris Johnson.



Pools and bog peatland at dawn, Flow Country, Scotland © 2020 Vision

COP26

What are the implications

FOR DERBYSHIRE?

Matt Buckler – Head of Nature’s Recovery



Golden Plover © Andrew Parkinson

Even in landlocked Derbyshire, climate change is already having an impact, which will only increase as the global temperature increases. We are seeing more intense rainfall through the year, leading to more localised flooding. We are also seeing longer periods of high atmospheric pressure, with longer periods of drought. These two factors are having significant impacts on the plants and habitats around us. Blanket bogs are becoming more susceptible to wildfire, which can release huge amounts of carbon into the atmosphere very quickly, and water stress is exacerbating diseases of trees, such as ash dieback.

Species are changing across Derbyshire too as climatic envelopes shift. 20 years ago, species such as cetti’s warbler and little egret were unheard of in Derbyshire; now they are regular breeders. Species of the uplands are likely to start disappearing as they have nowhere else to go. How much longer will red grouse and golden plover be resident on our moorlands?

We must also consider the other impacts that climate change will have. We will need to find more land for renewable energy production. Solar farms and wind turbines are springing up across the county; we need to work with developers to make sure that these are built in ways which benefit nature as well. With sea level rise already underway, coastal regions, which is where much of the world’s population lives, are likely to become too great a risk for large numbers of people. For example, the Thames Barrier, which protects London from flooding, closed four times in the 1980s, 35 times in the 1990s and over 100 between 2000 and 2014.



Cetti's warbler (c) Amy Lewis

So what can we do?

We must all do what we can to drastically cut our carbon emissions, primarily by moving away from fossil fuels and cutting our methane emissions.

We need to push our politicians on the issue as well; Net Carbon Zero by 2050 is not going to be quick enough to avoid the worst impacts of climate change.

We also need to start thinking about climate change adaptation. We need to make nature more resilient, to help us more effectively in future. This is why our focus has been on ecosystem restoration. The mechanism to do that is to follow the Lawton principles (bigger, better, more and joined up spaces for nature) and to allow natural processes to lead: rewilding, resilient ecosystems will also be better able to adapt to the challenges that a changing climate throws at them.

Bringing about Nature’s Recovery

Right now the Trust has a range of landscape scale programmes that will deliver some of the changes we need. One of the most exciting is our newest programme, Derwent Forest. This will create a series of connected new, native woodlands, predominantly through natural regeneration, that connects the National Forest with the Northern Forest.

We will work with landowners and the Forestry Commission to develop **woodlands that will store carbon, improve water quality and reduce the risk of flooding throughout the catchment.** Outcomes like these are key to climate adaptation, and can be achieved in many more areas if we let nature help.

Of course, Derwent Forest will be great for wildlife too. The north-south connection created will allow species to move within woodlands, between the two developing large Forests. We will try to bring back species like pine marten, red squirrel and lesser spotted woodpecker and identify areas – from Bleaklow, through Derby to the Trent – where beavers could be reintroduced as a wild population and will be developing this in line with the recent Defra consultation.



A6 Bakewell Flood Water © Adam Gerrard



Pine Marten © Karl Franz

Derwent Forest is made up of projects funded by the Green Recovery Challenge Fund and the People’s Postcode Lottery, whose support has made this programme possible.

There are also landscape scale programmes in development for Wild Peak and a Wilder Trent Valley and we are working with local authorities to create Nature Recovery Networks, mapping out where nature could be restored most effectively. These will be available online by early 2022 and will allow other people to see how they can contribute to Nature’s Recovery.

The people and nature of Derbyshire have challenging times ahead of us but what we all do now can still make a massive difference to the future world that we live in.

ROUTE TO NET ZERO!

Jane Davison – Support Services

The Climate Crisis is a serious threat to the wildlife of Derbyshire, as well as humanity across the world. As an organisation we have invested a considerable amount of time in looking at how we can reduce our own carbon emissions to Net Zero by 2025.

Firstly, we have switched our electricity supplier to one which generates all of its electricity from renewable sources. However, while this means that we are not directly using fossil fuels to generate electricity, there are still significant conservation issues from renewable energy production and so we need to cut our electricity use overall. The Carbon Trust identified installing LEDs as the best single way we could reduce the energy use in our buildings and we worked with a local Derbyshire company, T4 Sustainability, to install new light fittings across three sites, including headquarters. These have reduced our emissions from electricity use by over 30%.

Our partnership with Peak District Environmental Quality Mark (PDEQM) has enabled us to develop

an approach to reaching our goal which looks at our whole footprint as they have facilitated our use of the Peak District National Park Authority's bespoke carbon measuring tool. Management of land is complex with respect to carbon emissions; we store a lot of historical carbon in soil, plants and animals on our land, we draw down some carbon from the atmosphere through carbon sequestration and we emit carbon from the land management that we undertake.

We produced our baseline carbon footprint in 2019 and have produced a follow up this year.



Black Knapweed

Black Knapweed is a wild flower which benefits from cattle grazing and is a favourite of pollinating insects, being a source of good quality nectar. As well as supporting bees, butterflies and beetles its seeds provide food for many birds.

Carbon footprint measuring is an evolving process using the best data at the current time. We are using our two carbon footprint reports to inform the Trust's Carbon Reduction Action Plan. Our most recent footprint shows greater emissions than our baseline because we have broadened the scope of the work to include staff commuting, as well as looking in more detail at grazing stock breeds.

Livestock are by far our biggest emitter (over 70% of the emissions that we produce) but they have always played a significant role in managing our land. One of the key parts of our plan will be to look at our vegetation management to ensure we are making the best decisions, cutting our emissions while still maintaining a diversity of habitat types. How grazing animals fit in with this will be a difficult question to answer over the next few months.



The Royal Society of Wildlife Trusts (RSWT) is working across the Wildlife Trust movement to bring a consistent approach to this work and a system of collaborative reporting.

We are the beneficiaries of a £20,000 grant from People's Postcode Lottery secured by RSWT for each participating Wildlife Trust, which will enable us to roll out further mitigating measures replacing our fleet of vehicles with electric vans as far as possible; supporting staff to reduce fuel consumption through car share and ebikes; as well as improving the efficiency of our buildings. The Carbon Reduction Action Plan will ensure that carbon mitigation is considered in decision making at every level.



small local actions for big global impact



Danielle Brown
– Mobilisation Manager

Here in Derbyshire we have an enormous opportunity to push for local actions on the global crisis. We want green and wilder cities, protected woodlands and native new forests, uncut verges, wildflower meadows, restored peatland and thriving uplands. These inspiring places, great and small, are also a key measure to preventing the crisis.

We need to act together. The following actions will make sure your voice is heard. Please join us.

Action 1: Campaign for local government to deliver nature's recovery

During May local elections, our Manifesto for a Wilder Future was supported by candidates from across the political spectrum, including the leader of Derbyshire County Council.

Ahead of COP26 we are now calling for local councils to make good on these pledges by adopting policies for nature's recovery. To learn more, read the manifesto and our guidance on how to ask your local councillor to help and how to implement these changes: www.derbyshirewildlifetrust.org.uk/local-elections-2021



Photo: © Janet Dias in Buxton

Action 2: #GrowDontMow

In May this year we launched our #growdontmow campaign, asking people to lock away their mowers, kick back and watch the grass grow between their feet. Hundreds of you have taken part in this simple, yet amazing act of wildlife kindness, and if you haven't yet, there is still time and it's easy. Banishing the mower and letting the grass free not only saves you time but most importantly, it really helps your local wildlife. Gardens up and down Derbyshire have burst into life with buttercups, violets and dandelions encouraging visits from bees, butterflies, hedgehogs and much more.

