

Adroddiad **Sefyllfa Byd Natur**
Sir Gaerfyrddin 2024

Carmarthenshire's
State of Nature Report 2024

Partneriaeth Natur
SIR GÂR • CARMARTHENSHIRE
Nature Partnership



SR-54662

Nature in Carmarthenshire – Highlights

Carmarthenshire Nature Partnership Area*



Special sites - International

- 8 Special Areas of Conservation
- 3 Special Protected Areas
- 1 Ramsar site



Special sites - Wales

- 89 Sites of Special Scientific Interest



Special sites - Local

- 6 Local Nature Reserves



4 Important Plant Areas

- Dinefwr Deer Park
- Pembrey Coast
- Carmarthen Bay Dunes
- Cambrian Mountain Woodlands



1 Important Invertebrate Area

- Carmarthen Bay and Tywi Valley



* (excluding BBNP)

Carmarthenshire has:



the majority of our land area (~80%) classified as agricultural land.



at least **35** of the **55** priority* habitats



recorded over **240** terrestrial and marine Welsh priority* species.



some of the most important areas of habitat for, and populations of, the Marsh Fritillary butterfly in Wales.



important populations of the endangered Water Vole, Dormouse and Red Squirrel



rediscovered the rare Fen Orchid and Ruderal Bumblebee in the county.



the only records for the Strandline Beetle in the UK along our coastline



around **20** conservation organisations who actively work to conserve our species and habitats in the county.



over **50** sites managed by the members of the Carmarthenshire Nature Partnership.



a total of over **2600** vascular plant 'taxa' recorded in the county since **2000**.



invasive Non-Native Species such as Japanese Knotweed and Parrot's Feather which pose a continued threat to our native species and habitats.

*priority – of principal importance to the conservation of biodiversity in Wales

We must work together to tackle the Climate and Nature Emergencies - we cannot solve one without solving the other, but any solution needs to address both emergencies, and not worsen either.

Find out more about Nature in Carmarthenshire and how you can help:
carmarthenshire.gov.wales/biodiversity



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Carmarthenshire State of Nature Report 2024

Prepared by Carmarthenshire Nature Partnership

This is a summary of the full State of Nature report for Carmarthenshire. It has been written by the Carmarthenshire Nature Partnership using data/knowledge from a range of sources/expertise and provides an overview of the main headlines and recommendations for each priority broad habitat type (e.g. woodlands, marine, uplands, etc.)/species group (e.g. birds, mammals, fungi, etc.) found in Carmarthenshire and the threats they face.

More detail about the priority habitats and species found in the county and analysis of pressures/current status and action recommendations can be found on the web pages of the Carmarthenshire Nature Partnership on the [Council webpages](#) and the [West Wales Biodiversity Information Centre website](#).

1. HEADLINES

Globally, biodiversity is declining, with rates of loss and extinction unprecedented in human history and accelerating ([WWF Living Planet Report 2022](#)).

UK

- The latest [UK State of Nature 2023](#) report reveals the very serious scale of nature loss across the UK, with a 19% decline in abundance across many recorded species since 1970, and 16% of species are threatened with extinction.

