

Nature Matters

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Cover Photograph: Kathryn Woodroffe

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Foreword

Hello and welcome to issue 32 of NM.

As ever, I have drawn together a range of topical features into one place in this latest issue.

I'm grateful to the organisations and individuals who have contributed. And a very special thank you to Kathryn Woodroffe from the Canal and River Trust who has written the article about restoration projects on the Montgomery Canal for Nature Matters.

I hope you enjoy the read!

See you in the next issue

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THE Great British Beach Clean



Illustration:: MCS

2023 saw another year of brilliant volunteers from across the UK get involved in the Marine Conservation Society's Great British Beach Clean. People young and old took part in a quest to clear their local beaches, streets and parks of litter, and record their findings.

We wanted to say a huge thank you to everyone who braved the wind and rain to organise or take part in a beach clean and litter survey during this year's Great British Beach Clean, including the Great Northern Ireland Beach Clean and the Great Channel Islands Beach Clean, sponsored by Cully & Sully soup.

We can now reveal the results from this year's event. Despite the challenging weather, 5,416 of you helped clean up our coastline, joining 428 beach cleans over the 10-day period.

The Great British Beach Clean 2023 results are in! We've analysed the data and can now reveal just how much litter was picked up during this year's event.

Despite the challenging weather, we're excited to announce that 428 beach cleans took place over the 10-day period, with 5,416 volunteers turning up to help clean up our coastline.

Together, a total of 129,391 pieces of litter were collected, filling 1,426 litter bags. This weighed in at 7,476 kgs of litter - the same weight as an elephant! 40 miles of beach were cleaned - the distance it would take to walk from Edinburgh to Glasgow.

Clare Trotman, Beachwatch Officer, said: "A massive thanks to everyone who braved the elements and got involved in this year's Great British Beach Clean. Due to your efforts, over 7,000 kgs of litter has now been safely removed from our coast and inland areas, stopping it from entering our ocean where it poses a threat to marine life.

"What's more, the litter surveys we received will feed into our year-round reporting and help us understand the types and sources of litter pollution on our shores.

"This vital information will enable us to campaign for better regulation and action to clean up our coast."
Clare Trotman, Beachwatch Officer
Source to Sea results

Despite not being able to make it to the beach, 69 volunteers got involved in our Source to Sea Litter Quest, collecting 509 litter items and removing 29kgs of litter from inland areas. These litter picks help us track litter pollution and prevent it from reaching our shores.



Photograph: NWWT

Hedgehogs

A brand new monitoring project

You may have read that PTES and the British Hedgehog Preservation Society are in the process of launching a National Hedgehog Monitoring Programme (NHMP). There's still a lot to learn about hedgehog populations and how they're changing. We're using networks of camera traps to estimate hedgehog numbers at selected sites across Britain. With the vital insights the NHMP will provide, we can steer our conservation efforts and research accordingly.

PTES and BHPS are working with partners at Nottingham Trent University, the Zoological Society of London, MammalWeb and Durham University on a three-year pilot of the project. It's still early stages but we'll bring you all the updates here so stay tuned for early findings and opportunities to get involved as we progress!

Top Tips

The weather earlier this summer left a lot to be desired, but looking on the bright side it has been easier on hedgehogs than last year's heatwaves.

As autumn arrives, supplementary food in the form of meaty cat and dog food can help top up their natural diet as they begin to store energy for hibernation.

Another top tip for autumn is to pile up fallen leaves in the garden rather than removing them. This can provide nesting material for hibernation and insect prey for visiting 'hogs.

Restoration projects on the Montgomery Canal



Photograph: Kathryn Woodroffe

The Canal & River Trust was launched in 2012, taking over the guardianship of British Waterways' canals, rivers, reservoirs and docks in England and Wales - and heralding the next chapter in the renaissance of the waterways.

Once the nation's industrial arteries, the 200-year-old network transported vital goods and busy people around a booming Britain. When freight declined, the canals too fell into disrepair. Thankfully, these waterways today have risen, phoenix-like, to become treasured local gems - places where people can relax, re-connect, rediscover history and spot the abundance of wildlife that calls them home.

The Trust works hard to maintain their legacy, and, together with volunteers and communities across England and Wales, they are also transforming them into spaces where anyone can come to feel happier and healthier. A back garden for almost nine million people across the UK, today these waterways provide an opportunity to spend time in nature.

Preserving History, Restoring Life: The Montgomery Canal and Its Restoration

The Montgomery Canal, located in the idyllic countryside of Wales and England, holds a rich historical and ecological significance. Originally opened in 1797, this canal played a vital role in the transportation of goods and people, facilitating trade and connecting communities for over a century. However, with the advent of railways and roads, the canal's prominence declined, leading to gradual deterioration.

