

A Pollinator Strategy for Carmarthenshire

A framework for managing our land for pollinators



1 Summary

This strategic plan sets out the Council's commitment to contributing to the action being carried out across Wales to address the decline in pollinators. This includes action to contribute to the development of local environments that will be rich in habitats that help support sustainable pollinator populations. This will also contribute to making places more attractive for people to live and work in.

An action plan will be developed that will be implemented through a number of the Council's functions. This will include looking

at the management publicly owned areas of green infrastructure in order to enhance these sites for pollinators. The Council will also help raise awareness of the importance of pollinators in supporting the resilience of our natural environment for our own health and wellbeing.

This has plan has been written with the view to similar actions being carried out by member organisations of the Public Service Board.



2 Why do we need a Strategic Plan for Pollinators?

2.1 Because pollinator species in the UK are declining

- In the UK plant pollinators are the insects that deliver pollen from plant to plant, enabling fertilization to take place leading to the growth of new plants.
- Pollinators are essential for the maintenance our ecosystems, through pollination of the wild plants which form the basis of most habitats and also through the vital role they play in the production of many crops, contributing to the UK economy. Pollinators are of intrinsic value in their own right as part of our natural heritage, and some species, such as bees and butterflies, are widely appreciated by the public.
- However, these important insects are under threat from multiple pressures including loss of habitat, intensive farming, pesticides and diseases.

2.2 To enable the Local Authority to meet duties/responsibilities placed a upon us through WG legislation and guidance

- Developing a Strategic Plan for Pollinators will contribute to the Council's legal obligations under the Environment (Wales)

Act 2016, to maintain and enhance biodiversity in the proper exercise of our functions and in doing so promote the resilience of ecosystems.

- The Strategic Plan for Pollinators will also assist the Council in fulfilling its obligations towards the Welsh Government Well-being of Future Generations (Wales) Act 2015 and contribute to the Council's Well-being objectives (specifically Objective 12 - to 'look after the environment now and for the future') and the Public Service Board's Well-being Plan for Carmarthenshire.
- It supports the Council's Corporate Strategy priority for a sustainable environment.
- It will contribute to objectives within the Council's Local Nature Recovery Plan.
- Although this Strategic Plan is for the Council, the principles could be signed up to by the Public Service Board, community councils and strategic partnership developments being taken forward by the Council.
- It will contribute to the Welsh Government's Action Plan for Pollinators.



3 Pollinators

3.1 Importance of pollinators

- Our native pollinators include bumblebees and other bees, butterflies and moths, flies, beetles and wasps. Over 1500 species of insect in the UK are thought to carry out pollination of our native wild plants and our food crops. The value of pollination as a contribution to the UK crop market in 2007 was £430 million and the cost of hand pollination, were we to lose this valuable service, has been estimated at £1.8 billion per year in the UK (WG Pollinator Action Plan). Without pollinators we would struggle to grow many commercial vegetable and fruit crops including apples, pears, strawberries, beans and peas, oilseed rape.
- The European honey bee is the major pollinator available for field and outdoor crops. In Carmarthenshire there are approximately 674 apiaries made up of approximately 3774 hives. Based on average honey production per hive in 2017 of 12kg/hive this would equal honey production of approx. 45.3 tonnes (info. from Regional Bee Inspector). In 2016 307 tonnes of honey was produced in Wales, worth approx. £3 million (BBC website/ National Bee Unit).
- Pollinators also help us in the garden and allotment, helping to provide us with the garden vegetables and flowers we enjoy. Gardens now contain more flowers than most agricultural land and, in Carmarthenshire, we have a lot of gardens. For many pollinators gardens can be a significant help to local populations.

- Insect pollination, by helping plants reproduce, also supports a more complex network of animal and plant life. Pollination is therefore an important process in maintaining healthy and biodiverse ecosystems.