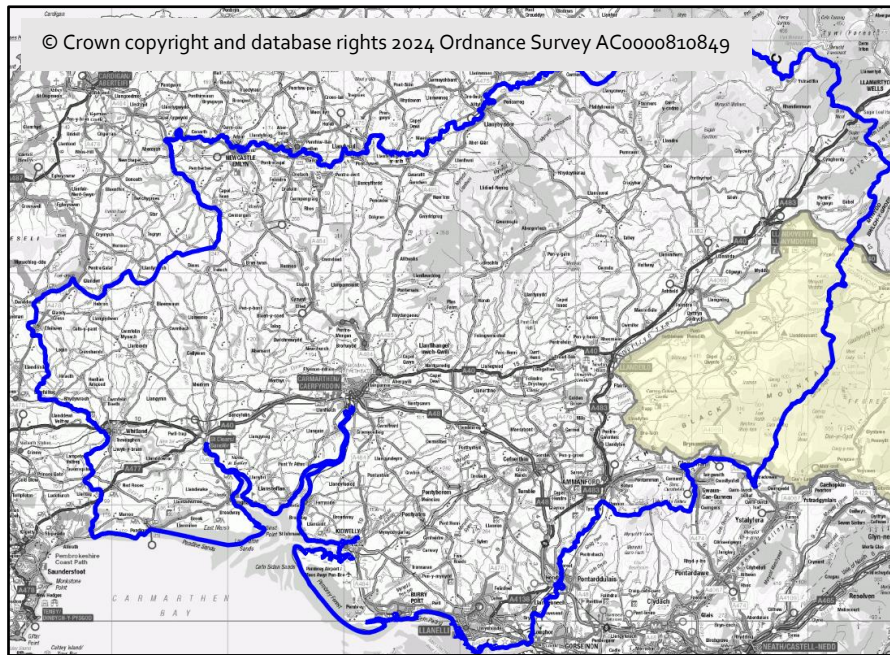
Wales

- Wales and the rest of the UK are among the most [nature-depleted countries](#) on Earth.
- The [State of Nature Wales 2023](#) report found that 18% of the species (1 in 6) assessed were at risk of extinction, including species such as Water Vole, Curlew and Salmon. [Turtle Doves and Corn Buntings](#) have already been lost from Carmarthenshire skies. The *abundance* (number of individuals) of the species assessed has declined on average by 20%.
- However, some species are increasing in abundance: six bat species show an average increase in abundance of 76% since 1998, primarily driven by large increases in two bat species that are recovering from historic declines thanks to increased protection of their roosts.
- The *distribution* (geographical location) of species in Wales has also changed – some species groups decreasing and some increasing due to a multitude of factors but climate change being a key one.
- **All available evidence indicates that these trends are reflected in Carmarthenshire.**



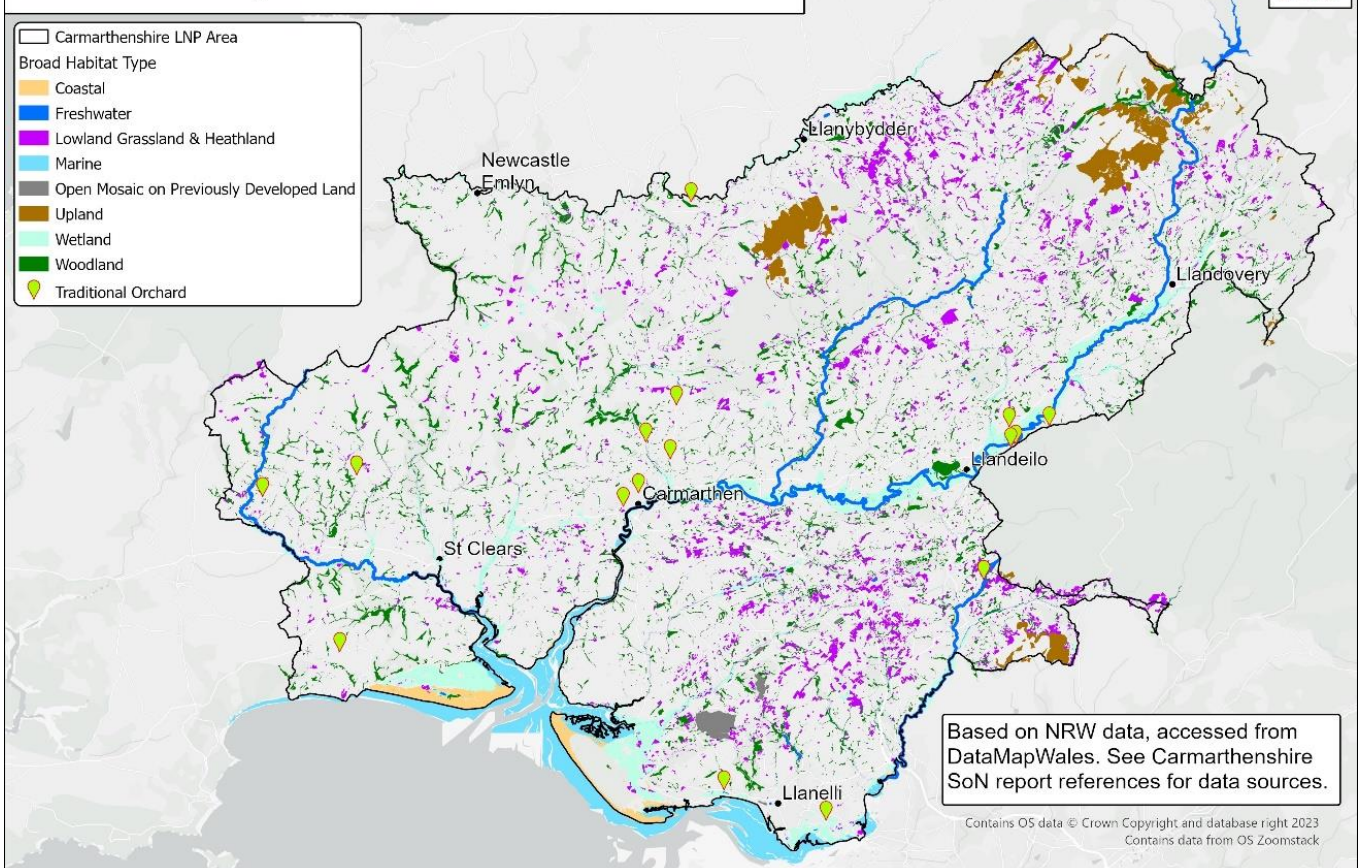
Gwynedd Sir Gaerfyrddin
Habitats within Carmarthenshire

