

## National Botanic Garden of Wales, Llanarthney, Carmarthenshire 09/7/2024 (coach trip)

**Organisers: Sue and Steve Southam**

This was the first coach trip we'd run for several years, and we were pleased to be able to fill a 29-seater, picking up members en route in Welshpool, Llwynderw, Newtown and Llanidloes. It was a pleasant run down, despite frequent heavy rain showers, with a brief 'comfort stop' in Builth Wells.

The National Botanic Garden of Wales is a place of international significance dedicated to conservation, horticulture, science, education, leisure and the arts. It opened in 2000, making it the first national botanic garden to be created in the new millennium, and is a charity dedicated to the advancement of knowledge in the science of plants and related subjects, and the conservation of plant species, especially those in Wales, Great Britain and the Western European Seaboard.

With over 500 acres there was plenty for us to explore, including the recently restored parkland, the Waun Las Nature Reserve, the British Bird of Prey Centre, Science Centre and the Great Glasshouse, 'home' to some of the most endangered plants in California, Australia, the Canary Islands, Chile, South Africa and the Mediterranean Basin. Of course this meant there was far more to see than most of us had time for, but between us we enjoyed a good overview of much of this wonderful site.

Many wandered through the double walled garden where the story of the evolution of flowering plants is told within a beautifully restored Regency feature. Within this garden is the Tropical House, where the collection of plants represents those found in tropical rain forests, one of the most important, and endangered, habitats on earth. Climbing high into the roof space, an *Aristolochia littoralis* caught the attention of a group of us, as we tried to work out the way its large and striking pipe-shaped purple and white flowers might be pollinated - since then I've discovered they produce an odour like rotting meat to attract pollinating flies, but the exact procedure remains a mystery!

Several members followed an interweaving network of paths through part of Waun Las Nature Reserve, through broad-leaved woodland to a series of cascades and waterfalls, created over 200 years ago but still thrilling visitors today.

Another group spotted the rare string-of-sausages lichen (*Usnea articulata*) on a couple of hawthorns along the path east of Llyn Mawr.

The colourful species-rich hay meadows have been managed traditionally since the late 1990's, and support a wide variety of orchids and flowering meadow plants. Unfortunately, a lengthy search for two rather special species, Whorled Caraway and Meadow Thistle, proved fruitless today, but it was good to know that they were there...somewhere!

The British Bird of Prey Centre, which is the only one in the UK focussing solely on our native species, was for many the main excitement of the day, as they watched a dozen or so species ranging from one of our smallest falcons, the Hobby, to the magnificent White Tailed Sea Eagle, our largest. Several members were treated to flying displays where they experienced having their hair parted by an Eagle Owl!

An exploration of The Apothecary's Hall revealed an Edwardian Pharmacy, relocated from a site on Anglesey. The old drawers would have contained tinctures, syrups and powders derived from plants to produce pills, ointments and potions to treat a range of ailments. There was also an exhibition displaying how plants have been used for medicinal purposes in the past. Some of the claims on proprietary products were to be taken with a pinch of salt. Asthma cigarettes raised some concern but we were somewhat relieved to read that they were not to be sold to anyone under the age of six!

Of course, many members headed for the great Glasshouse, and it was certainly an impressive structure and collection of plants, but perhaps the highlight for many of us was the Science Centre, which houses the herbarium, library and archives. This is where the NBGW's science team carries out research to benefit the conservation of plants, pollinators and habitats in Wales and across the world, and it was fascinating to learn that Wales was the first nation in the world to DNA barcode all of its native flowering plants and conifers, through work led by the National Botanic Garden of Wales. As this centre is not usually open to the public, we were particularly grateful to Kevin McGinn, Science Officer, for

agreeing to give us a guided tour. Last year, Kevin had visited Montgomeryshire to collect seed of March Stitchwort (*Stellaria palustris*), Tubular Water Dropwort (*Oenanthe fistulosa*) and Narrow-leaved Helleborine (*Cephalanthera longifolia*), all particularly rare in the county.

The herbarium houses pressed plants, including specimens relating to scientific research, some of which are well over 100 years old. Here we were lucky enough to see pages from the James Cosmo Melvill herbarium of British plants, including a pressed Corn Marigold, collected in 1886. Melvill was educated at Harrow School, and amassed a huge collection of plants which was kindly donated to the Garden by Melvill's old school. I have read since that he retired to Shrewsbury in 1904, where he had a building constructed in the grounds of Meole Brace Hall just to house his collection of grasses, ferns and seaweeds.

The National Seed Bank of Wales is also housed here, helping to safeguard plants and their genetic diversity for the future, by professionally drying, cleaning and testing seeds, and then storing them long-term, thereby acting as an insurance policy that can prevent plant extinctions. It was especially exciting to see a tray of germinated *Oenanthe fistulosa* seedlings, collected last year on the Wern, near Welshpool, in one of the labs.

A fascinating exhibition of exquisite embroidered flowers in the foyer, created by a volunteer textile art group calling themselves 'Stitching Botanicals', was admired by us all. It featured Welsh county flowers, rare Welsh plants, medicinal plants, meadow plants, and many beautiful fungi, all so intricate and lifelike that it was hard to believe they were stitched. Close by was a display relating to Welsh Botanists including Montgomeryshire's Janet Macnair, who started our Field Society in 1947.

Not far away was an impressive outdoor display of the rare plants associated with one of Wales' richest botanical sites, The Breidden SSSI, and several of us followed Kate Thorne, who collected seeds from the site between 2015 and 2016, to check on the 'exhibit'. We all agreed it was looking good, and Sticky Catchfly (*Lychnis/Silene viscaria*), Spiked Speedwell (*Veronica spicata*), Rock Cinquefoil (*Potentilla rupestris*) and Bloody Cranesbill (*Geranium sanguineum*), were all in evidence, as well as other species associated with the site. The main reason for the seed collection was to grow these plants on at the Garden in order to produce more seed which would eventually be planted back at the quarry in areas where quarrying had finished. We've been pleased to hear from Kevin McGinn that the spare seed is being stored long-term in the seed bank.

All too soon it was time to head homewards on our coach, reflecting on an excellent and surprisingly dry day (after a very poor forecast), whilst looking forward to a future visit in order to fill in the gaps that a shortage of time inevitably creates.