

Wild

Leicestershire
and Rutland

Membership magazine

Winter/Spring 2022



THE DOMAIN OF THE SEA DRAGON

The unexpected discovery
in Rutland of one of the
UK's most exciting fossils



Leicestershire
& Rutland
Wildlife Trust

FABULOUS FISH

The Leicestershire and Rutland
species also found in our oceans

5 MILLION BIRDS

A landmark milestone for
Wetland Bird Surveys



Welcome



After over a decade working in the Wildlife Trusts movement, it's a sad but exciting time as I write my last column for LRWT. I'm leaving to take up a position as Head of Natural Science with the Interim Office for Environmental Protection. But wow – what an issue to leave you with!

I love where LRWT, and the whole movement, is headed and how it has evolved under such difficult circumstances. Never has there been such a sense of urgency to act, to tackle the twin challenges of climate change and biodiversity loss. We are united in creating a movement for change and that starts with you, our members, who are already taking action to protect your local wildlife. We call this Team Wilder.

At this critical juncture in history, it seems poignant that we are looking to our local past, exploring where we've been to understand where we're going next. We never thought that journey would take us 200 million years back in time! Read the incredible story on p10.

There are so many ways you can play your part in restoring nature. Everything you do for wildlife, big or small, plays a vital role in achieving our vision of a Wilder Future, where 30% of land is connected and protected for nature's recovery by 2030.

I'm looking forward to seeing all this work continue so that LRWT reaches its full potential. Thank you for your continued support for all our important work, and I wish you all the very best for the future.

Tim Graham

CEO



Leicestershire and Rutland Wildlife Trust *Get in touch*

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Protecting and enhancing the wildlife and wild places of Leicestershire and Rutland and engaging people with nature.

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18



28



Contents

4 Wildlife news

Read the latest news and stories from LRWT and around the UK.

8 Wild thoughts

Dr Amir Khan on why a wild life is a healthier, happier life.

10 Domain of the sea dragon

The unexpected discovery in Rutland of one of the UK's most exciting fossils.

14 Wild winter walk

Explore one of our best local sites for fossils: Tilton Railway Cutting.

16 Be fascinated by fossils

Find the best spots around the UK to see geology in action.

18 Five million birds

And counting! We've reached a milestone for the Wetland Bird Survey.

20 Supersonic superstars

How a Forest School approach has helped one Leicester primary school.

24 Upcycle your garden

Kate Bradbury shows how to make the most of the 'rubbish' lying around your garden.

26 My wild life

Meet Robert and Karin who have transformed a limestone quarry into a wildlife haven.

28 From stream to shining sea

County fish recorder Andrew Heaton brings an underwater world to life.

32 Events and activities

Get out and about with our guide to events and activities.

6 ways to get involved with Leicestershire and Rutland Wildlife Trust

Gift membership Help someone feel more connected to nature by signing them up as a member
lrwt.org.uk/gift-membership

Donate From purchasing land to vaccinating badgers to helping bats flourish, we rely on your donations
lrwt.org.uk/donate

Legacy You can include a gift in your Will for wildlife and the future of our local natural world
lrwt.org.uk/legacy

Businesses Become a corporate supporter of LRWT and make wildlife part of your business
lrwt.org.uk/corporate

Wildlife Watch Inspire a wild child by signing them up for our junior membership, Wildlife Watch!
lrwt.org.uk/wildlife-watch

Local Groups Be inspired by walks, talks, events and activities in your local area
lrwt.org.uk/local-groups



Celebrate our 65th Anniversary with a gift to local wildlife

At the end of last year, we launched our 65th Anniversary Appeal to raise vital funds needed to enable us to carry out the work we are doing on our nature reserves.

We would like to say a huge thank you to everyone who has donated so far, we are so grateful for your support. We have not yet reached our goal of £65,000, so if you are able to donate, every contribution whatever the size will make a huge difference.

Since 1956, we have been working on the ground to restore nature; our founders lobbied on the proposed route of the M1 motorway through the Charnwood Forest and in 1961, we started managing our first nature

reserve, Charnwood Lodge. Since then, we have grown our network of nature reserves and for over 60 years, they have provided a diverse range of precious habitats across Leicestershire and Rutland, essential for wildlife to survive.

Our reserves are now some of the last remaining wild places that are critical to help nature recover. Thousands of birds, insects and other animals across Leicestershire and Rutland are at risk and only a very small percentage of land is protected for nature. Our nature reserves are islands of hope for wildlife, and it is crucial that we protect them for the future.

With your support, we can continue to manage our reserves year-round to

ensure they are in the best possible condition for wildlife, and we can create and deliver land management projects that protect the rich and varied landscapes across our two counties. We will also be able to work with others across our towns and wider countryside to reconnect wild spaces and make more space for nature to become abundant once again.

Donate today to ensure our precious wild places survive and flourish for the next 65 years.
lrwt.org.uk/65-appeal

Donate
Now

Donate to our 65th
Anniversary appeal
at [lrwt.org.uk/
65-appeal](https://lrwt.org.uk/65-appeal)



Look out for spectacular displays of bluebells in our woodland nature reserves this spring.

Reed all about it!

A species of beetle not seen in Leicestershire and Rutland for over 125 years has been rediscovered at Rutland Water Nature Reserve during a recent aquatic botanical survey.

The reed beetle *Donacia thalissina* was discovered on Lagoon 2 in a clump of common spike rush (on which it feeds), during a plant survey carried out with the help of volunteers for BSBI Leicestershire and Rutland (the Botanical Society of Britain and Ireland). The records and identifications were confirmed by Graham Finch, the coordinator for beetle recording in Leicestershire and Rutland.

These medium to large leaf beetles are associated with marginal and aquatic vegetation. Many are conspicuously

brightly coloured with a metallic, jewel-like brilliance. Most have suffered dramatic declines in the UK in recent years due to loss of habitat from drainage, water abstraction, farmland run-off and infilling of lakes and ponds. The extensive areas of reedbeds and marginal vegetation at Rutland Water Nature Reserve have created a haven for specialist species of invertebrate.

A further four species of the Donaciinae family were recorded in 2021 including *Donacia marginata* (last seen in 1907), *Donacia clavipes* (last seen in 1932) and *Donacia cinerea*, which was recorded for the first time in the two counties in July!



Donacia thalissina, a species of reed beetle, has been rediscovered at Rutland Water Nature Reserve.

DONACIA THALASSINA © LRWT.

Record-breaking chiffchaff discovered at Rutland Water

A chiffchaff recorded at Rutland Water was the oldest known individual of the species in the UK! It was ringed as a juvenile in July 2009 on the nature reserve and wasn't encountered again until June 2020: 10 years, 10 months and 27 days after it was ringed. This beats the previous record holder by three years. Chiffchaffs typically live for around two years, so this bird is an extraordinary individual and shows the value of the habitat on the reserve to provide it with a safe breeding area for all these years.



Chiffchaffs typically live for around two years.

CHIFF CHAFF © JANET PACKHAM PHOTOGRAPHY.

LRWT AGM 2021

Our second virtual AGM, held on 17th November 2021, was well attended, with around 110 members joining staff and trustees online. CEO Tim Graham outlined the many impacts of the pandemic across all our operations during 2020-21, including the pressure on our finances (details of which were given by the Honorary Treasurer).

However, there were many positives. The resilience of staff, volunteers and members allowed much of our engagement work to move online. The successful 'Virtual Birdfair', activities and educational videos for children and families, the annual Recorders'

conference, local group talks, staff blogs and our first AGM webinar allowed us to maintain our contact with supporters.

Tim thanked everyone for their hard work and continued support. He also announced that he would be leaving LRWT to take up a post with the new Office for Environmental Protection. We wish him well in this new challenge.

Five new trustees, Silviu Petrovan, Bev Smith, Andy Thorpe, Abigail Wilkin and Matt Youngs were elected to Council, and Bob Bearne was re-elected. Ann Tomlinson stepped down from the role of Honorary Treasurer after over 20 years,

and Chair Anthony Biddle thanked her for her tireless efforts. He also thanked Ian Selmes, Andy Cotton, Ray Morris and Tony Clarke, who all stood down as trustees during the last year.

Finally, our guest speaker, Debbie Tann, CEO of Hampshire and the Isle of Wight Wildlife Trust gave an insight into 'Team Wilder', providing a timely reminder of how we can all play our part in restoring wildlife and wild places. The minutes of the AGM, including the text of the reports delivered, are available on our website.

Watch a recording of the AGM and our annual video of staff highlights at lrwt.org.uk/members



Birdfair

On 23rd November, we announced that LRWT would no longer run Birdfair. We set out below the full text of the letter sent to Trust members, Birdfair volunteers and all other Birdfair stakeholders to explain the reasons behind our decision.

It is with great regret that Leicestershire and Rutland Wildlife Trust (LRWT) has made the decision to no longer run the annual Birdfair at Rutland Water Nature Reserve. For over 30 years, LRWT, supported by its staff, volunteers and members, has been proud to run this internationally-renowned event. Working with our co-promoter, the RSPB, we have brought thousands of visitors to Rutland Water Nature Reserve for three days each August, and overall have raised more than £5 million for overseas projects run via the Birdlife International group of charities. We are immensely proud of this achievement in global wildlife conservation.

The global pandemic has had a significant effect on our day-to-day operations as a charity. Like many other similar institutions, we have seen income streams lost or reduced, with resultant significant impact on our financial reserves and thus the delivery of our charitable work.

Birdfair operations have contributed to these financial concerns. When COVID-19 struck, we were obliged to cancel the 2020 event. We could have chosen to close the gates of Birdfair for good at that point. Instead, we decided to press forward with evolving the event and continuing the Birdfair legacy. Our innovative Virtual Birdfair, held in 2020, showed how new digital techniques could be harnessed effectively to communicate with the public and spread the Birdfair message.

However, to continue Birdfair operations, we had to obtain external funding from the National Lottery Heritage Fund, as well as a loan from the Royal Society of Wildlife Trusts to support our working capital. Despite these measures, Birdfair operations made a loss of over £19,000 in Financial Year 20/21, which is wholly borne by LRWT. These stresses were exacerbated by the prolonged COVID-19 measures which meant that an event in 2021 was also not viable.