Carmarthenshire



Carmarthenshire Nature Partnership area (yellow area shows the part of the county within Bannau Brycheiniog National Park)

Carmarthenshire Local Nature Partnership Section 7 Priority Habitats



Area (ha)	Information
221,427	Carmarthenshire Nature Partnership area (measured to mean low water and <i>excluding</i> that part of Carmarthenshire which lies within the Bannau Brycheiniog Natural Park) – see above.
43,590	The area of ' Priority '* terrestrial habitats in Carmarthenshire is approximately 20% CNP area. NB this figure is based on NRW's Phase 1 mapping. Carmarthenshire has at least 34 of the 55 Welsh Priority 'Section 7' habitats – including marine habitats. These habitats together help create the character of the county and are of principal importance to improving ecological resilience across Wales.
15,300	89 Sites of Special Scientific Interest , 8 Special Areas of Conservation , 5 National Nature Reserves , 3 Special Protection Areas and 1 Ramsar site- 7% of the Local Nature Partnership area.
Carmarthenshire Coast	All Carmarthenshire's coastal marine area is protected as part of a national Marine Protected Area network.
305	Six Local Nature Reserves within the Carmarthenshire Nature Partnership area. These are sites that are managed for both nature and public access. They are of special local interest, and some of these are becoming recognised of regional and national importance.
7000	51 sites managed by partner organisations within the Carmarthenshire Nature Partnership. Some of these sites are, or are within, designated sites.
127	25 grassland sites managed as part of Carmarthenshire Council's Caeau Mynydd Mawr Marsh Fritillary project (2023) .

