







### **Action Guide**

Everything you need to know to make your organisation or community Pollinator-Friendly.

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#### WELCOME TO THE BEE FRIENDLY ACTION GUIDE

Bees, butterflies and other pollinators are in trouble due to a variety of factors.

The good news, however, is that we can help.

And our **Bee Friendly** scheme aims to do just that!

This initiative is aimed at communities and community organisations.

#### **DID YOU KNOW?**

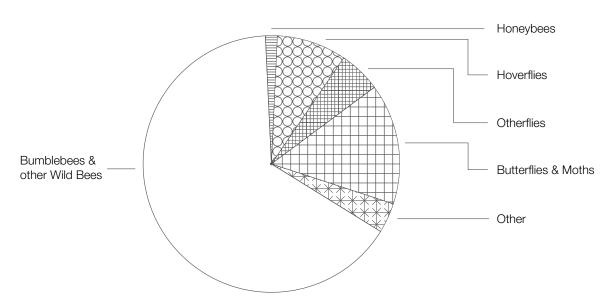
They may be tiny but bees are essential to a healthy environment and healthy economy. We rely on them and other insects to pollinate lots of our fruit and vegetables. The economic benefit of pollination to crop production in the UK is approximately £600m each year, based on yield.

At its heart, the Bee Friendly scheme is about making Wales a Pollinator-Friendly country.

#### **DID YOU KNOW?**

Honey bees are **NOT** the only insect pollinators in Britain. Wild pollinators include bumblebees and other bees, butterflies and moths, flies and various other insects such as beetles, wasps and thrips.

The chart below represents visits by pollinators that were studied at one site. Even this limited study shows that there is a great diversity of insect pollinators, and that honeybees are only a very small part of the picture. Many have different shaped mouthparts so are needed to pollinate different shaped flowers.



Pie chart constructed using data from trancest recording of insect-plant visitation in an ancient hay meadow at Shelfranger, Dicks, Corbet & Pywell (2002) compartmentalisation in plant-insect flower visitor webs. J Animal Ecology 71,32-43.

#### IS IT ONLY ABOUT BEES?

#### No – all pollinators are included.

Although the scheme is called Bee Friendly, we want people to take action to help all our pollinators, and not just bees. The **Bee Friendly** scheme is a fun innovative way to help get communities and organisations across Wales active in learning more about pollinators and habitats, and finding local solutions to help bees and other pollinators to thrive. Enhancing the natural environment in this way will also make places more attractive for local people and visitors and add to a community's sense of wellbeing.

So, if you would like to live in a **Bee Friendly** Town or Community, or work for a **Bee Friendly** Business, or study at a **Bee Friendly** School, University or College, for example, then read on to find out more about our fun scheme.

Together we can make a real difference to pollinators in Wales as we aim to become the first Pollinator-Friendly nation in the world!

#### **DID YOU KNOW?**

97% of traditional lowland grassland meadows in England and Wales were lost between 1930-87. Although the rate of decline has slowed, remaining semi-natural grassland continues to be lost.

#### **HOW DID WE GET HERE?**

Many groups and individuals have been working to protect species, habitats, nature and ecosystems in Wales for many years.

In 2013, the Welsh Government launched an action plan to protect pollinators in Wales, called the Action Plan for Pollinators<sup>1</sup> which was updated in 2018<sup>2</sup>.

A Taskforce group of organisations and individuals was set up to look into ways of implementing the action plan. To encourage everyone to get involved and help pollinators the Taskforce developed the Bee Friendly scheme.

#### WHY HELP POLLINATORS?

- » Pollinator populations have been in severe decline for the past thirty years. There is evidence for widespread declines in solitary bees, bumblebees and some hoverflies.
- » Pollinators are essential to pollinate commercial crops, soft fruit, orchards, horticultural crops, and wild and garden flowers.
- » Diverse and attractive natural environments are good for pollinators and are good for people too.
- » Natural green spaces and contact with wildlife are essential for our wellbeing.
- » The buzz of bees creates a sense of place and is the sound of our summer.
- » Many pollinators, especially flies and moths, are vital food for birds. It is not only the buzz of bees we want to bring back to our communities, but the cries of swifts and house martins as they swoop across the rooftops.

#### **BEE FRIENDLY**

If a bee or a moth or a butterfly could talk, what do you think they would ask of us? Probably to look after and increase their food sources, to protect and enhance places they live and shelter in, to stop using chemicals that can be harmful, and to tell as many people as possible about the issues they face — so that more and more people get involved and take action.

This is why we are asking you to join with us in taking action on four themes:

- 1. **Food** providing pollinator-friendly food sources in your area.
- 2. **Five star accommodation** providing places for insect pollinators to live.
- 3. Freedom from pesticides (this includes insecticides and herbicides) committing to avoid chemicals that harm pollinators.
- 4. **Fun** involving all the community and telling people why you are helping pollinators.