The impact of COVID-19 has meant that we have had to take a long, hard look at our commitment in operating Birdfair.

Birdfair proceeds have always been donated in full to Birdlife International. LRWT has never received any part of this, but we have nevertheless borne all the risks and liabilities. Moreover, a large part of our staff team has had to devote significant time to its preparation and running over the years, supported by our remarkable team of 341 Birdfair volunteers. This is a significant burden for any organisation, let alone a small, local, charity such as ourselves.

LRWT's focus now must be on our recovery from the financial impacts of COVID-19, and on our new forward strategy '30 by 30', which aims for 30% of land managed for wildlife by 2030. We also need to be aware that the world has changed markedly over the past two years. One realisation is that a vastly disrupting event

such as the global pandemic we are still experiencing may not be uncommon in future.

Other concerns have also been key to our decision. Firstly, the current format of Birdfair is heavily influenced by travel and tourism. The carbon footprint generated both by the event itself and the activities it promotes does not now fit well with our own strategy towards tackling the climate crisis.

Secondly, we have become concerned about the impact the event might be having on Rutland Water Nature Reserve itself in terms of compaction of soil in the site area. Whilst our studies have not been conclusive so far, our stewardship of the nature reserve must be taken seriously. On balance, we believe the risk to the site itself, and to LRWT's reputation should the site become damaged, outweigh the benefits of the event continuing at the nature reserve.

We conclude that in this overall scenario, continuing to run Birdfair in its current form presents LRWT with unsustainable financial, ecological and reputational risk. We feel that if it were to continue, then the event would need a radical rethink in terms of content and format. Given the other factors to our decision I have noted, LRWT does not have the resources to take up this challenge.

We have thought long and hard about all these concerns, and the decision has been an extremely difficult and sad one. But we knew that it was now time to make the future clear, in the interests of the event, and of everyone who is involved in it or supports it. We hope the legacy of Birdfair may live on in similar events, run by organisations with greater resources than our own.

Although we are bringing our involvement with Birdfair to a close, we are pleased to be able to announce a donation of £15,005 to Birdlife International. This amount is made up of direct donations and auction proceeds in aid of their Helmeted Hornbill conservation project supported by our Virtual Birdfair in 2020.

We send our thanks to all our sponsors, exhibitors, site contractors, and the many wildlife experts and media presenters who have supported Birdfair over the years. Thanks are also due to LRWT's members, the tremendous family of Birdfair volunteers, LRWT's Birdfair organisation team, the Rutland Water Nature Reserve site team, our finance team and Anglian Water. Birdfair could not have existed without these key people.

We wish you the best for the future.

Yours sincerely,

Dr Anthony Biddle
Chair LRWT



UK NEWS

UK UPDATE

Big vision, high ambition – a year of progress

This September marked the first anniversary of 30 by 30, our vision for 30% of land and sea to be restored for nature by 2030. In the past year we've launched some inspirational projects to restore land for nature, from saving meadows for mountain pansies in Shropshire to restoring rhos pasture in Radnorshire — marshy grasslands home to rare butterflies, curlew and snipe. Thanks to your generous support, we will continue to bring nature back across the UK — to link up wild places and protect and repair others. Our latest projects include securing more land for nature in Somerset's Avalon Marshes, an internationally important wetland landscape home to waders, wildfowl, and rare insects and plants, and

establishing England's first large-scale community rewilding project, on 170 hectares of land near Bere Regis, Dorset.

Discover more of our 30 projects at wildlifetrusts.org/30-30-30



SUNFLOWER © MATTHEW ROBERTS, WHITING INSIDE OF JELLYFISH © IAN WATKIN & CORNWALL WILDLIFE TRUST, SNIFE © ANDY ROUSE/2020VISION.



Vine House Farm grow over 100 acres of sunflowers

Sunflower power

Birdfood suppliers, Vine House Farm has generated £2 million to support the conservation work of The Wildlife Trusts. For the past 14 years, The Wildlife Trusts have been in partnership with the wildlife-friendly farm in Lincolnshire, with a percentage of each purchase of their bird seed going to local Wildlife Trusts and helping wildlife across the UK. This year saw the contribution pass the

impressive milestone, with the Covid-19 pandemic prompting more people than ever to purchase food for their garden birds. Vine House Farm grows 400 acres of bird seed crops, including the ever-popular sunflower seeds, as well as being a haven for wildlife in itself, with a thriving population of tree sparrows and other farmland birds. Learn more at wtru.st/2-million

UK HIGHLIGHTS

Discover how The Wildlife Trusts are helping wildlife across the UK



1 Great news for gulls
Gull chicks have fledged at South Walney nature reserve for the first time since 2015, thanks to a new predator-proof fence. Since 2017, no chicks have survived longer than a week, but this summer Cumbria Wildlife Trust recorded over 100 large and healthy chicks of lesser black-backed gulls and herring gulls — a red-listed and declining species. Find out more at wtru.st/Cumbria-gulls

2 Tadpole triumphs
The northern pool frog has been successfully reintroduced to Norfolk Wildlife Trust's Thompson Common, the last place it was recorded before its extinction in Britain in the 1990s. Since 2015, more than 1,000 pool frog tadpoles have been released on the site, with early indications promising that the frogs will form a self-sustaining population. Learn more at wtru.st/frogs-return



3 Jelly jeopardy
Cornwall Wildlife Trust supporter Ian Watkins spotted the unusual sight of a whiting trapped inside the bell of a compass jellyfish, whilst on a walk during National Marine Week. Juvenile fish often hide amongst jellyfish tentacles for protection from predators, but are occasionally stung and eaten.



Dr Amir Khan

 @DrAmirKhanGP  @doctoremirkhan



A dose of nature



I have just come in from the garden, having filled the bird feeders with sunflower hearts, topped up the watering station

with fresh water and refilled the bowls the hedgehogs like to eat from with crunchy kitten biscuits. As soon as I come inside, a magnificent male bullfinch plonks itself onto one of the feeders and starts eating the seeds, dropping as many onto the floor as it manages to get into its mouth. Luckily an opportunistic chaffinch is on clean up duty, guzzling any seeds the messy bullfinch drops. It is a lovely scene to watch unfold, calming and beautiful in its simplicity.

Many of you reading this article will be familiar with the feeling of positivity that fills our bodies when we spend time in nature, and as a doctor it is something I am increasingly “prescribing” for my patients. I have to be honest, sometimes I do get incredulous looks when I suggest a “dose” of time spent in green spaces to my patients to help sooth their ailments, either on its own or in conjunction with modern medicine; but for those who heed my advice, I have never had any complaints.

That is because there is scientific evidence that nature is good for us. When we go outdoors and embrace our natural surroundings our bodies produce less of our stress hormone, cortisol, lowering our heart rates and blood pressure. We also produce more of our “happy” brain chemicals, dopamine and serotonin, increasing our sense of calm and wellbeing.

It is relatively easy to spend time outdoors in the summer months when the sun is shining and everything is more inviting,

but we can get huge health benefits from nature as autumn and winter set in too. We need that boost to our mental health that nature gives us more than ever when longer nights set in, but the benefits don't stop there. Plants and trees naturally produce chemicals called phytoncides that help protect them against damage from bacteria, fungi and insects. As we spend time in green spaces, we breathe these chemicals in and they can help stimulate our own immune systems to produce more natural “killer” cells, which are vital for fighting off viruses, perfect for winter when respiratory viruses are more common. Nature can also help our brains focus better; by spending time looking at wildlife and plants during our breaks at work, we can give the parts of our brain a rest that are needed for attention and focusing, so when we return to work or a task we need to complete, we will be more productive. Being out in natural light is good for improving sleep — so make the most of those shorter days and get out there!

Sometimes it can feel difficult to go out if the weather isn't quite right, but it is important to carry our good summer habits into autumn and winter. For those who do go outdoors regularly, spread the word and encourage your friends and family to do the same, so they too can reap the benefits of our natural world.

Find inspiration to get outdoors and discover wildlife this winter with our selection of seasonal spectacles!



wildlifetrusts.org/winter-wildlife

WILD HOUSE CALL

You don't have to travel far for your dose of nature. Even in built-up areas, there are wild wonders to soothe your soul. Listen for the cheerful chirps of house sparrows in the bushes, or the soft cooing of pigeons perched on buildings.

If you have a garden, we've got lots of great tips to help attract even more wildlife at wildlifetrusts.org/actions



Dr Amir Khan is a Vice President for The Wildlife Trusts. He is an advocate for Green Prescribing and champions the benefit that being in nature has on health and wellbeing.

Wildlife mural unveiled at Leicester primary school



The wildlife mural at Queensmead Primary Academy took three days to create.

ART MURAL © LRWT.

A Leicester primary school is now home to a stunning wildlife-themed mural after one of its pupils won the top prize in Leicestershire and Rutland Wildlife Trust's 2021 Wild Art Competition.

Graffwerk street artist Wing Lo spent three days creating the vibrant artwork on a wall at Queensmead Primary Academy. The mural, which features animals chosen by pupils - a fox, ladybird, deer, bee and hedgehog - was the top prize for the creative talents of Year 6 pupil Yasmine Mohammed. Yasmine was one of almost 60 entrants into the Wild Art Competition, and her eye-level encounter with a hedgehog was judged to be the best of the bunch.

Rebecca Catlow, Yasmine's teacher, said: "We are blown away by the fantastic mural that Yasmine won for the school with her brilliant drawing. We asked the children to pick their favourite animals and Wing has done a fantastic job bringing them to life. The mural will have pride of place in the school playground, and it can also be seen from the street outside, so we hope that the local community will enjoy it as well."

The three winners received a set of art materials as well as a prize for their school. Young artist Neva Zaman, age 11, won a wildlife-themed chainsaw



Neva, from Evington Valley Primary school, won a chainsaw sculpture in the shape of a raven.