Elsewhere



Natural Resources Wales have produced guidance on managing grounds of public buildings for pollinators – **Healthy for Bees: Healthy for People**

3.2 Pollinators under threat

- Buglife's Wales "<https://www.buglife.org.uk/wales-threatened-bee-report-0>" Threatened Bee Report, published in 2018 reported that seven bee species have been lost from Wales, five species are currently at risk of extinction and the range of many others has significantly decreased.
- Research indicates that honey bee showed a 23% decline in Wales between 1985 and 2005.
- The State of Nature Report for Wales in 2016 showed that 60% of butterfly species



had declined over the long term (~1970–2013). (Bumblebee Conservation Trust; Wales Action Plan for Pollinators; State of Nature Report for Wales, 2016). There are many possible reasons for these observed changes. No single factor seems to be responsible for the changes, but many factors combine to create a greater overall impact. There are, however, some impacts that are more notable than others.

- **Habitat loss, degradation and fragmentation** – the most significant cause of decline is the loss and degradation of habitats that provide food, shelter and nesting sites for pollinators. Losses can be attributed to more intensive farming, inappropriate management of potential habitats, and urban/industrial development. A 2016 study published in Nature showed that loss of wild flowers in Britain matches the decline in pollinators.
- **Pesticides** – there is growing evidence that the use of pesticides is having harmful effects on pollinators including honey bees, bumblebees and butterflies.
- **Climate Change** – long-term changes can deprive pollinators of food supplies at times when they need them, increase their

exposure to parasites and diseases, or change habitats so that they are no longer suitable. In this way climate change is a threat to ecosystem resilience.

3.3 What do pollinators need?

- **food** in the form of pollen and nectar, foraged from a variety of flowering plant species, available from early spring to late autumn from a number of habitats, e.g. meadows, hedgerows, verges, woodland edges, orchards and gardens. Many plants and trees can provide these food resources, including many so-called ‘weeds’ such as dandelions and daisies. In addition to flowers, many pollinators need other food resources to support their different life stages – for example butterfly and moth caterpillars need particular plants to feed on.
- diverse vegetation structure, e.g. hedgerows, scrub and tall grass for **shelter, nesting and overwintering**. Dense vegetation such as tussocky grassland, scrub, mature trees, and piles of wood and stone can provide essential habitat for hibernating pollinators. Many species overwinter as adults, including queen bumblebees, and some butterflies and hoverflies, others as eggs, larvae or



pupae. Old burrows and dense vegetation are used by bumblebees, with sunny slopes and dry ground used by nesting bees such as mining bees.

3.4 How can we help?

To reverse this decline, we should aim to:

- **Food - provide a pollinator-friendly food source**
- increase **diversity** of flower-rich areas, i.e. manage formal and informal areas so that a range of suitable pollinator-friendly species are available;
- increase **abundance** of food resource, i.e. increase the area of land available for pollinators to use; and
- extend the **availability** of flower-rich resources throughout the life cycle of pollinators; make sure that suitable plants are available from spring to autumn.

However, we need to understand that our native pollinators are often best supported by native plants. Replacing natural habitats with multi-coloured annual flowers is not in the interest of our native biodiversity. However, it may have a role in landscaping

in more urban areas in amenity grassland.

- **Provide places for pollinators to live**
- **Avoid using chemicals that harm pollinators**
- **Work together to help pollinators**

The above are all themes in Welsh Government's Bee Friendly Action Guide - see section 7.1 for more information.

3.5 What does research show?

There is a significant amount of research on the benefits of managing areas for pollinators – both for local biodiversity and for the people that live and work in these areas. There is also evidence that there is public approval for such positive action. A plethora of guidance is available for a range of users to help inform the management of areas for pollinators – from areas of land around public buildings, to parks, allotments and gardens. Some examples include:

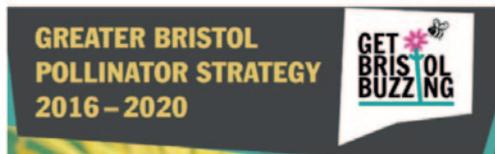
- A study in Sussex showed twin benefits of reduced mowing in a public park – there was an increased abundance of flowers and flower-visiting insects and 97% of park visitors said they favoured encouraging insects and wildflowers (Insect Conservation and Diversity, 2015).

