



Tayside Recorders' Bulletin

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Welcome to our 2024 issue

Introduction - Our Annual Recorders’ Day

We are very grateful to David and Mike of Leisure & Culture Dundee for hosting and arranging the 16th Tayside Recorders’ Day in September 2024 and look forward to welcoming as many people as possible to the event. The programme can be downloaded via [Tayside-Recorders-Day-Programme_21Sep24.pdf \(taysidebiodiversity.co.uk\)](https://www.taysidebiodiversity.co.uk/Tayside-Recorders-Day-Programme_21Sep24.pdf).

Last year we enjoyed a special day in Montrose at the museum, hosted by Angus Council. As ever, the programme covered national and local updates and we welcomed speakers from far and near, including Christine Tansey of the National Biodiversity Network Trust with an update on the Scottish Better Biodiversity Data Project, Jonathan Willet from the Cairngorms National Park Authority who spoke about beaver reintroduction, and Ian Talboys who outlined the Aberdeenshire Biodiversity in Graveyards Project.

Closer to home we heard about the RSPB's West Angus Wader Project and Buglife's contribution to the Species on the Edge Project. Staying in Angus, there was an update on citizen science recording in East Haven, local Forestry and Land Scotland projects and an outline of the Angus Local Nature Conservation Sites. The focus on species included learning the difference between Field Voles and Bank Voles, a Tayside moths update, and the Scottish National Adder Survey.

This year is particularly special as we are celebrating the 150th anniversary of the Dundee Naturalists' Society. As their website says, their objectives are the study, promotion and conservation of the natural world and they have been doing this admirably ever since their inauguration in 1874. They hold regular field trips and outings over both summer and winter and their programme of fascinating and diverse lectures take place during the winter in the Dalhousie Building, University of Dundee. Together with Members' Nights and social events, there is also a conservation volunteer section which works on the Carsegowniemuir Nature Reserve. New members are always welcome, whatever level of interest they have in the natural world - check <https://dundeenaturalists.org.uk/join/> for more information.

We are planning to meet in Perth next year - again in the autumn if possible. We will get a date in the diary as soon as possible and it will be announced on the home page of www.taysidebiodiversity.co.uk.

The Better Biodiversity Data Project: continuing to work on Scotland's biological recording infrastructure

Author: Christine Tansey



The Better Biodiversity Data (BBD) project is led by the NBN Trust and funded by the Scottish Government and NatureScot. In 2024, work has focused on key recommendations from the Scottish Biodiversity Information Forum (SBIF) review on Biological Recording Infrastructure in Scotland around biodiversity data services, and the technological tools to deliver them.

In late 2023 the BBD team welcomed Emily Baker - Data and Digital Services Manager, and Phil Bysh and Bethany Fairbairn - BBD Business Analysts. Alongside Mike Tetley - Scotland Programme Manager, the expanded team has undertaken ongoing consultation on:

1. A consortium of partners to deliver nationwide biodiversity data services
2. A Data Management and Digital Services System for use by LERCs (Local Environmental Records Centres), Recording Groups and other partners

The BBD project has continued to collaborate with SBIF, and Christine Tansey - BBD Partnership Officer, has supported the publication of a progress report on the SBIF Recommendations. This report also highlights the priority for addressing the SBIF recommendations alongside the Scottish Biodiversity Strategy 2025-2030, and the roles that different sectors in Scotland can play. The report is available from the [NBN Trust website](#).

In September 2024 BBD will be holding a three-day exhibition at the Scottish Parliament. This will showcase the role of recorders and the importance of the biodiversity data infrastructure in Scotland to policymakers at Holyrood. As part of the event, the BBD team will be featuring stories from those involved in the collection, collation and use of biodiversity data.

Stories have been gathered from across Scotland throughout the summer of 2024 and include examples from terrestrial, freshwater and marine recording. The range of experiences shared with the BBD team include community-led recording, partnership projects, work done by LERCs and government agencies.

Through the exhibition BBD will highlight the importance of a well-connected and functional biodiversity data community and infrastructure. This will feed into future engagement with BBD partners as the project completes consultation for, and development of, a new consortium for biodiversity services and the Data Management and Digital Services System.

If you would like to speak with the Better Biodiversity Data team about the project, please contact Christine Tansey: c.tansey@nbn.org.uk

Records From Visit to Greyfriars Burial Ground, 8th June 2024

Author: Per Smiseth

This visit to Perth was part of **Cemetery Wildlife Watch**, an iRecord recording activity that aims to record all wildlife in cemeteries, churchyards and burial grounds across the UK. I recorded 31 species of arthropods, mostly found on gravestones.

Deraeocoris lutescens

This is a small (about 4mm) true bug that has expanded its range northwards in recent years, presumably in response to climate change. This species is pretty common now in Edinburgh, and it was on my target list when visiting Greyfriars Burial Ground. I found it on a gravestone under a tree. This record looks to be northernmost record in the UK at least for now. The shape is quite distinctive and there are usually two black bars on the scutellum (the triangular section at the base of the wings).



Image © Per Smiseth



Image © Per Smiseth

Lime Tuft (*Bucculatrix thoracella*)

This is a small micro moth (wing length about 3-4mm) associated with lime trees where the larva mines the leaves. The species is expanding its range in Scotland and I now come across this species fairly regularly in Edinburgh. I found this one on gravestones under a lime tree. This might be one of the first records, perhaps even the first record, of this species for Perthshire. The species is pretty distinctive despite its small size.

Willowsia platani

This is a small (2mm) springtail associated with trees. It's expected to be very widespread and common across Britain but is very under-recorded. The pattern of the dark and pale bands are pretty distinctive.