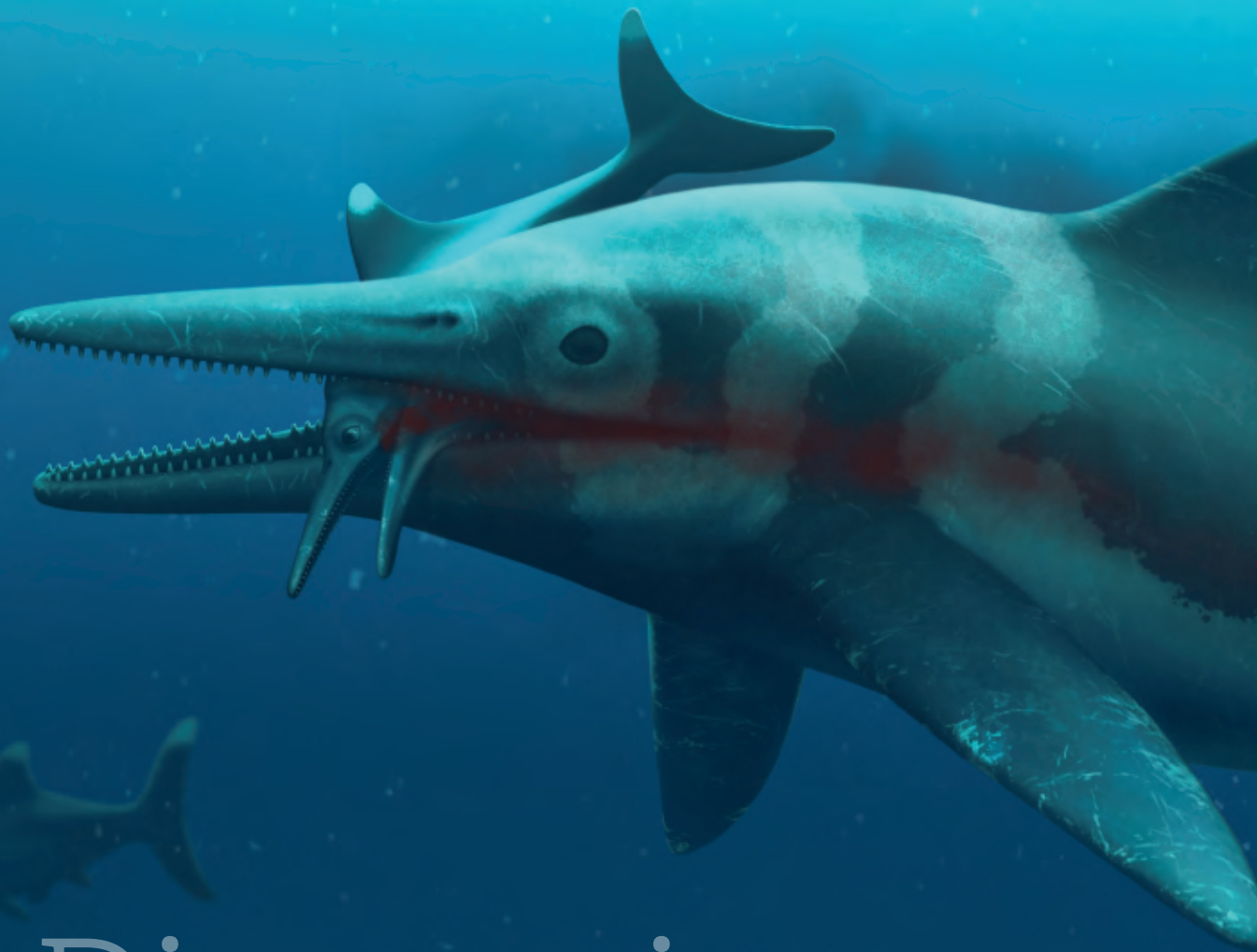
NEVA ZAMAN & MARTHA ROSE © LRWT.

sculpture in the shape of a raven for Evington Valley Primary School whilst Abidah Hossain, age 5, won a bumper pack of art materials for his class at Medway Community Primary School.

Jamie Perry, Head of Engagement for Leicestershire and Rutland Wildlife Trust, said: "We are so pleased to have been able to give these amazing prizes to the winners of our Wild Art Competition.

We would like to thank the players of People's Postcode Lottery who made this competition possible through their support for our Wild Forest School project."

Watch a timelapse video of the mural at Queensmead Primary Academy, as well as an exhibition of all the Wild Art Competition entries at wildforestschool.org.uk/wild-art



Discovering the Sea Dragon

Every day is different when you work on a nature reserve, but nothing could have prepared our reserves team at Rutland Water Nature Reserve for the day when they made the palaeontological discovery of a lifetime.

By Lucy McRobert

Imagine you're trudging along through the winter mud and ice on a brisk January day, a walk you've done hundreds of times before. You glance down and spot something, something unusual,

sticking through the frosty ground. Instinct tells you that this is different, this is important, this could be huge. That's just how Joe Davis and Paul Trevor felt when they nearly tripped over the biggest paleontological find ever made in Rutland.

"We don't spend a lot of time out on the lagoons," explains Joe. "We usually get the job done and dash off. Today was different because we were looking at reprofiling the islands on Lagoon 4."

Joe and Paul set off across the lagoon when Joe noticed what looked like clay pipes sticking up out of the mud, except that "they looked organic. I worked out

on the Hebrides, so I've found whale and dolphin skeletons before. This appeared similar and I remarked to Paul that they looked like vertebrae. We followed what





indisputably looked like a spine and Paul discovered something further along that could have been a jawbone. We couldn't quite believe it."

"I'll have to phone you back!"

Joe chuckles as he thinks back to his initial conversations with Rutland County Council.

"It was a great moment," laughs Joe. "I called the switchboard and asked to be put through to whoever would be responsible for a dinosaur discovery. The receptionist went very quiet and then replied 'I'm afraid I've never had this conversation before. I'll have to phone you back!'" →





Within a few days, a team of experts were on site to take a first look at the discovery, including Dr Mark Evans of the British Antarctic Survey and Visiting Fellow at the University of Leicester. It was clear from Dr Evans' flabbergasted expression that the find was beyond significant.

“When I first saw the initial exposure of the specimen, I could tell that it was the largest ichthyosaur known from either county.

“I've been studying the Jurassic fossil reptiles of Rutland and Leicestershire for over twenty years,” explains Dr Evans. “When I first saw the initial exposure of the specimen, I could tell that it was the largest ichthyosaur known from either county.”

The discovery is not the first at the Anglian Water reservoir, with two incomplete and much smaller ichthyosaurs found during the initial construction in the 1970s. Dr Evans continues, “it was only after our exploratory dig that we realised that it was practically complete to the tip of the tail. It's a highly significant discovery both nationally and internationally.”



Uncovering the Sea Dragon

Further excavations in February began to uncover a species of ichthyosaur, whose name derives from the Greek literally translated as ‘fish lizard’. They lived in the late Triassic and early Jurassic periods, around 180-million-years ago. A family of marine reptiles, an ichthyosaur was the first major discovery made by the notable fossil-finder Mary Anning of Lyme Regis, Dorset in the early 19th century (she was just twelve-years-old at the time).

Within a few days, further digs were exposing more of the skeleton. The conditions were far from perfect though, with snow, ice and mud inhibiting the project. It was decided that a full excavation was needed but would have to wait until the breeding season had finished.

“We had our best breeding season ever on Lagoon 4. 30 avocet chicks fledged that summer, showing how important it was that we waited for a quieter time to go back in,” remembers Joe.

Reflecting on the creation of Rutland Water, and especially the nature reserve area, it was a miracle that the skeleton hadn't been damaged or destroyed. The discovery might easily have been lost when the reservoir was created. Just a couple of centimetres of soil would have protected the fossil from the teeth of the bulldozer. Equally, if the lagoons had never been landscaped, the skeleton may never have been uncovered.

“When I think how close we've come in the past to damaging it,” reflects Joe, “we've missed it by a gnat's whisker.”

An ‘unprecedented discovery’

The full excavation, which took place in August and September 2021, was supported by BBC Two's *Digging for Britain* team, airing in early 2022. Working meticulously, palaeontologists uncovered what was almost a complete skeleton. At over ten metres long, this is the biggest and most complete skeleton of its kind found to date in the UK and is also thought to be the first ichthyosaur of its





species found in the country.

Dr Dean Lomax, a palaeontologist and a Visiting Scientist affiliated with the University of Manchester, has studied thousands of ichthyosaurs and named five new species in the process. "It was an honour to lead the excavation," he remarked. "Britain is the birthplace of ichthyosaurs - their fossils have been unearthed here for over 200 years. Despite the many ichthyosaur fossils found in Britain, it is remarkable to think that the Rutland ichthyosaur is the largest ichthyosaur skeleton ever found in the UK. It is a truly unprecedented discovery and one of the greatest finds in British palaeontological history."

"The block containing the massive 2m long skull weighs just under a tonne, comprising the fossil, the Jurassic clay in which it lies, and the encasing plaster of paris and wooden splints," explained Nigel Larkin, a specialist palaeontological conservator and Visiting Research Fellow at Reading University who also worked on the excavation. "It's not often you



are responsible for safely lifting a very important but very fragile fossil weighing that much. It was a very complex operation to uncover, record, and collect this important specimen safely."

"When I think how close we've come in the past to damaging it, we've missed it by a gnat's whisker."

"Another ichthyosaur tooth was found lodged in the tail, so we suspect that another species had a nibble after the creature had died. We also found two other ichthyosaur vertebrae from other species, one pretty close and one a bit further away, plus a really cool Stone Age arrowhead," laughs Joe. "I think they want to explore more of the area, but our first priority is the wildlife."

Multum in Parvo

The species is thought to be a *Temnodontosaurus trigonodon*, one of the biggest examples of ichthyosaurs that ever lived. This incredible sea creature is famed for its enormous eyes, around 20cm in diameter, the largest of any animal ever discovered. An apex predator, this dolphin-shaped ichthyosaur had long elongated fore- and hind-fins, a robust snout and conical teeth.

I asked Joe how this ranked in his career highlights, and he was quick to reply "Oh

this is definitely up there for me and Paul. I love how this area we're standing in now was an ocean, thriving with wildlife; it's come full circle, with the reservoir now supporting more, if very different, wildlife. I never thought in 180-million-years this would happen to me. It's phenomenally exciting and it's been fascinating to learn so much, too."