<sup>1</sup> www.gov.wales/action-plan-pollinators

<sup>2</sup> www.gov.wales/action-plan-pollinators-review-and-future-actions

The first three themes reflect what pollinators need to thrive: an environment which has varied and nutritious food sources, water, nesting sites and is free from pollution and pesticides. The fourth theme reflects the importance of community engagement and inclusion.

Groups taking part in this scheme need to carry out at least one idea for action from each of the four themes.

Community groups and organisations, public bodies with local stakeholders, and businesses with local customers are ideally placed to know the most appropriate actions to take in their area. The opportunities for action for a school in Newport, for example, may be different to those for a village in Anglesey or a business in Newtown.

The following pages offer some ideas for action with some links for more information. You can find some case studies to inspire you on the Wales Biodiversity Partnership website (WBP)<sup>3</sup>. Work out your own plan of action that considers the opportunities available in your community or organisation. If you have other ideas for actions within these themes, please feel free to incorporate them.

The most important thing is to have some fun and to involve as many people as possible in becoming **Bee Friendly**. Remember it's not just about bees, it's about all pollinators — you can take action to encourage hoverflies, butterflies, moths and other insects.

### CASE STUDY – BEE FRIENDLY ST DAVIDS

St Davids Bee Friendly initiative encourages businesses, residents and community groups to help combat the decline of insect pollinators by providing them with food and habitat and reducing pesticide use. Acres of new wildflower meadows have been sown, pollinator friendly plants bloom outside businesses and gardens and bilingual education boards inform visitors about the variety and importance of British pollinators. Once a year, the St Davids Open Gardens weekend sees homeowners open their wildlife friendly gardens to the public

too. The St Davids Bee Friendly initiative, coordinated by The Bug Farm, has helped the city become a sanctuary for pollinators and a haven for people wanting to learn more about them. One of the main attractions of the Bee Friendly city is the St Davids Pollinator Trail, an interactive and educational trail that links businesses across the peninsula. Each business showcases a specific insect pollinator with Welsh artwork and information beside the pollinator habitat. For more information, or to download the spotter guide and map, see the St Davids Pollinator Trail webpage<sup>4</sup>.

#### IT'S FOR THEM

Regularly cut, closely mown grass may look tidy — but it has little benefit for pollinators or other wildlife. Reducing mowing on road verges and amenity grasslands and allowing grasses and wildflowers to grow can provide food for pollinators. Leaving grass to grow and become more meadow-like can also provide shelter for pollinators.

After mowing, it is important to collect the grass cuttings. Collecting:

- » prevents the build-up of dead vegetation, which can smother delicate plants
- » leaves more exposed ground to allow seeds to grow
- » reduces soil fertility, slowing the growth of nutrient-loving coarse grasses that choke wildflowers and finer grasses.

Cutting less often and collecting the cut grass creates a better habitat for 'Them': invertebrates, birds, small mammals, amphibians and reptiles.

The 'It's for Them'<sup>5</sup> campaign has a range of resources that can be used to engage with and inform people why it is important to change how we cut grass. 'It's for Them' resource templates include signs and leaflets that you can customize with your own details and logos. Colouring-in templates and an education pack have been developed to explain benefits to children.

<sup>3</sup> www.biodiversitywales.org.uk/Case-studies

<sup>4</sup> www.thebugfarm.co.uk/pollinator-trail/

<sup>5</sup> www.gov.wales/its-them-campaign-stakeholder-toolkit

To support 'It's for Them', the Welsh Government website<sup>6</sup> has links to good practice material.

Taking the 'It's for Them' approach could be used as an action for both the Bee Friendly:

#### » Theme 1:

Food – providing pollinator friendly food sources; and

#### » Theme 2:

Five star accommodation – providing places for pollinators to live.

## GETTING INVOLVED WITH BEE FRIENDLY

We want to work towards a Wales where more people know more about the issues affecting pollinators and are taking more action to protect them, their habitats and food sources. If we all work together, we can hopefully add the title of Wales being the world's first Pollinator-Friendly Nation to that of Wales being the world's first Fair Trade Nation.

#### A suggested plan of action:

- » Get together with like-minded individuals within your community, organisation or business to work out an action plan for your scheme.
- » Contact your local Bee Champion at the beginning of your project as they can help you work out what your ideas are for the four themes: Food, Five star accommodation, Freedom from pesticides and Fun. (To apply for the scheme, you need to complete at least one idea for each of the four Themes. With your Bee Champion, choose ideas that are most relevant to you and try to pick ideas that are achievable and enjoyable. This will make things much easier, especially if you are a new group.)
- » Advertise in your local area and use social media to let people know what you are doing and invite more people to join your project.