- Research on pollinator communities in various habitats concluded that improving the value of urban areas for pollinators should be part of any national strategy to conserve and restore pollinators (Proc. R. Soc. B, 2015).
- Urban areas are often perceived to have lower biodiversity than the wider countryside, but a few small-scale studies

suggest that urban gardens and allotments can support substantial pollinator populations. (Nature Ecology & Evolution, 2019).

- Transport corridors, including roads, railways, canals and cycle paths provide a range of habitats and features that can be beneficial for pollinators. Cutting regimes have to balance safety, amenity and the needs of pollinators/wildlife (Buglife).

Elsewhere



Partners in Bristol, including the City Council, have produced a local strategy to promote positive action for pollinators.

Elsewhere



Buglife are developing a 'B-line' project which aims to restore and create a network of high-quality wildflower-rich areas. There are proposed B-lines in Carmarthenshire.

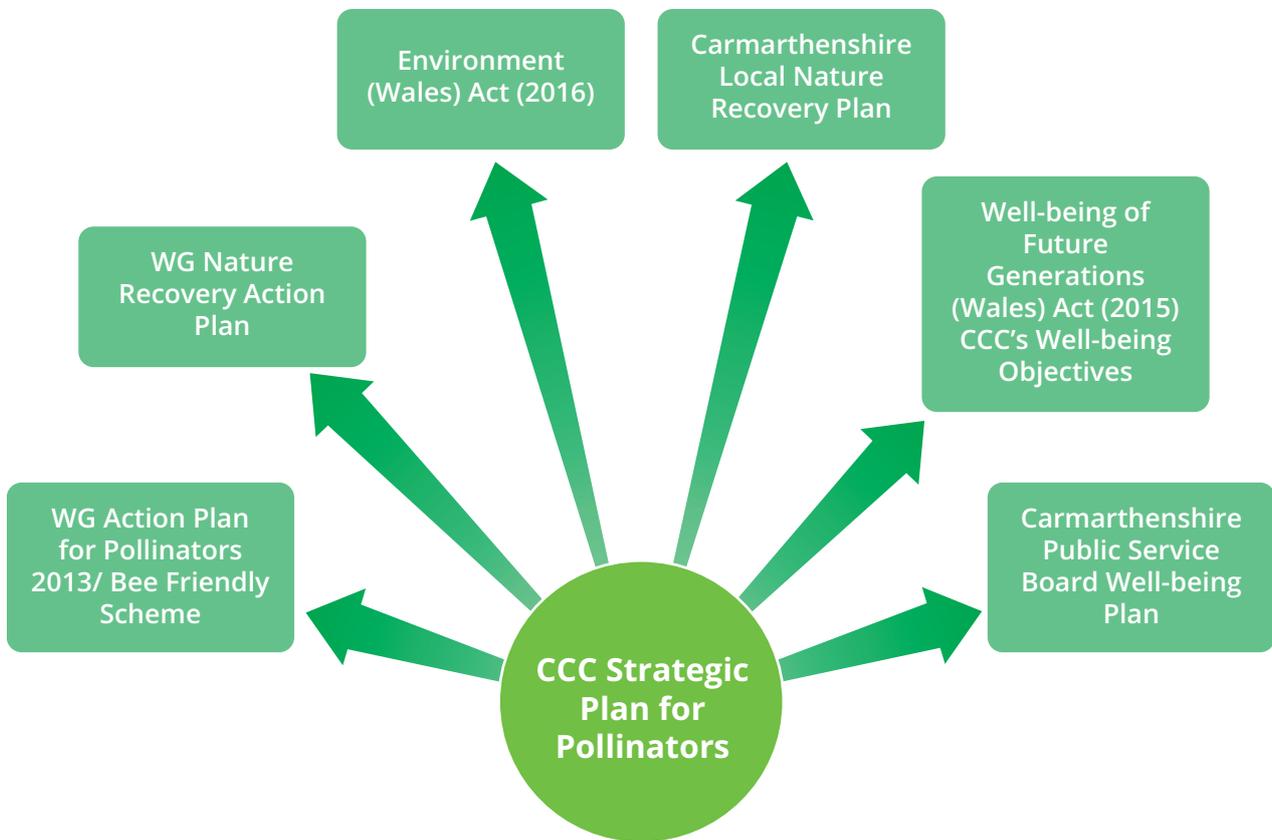
4 Legislation and Policy

Local authorities throughout Wales, through Welsh Government legislation and policy, are being asked to deliver, promote and enthuse others to participate in work which will benefit pollinators. WG have established a **Pollinator Task Force** to lead on this.

Local authorities with their wide-ranging

responsibilities, services and land holdings are in a unique position to help safeguard our native pollinators. Significant opportunities exist in local authority work, including in our role in local planning and strategic development and as managers of public green space, housing, highways and schools.

Relevant legislation and policy includes:



Implementing the Strategic Plan will directly help the Council meet our duty under the above legislation and national policy/local plan objectives. It will show how we can lead by example by managing some of our landholdings to provide multiple benefits for the community and pollinators and offer opportunities to work in partnership with

others. Making changes will not only benefit pollinators but will provide higher-quality public green space; helping to bring people closer to nature, with the health and well-being benefits this provides. In some instances such changes may result in financial savings.



Elsewhere



Burnley, facing cuts of 60% in their public parks over the next decade, looked at new approaches to managing their parks, seeking to maintain them at a lower cost, increase biodiversity and reduce CO2 emissions. In 2015/16 they realised savings of £67,480.