Tidy gardens are so last year, embrace the wild

Not only is it good for Wildlife, but it's good for you too. Sarah from Oxcroft took part in #growdontmow and she wrote in to tell us that not only had she seen an increase in wildlife in her garden, but it had really helped with her own mental health during the Covid-19 restrictions, allowing her to focus on the positive whilst on furlough.

'Since we stopped mowing, we discovered a beautiful, purple wild orchid, which was a complete surprise, we would never have discovered it, and we probably would have mown it away, had it not been for #growdontmow. We have now turned the no-mow meadow into a feature.'

Ready to take the cut

We know that at some point you might want to cut your grass but it's best if you resist cutting until all the flowers have finished blooming – usually in August. And make sure you check for any hedgehogs or any other wildlife that may be hiding. If you don't want to cut all, you could try leaving a few long patches around the edges for all the insects that have laid eggs in your grass. If you want to do more, why not keep your grass cutting to make a winter hideaway for frogs, hedgehogs and all the insects that will be the natural pest controllers in your garden next year, like ladybirds and earwigs.

Still time to get involved

Whether it's a large lawn, a whole field or just a small patch of your garden, it's really simple: just let your grass grow and wait and see what pops up. Fancy adding a bit of colour? Send in your photo of unmown grass to wilder@derbyshirewt.co.uk and we will send you some free wildflower seeds.

No lawn to cut?

No problem, we have the perfect action for you to take, that will have the bee's buzzing, the bats flapping and the caterpillars crunching with our latest campaign, #gopotty for wildlife.





Derbyshire
Wildlife Trust



Action 3: #GoPottyForWildlife

Go Potty for wildlife on your balcony, window ledge, patio or community area, use whatever space you have. This small act of wildlife kindness is not only wonderfully wild but passing insects and pollinators will love it.

What can I use to plant in?

Pretty much anything, recycle, up cycle, be creative, be fun, paint an old jar, even an old pair of wellies.

What can I grow?

This depends on the time of year. September is great for growing your own food, like radish, turnip or onions!

September and October is also the perfect time of year for planting native wildflower seeds.

1. Choose a fine autumn day when the soil is not too wet or too dry.
2. Find a container, large wooden planters oversized pots or old baths; the bigger the better as wildflowers don't like to be too cramped

3. Dig over the soil with a fork and break up any large clumps, remove weeds or stones
4. Scatter your wild flower seeds over the soil by hand, a few at a time, evenly cover the seeds lightly with soil.
5. Place in sunlight and gently water the area.

Now leave over winter and once the weather gets warmer you'll see the seedlings starting to show, add a little water and keep an eye on them, making sure the soil is moist. You'll have a pot full of beautiful flowers next spring.

Show you care

Show your neighbours and friends that you want a #wilderderbyshire by downloading a #growdontmow sign for your garden or a #gopotty sign to put in your window – www.derbyshirewildlifetrust.org.uk/small-impacts-big-impact

The most exciting part about #growdontmow or #gopotty is seeing what wildlife comes to visit.

Did you know we are the proud hosts of the Derbyshire Biological Records Centre?

The information logged helps us to build a picture of the wildlife across Derbyshire.

Next time you're having a cuppa, take it outside and see what you can find. Let us know what you spot at: www.derbyshirewildlifetrust.org.uk/wildlife/record-sighting



Action 4: Reduce Reuse Recycle

The way we consume is really important, the world's natural resources are finite, and some are in really short supply. Recycling is crucial to the future of our planet.

How can you help?

Next time you're out shopping why not buy used? We have two amazing charity shops in Bakewell and Belper for you to visit. You'll find some amazing bargains or perhaps even a vintage classic.

If you have items you don't want any more then give them a second lease of life by passing them on. It's easy to donate: just drop your bags off at one of our stores – and we'll be there to say a huge thank you.

Where?

Belper shop at 6 King St, Belper DE56 1PS or Bakewell shop at Matlock St, Bakewell DE45 1EE

Donate

Your donations are vital to us. Did you know that we can make £25 per bag of your unwanted clothing and the money made goes back to protecting Derbyshire's wildlife.

Action 5: The Big Wild Walk 2021

Get fit, have fun and raise money for wildlife. Getting sponsored will help raise vital funds for wildlife. Invite your friends and family along and start a conversation about why this is important.

When? Between 25th-31st October

Why? It's not only about raising money – walking on the Big Wild Walk shows people you care about wildlife and about the natural world we live in.

Who can take part? Everyone

Where? Walk in your local park – your favourite route or find a new trail. We will be sharing set routes with exciting activities at locations across Derbyshire.

If you are ready to Walk for Wildlife during the week beginning 25th October, then download your pack to sign up: www.derbyshirewildlifetrust.org.uk/bigwildwalk



What is SHIFTING BASELINE SYNDROME?

“In every walk with nature one receives far more than he seeks.”

John Muir (1915)¹

National Forest © 2020 Vision

Dr Anna Gilchrist and Joseph Glentworth – Department of Planning & Environmental Management, University of Manchester

Nature invokes a variety of positive responses in humans, including awe, tranquillity and creative inspiration. These reactions can be formative in our reading of nature, often catalysed through childhood experiences and subsequently relived throughout our life course. In this sense we create a “baseline”, or reference point, of the nature we know, appreciate and want to protect. We might then use this baseline as a way of recognising the loss or decline of nature. Certainly, ecologists use baselines to define targets for conserving biodiversity, such as the habitat that we consider is most suitable for a particular species because that is what it currently inhabits. But how much do we actually interrogate this baseline? As Muir recognised in the opening quote of this article, nature’s ability to amaze and surprise us perhaps means that we fail to consider what we might be missing.

In the majority of the UK’s landscapes, the nature we know from our lifetime is significantly diminished from what has gone before. This is not however, just a phenomenon of the 21st Century; for centuries, probably millennia, with each passing generation, there has been a deteriorating shift in the baseline of what we accept as typical wildlife. This phenomenon of repeated declines in the intergenerational knowledge of “normal” nature has been termed Shifting Baseline Syndrome. It was first coined by Daniel Pauly² to describe that the fishery industry was often unaware that catch sizes of specific fish species



Extract from a re-constructed nature diary (1915) by Anna Gilchrist

had been declining over decades. It has since been applied beyond individual species to demonstrate that our understanding of wider ecological processes may often be misinterpreted. Dutch ecologist, Frans Vera³ for instance, argued that nature conservation in Europe has used erroneous reference points to define what is “natural,” including the pervasive belief that without humans, much of Europe would have been dominated by closed canopy forest. Instead, he argued that a diverse array of large herbivores such as tarpan, aurochs, wild boar and others may have created a much more varied and dynamic mosaic of habitats, which should be reflected in contemporary ecological restoration. Subsequently, Shifting Baseline

Syndrome has been applied to ecosystems around the world to demonstrate society’s ignorance of the damaged state of nature Soga and Gaston⁴.

Why is Shifting Baseline Syndrome Important?

“The greatest impediment to rewilding is an unwillingness to imagine it”

Michael Soulé & Reed Noss⁵

Critically, this syndrome is both a social and ecological one. As nature declines, so too does our connection with it. This severance affects our knowledge and understanding of natural phenomena (for example, being able to recognise and name starlings and their murmurations). It also inhibits our ability to imagine ourselves living within healthy, thriving ecosystems. We are all affected by our own shifting baselines.