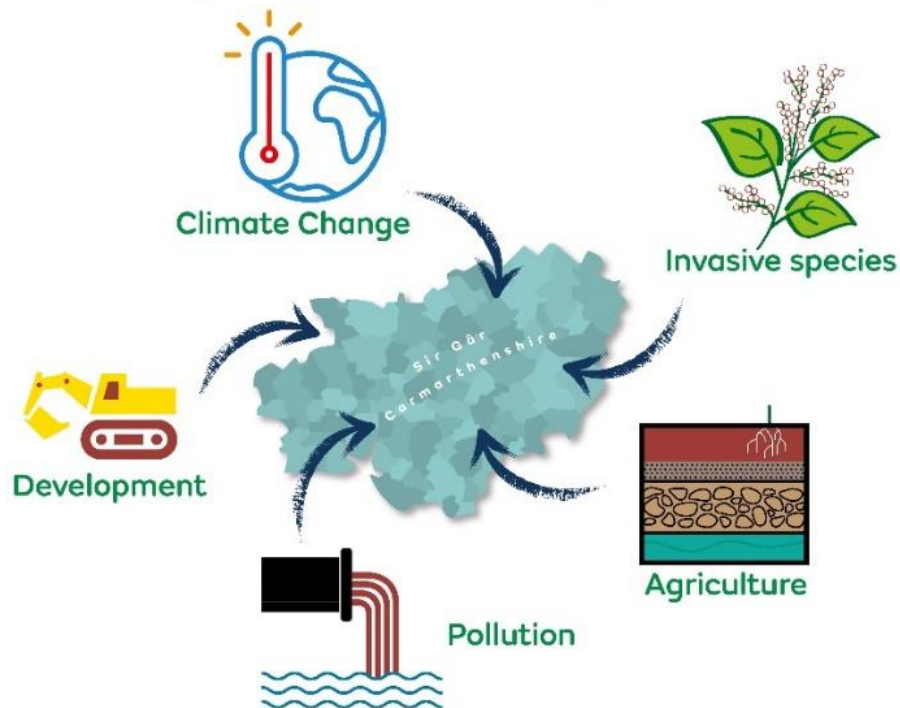
*Priority Species and Habitats in Wales are those which are of particular importance for biodiversity and are referred to in legislation.

- Based on the best available data, many Priority Species in Carmarthenshire are declining, including species once much more common, e.g. Brown Hairstreak Butterfly and Yellowhammer. Both are linked to Carmarthenshire habitats, i.e. hedgerows and farmland. 'Specialist' species with specific habitat/feeding requirements are much more likely to be in decline than more 'generalist' ones who can use a variety of habitats.
- There are conservation success stories, showing that positive action can make a significant difference - targeted conservation management and survey effort led to the rediscovery of the Fen Orchid and Ruderal Bumblebee, both once thought extinct in the county.

Threats and pressures to our natural environment

- The resilience of our natural environment is threatened by climate change, development, land-use practices, pollution, and [Invasive Non-Native Species](#).