- » Buzz into Action!
- » Once you have completed an action for each of the four themes, fill in the application form<sup>7</sup> on the Wales Biodiversity Partnership website.
- » Celebrate officially becoming **Bee Friendly**.
- » Publicise and share your achievements by posting any photos and experiences on social media platforms using the hashtag #BeeFriendlyWales.
- » Build on your success. Think about what other actions you can do across the four themes. Tell us your progress.
- » Flower-Insect Timed Counts, developed by the Pollinator Monitoring Scheme (PoMS),<sup>8</sup> can be used as a method of monitoring pollinators. Remember to carry out your survey when the weather conditions are suitable. Don't forget to send in your results via the FIT Counts form or app, even if you have not seen any insects visiting your target plants.
- » X-Polli:Nation<sup>9</sup> resource materials can help schools learn about pollinators and how to record them.
- » Please remember that, after a year, you will need to submit a renewal application to maintain your Bee Friendly status.
- » Keep maintaining and developing your actions for pollinators. After your second year, you do not have to complete a renewal application to maintain your status. However, if you would like to let us know what you are doing, we are always grateful to hear about how your project is progressing.



<sup>6</sup> www.gov.wales/road-verges-and-amenity-grasslands-supporting-wildlife

<sup>7</sup> www.biodiversitywales.org.uk/About-the-scheme

<sup>8</sup> www.ukpoms.org.uk/

<sup>9</sup> www.xpollination.org/

#### **BEE FRIENDLY - THE 4 THEMES**

## THEME 1: FOOD – PROVIDING POLLINATOR FRIENDLY FOOD SOURCES IN YOUR AREA

#### WHY IS THIS IMPORTANT?

What did you have for breakfast today?

- » Jam on toast?
- » Fresh fruit?
- » Dried fruit in your muesli or some grilled tomatoes with your fry-up?
- » Maybe fruit juice or a coffee?

All of this was brought to you by bees and other pollinators. It's tempting to think bees just provide us with honey – but in fact they're behind much of the food we eat, including most fruit and vegetables.

Pollinators are crucial to our economy — without them it would cost UK farmers £1.8 billion a year to pollinate our crops. In a world without bees and other pollinators, our food would cost a lot more to produce and our economy would take a big hit.<sup>10</sup>

POLLINATORS ARE
AMAZING. THEY'RE A
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VEGETABLES WON'T BE
POLLINATED AND MANY
THINGS ON EARTH WOULD
HAVE NO FOOD.

Finn Collister (aged 9)

#### DID YOU KNOW?

Pollinators need food in the form of pollen and nectar foraged from a variety of flowering plant species. The larval stages of many pollinators have many differing requirements. In order to support a variety of pollinator species, nectar sources need to be available from early spring through to late autumn.

- » Identify areas that already provide a very good food source for pollinators, for example; flowering hedgerows, patches of wildflowers on waste ground, areas of bramble or ivy and flowering meadows. Work with landowners to protect these or manage them more sensitively.
- » Provide pollinator-friendly food areas Sow seeds and take cuttings of some of the plants from the plants for pollinators list on the Wales Biodiversity Partnership website<sup>11</sup> which includes a selection of forage plants useful for adult butterflies, moths, hoverflies, bumblebees and solitary bees. Together, these make up the vast majority of pollinators in Wales.
- » Remember that butterflies and moths have different needs to bees in terms of their larval food plants. Plant appropriate native species which supply suitable food for their caterpillars. Remember you are growing these plants to be eaten, so do not squish or remove the caterpillars. Plants recommended as larval food plants for butterflies and some moths have also been included on our Suggested Plant List for Pollinators<sup>12</sup>.
- » Leave wild areas to allow larval food plants such as nettles to grow.

<sup>10</sup> www.cdn.friendsoftheearth.uk/sites/default/files/downloads/20%20Things%20about%20bees\_0.pdf

<sup>11</sup> www.biodiversitywales.org.uk/About-the-scheme

<sup>12</sup> www.biodiversitywales.org.uk/Content/Upload/Bee-friendly-plant-list-ENG.pdf

- » Unlike bees, adult butterflies and moths need nectar but do not eat pollen. Grow nightscented plants which are good for moths.
- » Create wildflower meadows<sup>13</sup>, or plant cultivated flowers, shrubs or trees that provide pollen and nectar for bees and other pollinators e.g. in parks, on road verges, civic spaces, playing fields, and on land around offices and depots. Check to see if your site falls within a B-Line<sup>14</sup> and add your details to Buglife's interactive map.
- » Cut your grass less often. Encourage householders and other organisations to follow your lead. Aim to provide long grass that caterpillars can eat and shelter in, and flowers that adult pollinators can feed from. If appearance is important, try mowing a one metre-wide strip around the edge of wildlife meadows to emphasise that the area is a managed feature and not just neglected. To allow butterflies to complete their life cycle, find an area of grass, divide it in half and cut the halves in alternate years so there is always a safe refuge for caterpillars. If you need to cut, raise the bar on your mower and reduce your cuts to 2-3 times a year, with the final cut as late as possible. Allow flowering plants to flower and set seed. Where possible, leave grass to grow longer; preferably cutting only once a year. It is important to remove grass cuttings. This prevents smothering of delicate plants by cut grass. It also reduces soil nutrients and the growth of rough grass that can outcompete wildflowers.
- » More information on how to cut your grass less often is in the Bee Friendly Planting for Pollinators booklet<sup>15</sup>. The 'It's for Them'<sup>16</sup> campaign has a range of resources, including signs, that you can customise and print off which explain why reducing grass cutting is important for wildlife. Buglife B-lines project<sup>17</sup> have developed a young people's guidebook to pollinators and their habitats called Top Tips for Pollinators<sup>18</sup>. Top tip #1 is 'Go easy on the mowing'. Nature Isn't

