Carmarthenshire Nature Partnership - 2019 Achievements

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. It is facilitated by the Council's Biodiversity Officer and has been established for over 20 years.

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.

The <u>State of Nature in Wales 2019</u> 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. This is reflected in Carmarthenshire:

- the **fen orchid** has been lost from our coastal habitats due to loss of the wet hollows within the sand dunes;
- **curlews** are now a rare and local breeding bird in the county (although they area more common winter visitor to our coastline) due to loss of suitable nesting habitat in upland and lowland grasslands;
- annual recording has shown the continued decline of the **brown** hairstreak butterfly in areas of Carmarthenshire still considered a stronghold for this rare species. Where intensive annual flailing of hedges is less widespread (e.g. Teifi valley), the butterfly fares better.
- **bog habitats**, which can store carbon and water are now scarce in the county, isolated within the wider agricultural landscape. They have been drained, planted on or lost to development. Work carried out this year is attempting to help some of the remaining bogs here.
- we are likely to see significant changes in our woodland and hedgerows as trees succumb to **ash dieback disease**.

A 2019 intergovernmental report (IPBES assessment 2019) has 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 include:

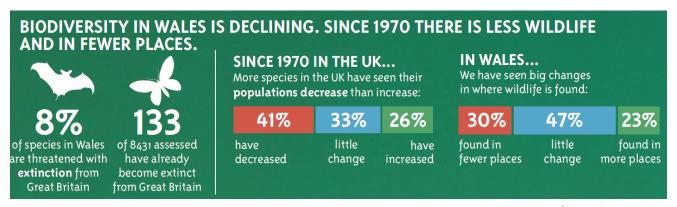
- The draft <u>Carmarthenshire Nature Recovery Plan</u> which contributes to the national biodiversity strategy and action plan for Wales working to reverse the decline in biodiversity in Wales and build the resilience of our ecosystems.
- Carmarthenshire County Council's <u>Well-being Objectives</u> and the Carmarthenshire Public Service Board's Well-being Plan.

In addition <u>The Environment (Wales) Act 2016</u> 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.

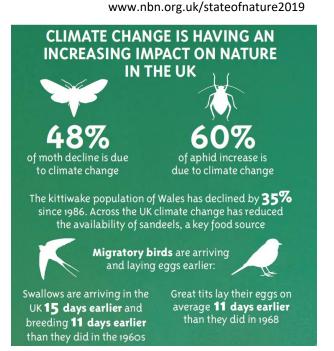
Local Nature Partnerships are a key delivery mechanism that can help provide local focus and delivery of all these aims.

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 some of the achievements of the partners in 2019, often working together, to conserve and enhance Carmarthenshire's diverse range of habitats and species.







The success of green hay translocation has been one of the biodiversity highlights at the **National Botanic Garden of Wales** in 2019. In just 3 years, grass-dominated pastures have been transformed into orchid-rich hay meadows by using a relatively simple technique that may help transform meadows across Carmarthenshire over the next few years. Garden-led scientific research has been establishing which plants pollinating insects visit for pollen and nectar, leading to greater advocacy about the need for people to leave wild places on their land. New education courses and themed activity days run by the Garden's Growing the Future project have helped to raise knowledge and awareness of wild plants, pollinators, lichens, fungi and sustainable gardening. Whilst the Garden's ambitious Regency Restoration project has seen the restoration of three lakes, Garden volunteers began a long-term project to monitor climate change by monitoring the phenology of 14 different native tree species. By opening a National Seedbank for Wales, the Garden has also embarked on a long-term conservation project which aims to keep a physical record of all of Wales' native plants.