The specimen has now been carefully removed. To preserve the precious remains, Anglian Water is seeking heritage funding, and wants to ensure that it can remain in Rutland where its legacy can be shared with the public. CEO for Anglian Water, Peter Simpson said, "Rutland Water has a long list of fascinating archaeological and palaeontological discoveries, but none more exciting than this. We recognise the significance a find like this will have for the local community in Rutland. Our focus now is to secure the right funding to guarantee its legacy will last into the future."

It is remarkable to think how once again Rutland proves that it is *Multum in Parvo*, with the largest ichthyosaur skeleton ever fully excavated being found in the smallest county in England. 🐡



Fact file

Genus: *Temnodontosaurus*

Name: Cut-toothed-lizard

Size: 9-12 metres

Discovered: 1811-1812, by Joseph and Mary Anning

Lived: 175-200 million years ago

Ate: Vertebrates such as fish, plesiosaurs and other ichthyosaurs



Journey

to the bottom of the sea

A winter walk through Tilton Railway Cutting provides a unique view into the distant world of the Jurassic seabed. Here creatures that lived in the Jurassic period (200 million years ago) are revealed in rocks exposed by the navvies building the railway line in the 1870s. By Andy Lear.



HART'S-TONGUE FERN © ANDY LEAR.

Tilton Cutting is a Geological Site of Special Scientific Interest (GSSSI) and was once part of the railway from Melton Mowbray to Market Harborough. When the line was excavated in the 19th century, large numbers of fossils were exposed in the sediments. Tilton Cutting featured in the opening scenes of David Attenborough's documentary *A Life on Our Planet*. The reserve was one of the many places that inspired Attenborough to fall in love with the natural world; when he was young, he often visited the area to go fossil hunting.

Begin your journey into the Jurassic at the reserve entrance on Oakham Road **1**. Follow the path until you meet the steps **2** and begin your descent through time. Halfway down and directly

ahead you can see an exposed rockface revealing different layers **3**, getting progressively older the nearer they are to the bottom of the cutting.

At the bottom you are standing on the bed of what was once a warm shallow tropical sea **4**. The rock here is ironstone, a type of limestone, and consists of small spherical grains or ooids within, which are the fossil remains of creatures that once lived there. Many look similar to shells you might find on a sandy beach today – hinge-shelled bivalves and singled-shelled gastropods.



You might also see the ribbed coils of ammonites of the *Amaltheus* species whose nearest living relatives are squids, octopus and cuttlefish.

As you walk south along the cutting, the rock layers dip and the track rises so that you become level with progressively younger rocks (5). Within these beds are dense clumps of nut-like brachiopods, scallop-like bivalves and snail-like gastropods, as well as dark grey rods of belemnites. These are little colonies of animals suddenly overwhelmed by sediment during storms, buried and preserved in situ.

Further along, self-sown oak trees cling on to the cliffs and other trees and scrub arch over the cutting (6). In the cool shady atmosphere patches of ferns thrive, relatives of plants from the age of the dinosaurs. Midway along the cutting a large landslide of grey mud and shale has slipped down almost blocking the former railway track (7). This material comes from the Whitby Mudstone formation



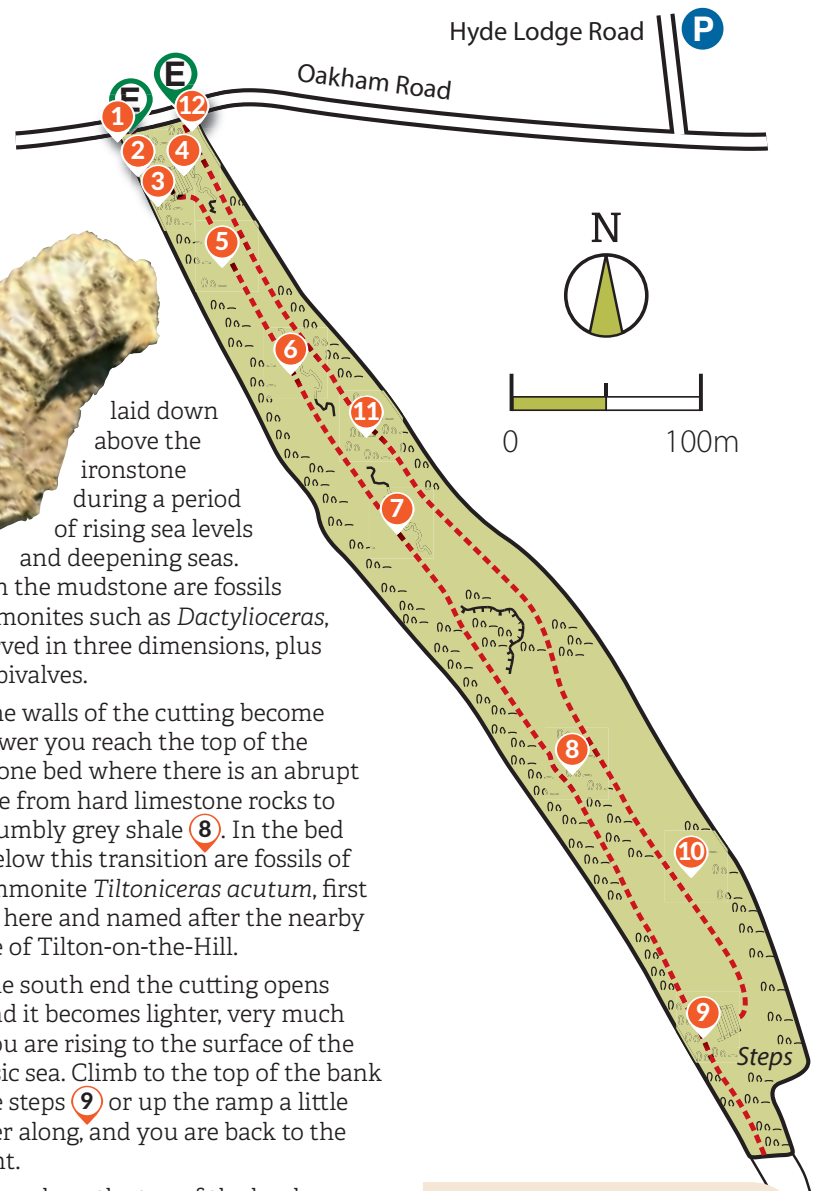
laid down above the ironstone during a period of rising sea levels and deepening seas.

Within the mudstone are fossils of ammonites such as *Dactylioceras*, preserved in three dimensions, plus more bivalves.

As the walls of the cutting become shallower you reach the top of the ironstone bed where there is an abrupt change from hard limestone rocks to the crumbly grey shale (8). In the bed just below this transition are fossils of the ammonite *Tiltoniceras acutum*, first found here and named after the nearby village of Tilton-on-the-Hill.

At the south end the cutting opens out and it becomes lighter, very much like you are rising to the surface of the Jurassic sea. Climb to the top of the bank up the steps (9) or up the ramp a little further along, and you are back to the present.

Return along the top of the bank through grassland pitted with rabbit holes where you can often see red kite, buzzard and raven resting in the trees or calling above (10). Heading north the bank narrows and you pass between a hedgerow and the scrub lining the cutting. Here you can get glimpses down into the Jurassic world far below (11). Return to the entrance where you become aware of the fast traffic on the Oakham road (12).



Fact file

The reserve lies to the south of the Tilton to Oakham Road, about 2km east of Tilton. The cutting is accessed by steep steps at either end. In winter and wet weather, wellingtons are essential. Rock faces can be unstable, and it is recommended not to approach too closely without wearing a hardhat. If you wish to look for fossils you may rake through the loose material in the spoil heaps but please do not hammer the rock faces. Dogs are welcome on leads.

Nearest postcode: LE7 9DJ

Parking: There is parking for one vehicle at the entrance. Please park on Hyde Lodge Road as the road next to the reserve is dangerous.

Size: 3ha

For further information, please see our Nature Reserves Guide or lrwt.org.uk

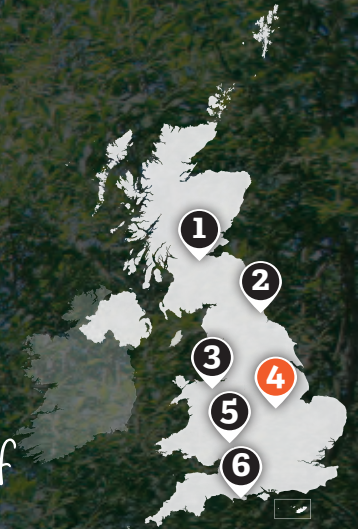
Please respect Government social distancing guidelines when visiting our nature reserves and check our website for updates.



UK NEWS

6 places to be fascinated by fossils

The story of the rocks beneath our feet has been written over almost 3,000 million years. They shape our islands and their rich wildlife. The word fossil is derived from the Latin *fossilis* meaning 'unearthed'. They are the preserved remains of plants and animals whose bodies were buried in sediments under ancient seas, lakes and rivers. Bones, shells and teeth are the most found, these hard body parts replaced by minerals that turn into rock. Nature reserves, whilst often protected for their wildlife value, can carry a huge geological value, too. For example, abandoned quarries might carry the scars of our industrial past, but also showcase a mix of history, industry, geology and wildlife. Exposure of rocks millions of years old can reveal fossilised species like brachiopods, gastropods and ammonites as well as fossilised shark teeth, shells and wood. This winter, take a moment to appreciate the fascinating fossils beneath our feet.