The Strategic Plan for Pollinators should sit alongside other plans or policies that include the management of greenspace and green infrastructure, and link into existing Local Development Plans or policies. It should be referred to as part of any future review of relevant Council plans or policies.

Developing and implementing a Strategic Plan for Pollinators shows commitment from the local authority that we are doing our part in conserving our pollinators and is accepting Government challenges to take action.

The Strategic Plan for Pollinators will contribute to all of the Well-being goals within the Well-being of Future Generations Act (Wales) 2015.

<p>A prosperous Wales</p>	<p>The value of pollination as a contribution to the UK crop market in 2007 was £430 million. The value of honey produced in Wales is also considerable with a wholesale value in excess of £3 million in 2016.</p>
<p>A resilient Wales</p>	<p>Diverse natural habitats with healthy populations of pollinating insects will help our natural environment be more resilient to change and continue to provide vital pollinator services for us.</p>
<p>A healthier Wales</p>	<p>Natural resources make a significant contribution to the physical health and mental well-being of people in Wales. Access to nature and greenspace has positive impacts on physical and mental health.</p>
<p>A more equal Wales</p>	<p>Equal access to ecosystems providing cultural services contribute to equality in Wales. Local access to good-quality green space will benefit all our citizens.</p>
<p>A Wales of cohesive communities</p>	<p>Involving communities in the management of their local parks and woodlands has been shown to improve community cohesion and reduce anti-social behaviour.</p>
<p>A Wales of vibrant culture and thriving Welsh Language</p>	<p>Our diverse habitats and the range of species within them have contributes to a landscape in Carmarthenshire that has played a significant role in the development of a distinct culture such as locally specific art and literature.</p>
<p>A globally responsible Wales</p>	<p>The environment supplies all our material resources but we must ensure that we use only our fair share.</p>

Elsewhere



Monmouthshire CC produced a Green Infrastructure Plan for Pollinators. The plan is the first of its kind and sets out how land owners can manage their property more effectively and work together to tackle the decline of bees and other pollinators.