WG Nature Recovery Plan Objective	Engagement	Species and	Resilience	Tackling key	Evidence and
		habitats		pressures	monitoring

During spring/summer this year, **Natural Resources Wales**'s Biodiversity Officer has been working in collaboration with **Carmarthenshire County Council** (CCC) and local business owners on the Cross Hands Business Park to improve local biodiversity. The business park was built on high-quality neutral grassland, and remnants of this habitat remain around the park. Business owners were asked to adopt a sympathetic mowing regime to allow the orchids and other notable plants to flourish over the summer months. CCC also ensured that areas of the park under their ownership were managed accordingly. Signs were erected around the park to raise public awareness of the scheme. Despite a degree of initial scepticism from some business owners, the initiative has been a great success and well received, resulting in a beautiful display of flowers and visible benefits for pollinators. We hope to expand the scheme in future years.

In addition, NRW's work on Invasive Non-Native Species projects including mink, giant hogweed and Himalayan balsam control is ongoing. These projects would not be possible without partner collaboration and the invaluable help of volunteers.

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Bogs are important habitats, home to a range of rare plants and can also help mitigate climate change by storing carbon in the peat. Locally they can also help avoid adverse environmental impacts, e.g. flooding, and their economic impacts.

At **Llyn Llech Owain Country Park** and **Figyn Common** (near Llanfynydd) the Welsh Peatland Sustainable Management Scheme Project (run by Snowdonia National Park) has funded **Carmarthenshire County Council** to undertake important work to help manage the bog habitats there. At Llyn Llech Owain small trees and scrub have been removed from the bog and drainage ditches blocked to help retain water in the bogs. This will help to restore the fragile bog community and the peat-forming sphagnum moss, which needs wet conditions to thrive. The fencing on Figyn common will allow grazing on this site for the first time in years, helping to restore the wetland habitats here and protect the site from off road vehicles.

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National Botanic Garden of Wales









Llyn Llech Owain Country Park

The **National Trust** (NT) have undertaken important work this year to remove Invasive Non-Native Species (INNS) – clearing Himalayan balsam and stem injecting Japanese Knotweed at sites on their estate. In addition, a programme of rhododendron control is being undertaken in partnership with the RSPB and Snowdonia NP at Dolaucothi as part of the LIFE Celtic Rainforests Project. INNS such as these are a significant problem in areas of the county and this work contributes to efforts to eradicate them.

NT have acquired a small parcel of extra land at Paxton Tower and have committed to placing the 16 Ha around the Tower and the new land there into their Magnificent Meadows restoration project along with land at Dinefwr and Dolaucothi, some of this work will be done in partnership with **Plantlife** and the **National Botanic Garden of Wales**. It is hoped that tenant farmers across the Dolaucothi estate will also be working with the trust in helping to restore areas of marshy 'Rhos' pasture in Dolaucothi as part of a wider marshy grassland project the NT are undertaking. Carmarthenshire is an important county for this habitat and this work is an important contribution to the enhancement of the habitat in the county.

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The **Caeau Mynydd Mawr Project** continues to manage a large area of habitat for the marsh fritillary butterfly in the Cross Hands area of east Carmarthenshire. The project now has over 130 Ha of land in ownership or management agreements – with the addition of two new agreements this year. Neither site had been grazed for many years, so fencing has been installed and some mowing carried out to prepare them for grazing with ponies in the spring.

It has been a reasonable year for marsh fritillaries, with adults and larval webs recorded on 12 sites. Most of the managed sites also contain dormice habitat, which have been recorded on five sites this year.

Working in partnership with **PONT** (Pori Natur a Threftadaeth) for a WG grant-funded project for **Butterfly Conservation**, the project hosted a marshy grassland grazing evening at one of the sites owned by the project in Gorslas, aimed at encouraging farmers to graze their marshy grassland. Farmers heard talks from a variety of speakers, toured the site to look at the habitat and the cattle grazing there and were treated to a beef burger made from beef reared on the site. The event was well attended, and another took place in December.

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The **Sands of LIFE** is a major conservation project to revitalise sand dunes across Wales. The project will restore over 2400 hectares of sand dunes, across four Special Areas of Conservation, on 10 Welsh sites. This will be done by re-mobilising the dunes to restore natural ecological processes with the aim of bringing them into favourable condition. In Carmarthenshire this includes dunes at Laugharne–Pendine and Pembrey Burrows. So far work has been undertaken to choose suitable locations and design planned works at Pembrey which includes the creation of dune slacks, scrapes and notches in the foredunes in the New Year. At Laugharne–Pendine a scrub management plan has been designed and now approved with the hope of starting scrub clearance works in the New Year.