Forage for fossils for yourself

- 1 Petershill, Scottish Wildlife Trust**
An old limestone quarry noted for its geological exposure. Fossils from a prehistoric marine reef have been found, including trilobites, crinoids and brachiopods.
Where: Bathgate, EH48 4DT
- 2 Blackhall Rocks, Durham Wildlife Trust**
The 60-foot cliff consists of 20 feet of glacial boulder clays, separated by a bed of gravel. Below this, the exposed cliffs and rocks deliver a range of fossils.
Where: Blackhall Colliery, TS27 4DG
- 3 Minera Quarry, North Wales Wildlife Trust**
A renowned geological site. A 440-million-year-old seabed can be seen just beyond the pond and fossils can be spotted throughout.
Where: Wrexham, LL11 3DE
- 4 Tilton Railway Cutting, LRWT**
A real-life Jurassic world (except no dinosaurs), managed as much for geology as for wildlife. 200-million-years of history can be seen in the exposed rock layers. Tilton Cutting is the 'type locality' for several fossil species, including brachiopods, gastropods and ammonites.
Where: Tilton-on-the-Hill, LE7 9DJ
- 5 Stenders Quarry, Gloucestershire Wildlife Trust**
Brilliant for geological features, fossils and wildlife. Exposures of fossiliferous Lower Carboniferous limestone shales yield fossils of sea lilies, water fleas and shellfish.
Where: Mitcheldean, GL17 0HY
- 6 The Fine Foundation Wild Seas Centre, Dorset Wildlife Trust**
On the edge of Kimmeridge Bay, this interactive marine centre is situated on a beautiful stretch of Dorset's Jurassic Coast, perfect for exploring marine life and geology!
Where: Kimmeridge, BH20 5PE

Geology rocks!

Wildlife Trusts across the UK run guided walks and events to explore geology and fossils. Search for your nearest at wildlifetrusts.org/events

Take only photos

Check with the landowner before taking any fossils away: you may need to get permission to remove them. Take photos instead!



Five star winter species to spot

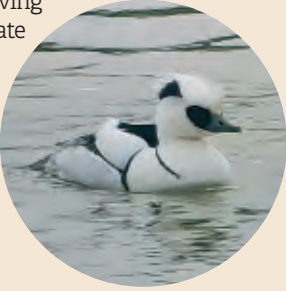
GREAT WHITE EGRET

Almost as large as a grey heron, with long legs and neck. Large, dagger-like bill (yellow for most of the year, but black in breeding birds). Upper legs yellowish.



SMEW

Small compact diving duck with a delicate bill. The male is white with a black mask and a black back, the female is grey with a reddish-brown head and white cheek.



PINTAIL

Long-necked and small-headed duck, which flies with a curved back, pointed wings and a tapering tail. Males are obvious in breeding plumage, with females harder to identify.



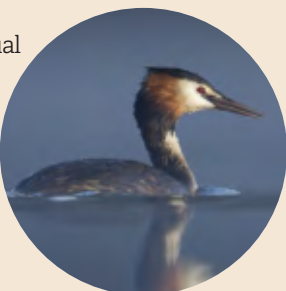
GREAT NORTHERN DIVER

Occasionally seen far from the sea on inland reservoirs in winter. The UK's largest diver, it has a big, heavy head and bill, and is black, white and grey in plumage.



GREAT CRESTED GREBE

Elegant waterbird with ornate head plumes. Look for their famous ritual dances to attract mates in late winter and early spring, complete with pondweed!



5 MILLION BIRDS...

...and counting. In 2021, staff and volunteers at Rutland Water Nature Reserve recorded their 5 millionth bird through the Wetland Bird Survey. Species and Recording Officer Tim Sexton shares the importance of this magical milestone.

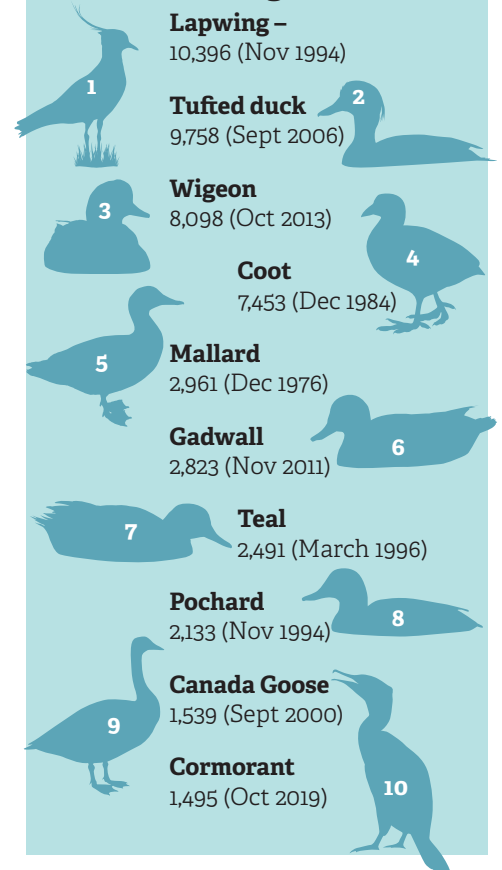
Gaze out over the lagoons in the winter and you'll understand why Rutland Water is so highly protected and internationally famous: literally tens of thousands of wildfowl make their home here every winter, with as many as 25,000 ducks, geese and swans. They are joined by wintering grebes, divers and egrets, coming together to create one incredible wild winter spectacle. Recording and counting these birds, in winter and all year round, is crucial to managing the nature reserve and in reaffirming Rutland Water's international importance as a wetland site.

Recording of wetland birds is done, unsurprisingly, though the Wetland Bird Survey (or WeBS). This monitors the UK's non-breeding waterbirds, providing data for population and trends in abundance and distribution. The counts are carried out once a month, on the same day across the country to avoid birds being double-counted as and when they move between sites.

As well as being a nature reserve, Rutland Water is designated a RAMSAR, SPA and SSSI for its populations of wintering ducks, with the WeBS being the most important survey carried out on the site. It has taken



Top 10 highest species counts recorded through WeBS



Look out for...

In the deeper water of the reservoir and both arms of the nature reserve, look for scaup, common scoter and red-crested pochard, great northern divers, red-necked grebes, black-necked grebes and Slavonian grebes. On the lagoons, a star species is the smew. Small flocks of whooper and Bewick's swans might be present, as well as pink-footed geese, mallard, tufted duck, teal, wigeon, pochard, shoveler, shelduck and pintail. If you're lucky, you might spot a wintering bittern, alongside other heron species including great white egret. Marsh harriers hunt over the reedbeds and you might hear the ping-ping-ping of a bearded tit. Wrap up warm and bring binoculars to get the most out of your trip!

The Wetland Birds Survey (WeBS)

WeBS is a partnership jointly funded by the BTO, RSPB and JNCC, in association with WWT, with fieldwork conducted by volunteers.

place at Rutland Water since September 1975 and is carried out by a team of staff and dedicated volunteers – some of which have been doing the count since day one!

In that time, over 5.2 million birds of 128 species have been recorded. In contrast to the first count, which recorded just eight species and 1,294 birds, numbers of waterbirds (which includes ducks, geese, swans, waders, rails, divers, grebes, cormorants and herons) now regularly exceed 20,000 individuals during winter.

With the exception of gulls, which have been recorded in roosts of up to 30,000 individuals in the winter months, there are three species which regularly dominate the rankings for the most counted winter waterfowl: tufted duck, wigeon and coot, with numbers exceeding multiple thousands per count.

Not a month goes by when there isn't a 'wow!' statistic, too. Highlights of the last year include the largest number of great white egret ever recorded on the site (41 in November 2021), the largest count of pintail since 2005 (288) and the largest count of teal in 25 years (2,128). Results of the WeBS counts, along with 10-year trends can be found in the hides around the Nature Reserve and are updated each month.

The long-term data, gathered through the counts over almost 50 years, provides a valuable insight in to the state of wetland birds at Rutland in response to a changing environment – particularly with regards to a warming climate. It also enables us to see how the nature reserve has evolved over time, especially as the site has grown and become more established in recent years.



Super Sonic superstars!



With thanks to funding from Central England Co-op, Education Officer Fee Worton has been working with one of Leicester's inner-city schools to deliver five weeks of Forest School education to children from Rowlatts Mead Primary Academy. Here's what they got up to.

Back in September 2021, I joined fifteen children from Rowlatts Mead Primary Academy on Tuesday afternoons for some fun activities in their school grounds. The children were lucky to have brilliant outside spaces that we could use, including a large school field and outdoor classroom that we have used as our base (and for shelter from the rain!).

The students got stuck in to exploring nature in ways that they never had before. The very first week saw a cornucopia of slugs feasting on fallen pears. We explored their movement, colour and habitat. We also saw huge amounts of craneflies, familiarly known as daddy long legs. Many

loved describing how their parents don't like daddy long legs in the house and shared their inventive ways of removing them. We talked about other creatures that we might find in our homes, the importance of caring for wildlife and the interconnectedness of nature.

Brilliantly, lots of children returned the following week to tell of how they had been educating their parents and encouraging them to adjust their attitudes to the common creepy crawlies that live amongst us! It was also very clear how, after just one session, they had started to notice things that they hadn't before, from craneflies to the birds, from tiny seeds to falling leaves.



Hedgehogs seen during the day may need help. For advice, visit leicesterwildlifehospital.org



“It’s incredible how keen they are to learn and how quickly they have started to see things differently.”

Learning from nature

Teaching Assistant Mrs Chadva was staggered at her pupils’ keen interest and motivation to explore right from the start. “It’s incredible how keen they are to learn and how quickly they have started to see things differently,” she said, “pointing out the insects and animals that they had never noticed before.” Vice Principal Mr Ashcroft reiterated this, saying how much these sessions have benefitted the children, and being enthusiastic about continuing with this way of learning.

For many children inner-city life presents a lot of challenges to accessing nature. These sessions have been some of the only time that these children explored and connected with local plants and wildlife in a relatively unstructured and child-led way. We love how the Forest School approach encourages children to become more independent and curious, and how much they learn from both each other and from the natural world when we let nature lead the way.

Pupils at Rowlatts Mead Primary Academy in Leicester enjoyed five weeks of Forest School.

Super Sonic

During one session the children saw a juvenile hedgehog trundling across their playing field, linking perfectly with the nocturnal learning journey they had explored earlier in the day. After a close-up look and a discussion about where hedgehogs live, what they eat and hibernation, they named him ‘Sonic Jnr’. Following the session, the hedgehog was taken to an animal hospital where he was treated for a tick infestation and where he’ll remain until he is healthy enough to be released.

Amongst other things we explored colours in nature, experimenting with making paints from natural materials including berries and mud and painted pictures outside. They all attempted to light a fire using a flint and steel, followed by the obligatory toasting of marshmallows.



Spending time in nature makes children happier and healthier.



