

Minutes of Action Plan for Pollinators (APP) Taskforce Meeting – 3 Nov 2022, MS Teams

Attendees:

Angharad Owen	Network Rail
Bob Griffiths	(CEFNFFYRDD)
Clare Burrows	National Resources Wales
Clare Flynn	Bumblebee Conservation Trust
Darryl Cox	Bumblebee Conservation Trust
Elliot Waters	Monmouthshire County Council/ Gwent Green Grid Partnership
Emma Morgan	Buglife
Gemma Baron	National Trust
Geoff Robinson	Welsh Government
Huw Bramhall	Welsh Government
Kathleen Carroll	Welsh Government
Kathryn Thomas	Swansea Council
Kipper Davies	Welsh Beekeepers' Association
Laura Jones	National Botanic Garden of Wales
Liz Halliwell	Natural Resources Wales
Lucie Taylor	Social Farms & Gardens,
Lucy Birch	Welsh Government
Maggie Gill	Animal Plant Health Agency
Maria Golightly	Brecon Beacon National Park
Mark Cleaver	Monmouthshire County Council
Nicola Bradbear	Bees for Development
Rachel Carter	One Voice Wales
Rachel Richards	Buglife
Richard Dawson	UK Centre for Ecology & Hydrology
Sarah Beynon	The Bug Farm
Selwyn Runnett	Bee Improvement & Bee Breeders Association
Sophie Roberts - P&E	Flintshire County Council
Tom Bucher-Flynn	Buglife
Veronika Brannovic	Torfaen County Borough Council

1. Kathleen Carroll opened the meeting and introductions were made.
2. **How nectar resources affect pollinator assemblages** – Maggie Gill (Animal Plant Health Agency) (Please see slides attached, due to size these are in a following e-mail.)

Maggie gave a presentation on research she has carried out as part of her Master's degree in entomology.

To help her select plants, she used M. Baude et al ("Historical nectar assessment reveals the fall and rise of floral resources in Britain," *Nature*, vol. 530(7588), pages 85-88, February 2016), who compiled a list of 271 flowering plants, which provide 98% of the floral resources in Britain. As her focus was on nectar resources, she excluded plants that only produce pollen. She then sorted the remaining plants into what months they flowered. She randomly selected 10 plants for each month during her sampling period April – September. Her sample site was the National Botanic Gardens of Wales. Nectar was collected using a microcapillary. Flowers needed to be bagged the night before and nectar collected early in the morning, so it was not evaporated by the sun. If it rained during the night, samples were not collected as rain could potentially have diluted the nectar. Average flower nectar volumes were calculated and chemical analysis of the nectar was carried out for the percentages of sucrose, fructose and glucose.

The top five nectar producing plants were: cultivated bean, foxglove, sunflower, water mint and honeysuckle.

To define what a flower was, she used how the insects interact with each of the plants and whether an insect could walk from one nectar tube to another to feed. For example, on sunflowers an insect can land on the flower dish structure and then walk around and feed from multiple tubes. In that instance, the flower dish was classified as one individual flower. However, for foxglove the insect has to fly between bell-shaped flower structures to feed. For these type of plants, each individual structure was classified as a flower.

To record which pollinators were feeding on the plant species she had sampled nectar from, she carried out timed surveys. She observed 20 flowers of each plant species for 10 uninterrupted minutes at 6 different times throughout the day.

Result tables and graphs can be found in the slides.

Maggie's final summary was:

- To help butterflies and moths, we should encourage people to have wilder areas in their gardens for larvae. Making hoverfly lagoons would also help hoverflies.

Links provided in the chat:

Action Plan for Pollinator Plant list:

<https://www.biodiversitywales.org.uk/Content/Upload/Bee-friendly-plant-list-ENG.pdf> / <https://www.biodiversitywales.org.uk/Content/Upload/Bee-friendly-plant-list-CY.pdf>

[Hoverfly Lagoons | Buzz Club \(thebuzzclub.uk\)](https://thebuzzclub.uk)

- Some flowers have evolved to produce lots of nectar, but these flowers limit the insects that can access the nectar and they make sure that they're getting

pollinated in the process, whereas others will produce less nectar but they're not so strategic about which pollinations visit them.

- The different kinds of sugar (glucose, fructose & sucrose) in the nectar promote different responses from pollinators. The volume of glucose in nectars seems to be linked to the social evolution of Hymenoptera and may possibly be connected with brood rearing. It appears that the more socially evolved the bees are the more important the volume of glucose in the nectar is to them.

For more information on this research please see published paper:

Maggie C. Gill & Keith F. A. Walters (2022): Potential use of floral nectar sugar characteristics in plant selection for pollinator habitats, Journal of Apicultural Research

Link to paper: <https://doi.org/10.1080/00218839.2022.2081443>

3. Drafting a response to Co-design Sustainable Farming Scheme – Gemma Baron (National Trust)

Prior to the meeting, a draft response for discussion had been written by Gemma. In a previous meeting, the Pollinator Agricultural Subgroup (Ant Rodgers, Darryl Cox, Gary Mitchell, Kipper and Huw Bramhall) had provided Gemma with comments which she had incorporated into the draft response.

During the meeting Gemma highlighted different sections from the proposed Sustainable Farming Scheme document ([Sustainable Farming Scheme | Sub-topic | GOV.WALES](#)) and outlined what the Pollinator Agricultural Subgroup had suggested as a response.

