

Stanner Rocks Field Meeting - 8th June 2021

“There it is: through the arches into the Garden of Eden!”

These were the words of our guide, Andy Shaw, as he welcomed us to the famous Stanner Rocks National Nature Reserve. We had just crossed the busy A44 road and walked beneath the boundary trees whose topmost branches met above our heads.

Earlier, we gathered in warm sunshine beside the old Stanner Station building on the other side of the road where, in times past, trains regularly discharged groups of excited botanists looking forward to a day exploring the floral delights of the dolerite & gabbro rocks opposite. Our day focused on the amazing suite of floral rarities at Stanner Rocks, which is reflected in this report, particularly with regard to the importance of annual weather patterns, soil conditions and viable seedbanks.

Andy has spent many years passionately studying the flora and fauna of Stanner Rocks and his energy and passionate enthusiasm was contagious. Following a general introduction to the site focusing on the importance of geology and aspect which are key to the special plants that grow here, Andy vividly demonstrated the effect that optimal growing conditions can make when he introduced us to the most amazing selection of plants that he had brought along from his Rare British Plants Nursery, all of them in superb condition: Meadow Clary *Salvia pratensis*, Isle of Man Cabbage *Coincya monensis* ssp. *monensis*, Strapwort *Corrigiola litoralis*, Grass-poly *Lythrum hyssopifolia*, Adder's-tongue *Ophioglossum vulgatum*, Red-tipped Cudweed *Filago lutescens*, Stinking Hawk's-beard *Crepis foetida* and a wonderful array of clovers including Twin-headed *Trifolium bocconeii*, Long-headed *T. incarnatum* ssp. *molinerii*, Clustered *T. glomeratum* and Starry *T. stellatum*all in one place!



The rock floor was a riot of colour with an array of flowerheads everywhere we looked and we began by making our way over to a beautiful flowering patch of Sticky Catchfly *Silene viscaria* which was thriving following the recent rains, its brightly-coloured flower-clusters lighting up the areas of the Rocks where it grew. We were fortunate to see it in such good condition as it would normally have gone over at this time of year, but the cold Spring meant that it was flowering a little later than usual. We were able to see and feel the sticky glandular hairs on the stem, preventing ants from climbing up to the flower-heads and making a hole in them in order to steal the nectar. Andy remarked that he sometimes finds a number of dead ants stuck to the stem!

We then made our way over to "...the Scleranthus Spur, the most hallowed piece of botanical turf in Wales!" This spur of rock is home to populations of both the upright subspecies of Perennial Knawel *Scleranthus perennis* ssp. *perennis* and Upright Clover *Trifolium strictum*. The former grows only here (ssp. *prostratus* being found at a couple of sites in the Brecks) and the latter only here and on The Lizard Peninsula.

Unfortunately, there wasn't any flowering Upright Clover following a very dry April for the third year in a row. Even in a good year it rarely reaches double figures so it really does have a precarious foothold. There must be a good seedbank for it to keep returning in more suitable years. Andy had included a healthy specimen with his collection from the Nursery which demonstrated how this species can potentially thrive in perfect, but artificial, conditions. It's impossible to recreate these conditions at Stanner Rocks, of course, but some years ago, Andy had removed just three seeds under licence from this population and grown flourishing plants producing seed from which he had managed to start a new population at a site higher up the cliff. This produced nearly one hundred plants a few years ago, though there were none present this year. A little gentle micro-management with the removal of encroaching *Festuca* has also encouraged plants to grow in the past.

We did get to see the Perennial Knawel, about thirty plants being present on the spur this year. Like the Upright Clover, this species likes a warm, wet Spring. This is a plant that grows well from tiny cuttings and Andy has worked his magic again, growing cuttings at the Nursery, "...providing a polytunnel, good soil, no slugs and talking to them!" resulting in ten thousand seeds! These seeds were scattered higher up the cliff and now give rise to three thousand plants in a good year, spreading up and down the cliff from the replanted site.

Another plant that we missed out on was the famous Radnor Lily/Early Star-of-Bethlehem *Gagea bohemica* which occurs on most rock outcrops here and nowhere else in Britain. Its presence was only confirmed in the 1970s, flowering as it does in the winter, but then withering away and leaving no trace of its presence apart from hundreds of tiny bulbils in the shallow soil! The entire population is a clone with no genetic variation and it is very flower shy with only a few plants flowering each year. They are growing in a very nutrient-poor environment and probably cannot produce enough energy, which appeared to be confirmed when Andy noted that he had managed up to five flowers per stem in cultivation!

Stanner Rocks is home to a number of rare bryophytes, too, and a few of us examined a patch of Rigid Apple Moss *Bartramia stricta* at its only British site.

We wandered over the site noting some of the other plants. There was a nice patch of Hare's-foot Clover *Trifolium arvense* on the spur, notable because it is a rarity in this part of the country. Rock Stonecrop *Petrosedum forsterianum* and Common Rock-rose *Helianthemum nummularium* were flourishing and there were also a few plants of Smith's Pepperwort *Lepidium heterophyllum* scattered around.

We made a steep ascent up the face of the Rocks along a narrow path, passing a single Sticky Catchfly plant that had, unusually, appeared in a wooded area, together with a small patch of Pale St John's-wort *Hypericum montanum*. This species had disappeared from the site for a number of years before the path was widened and it appeared once more, another example of the importance of the seed bank!

We stopped for a leisurely lunch on a high eastern rock outcrop looking over the border into the rolling hills and patchwork fields of Herefordshire. It was here that we found another speciality, Spiked Speedwell *Veronica spicata*, with examples of both last year's flowering spikes and this year's developing stems.

We then made our way up to the summit which had been covered in Pine trees until twenty or so years ago, the ground deep in needles. After being cleared the area has gradually been recolonised with an array of plants, including a nice Bird's-foot *Ornithopus perpusillus* next to the summit stone.

From there we made our way back down to the foot of the Rocks, pausing to examine nest boxes with both Pied Flycatcher and Common Redstart nestlings, species whose numbers have grown markedly since Andy introduced these nesting sites.

So this Garden of Eden had exceeded our expectations on what turned out to be a wonderful day. Thanks so much to Andy, not only for his fascinating tour, but also for his dedication to making a real difference for good regarding the fortunes of some of our rarest plants, both here and across the UK. You can find out more about his Rare British Plants Nursery at

<https://www.rarebritishplants.com/>

STEPHEN PLUMMER