Recreated with kind permission from Cartoon Ralph
Follow on: @CartoonRalph on Twitter
Facebook <https://m.facebook.com/cartoon.ralph>

But Shifting Baseline Syndrome goes way beyond individual perspectives of nature. It has made ecological impoverishment commonplace in policies, institutions and our wider culture. Arguably, even our landscapes with the greatest level of protection are degraded precisely because of the use of inappropriate baselines. This means we preserve just a fraction of the nature that could be in our

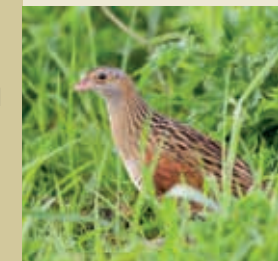
WE NEED YOUR HELP!

We want to help create a former baseline of the nature around the Win Hill / Thornhill Carr landscape near Bamford.

Do you have any of the following that you might be able to share with us:

- Old photographs or aerial photography
- Paintings or artwork (photographs of these would be fine!)

landscapes. These sites are often fragmented, and managed based on specific ideas of what natural means in that location at a specific point in time. And all too often, wider society accepts and tolerates degraded nature, and perceives it as normal, because we don’t have anything else to compare it to.



Corncrakes used to be found across the agricultural landscapes of Derbyshire in the early part of the 20th Century but are now nearly extinct in the UK, confined to a few Hebridean islands in Scotland.

What can we do about it?

Delving deeper into the history of our landscapes can help challenge our perceptions of nature and reveal other past baselines where nature was much more abundant than it is today. These clues are not just in our scientific records but can also be found in our cultural assets (artworks, pottery, poetry, literature and song) and in our historic records (like place names and toponyms). They also live on in the memories of our older generations. Like those who can recall that they used to be kept awake in summer evenings because of the noise of the corncrakes calling in the field behind their house. Or those that can remember mile upon mile of bushed out hedgerows heaving with bird song across the countryside. Or even those who can recollect the rotational field systems that underpinned traditional upland management practices. These memories are important portals to help better understand what we had, and importantly, what we could bring back for the future. They provide insights not just in terms of past ecological baselines, but what it was like for people to experience these baselines.

Derbyshire Wildlife Trust are working with researchers from the University of Manchester to capture these memories and use them to inform work to address Shifting Baseline Syndrome.

1. Muir, J. Travels in Alaska. Boston and New York Mifflin Company. Houghton The Riverside Press Cambridge. 1995: 1-144.
2. Pauly, D. Anecdotes and the shifting baseline syndrome of fisheries. Trends in Ecology & Evolution. 1995; 10(10): 430.
3. Vera, F. The shifting baseline syndrome in restoration ecology. In Restoration and History. Routledge. 2010: 116-128.
4. Soga, M, Gaston, K J. Shifting baseline syndrome: causes, consequences, and implications. Frontiers in Ecology and the Environment. 2018; 16(4): 222-230.
5. Soulé M, Noss R. Rewilding and biodiversity: complementary goals for continental. Wild Earth. 1998; 8 (1): 18-28.

- Species lists or nature diaries
- Memories of what this landscape used to be like

If you have anything that you think might be relevant, please email Anna and Joe at: NODAL@manchester.ac.uk

Gifts in MEMORIAM

A gift made in memory of a loved one can be a fitting way to celebrate and remember their life. Your support could maintain the spring blossom in our ancient woodlands or cultivate the fragrant wildflowers in our summer meadows for future generations to benefit from and enjoy.

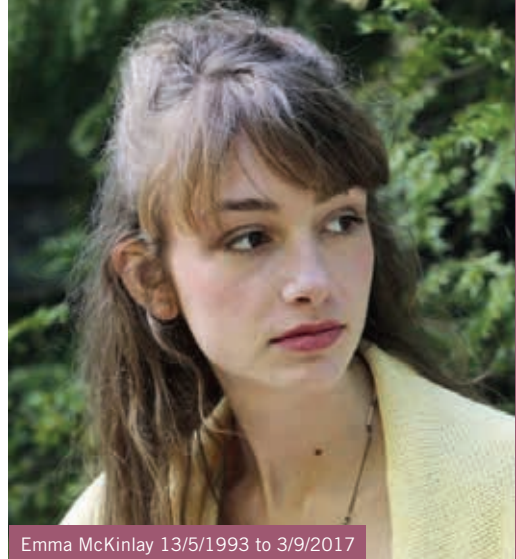
Here, Ross and Sue McKinlay share their story of how they chose to remember their precious daughter Emma and her love for wildlife, by supporting the wildlife at Thornhill Carr.

Our family has always enjoyed the outdoors and the countryside and we have had some of our happiest family times on Wildlife Trust reserves all over the UK. When the children were small they loved marked trails which encouraged them to run ahead to the next post and enjoy the simple pleasures of nature. When they were older they still loved these special places, whether on a family walk spotting wildlife or out trekking with their friends. We always felt better for it.

Sadly our 24 year old daughter, Emma, died in September 2017 after 3 years battling with a rare blood malignancy. During her illness, when she felt well enough, we enjoyed many gentle restorative walks at a wildlife reserve close to our home, near Lincoln. Now our walks take us back to those happy times with her there, and give us the comfort which closeness to nature can bring.



Emma's art



Emma McKinlay 13/5/1993 to 3/9/2017



The McKinlay family in the 90's



Emma's art

It was when we were walking in our local reserve that we were inspired by the idea to support the Wildlife Trust to fund some kind of trail as a memorial to Emma. When we approached the Derbyshire Trust, they suggested a sculpture trail on the Thornhill Carr Rewilding site and this seemed absolutely perfect! We are now as a family very enthused about rewilding and truly delighted to be supporting this project in Emma's memory.

The thought that this trail will introduce more of the public to the amazing rewilding concept is such a positive thing. We feel that despite our huge sadness, we have the joy of using her memory to reach out to a better, brighter and more beautiful future for us all. It has given us back our hope. Emma would have definitely approved and this is a tremendous comfort in our grief.

Emma's art was often inspired by the beauty of the natural world and the knight she painted for the Lincoln Knights trail "The Guardian of the Forest" was covered in animals, insects, flowers and foliage. She died on the last day of the trail.

www.silent-frame.com/emma-mckinlay

It can be especially difficult to say goodbye to a loved one but we hope the thought of a memory which lives on will provide some comfort to you during a time of sadness.

Please get in touch with us, if you would like to know more about a gift made in memory. We will be mindful that you are contacting us in what might be a difficult time for you and your family. Thank you for thinking of us. You can send us an email (enquiries@derbyshirewt.co.uk) or give us a call (01773 881188).



Blackberries. Photo: © Amy Lewis

Messy HABITATS Brambles

Penny Anderson

I bet you have your favourite bushes where you go blackberry-picking, but did you know that the reason could be the fact that there are over 320 micro-species that differ in small details – and you will have selected the best in your patch for picking?

Don't worry, I am not going to try to describe this variation, but there are some similar species that are worthy of your attention. Rare on rocky screes and limestone slopes in the White Peak is stone bramble (*Rubus saxatilis*), which has stiff hairs but few or no prickles, hairy lower leaf surfaces and creeping stems that can still trip you up. The long-stalked leaves are in three sections (trefoil form) and the off-white flowers develop into bright red berries (see photo). This is generally a plant of upland Britain here on the south-east edge of its range, like so many of our Peak District species. Look for it in the Wye Valley – Priestcliffe Lees, Derbyshire Wildlife Trust's nature reserve, for example, and the south-east limestone. Charles Dickens refers to it as the mountain bramble "known only to the inhabitants of the hills" in his *The Miner's Daughters – A tale of the Peak*, where children scramble through the dales picking its fruits in a story of hard-drinking lead miners and pinched framework-knitters (1).