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Cothi Valley



Caeau Mynydd Mawr grassland



Sands of LIFE

The **Wildfowl and Wetland Trust** worked with Arts Organisations Migrations and Soundlands to bring a specially commissioned piece of sound art to the Millennium Wetlands nature reserve at WWT Llanelli, created by Netherlands artist Bouke Groen. An antique church bell chimed every few minutes within four huge concentric cubes of glass. The muffled sound of the bell could be taken as a metaphor for how people distance themselves from the alarms ringing in our natural environment. The piece was very well received by visitors.

A new project, mainly funded by **Dwr Cymru/Welsh Water**, aims to enhance habitats in the Millennium Wetlands and improve infrastructure for grazing animals. As part of the project we have worked with CABI to introduce a microscopic mite to help control the highly invasive plant *Crassula helmsii* as part of a trial of the effectiveness of this new biological control agent.

WWT recent project to create new wetland habitats in the Dafen scrapes has been very successful so far, attracting little ringed plover and lapwing to breed in the area, as well as visits from rare species including red necked phalarope and roseate tern.

Other highlights from the year included an increasing in breeding lapwing from 11 to at least 20 pairs, as well as records of breeding willow tit, barn owl and cuckoo.

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The **West Wales Biodiversity Information Centre** has continued to promote biological recording in the county throughout 2019. We are now receiving records through the App launched last year and continue to promote the public access portal of Aderyn, the all Wales database, which has grown by half a million records this year. WWBIC organised three recording days in the county: Graigina near Llanybydder, Caermelwas (this new Wildlife Trust reserve was particularly interesting), and a joint day held with the Brecon Records Centre BIS at Penygraig Goch where marsh fritillary larval webs were recorded for the first time. To encourage new recorders, we purchased a trail camera and bat detector intended for loan and we are building a web portal to encourage recording of some common but under-recorded species to improve the coverage of records.

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Coed Cymru (CC) officers in the Council's Conservation Section have continued to work with Western Power to help landowners affected by the Brechfa Forest Wind Farm Connection carry out small-scale landscape and ecological enhancements. Following completion of work CC officers inspected 47 projects leading to payments totalling over £61,000 to these landowners. Officers have continued to work with the Woodland Trust and Farming Connect to provide advice to private landowners and 60 advisory visits were made including advice on Glastir schemes, Woodland Trust planting schemes, felling licences and general woodland management. Twenty woodland management plans, including Glastir Woodland Creation, Woodland Trust Morewoods and felling licences were produced. CC officers have contributed to the development of the CCC ash-die back policy and have provided advice to landowners with trees affected by this disease. CC officers have advised on felling and restocking work carried out at Llyn Llech Owain Country Park and are currently advising on follow up work at this park and future work at Pembrey Country Park and other CCC woodland sites.

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Wildfowl and Wetlands Trust



WWBIC - recording day

This year money awarded to the **Wildlife Trust of South and West Wales** through WG's Landfill Tax Community Fund has brought several wildlife benefits to Carmel National Nature Reserve. The installation of key infrastructure has allowed the Trust to compartmentalise the grazing. This year seven gates have been replaced and three new drinkers added to the site.

The Trust had a roadside hedge laid in a 'crop and pletch' Carmarthenshire style. This was completed with a combination of contractor and volunteer effort and has the dual purpose of maximising the wildlife potential of the hedge, whilst also keeping it maintained for safety of road users.

Bunding on the reserve's bog has been improved to make it more effective in holding back water and re-wetting the bog.

The project has also supported staff time to deliver some crucial ongoing management, including clearing bramble, rolling bracken, and tackling problem Invasive Non-Natives such as cotoneaster and Himalayan balsam.