The Montgomery Canal is designated as a Special Area of Conservation (SAC) in Wales for the submerged aquatic plant Floating Water Plantain (*Luronium natans*), boasting one of the best populations in the UK. It is also a Site of Special Scientific Interest (SSSI) in both England and Wales for the emergent fringe, invertebrate assemblage, and nationally important species such as Grass-wrack Pondweed (*Potamogeton compressus*). Canals serve as purposeful human-made habitats that closely mimic natural ecosystems, thus fostering the presence of diverse plant and animal species. It plays host to a whole other raft of species from otters to kingfishers and bats.

Recognising the cultural and environmental value of the Montgomery Canal, restoration efforts have been underway since the 1960's to revitalise the canal – now over 60% of the waterway has been restored. The project aims to rejuvenate this waterway, not only for recreational purposes but also to create a thriving habitat for diverse wildlife. The Conservation Management Strategy (CMS) was developed which strategised how to progress the sustainable restoration of this unique and sensitive ecosystem.

The canal restoration is a collaborative endeavour, bringing together various stakeholders such as local communities, conservation organisations, government bodies, and passionate volunteers – all endorsing the CMS. Their collective efforts have focused on repairing and reopening sections of the canal that had fallen into disrepair, clearing overgrown vegetation, creating online and offline open water nature reserves and reinstating important infrastructure like locks and towpaths.

All works to restore the Montgomery Canal are guided by the Conservation Management Strategy and, where necessary, built upon to reflect present day knowledge and understanding of this important site. With each milestone achieved in the restoration project, the Montgomery Canal gains renewed vitality and becomes a haven for both nature enthusiasts and wildlife alike. The dedication and passion exhibited by those involved in this project underscore the importance of preserving our cultural heritage while fostering a sustainable and biodiverse future.

Following a successful bid to the UK Government, the Canal & River Trust were awarded over £13 million of the Levelling Up Fund money to complete the next phase of the restoration.

Restoration of the Montgomery Canal is not merely an exercise in historical preservation or the wish to bring back a few boats; it also plays a vital role in conserving local biodiversity.

Unravelling Nature's Tapestry: The Ecological Decline of the Montgomery Canal

As a remainder waterway, the Montgomery Canal has experienced extensive ecological succession. Although this is a natural and dynamic process in ecosystems, within a man-made habitat like a canal, this can sometimes be undesirable.

Ecological succession leads to changes in habitat types and their structure over time. Different conditions suit different species, creating a dynamic ecosystem where the species that establish and dominate also change over time. Those less competitive

species tend to be more specialised, thriving best at a singular snapshot in the succession process. Where more aggressive competitors establish, the struggle for resources, alongside shrinkage of the area of suitable habitat due to succession, can lead to decline in rarer species' populations, and even local extinctions.

The shifting habitats created by succession, therefore, have a knock on effect on the intricate ecosystem web that surrounds and depends on the canal. It has potential to influence, for example, predator-prey interactions, pollination dynamics, or symbiotic associations. This is why a change in the wider biodiversity of an area may be seen over time.

Understanding the dynamics of an ecosystem and the implications of change can help us create long term plans for the management of a site. In doing this, it is possible to work towards the conservation of particular snapshots within the succession of the habitat, and hence, the species that depend on it.

Reviving Nature's Haven: The Wildlife Benefits of Montgomery Canal Restoration

From a wildlife perspective, the Montgomery Canal provides a corridor-like oasis across the county, connecting numerous different islands of habitat that become increasingly isolated. The restoration of the canal plays a key role in preserving and enhancing the canal, ensuring its continuation of this vital role.

To name just a few of the ecological functions surrounding the canal, the wetland habitats found here support water-loving plants, birds, invertebrates, amphibians and mammals. The canal is recognised not only for its habitat that supports internationally rare plants, but also protected species such as otters, bats and numerous avian species. As part of the project, the Trust are also exploring the potential to create additional open water habitat connected to the canal.

The restoration project offers valuable educational opportunities for local communities and visitors. By showcasing the importance of wildlife conservation and the interdependence between humans and nature, the project raises awareness and fosters a sense of stewardship among the local communities and wider public. It exemplifies the synergy between heritage preservation and wildlife conservation, serving as a testament to the importance of protecting and restoring our man made and natural habitats for future generations.

Nurturing Nature's Treasures: Propagation of Rare Aquatic Plants

The Montgomery Canal boasts a reputation for being a haven for several rare pondweeds (Potamogeton sp.) and the Floating Water Plantain (Luronium natans), two captivating plants that have captured the attention of botanists, conservationists, and nature enthusiasts alike. These remarkable aquatic plants contribute to the canal's ecological richness and are emblematic of its unique biodiversity.

Among the Potamogeton species found in the Montgomery Canal, two particular species stand out for their rarity: Potamogeton praelongus and Potamogeton friesii. These two pondweeds are considered rare and have faced challenges in their survival due to various factors. These particular species of pondweeds are not only rare but also inadequately documented within the UK and on a global scale. P. friesii, for instance, is listed as "Near threatened" on the UK IUCN Red List, having experienced a significant decline of over 20% from the pre-1930s period to 2019. This places it in close proximity to qualifying for a threatened category in the foreseeable future.