Pressures impacting on the resilience of ecosystems in Carmarthenshire

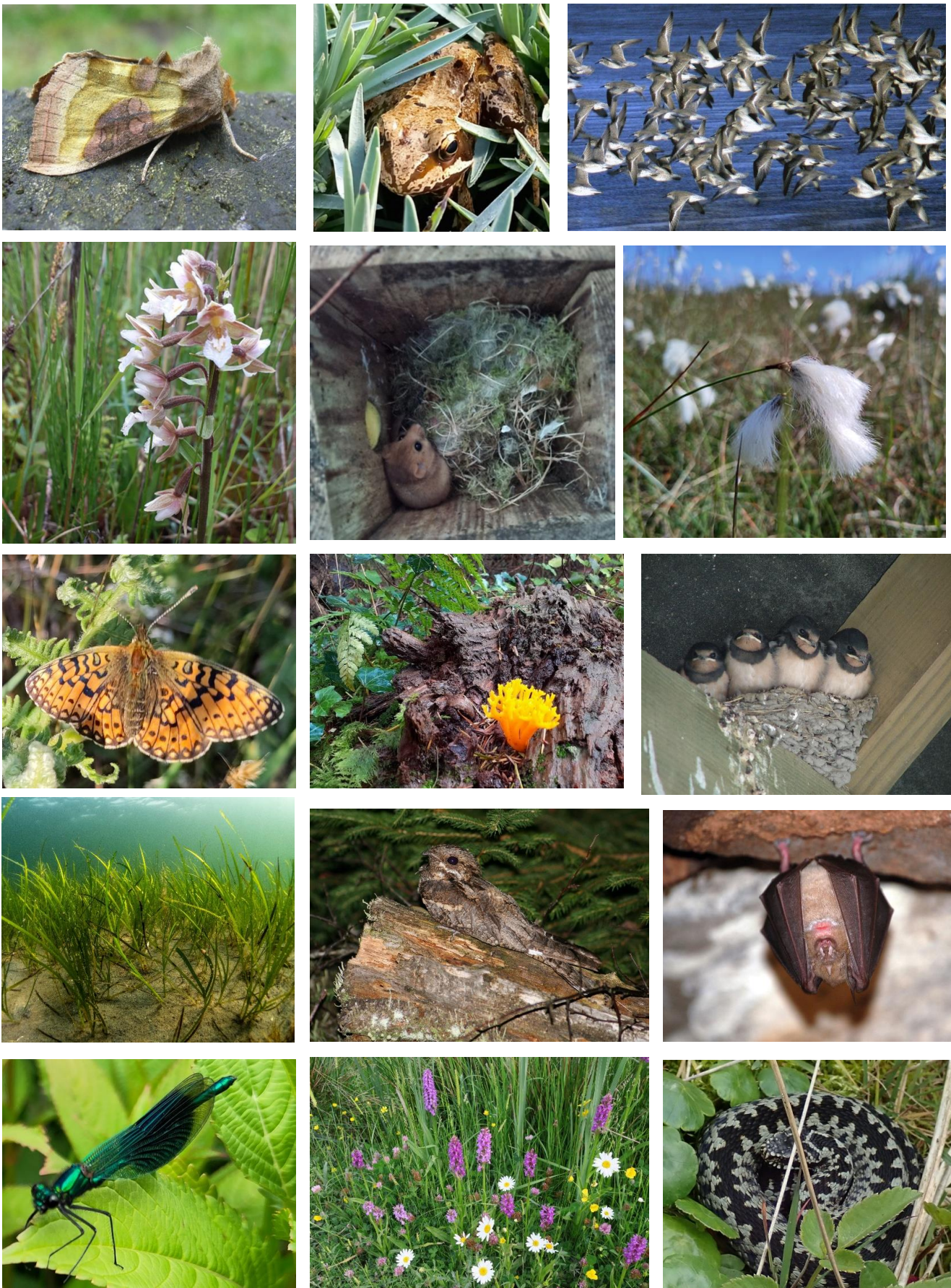


- Climate change is impacting our wildlife, for example, [research](#) linked to Carmarthenshire has shown that the temperature in Welsh streams and rivers has risen by an average of 1°C in the past 40 years. This has had substantial change in the number of insects and invertebrates found in watercourses with obvious impacts other species that rely on them.
- To ensure that our natural environment is more resilient, we need to create 'more, bigger, better and joined up' habitats by:
 - improving the ecological condition of habitats across the county
 - increasing the extent of these habitats
 - creating linkages between them



Actions to improve network resilience include: TOP improving the condition of existing habitats and BOTTOM (A) creating new habitat, (B) restoring habitat, (C) increasing habitat size and (D) connecting habitats.

NB This is a representative diagram - many more options may be viable, and these actions can be carried out on any scale.



Some of the thousands of species recorded in Carmarthenshire (left to right, top to bottom): Burnished Brass moth, Common Toad, a flock of Sanderling (W. Parry), Marsh Helleborine, Dormouse (S.Musgrave) , Cottongrass, Small Pearl-bordered Fritillary butterfly, yellow Stagshorn fungus, Swallows (R. Parry), Seagrass (B. Jones/[Ocean Image Bank](#)) , Nightjar (D. Rees), Greater Horseshoe bat (T. McOwat), Banded Demoiselle damselfly, Meadow flowers, Adder.

Positive action

- There are hundreds of individuals and many organisations working to support Carmarthenshire's wildlife, through volunteering, recording, monitoring, raising awareness and undertaking practical conservation works on the ground. [Llanelli Naturalists](#) and the [Carmarthenshire Bird Club](#) have been in existence for decades and have a depth of knowledge about Carmarthenshire's natural environment. More recently groups such as the [Carmarthenshire Meadows Group](#) meet to share knowledge and experience about managing their land for biodiversity.
- The [Carmarthenshire Nature Partnership](#) (CNP) is a group of over 20 organisations. First set up in 1998 the Carmarthenshire Nature Partnership brings together partners with a depth of knowledge, experience and enthusiasm for the county's biodiversity.

The CNP provides opportunities for conservation organisations, ecologists and recorders to network, share experiences and develop projects in partnership.