REBUGGING OUR HOMES



Several species of spider thrive in houses



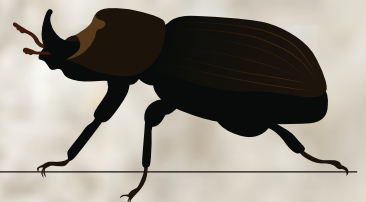
Vicki Hird

has been working on environment, food and farming issues for over 25 years. She explores more insect stories in her new book, *Rebugging the Planet: The Remarkable Things that Insects (and Other Invertebrates) Do — And Why We Need to Love Them More*

I've always loved bugs, from the ants in my garden to the huge rhinoceros beetles that wander our woodlands. Concerned by their alarming signs of decline, I've tried to share my love and encourage everyone to do what they can to help save them.

We can all benefit — humans and bugs alike — by rebugging our lives and homes; starting with how we think and view bugs, to how we eat, garden, what we buy and even how we talk about them.

Wildlife is all around us: it's not just out in the countryside, in woodlands or other remote wild places. It's in our towns, our gardens and even our homes! Here I explore — and celebrate — some of the tiniest housemates that have moved in with us, either permanently or just for a short stay (and that you might not even know about)...

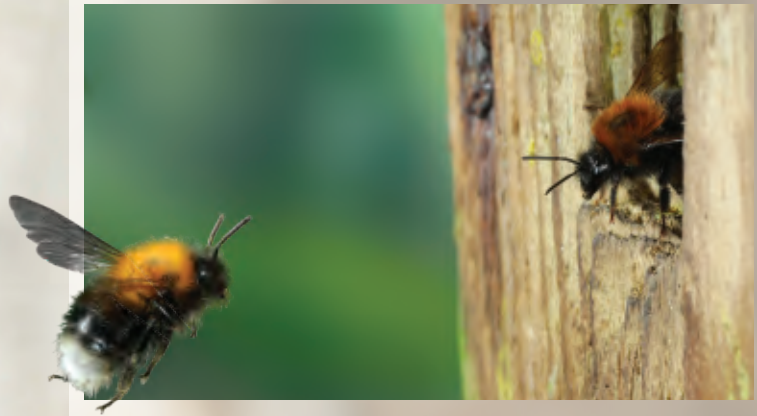


HOUSE SPIDER © STEPHEN DALTON NATURE PL.



Sharing your space

Your home and garden can be wonderful places, and not just for you. Thousands of creatures, visible and hidden share these spaces with you. From the fly-catching spiders sheltering in the corners of your bedroom, to the worms wriggling through your garden soil, the teeny pollinating wasps in your window box, and the cavity-nesting tree bumblebees tucked into a gap in your eaves. Not only do these creatures live peacefully and often unnoticed around you, but they also contribute much to your life. They are gardeners that help your flowers flourish, farmers that lend a hand with your home-grown veg, and bouncers that get rid of other less welcome house guests.



Nooks for nature

The cracks and crevices around our houses are hugely important for our bugs. They serve as everything from a nesting place for bees and wasps, to a lurking space for others. One species that may move in is a centipede. Centipedes, whilst harmless to us, use their huge jaws to feast on other bugs you won't want around like silverfish, carpet beetle larvae, and cockroaches. They will hide in cracks around your house, in drains and damp dark spaces. If you spot a centipede scurrying from its hiding place, take a close look as they are fascinating to watch.



Eight-legged lodgers

Do you shudder with fear when you see a spider? It's worth giving that reaction a rethink, as these wonderfully diverse and useful creatures are very unlikely to harm you. You are a far bigger threat to them and if you can resist the urge to hurt them, that's a great start. Your home and garden provide cosy spaces for these handy housemates.

Spiders make great neighbours as they munch through huge volumes each year including ants, mosquitoes, cockroaches, aphids, flies, and even fleas. They are food too for your garden birds. Welcome the spiders with open arms (even if it is at arm's length)!



The hidden underworld

Your garden soil is home to many more critters than worms. The soil, in which we grow most of our food, is created largely by the guts and jaws of worms, mites, springtails, termites, beetles and many more. If you can imagine the soil as a cooking recipe, the bugs basically do all the cutting, grating, mashing, grinding and, given their role in moving fungus and microbes about, they ensure fermentation happens too. They also help draw down air, water and nutrients; your flowers, grass and spuds would not grow without the huge array of hard-working hidden beasts beneath your feet.



IMAGES CLOCKWISE FROM TOP LEFT: TREE BUMBLEBEE © KIM TAYLOR NATURE PL; CELLAR SPIDER © VAUGHN MATTHEWS; GLOBULAR SPRINGTAIL, CENTIPEDE © ALEX HYDE NATURE PL



UK NEWS

Upcycle your garden for wildlife

Wildlife gardening needn't be expensive. There's nothing more rewarding than upcycling old, broken or unused household items into wildlife habitats for the garden.



Use hessian bags to grow bee-friendly plants

Many bee-friendly plants grow well in pots and hessian bags make excellent alternatives that you can pack away in winter. Choose drought-tolerant catmint, lavender and Mediterranean herbs like oregano and mint.



Pallet herb garden

An upturned pallet can add height to your garden. You can paint it a nice colour and simply wedge plants in their pots between the slats.

Grow plants in saucepans

Drill holes in old saucepans and other kitchen containers to make plant pots. They're perfect for salad crops like lettuce and radish, plus herbs like chives and parsley.





Upcycling is a fantastic way to reduce the amount of waste sent to landfill, while saving you money, too. Who needs to buy expensive plant pots when there are old saucepans, wellington boots or even basins and toilets that can be used instead? Or how about making a pond from your old bath or kitchen sink?

There are no limits to what you can do with old, broken and unused items. Use your imagination to find creative ways to find new uses for forgotten possessions in the loft or shed. What can you use to make a cosy bird box for a blue tit or a refugia for slow worms? Do you have enough old bits of wood to knock up a hedgehog or bat box?

Whatever you choose, make sure you use materials safely and effectively. Upcycled gardens look fun, quirky and unique. They can make fantastic wildlife habitats, too.

Get more wildlife gardening tips on our website



[wildlifetrusts.org/actions](https://www.wildlifetrusts.org/actions)



Kate Bradbury is passionate about wildlife-friendly gardening and the author of *Wildlife Gardening for Everyone and Everything* in association with The Wildlife Trusts.

ILLUSTRATION BY KATY FROST, PHOTO © SARAH CUTTLE.

Tin can bee hotels

Fix an old tin can to a fence or wall and pack it with dried, hollow plant stems from 1mm to 12mm in diameter, to attract a range of solitary bees and wasps. Make sure the can overhangs the stems so they don't get wet.

A teapot bird house

An old teapot can make the perfect nest site for a robin or wren. Hang it with the spout facing down, in a sheltered site away from cats and other predators.

Plant tray bird bath

Fill an old plant pot tray with water to make a bird bath. Stand it on old bricks to raise it from the ground or leave it low to provide water for hedgehogs. Add a stone to help bees escape if they get stuck.

Old sink pond

A Belfast sink or old baby bath make attractive mini container ponds, or sink a full-sized bath into the ground for a bigger pond. Pile up logs or stones to make sure wildlife can get in and out safely.





MY **WILD** LIFE



Robert and Karin have transformed their land into a haven for wildlife.

“We saw the potential”

Robert & Karin, Cottesmore, Rutland

We're meeting people in Leicestershire and Rutland who are making a difference for wildlife. Lucy McRobert meets Robert Tregay and Karin Ertzgaard, who have transformed a disused lime-pit into their own botanical haven for wildlife.

Tell me a little about your background. This seemed like a natural project for you.

We bought our country house around twelve years ago. The grounds are four and a half acres and had, unsurprisingly, been managed by mowing. We are both landscape architects so saw a wonderful opportunity. From the 1970s onwards we have promoted an ecological approach to landscape design and management. I published a lot on the subject, including

a university publication for the Swedish University of Agricultural Sciences, which is sold worldwide and used as a standard reference text for landscape architecture: the coming together of landscape architecture and scientific ecology. We looked at this bit of mown grass and saw the potential.

Now you have your own personal nature reserve! How did it come about?

We set out to create a landscape that's been in my head (and that I've done for

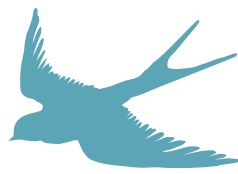


“We seeded a limestone and chalk mix, including grasses like fescue and quaking grass.”

clients) all my career. The grounds can be split into three: a garden; a traditionally-managed hay meadow and parkland with lime trees and a Wellingtonia tree; and a Jurassic oolitic lime-pit, that we think was formed round 200 years ago. The land is boulder clay over limestone, but the lime-pit is pure limestone on which a thin topsoil with an uninteresting flora had developed. Removing the topsoil created a perfect base for a species-rich meadow. Enclosing the quarry to the south was an area of big beech, big ash and a mixed plantation. Part of the bank is south facing, so we've planted dog rose and hawthorn to accentuate the warmth, making the most of the existing woodland and planting new beech on the south side. This quarry area is our nature reserve.

What transformation have you seen?

From 2009, the main thing was to strip the poor topsoil from the lime-pit. This was reformed into a very satisfying land form that provided a bit of enclosure on the west side, which was planted with hazel and hornbeam. That left us with something that would horrify most gardeners: limey, subsoil dust, solid-soft rock and chippings! To us this was a fantastic base, but it needed a bit of help. We seeded a limestone and chalk mix, including grasses like fescue and quaking grass. In the first year the results were thin, but the next year we recorded meadow vetchling and within five years we got a wonderful diverse meadow mix. It's fascinating how stable it is, with one



“...within five years we got a wonderful diverse meadow mix”

or two new things seeding in every year. We strim it in September, creating grass heaps for grass snakes and invertebrates.

Have you had any interesting species?