Image © Per Smiseth

Greyfriars Summer Project – Invertebrate Abundance

Author: Elena Barbary

During my time with the Tayside Biodiversity Partnership, I undertook my own project at Greyfriars Burial ground in Perth. As part of this project, I set up 16 pitfall traps: 8 in mown areas and 8 in unmown areas. My aim was to assess whether invertebrate abundance and diversity are higher in unmanaged (unmown) areas. Additionally, I used sweep netting at each site to capture a wider range of invertebrates.

I expected that leaving areas unmown would result in higher invertebrate abundance, as the habitat remains undisturbed. However, the results showed distinct differences in species composition between the two areas. In mown areas, species from the orders Araneae, Hymenoptera, Coleoptera, and Gastropoda were found to be more abundant. In contrast, unmown areas had higher numbers of invertebrates from the orders Hemiptera, Diptera, and Lepidoptera.

These findings suggest that a mixed approach to grassland management—allowing for both mown and unmown areas—supports a wider diversity of invertebrates, as different species thrive in different habitat conditions.



This species from the order Coleoptera was identified as *Pterostichus madidus*.

Taysides Swifts

Author: Elena Barbary



We are happy to share the developments and continued support for Tayside Swifts over the past year. Last year, we were honoured to be acknowledged with a Highly Commended Certificate in the Nature of Scotland's Community Initiative Award. This award highlights the importance of community involvement in projects, such as "Saving Our Swifts". This Project continues to thrive thanks to the dedication of local groups and individuals.

The UK Swift Awareness Week, first launched in 2018, continues to grow. This year, we included several Swift Walks across Tayside in the national programme, drawing in many participants willing to learn about these fascinating birds. Local communities enjoyed joining the walks in Kinnesswood/Portmoak, Kettins and Blairgowrie, as well as Carnoustie and Arbroath. New swift nest sites were discovered, and Daniele suggested potential new sites where specialist nest boxes could be added. She outlined how best to survey for swifts and showed how to use the RSPB's SwiftMapper App which now captures all the data – www.swiftmapper.org.uk.

Additionally, our involvement in local events such as the popular Scone Garden Fair, the Blairgowrie BioBlitz and Perth and Kinross Council's Nature Market draws to the growing public interest in swift conservation. We again encouraged people to scan the skies and report swift sightings to SwiftMapper, contributing valuable data to national conservation efforts.



Images: Everyone looking to the skies – the Arbroath Swift Walk © D. Muir

A new initiative, the Angus Coastal Swift Project, focuses on the coastline from Montrose to Monifieth. This project aims to safeguard existing swift populations by working with developers and the local authority to protect existing nest sites and create new ones. The project will also involve educational outreach, setting up Swift Champion Groups, and installing long-life woodcrete nest boxes. This initiative is part of a broader effort to support not just swifts but also house martins and swallows, whose populations are also declining. If you would like to get involved with this project please contact either Kelly Ann Dempsey at dempseyk@angus.gov.uk or Daniele Muir at DMuir@taysideswifts.co.uk.

The continued success of these projects hinges on community involvement. We are looking for volunteers to join our swift surveyor teams, helping monitor nest sites and report on swift activity during 2025. Your involvement can make a significant difference in protecting these beautiful birds from further decline. If you are interested in helping please contact Daniele at DMuir@taysideswifts.co.uk or Catherine at cagllloyd@pkc.gov.uk.

These projects are important as they engage local communities. The summer surveys may only involve 15-30 minutes of people's time, but the findings are extremely important, ensuring that our swifts continue to populate our skies. Thank you for your ongoing support! Further information can be downloaded from [Projects - Swifts - Tayside Biodiversity](#).

Museum Updates

The McManus, Dundee

The McManus Museum and Art Gallery hosts an extraordinary collection showcasing a wonderful diversity of animals, plants and geological artifacts. Whether you are an invertebrate enthusiast or fascinated by the history of botany, there is something of interest for everyone.

This year, The McManus highlighted the beauty of nature throughout the changing seasons with a special feature on "The Art of Spring". This included an oil painting by Ann Patrick, which depicts the brilliant colours of tulips - a flower symbolic of the warmer brighter year ahead. Additionally, the featured included a piece painted by Jane Elizabeth Spindler, illustrating a peaceful moment amidst ducks and cows, sheltered by newly blossoming trees.

The museum excels at exhibiting the artistry of natural history while focusing on community outreach projects, making both the art and knowledge fully accessible

Keep up to date with what there is to see and special exhibitions via [the mcmanus | Dundee's Art Gallery & Museum](#).

Angus Museums

Angus has eight museums and galleries to visit: listed here -

<https://angusalive.scot/museums-galleries/>

Kirriemuir's Gateway to the Glens Museum tells the story of both the town and the Angus Glens. Keep up to date with what is happening via [Exhibitions • ANGUSalive](#).

The New Perth Museum

In Spring 2024, the new Perth Museum opened its doors, proudly showcasing the long-awaited return of the Stone of Destiny. Among Perth Museum's engaging exhibits is the "Rewilding Case", which includes specimens such as a wolf and a crane. This exhibit introduces visitors to the concept of local biodiversity and the ongoing efforts to restore Scotland's natural environment. The rewilding efforts showcased here focus on habitat restoration and species conservation, including initiatives for the reintroduction of beavers and sea eagles, and the contentious debate around reintroducing top predators like the lynx and wolf.

