

## SOME HIGHLIGHTS OF BOTANICAL RECORDING IN PEMBROKESHIRE IN 2005

The year began well with the discovery of a single Yellow Horned-poppy (*Glaucium flavum*) at Pwll Gwaelod, Dinas Cross, SN005399, on 2<sup>nd</sup> April in an open sandy area disturbed 2 winters earlier. It had not been seen here since recorded by the late Tommie Warren Davis in 1969. On 8<sup>th</sup> May about 40 plants of Henbane (*Hyocyamus niger*), were found in the same area of old sand dunes, which had experienced earthmoving works in 2004. It had been found, at Pwll Gwaelod, by the late Margaret Patterson, in 1975 following another period of disturbance, this time associated with the sea defence works of 1973/74. A single plant managed to set seed in 1975. Henbane had been recorded, by Margaret, between 1947 and 1951, at a time when the tiny dunes were regularly disturbed by grazing horses and cattle. Henbane is well known for this pattern of long dormancy followed by a brief flourish of growth after disturbance. This cycle has occurred at other locations in Pembrokeshire, for example at Pickleridge in Dale, when it appeared during wartime disturbance in 1941 and then disappeared until 1974 when it was found after major sea defence works and again in 1980 following more disturbance. Following the rediscovery at Pwll Gwaelod the author approached Jane Hodges of the Pembrokeshire Coast National Park and all the plants were left to flower and set seed. Most seed had dropped from the capsules by September before the rank vegetation, along with the skeletal remains of the henbane, was cut. There are currently between 4 and 6 locations in Pembrokeshire, all on sandy ground near the coast, where henbane appears at irregular intervals.

On 16<sup>th</sup> April, whilst accompanying an advance party for a British Bryological Society (BBS) visit, a single clump of Hard Shield-fern (*Polystichum aculeatum*) was found at Ffynone Wood, SN243382, in the Cych valley. It was growing below an old track on a steep slope and is isolated, as is often the case, because no other plants could be found in the vicinity. This is the first definite record of the fern in Pembrokeshire for about 15 years. Not far away was Solomon's-seal (*Polygonatum multiflorum*), just starting to flower. This plant is widespread in wooded hedgerow banks in parts of north-east Pembrokeshire and although the New Atlas treats all our records as non native there may well be a case to argue otherwise. When the main BBS party arrived, in early June, the hybrid between Narrow Buckler-fern and Broad Buckler-fern (*Dryopteris x deweveri*) was found with both parents in the forest of Canaston Wood at SN059142.

In 2005 a major effort was made by the author, and his wife Ann, to record and photograph the locations and count the number of Prostrate Broom (*Cytisus scoparius* subsp. *maritimus*) plants growing on the Pembrokeshire cliffs. The survey started in May and finished in October. About 2,400 plants were counted over 8 days of fieldwork but two lengths of cliff on the Marloes peninsula, visited prior to 2005, need revisiting to gauge numbers. Earlier visits had used broad abundance classes rather than individual counts. The northernmost colonies were near Trevine, with other small populations either side of Solva but its stronghold is the Marloes/Dale peninsula where some unstable cliff slopes are covered with superb stands of this very prostrate bush. There are no colonies south of or within Milford Haven. Interestingly there were very few locations where more upright bushes of Broom (*C. scoparius* subsp. *scoparius*) co-existed with typical prostrate specimens. Wind-shaped, upright populations exist in the north of the county at places such as Cemaes Head and Pwlleri, Strumble Head where previous recorders had erroneously described them as the prostrate subspecies.

Another plant that received more attention in 2005 was Subterranean Clover (*Trifolium subterraneum*). 1000's of flowering plants were found in very short horse- and rabbit-grazed turf at Y Gribyn, Solva, on 14<sup>th</sup> May at SM807242. On 8<sup>th</sup> May *T. subterraneum* was found at West Dale in very short south facing rabbit-grazed turf at SM800059. A previously recorded colony at Clegyr Boia, near St. Davids, was recorded in detail. It was growing on the rocky margins of an unmade track and a minor road between SM737250/738251 on 20<sup>th</sup> June. Julie Webber also found lots of it at Upper Porthmawr, St Davids in mid June.

In May Julie made one of the finds of the year when she discovered a new inland colony of Pale Dog-violet (*Viola lactea*) in the north of the county at Craig Rhosyfelin, Crosswell on a steep south-east facing slope of gorse and heather at SN116360. There were about a 100 plants present in the heath, which was regularly burnt and grazed by ponies. Pale Dog-violet was also flowering in quantity along with Heath Dog-violet (*V. canina*) on National Trust cliff land at Penanglas, Goodwick where its abundance was first reported by Tony and Viv Lewis. The heathland on the cliffs had been severely burnt on 22<sup>nd</sup> June 2004.

Moonwort (*Botrychium lunaria*) is currently only known from two locations in the county. It is still present at Plumstone Mountain, where it was refound, by Jon Hudson, in 2003 after a gap of 70 years. 19 fertile fronds were counted in May 2005 and Pale Dog-violet (*V.lactea*) was also found in grazed heathland nearby, at SM916222.

A major disappointment of 2005 was to discover in May that the Sea Stock (*Matthiola sinuata*) found on an eroding sand cliff in October 2004 had been washed away by winter storms. It had been growing at SS126994 on the dune front at Tenby's south beach.

An exciting find in August was the discovery by Sam Bosanquet and S. Smith of a previously unknown 8 x 8 metre stand of flowering Great Fen-sedge (*Cladium mariscus*) in the fen of Castlemartin Corse at SR897997. We only have one other location for this fine sedge in the county.

Recording of arable weeds again demonstrated the quality of the county for these threatened plants that feature so strongly in the 2005 Vascular Plant Red Data List for Great Britain.

In July Clive Hurford found a new site for Dwarf Spurge (*Euphorbia exigua*) along the edge of a brassica crop at Lambeeth SM930012. The highlight was, however, the discovery of a Small-flowered Catchfly (*Silene gallica*) colony in a main crop potato field. It was in the Angle peninsula by the coast path at SM870034. With this addition, the plant is currently present at three locations in Pembrokeshire where it is counted each year with the help of Stuart Devonald.

Matt Sutton found 4 extra Pillwort (*Pilularia globulifera*) populations in the St Davids and Marloes peninsulas in 2005. Each find was at locations where he had steered recent management in a direction to favour this minute fern. Shallow pools with fluctuating water levels had been dug on sites not too distant from other populations of pillwort and in winter wet habitats grazed by cattle or ponies.

Another success of 2005 was Ann and Stephen Coker's work on Autumn Lady's-tresses (*Spiranthes spiralis*). In previous years they had adopted Field Gentian (*Gentianella campestris*) and Green-winged Orchid (*Orchis morio*) and visited most of their current and old locations to census the populations. They count the number of flowering spikes within ten-metre squares located using GPS and produce density dot maps at this scale amply

supported by digital images. These can be overlain on Ordnance Survey maps or air photographs. In 2004 they counted 27,834 Green-winged Orchid spikes in 978 ten-metre squares in Pembrokeshire with a maximum of 405 spikes in one square. They counted even more flowers of Field Gentian! Next year they will finish Autumn Lady's-tresses and move on to record Marsh Helleborine (*Epipactis palustris*) in equal detail.

STEPHEN EVANS, Glan-y-Mor, Dinas Cross, Newport, Dyfed SA42 0UQ