- Neat<sup>19</sup> and Buglife B-lines<sup>20</sup> have information packs on how to manage green spaces for pollinators.
- » Work with local householders to encourage them to grow pollinator friendly flowers and plants. Aim to have plenty of nectar-bearing flowers out in as many months as possible, including early spring, late summer and autumn. Start to get your space buzzing through the seasons with the National Botanic Garden of Wales' recommended top 30 plant list found in our Planting for Pollinators booklet. Before you begin work, it is important to have the landowner's permission.
- » In gardens, encourage the use of openshaped flowers where insects can reach the nectar and pollen.
- » Plant more old-fashioned varieties of plant which tend to have more nectar than more modern forms and hybrids, and choose varieties with single flowers.
- » Manage hedges, ditches and banks on rotation. Hedges, ditches and banks can be a haven for pollinators, not only providing vital food sources but also egg laying, hibernation and nesting sites. Sensitive management of these areas helps to connect larger habitat patches and sustain healthy populations. The Bumblebee Conservation Trust<sup>21</sup> has produced a fact sheet on how to manage hedges, ditches and banks.
- » Plant a thicket of Goat Willow (Salix caprea), the leaves of which provide food for caterpillars and the flowers of which are an early-season pollen source for queen bumblebees.

<sup>13</sup> www.meadows.plantlife.org.uk/making-meadows/

<sup>14</sup> www.buglife.org.uk/b-lines-hub/wales

<sup>15</sup> www.biodiversitywales.org.uk/File/809/en-GB

<sup>16</sup> www.gov.wales/its-them-campaign-stakeholder-toolkit

<sup>17</sup> www.buglife.org.uk/news/spread-the-buzz/

<sup>18</sup> www.issuu.com/buglifecymru/docs/top\_tips\_for\_pollinators

<sup>19</sup> www.monlife.co.uk/outdoor/green-infrastructure/nature-isnt-neat/

 $<sup>20\</sup> www.buglife.org.uk/our-work/b-lines/b-lines-guidance/local-authority-guidance/$ 

<sup>21</sup> www.bumblebeeconservation.org/wp-content/uploads/2017/08/BBCT\_Land\_Factsheet\_6\_Managing\_hedges\_edges.pdf

- » In gardens, sow native wildflower mixes. However, do not sow in areas that are already naturally wild. Seeds could be wasted as they will have difficulty growing and competing with plants already there. Introducing species that are not native to a wild area could disturb the natural balance and damage it. Never plant Invasive Non-Native Species in naturally wild areas or areas where they can escape into the wild.
- » For more ideas on how every garden or growing space, no matter its size, can be a haven for pollinators, see our Planting for Pollinators booklet<sup>22</sup>.

#### **DID YOU KNOW?**

The Holly Blue Butterfly is so called because its caterpillars can only eat Holly in the spring or Ivy in the autumn. This is why native wild plants are so important for butterflies; often their caterpillars can only eat one specific plant.

Holly Blue also overwinter as an egg on Holly bushes. Therefore, rotational cutting for hedges (not cutting a hedge every year or just cutting each side alternately) is also important.

### THEME 2: FIVE STAR ACCOMMODATION – PROVIDING PLACES FOR INSECT POLLINATORS TO LIVE

#### WHY IS THIS IMPORTANT?

Since 1900, the UK has lost 20 species of bee, and a further 35 are considered under threat of extinction. Buglife's Wales Threatened Bee Report<sup>23</sup>, published in 2018, reports 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. None are protected by law. Across Europe nearly one in ten wild bee species face extinction.

- » Create suitable habitats for hoverflies to lay eggs in, promoting pollinators in your garden by creating a hoverfly lagoon<sup>24</sup> a pond or "boggy places".
- » Create bee nesting habitats<sup>25</sup> and banks<sup>26</sup> and avoid destroying existing nesting habitats for ground nesting solitary bees and bumblebees.
- » Identify and protect or provide areas of long grass, hollow trees and large and small cavities in walls for bees to nest inside.
- » Identify areas of short mown grass, embankments or earth banks that currently support colonies of ground-nesting bees.
- » Identify old walls that currently support colonies of solitary bees nesting in crumbly mortar and ensure that these walls are not re-built or re-pointed without making arrangements to retain the solitary bees.

