



Carmarthenshire Nature Partnership  
Report on Action  
January – December 2023

*Partneriaeth Natur*  
SIR GŶR • CARMARTHENSHIRE  
*Nature Partnership*



## Introduction

The [Carmarthenshire Nature Partnership](#) (CNP) is a group of over 20 organisations. First set up in 1998 the Carmarthenshire Nature Partnership is made up of a number of partners with a depth of knowledge, experience and enthusiasm for the county's biodiversity. The Partnership is individual to our area and for over 20 years has provided probably the only local opportunity for conservation organisations, ecologists and recorders to network, share experiences and develop projects in partnership. The individual conservation organisations within the Partnership make up a broad spectrum of expertise on a wide range of species and habitats (including our best and least known wildlife).

Carmarthenshire supports a rich mosaic of different [habitats](#) making up our landscapes, most of which have been influenced by a long history of human activity and land-management practices. Whether they cover large or small areas, all our varied habitats, and the species that live there, add to the richness of biodiversity in Carmarthenshire. They all contribute to our experience of living here and also to the economy of the county, the health and well-being of our citizens, the provision of food, clean water and air, and to our local culture. A healthy natural environment is a vital part of a sustainable, resilient and distinct Carmarthenshire.

However, the [State of Nature in Wales 2023](#) report identified that there has been a considerable change in Welsh wildlife in recent decades with evidence of the overall decline in the diversity of species and the extent of natural and semi-natural habitats. The [State of Natural Resources Report](#) (SoNaRR 2020) published by NRW recognises the complexity in the detail of the biodiversity assessment contained in the report, whilst noting that "the overall trend is one of serious decline, reflecting the global situation and internationally recognised nature emergency". This is reflected in Carmarthenshire.

After the Senedd declared a Nature Emergency in Wales 2021 and recognised that the nature and climate crises are inextricably linked, Carmarthenshire did the same in 2022. Also in 2022, the WG Minister for Climate Change, working with a group of key experts and practitioners, undertook a '[Biodiversity Deep Dive](#)' to develop a set of collective actions we can take in Wales to support nature's recovery. The '30x30' target was chosen as a strategic focus and refers to protecting, and effectively managing at least 30% of our land, freshwater and sea for nature by 2030, by improving the condition, connectivity and resilience of protected sites, designated areas and other key areas that deliver biodiversity outcomes. A key recommendation in the Deep Dive identified the need for capacity building, behaviour change and awareness raising and skills development across the sector.

Local Nature Partnerships (LNPs) were recognised as a key network in supporting collaborative partnership action for nature recovery at the local level and the intention is to provide funding to support LNPs in Wales. There is recognition that nature recovery will require a society-wide approach to deliver for nature and for people.

30 x 30 is one of 23 targets which formed part of a new Global Biodiversity Framework agreed at the 15th [Conference of the Parties](#) to the United Nations Convention on Biological Diversity (COP 15) in December 2022. The Post 2020 Kunming-Montreal Global Biodiversity Framework states the commitment to put the world's biodiversity on a path to recovery by 2030. Progress towards national targets will be reviewed at COP16 in 2024.

All of this will ultimately influence our work at the local level, including the updating and delivery of the Carmarthenshire Nature Recovery Plan.

A 2019 intergovernmental report ([IPBES assessment 2019](#)) has also shown the strong interrelationship between climate change, the loss of biodiversity and human wellbeing. Any local framework to address climate change should consider the impact on Carmarthenshire's biodiversity and also consider how our natural environment can help with mitigation and adaption to climate change. We cannot solve the threats of human-induced climate change and loss of biodiversity in isolation. We either solve both or we solve neither.

The work of the partners, and the projects they undertake, deliver outcomes that help to conserve and enhance our natural environment and often deliver multiple benefits that improve the well-being of the people that live here. Their work contributes to objectives and outcomes of a number of national and local plans with goals for the natural environment. These the [Carmarthenshire Nature Recovery Plan](#) which contributes to the national biodiversity strategy and action plan for Wales working to reverse the decline in biodiversity in Wales and build the resilience of our ecosystems. The Carmarthenshire Nature Recovery Action Plan has a focus on ecological resilience with connectivity as a central theme. This is part of a vision to restore and create better connected networks of habitats within the county.

