

## **Report of the Back our Bees Day with Glamorgan Federation**

An excellent day was held in Porthcawl on Friday 26 May to encourage members of Glamorgan Federation to 'Back our Bees'. A total of 79 WI members attended from various WIs within Glamorgan Federation and they had an opportunity to listen to and question an excellent group of speakers.

Ann Davies, Chair of Glamorgan Federation welcomed everyone to the event and introduced the first speaker **Marylyn Haines Evans, Chair of the NFWI Public Affairs Committee.**

Marylyn Haines Evans updated everyone on the work that the WI had done on bees following the SOS for Honeybees resolution which was passed in 2009. Marylyn explained that WI members had become increasingly concerned about declines in honeybees and other pollinators and that the statistics were worrying. The wild and solitary bees were disappearing at speed, only eight of the 24 bumblebee species were now commonly found in the UK and bees were facing pressure from diseases, pesticides, loss of habitat and climate change. Since World War II the UK had lost 98% of its wildflower meadows. Bees played a key role in pollinating up to three quarters of global crops, from strawberries and apples to peas and tomatoes – replacing this with hand pollination would be extremely expensive and very difficult!

The first call of the campaign was to make a buzz at local level. WI members came up with a whole host of ways to promote bees. Some trained as bee keepers, planted bee friendly habitats, or held 'bee teas'. They wrote to their MPs and even hosted bee themed carnival floats, dressing up as bees themselves in order to spread the word.

A 'Bee Aware Action Week' saw WI members pledging to eat only bee pollinated food for a day. Marylyn recommended that members try this at home and they will soon realise like she did just how essential bees are to the foods we eat every day.

The WI lobbied the government, WI members wrote to MPs and MEPs and tabled questions and debated the issue of honey bee declines in Parliament both in the UK and in Europe, and WI members also pressed Government Ministers for more action. In 2010 the Insect Pollinator Initiative announced a 10 million pound funding pot to research bee decline. WI campaigning helped ensure that honey bees were given their fair share of that funding.

This was great news for the campaign and a huge success in helping protect our bees for the future. This research would look at the causes and impacts of bee decline, and hopefully provide information about how to protect them in future. But bee numbers were still declining. So in 2013 the WI joined forces with Friends of the Earth to call for a government bee action plan. Friends of the Earth's research found that wild bees were extinct in many parts of the UK; solitary bees had declined by over half in some areas; hand pollinating crops in the UK would cost an extra £1.8 billion so it was clear more action was needed.

WI members took the campaign to Parliament and held 'Bee Tea' events to encourage politicians to get behind it. A Bee Summit brought together experts from science, farming and the environment to discuss the issue too. After much pressure the government heard the WI's calls and agreed to launch a National Pollinator Strategy. This Strategy covers England only and set out a range of actions the government would take to protect and support pollinators.

This was fantastic news for the campaign. WI members then pushed the government to make sure the Pollinator Strategy was strong and included a monitoring system so that bee population changes could be checked over time. The NFWI produced a range of materials for members including posters, postcards and a campaign action pack calling on government to make the plan as strong as possible. The NFWI received over 5000 campaign postcards

from members telling them why bees were important, and the NFWI met with the then Bees Minister, Lord de Mauley, to present the postcards and discuss the plan.

Members were aware that Wales was a bit ahead of the game when it came to bees – the Welsh Government launched its Action Plan for Pollinators in 2013. With plans due to cover all of the UK, there was now a unique opportunity to make a real change for pollinators, both ‘on the ground’ and through national leadership.

The NFWI hosted its third Bee Summit with Friends of the Earth in March to take stock of where they had got to and what needed to be done next. The NFWI also sat on the Department of Environment Food and Rural Affairs Pollinator Advisory Strategy Group.

The NFWI will continue to work with Friends of the Earth and the government to keep up the momentum. WI members were also still working locally to make their own communities bee friendly, Marylyn explained that members could:

- Create a bee haven
- Provide nesting sites
- Provide a water source
- Raise awareness in their own community
- Lobby their local authority
- Do the Friends of the Earth bee count [www.greatbritishbeecount.co.uk](http://www.greatbritishbeecount.co.uk)
- Try ‘Spot a Bee’ [www.spotabee.buzz](http://www.spotabee.buzz)

The next speaker was **Professor Les Baillie** from the **School of Pharmacy and Pharmaceutical Science at Cardiff University**. Les started by showing the video that had been produced which explained the work that Cardiff University, Pollen8 Cymru, WCVAs Bee Friendly Wales Scheme and the WI were doing on bees. The School of Pharmacy had been studying antibiotic resistant superbugs and new sources of drugs and pathogens which had led them to honey which had been used for 1000’s of years to treat disease. The use of honey is so old that there was a hieroglyph for bees. The university recreated honey recipes from a book printed in 1554, one of which killed superbugs and then did some research to find the plants which would produce honey that kills superbugs. They found plants in Tywyn that produced a honey sample that was as active as New Zealand’s Manuka honey; they had found Wales’ Manuka and discovered the next superfood. They currently had 500 honey samples in the lab waiting to be analysed, and it was hoped that in a couple of years they would have developed a honey in Wales that had antibiotic properties.