- » Develop and maintain strips of tussocky grass (cut every 2-3 years to prevent scrub invasion) as nesting areas for above-ground-nesting bumblebee species.
- » Plant a hedgerow of native shrub species and manage it in rotation<sup>27</sup>.
- » Build and maintain<sup>28</sup> a bee/bug hotel in a suitable location (in full sun, facing south or south east, a metre off the ground, with no vegetation blocking the entrance, and with a strong roof to deflect rain). To prevent high mortality of larvae from fungus moulds, bug hotels need protection from wet weather. Monitor the bug hotel from year to year, cleaning and replacing nesting tubes and materials as necessary. A bug hotel provides space for solitary insects to nest in. They are fascinating to watch and a good way of learning about solitary bees.
- » Make your own bumblebee nest spot<sup>29</sup>.
- » Wait until the spring<sup>30</sup> when the weather is warm (reliably above 10°C) before you clear up gardens and flower beds or borders. Hollow stems, seed heads, fallen leaves and piles of twigs and branches can provide places for pollinators to live over the winter.
- » If you are building a structure, consider how you can include homes for pollinators in the design such as green roofs<sup>31</sup>.

<sup>23</sup> www.buglife.org.uk/get-involved/near-me/buglife-cymru/welsh-pollinators/

<sup>24</sup> www.thebuzzclub.uk/hoverfly-lagoons

<sup>25</sup> www.pollinators.ie/wp-content/uploads/2022/12/Pollinator-Nesting-How-to-Guide-2022-WEB.pdf

<sup>26</sup> www.cdn.buglife.org.uk/2020/04/Bee-bank-booklet-2.pdf

<sup>27</sup> www.bumblebeeconservation.org/wp-content/uploads/2017/08/BBCT\_Land\_Factsheet\_6\_Managing\_hedges\_edges.pdf

<sup>28</sup> www.foxleas.com/make-a-bee-hotel.asp

<sup>29</sup> www.bumblebeeconservation.org/beethechange/resource/how-to-provide-bumblebee-nest-sites/

<sup>30</sup> www.butterfly-conservation.org/news-and-blog/top-tips-for-helping-butterflies-andmoths#:~:text=Consider%20creating%20a%20habitat%20pile%20in%20your%20 garden,time%2C%20giving%20them%20a%20safe%20space%20to%20rest

garden, inne %2C %20giving %20then %208 %208 me %208 pace %2010 %20 lest
www.cdn.buglife.org.uk/2019/07/Creating-Green-Roofs-for-Invertebrates\_Best-practice-guidance.pdf

#### **DID YOU KNOW?**

Bee and pollinator health and declining populations have been increasingly highlighted as a cause for concern in the UK and globally.

Butterflies, hoverflies and many species of moth are also declining across Wales.

Wildflower meadows and other important seminatural habitats have also decreased in area.

Pollinators need diverse habitats and vegetation structure, e.g. hedgerows, scrub,tall grass, burrows and holes in tree trunks for shelter, nesting and overwintering.

#### **DID YOU KNOW?**

In Wales, honey bees are largely managed by beekeepers. The UK hive count, carried out by the National Bee Unit (part of the Animal Plant Health Agency) indicates that honey bee numbers are not in decline. Therefore, increasing their numbers by installing hives is not generally considered an action to aid biodiversity. To take part in the Bee Friendly Scheme you do not need to keep honey bees. The National Bee Unit has a data map<sup>32</sup> with layers that provide information on the number of registered colonies (honey bee hives) and apiaries (a location where honey bee hives are kept) in each 10km<sup>2</sup>.

Honey bees are a valuable resource, used to pollinate crops and produce honey. Keeping honey bees can help people better appreciate and understand the natural world, while also improving their wellbeing. The findings of a number of studies suggest that in some areas there are concerns about sufficient availability of forage (nectar and pollen resources) for wild bees, where large numbers of honey bee colonies are also kept.

The Welsh Beekeepers' Association's 'The Beekeeping Year'<sup>33</sup> booklet will give you an idea of the undertaking that is required to look after honey bees.

<sup>32</sup> www.nationalbeeunit.com/diseases-and-pests/reports-charts-and-maps/maps-2/

<sup>33</sup> www.wbka.com/wp-content/uploads/2022/06/Beginners-Booklet-post-proof-16-for-web-English.pdf

### THEME 3: FREEDOM FROM PESTICIDES (THIS INCLUDES INSECTICIDES AND HERBICIDES) – AVOIDING CHEMICALS THAT HARM POLLINATORS

#### WHY IS THIS IMPORTANT?

To reduce our overall reliance on pesticides it's important to understand and consider non-chemical alternatives and other preventative measures. There are a number of ways you can control pests, weeds and diseases without using pesticides. Adopting an Integrated Pest Management (IPM) approach can help you do this. An IPM approach offers the opportunity to eliminate or markedly reduce the use of pesticides. It does this by using a range of alternative techniques, such as:

- » Choosing plants well suited to local conditions and, where possible, which have natural resistance to pests and diseases;
- » Providing good care for your plants such as suitable drainage, crop rotations, mulching, well-planned pruning regimes and allowing sufficient space for growth;
- » Removing weeds, pests and diseased foliage manually (by hand weeding or with a trowel etc.) can be sufficient to get acceptable control in gardens and community spaces;
- » Companion planting (growing plants together which benefit and help each other). For example: marigolds can deter aphids, sage is said to repel slugs, and nasturtiums will attract aphids and caterpillars away from cabbages and other vegetables. There are many more plants with similar properties.
- » Be more tolerant of 'weeds', many of which are native wildflowers. For example: dandelions can provide a vital early food source for bumblebees. In early spring, one bumblebee queen needs to feed on 5000 flowers a day to have enough energy to raise her young.