The young greyish stems of another bramble look-a-like, dewberry (*Rubus caesius*), separate it from blackberry, along with its less robust, prostrate and prickly habit and reduced vigour. The fruits differ in their bluish waxy bloom and fewer, larger segments, and are not particularly tasty, being rather insipid. Dewberry is abundant in the Trust's Miller's Dale Nature Reserve, but is a native species of wood edges, hedges, damp woods and thickets occurring occasionally on the White Peak and Magnesium limestones in the county but rarely elsewhere.

So back to blackberries. Seventy-one species are listed in the Flora of Derbyshire (2), some of which are thought to be extinct. But you need to be a specialist to separate them out. In general terms, the aggregate is a scrambling, prickly, native perennial plant, with stems that last for two to three years before dying back. These long, arched stems become positively geotropic (responding to gravity) turning down to the soil where they root, leading to amazingly rapid spread. These arching branches were once called "lawyers" as they are difficult to escape once entangled (3). Their deep, entrenched roots and rapid growth heralds fast invasion of disturbed ground in particular, in woodlands, hedges, waysides and waste ground. They occur throughout the county except on deep peat and in the most acidic soils.

The bramble aggregate is very variable, with each mostly producing seed through self-fertilisation, accounting for the many localised micro-species, but they do occasionally hybridise, further confusing identification. They are a very valuable habitat, producing fruits not just for us, but for a myriad of animals, some of which, like fox, badger and birds, will be carriers of the seeds to new sites. Their flowers offer nectar for honeybees, bumblebees and other invertebrates. Various caterpillars depend on their leaves such as the bramble shoot moth, a member of the Tortricidae family, and animals like deer will browse them. Their thick tangled mass provides cover for nesting birds such as some warblers as well as robins and blackbirds. The prickly mass also protects small mammals from predators. Bushes were once planted on graves, to cover weeds and keep sheep off, but also possibly an echo of more ancient and magical customs of keeping the dead in and the Devil out (3).

Our blackberry-picking customs are longer established than you might think. Blackberry

remains have been found in the stomach of a Neolithic man. Culpeper (4) considered it "openeth and cleanseth the liver, helpeth the jaundice, and is very beneficial to the bowels, healing all inward wounds, bruises, hurts and other distempers". A decoction of the herb added to wine was supposed to be good for the biting and stinging of serpents. Applied to the skin in old swine's grease (!) helped old sores, cancers and ulcers as well as drawing out splinters. Mrs Grieves in her herbal book (5) wrote of blackberries being called "scaldhead" in some parts either though the eruption known as scaldhead in children that ate too many overripe fruits, or from the remedial effects of the leaves and berries on this scalp malady. Creeping under the bramble bush was a charm against rheumatism, boils and blackheads and was supposed to give protection against "evil runes" if gathered at the right time of the moon. It is probably safer now to confine blackberry use to wine, pies, jam, fruit salads and jellies, for it is rich in Vitamin C. (6) gives a particularly good junket recipe made from blackberry juice.



Bot Acre Stonebramble



Whitethroat with blackberries. Photo: © Margaret Holland

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3. Mabey, R. (1996). Flora Britannica. Sinclair Stevenson, London.
4. Culpeper, N. (1826). Culpeper's Complete Herbal and English Physician. Facsimile of original Cleave, J & Sons, Deansgate, Manchester by Gareth Powell Ltd.
5. Grieve, M. (1976). A Modern Herbal. Penguin Books, London.
6. Mabey, R. (1972). Food for Free. A guide to the edible wild plants of Britain. Collins, London.

TOGETHER, WE CAN DO IT

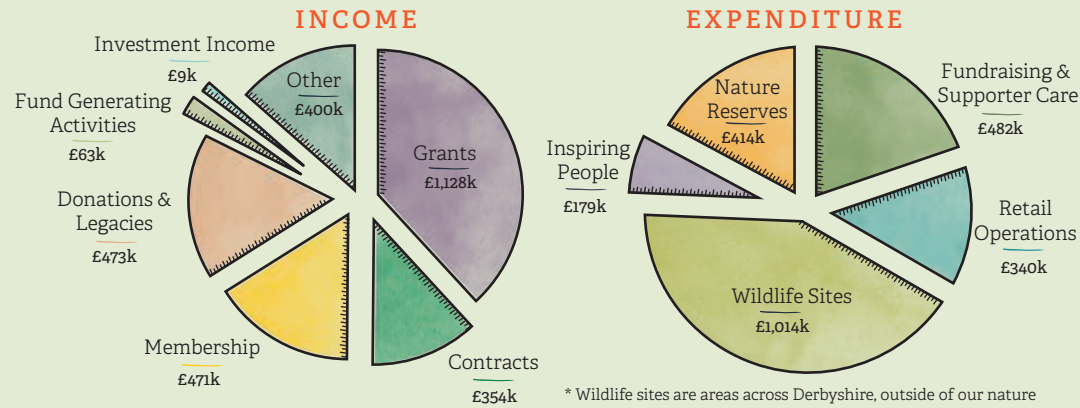
In these page you'll see the impact of our work for nature – made possible by you. From the places saved, wildlife protected or the people inspired & acting for wildlife. Yet, our natural world is still in trouble. Wildlife is disappearing at an alarming rate & we're in a climate crisis. That is why we're calling for at least 33% of Derbyshire be connected & protected for nature's recovery by 2030.

Let's make it happen, together: derbyshirewildlifetrust.org.uk/support/join



FINANCIAL REVIEW 2020 - 2021

For full accounts, annual report, trustee list and funders' information, visit: derbyshirewildlifetrust.org.uk/accounts



* Wildlife sites are areas across Derbyshire, outside of our nature reserves, where we are working to restore and reconnect nature.

Derbyshire Wildlife Trust, Sandy Hill, Main Street, Middleton, Derbyshire DE4 4LR
Derbyshire Wildlife Trust is registered in England and Wales, company number 715675. Registered charity number 222212.

THE TRUST GROWS TO £5M BY 2025

Increase membership income
2025 aim: £944,408
20-21 aim: £580,000
actual: £471,000

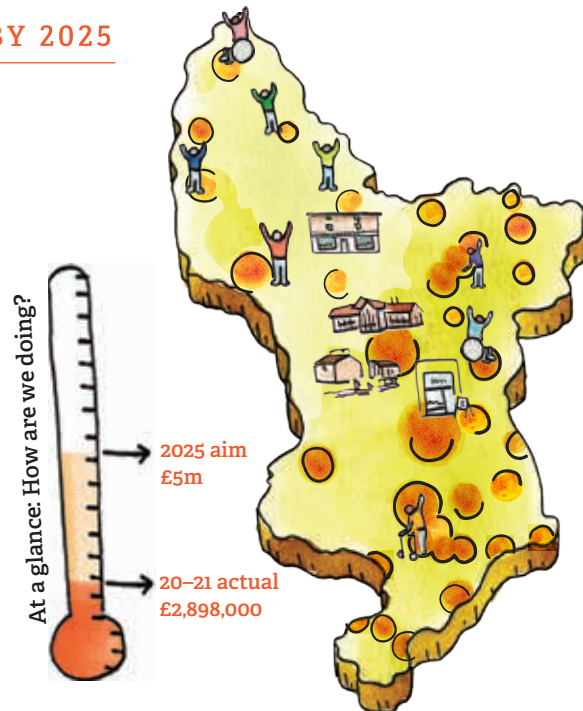
Members heat map
Map highlights areas with highest density of memberships

Increase commercial income
2025 aim: £580,000
20-21 aim: £235,244
actual: £58,000



Increase income from all sources
2025 aim: £5,000,000
20-21 aim: £2,900,000
actual: £2,898,000

A little note on some data across our maps: we've used approximate data. We've flagged these in the key. We're working hard to report against actuals next year.