In addition, [The Environment \(Wales\) Act 2016](#) puts into place a duty to plan and manage our natural resources. This includes a duty to require all public bodies, when carrying out their functions to seek to 'maintain and enhance biodiversity' where it is within the proper exercise of their functions and seek to 'promote the resilience of ecosystems'. The Council has prepared a Forward Plan to evidence how it will integrate this legislation into the delivery of its services, which has been reported on to WG.

Local Nature Partnerships are a key delivery mechanism that can help provide local focus and delivery of all these aims. In 2023 a State of Nature report for Carmarthenshire was drafted and will be published in the first half of 2024.

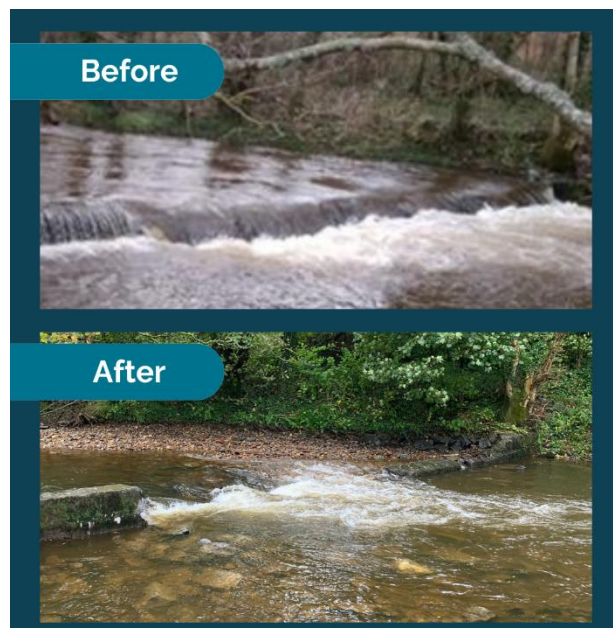
Local people can make a difference as well and it is a role of all the partners to raise awareness and work with communities on projects that benefit biodiversity – and the people involved.

This is a summary of just some of the achievements of the partners in 2023, often working together, to conserve and enhance Carmarthenshire's diverse range of habitats and species.

## THE CARMARTHENSHERE NATURE PARTNERSHIP



The **West Wales Rivers Trust**, with support from Natural Resources Wales, Ammanford and District Angling Association and a landowner, have removed a weir that was impounding habitat and disrupting natural depths, flows and movement of river gravels and fish on the River Loughor in Carmarthenshire. This is part of our wider programme of works to restore natural river flows and fish passage in the County, following the removal of six other weirs in the Loughor catchment in the last 2 years, and multiple fish passes.



The Conservation Team of Carmarthenshire County Council's **Outdoor Recreation Service** has been awarded funding from WG's The Woodland Investment Grant (TWIG) for Ynysdawela Local Nature Reserve (LNR) in Upper Brynamman.

The award of has seen contractors on site removing defunct infrastructure, improving access and light-touch habitat management.

Ecological surveys looking specifically at Invertebrates and fungi have revealed new species to Wales, including the beetle *Stenus kiesenwetteri*.

Responsible use of the woodland by local residents has increased since the restoration work has begun. Much more work is planned for 2024.

Habitat management work continues across the other five LNRs ranging from Sea Buckthorn and Japanese Rose clearance to pond management and prepping for the reintroduction of, Deptford Pink, (*Dianthus armeria*) to a coastal location.

Funding from [WG Local Places for Nature](#) grant allowed the creation of native flower beds to be created along the Llanelli coastal link road and were a popular hit with locals and visitors alike.



The Ministry of Defence estate at Pendine includes Laugharne–Pendine Burrows SSSI. Here management by the **Defence Infrastructure Organisation** has removed 5 Ha of Sea Buckthorn (*Hippophae rhamnoides*)-dominated invasive scrub from SSSI/SAC dunes.