Cardiff University had an ambition to make Cardiff a bee friendly city; they had several hives on their roof with a 150,000 Italian bees, and had trained staff as bee keepers. They made their own honey and lip balm and profit from the sales went towards buying bee hives for schools. They had planted bee friendly flowers and plants around the campus and were in the process of putting information boards up to inform students and visitors about the flowers and their medicinal properties. In 2017 they won the Guardian University award for their work on bees.

They had been working with local schools to engage children in their work which was linked to the National Curriculum. In partnership with Pollen8Cymru they had put bee hives into a few schools in Cardiff, for £600 a bee hive could be set up and then Nature’s Little Helpers would help to look after the bee hives in the schools. They were also working with various health boards and colleges to develop bee friendly spaces and had developed the ‘Spot-a-bee’ website for people to upload the images of plants they find bees on.

They had also been developing Barcode Wales, an initiative to produce a dataset for Wales’ flowering plants. They now had a list of flowers that they knew bees visited from studying the honey.

Ann Jones, Chair of the Federations of Wales gave a re-cap of the morning session and introduced the afternoon speakers.

**Laura Jones** from the **National Botanic Garden of Wales** spoke about the work they were doing at the Botanic Garden where they were investigating which flowers honey bees forage on to help them inform future choices when it comes to managing habitats and planting pollinator-friendly flowers. By using DNA metabarcoding they could identify the plants within the honey and they used the Botanic Garden as their study site, sampling from their own apiary throughout the season. By sampling honey from their hives on a monthly basis, and surveying the Botanic Garden for all plant species in flower, they could track honey bee foraging on a monthly basis giving them important information on foraging preferences.

The Botanic Garden provided them with a unique foraging habitat for the honey bees, with a highly diverse floral resource surrounded by a National Nature Reserve. To widen their survey and understanding of honey bee foraging across different habitats they were asking for a 30ml sample of honey from beekeepers across Wales and the UK to include in their analysis.

By using DNA barcoding to identify pollen from the bodies of pollinators, they were investigating where the honey bees were foraging, which plants hoverflies were visiting, and more about the ecology of wild bees. If they could find out which plants were most important for pollinators then they could help to ensure that those plants were available in the pollinators' environment. With the information they could also start to answer questions on the floral preferences of honey bees and how the plants used compared with the plants available. They could relate this to nutritional requirements, examining the pollen and nectar, and start to answer why honey bees choose the plants they do.

Wales was the first country to barcode their native flowering plants and they used Wales' data to record flowering plants throughout the UK. By using the DNA barcode they had identified 1,354 different type of plant in Europe, but bees only used a small number of plants with some of the favourites being bramble, white clover and apple.

The next speaker was **Sue Poole** from the **Centre 4 Entrepreneurial Education** who introduced the members to the 'Bumbles of Honeywood', a project for primary school aged children to raise awareness of the importance of bees. Each interested school received a knitted beehive, honey, a setoff 6 books which contained challenges, masks, plant pots and seeds for the children to grow bee friendly plants and flowers. The project had its own YouTube channel where the stories were read out by Kev Johns a local DJ, and there was a song and dance for the children to learn. Sue appealed to the members to help her knit beehives as she required 82 for the September launch of the project; she had wool and patterns available for the members.

Finally **Mavis Tierney**, a member of **Tonteg WI** spoke about her experiences as a bee keeper. Mavis explained that she had started keeping bees six years ago with two hives and five frames. She now had 12 hives and had a passion for bees, she showed the members the frames and how the bees produce the honey, about the life of the bee and how they only lived for 6 weeks, and her clothing and how important it was to wear the right clothing to avoid being stung. Mavis explained about the work she and her husband did in going out to catch bees that had swarmed, and explained that bees swarm when their hives gets too full and they need to find a new home. If members should find a swarm, they were advised to leave them and call for professional help; if the bees were left alone they would not harm anyone.

Ann Davies closed the day by thanking all the speakers.