» Plant more insect-friendly plants and create insect log piles to attract insects which control pests. For example: hoverfly larvae, lacewing larvae and ladybirds are predators of aphids. Wasps are also predators of lots of insect species like greenfly and therefore help to keep their numbers in check.

- » Work with local householders to encourage them to reduce or eliminate their use of pesticides that may be harmful to insect pollinators. The Bumblebee Conservation Trust have produced a guide: 'Go pesticidefree in your garden'<sup>34</sup>. Welsh Water's, PestSmart<sup>35</sup> also provides advice on how to manage weeds, pests and plant diseases.
- » Work with local householders to encourage them to reduce and eliminate their use of herbicides that kill "weeds" which can rob pollinators of food and homes.
- » Encourage your Community Council or Local Authority to do more for pollinators by reducing or eliminating the use of chemicals harmful to insect pollinators on land that they control.
- » Work with local allotment holders to involve them in creating and managing pollinator habitat on allotments and to reduce pesticides.
- » Raise awareness more generally about the effects of some pesticides on pollinators.
- » If you have someone managing your property check that they are taking an IPM approach.

#### **NEONICOTINOIDS**

Around 2012, there was increasing concern about certain pesticides containing neonicotinoids. They are a systemic pesticide, which means they are taken up by the plant and transported to all the tissues (leaves, flowers, roots and stems, as well as pollen and nectar).

Research suggests that three neonicotinoid pesticides (clothianidin, imidacloprid and thiamethoxam) may have an adverse impact on the health of bees. Such concerns led the European Commission and the UK to completely ban the outdoor use of the three neonicotinoids and restrict their use to greenhouses from December 2018.

#### **DID YOU KNOW?**

Attitudes to pests are important. For home growers, a low level of pest or disease damage is usually acceptable and there is therefore no need to use pesticides.

Conwy CBC has stopped using insecticides (pesticides used to control insects) in all of their public open spaces such as parks and recreation areas, and only use herbicides (pesticides used to control plants, commonly known as weed killers) sparingly and where there is no other viable option.

#### **DID YOU KNOW?**

Bees and their produce have been important in Wales from the earliest of times. The Laws of Hywel Dda deal with bees and their habits and produce. In the middle ages, mead was very important. Mead is an alcoholic drink made from honey and according to the Welsh laws, townships were expected to pay part of their taxes to the King in the form of mead. The Welsh words 'mêl' (honey), 'medd' (mead) and 'meddwi' (to get drunk) all share the same root.

The willingness of a patron to share his mead was a measure of his generosity according to the early poets. In the early Welsh poem 'Y Gododdin', composed in the 6th century, the warriors of the Welsh-speaking kingdoms of the "Old North" (northern England/southern Scotland today) lost to the Anglo-Saxon invaders at the great battle of Catraeth (generally assumed to be Catterick) due to the overconsumption of mead. Many houses and farms in Wales include the element 'gwenyn' (bees).

#### THEME 4: FUN - INVOLVING ALL THE COMMUNITY

#### WHY IS THIS IMPORTANT?

Places that are good for pollinators are good for people too! Bees, butterflies and wildflowers are, after all, synonymous with beautiful summer days. Engaging as many people as possible, and in particular younger people, will help them learn to love nature and could instil in them a desire to protect their environment for future generations.

Involving as many other people in your Bee Friendly Wales project is probably the single best thing you can do. It can help ensure that your project reflects local needs, has local support, generates new ideas, different perspectives and new partners to work with.

Most importantly...it's FUN!

- » Work with at least one local school, nursery, youth group or other local community group to have an annual 'pollinator day' where children can dress up in fancy dress, learn about pollinators, do a range of craft activities and maybe even come up with a bee-rap?
- » Organise or attend at least one event per year to promote action to help pollinators (this could be a stall at the local fair or school fete, an evening film showing or public talk or maybe even something like a special local honey tasting event for staff at your business for example).
- » Download the Pollinator Monitoring Scheme (PoMS) app<sup>36</sup> and carry out a FIT Count<sup>37</sup>.
- » Take part in Wales Nature Week<sup>38</sup> to highlight the work you are doing to help pollinators.