5 Delivering changes to help pollinators – aims of the Strategic Plan for Pollinators

In summary our aims are to address the causes of decline in **populations, diversity and range** of our pollinator species by:

- increasing the area of habitat suitable for pollinators and managing areas to provide greater benefits for pollinators;
- ensuring the Council considers the needs of pollinators in the delivery of our functions through the implementation of our Environment Wales Act (2016) Biodiversity duty;
- working in partnership with organizations to raise awareness of the importance of insect pollinators among the public, business and private landowners and enthuse others to take action.

- These aims will have to be integrated across the Council's functions through an action plan identifying where action can be undertaken.
- Implementation of the aims of the Strategic Plan for Pollinators will not only increase pollinator provision but it will also help develop multi-functional spaces bringing social and health benefits and support greater ecosystem resilience to issues such as climate change and disease.
- Habitat connectivity is an important consideration when developing a useful resource for pollinators. Pollinators do not confine themselves within the borders defined by humans. Working across departments and in partnership with other organizations should allow opportunities for positive action for pollinators on a wider scale.
- In the long term, by effectively implementing this Strategic Plan the Council could apply

for 'Bee Friendly' status from Welsh Government as part of their national scheme.

Elsewhere



By taking positive action for pollinators Conwy CBC and Monmouthshire CC have become the first Bee Friendly local authorities in Wales

6 What we are doing already

The Council has already considered pollinators in some areas of its work and sought to take positive action. This Strategic Plan for Pollinators would support continued action and promote action to revise existing practices. Below are examples of action we already undertake:



Highways manage a series of verges as 'late-cut' verges, allowing the flowers to set seed before being cut.



Work with Bumblebee Conservation Trust and local residents at Sandy Water Park in Llanelli has enhanced local green space for pollinators.



© L.Brooks

The Carmarthenshire Meadows Group promote the management of traditional species-rich hay meadows that support pollinators



Areas of grassland around housing sites have had pollinator-friendly seed mixes introduced, which have been popular with local residents



Local Nature Reserve management seeks to manage areas for pollinators. Management of species-rich brownfield habitat at Morfa Berwig promotes a wide range of pollinators, including the scare brown-banded carder bee.

7 Strategic Plan for Pollinators – implementation and delivery

For the successful implementation of this plan and the delivery of actions that will support pollinators the Council will:

- Develop site-specific action plans that will set out how the needs of pollinators will be addressed on land managed by the Council. This approach will be piloted across five sites initially.
- Brief the Council's customer care teams, so they can inform the public as to why the way in which we manage our land may change.
- Ensure that the Council's web site includes relevant information on how the Council is managing land for pollinators and links providing information for others who would like to do the same.
- Review the success of these actions with a view to developing additional actions in the future – see 7.3 below.

7.1 Site-specific action plans that will set out how the needs of pollinators will be addressed on land managed by the Council, this approach will be piloted across five sites.

Action on sites can be taken under three themes:

- **Food – provision of pollinator-friendly food sources**
 - promote the management requirements that meet the needs of pollinators,
 - changes to management regimes, such as cutting grass to different heights and/or at

- different times of the year to allow plants to flower, and tall 'wild' areas to develop,
- restoration and creation of wild flower meadows,
- develop pollinator-friendly formal planting areas with perennial plants,
- appropriate tree planting.

- **Provision of places for insect pollinators to shelter, nest and overwinter**

- identify and protect areas of long/tussocky grass to maintain as habitat for pollinators throughout the year,
- plant native species hedgerow on a bank,
- maintain bare south-facing banks for solitary bees,
- install bug hotels in suitable locations.

- **Avoid chemicals that harm pollinators**

- review use of pesticides.

7.2 Raising awareness and public engagement

- provide information/guidance on pollinators and how they can be provided for via customer care teams and the Council's web site,
- work with partners to provide workshops and help with community projects,
- help pollinators through regulatory functions - Local Planning/Development Management.