Whilst the canal is an artificial environment for all species, both the rare pondweed and floating water plantain now play a small role in supporting the overall ecosystem of the Montgomery Canal. They provide food and refuge for numerous invertebrates, amphibians and fish, contributing to the biodiversity and ecological balance of the waterway.

The restoration of the canal will help turn back the clock of ecological succession, returning it to the equivalent of bare ground ready for primary colonisers – our rare aquatic plants. To help boost the current populations, a programme of research and propagation will be undertaken, working with specialists at Chester Zoo, National Botanic Garden of Wales and The Rare British

Plants Nursery.

Human activities, such as habitat destruction, water pollution, and the introduction and spread of invasive species, have taken a toll on their populations. The Montgomery Canal's protected status has provided a haven for these elusive species, allowing them to persist and maintain their ecological significance, however their populations are still small. In collaboration with The Rare British Plants Nursery located in Builth Wells, Wales, the Trust is conducting a comprehensive study of these pondweeds. The primary objective of this research is to assess how easy it is to propagate these species which will help contribute to species recovery and reintroduction initiatives worldwide.

Understanding the life cycles, reproductive mechanisms, and ecological requirements of these plants enables scientists to develop effective conservation strategies. By identifying and working to mitigate the threats they face, we can hopefully ensure the long-term survival of these delicate species and maintain the biodiversity of the Montgomery Canal.

Forging a Sustainable Path: Ensuring the Future Sustainability and Management of the Montgomery Canal

The end goal for the canal's restoration is the return of navigation by boat. However, more work is required before this can be achieved. In the interim, it is hoped that canoeists and paddleboarders will make use of the newly opened water space, connecting with nature and enjoying time on, and next to, the water.

The role that a restored Montgomery Canal can play in enhancing biodiversity is central to the Trusts purpose – as is supporting the cultural heritage of the canal and the additional jobs and boost to the economy that restoration will provide. Restoration is critical to ensure the sustainable long-term future of the canal and with increased economic and social purpose, the canal can be better managed and protected, saving it from falling into the disrepair that in turn would be harmful to the protected flora. Continued and long-term monitoring will inform management, whereby an appropriate and pragmatic baseline for populations will be established prior to any changes in the management of the site. The efficacy of the management will be informed by monitoring of populations against this baseline to determine whether the management at that time is suited to achieving the objectives for the site, or whether a change is required.

Without restoration and ongoing maintenance, there is a risk that more competitive plant species may continue to outcompete and overshadow the protected species present. By enabling navigation, a controlled level of boating activity helps maintain the submerged flora by preventing excessive growth of reed fringes and promoting a balanced ecosystem.

Furthermore, canal restoration projects offer extensive opportunities for biodiversity gains beyond the channel itself. All of the schemes involved in re-opening the canal, from the build and re-build of two bridges to the potential creation of additional open water habitats, will incorporate as many enhancements as possible for the local ecology. This will include work such as planting species-rich hedgerows, areas of trees or scrub that are reflective of the species found naturally in the area to including bat roost spaces within the bridges and ensuring that the corridor of water is not interrupted to allow continued safe use by otters.

The surrounding landscape, encompassing the canal corridor, can experience a significant boost in biodiversity as a result of the restoration project. By creating a mosaic of habitats and enhancing ecological connectivity, the project contributes to the overall conservation of wildlife in the area. It is a testament to the positive outcomes that can be achieved when restoration efforts align with the conservation of precious plant species and the broader ecosystem.

As the UK's canal charity, the Trust have the experience and expertise to help deliver benefits for both wildlife and people. Their understanding of the unique and often complex ecosystems formed within canals provides the opportunity to achieve a balance between the 'Monty's' highly important ecology and the navigation by boats which will help safeguard the canal's future.

**Kathryn Woodroffe BSc(Hons), MEnvSc.
Project Manager, Montgomery Canal Restoration**

Climate change is exacerbating the decline of the hazel dormouse



Photograph: Hattie Spray

New research has confirmed that increased precipitation and fluctuating winter temperatures, as well as density dependence all negatively affect hazel dormouse populations. Worryingly, changing weather patterns – which are increasing – appear to exacerbate populations that are already struggling. The study warns that without mitigating these factors, dormice could disappear from our woodlands altogether.

The research was led by Dr Fraser Combe, former PhD Student at Manchester Metropolitan University, and supported by wildlife charity People's Trust for Endangered Species which spearheads the UK's hazel dormouse conservation work. It has been published in leading journal *Animal Conservation*.

By studying long-term data gathered on 4,000 animals from four UK populations (via PTES' National Dormouse Monitoring Programme) and one in Europe, Fraser, PhD supervisor Dr Edwin Harris and colleagues were able to investigate exactly what impact changing local weather patterns has on population growth rates, and how these interact with other factors contributing to the species' decline.