A discussion on the draft response was held and comments collected.

Action: A request was made for any further comments to be provided to Gemma so she could include them in the final response that she would submit on behalf of the Pollinator Taskforce.

4. Inspiring Spaces - work on health board sites - Kathryn Thomas (Communities and Nature Project Officer, Swansea Council) (Please see slides attached in the e-mail)

Kathryn explained that the work had been carried out under the Biophilic Wales project, which started in 2019. Biophilic Wales recognised that humans are drawn to natural world, and it is an important part of our wellbeing. The project had been funded through WG Enabling Natural Resources and Well-being grant, which finished in March 2022. The Swansea Bay University Health Board has provided additional funding for another year.

The [Biophilic Wales](#) project was divided into three work programmes; Inspiring Spaces, Grassland for Life and Plants for People. Elliot Waters and Dr Laura Jones who were also at the meeting were involved.

The presentation focused on the Inspiring Spaces element and improving the green infrastructure across 40 Swansea Bay University Health Board sites.

Improving the green infrastructure supported nature but also provided a space for NHS staff to take some time to refresh themselves when they were working under very difficult circumstances during the Covid 19 pandemic.

Volunteer contributions were a big part of the project and due to Covid 19 they had to adapt how this was delivered. They developed a system where they provided seeds for volunteers who grew them into plants. These were then brought to the health board sites so they could be planted out. (Resource materials developed for this side of the project were provided after the meeting. Please find attached.)

Post-care of a project site is an important factor to remember at the start of any project and having a service level agreement in place at the beginning of the project will ensure maintenance and upkeep of a site once the initial project has finished.

To help patients in the hospital who may not have been able to go outside, a number of nature videos were produced (for example: [Grasslands for Life | Glaswelltiroedd am Oes - YouTube](#)).

(After the meeting, a case study on Inspiring Spaces was provided. Please see attached in a following e-mail. It has a lessons learnt and an insights section.)

5. Marsh Fritillary Butterfly Conservation in Pembrokeshire - (Dr. Sarah Beynon (Bug Farm)) (Please see slides attached in a following e-mail)

Dr. Sarah Beynon is interested in how it is possible to utilize private land for nature conservation, and the need to engage with farmers, especially as 80% of land in Wales is farmed by private landowners.

Sarah outlined the work that she has been doing on her farm to connect habitat for the marsh fritillary butterfly, which went locally extinct on the St Davids peninsular in 2013. The indicator species, marsh fritillary butterfly, is very sensitive to land management so getting the land management right for marsh fritillary means that it is also right for other wildlife.

After the meeting Sarah provided the following links which outlines the work that she is doing:

Stage 1 (includes project film): <https://www.thebugfarm.co.uk/research-farm/marsh-fritillary-project/>

Stage 2 (includes draft legal contract): <https://www.thebugfarm.co.uk/research-farm/connecting-the-commons/>

Pollinating the Peninsula: <https://www.thebugfarm.co.uk/research-farm/pollinating-the-peninsula/>

6. Updates

Bumblebee Conservation Trust:

Clare Flynn gave an update on Skills for Bees Cymru project. The project's aim is to upskill volunteers' bumblebee identification skills and to build their confidence to undertake monitoring, recording and BeeWalk surveys. The BeeWalk survey is a UK wide standardised monitoring scheme for bumblebees where volunteers walk a transect once a month through the summer. The Skills for Bees is a 3 year project and next year will be the final year. By the end of the project, hopefully the number of people who are carrying out bumblebee transect surveys across Wales will have doubled. Nearly 500 people have attended training over the last two years. Clare hopes that the Skills for Bees could be used as a future model for engaging with volunteers on recording. So far, the project has worked with organisations such as the National Trust, Wildlife Trust and Buglife.

The training schedule for next year is already pretty full. However, if you are interested or know of a volunteer group that is interested in citizen science and monitoring bumblebees, please e-mail Clare.

For more information on Skills for Bees and Clare's contact details please see: <https://www.bumblebeeconservation.org/skills-for-bees-cymru/>

WG update:

- Kathleen Carroll mentioned that in case anyone missed the Wales Biodiversity Partnership Conference, sessions were recorded and can be found on: <https://www.biodiversitywales.org.uk/Conference>
- Kathleen also informed the Taskforce group that the 'It's for Them' campaign bilingual resource materials have been launched and can be found on:
 - <https://gov.wales/its-them-campaign-stakeholder-toolkit>
 - <https://llyw.cymru/iddyn-nhw-pecyn-cymorth-i-randdeiliad>

The purpose of the campaign is to encourage organisations to create more meadow-like areas on road verges and amenity grasslands and to raise awareness with the public why this is good for wildlife.

Action: Please contact Kathleen Carroll if you have an 'It's for Them' case study that could be developed.

7. Next Meeting

It was decided that it would be useful if one of the meetings every year was a hybrid meeting. This would provide an opportunity for people to meet up in person but for those who could not to join virtually. Incorporating a site visit in the afternoon would also provide an opportunity to learn and be inspired.

Action: Kathleen requested that people provide her with information on where people would like to visit and that ideally would have hybrid facilities.

Laura offered the National Botanic Gardens as a location. Sarah also offered the Bug farm as a location.