Elsewhere



The NBGW has a Saving Pollinators project and is using their DNA barcoding expertise and horticultural knowledge to research the floral preferences of honey bee and other pollinators

7.3 Future Action could include:

- **Local Authority departments.** There are a number of green infrastructure types where positive action for pollinators could be taken: school grounds, housing, roadside verges, country parks, civic spaces, allotments and public parks and gardens, Local Authority-led strategic developments, council-tenanted farms.
- As part of endorsing this Strategic Plan the Council will encourage other Public Service Board Members to sign up to its aims and seek to implement them through the management of their land and working practices.
- In addition, **businesses, schools** and **community councils** could sign up the aims of the strategic plan and undertake positive action on the land they control.
- In order to take forward the implementation of the Strategic Plan for Pollinators the Council potential action

could include:

- liaise internally with managers and operatives to promote the Strategic Plan through linking it to the Council's Well-being Objectives and Environment Act Biodiversity duty;
- encourage community and partnership working on pollinator projects;
- seek to work with the NBGW who are undertaking research on pollinators in Wales;
- undertake or work in partnership on community engagement and outreach;
- undertake or work in partnership to liaise with schools;
- undertake a strategic partnership project to evidence how the aims of the Strategic Plan can be implemented and gain 'Bee Friendly' status for a town in Carmarthenshire. Seek funding for such a project.
- ensure other strategic projects, e.g. the developing Wellness Village in Llanelli adopt the principle of the plan.
- consult with other authorities to find out more about what they are doing for pollinator to learn from their experience.

The WFG Act sets out **five ways of working** that public bodies must adhere to in order to demonstrate how they are meeting their duty. Any project for pollinators must now demonstrate that they are following these ways of working and this Strategic Plan would follow those principles:

Looking at the long term so that we do not compromise the ability of future generations to meet their own needs

Understanding the root causes of the issues to prevent them reoccurring

Taking an integrated approach so that we look at all well-being goals and objectives of other services and partners

Collaboration - working with others in a collaborative way to find shared sustainable solutions

Involvement - ensuring a diversity of the population is involved in decisions that affect them

7.4 Reporting

Actions to embed the delivery of the Strategic Plan into the day-to-day working of Local Authority departments will be delivered and reported through the Council's Environment Act Forward Plan linked to reporting on the Well-being Objective 12.



8 Useful links

- **Healthy for Bees: Healthy for People** – Managing the grounds of public building for pollinators. Natural Resources Wales.
<https://naturalresources.wales/media/681901/managing-the-grounds-of-public-buildings-for-pollinators.pdf>
- **Wales Action Plan for Pollinators:**
<https://www.biodiversitywales.org.uk/Wales-Action-Plan-for-Pollinators>
- **Learning to Rethink Parks** – report from an HLF and Nesta programme to test new ways of managing public parks. More details of the projects can be found online at
<http://www.nesta.org.uk/project/rethinking-parks>
- **Wildlife Trust** – five simple actions for pollinators. There's a little something that everybody can do for pollinators. Read about five simple actions you can take.
<https://www.wildlifetrusts.org/bees-needs/fivesimpleactions>
- **Buglife.** Managing Urban Areas for Pollinators. This includes advice for public parks.
<https://www.buglife.org.uk/sites/default/files/managing%20urban%20areas%20for%20pollinators.pdf>
- **Become Bee Friendly** - an brand new initiative aimed at communities including Town and Community councils that wants to make Wales a pollinator-friendly country.
<https://www.biodiversitywales.org.uk/Wales-Action-Plan-for-Pollinators>
- **Buglife.** Managing Urban Areas for Pollinators. This includes advice for public parks but they have a range of advice on their website.
<https://www.buglife.org.uk/sites/default/files/managing%20urban%20areas%20for%20pollinators.pdf>
- **WCVA** – Making Space for Nature.
<https://www.wcva.org.uk/what-we-do/invest-in-nature-cymru/ms4n>
- **Bumblebee Conservation Trust** have a series of information sheets on managing land for bumblebees.
<https://www.bumblebeeconservation.org/land-management-advice/>