Lead author Dr Fraser Combe explains: "Our results showed that increased rainfall, fluctuating winter temperatures (rather than stable cold temperatures) and density dependence are all contributing to the species' decline. As population density increases, a population can reach carrying capacity, resulting in more individuals competing for food and nesting sites. In areas where food and shelter are plentiful this is less of an issue, but lack of sympathetic woodland and hedgerow management leads to less diverse habitat. This, combined with increased fragmentation of habitat patches, means that the number of dormice those areas can support is lower. The plights of these populations is exacerbated by a changing climate."

"When a population is at capacity, a bad winter or a year of fluctuating and unusual weather has a stronger and more negative effect on dormouse populations than during a stable winter. We also found that although warmer and wetter weather impacts dormice of all ages, there were subtle differences between adults and juveniles."

The research showed that in adult dormice, both over winter survival and fecundity (the ability to breed successfully) were negatively impacted by increased average temperatures and higher rainfall, especially when these patterns of warm, wet weather were interspersed with cold periods. It's not uncommon for hibernators to wake up intermittently, but frequent waking depletes the adults' energy reserves by the time they wake in spring, thereby hampering their breeding capacity.

Juveniles were impacted before hibernation and over winter. If juvenile dormice don't build up enough fat reserves before winter their chance of surviving hibernation is slim. That, combined with waking up early or more frequently and being forced to be active when they should be asleep and when there's less food around, has serious consequences too.

But the study did offer some cause for optimism: conservationists can help mitigate against these negative effects, giving dormice a fighting chance. Measures such as coppicing, improving hedgerow quality and connectivity between suitable habitats, planting diverse tree species that fruit and flower in varying seasons, and host an abundance of invertebrate species, and creating plenty of scrubby edge habitat can provide more nesting sites and ensure year-round food availability. This will help improve resilience through periods of unpredictable weather patterns, and hopefully enable dormice to better survive winter and successfully breed come spring and summer.

Nida Al-Fulaij, Conservation Research Manager, People's Trust for Endangered Species explains: "Hazel dormouse populations have fallen by a staggering 51% since 2000 [PTES' State of Britain's Dormice 2019 report], and they're listed as vulnerable to extinction on the Red List for Britain's Mammals 2020. Understanding what is driving this decline is critical, so that we can put measures in place to prevent further decline, restore populations to stable levels and ultimately stop dormice from disappearing from our woodlands and hedgerows."

"Fraser's study also highlights how vital long-term data collection is. Thanks to the National Dormouse Monitoring Programme (NDMP) which PTES has been successfully running since 1993, we're able to gain insights into how different populations are faring year on year and implement targeted conservation measures to populations that need the most help. Through our ongoing work we're starting to make a difference, but we desperately need more better-managed woodland and hedgerow habitats across the country in order for dormice to really become commonplace again."

With the help of thousands of dedicated volunteers and like-minded conservation organisations, ecologists, researchers and government agencies, PTES has worked tirelessly over the past 30 years to try and combat the decline in hazel dormouse numbers. In addition to running the NDMP, the charity also leads the annual reintroduction programme (which celebrates its 30th anniversary this year), manages the National Dormouse Database, funds vital research like Fraser's, and provides bespoke training for woodland owners and land managers to ensure that woodlands and hedgerows are appropriately managed for dormice.

Combatting such a dramatic decline will take time, but it is hoped that armed with the latest research and data, PTES will eventually bring dormice back from the brink.

<https://www.ptes.org/dormice>

Welsh Plastics Ban



From 30 October 2023 there will be a ban on anyone selling or supplying some single-use plastic products in Wales. Wales has followed Scotland and England in bringing in this sort of law. Single-use plastics are discarded without thought, causing harm to wildlife and the environment.

So, what is being banned?

Basically most single-use plastics will be banned, including:

- Plastic plates – this includes paper plates with a laminated plastic surfaces
- Plastic cutlery – for example forks, spoons, knives and drinks stirrers
- Plastic drinking straws – with exemptions so people who need them to eat and drink safely
- Plastic-stemmed cotton buds
- Polystyrene takeaway cups and food containers

In 2022, plastic and polystyrene accounted for 76.5% of all beach litter recorded in Wales.

ADVANCE PAYMENTS TO BE MADE TO THOUSANDS OF WELSH FARMS



Photograph: Mike Armitage

More than £158m will be shared by over 15,600 farms across Wales as Basic Payment Scheme (BPS) 2023 advance payments are made tomorrow (Thursday 12 October), Rural Affairs Minister Lesley Griffiths has announced.

The announcement means over 96 per cent of claimants will see a BPS advance payment worth approximately 70% of their estimated claim value.

This year, for the first time, Rural Payments Wales (RPW) will be making BPS advance payments during a payment window.

The new payment window which opens tomorrow will run until 15 December. Farm businesses not receiving an advance payment tomorrow, but whose claim is subsequently validated before 15 December, will receive the advance payment.

This means more farm businesses will benefit from receiving a BPS advance payment.

Full and remaining balance BPS 2023 payments will be made from 15 December 2023, subject to full validation of the BPS claim.

It is expected all but the most complex BPS claims will be fully validated, and payments made before the end of the payment window on 30 June 2024.