33% OF DERBYSHIRE IS MANAGED FOR WILDLIFE BY 2030

Ha of land we have direct influence over
2030 aim: 7000 | 20-21 aim: 1200 | actual: 1040ha ↓

We achieve this in two ways, see points 1 & 2. We're also developing new partnerships & provide advice on land we have not yet mapped.

2. Ha of new land being rewilded that we have influence over
2030 aim: 700ha | 20-21 aim: 81ha | actual: 35ha ↓

DWT rewilded land see Thomhill Carrs

1. Total % of land managed for nature in Derbyshire
2030 aim: 33% | baseline: <5%

DWT Nature Reserves Local Wildlife Sites SSSIs in favourable condition

Successful DWT projects which ensure vulnerable species are in local recovery
2030 aim: 10 | 20-21 aim: 2 | actual: 3 ↑

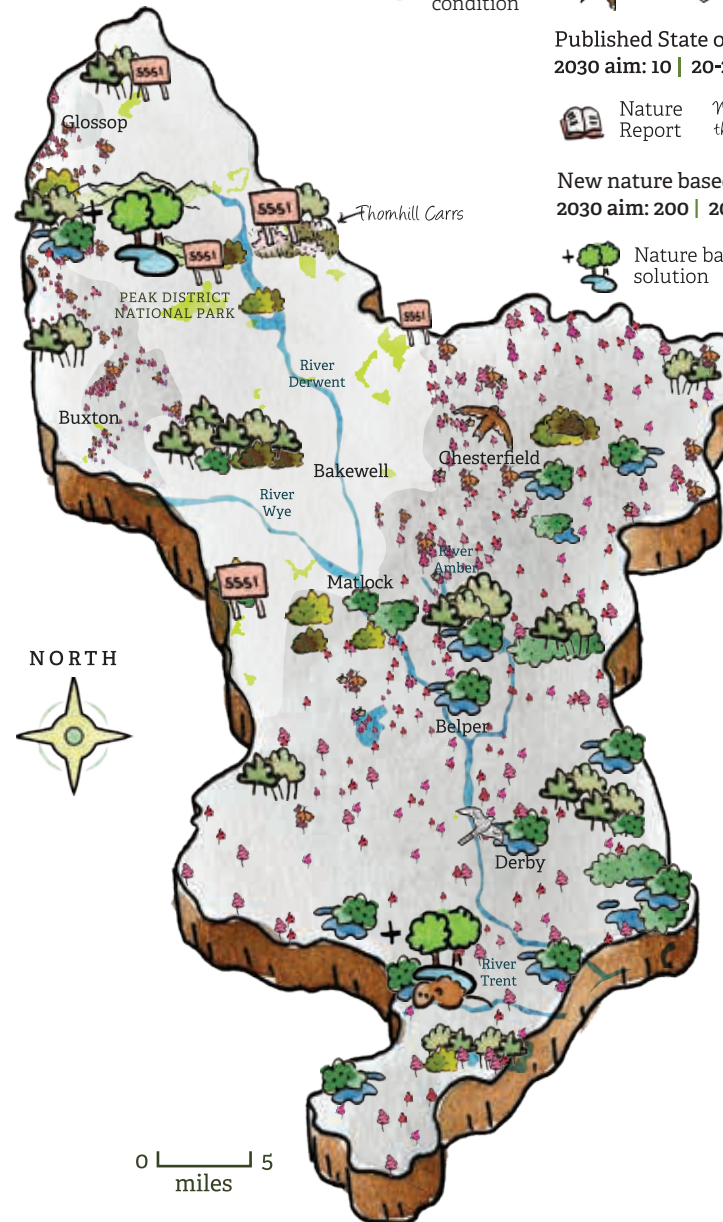
Swifts Peregrines Water Voles Countywide

Published State of Nature Reports
2030 aim: 10 | 20-21 aim: 0 | actual: 0 ✓

Nature Report We are all set to publish in the next few months

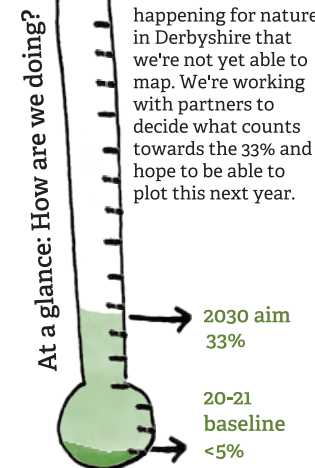
New nature based solutions initiated
2030 aim: 200 | 20-21 aim: 10 | actual: 0 ↓

Nature based solution We spent this year identifying nature based solutions that already exist.



33% OF DERBYSHIRE IS MANAGED FOR WILDLIFE BY 2030

a little note
We recognise that there is a lot more happening for nature in Derbyshire that we're not yet able to map. We're working with partners to decide what counts towards the 33% and hope to be able to plot this next year.



MORE PEOPLE NOTICE AND CARE

Wilder community engagements that improve the connection between nature & wellbeing
 2030 aim: 100,000 | 20-21 aim: 10,000 | actual: 5,400 ↓

Wilder community engagements Each one of these icons represents 1000 engagements

New programmes to connect new audiences
 2030 aim: 12 | 20-21 aim: 2 | actual: 2 ↑

Horizons 6th Form YMCA Key College

Developers/corporates who commit to biodiversity gain
 2030 aim: 1000 | 20-21 aim: 100 | actual: 144 ↑

Developers Corporates These are plotted randomly on map but exclude the Peak District National Park

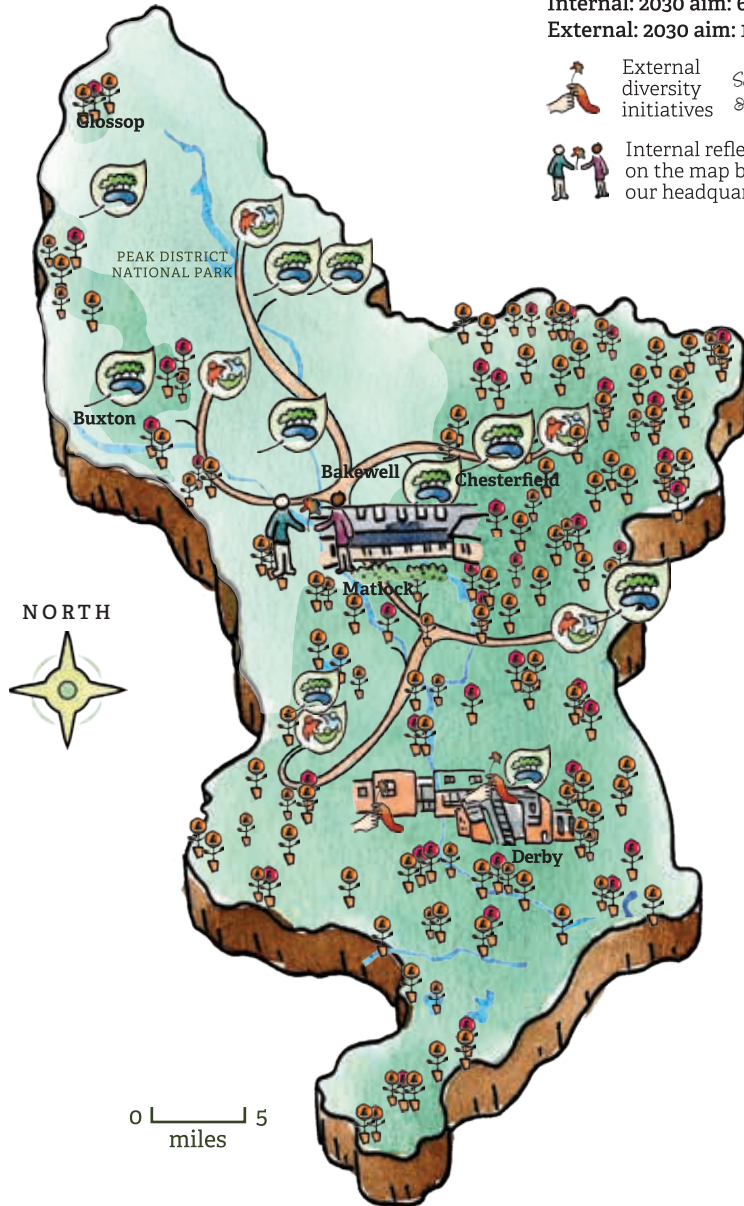
Wilder initiatives established in schools/public spaces
 2030 aim: 100 | 20-21 aim: 10 | actual: 10 ✓