- We have one of the most important populations of the Marsh Fritillary Butterfly populations in Wales. The Carmarthenshire County Council (CCC)-led [Caeau Mynydd Mawr Marsh Fritillary Project](#) works to support the conservation of this UK Red List butterfly, which is vulnerable to extinction in the UK.

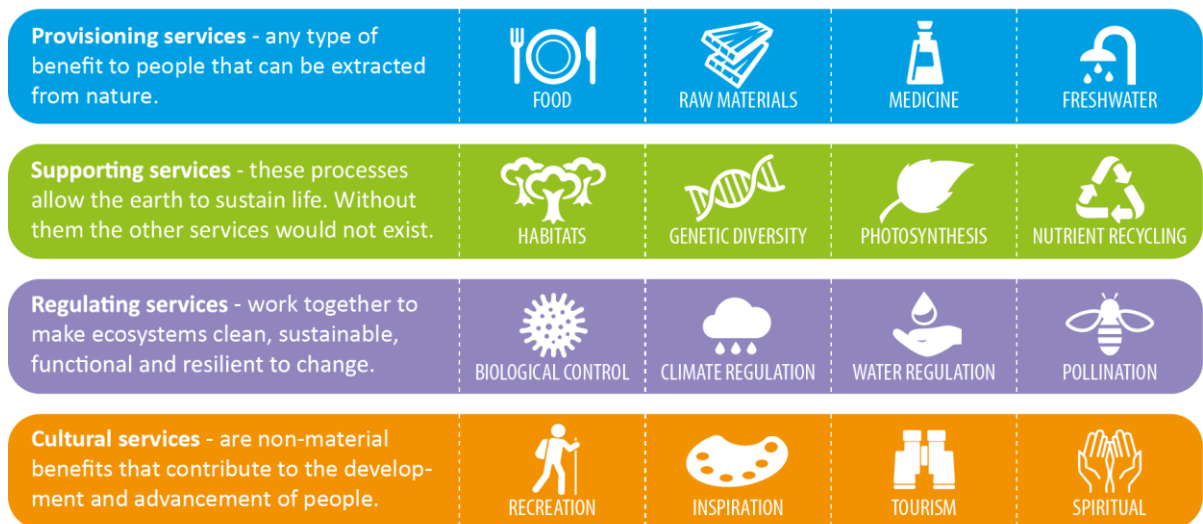
The Llanelli Levels is one of the most important sites in Wales for Water Vole and we have created new habitat for this species on CCC land. The Burry Inlet supports internationally important numbers of overwintering wildfowl and waders that feed in the saltmarshes and on the intertidal areas. Many can be seen roosting at WWT Llanelli Wetland Centre during high tides.

The CNP was instrumental in setting up the [Mid Wales Red Squirrel Partnership](#), which seeks to safeguard this species found largely in the mid Wales forests.

2. KEY MESSAGES

Carmarthenshire - natural habitats and ecosystem services:

- Carmarthenshire supports a variety of semi-natural habitats from the uplands in the north and east, through the lowland grasslands, rivers, woodlands and wetlands, to the coastline in the south. Our agricultural landscapes support important connecting networks of hedgerows, woodland, watercourses, and other valuable habitats. This network of linked habitats across the county is one of the reasons why Carmarthenshire's biodiversity has been so rich. If well managed, these networks will support nature recovery and a rich diversity of species.
- As well as their inherent value, wildlife and habitats provide important '[ecosystem services](#)' that benefit us all, e.g. flood prevention, food provision, carbon storage and natural places for recreation which supports our wellbeing. These services are provided for us all, free of charge, every day.