Rural Affairs Minister, Lesley Griffiths said: "I am pleased we can provide BPS advance payments to thousands of farms across Wales.

"Changes we have made also means more farm businesses will benefit from an advance payment during the payment window.

"RPW will be working hard to ensure full and remaining balance payments are made as early as possible from 15 December."

Welsh Government

Tally flies home to Texas



Photograph: RAF Valley

Tally, a rare Kemp's Ridley Turtle, is returning home to Texas after washing up 4,000 miles off course in Wales.

Back in 2021, Tally was found close to death on Talacre beach on the North Wales coast and was rescued and nursed back to health for 2 years at Anglesey Sea Zoo.

Kemp's Ridley Turtles are a species usually found in the Gulf of Mexico and off the eastern seaboard of North America.

But these turtles can sometimes be swept by Gulf Stream currents across the Atlantic to the UK.

Tally will be released from Galveston, Texas, into the Gulf of Mexico in September for what the US Fish and Wildlife Service called "a second chance at life". When she arrived back in the United States, Tally immediately was transported to the Houston Zoo, where a team of experts conducted a thorough examination, Houston Zoo officials said. Tally was found to be strong, vigorous and healthy after the 22-hour transit, zoo officials said.

The routine exam by the zoo's veterinary care team revealed no signs of organ dysfunction and radiographs confirmed no indications of pneumonia. The examination of her limb joints showed no swelling. Tally is estimated to be between 6 and 7 years old and weighs 32 pounds, Houston Zoo officials said.

Tally's bloodwork results still were pending Friday. The results will provide crucial insights into her overall health and help guide her ongoing care.

Tally spent a few days in a deep-water tank at the Houston Zoo to regain her muscle strength.

After that, researchers from Texas A&M University at Galveston's Gulf Center for Sea Turtle Research attached a tracking device to monitor her movements and she was taken n to Galveston for release in the Gulf of Mexico.

Welsh Water admits illegally spilling sewage 'for years'

Welsh Water has admitted illegally spilling untreated sewage at dozens of treatment plants for years. The admission came after the BBC presented the water company with analysis of its own data. One of their worst performing plants is in Cardigan in west Wales.

The company has been spilling untreated sewage there into an environmentally protected area near a rare dolphin habitat for at least a decade.

Welsh Water says it is working to tackle the problems and does not dispute the analysis, which was shared with BBC News by mathematician and former University College London professor Peter Hammond.

Most of the UK has a combined sewerage system, meaning that both rainwater and wastewater - from toilets, bathrooms and kitchens - are carried in the same pipes. Usually, all the waste is carried to a sewage treatment works.

During heavy rain, to prevent a plant becoming overwhelmed, it is allowed to discharge untreated sewage. But releasing any before a plant reaches the overflow level stipulated on its permit is an illegal breach.

Prof Hammond requested data on 11 Welsh treatment plants and found that 10 had been releasing untreated sewage at times when they should have been treating it.

Cardigan was particularly bad, spilling for more than 200 days each year from 2019-2022. The data provided to Prof Hammond showed that Cardigan almost never treated the amount of sewage it was supposed to.

According to its permit it has to treat 88 litres a second before spilling - but had illegally spilled untreated sewage for a cumulative total of 1,146 days from the start of 2018 to the end of May 2023.

"This is the worst sewage works I've come across in terms of illegal discharges," he said.

When presented with the findings Welsh Water admitted it has between 40 and 50 wastewater treatment plants currently operating in breach of their permits. It said decisions on which plants to improve were taken with customer bills in mind, and that because there is "no measurable environmental impact" of the Cardigan estuary spills, these have been a low priority.

The outflow point from the Cardigan treatment plant spills into the Teifi estuary and Welsh Water points to Poppit Sands, a designated bathing beach two miles away, that has water quality consistently rated as "excellent".

Environmental groups say testing at Poppit Sands only takes place from May to September and there is no regular monitoring of the impact of sewage discharges in the River Teifi. It is designated as a Special Area of Conservation (SAC)

and is home to lamprey, Atlantic salmon and otters. The Teifi flows into Cardigan Bay, home to one of Europe's largest populations of bottlenose dolphins.

"Untreated sewage causes a host of problems on our rivers," says Gail Davies-Walsh of rivers campaign group Afonydd Cymru.

"High nutrient levels coming from sewage lead to algal blooms that lead to the depletion of oxygen in our rivers. And that clearly has knock-on impacts to our fish populations and to other species."

The regulator, Natural Resources Wales, told the BBC that it has been aware of the issues at Cardigan for eight years and has issued enforcement notices but no fines. It says it is now looking at data from 101 treatment plants run by Welsh Water that have been spilling before they reach their permit capacity.

Unlike many water companies Welsh Water is a not-for-profit company and does not have shareholders.

It said in a follow-up email that it was not under "formal investigation", that NRW's figures are "inaccurate," and that it stands by its total of about 45 treatment plants currently breaking their permits.