At Pembrey Sands Air Weapons Range, which includes Pembrey Coast SSSI, 10 Ha of invasive scrub from SSSI/SAC dune/saltmarsh habitat has been removed. In addition targeted herbicide use has controlled the Sea Buckthorn regeneration from 2021/22 scrub removal areas. Dune grassland has been managed by rotational cut and collect.



Whilst the work of **West Wales Biodiversity Information Centre** is primarily managing biological records, we continue to promote biological recording through activities, our website and social media. Records for Carmarthenshire in the first 9 months of 2023 year increased by ca. 60,000 across all main taxa.

To date in 2023 we have held four recording days at sites in Carmarthenshire bringing staff and Vice-county recorders together on private land with the permission of the landowners at: Halfway, Cilycwm, Llanarthne and Llanddowror. Two busy events were the WWT Bioblitz in Llanelli to which we were invited and our annual Recorders Forum, which was held in March at UWTSO, Lampeter.



WWBIC staff have engaged with several groups in the county. Energy Local Capel Dewi have received training in recording and plant identification to aid their road verge monitoring programme and we support the Carmarthenshire Meadows Group and their Big Meadow Search project. Two people in Carmarthenshire have taken up our offer of loan equipment, borrowing moth traps and trail cameras.

With grant funding from Welsh Government **Carmarthenshire County Council** worked with a local contractor to create another contour peat bund on Figyn bog, near Llanfynydd.

The lowland raised bog here is very deep at the centre (approx. 11 m) but removal of peat in the past and the excavation of a ditch has meant that the water is draining eastwards out of the bog. The ditch has been dammed and creating ‘bunds’ of peat, slowing surface and sub-surface run off, raising the water table closer to the surface vegetation so peat can form again.



A good analogy here is a bath with the tap running. The pre-restoration bog is like a bath without the plug in, and the water flows out of the plug hole causing the bog to dry out and degrade.

Contour bunds are the equivalent of putting a plug in the bog. The water storage in the bath (bog) increases as the water level rises behind the bund.

‘Active’ peat can store Carbon and act like a sponge, slowing down the loss of water – they are also one of our most important wildlife habitats and their restoration is a priority in Wales.

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Probably one of the best highlights for the **Wildlife Trust of South and West Wales’** Carmarthenshire reserves was getting grazing onto the western bog at Cors Goch National Nature Reserve/Special Area of Conservation. Funding received from National Heritage Lottery Fund paid for new fencing and a holding pen for safe loading of cattle, alongside scrub clearance and cut and collection of the overstood *Molinia* [grass not cut around the optimum hay time in midsummer (around July)]. The cows were on all summer and did a fantastic job of tackling scrub regeneration and keeping the vegetation open. The Black Bog Ant (*Formica picea*), one of the sites most special species, appears to be fully taking advantage of the shorter sward height of the *Molinia*. We installed dip wells across the bog and are gathering data so that we can better understand the hydrology and make informed decisions on how to hold water on the bog for longer.

With help from the [WG Local Places for Nature Grant](#), via the Carmarthenshire Nature Partnership, we have also dug a series of small ponds at Carmel National Nature Reserve. Transforming a species-poor rush-dominated corner of a field into a mini wetland. Also at Carmel we had a record-breaking year for Greater Butterfly Orchids, circa 1800, laid 135 m of hedge, and installed eight carved wildlife sculptures.

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The **National Botanic Garden of Wales’** seed banking programme has continued in partnership with the Millennium Seed Bank’s [UK Threatened Flora Project](#) and [UK National Tree Seed Project](#). A total of 26 collections were made across Wales in 2023, including from Carmarthenshire populations of Bird’s Nest Orchid (*Neottia nidus-avis* - GB red-listed as near threatened) and Tubular Water Dropwort (*Oenanthe fistulosa* - GB red-listed as vulnerable to extinction).

NBGW horticulture and science teams have worked together to propagate three threatened species to support *in-situ* conservation, including [Dog Screw Moss \(\*Tortula canescens\*\)](#) for [Natur am Byth](#) and Deptford Pink (*Dianthus armeria*) for CCC. Brush-harvested seed and green hay from wildflower-rich hay meadows on Waun Las NNR was supplied to South Wales Trunk Road Agent, including two sites in Carmarthenshire.