Another highlight is the "Study of Nature Case", an exhibit which reflects on the establishment of over 250 natural history museums across the UK during the Victorian era. The exhibit also pays tribute to celebrated specimen-hunters, such as David Douglas from Scone, and the founding of the Perthshire Society of Natural Science (PSNS) in 1867, which played a pivotal role in documenting the region's flora and fauna. The PSNS also established one of these 250 museums, a Natural History Museum located on Tay Street.

Perth Museum also features a "Biodiversity Diorama", which displays more recent or newly obtained specimens which bring to life the birds and mammals of Perthshire's upland, woodland, and freshwater habitats. Complementing this are the "Discovery Drawers", highlighting historic natural history collections. Containing an array of local minerals, fossils, and history collections, including Beatrix Potter's fungi studies in Perthshire. A notable celestial addition is "The Strathmore Meteorite," the largest recorded meteorite in Scotland.

Keep up to date with upcoming events visit- <https://perthmuseum.co.uk/inside-the-museum/upcoming-events/>

Scottish Pollinators' Annual Conference 2024

The Fourth Annual Pollinator Conference, held in June, was a testament to the growing interest in supporting pollinators with the largest number of participants yet. This year's online conference focused on the theme of connectivity, building on last year's emphasis on monitoring. The event brought together a range of experts who shared valuable insights into creating and sustaining pollinator-friendly environments. With speakers from Ireland, the Netherlands, and Scotland, this conference allowed for a comparison of our own actions with those from outwith Scotland.

Una Fitzpatrick, Chef Scientific Officer at the National Biodiversity Data Centre in Ireland, opened with an update on the All-Ireland Pollinator Plan. Una stressed that the All-Ireland Pollinator Plan's inclusive approach encourages participation from all sectors. The plan provides How-To-Guides available to aid wildlife recorders in best practices for contributing to the protection of pollinators. By creating guidelines aimed towards a specific audience, local communities as one example, this makes implementing positive actions for this plan more accessible.

Una's presentation was followed by Astrid Boerkamp from the Netherlands. Astrid shared an inspiring case study from Arnhem, where the Arnhem Buzzing initiative has transformed the city into a bee-friendly haven. Wildlife recorders in Arnhem have been instrumental in documenting the success of various interventions, such as the city's diverse mowing policy and community-driven projects. The importance of accurate recording in measuring the initiative's impact on local bee populations, particularly wild bees was emphasised. The initiative's "Adopt a Bee" campaign has shown direct benefits for bee habitats, improved education and strengthened the city's green policy. The initiative's community-led approaches, such as providing native seeds to markets and schools, encourages citizens to engage in recording activities and helps raise awareness

The first half of the conference finished with a presentation from Anna Perks, from Falkirk Council. Anna provided a detailed overview of local efforts to support pollinators, with a strong focus on data-driven conservation. Wildlife recorders play a vital role in Falkirk's Biodiversity Action Plan (BAP), contributing to the monitoring of brownfield sites and the creation of meadows. The importance of training for council staff and volunteers was noted, as was ensuring that data collection methods are standardized and reliable. The information gathered by wildlife recorders helps the council assess the effectiveness of its conservation strategies and adjust them as needed.



Forvie National Nature Reserve served as a case study in the power of wildlife recording for understanding and preserving biodiversity. A recent wildflower-themed walk at the reserve provided an opportunity for participants to observe various pollinator species, including bees, butterflies, and moths. The reserve has documented sightings of species such as the Dark Green Fritillary and Common Blue; these sightings contribute valuable data to ongoing monitoring efforts.

The second half of the conference opened with Dallas Seawright, Conservation Manager for the Fife Coast & Countryside Trust. Dallas emphasized the crucial role of wildlife recorders in the transformation of Lochore Meadows Country Park. The park's transition from a former hay meadow to a biodiversity-rich grassland has been closely monitored by a dedicated team of both staff and members of the public. The use of traditional management techniques, informed by recording data, has been key to the park's grassland management success. Recorders provide essential information on the timing of mowing and the selection of plant species, ensuring that these actions benefit local wildlife.

Continuing with the second half, Jenn Wiggins from NHS Scotland outlined the organization's initiatives to enhance green spaces, with a focus on data-driven management. The collection of data on species diversity and habitat conditions across NHS estates are integral to these efforts.

The Clyde Grasslands project is a collaborative effort involving multiple local authorities. This project has a focus on training and capacity building, ensuring that recorders are equipped with the skills needed to collect high-quality data. The project's success demonstrates the potential for data-driven approaches to create greener, more biodiverse healthcare environments.

The conference drew to a close with a final presentation given by Christian Christodoulou-Davis from NatureScot. Christian discussed the Nature Networks programme, a cornerstone of the Scottish Biodiversity Strategy. The programme aims to create interconnected networks of nature-rich areas, supporting a wide range of species, including pollinators. Christian called for increased collaboration and coordination among recorders, conservation organizations, and local authorities to enhance data collection and analysis.

The Fourth Annual Pollinator Conference highlighted the indispensable role of wildlife recorders in supporting pollinator conservation. As we continue to face the challenges of biodiversity loss and climate change, the contributions of wildlife recorders are more important than ever.

For further information on how to get involved in wildlife recording and support pollinator conservation, follow the NatureScot Pollinator Twitter account (@ScotPollinators) or contact Jim Jeffrey at NatureScot (jim.jeffrey@nature.scot). To explore more about pollinator-friendly initiatives and access the full collection of posts and blogs, visit: [Helping Scotland's Pollinators](#).