Cardigan's problems date back to 2004 when Welsh Water installed a wastewater treatment system which filters sewage through a membrane. That is not how most sewage plants work.

The sewage network in Cardigan is old and leaky and during Spring tides saltwater gets into the pipes and the treatment plant.

The saltwater causes bacteria to release an enzyme that blocks the membrane. That has meant the plant regularly fails to treat the right amount of sewage and spills untreated sewage.

"We're not proud of this at all," Steve Wilson, managing director for wastewater services at Welsh Water said. "It's a very uncomfortable position to be in - but it's not for the want of trying. We have been trying to fix this."

Those fixes have not worked. In 2025 work is due to begin on a new treatment plant for Cardigan, at a cost of £20m.

For Gail Davies-Walsh of Afonydd Cymru there are questions now for both the water company and the regulator, Natural Resources Wales, which is responsible for enforcing permits and, if necessary, issuing penalties.

"Fundamentally this site [Cardigan] has been discharging raw sewage for possibly 10 years and no action has been taken," she says.

Sewage dumped in Welsh waterways for 600,000 hours

NRW provided the BBC with a timeline of their responses which shows a number of enforcement notices - but no prosecutions or fines. In the last five years the NRW has made no prosecutions anywhere in Wales for illegal sewage spills of this type.

Historic Ban on Snares and Glue Traps comes into force

Wales' historic total ban on the use of snares and glue traps comes into force from 17 October helping to end the indiscriminate suffering of animals, Rural Affairs Minister Lesley Griffiths has said

From today the use of snares or glue traps in Wales is illegal, the first ban of its kind in the UK. This measure was included in Wales' first Agriculture Act and the ban on snares is a Programme for Government commitment.

Snares, sometimes referred to as cable restraints, cause a great deal of suffering to animals and are indiscriminate as they can harm species they are not intended for such as otters, dogs and cats. An animal caught in a snare can endure acute pain and suffering.

Similarly glue traps cause suffering to the trapped animal, including the rodent it was intended for and other animals such as cats. If pets such as cats are caught in a glue trap it can tragically lead to the animal being put to sleep as a result of the injuries sustained.

Alternative methods of predator control are widely available, and similarly while rodent control is essential where prevention has failed, more humane and targeted methods are available.

Rural Affairs Minister Lesley Griffiths said: "This is a historic day for animal welfare. We strive for the very highest standards of animal welfare in Wales, and the use of snares and glue traps are incompatible with what we want to achieve.

"Many animals will now be spared the most terrible suffering as a result of this ban. I'm proud Wales is the first of the UK nations to introduce such a move.

"The banning of snares and glue traps is not about preventing predator or rodent control. There are other more humane ways to do this.

"I'd like to thank all our partners who've worked hard to bring this ban about, and I look forward to continuing to ensure we have the very highest standards of animal welfare in Wales."

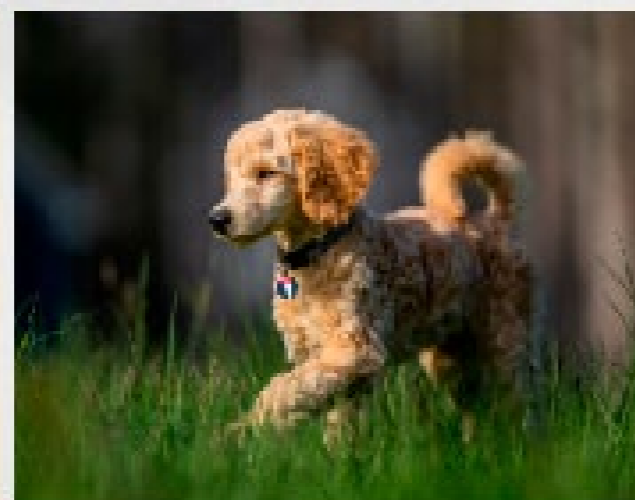
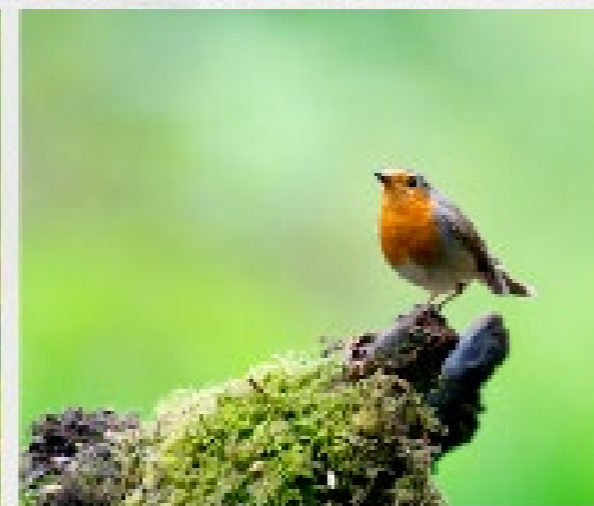
Rob Taylor, Wales Rural and Wildlife Crime Co-ordinator said: "I welcome the introduction of the ban here in Wales today. These traps are indiscriminate and over the years I have personally seen various non-target species, such as badgers and cats caught in snares and suffering terrible injury. After today anyone caught using a snare or glue trap in Wales could face a fine or imprisonment, so we advise people to be aware of this new law and act accordingly".