Wilder initiatives

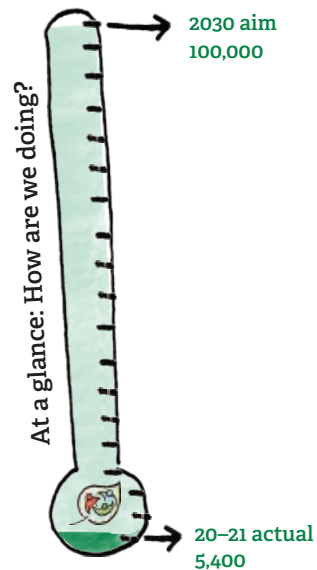
New initiatives to improve diversity & inclusion
 Internal: 2030 aim: 60% | 20-21 aim: n/a | actual: 32 % ↑
 External: 2030 aim: 15 | 20-21 aim: 0 | actual: 2 ↑

External diversity initiatives See Horizons 6th Form & YMCA Key College

Internal reflected on the map by our headquarters



WILDER COMMUNITY ENGAGEMENTS



1 IN 4 PEOPLE ACT FOR WILDLIFE BY 2030

People in Team Wilder
 2030 aim: 100,000 | 20-21 aim: 1,000 | actual: 0 ↓

Team Wilder people Delayed start until 2022

Team Wilder Champions
 2030 aim: 300 | 20-21 aim: 10 | actual: 8 ↓

Team Wilder Champions Plotted randomly

Corporate & agency relationships
 2030 aim: 160 | 20-21 baseline: 41

Corporate & agency relationships Some may be based outside of Derbyshire so not mapped

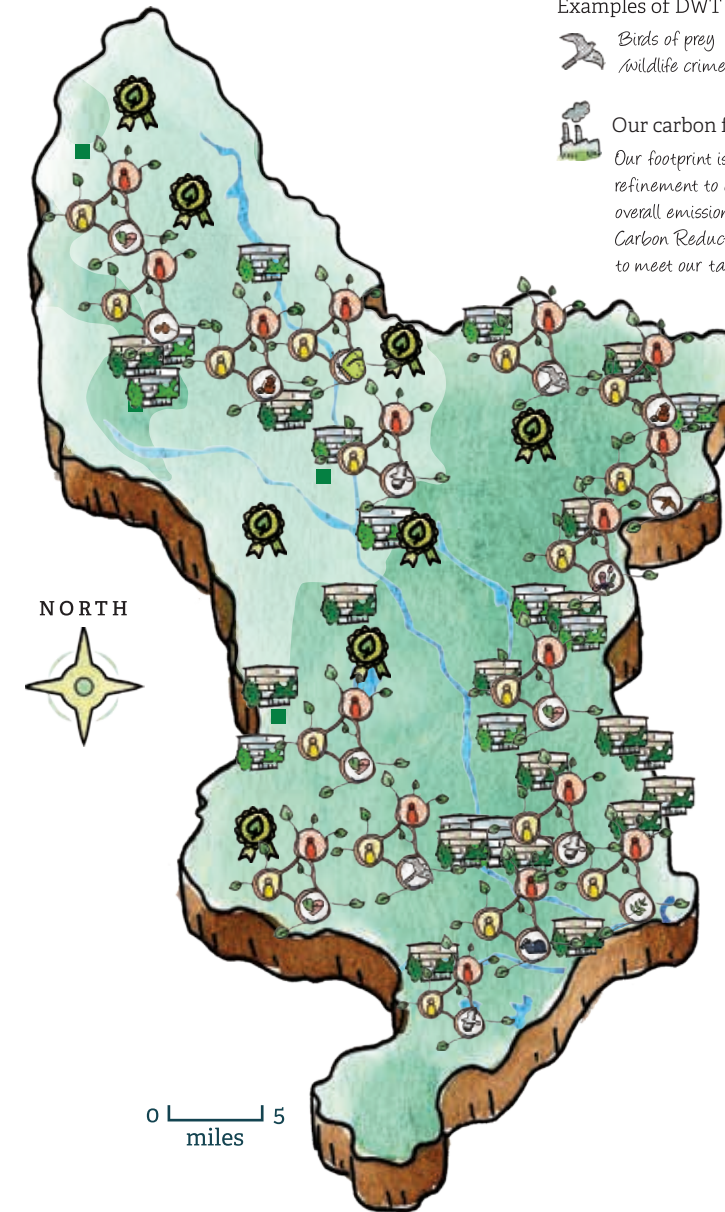
No. of people engaging in campaigns
 2030 aim: 100,000 | 20-21 aim: 15,000 | actual: 52,000 ↑

People engaging in our campaigns locally & nationally

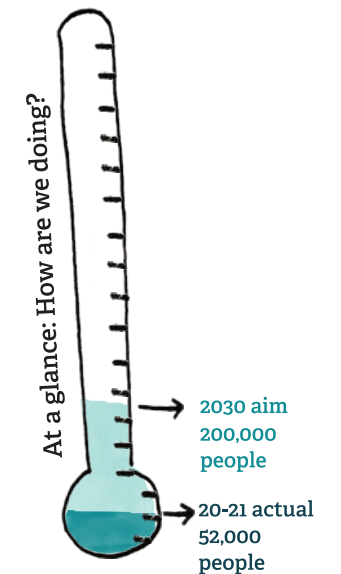
Examples of DWT campaigns

Birds of prey wildlife crime Campaign against the badger cull Took part in 30 Days Wild

Our carbon footprint for 19-20 is 267 tonnes CO2e
 Our footprint is larger for 19-20 than our baseline footprint due to refinement to our carbon tool enabling us to better reflect our overall emissions. We are reviewing all our operations as part of our Carbon Reduction Strategy, including our livestock practices in order to meet our target of net zero by 2025.



1 IN 4 PEOPLE ACT FOR WILDLIFE



Approximate population of Derbyshire: 800,000



What is THE WILD PEAK PROJECT?

Phoebe Cox – Living Landscape Adviser

Wild Peak is Derbyshire Wildlife Trust's ambitious rewilding project, that is working in close partnership with landowners, local projects and communities, our neighboring Wildlife Trusts and Rewilding Britain to inspire and implement long-term, landscape-scale conservation gains that are driven by wildlife.