Carnoustie Golf Links – BioBlitz 2024

Author: Craig Boath

Carnoustie Golf Links was selected as the first venue to host a Golf BioBlitz by the R&A Foundation in 2024. The purpose of the BioBlitz was to bring the local community together to help understand more about the wildlife supported by the golf courses at Carnoustie, allowing amateur naturalists to mingle with experts and discover what creatures are lurking in the rough.

The BioBlitz was sponsored by the R&A Foundation in memory of Helen Goodman, a nature lover and endlessly passionate advocate for sustainability in golf.

‘Bio’ means ‘life’ and ‘Blitz’ means ‘to do something quickly and intensively’. Together they make ‘BioBlitz’; a collaborative race to discover as many species of plants, animals, and fungi as possible, within a set location. The Carnoustie Golf Links BioBlitz 2024 took place between Thursday 27th and Friday 28th June and brought together golfers and non-golfers alike, all with the aim of exploring the variety of life supported on and between the fairways!

All those who attended were able to learn new identification skills across a wide range of taxa, from lichens to lacewings, learn all about the biodiversity value of golf courses and why they can be so important for wildlife, and most importantly have fun finding out more about biodiversity and how we can help it thrive.

Biodiversity is essential to the health of people and the planet. We wanted to understand and appreciate the species supported by golf courses, beginning here at Carnoustie Golf Links with a BioBlitz. Improving our understanding of the wildlife found on golf courses can help us to protect, support and restore nature, as best as possible. Golf is intrinsically linked to the natural world, the tees, greens and fairways often bound by a variety of habitats which support an array of flora and fauna but, with nature continuing to decline and almost one in six species threatened with extinction in the UK (State of Nature, 2023), we want to be as informed as we can so that we can be ready to take further action in golf.

From supporting rare and declining bird species, to locally notable plants, golf courses can provide havens for animals, plants and fungi if you just look closely!

The BioBlitz Head Quarters were based in Links House, the main clubhouse for Carnoustie Golf Links, and included an array of activities and guides to help our BioBlitz-ers ID their findings. Children (and some adults!) enjoyed gathering wildflowers to complete nature bracelets, seeing, feeling and learning about a range of different plants obtained from the golf course, and taking part in colourful leaf art. Children’s binoculars and magnifying glasses were also available to use out on the estate. A whiteboard was used for people to jot down their sightings throughout the day, with space running out before the day was over!

Highlights From The 24 Hours – BioBlitz 2024

Author: Craig Boath

Of the 47 bird species we recorded, over 50% (28 species) are listed as Birds of Conservation Concern, showing how important the golf courses are for declining species such as Red-Listed Skylark, Curlew, and Swift. We also recorded 19 species which are listed on the Scottish Biodiversity List (SBL). The SBL collates wildlife of conservation importance in Scotland including Common Toad, Otter, and Common Pipistrelle.

Meadow Pipit are ground-nesting birds, like Skylark, and their numbers have been declining since the mid-1970s in the UK, resulting in this species being included on the Amber List of conservation concern. We spotted several during the BioBlitz.

Despite the strong winds, plenty of Ringlet butterflies were spotted darting through the grasslands and were the most frequently seen butterfly during the BioBlitz. The Ringlet is so-called due to the small circles present on its underwings. The adults favourite nectar sources are Bramble and Wild Privet flowers whilst the caterpillars feast on grasses such as Cock's-foot.

Yellowhammer were seen and heard across the estate during the BioBlitz, often found singing their 'a little bit of bread and no cheese' song from atop the many Gorse bushes. One was even spotted foraging on a tee during the evening bird walk! Yellowhammer have declined drastically and are Red Listed, largely due to poor overwinter survival from a lack of winter forage and habitat.



At least evidence of, with fresh and old otter spraints spotted by the pond right of the 10th on the Buddon Links. BioBlitz-ers got up close for a sniff to check – otter spraint has a sweetish jasmine tea-type smell, or so they say... We *think* we spotted one swimming in the pond during the bat walk too! Otter mainly eat fish, but they will eat birds, mammals and frogs if fish are in short supply. Thankfully Carnoustie Golf Links provides a well-stocked larder for them given the numerous ponds, ditches and the Barry Burn!

An array of lichens thanks to the expertise of Richard Brinklow. A lichen is not a single organism; it is a stable symbiotic association between a fungus and algae and/or cyanobacteria. They can be found on several surfaces, from stone, including the engineered banks of the Barry Burn, to the bark of trees. Often unnoticed, lichens can be used as air pollution indicators with the ‘bushier’ species needing especially clean air to thrive.

We were enthralled to find so many Oystercatchers and Curlew loafing on the fairways and practice grounds during the BioBlitz, seemingly unbothered by golfers! Both species have long, thin bills, ideal for grubbing out worms and other invertebrates from the fine turf.



One of 21 moth species recorded during the BioBlitz, the Latticed Heath is a widely distributed moth, found in a variety of open habitats such as those found at Carnoustie. The larvae feed on different clovers including White Clover, Red Clover, Hare's-foot Clover, and Lesser Trefoil, all of which were recorded on the estate.

Is it a twig or is it a moth?! The Buff-tip resembles a silver birch twig, much to the amusement of everyone checking the moth traps! It is a night-flying moth, which is readily attracted to light, so much so that we caught two during the BioBlitz!

Endangered in Great Britain, Purple Milk-vetch has suffered a drastic decline since 1930 across large parts of its range. It is a small, perennial plant which flowers in June and July, mainly found in species-rich, short, dry and infertile calcareous grassland and sand dunes, the latter present in abundance at Carnoustie. A scattered distribution of this plant was spotted in the open dune grassland rough alongside the 16th hole on the Buddon Links.