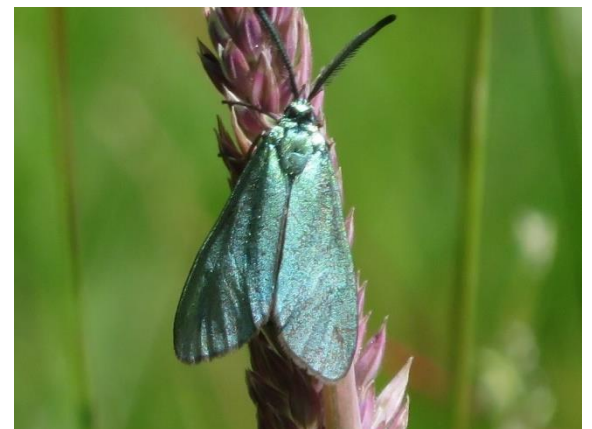
**Plantlife** has one of its two Welsh nature reserves in Carmarthenshire: Cae Blaen-dyffryn, just south of Lampeter. This year our orchid count on the nature reserve (which is SSSI for its grassland and orchid features) was just shy of 3000 spikes in total for Greater and Lesser Butterfly Orchids (*Platanthera chlorantha* and *bifolia*) - many thanks to all the volunteers who helped with the count. We have also been working with farmers in the landscape around the nature reserve to understand more about the habitats and farm businesses in the area, to discover where there are opportunities to work in partnership for nature recovery. The farm liaison work has been done by our agricultural advisor, Hywel Morgan. In addition, September 2023 saw the start of our Nature Networks Fund-supported project, [Glaswelltiroedd Gwydn](#). This project will be funding habitat restoration on and around Cae Blaen-dyffryn until March 2026, as well as in other locations across Wales (which may include further sites in Carmarthenshire, depending on the outcome of our shortlisting process). We have recruited three new staff members to the team, including Carmarthenshire-based Lawrence Harris who joins us as one of our Project Officers.



**Butterfly Conservation's** volunteer team has been very active once again and put in 140 days of volunteer work in the county, organised by Richard Smith (also a volunteer). Carmarthenshire is both the largest and most central of the South Wales region which we cover and has some of the best populations of the Wales' Priority butterfly species with which we work, notably Marsh Fritillary (*Euphydryas aurinia* - a species of sheep-free Rhôs pasture) and Brown Hairstreak (*Thecla betulae* - a hedgerow and tree canopy species).



Winter is the natural time to survey for the eggs of Brown Hairstreak on young blackthorn shoots - once leaves have fallen. Excessive mechanical hedge flailing is the main threat to the eggs - once shoots are cut off by flail, eggs perish, and species can become locally extinct within a couple of years. So time is invested in late summer/autumn talking to landowners about the impacts of mechanical flailing. Good progress has been made around Llandeilo where the once widespread Tywi population has contracted to in last decade. Several private smallholders and farmers are now on board, plus the National Trust at Dinefwr and Coleg Sirgar at Gelli Aur Home Farm. The South Wales Trunk Roads Agency have been really helpful with enhanced blackthorn planting and less management along A40T corridor.



Invasive brambles were cleared at a couple of sites from smothering blackthorn.

We've just started the Brown Hairstreak egg surveys early this year, to give us better coverage of new sites around Llandeilo and more time to negotiate management using our Carmarthenshire-based contractor in coming winter months.

Scheduled Marsh Fritillary surveys in June resulted in 12/21 sites visited in the county as still having the species. Two of the sites also produced new records of the elusive bright blue Forester moth too – another Welsh priority species. There are still another 40 or so Carmarthenshire sites to visit over the next few years.

From mid-August to end of September, we focused mainly on searching for Marsh Fritillary caterpillar webs, which if found, confirm breeding. Forty-five sites were surveyed, finding nearly 800 webs, including at sites just over the border in Neath Port Talbot and Swansea. We also worked collaboratively with Amanda Evans of the County Council's Mynydd Mawr project, providing advice and experience each way.

Funding from the [WG Local Places for Nature Grant](#), via the Carmarthenshire Nature Partnership supports these activities. However much is owed to our committed volunteer team.