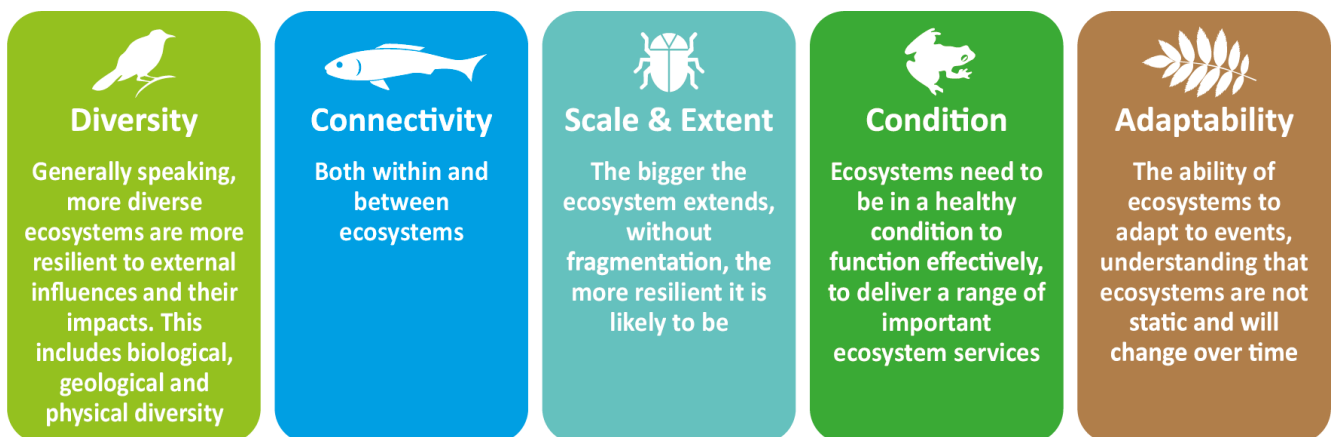


A resilient Carmarthenshire

- Carmarthenshire’s protected site network (Sites of Special Scientific Interest, Special Areas of Conservation, Special Protection Areas, National Nature Reserves and Ramsar site) must be managed to achieve favourable conservation status. Key wildlife sites should have up-to-date management plans, monitoring programmes, and the resources in place for their continuing management.
- Protected sites alone will not conserve Carmarthenshire’s rich biodiversity. It is essential that these sites are linked within a resilient wider network of habitats across the county to enable movement of biodiversity throughout our landscapes.

Resilient Ecological Networks are networks of habitats in good ecological condition linking protected sites and other biodiversity hotspots across the wider landscape, providing maximum benefit for wildlife and wellbeing.

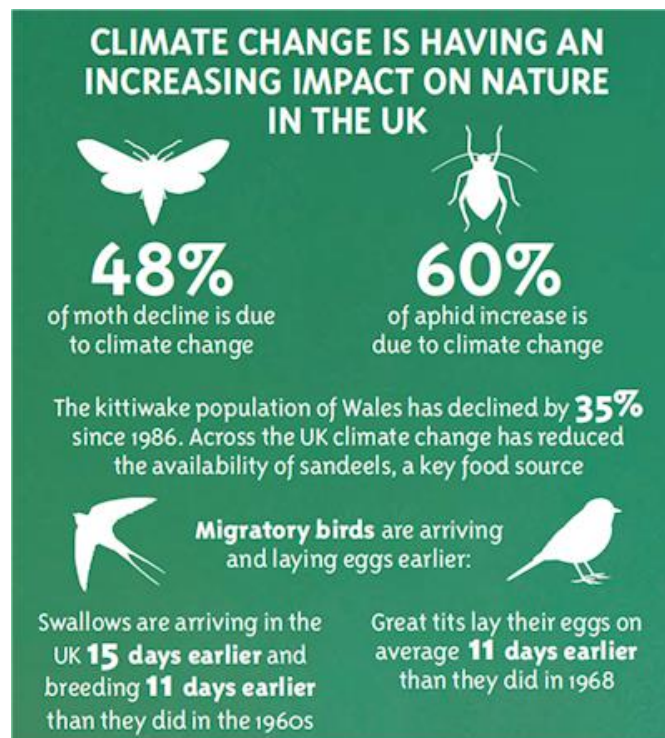
- To support nature recovery and ecological resilience, we need to ensure that areas and networks of habitats are **bigger or more extensive, better connected** and are in **better condition** to support biodiversity, i.e. these networks need to be diverse, of sufficient scale and extent, in good functional condition and part of connected mosaics, if they are to enable species and habitats to successfully adapt to pressure and change.