Scoped out by the 11th tees on the Buddon Links, Salad Burnet is not a common find this far north and is listed on the Scottish Biodiversity List for that reason. It was possibly sown on the estate here but nevertheless; it was still a great find! Salad Burnet's name comes from its use in salads as the leaves have a slight taste of cucumber. We also discovered other edible plants in the same area, with several BioBlitz-ers giving Ox-Eye Daisy a taste; some being more impressed than others!



Article images: © Craig Boath, © Sophie Olenjnik ©Jodie Docherty

During the bat walk, we recorded both Common Pipistrelle and Soprano Pipistrelle bats. At times, more than one bat could be seen foraging along the corridors of scrub in the south of the estate. We used bat detectors to listen to their echolocation which was how we could distinguish between both species, with Common Pipistrelle echolocating at 45kHz and Soprano Pipistrelle at 55kHz. These are two of the smallest bat species found in the UK, weighing around the same as a teabag or 20p coin. Despite their small size, they can feast on around 3,000 small insects in one night alone!

Glenlyon Primary School Welcoming Hedgehogs

Author: Elena Barbary

Glenlyon Primary School, one of the most rural primary schools in Perthshire, is setting a remarkable example of how schools can play a role in wildlife conservation in their efforts to create a hedgehog-friendly playground. The school has embraced their surroundings by aiming to enhance biodiversity on its grounds, demonstrating a strong commitment to protecting local wildlife and encouraging an interest among students.

The school has been using multiple hogilos, provided by the Tayside Biodiversity Partnership as part of its Homes for Wildlife Project funded by the Nature Restoration Fund, to create shelter and nesting sites for hedgehogs in the school grounds. These hedgehog houses have been placed in various locations, including shaded areas under trees, near log piles, and even discreetly under playground benches. Although direct evidence of hedgehogs using the hogilos is yet to be confirmed, the presence of these shelters shows the school's dedication to creating a hedgehog-friendly environment.



© Sarah Mitchell

A trail camera set up in the ground has captured exciting footage of local wildlife, including hedgehogs, pine martens, and woodpeckers. This not only proves the effectiveness of the school's conservation efforts but also provides a unique educational experience for the students, who can witness the impact of their hard work first hand. Additionally the batteries for the camera are funded by creative initiatives like selling plants that have been grown from donated seeds.

Glenlyon has also taken steps to improve the overall biodiversity of the school grounds. The front garden, managed with the local council, has been left partially unmown to let plants grow, attracting a variety of pollinators and other wildlife. The school's grounds feature two small ponds, a bug hotel, 10 bird boxes, and swift boxes, further enriching the habitat available to local species.

On the first week of September we set up a hedgehog footprint tracking tunnel with the children. And after the first week the school had already recorded hedgehog footprints. I look forward to seeing what discoveries they make next!

Champhibians, Citizen Science for Schools

Author: Janet Ullman



Watery places hold an innate fascination for children of all ages. It is with this in mind that the Amphibian and Reptile Conservation Trust's (ARC) Saving Scotland's Amphibians and Reptiles in Scotland Project (SSAARs) created Champhibians, a schools' citizen science project that provides useful records for the monitoring and survey of amphibians. Through Champhibians schools can register on the ARC Trust web site naming their school pond or adopting a local pond. The school then has access to their own unique recording page, access to resources and materials and receive their own Champhibian Pack with ID guides, card game, stickers and printed resources. The registration for Champhibians can be found at <https://www.arc-trust.org/champhibians>.

Champhibians is also an appreciation that a study of a pond is often a child's first introduction to the many wonders of the natural world and a teacher's chance to teach biodiversity in a real-world setting. It also enables the opportunity to teach about health and well-being next to water and an emotional appreciation of nature for a sense of connection to the natural world.

Studying amphibians in Scotland is relatively easy because there are only six native species: common frog, common and natterjack toads, and smooth, palmate and great crested newts. The natterjack toad is found only on certain areas on the coast and the great crested newt is very rare. Both are specially protected by law and may not be disturbed or handled without a licence. If great crested newts are found in your pond this is very exciting but does mean the pond has to be surveyed by a licenced surveyor who can help you monitor your pond. In that case we can link your school with a listed surveyor or train a staff member as a licensed surveyor.



ARC Trust project officers are working closely with staff in the Perth and Kinross area and with the Biodiversity Villages & Towns Initiative, where adopting a pond allows the school to become part of the surveying population of Amphibian schools locally, with a chance to compare results with other local schools. Amphibians gives access to the wider ARC Trust with its specialist support and knowledge. From surveying ponds for amphibians your school's data is recognised as part of the national monitoring for species national recording centre of the National Biodiversity Network. This is a chance for the whole school to contribute and be involved with a national recording programme in the long term, supporting the information that is given to determine the protection and conservation of these very important species. In essence everyone surveying a pond becomes a species surveyor, working as a scientist in real time

Coupled with the importance of surveying a Amphibian school gains the support of the dedicated Education Officers of the ARC Trust and access to advice, educational materials, lesson plans and Digi Lessons. Where possible an education officer can visit your school in person and help with surveying, lessons and pond restoration.

Going further the school has a chance to engage the whole of the local community in the promotion of amphibian conservation, whether that is through encouraging parents to take part by surveying home ponds and local ponds or by being involved in a community events. The possibilities are boundless.



Both photos © Janet Ullman

Geodiversity Around Tayside

Author: Elena Barbary

Tayside's landscape offers remarkable geological features that are significant for education, scientific study, tourism, and public appreciation. Local Geodiversity Sites (formerly known as Regionally Important Geological & Geomorphological Sites or RIGS) are identified for their natural history, geology, historic interest, or archaeology. These sites are conserved for their educational and cultural value, with local councils involved in their preservation.