We had a survey done by LRWT, so we have a species list. The most interesting are the orchids, mostly pyramidal orchid! From the two plants five years ago we're up around 60 plants now. They're doubling each year. There are a

handful of common-spotted orchid. It attracts butterflies, nothing rare but lots of meadow browns, small blues, orange tips, small copper, and speckled woods, along the edge of the woodland. The odd comma. We have ended up with a diverse mosaic of grasslands, from course uncut grassland, shady areas under the woods where dog's mercury and wood anemone grow, plus some wild garlic. We have wood cuttings and log piles about the place, bird boxes and feeders, green woodpeckers on the ant hills, swallows nesting nearby on a farm, lots of bats, and we're very fond of our hedgehogs.

What would you say to someone looking to do something similar?



Nature needs a helping hand. This is not a 'pure' nature reserve. It's designed. There's a path going through, a spiral walk up a hill, a place to look out, some hazel coppice, a variety of shrubs and trees from natural regeneration and a hornbeam ring, which creates a natural sculpture. We think everybody can do their bit in their garden, large or small.

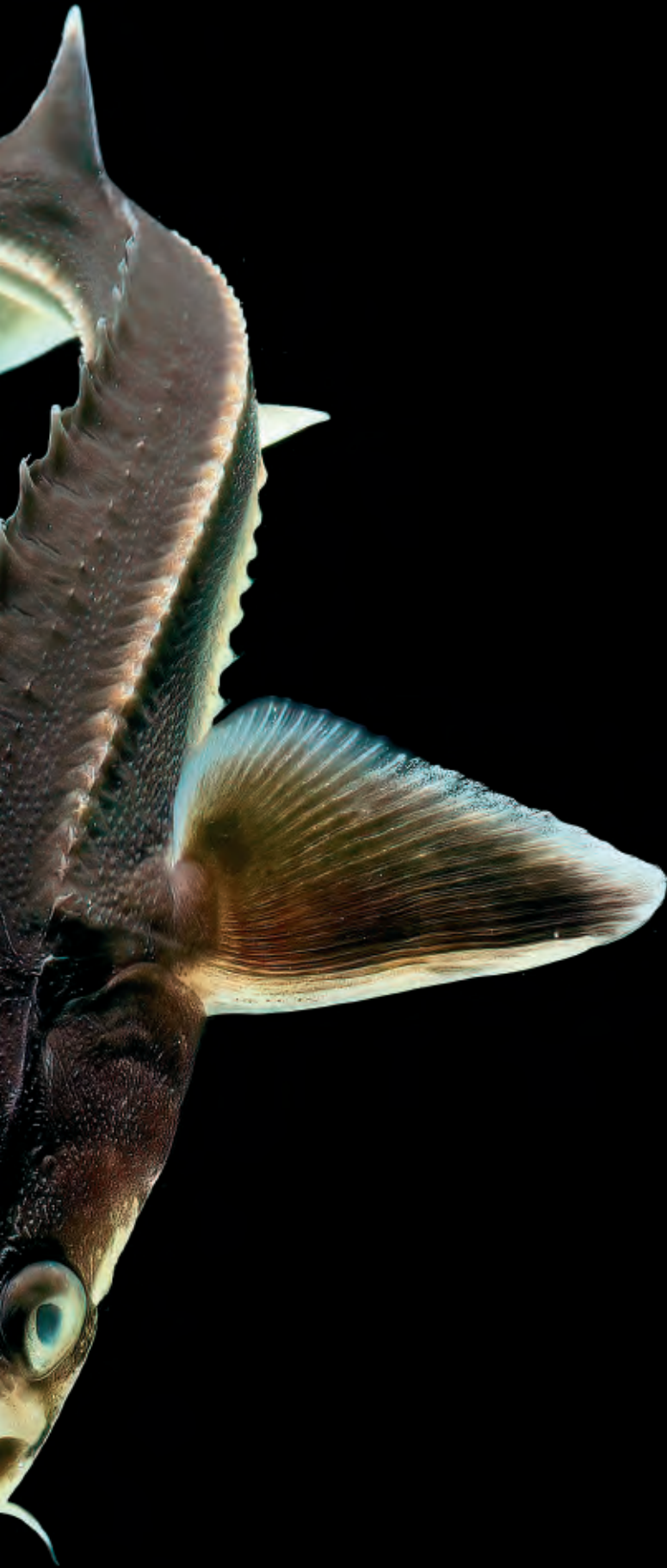


Contact us if you or someone you know could feature in a future issue of *Wild!* We're looking for inspiring stories from people like you!



From stream to shining sea

Often overlooked, the story of our local migratory fish leads us not only to the coast, but right across the oceans. Andrew Heaton, local county recorder for fish, takes us on a journey beneath the surface.



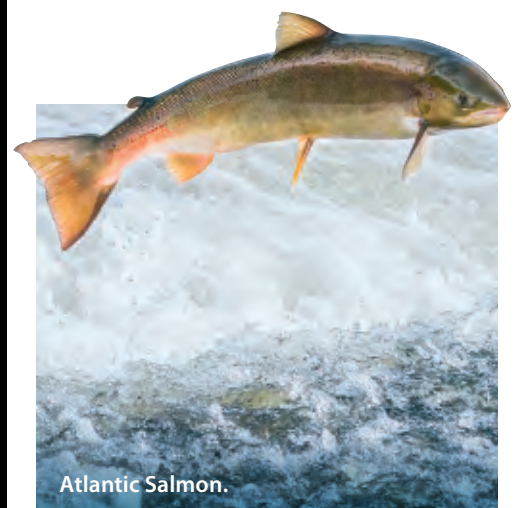
With rows of spiny scales along its body, common sturgeon reach three metres in length and are the largest freshwater fish in Europe.

Despite being almost as far from the sea as you can get in the UK, Leicestershire and Rutland Wildlife Trust has joined national calls for Marine Conservation Zones, including sending people to lobby Government. There are lots of species that use both freshwater and marine habitats; think waterbirds feeding on the Lincolnshire coast one day, and the next found around the edges of Rutland Water. Similarly, our fish fauna includes a small group of fish found in local waterways that also migrate to the sea. They are often overlooked, and yet the fate of each emphasises the problems facing them inland and at sea.

Epic migrations

The most well-known of our migrating fish is the Atlantic salmon, familiarly depicted leaping up waterfalls on their relentless journey from the sea upstream to their freshwater spawning grounds. This lifecycle is known as “anadromous”. Salmon breed in clean, cool, well-oxygenated rivers, mainly in the uplands. The females build nests called “redds” by digging into the gravel bed of the river. Eggs and sperm are deposited into the redd and the resulting young stay in the area for a few months. They then move downriver, taking over two years to reach the sea. They travel large distances to feeding grounds on the edge of the Arctic Ocean and the coast of Greenland, where they prey on crustaceans, molluscs and fish. They return to their natal river to breed after one to four years.

Salmon have declined in numbers in recent years, probably due to over exploitation and water pollution. Formerly numerous in the local area and breeding at Kings Mills near Castle Donington, salmon became extinct in the Trent in the later 19th century. →



Atlantic Salmon.



European eel.

A recent reintroduction project has seen them return, including breeding in the River Dove in Staffordshire, and with individuals probably turning up in Leicestershire.

Our only example of a “catadromous” migrant (living in freshwater but breeding in the sea) is the European eel. They are believed to spawn in the Sargasso Sea near Bermuda. The larvae then drift back on the Gulf Stream to Europe where they colonise many freshwater habitats. With a complicated lifecycle involving several stages, they can live up to 20 years before returning to spawning grounds. There has been a drastic decline in numbers in recent years, possibly because of the impact of climate change on the Gulf Stream.



EUROPEAN EEL IN ROCKS © JACK PERKS/SHUTTERSTOCK.COM.



Sea trout are a form of common brown trout.

Amazing adaptations

Sea trout are a form of the common brown trout that grow to a large size and have a migratory lifecycle like that of the salmon. At sea they feed in their home estuary or nearby coastal waters. Breeding in freshwaters in redds, the young spend up to six years in their nursery streams, followed often by one year feeding at sea. Whether a fish develops into a sea or brown trout depends on environmental conditions combined with a genetic component. Sea trout are rare locally, though small numbers are noted in the Trent catchment.

Lampreys are not fish but do look and behave like them. The river lamprey migrates from the sea to spawn in freshwater rivers and is rare in Rutland, having been recorded breeding only in the River Gwash and its North Brook tributary. From hatching, river lampreys live as larvae, burrowing into river bed silts for up to five years. They migrate

River lamprey are not fish, but do look and behave like them.



RIVER LAMPREY SPAWNING © IGITAS SIRYDAS/SHUTTERSTOCK.COM.



down to the sea where they live for up to a further five years before returning to the rivers as mature adults to spawn. They do not feed in rivers, but in the sea, they parasitise fish like salmon and haddock. They attach on with suckers (which they have instead of mouths), rasping with their teeth and feeding upon the body tissues and fluids of the host.

Endangered giants

The most spectacular migratory fish, and the one least likely to be seen, is the common sturgeon. With rows of spiny scales along its body, these huge fish reach three metres in length and are the largest freshwater fish in Europe. Another anadromous species, they have bred in several large European rivers, in deep pools with a gravel bed. Immature fish migrate to coastal waters all over Europe, finding their way up rivers. They are now highly endangered, breeding only in the Gironde, France, and occasionally straying into British waters. Several sturgeon were reported in the Trent catchment

during the 19th and 20th centuries, most recently in the Smitte Brook in the Vale of Belvoir. Young sturgeon feed in rivers on invertebrates, especially midge larvae, whilst adults at sea take larger worms, crustaceans, molluscs and small fish. Their rarity is caused by water quality, obstructions to migration routes and the collection of eggs as a highly-prized caviar.

All these species use both freshwater habitats in Leicestershire and Rutland and marine habitats in the Atlantic Ocean and North Sea. All show drastic declines in populations, and their fate shows that we all need to consider ocean conservation problems: climate change, obstruction to migratory routes, and degrading and polluted freshwater habitats. These migratory fish bring marine conservation issues very close to home.

Find out how to support marine conservation issues: wildlifetrusts.org/marine-protected-areas



Events and Activities

January 2022 – May 2022

Getting fresh air and exercise is even more important in winter, so let our events and activities motivate you to get outside.

Check online

Our full events programme is available online!



We offer an interesting and varied programme of events for all ages to get involved with, organised by Leicestershire and Rutland Wildlife Trust and our Local Groups.

