

A life without Echiums

David Pearce recalls his post-Ventnorian adventures and growing passion for plant ecology



Butterfly Orchid. Photo by Lee Behegan

“If you can make it through the first month, then you’ll be fine.” These were the words Chris Kidd, VBG’s curator, uttered to me on that last day of my apprenticeship, before my departure to Surrey and the RHS’s flagship garden, Wisley. A little while later and I was flung into the diploma course with nine course mates of a similar level of naivety as me as to what they had signed up to.

The Wisley Diploma is one of the oldest and most recognised horticulture qualifications, with alumni including the world-famous garden designer Dan Pearson, Mike Nelhams, curator of Tresco Abbey Garden, and the renowned author, botanist and horticulturist Brian Mathew. But there was little time to

revel in our accomplishment: we had to arrange our first-year bursary. Put eight incredibly enthusiastic plantspeople in a room with a somewhat infinite amount of funds and one soon realises how hard it will be to come to a unanimous agreement; I was set on going to South Africa, with Madeira, the Canaries, Switzerland, New Zealand and California being among the suggestions. We eventually settled on Andalusia in Southern Spain.

The trip, however, was worth every minute of anguish. The rich diversity of plants, landscapes and gardens appeased everyone’s hunger for Mediterranean plantsmanship. Our trip to Spain resulted not only from a passion for wild plant species, but also an appreciation of their application in horticulture.

As our climate changes, creating a less favourable environment for many of our native species, and one more suitable for a wide range of foreign plant pathogens and invasive species, it will become increasingly important to optimise biodiversity, and to use the information given to us through ecology; to conserve, garden, develop and restore. Indeed, the future of horticulture lies somewhere between ecology and traditional horticulture, an ideology long adopted and pioneered at Ventnor. The full report can be found at rhs.org.uk/education-learning/pdf/Bursaries/Bursary-Reports/rhs-bursary-report-wisley-students-andalucia.pdf.

Back in RHS Garden, Wisley, our thoughts turned from the lavish amounts of *pan con tomate*, *pisto*, *panellets* and *paella* to the ever-pressing plant pathogen portfolio. Three months of arduous deadlines, sleepless nights and stressful exams followed, and we began craving the simplicity of mountains, rivers, the beautiful diversity of life – and maybe a little whisky. Hence we set off to the Scottish Highlands, flying into Inverness and driving down to Skye before a day of botanising, and then heading off to the Outer Hebrides and the Island of North Uist.

We were lured here by the machair meadows. From the Gaelic meaning ‘low lying grassy plain’, the machair is almost entirely found in the west coast of Uist. Formed from a

combination of nutrient-rich shell deposit and the 6000 year old tradition of crofting – a rotational, low intensity agricultural process resulting in a mosaic of various habitats – this is a unique example of agriculture working with nature to create a refuge for a wide range of flora and fauna. These include one of Britain's rarest bees, the Great Yellow Bumblebee; a number of endangered seabirds including the ringed plover; and a large diversity of orchids including the endemic hebridean spotted orchid (*Dactylorhiza fuchsii* subsp. *herbidensis*), a stunning purple sub-species of the more well-known common spotted orchid.

The machair has long fascinated ecologists; a harmonic symbiosis between nature and man resulting in some of our country's greatest biodiversity, with more than 40 plant species per square metre. Machair provides many clues to how we can address the biodiversity crisis whilst feeding an ever-growing population.



The Hebridean spotted orchid amounts the machair

February 2020, and after six months of diligent dissertation research I was once again back out looking at wild plant species, this time with the local recorder for Snowdonia and owner of the world's smallest accredited botanic garden; Robbie Backhall-Miles. After a week learning germination protocol for some of South Africa's rarest species of Proteaceae – scraping and soaking *Mimetes* seed – we rewarded ourselves with some in-situ conservation. Our task was to ascend one of Snowdonia's most picturesque walking spots; Cym Idwal. We hiked for roughly an hour through the horrendous February Welsh weather to a series of large boulders. Robbie explained these were pyroclastic rock; ejected during volcanic eruptions almost 500 million years ago. Containing a large concentration of micro-nutrients and a good porous structure, they provided perfect growing conditions for the sub-Antarctic alpine genus of *Saxifraga*. Saxifrages have survived in Wales and Scotland longer than most other plants; they evaded the ice age by clinging to the top of the highest mountains, their long root system and compact cushion-like structure anchoring them to the rock during the almost never-ending blizzards. "What bonkers insect would be pollinating it in this weather?" I said as we observed the flowers of the purple saxifrage (*Saxifraga oppositifolia*) in the 5°C storm of wind and rain.

Next we carried out population checks on Wales's only tufted saxifrage (*Saxifraga cespitosa*); three individuals were counted with clear signs of over-grazing by Snowdonia's tenacious feral goats. Recently seed has been collected and distributed around Welsh botanic gardens to conserve these beautiful plants, with re-introductions planned.

How does all this link to horticulture, I hear you ask. For me, the most wonderful aspect of Ventnor Botanic Garden is the emphasis on plantsmanship and design based upon natural landscapes. There are examples in the Garden in which an ecosystem (often from the other side of the world) has been copied and inserted into an area so like-for-like that the ecosystem itself begins to flourish, to outcompete weeds and create an immersive, Covid-friendly, exotic holiday for visitors. This is known as the 'Ventnor Method', which has inspired me and will continue to stimulate my interest in ecology and wild plant populations in order to further our collections, gardens and ability to apply conservation in a horticultural scenario.



Linaria Verticallia. Photo by Lee Behegan