One notable site is Kinnoull Hill, formed from volcanic andesite lava flows dating back around 410 million years, during the Devonian period. At that time, Scotland was a desert-like region located south of the equator. Subsequent earth movements folded the local rock strata, creating the Tay Valley's distinctive rift valley. The volcanic rocks of Kinnoull Hill were later cut by a dolerite dyke, which was quarried at Corsiehill for road construction.

Tayside Geodiversity, although no longer active as a voluntary group, contributed greatly to identifying and preserving Local Geodiversity Sites. Its work continues through the [Scottish Geology Trust](#), which promotes Scotland's geological heritage and hosts an annual Geology Festival. The [Tayside Geodiversity Action Plan](#) remains in place until 2026 and is featured on the Tayside Biodiversity website. For further information or to report activities, contact caglloyd@pkc.gov.uk.

Scottish Geology Festival (1st September to 6th October 2024)

This year's Scottish Geology Festival runs from the 1st September to 6th October.

Scotland's unique character and cultures are rooted, quite literally, in the rocks that lie beneath our feet and under the sea. These rocks have directly influenced our landscapes, built heritage and industry, and are intrinsically linked with our sense of place. The Scottish Geology Festival gives everyone the opportunity to learn about these incredible stories hidden within Scotland's rocks – with events across the country, including guided walks, online talks, boat trips and geological exhibitions – there is something for everyone to enjoy! Check - [Events from 1 September – 2 October – Scottish Geology Trust](#).

Dr Katie Strang, Director – Scottish Geology Festival: engagement@scottishgeologytrust.org

Emily Brown, Secretary – Scottish Geology Trust: secretary@scottishgeologytrust.org

The Decline of House Martins and Swallows and its Ecological Impact

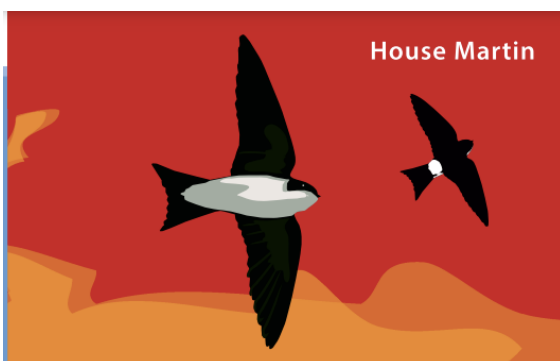
Author: Elena Barbary

House martins and swallows are two species of small, aerial-feeding birds. In recent years we have seen a worrying decline in their numbers, raising concerns about the future of these summer visitors. House martins, known for their distinctive white undersides and their mud-built nests, migrate to the UK and Ireland each spring to breed. They can often be seen catching insect in flocks, to fuel their long journey back to Africa in the autumn. House martins have experienced a significant population decline in the UK, regardless of their adaptability to nesting in human habitats. This decline has led to their addition to the UK Red List in 2020, a status that indicates the species most at risk of extinction in the region.

Swallows, another migratory bird species, shares similar habits and feeding behaviours with house martins. And like the house martin they have been in decline for about a decade. While their numbers did increase during the 1990s and 2000s, recent years have seen a sharp decrease. However, during the 2021 review, due to their previous population growth swallows did not meet the criteria for the amber list, indicating a lower risk to extinction than that of the house martin.

The cause of the decline in both species is not fully understood; however several factors have been identified as potential contributors. One is the increased use of modern PVC surfaces, which for house martins has lower breeding success compared with nests built on brick or wood. The nests built on this material tend to collapse, leading to fewer successful broods. Additionally, the reduced number of invertebrates, caused by changes in agricultural practices, urbanization and climate change, may be a contributing factor as a crucial source of energy for these birds.

This decline of both house martins and swallows is not just a loss of two delightful summer visitors; it could have broader ecological implications. Just as the decline in invertebrates could be a contributing factor, their own decline could disrupt local food chains as birds of prey rely on swallows and house martins as a food source. Additionally, both species play a crucial role in controlling insect populations that can be seen as pests, such as midges and aphids.



To help swallows and house martins thrive, you can install nest boxes under the eaves of buildings to provide safe nesting sites. Encouraging a healthy population of invertebrates, their primary food source, is essential—consider planting wildflowers, maintaining ponds for wildlife, or leaving areas of grass unmown to attract insects. Access to mud is also crucial for house martins, as they use it to build their nests, so leaving small patches of damp soil can be helpful. These simple actions can create a more supportive environment for these birds. 20

To read more about The BTO House Martin Survey Visit: <https://www.bto.org/our-science/projects/house-martin-survey>

Blairgowrie's First Large-Scale BioBlitz

Author: Jenna Muir

Biodiversity Blair hosted its first large-scale BioBlitz on June 21-22, 2024. The weekend began with a showing of the “Why Not Scotland” film, which attracted a great crowd and sparked lively conversations. Afterwards, viewers joined local bat ecologist and beaver expert Jean Oudney for a bat walk by the riverside, where she shared fascinating insights about these species.

The following morning kicked off with a dawn chorus led by volunteers Ang and Rob in their garden. Attendees enjoyed fresh coffee and croissants while listening to native birds.

Later, the Wellmeadow came alive as we welcomed stallholders, including the RSPB, Climate Café, Tayside Biodiversity Partnership, Saving Scotland's Red Squirrels, local author Alan Stewart, Nest Creative Spaces, and St Stephen's Primary School. Activities like worm charming, treasure hunt surveys, and sustainable crafts engaged people of all ages. The worm charming was a highlight, with participants using creative methods like dancing, tapping, and even musical instruments to coax worms from the ground!