Billie-Jade Thomas, senior public affairs manager at RSPCA Cymru said: "We very much welcome the ban on snares and glue traps coming into force today.

"Both have the potential to cause immeasurable suffering to animals. Too often, our officers have dealt with animals in severe pain and misery at the hands of these devices; which are cruel, indiscriminate and totally unnecessary.

"The lives of many animals will be saved including wildlife, pets and farm animals such as sheep and lambs."

Anne.Jones@gov.wales



Durrell Wildlife Conservation Trust begins 100-year rewilding project on former grouse shooting estate in Cairngorms National Park

An 18,500-acre estate in Perthshire is set to be the home of a 100-year rewilding project managed by Durrell.

The Trust has secured the lease for Dalnacardoch Estate, which sits entirely within the Cairngorms National Park, halfway between Blair Atholl and Dalwhinnie.

This will be Durrell's first project in Scotland.

The team has a long-term vision to revive the estate by applying its proven techniques to restoring habitats and ecological processes, as well as recovering iconic missing species such as the capercaillie, which is currently facing extinction in Scotland.

Durrell's scientific approach combines hands-on species management with habitat restoration while working alongside local communities and training conservationists.

Significant ecological audits of the site, to establish the geography, species and habitats, are already taking place. These surveys will be ongoing and continue to inform the long-term strategic vision for rewilding the estate in line with the interests of the wider community and the requirements of being in a national park.

Durrell's CEO, Dr Lesley Dickie, said: "This is a transformational moment in the Durrell story. The UK is one of the most nature-depleted countries on Earth with a multitude of diminished species and missing ecological functions. We are proud to be a British charity and we have been looking for a landscape-scale restoration project in the UK for several years.

"Leasing the Dalnacardoch estate offers an incredible opportunity to demonstrate our approach to conservation and transition this estate to a nature-positive landscape that will benefit both local people and wildlife."

Durrell's intention is to have a managed transition away from Dalnacardoch's historic use as a sporting estate. Instead moving towards a diversified range of activities that will provide economic, social and environmental benefits.

The team's immediate focus is on engaging with neighbouring estates and potential partners.

Grant Moir, Chief Executive of the Cairngorms National Park Authority, said: "We're delighted to be working with the Durrell Wildlife Conservation Trust on the long-term restoration of Dalnacardoch Estate. This collaboration will be vital in helping achieve our National Park Partnership Plan commitments, particularly around ecological restoration, net zero, woodland expansion, peatland restoration, and green skills and training.

"It's also encouraging that Durrell plans to work so closely with neighbouring landowners and with the local community, developing a lasting vision that reflects the unique environmental and cultural heritage of the area."

Professor Carl Jones MBE, Durrell's Chief Scientist, said: "Durrell is excited to be working on a major restoration project in Britain, bringing six decades of experience in saving species from extinction and rebuilding ecosystems. In a world where we are seeing major environmental changes and the loss of wildlife, we passionately believe we can address these challenges and make the world a better place. We look forward to restoring the plant and animal communities of Dalnacardoch so that the glens and moors are vibrant with bird song and pulsing with life."

The land was bought earlier this year by a family foundation with charitable aims, specifically with the intent to lease it to Durrell for a rewilding project.