The [Carmarthenshire Meadows Group](#) now has over 100 members. In 2023 there have been two well-attended indoor meetings, which included engaging talks, including on management techniques to enhance biodiversity, and Plantlife's grassland projects in Wales. We are in the third year of the [Big Meadow Search](#) (BMS) project. This has generated thousands of new records across the UK, and its Facebook Group has over 500 members and X has over 2600 followers.

Records submitted to BMS will be analysed to assess the number of participants, geographical coverage, types of grassland searched, range and numbers of plant species encountered and the proportions of positive and negative indicator species per search area. Once the BMS analysis is complete, the submitted records will be forwarded to the relevant local environment record centre (LERC) so that the data can be put to maximum use.

Laura Moss, who leads on the BMS, and Andrew Martin produced a book – "The Big Meadow Search – a guide to grassland indicator plants and some of their associated species" for people taking part in the BMS, or others interested in the species' interactions. This guide has proved popular.

Members of the Steering Group have also conducted a preliminary small-scale trial of seed harvesting using a leaf vacuum – this is ongoing.





**Bumblebee Conservation's** Connecting the Carmarthenshire Coast project aims to do just that, to connect and improve habitats along the Carmarthenshire coastline for bumblebees and other important invertebrates. The Welsh Landscapes for Rare Bees report was published in 2021 and has been extremely useful in targeting priority areas through habitat associations and species distribution maps. The report indicates that the Carmarthenshire coast is a priority area to target five species of rare bumblebee included in the report. This area is also a Priority Landscape for Butterfly Conservation and an Important Invertebrate Area for Buglife. Working in such partnership is crucial not only to strengthening the project but also to extend work in the area.

The project hit the ground running in spring this year during the survey season. Priority has been to understand more about key project sites and collect primary habitat and bumblebee survey data. The potential of these varied sites has been extremely promising, particularly with strong records of one of the target species, the Brown-banded Carder Bee. Buglife and Butterfly Conservation have also been busy carrying out surveys for the project with some interesting finds to be reported on in the coming year.

In 2024, surveys will be carried out on involved sites to inform habitat advice and improve our knowledge of rare and scarce species and the next steps for their conservation locally and contributing to wider national action. Working at local sites and raising awareness is crucial to improving the habitat connectivity for invertebrates.

An important aim of this project is to involve underserved communities in conservation and empower locals to take action to support the nature on their doorstep. We will be working with more local volunteers and engaging with a range of local groups to understand how we can really make a difference for both local people and local nature.

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The **Institute for Nature Conservation Cymru** (INCC) have continued their valuable work in the Amman Valley. With support from the from the [WG Local Places for Nature Grant](#), via the Carmarthenshire Nature Partnership, the Nature Garden next to the Bowls Club in Garnant – the hub for the group's volunteers – was enhanced with improved access and the creation of a small pond.

INCC now work with about 30 landowners in the valley on the management of their site. Targeting flagship species for the valley they have put up nesting boxes over recent years for the Pied Flycatcher (*Ficedula hypoleuca*) and this year recorded 30 breeding pairs.