A range of nature walks and presentations were held across two locations. At the Wellmeadow, bird expert George Donald led a bird ramble, Mike Jones hosted a photography workshop, Helen Dickinson from Bumblebee Conservation offered a bee identification workshop, and Sustainable Kirriemuir's Amandla and Rejane led a foraging walk. Meanwhile, at St Catharine's Hall, Alan Stewart presented on his wildlife crime fact-to-fiction books, inspired by his time as Tayside's wildlife crime officer. Jean Oudney discussed beaver ecology and their reintroduction to Scotland, and Susie McNaughton from Saving Scotland's Red Squirrels highlighted the threats facing red squirrels and how the public can help in their conservation.

The weekend's main goal was to better understand the biodiversity in various local environments and encourage public involvement in wildlife surveying. We provided survey sheets for participants to complete at their own pace, while expert-led workshops and knowledgeable stallholders offered guidance throughout.

The event was a huge success, and we look forward to organizing more BioBlitz weekends in the future. In the meantime, Biodiversity Blair continues to host monthly nature surveys on the second Saturday of each month. To find out more contact jennamaymuir@hotmail.com.



Tayside Moth Monitoring Updates

Author: David Lampard

As part of ongoing efforts to monitor local biodiversity, two moth traps have been loaned to community projects in Dundee and Angus.

The first trap is currently being used at Dawson Park Community Garden, a project run by Scottish Action for Mental Health. Volunteers are using the trap to assess how insect-friendly the garden is while learning moth identification skills.

The second trap has been loaned to Campy Growers, Dundee's largest community growing space. This project is transforming the council's disused plant nursery into a thriving community garden. The portable moth trap is being used across different parts of the large site to monitor moth diversity and evaluate the health of the growing space.

Additionally, I am now in the second year of regular moth trapping at Dundee Botanic Garden. Using a range of traps, we are converting different habitats across the garden on a near-monthly basis. Early results are already revealing differences in species preferences between habitats.

Moth Trap Loan

The East Scotland branch of Butterfly Conservation has funded a project to create several bucket traps for County Moth Recorders to lend out, encouraging more moth trapping and recording. Cathy Caudwell has traps available for loan. If anyone is interested, please get in touch at c.m.caudwell@dundee.ac.uk.

Additionally, moth trap kits have been provided to both Stanley and Blairgowrie as part of the Biodiversity Villages & Towns Initiative. A third moth trap kit is available to borrow for up to a week anywhere in Perth & Kinross through the Tayside Biodiversity Partnership. For inquiries or to arrange a loan, please contact caglloyd@pkc.gov.uk.

Survey Help Needed for Perth and Kinross Projects

Author: Catherine Lloyd

If any recorders or citizen scientists would like to help with one-off or regular recording in any of the Biodiversity Villages & Towns, or for the Industrial Estates/Business Parks Project, please contact the Tayside Biodiversity Partnership via caglloyd@pkc.gov.uk. The TBP would also welcome ideas for informal recording workshops or events during 2025.



Tayside and Fife Fungal Group

Author: Jim Cook

For those interested in joining our autumn forays, the full details can be found on the TAFFG Facebook page, where updates or last-minute changes will also be posted. The usual start time for all TAFFG forays is 12 noon at the site.

Upcoming forays include UK Fungal Day at the Wildlife Centre in Camperdown Park, Dundee, on Sunday, 6th October, followed by Crombie Country Park, Angus, on Sunday, 13th October, and Ravenscraig Park Woods, Kirkcaldy, on Sunday, 20th October. If you'd like to attend, please email jim.strath91@gmail.com to let the Steering Team know you will be coming.



Toad Patrols Continue to Thrive in 2024

Blairgowrie and the surrounding areas are now home to four active Toad Patrols, demonstrating a growing commitment to amphibian conservation. The patrol sites include Rae Loch (Blairgowrie), Palace Road (an extension of Rae Loch patrol, Blairgowrie), Bridge of Cally, and Tullybaccart (Coupar Angus to Dundee Road).

Palace Road and Bridge of Cally were registered as new sites on the *Toads on Roads* portal, Froglife, this year by the current manager of both sites. Rae Loch continues to be managed by Jean Oudney, and Tullybaccart was initially registered by Celia Holmes, now managed by Sean Earnshaw.

The managers have been crucial in storing and submitting data to Froglife, as well as onboarding new volunteers with health and safety briefings, making the patrolling process smoother and safer. For more details about frog patrols please visit [Froglife.org](https://www.froglife.org).

Thanks to generous funding from Amphibian and Reptile Groups of the UK (ARG UK) and the Tayside Biodiversity Partnership, all four patrols have benefited from brand-new safety equipment. This includes hi-vis jackets, road signs, traffic cones, beacons, buckets, nets, and walkie talkies. These enhancements have significantly increased the safety of volunteers, especially on roads with hidden dips and blind corners where vehicles might not otherwise slow down.

A key highlight of this year's patrols has been the growing sense of community engagement. The patrols have not only saved over 2,000 amphibians collectively, but they've also created opportunities for people of all ages to connect with conservation work. Many volunteers have been introduced to an issue they weren't previously aware of, and their involvement has directly contributed to boosting the populations and breeding success rates of amphibians at all four patrol locations.

You can register a toad crossing here: <https://www.froglife.org/what-we-do/toads-on-roads/register-a-toad-crossing/>.

To find out more or get involved in this vital conservation work, visit [Froglife's Toads on Roads](#) portal or reach out to the local Toad Patrol managers.