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Carmarthenshire County Council has produced bilingual guidance for town and community councils (T&CCs) in the county to raise awareness of their duty under the Environment (Wales) Act 2016 with advice as to how they could consider this as part of the management of public open space. The Biodiversity Officer met with some of the larger T&CCs, who have extensive areas of land to manage to discuss management for biodiversity.

In addition, the **NBGW**, in partnership with CCC, hosted a session for T&CCs and others on how to manage green spaces for people and wildlife in June at the Gardens. Over 50 people attended the workshop to find out how to manage land for which they are responsible in ways that will be enjoyed by the public, promote biodiversity and nature conservation, are more sustainable in the long term and can often save money. Examples of these approaches were seen in the Gardens and through presentations (including Monmouthshire CC's *Nature isn't Neat* project and Burnley CC's *Go to the Park* project) the benefits they bring were evidenced.

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Butterfly Conservation continue to work to find out more about the marsh fritillary butterfly in the county. In 2019 around 12 additional 1-km grid squares in Carmarthenshire revealed marsh fritillary populations for first time in last two decades. This compares to 22 such additional squares in the county discovered in 2018. In both years, several are likely to be new/recent colonisations as several sites have been checked regularly in recent years but not evidenced occupation. Carmarthenshire has revealed more additional populations in both years than rest of Wales.

Egg surveys for the brown hairstreak butterfly showed that the butterfly had had an excellent year in the Teifi Valley where record egg numbers were recorded last winter. An adult female was recorded that the NBGW but elsewhere the butterfly did not fare so well – it seems to have been lost from sites in the Tywi valley and west of Carmarthen.

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Ditch blocking Carmel NNR



Managed for Wildlife signs



Brown hairstreak butterfly

With funding from NRW and Dwr Cymru/Welsh Water, the **West Wales Rivers Trust** begun work in July 2019 on a catchment-scale project within the Tywi to improve the access for migratory fish to important spawning tributaries in this once great fishing river.

This project is a response to the worrying decline in numbers of Atlantic salmon and sewin (sea trout) that have been recorded over many decades. While there are efforts to mitigate pressures out at sea, in the estuaries of Welsh rivers, and improve water quality in general, the IUCN and fisheries bodies cite habitat improvement works as very important to increase the fry to smolt (young to sub adult) stages of the fish life cycle. This in turn boosts the number of returning fish in the following years.

The work being promoted by the Trust is ideally suited to Citizen Science projects based in the communities found in the headwaters of the spawning streams. This winter the Trust will be gathering support from communities and anglers to help with in-stream habitat improvements, invasive species mapping and removal. These compliment other actions across West Wales carried out by the Rivers Trust and partners, contributing to large-scale improvements

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Carmarthenshire Meadows Group continues to thrive. This year the spring meeting focused on management of meadows and three CMG members spoke of their experiences of managing their meadows using different types of machinery. This was complemented by the offer by the NBGW to come and see their green hay experiment. The gardens kindly gave CMG members the opportunity to collect some freshly cut hay from their species-rich Waun Las meadows - part of their green hay project. Ten members were able to collect some and take it home to spread on their own fields. Whether any new species appear on the receptor fields is unknown but annual management and monitoring over the next couple of years will tell!

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The **Mid Wales Red Squirrel Project** has had another busy year. Funding has been received by the WTSWW for a 'Healthy Reds' project that aims to find out more about the fragile population of red squirrels in mid Wales. Funding came from National Heritage Lottery Fund and WG's Landfill Tax Community scheme. Healthy Reds will focus on three forests, including Bryn Arau Duon north east of Pumsaint looking at red squirrel activity through a tracking project using radio collars. This should help reveal which areas of the forest are most valuable to red squirrels and inform conservation efforts. The project will be working with local volunteers, schools and universities.

In early September, the Project received a report sighting of a red squirrel from Brechfa Forest, a large forest plantation which covers nearly 6000 Ha. Since the 1980s there have been few sightings reported from Brechfa, and so the photo of a dead squirrel caught by a cat may be an indication of an extant population here. Trail cameras have been set up with the hope of finding more red squirrels.

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