- » Take part in the National Moth Recording Scheme<sup>39</sup>. Any moth species that you see and can identify, whether you are moth trapping on a mountain or relaxing in your garden, can be recorded and submitted. Sightings of life cycle stages, such as caterpillars, are also welcome as records.
- » Take part in the Big Butterfly Count<sup>40</sup> a nationwide survey aimed at helping us assess the health of our environment. It was launched in 2010 and has rapidly become the world's biggest survey of butterflies. Over 100,000 people took part in 2018, undertaking 97,133 counts.
- Consider becoming a Bumblebee
   Conservation Trust volunteer BeeWalker –
   BeeWalk<sup>41</sup> is the standardised bumblebee-monitoring scheme across Great Britain.
- » Give awards for the best pollinator garden in any local "In Bloom" competitions, and/ or hold a competition for the best pollinatorfriendly workplace/business or school garden.
- » Have an open day and invite people to see and enjoy what you are achieving.
- » Work with other groups in your community on pollinator projects.
- Encourage gardeners, children and schools to go on a hunt for one of the common solitary bee species and to submit any records – see the next page for suggestions.
- » Tell the local press and others, perhaps through social media, what you are doing and why.
- » Signage can be a good way to let people know what you are doing. We have developed Bee Friendly<sup>42</sup> and 'It's for Them' signs for you to use.

<sup>36</sup> www.ukpoms.org.uk/fit-count-app

<sup>37</sup> www.ukpoms.org.uk/fit-counts

<sup>38</sup> www.biodiversitywales.org.uk/Wales-Nature-Week

<sup>39</sup> www.butterfly-conservation.org/our-work/recording-and-monitoring/national-moth-recording-scheme

<sup>40</sup> www.bigbutterflycount.org/

<sup>41</sup> www.bumblebeeconservation.org/beewalk/

<sup>42</sup> www.biodiversitywales.org.uk/About-the-scheme

- » Learn from others. Invite or visit another a Bee Friendly group to share what you are doing. Attend events run by conservation organisations such as Buglife<sup>43</sup> and the Bumblebee Conservation Trust<sup>44</sup>.
- » Produce publicity about what you are doing for your customers, clients or partners.
- » Become a Bee Friendly Champion inspire other organisations or communities to sign up to the Bee Friendly Scheme.

#### **HUNTING FOR SOLITARY BEES**

In summer, hunt for the Wool Carder Bee. Great fun to watch the male as it patrols territories around flowers and chases other insects. Females collect fibres from plants such as lamb's ear. They use this to line their nest cells, which contain an egg, nectar and pollen. This habit of collecting fibre is why they are called 'wool carder' bees. This bee species is under-recorded in Wales, so schools who submit records are also contributing to science.

#### See:

www.bwars.com/content/anthidium-manicatum-wool-carder-bee-survey

In autumn, hunt for the Ivy Mining bee. Very easy to identify as it only visits flowering ivy, at a time when other solitary bees are not around. Very interesting because it is slowly colonising Wales via the Severn Valley so its progress across Wales can be monitored by looking at the online distribution map on the BWARS site. Again, this contributes to our scientific knowledge of the bee.

#### See:

www.bwars.com/content/colletes-hederaemapping-project

TEACHING A CHILD NOT TO STEP ON A CATERPILLAR IS AS VALUABLE TO THE CHILD AS IT IS TO THE CATERPILLAR.

**Bradley Millar** 

#### **APPLICATIONS AND RENEWALS**

Making a successful application:

Seek advice and support by making contact with your local Bee Friendly Champion (contact list available in the Bee Friendly tab on the Wales Biodiversity Partnership web site<sup>45</sup>.

To become a Bee Friendly community or organisation you will need to show how you are committed to taking action or how you have already successfully taken action around the four Bee Friendly themes.

If you are submitting an application on behalf of a Local Authority or other Council, please provide information that demonstrates they support the application. A Council commitment could be shown in a number of ways which could include, but not be limited to:

- » referencing the scheme in policy documents approved by the Council (such as biodiversity policy documents)
- » passing a Council vote confirming they want to become Bee Friendly.

Please keep a record of all your achievements, activities and media coverage.

When you're ready and confident that the requirements for each theme can be met:

- Download the application form from the Wales Biodiversity Partnership website.<sup>46</sup>
- 2. Complete the application form with details around each of the four themes. Completing the form electronically makes processing the application quicker and more efficient.
- Email the completed application form with any supporting information such as photos and media coverage to NatureConservation@gov.wales

If you cannot submit the form electronically, please send it to:

Bee Friendly Biodiversity and Nature Conservation Branch Welsh Government, Rhodfa Padarn Llanbadarn Fawr Aberystwyth SY23 3UR

<sup>43</sup> www.buglife.org.uk/

<sup>44</sup> www.bumblebeeconservation.org/

 $<sup>45\</sup> www.biodiversitywales.org.uk/Bee-Friendly-Champions$ 

<sup>46</sup> www.biodiversitywales.org.uk/How-can-l-get-involved

#### WHAT HAPPENS NEXT?

Bee Friendly will confirm your application has been received and if necessary, request any additional information needed.

A Bee Friendly Champion will assess your application and give you feedback.

If your application is successful – celebrate! A certificate and Bee Friendly identity/logo for you to use will be awarded to the group. You will be able to use your Bee Friendly identity/logo on all your materials.