Building on Lawton's conservation principles of bigger, better, more and joined up, the project is working towards creating, restoring and connecting wild spaces across the region. Working with and between existing initiatives and conservation sites, Wild Peak aims to create an on-the-ground network that will allow wildlife to move freely across the landscape again and be able to adapt to our changing climate.

The project also encompasses a number of exciting, research-based tasks to support our rewilding journey, including undertaking opportunity mapping and gap analysis of rewilding

areas; research into moving to a nature-based economy and how landowners can diversify their income streams; and, taking the first steps to understand if and how we can start to reintroduce some of our lost species back into the region!

The Wild Peak Vision

Through collaborating with our partner Wildlife Trusts, local community groups, land owners, and other organizations working in the region, we have created an exciting, long-term vision for the Wild Peak...

The Wild Peak is a place where wildlife is thriving and extending into our surrounding towns and cities. Where ospreys soar overhead; and black grouse and hen harriers are back where they belong. Our wildflower meadows sing with insects, bees and butterflies, and our blanket bogs suck in our rain and contribute as a carbon sink. Native woodlands are re-generating and expanding, teeming with pine martens, adders and red squirrels. Beavers are effectively managing our wetlands. It's a dynamic place, valued by and benefiting society, locally, nationally and internationally.

Progress so far?

People and communities are at the heart of the Wild Peak project and we are already witnessing the power that local people and grassroots initiatives have in establishing rewilding gains in the Wild Peak area. To date, we have over 600ha of locally owned land pledged for rewilding, and are regularly out, on-site, visiting new landowners and community groups that want to be involved. The sites range from species-rich meadows and established woodlands, to ex-pasture land and roadside verges that have never been managed with nature in mind. The sites also have a huge geographic spread and a broad range of ownerships, from local land owners and farmers to large corporations, like Hope Valley Cement Works.

As well as pledged land, the project has also gained its first corporate sponsor – Porter Pizza,

a local and independent wood-fired pizzeria, who have pledged to match their monthly expenditure on firewood, to support our project!

Over the last few months, we have been busy undertaking a range of baseline surveys at a number of sites, pledged to the Wild Peak project; and using this data, we have developed our first ever rewilding management plans. These plans set out the initial actions and long-term goals for the sites and include a tailored monitoring plan to track the changes in wildlife at each site. We have also been working on a simplified template with instructions, so that land owners and other members of the public can start to build their own rewilding management and monitoring plans. We hope to release these later this year alongside a series of webinars that we have been developing – so keep an eye out for these!



Peak District, Thornhill



Peak District, Thornhill

What's next?

Next month we will be officially launching our project and its website (wearewildpeak.co.uk), where you will be able to find all the information and resources you need to get involved with the project. Once live, the website will showcase our new, interactive pledging map, that will allow users to map their pledges to the project, whether that is land, time or money, and see the wider-network of other pledges across the region! This tool is really useful for visualising the growing nature recovery network and understanding what's going on in your local area.

The next stage of the project is all about growing our network of people and places that are connected for nature, through continuing to engage with new interested parties and land owners who want to rewild their land. We are also

looking into setting up an exciting and accessible crowdfunding opportunity, to allow members of the public to sponsor the purchase of an area of the Wild Peak that will be secured for nature forever.

To achieve landscape scale restoration of ecosystems, we also need to be bold and look towards some of the region's largest landowners for change, as over 20% of the land within the Wild Peak boundary, if we include the National Trust, is owned by our public bodies and statutory undertakers. We have started to see small changes in the way some of this land is managed, but in order to see the large-scale change that is needed, we must maintain pressure on these organisations through projects such as the Wild Peak.

If you want to find out more or make a pledge to the project, please email us directly at wildpeak@derbyshirewt.co.uk.

Why Keystone & Indicator Species MATTER

by Tarun Ingvorsen
Senior Living Rivers Officer

Atlantic salmon are an iconic species of fish, one that we all know the name of and many have probably eaten. Did you know, though, that they are a keystone species? A keystone species is one that has a disproportionately beneficial effect on all life around it, helping to define entire ecosystems and facilitate life therein. Additionally, Atlantic salmon are classed as an indicator species. That is, a species that indicates the health of a watercourse and is used to monitor the improvement or decline of a habitat or ecosystem. It is no wonder they are called the King of Fish. Not all keystone species are indicator species, but both are affected by the rapid degradation of our natural world.

Earlier in the year news outlets reported that freshwater fish species globally are in rapid decline, with responsibility falling to mankind's actions alone. Last year Environment Agency data revealed that **NO English river passed pollution tests, with less than 15% achieving a "good" ecological status**, the second level on a five tier grading system. It is widely acknowledged by freshwater ecologists that any waterbody achieving less than a "high" ecological status is not good enough.

Freshwater habitats are under severe threat from a slew of horrors – raw sewage, agricultural pollution, pesticides, heavy metals from road run-off, detergents, warming temperatures, low oxygen levels, plastic, fly

tipping, invasive species, siltation from irresponsible and uneducated land governance and destruction from poor management techniques.

Aquatic species and habitats are often overlooked and forgotten about, especially in our post-industrial cities where many rivers, once used as waste disposal, have now been culverted underground, long since forgotten. Because of this, and the fact that species found underwater aren't "cute" or "fluffy", often sporting scales, fins, external gills or pincers, they are regularly ignored and disregarded when it comes to donations, adoptions and support.

The Atlantic salmon is a prime example of this. As a keystone species, once abundant in our waterways, it would have supported whole estuarine, riverine and even arboreal ecosystems, as seen in the Baltic States and in the Pacific North West of North America. These effects would have been very obvious in our largest rivers, the Trent, Thames and Severn, as they would have held a greater number of salmon. The salmon would in turn support a huge array of life, including healthy populations of wolves, bear, lynx, eagles, osprey, seals, porpoises, some dolphins and whales, otter, kingfisher and even pelicans. This is not to mention sustained fantastic populations of other fish that would have fed on salmon fry and eggs. Freshwater invertebrates would thrive on the gravels caused by spawning salmon. Deer, wild horses and cattle would

graze the rich, lush forests and grasslands fertilised by dead salmon and the faeces of species that would have fed on them. The diverse meadows created would have sustained myriad insects, rodents, birds and reptiles.

Shamefully, our populations of Atlantic salmon have almost disappeared, with only about 5% of the fish spawned in British waters returning to spawn themselves. Increases in pollution levels, water temperatures and soil run-off are too high to support large populations of the King of Fish. Those that do remain face a depleted prey resource, barriers to migration and parasitic lice from the fish farming industry that greet them at the start and conclusion of their great migrations. Sadly, these pressures are not decreasing. Despite our "acknowledgement" of the climate and biodiversity crisis, little is actually being done to preserve and enhance our nature by those that have the most power and capability to do so. Year on year, criminal negligence to nature is on the increase, even by industry leaders, as oft reported in the news. Often as not, these incidents accrue nominal fines. Therefore, any loss of Britain's (one of the world's most nature depleted countries) natural landscapes or wildlife is so devastating.

Salmonids (members of the salmon family) support another rapidly decreasing family of sweet water legends – the freshwater mussels. The larvae of freshwater mussels attach themselves to the gills of salmonids and hitch a ride to exposed gravels from the fish spawning, which just happen to be the perfect location for mussels to live. Once there, they drop off and bury themselves into the riverbed. Gravels and clean stream beds are shrinking in prevalence as soil and silt from poorly managed land wash into waterways, smothering the delicate habitat. This is unwelcome news for fish and river fly species, too, as they also rely on this type of river bottom to reproduce.