Photos © Hannah Caves and Izzy Wardhaugh

Final Notes

Useful National and International Websites

- The State of Scotland's Nature 2019 - [State of Nature Scotland 2019 - Scotlink](#)
- United Nations - Biodiversity - [Biodiversity | United Nations - CEB \(unsceb.org\)](#)
- Considerable Change Needed to Stop Nature Loss (September 2023) - [Considerable change needed to stop nature loss in Scotland | NatureScot](#)
- It is not too late to reverse biodiversity decline by 2030, UK's five leading nature bodies say - <https://www.gov.uk/government/news/its-not-too-late-to-reverse-biodiversity-decline-by-2030-uks-five-leading-nature-bodies-say>
- Scotland's Biodiversity Strategy 2022-2045 - <https://www.nature.scot/scotlands-biodiversity-strategy-2022-2045>
- 30:30 Explained - [30 by 30 explained | NatureScot](#)
- National Biodiversity Network - [National Biodiversity Network \(nbn.org.uk\)](#)
- Nature Networks Explained - [Nature Networks explained | NatureScot](#)

What's On

Please check the Tayside Biodiversity website for a variety of events. If you have an event to publicise, please send brief details as early as possible to caglloyd@pkc.gov.uk. Information can also be shared on the Tayside Biodiversity and Tayside Wildlife Recorders' Facebook pages. There is a quarterly Tayside Biodiversity E-News too and we are happy to include details there.

Editorial Opportunity

We have been extremely fortunate in past years to welcome several students and graduates who gain invaluable experience in researching and compiling the Bulletin. This is not a short-term newsletter, but a well-used document which is featured on the Tayside Biodiversity website for the entire year of its publication and is then available via the website's archives: www.taysidebiodiversity.co.uk. If you would like to be involved in compiling and editing the 2025 issue, please contact Catherine at caglloyd@pkc.gov.uk.

Finding Us & Getting Involved

Archived Recorders' Bulletins

These Bulletins started in 2012 and we have not missed a year since! All of them can be downloaded via the TBP website, or just click whichever one you wish to read below –

- 2012 - https://www.taysidebiodiversity.co.uk/wp-content/uploads/2015/02/TaysideRecordersBulletin_March_2012.pdf
- 2013 - https://www.taysidebiodiversity.co.uk/wp-content/uploads/2015/02/TaysideRecordersBulletin_April_2013.pdf
- 2014 - https://www.taysidebiodiversity.co.uk/wp-content/uploads/2015/02/TaysideRecordersBulletin_April_2014.pdf
- 2015 - https://www.taysidebiodiversity.co.uk/wp-content/uploads/2015/02/TaysideRecordersBulletin_Feb_2015.pdf
- 2016 - <https://www.taysidebiodiversity.co.uk/wp-content/uploads/2016/08/2016-Recorders-Bulletin-07-16.pdf>
- 2017 - <https://www.taysidebiodiversity.co.uk/wp-content/uploads/2017/05/2017-Recorders-Bulletin.pdf>
- 2018 - <https://www.taysidebiodiversity.co.uk/wp-content/uploads/2018/03/2018-FINAL-Tayside-Recorders-Bulletin-ED-CL.pdf>
- 2019 - <https://www.taysidebiodiversity.co.uk/wp-content/uploads/2019/03/Tayside-Recorders-Bulletin-2019-ED-CL-edited-FINAL.pdf>
- 2020 - <https://www.taysidebiodiversity.co.uk/wp-content/uploads/2020/03/2020-Tayside-Recorders-Bulletin-FINAL-11-03-20-CL.pdf>
- 2021 - <https://www.taysidebiodiversity.co.uk/wp-content/uploads/2021/04/2021-Tayside-Recorders-Bulletin-FINAL-NM-CL-17-4-21.pdf>
- 2022 - <https://www.taysidebiodiversity.co.uk/wp-content/uploads/2022/09/2022-Tayside-Recorders-Bulletin-FINAL-9-22-CS-CL-DL.pdf>
(taysidebiodiversity.co.uk)
- 2023 - <https://www.taysidebiodiversity.co.uk/wp-content/uploads/2023/09/2023-Tayside-Recorders-Bulletin-HS-CL-09-23.pdf>

If you would like to be involved in the creation of next year's bulletin or if editing is more your style, please contact Catherine Lloyd at cagllloyd@pkc.gov.uk.

In the meantime, special thanks are due to Elena Barbary who single-handedly took on the task of compiling this year's Bulletin and ensured it was complete in time for the 2024 Recorders' Day.

Don't forget to share your surveying news with the Tayside Wildlife Recorders' Facebook page –
or indeed any of the other Facebook pages we run:

Tayside Biodiversity / Tayside Swifts / Tayside Amphibians & Reptiles

The Tayside Biodiversity Partnership also shares news via its regular E-Newsletters so if you have any special survey or project news, please let us know. Articles can be between c100 and 450 words and if possible, please provide a photograph with copyright details. The current and past E-Newsletters can be downloaded from www.taysidebiodiversity.co.uk.



Tayside Recorders' Forum, c/o Tayside Biodiversity Partnership,

Pullar House, 35 Kinnoull Street, Perth. PH1 5GD

The 2024 Bulletin was researched, compiled, and edited by Elena Barbary (University of Edinburgh) with additions and updates by Catherine Lloyd, for the Tayside Recorders' Forum

Summer 2024

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If you would like paper copies of this Bulletin for an event, please contact caglloyd@pkc.gov.uk

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Tayside Biodiversity Partnership