If your application is unsuccessful, use the suggestions in the feedback to develop activities and resubmit the application when you feel the necessary progress has been made.

## MAINTAINING BEE FRIENDLY STATUS

All Bee Friendly schemes must maintain status by submitting a renewal application one year after status is achieved.

Make sure progress around the goals is recorded and keep details of any events you do, your progress locally, photos, media coverage and any other information you feel is relevant.

On your renewal application, one of our Bee Friendly Champions will work with you to provide advice.

After you have submitted your renewal application and had confirmation that it has been successful, you do not need to send us any more applications. We trust you will be busy carrying out actions to help pollinators for years to come. If at any time you would like advice from your local Bee Champion, please do not hesitate to contact them.

We are always happy to hear how you are getting on. If you want to share your achievements with us, please send an update to NatureConservation@gov.wales.

If you would like us to promote the work you are doing on the Bee Friendly Wales Facebook page, please send photos and a post to: NatureConservation@gov.wales.

#### RESOURCES AND SUPPORT

For general enquiries about Bee Friendly, applications and renewals please contact: NatureConservation@gov.wales

Bee Friendly
Biodiversity and Nature Conservation Branch
Welsh Government
Rhodfa Padarn
Llanbadarn Fawr
Aberystwyth
SY23 3UR

Resources for Bee Friendly and the latest Bee Friendly news and information: www.biodiversitywales.org.uk/Bee-Friendly

#### **RESOURCES TO HELP YOU**

#### General information about pollinators

- » Bumblebee Conservation Trust www.bumblebeeconservation.org www.bumblebeeconservation.org/bees-needs/information-sheets/ www.bumblebeeconservation.org/beethechange
- » Friends of the Earth Bee Cause www.friendsoftheearth.uk/bees
- » Buglife www.buglife.org.uk
- » Bee Friendly Monmouthshire www.beefriendlymonmouthshire.org
- » Bees for Development www.beesfordevelopment.org

#### **Counting pollinators**

- » National Moth Recording Scheme www.butterfly-conservation.org/our-work/recording-and-monitoring/national-moth-recordingscheme
- » Big Butterfly Count www.bigbutterflycount.org
- » Pollinator Monitoring Scheme (PoMS) www.ukpoms.org.uk
- » Bumblebee Conservation Trust BeeWalk www.bumblebeeconservation.org/beewalk

#### Bee Friendly case studies and resources

- » Case Studies on WBP website www.biodiversitywales.org.uk/Case-studies
- » Resources on WBP web site www.biodiversitywales.org.uk/About-the-scheme

#### Beekeeping

- » Welsh Beekeepers Association www.wbka.com
- » National Bee Unit (Beebase) www.nationalbeeunit.com

#### Gardening for pollinators

- » Bee Friendly Suggested Plant List for Pollinators www.biodiversitywales.org.uk/Content/Upload/Bee-friendly-plant-list-ENG.pdf
- » Royal Horticultural Society Perfect for Pollinators www.rhs.org.uk/science/conservation-biodiversity/wildlife/encourage-wildlife-to-your-garden/ plants-for-pollinators
- » Bumblebee Conservation Trust Gardening for Bumblebees www.bumblebeeconservation.org/gardeningadvice
- » Wildlife Trusts Wildlife Gardening www.wildlifetrusts.org/gardening
- » Wildlife Gardening Forum www.wlgf.org
- » Buglife Wildlife Gardening Building for beeswww.buglife.org.uk/get-involved/gardening-for-bugs/building-for-bees
- » RSPB's Planning a wildlife garden design www.rspb.org.uk/helping-nature/what-you-can-do/activities/planting-plan-for-wildlife-gardens
- » Butterfly Conservation's gardening advice www.butterfly-conservation.org/how-you-can-help/get-involved/gardening

#### Other initiatives and useful information

- » Nature Isn't Neat www.monlife.co.uk/outdoor/green-infrastructure/nature-isnt-neat
- » National Botanic Garden for Wales www.botanicgarden.wales/science/saving-pollinators
- » X-Polli:Nation www.xpollination.org
- » Plantlife Meadows' Hub Everything you wanted to know about making and looking after meadows www.meadows.plantlife.org.uk
- » Plantlife: Managing Road Verges and Green Spaces www.plantlife.org.uk/learning-resource/road-verge-green-space-management-best-practice
- » Buglife B-lines guidance on how Local Authorities can manage green spaces for pollinators www.buglife.org.uk/our-work/b-lines/b-lines-guidance/local-authority-guidance
- » B-lines schools booklet: Top Tips for Pollinators www.issuu.com/buglifecymru/docs/top\_tips\_for\_pollinators
- » It's for Them Campaign www.gov.wales/its-them-campaign-stakeholder-toolkit
- » Welsh Government web page: Road verges and amenity grasslands supporting wildlife www.gov.wales/road-verges-and-amenity-grasslands-supporting-wildlife
- » On the Verge www.ontheverge.wales