It is no coincidence then that salmon, freshwater mussels and river fly species, such as mayfly, are considered indicator species. Unfortunately we don't often come across salmon in our Derbyshire rivers, but when the Living Rivers Team are out monitoring our watercourses and scoping areas for river restoration projects, we conduct surveys that examine these and other indicator species. Fortunately, they are very easy to do and the easiest, kick sampling, can be carried out as part of a citizen science programme called Riverfly, by many local groups. Additionally, we are using it to collect a baseline data for our Willington Wetlands Nature Reserve site, to help in monitoring the positive effects of the beaver reintroduction (another keystone species). It is by regularly using this survey

technique that we can help locate stretches of water, or even whole watercourses, that are in need of attention. If an abundance of indicator species is found, then that stretch 'typically' isn't doing too badly. If abundance is low, then we search for other issues – pollution, misconnections and sewage leaks, run-off from roads and fields and even fly-tipped chemicals. The Trust can then work with landowners, councils, governing bodies and the public to find a resolution. Perhaps, we can even create a project to restore these delicate habitats to their former glory.

Benefits aren't just to nature as science now shows that clean blue spaces are important for our mental health and wellbeing. It is in our best interest, as well as nature's to improve our watercourses. The more people that are aware of them and their importance, the greater the chance of government-led, nationwide blue space restoration.



Atlantic salmon (Salmo salar) © 2020 Vision



Freshwater Swan Mussel (Anodonta cygnea), Tarun Ingvorsen

If you want to help your local, regional or national blue space, then drop us an email at livingrivers@derbyshirewt.co.uk



Broad leaved sundew © Tom Marshall



Hen Harrier



Mountain hare (Lepus timidus)



Common spotted orchid © Paul Lane

Ghosts of the LANDSCAPE

Diane Gould – People Engagement Officer

Climate & Nature Crisis
Ghosts of the landscape

As a child my family summer holidays were spent on the North Yorkshire Moors. We walked and picnicked on the moors all the while admiring what we believed to be beautiful unspoiled landscapes filled with purple heather. Years later, as a student of Ecology at Leeds University, I had the option to study paleoecology for my final year dissertation. I jumped at the chance to learn more about the history and habitats of one of the places I loved so much. Eagerly I headed up onto the nearby moors to get core samples from the depths of the peat and then spent hours behind a microscope counting pollen grains and looking for macro fossils. This evidence would enable me to reconstruct a picture of the habitats and climates that had existed up on the moors through hundreds of years. Having always been interested in history the process fascinated me, but the story that unfolded filled me with sadness. Time and time again the evidence showed periods where vegetation and habitats were lost or

changed on a massive scale and the driver, most of the time, sadly, was humans. The moorland I believed to be beautiful and unspoiled was merely a fragment of a landscape that once flourished. It is in fact a common misconception that our uplands are wild, unspoiled areas. In reality they have been shaped by humans since ancient times. 10,000 years ago, when the last ice age ended, a wild wood developed across the whole country, which was home to boar, wolves, bears, beavers and bison. However once Neolithic man started to create settlements on the upland areas the woodland clearances began and we started to lose species. Removing the tree cover on higher ground caused the thin soils to erode, which made the deforestation irreversible and, coupled with the effects of a deteriorating climate, it caused the soils to become more acidic, eventually resulting in the spread of peat. Large areas of the once vast wild wood were lost to semi-natural open moorland.

Moorland in itself however is an incredibly valuable habitat and as such are designated as Special Areas of Conservation, Special Protection Area or Areas of Outstanding Natural Beauty. As well as providing a home to many species of international importance, our peat-based uplands have the ability to trap and store carbon, reduce flood risks and supply us with clean drinking water. Be that as it may, humans very quickly started to also manage this habitat. Charcoal in peat profiles indicates that fires have been a long-term feature on blanket bogs over centuries. It is hard to determine which fires were natural and which deliberate but we do know that regulated burning extends back at least into the medieval period and continues to this day. Now many protected areas are in very poor shape with 36% of all the special features designated as part of the upland SSSI/ASSI network in unfavorable condition.

Within the last 1000 years our uplands have suffered more than ever before. Pollution, natural climatic effects and overgrazing have certainly taken their toll. For example, in the last century deposition of sulphur and nitrogen from the atmosphere has acidified upland streams, affecting aquatic invertebrates such as mayfly and caddis fly, which in turn has had an effect on birds and fish. But perhaps the biggest threat facing our uplands is the fact that large parts of the uplands are now managed intensively for red grouse.

The land management practices associated with sports such as driven grouse shooting have had massively detrimental effects on our uplands. Intensive burning regimes and drainage have eroded and degraded the moorlands, levels of Dissolved Organic Matter have almost doubled in upland waters since the late 1980s. The loss of the distinctive heather moorland communities and the spread of grassland are significant concerns due to the loss of biodiversity and productivity that follows. Our uplands should be home to black bog rush, small white orchids and carnivorous plants such as great sundew. They should be alive with thriving populations of peregrine falcons, hen harriers, goshawks, and mountain hares, but they are not. Our upland areas are in trouble; this land management has deprived our uplands of the full range of wildlife that should be present in this semi-natural landscape and the illegal persecution of our birds of prey has left huge areas of our uplands bereft of birds.

When I visit the moorlands today as an adult, with a better understanding of the history of our land management, instead of seeing the beautiful unspoiled landscape that I perceived it to be as a child, I now see a landscape sadly bereft of its species. I see the ghosts of the plants and animals that we have lost, the ghosts of our landscape.
To learn more see: www.derbyshirewildlifetrust.org.uk/hen-harrier-day

Working together for wildlife

50/50 Club winners

Congratulations to recent winners!

Jill Hounslow-Eyre, Susie Gee, John and Elaine Holloway, Mr & Mrs S J Crook, Patricia McHale, Jean Lowe, Mr Graham M Sisson, John Green, Kayzi Ambridge, Karen E Gowing, Chris Budworth and Sandra Heard.

Feeling lucky?

The Wild Dreams 50/50 club raises funds which will be paid to a Landfill Operator to release Landfill Communities Fund monies for Derbyshire Wildlife Trust. Please note that these funds are not eligible for Gift Aid. The funds could generate 10 times their worth.

To join at just £12 per year please fill out the form below and send a cheque (made payable to Wild Dreams) to the Trust office or complete our online form at:

www.derbyshirewildlifetrust.org.uk/raffles-and-clubs

Name (s)

Address

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Telephone number Email address

Number of subscriptions at £12 each Total amount enclosed

Because of you

The Trust is very lucky to receive funding from a number of grant-making trusts who are supportive of our work. We are also grateful to the many members of the public, our local groups and businesses who help us by hosting donations boxes, as well as the many activities and events that raise funds for the Trust, all of which are very valuable sources of income for us.

Thank you to everyone who has given a donation so far this year. Your support really does make a difference to local wildlife!



To make a donation, please visit: derbyshirewildlifetrust.org.uk/donate

A big thank you!

The Wildlife Trusts have been in partnership with conservation award-winning Vine House Farm Bird Foods since 2007 and have raised an amazing £2 million through donations.



In memory of



We would like to show our deep appreciation to families who have sent us "Gifts In Memory" donations. If you would like to know more about how to remember a loved-one through a donation, please send an email to: enquiries@derbyshirewt.co.uk

Ladybower Reservoir. Photo: iStock.

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We work with businesses across all our living landscapes in different ways, from supporting the delivery of community projects to managing land for wildlife, with a lot going on in between! We love working with all our Corporate Partners as we believe that together we can enable a greener recovery for Derbyshire.



If your business would like to get involved, please get in touch on: enquiries@derbyshirewt.co.uk



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