We are continuing to monitor the ongoing COVID-19 situation. To allow for flexibility in changing dates, venues and times, we have moved most of our events programme online for now. All events advertised online contain details of times, dates, venues, booking, prices where applicable and useful information. Anyone booked on an event or volunteering activity will be notified of any changes. This programme is liable to change or cancellation, for which LRWT can accept no liability. Members and non-members are welcome unless otherwise stated.



Our full events programme is available at: lrwt.org.uk/events



Local Groups

Some of our Local Groups have decided to resume indoor meetings, however, please note face-to-face talks are subject to any future Covid regulations. We will continue with our online talks programme, so please check our website for updates and new additions.

Charnwood Local Group

Indoor meetings: Woodhouse Eaves Village Hall, 50 Main St, Woodhouse Eaves, Loughborough, LE12 8RZ. Admission £2.50/members, £3/non-members, children free. Contact Kate Moore on 01509 891005, katemoore123@yahoo.co.uk.

Great Bowden Local Group

Indoor meetings: The Village Hall, The Green, Great Bowden. Admission £2.50/members, £3.50/non-members. Contact Bruce White on 01858 467976.

Humberstone Local Group

Humberstone. Contact Alison Gardner on 0116 241 3598.

Melton Mowbray Local Group

Melton Mowbray. Contact Peter Dawson on 01664 852119, peter.dawson69@ntlworld.com.

North West Local Group

Indoor meetings: Ashby Methodist Chapel, Burton Road, Ashby-de-la-Zouch. Admission £3/person. Contact David Maltby on 01530 222934 or Margaret Mabey on 01530 412410.

Oadby & Wigston Local Group

Oadby. Contact Stuart Mucklejohn on 0116 281 0835, owgroup.lrwat@gmail.com.

Rutland Local Group

Indoor meetings: Volunteer Training Centre, off Oakham Road, Hambleton, LE15 8AD. Admission £2. Meetings also broadcast online via Zoom. Contact Becky Howard on 07908 252271.

Leicestershire & Rutland Badger Group

Contact Dr David Duckett on 0116 259 7231, info@badgergroup.org.uk.

JANUARY

Rutland Group

Monday 17th January, 7.30pm
Managing Habitats for Waders at Rutland Water with Joe Davis - ONLINE
Rutland Water Conservation Team Leader will talk about habitat and lagoon work on the reserve.

Great Bowden Group

Wednesday 19th January, 7.30pm
Speaker TBC

North West Group

Friday 21st January, 7.00pm
AGM followed by talk, with Martin Vaughn
Showcasing photographer Martin's latest portfolio on the birds of the National Forest.

FEBRUARY

Charnwood Group

Wednesday 9th February, 7.30pm
Cone Shells - Killers or Curers? with Brian Hammond
Learn about fascinating, venomous and carnivorous molluscs in the family "Conidae".

Great Bowden Group

Wednesday 16th February, 7.30pm
Speaker TBC

North West Group

Friday 18th February, 7.30pm
The Green Gym Initiative with Kay Thompson
How the National Forest group is transforming urban parks and premises into nature-friendly areas.

Rutland Group

Monday 21st February, 7.30pm
Green Recovery at Wimpole, with Jason Sellars
The National Trust Project Manager talks about restoring nature, tackling climate change and connecting people to nature.

MARCH

Charnwood Group

Wednesday 9th March, 7.30pm
AGM followed by talk with Hazel Groves
Be enthralled by galls: exploring the plant galls of Leicestershire.

Great Bowden Group

Wednesday 16th March, 7.30pm
Speaker TBC

North West Group

Friday 18th March, 7.30pm
A year at Rutland Water Nature Reserve, with Tim Sexton
LRWT Species and Recording Officer Tim Sexton traces back a year at Rutland Water Nature Reserve.

Rutland Group

Monday 21st March, 7.30pm
The underwater world of Rutland Water, with Tim Sexton
The underwater world of Rutland Water, focusing on aquatic invertebrates.

APRIL

Charnwood Group

Wednesday 13th April, 7.30pm
The Condor's Feather with Mike and Paula Webster
A travel memoir from Mike and Paula who spent in South America filming for BirdLife International.

North West Group

Friday 15th April, 7.30pm
Farming and Wildlife with Graham Matravers
Local organic farmer Graham looks at farming and wildlife today and in the future.

North West Group

Saturday 16th April, 2.00pm
Walk at Manor Farm with Graham Matravers
Guided walk at Manor Farm, Main Street, Long Whatton, LE12 5DF. Farm shop will be open.

MAY

Charnwood Group

Wednesday 11th May, 7.30pm
A wildlife quiz for everyone
The wildlife quiz is back with new quizmasters. Organise your team beforehand or join others on the night. Bring your own drinks and nibbles.





From wild walks to interesting talks, we offer something for everyone.

Other events on offer this winter

 lrwt.org.uk/events

Guided activities at Rutland Water

From guided wildlife walks to weekend courses, wildlife photography workshops to identification classes, family drop-in sessions to interesting talks. Events run from the Anglian Water Birdwatching Centre, Lyndon Visitor Centre or the Volunteer Training Centre. Look out for Terry's Friday Birdwatching Walks, Guided Wildlife Walks with Jeff and specialist walking tours looking for waders, wildfowl and other autumn wildlife.

Fun for all the family

Exciting outreach and education programmes for children, families and young people, including Wild Forest School; our Osprey Education programme; Wildlife Watch events; Wild Tots and Wild Play for younger children and holiday clubs; activities, events and courses, plus sessions for home-educators.

Wildlife Book Club

Our Wildlife Book Club takes place once a month at the Volunteer Training Centre, Rutland Water, on the first Wednesday of the month from 11:00 – 13:00. We select a couple of books, making the most of contemporary nature writing and classic literature. Free to attend, with a sub tin for drinks. Please check online for location.

Wild Walks, identification courses and activities

Our expert staff and volunteers offer Wild Walks on nature reserves and identification courses on specific taxa and species. You'll learn about the flora and fauna of the area, as well as interesting facts about our nature reserves, how and why we manage them, and benefit from tips on field craft.





Wildlife Watch

Our two Wildlife Watch groups are currently fully booked.

Contact Rachel Ibbotson on ww@lrwt.org.uk to be added to the waiting list. You can still get involved by doing your Hedgehog and Kestrel Award activities at home. See the Members Hub for more information.

Wildlife Watch Members Hub

Keep up to date with all things Wildlife Watch on the new section of our online Members Hub, including activities, events and campaigns.

Find out more:

lrwt.org.uk/family-members

Family events for 2022

Get your family up close with wildlife in Leicestershire and Rutland with our three Family Member events in 2022. These special member-only events are planned for spring, summer and autumn.

New for 2022, Wildlife Watch Family Members will be offered priority booking for our events aimed at Wildlife Watch child members and their families. You will get first chance to book tickets before booking opens to the public two weeks before an event. Please have your membership number ready when booking. Details of events will be available via the monthly Family e-Newsletter, quarterly *Wild Times* newsletter and on the Members Hub.

Priority booking applies only to events run by and booked directly through LRWT. It is not available for funded projects or those run in partnership with other organisations.

Wild half-term

Last October, we enjoyed another school holiday filled with outdoor fun. 50 families enjoyed bat-themed games and crafts at our Wild Play activities, learning more about our amazing night-flying mammals, whilst Wildlife Watch Family Members joined us for a lovely twilight activity creating willow and tissue lanterns. Some made autumn designs whilst others opted for spooky Halloween creations. The sessions at Attenborough Arboretum were part-funded by Leicester City Council COVID-secure Communities Fund. Our activities at Burbage Common are run in partnership with Hinckley and Bosworth Borough Council.



Green Influencers creating a bug hotel.

Green Influencers take environmental action at school

Over the past few months, groups of Green Influencers in Leicester have been taking the lead to address key environmental issues, and actively putting their project ideas into practice.

The Eco-Buddies at Sandfield Close Primary School are developing a project which aims to protect and promote their local wildlife. They have been learning about the different species that are already present in their school garden and developing their identification skills. They are looking to create nature 'playground activity bags' to encourage other pupils to explore outdoors and learn about wildlife.

The Rushey Mead Academy Wildlife Warriors will be transforming an area of underused green space in their school grounds into an outdoor classroom, providing a relaxing place where the school community can spend time surrounded by nature. Members of the group have also led climate change related workshops at the Leicester Eco-school COP26 roadshow.

At Mayflower Primary School in Evington, the Earth Savers have been busy discussing the benefits of recycling and sustainable transport and will be significantly enhancing their school



allotment with Green Influencers Scheme Project Grant funding!

If you know of a group of young people (10-14 years old) who would like to become Green Influencers and are available to start a project in 2022, please contact **Hannah Keys, (Green Mentor)** hkeys@lrwt.org.uk.

For more information, visit: lrwt.org.uk/green-influencers

The Green Influencers Scheme is an environmental youth social action project funded by The Ernest Cook Trust and the #iwill Fund. The National Lottery Community Fund and the Department of Culture, Media & Sport are each investing £25 million seed funding to create the #iwill Fund. The Ernest Cook Trust is acting as a match funder and awarding grants on behalf of the Fund.

Our Impact in 2021

Some of the great things we have achieved in 2021 with your help...



We managed **sites for wildlife**



The **Rutland Osprey Project** webcam had



1m
views

700

active volunteers did their bit for local wildlife



2,719

people took part in **30 Days Wild**



Purple emperor butterflies were recorded at **three new reserves**



490

children took part in **350 Forest School sessions**



35

16,642

people came to **Lyndon Visitor Centre**



2

curlew chicks fledged at **Merry's Meadows**



30



1,646

sand martins hatched at **Rutland Water Nature Reserve**



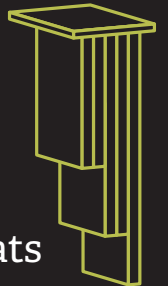
43

young people were engaged as **Green Influencers**



54

bat boxes built for **barbastelle bats**



The **Charnwood Lodge** midweek volunteers spent

412 hrs

clearing bracken



barn owls ringed across two of our nature reserves.

Thank you for a being member!

Leicestershire & Rutland
Wildlife Trust