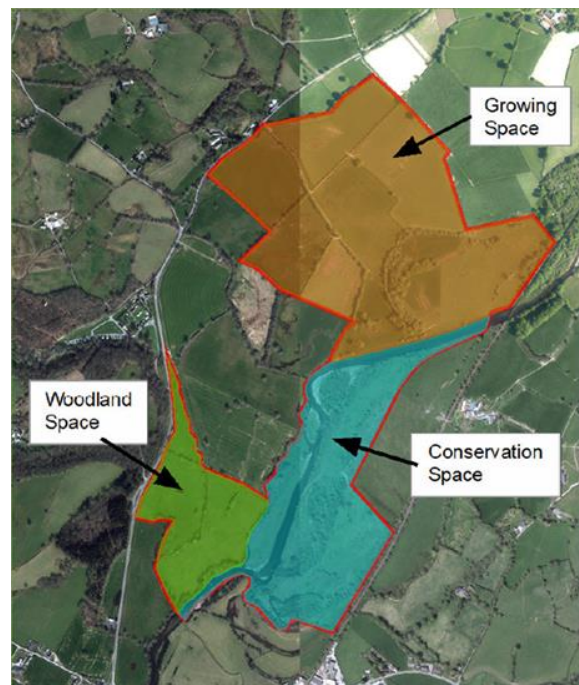
Tree planting on **Carmarthenshire County Council** sites in Ffairfach, Llandybie and Kidwelly totalling approximately 4.5 Ha of native broadleaved species was completed last winter with Glastir Woodland Creation funding. Community planting days were held for all three sites. Despite a dry spring tree survival on these sites has been good (>90%). A hard surface path was constructed at Llandybie with funding from NRW and at Tregib [Local Places for Nature](#) funding was used to install a bridge to connect the CCC site with footpaths in the adjacent Woodland Trust site. Permissive paths through both of these sites have been well used by local people. Tree planting is planned this winter for a small CCC site in Llanddarog and at St Clears Wetland. Felling of windblown conifers at Llyn Llech Owain is underway, most of the felled will be restocked with broadleaved trees but one area on deep peat adjacent to the SSSI area will be restored to heathland habitat. The Coed Cymru Officer has been working with the CCC Property department to identify opportunities to increase woodland cover on County Farms and tenanted land; at Bremenda Isaf near Llanarthney CCC is looking at the potential to introduce agroforestry systems on this County Farm which has recently come up for a new tenancy.



**Natural Resources Wales'** tree planting at Abermarlais in the Tywi Valley has been divided in to three distinct areas, each prioritising different objectives:

- A conservation space for wildlife to flourish – plans are being finalised so that visitors can safely access the conservation and woodland space. As part of the design work we are commissioning baseline surveys to understand how species are currently using the site.
- A woodland space for Covid commemoration that is fully accessible. Back in the spring we worked with [Tir Coed](#) to host some volunteer planting events in the commemorative woodland area of the site. Several thousand trees were planted, including heritage apple varieties in the community orchard area.
- A growing space to deliver sustainable opportunities for food, trees, and nature. Alongside volunteer planting in the woodland space we also began introducing some more selective tree cover in the growing space. This was in the form of wide shelterbelt hedgerows, planted along existing and historic hedge lines on the most 'improved' areas of the site.

As well as wildlife connectivity, the intention of this is to benefit the future agricultural productivity of those areas, stabilising the soil, improving drainage and providing shelter and shade for livestock



that will use the site in future.

We are currently carrying out further consultation to develop a partnership for the long-term management of the growing area of the site, which will help us to explore opportunities for sustainable food production alongside increased tree cover and conservation management.

We hope to work with a partner/s to develop a valuable educational resource, trialling and demonstrating how food growing, trees and timber growing, and wildlife can thrive together in a farming business model as our climate changes. Future planting, site design and management will be co-designed along with partners.

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[WG Local Places for Nature funding](#) is supporting a range of projects in the county this year. Funding in 2023 has allowed the council to purchase two more ride on grass cut and collect machines that will increase the capacity of the council to manage sites for biodiversity. The council is looked to increase areas managed less intensively through either a 'nectar' (every 6 weeks) or 'meadow' cuts (twice a year) depending on the site and its use by local people. This should over time increase the abundance and diversity of flowering plants in grassland areas and allow them to flower and support local pollinating and other invertebrates.



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The **South Wales Trunk Roads Agency (SWTRA)**, who maintain the A40 and its verges, have been managing verges on the Llandeilo bypass for a number of years to enhance banks adjacent to the road for biodiversity. In 2023, after butterfly Conservation identified the hedges in this area to be a local hotspot for the Brown Hairstreak Butterfly, SWTRA planted up areas with Blackthorn, and cleared some of their land next to Nantyrhibo/A40 junction to enhance the area for this priority species in Carmarthenshire. The butterfly lays its eggs on young Blackthorn.

This winter Butterfly Conservation volunteers recorded 100 eggs on Blackthorn in and around the area where SWTRA undertook management, including some on newly planted Blackthorn. In 2021 53 eggs were recorded in this area. This is an excellent example of partners working together to conserve a declining species in the county.