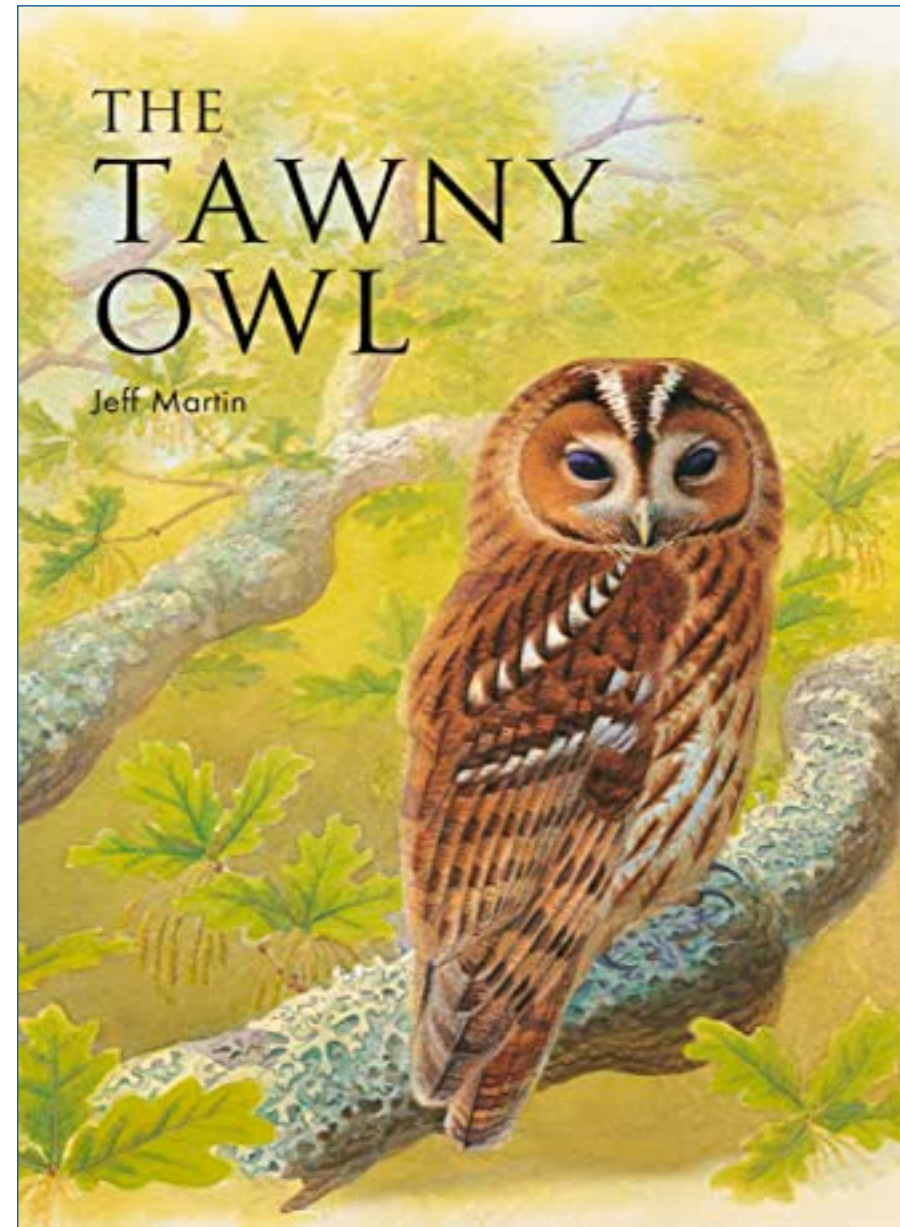
This is excellent news for wildlife conservation in Scotland, and especially for this south west corner of the Cairngorms National Park. Part of Dalnacardoch's boundary is shared with Gaick Estate, managed by Wildland and part of the impressive Cairngorms Connect project, a multi-partner, long-term, landscape-scale rewilding effort.

However, Dalnacardoch, a former grouse-shooting estate, also shares its boundary with a number of other estates (Atholl, Dalnaspidal, North & South Drumochter, and Phones, Eterridge and Cuaick). Some of these estates are still managed (some of them I'd say quite intensively) for driven grouse shooting.

more information:

<https://raptorpersecutionuk.org/2023/10/26/durrell-wildlife-conservation-trust-begins-100-year-rewilding-project-on-former-grouse-shooting-estate-in-cairngorms-national-park/>

editor's book review



Jeff Martin is a field ornithologist with a passion for studying owls. He has previously written two books about Barn Owls - *Barn Owls in Britain* and *The Barn Owl: Guardian of the Countryside*, but in recent years the Tawny Owl has become the focus of his studies. Given that it is Europe's most common owl, this is the first book to focus solely on the species.

I have had a personal and keen interest in Tawny Owls ever since I was a teenager after finding a pair nesting in a hollow tree in my local wood. So, the publication of a book dedicated to the Tawny Owl by Jeff R. Martin was of interest to me.

I have read species monographs previously and they do vary in their content and style - *The Badger* by Ernest Neal was the first one I got my hands on and I found it quite readable.

A section on the use of nestboxes was of particular interest as I wanted to attract Tawnies into artificial nest sites. With the help of my late and long-suffering Dad, I put up a 'chimney' design which failed to attract the local Tawnies but a large open fronted box made from old offcuts of wood was a big hit and birds used it immediately and in most years for more than 20 years.

There is a piece about daylight calling and this struck a chord as I have heard this many times. In fact, I heard this most recently from my garden only a week ago.

The Tawny Owl does have a great deal of scientific data and analysis but it is more wide ranging than this and contains a lot of interesting anecdotes, historical background and even folklore surrounding Tawnies.

The book is certainly comprehensive but is very definitely an academic publication and, as such, is probably not the sort of book you would read from cover to cover, but more of a valuable reference work.

Mike Armitage



If you have not yet seen the new series of Planet Earth, you're missing out.

Planet Earth I was released in 2006 and Planet Earth II ten years later and both gained immediate acclaim for their amazing photography in the most challenging of environments. But the image quality and wildlife spectacle in Planet Earth III exceed anything that has gone before. And, of course, they are all brilliantly narrated by that titan of wildlife filming - Sir David Attenborough.

Each episode of the series is dedicated to a specific habitat or theme, providing a comprehensive view of the Earth's natural diversity.

Planet Earth III began broadcasting on BBC One on Sunday 22 October at 6.15pm. The series is also available to view on BBC iPlayer.

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