- We need to consider how Carmarthenshire can respond to the Welsh Government target of protecting at least 30% of the land and 30% of the sea by 2030 (supporting the Convention of Biological Diversity goal) and how we can best take effective action.
- The Carmarthenshire Nature Partnership will identify priority areas for action to build ecosystem resilience. Positive work is already taking place including nature-friendly farming, peatland restoration, grassland management and new woodland planting in appropriate areas.

Threats and pressures

- The Climate and Nature emergencies are interlinked. Climate change policies need to be integrated with policies for biodiversity. You cannot solve one without solving the other. Well managed ecosystems usually sequester more carbon than those in poor conditions, as well as simultaneously providing a range of other ecosystem services. We need to be aware of proposals for climate change which actually contribute to the Nature Emergency such as tree planting on habitats which support biodiversity, and which are already sequestering carbon. **Any solution needs to address both emergencies, and not worsen either.**



Source: [State of Nature Report 2019](#)

- Local threats to Carmarthenshire’s wildlife mirror many national trends, such as habitat loss and fragmentation, pressure from development, inappropriate management, non-native species introductions and the impact of climate change. These processes have already resulted in the disappearance/near-disappearance of priority species from the county, including breeding [Curlew](#) over the last 20 years (reflecting a rapid decline in Wales by [more than 60% in the last 20 years](#)) and Lesser Butterfly Orchid linked to the reduction in the number in species-rich hay meadows. The latter has been recorded at only four 10x 10 km squares in Carmarthenshire since 2000 (County Plant Recorder, pers comm.).

- Despite having a wealth of data about some species, there are still many gaps in our knowledge of some species or a lack of consistency in data collection that make it difficult for us to identify and report with confidence the changes in biodiversity over time.

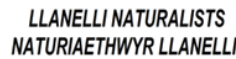
Taking positive action

- **Complexity** – the habitats and species making up Carmarthenshire’s natural environment are complex and interrelated. We must keep our minds open to multiple solutions and ingenious ideas to improve the resilience of the habitats we manage.
- **We work better together** – Carmarthenshire’s environmental sector must continue to collaborate and establish shared priorities for nature recovery, co-ordinating action, priorities and resourcing to achieve agreed goals. We need to work together, sharing skills, knowledge and expertise, and highlight the multiple benefits of our conservation projects e.g. [Caeau Mynydd Mawr Marsh Fritillary Project](#). The Carmarthenshire Nature Partnership is in a good place to do this.
- **Farming and nature** – agriculture accounts for approximately [80% of the land use](#) in Carmarthenshire. Sustainable land management has the potential to support the creation and enhancement of resilient ecological networks. Future agri-environment schemes in Wales have the potential to play a significant part in influencing nature recovery.
- Even in times of economic uncertainty, **spending on the environment** must remain high on the political agenda, it is an “invest to save” option, preventing further losses that cannot be reversed and which will ultimately not just impact ecosystems but us as well. In urban environments, trees and natural green areas contribute to Green Infrastructure and often provide cost effective nature-based solutions that can address issues such as drainage and flooding, urban heating, flooding, air quality improvements, mental and physical health and well-being. Nature must from an integral part of regeneration and new building projects.
- We must **build awareness and engagement** with the natural environment - from the general public to landowners and managers, business sector to decision makers. Easily accessible, practical advice is needed for communities and landowners to undertake positive action; the [Carmarthenshire Meadows Group](#) is a good example of this.
- **Increase community engagement and volunteering opportunities**. There is a wealth of expertise and people power in our volunteer networks; volunteering in nature base projects is now associated with delivering well-being benefits, as well as increasing understanding and value of the natural world among volunteers. Carmarthenshire’s Welsh Government funded Local Places for Nature Project is an example of this approach.
- All **Public bodies** must be prepared to adopt new ways of working and prioritise the delivery of blue and green infrastructure that will create ecological networks, deliver nature-based solutions, benefit communities, and put sustainable development and green thinking at the heart of local decision-making. Public bodies must evidence delivery of their Environment (Wales) Act 2016 as well as their Well-being of Future Generation Act 2015 duty and meeting Net Zero Carbon targets.

Carmarthenshire Nature Partnership



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