**Caerdeon July 21 – 24th 2017**

On this, our 6th annual ‘Residential ‘ staying in Caerdeon Outdoor Centre near Barmouth, we had our best ever turnout occupying almost all the available rooms. Several people arrived on the Thursday in order to start bright and early the next day and as we have done before we all met up for a meal at the Last Inn in Barmouth in the evening.

As ever, we had a choice of field trips each day, depending on people’s fitness and inclinations. One of the nicest things about Caerdeon is the number of returning botanists. The informal identification sessions in the evenings are always very relaxed, with wine glasses mingling with the coffee cups - but of course new faces are always welcome.

**Friday 21 July**

**Abergynolwyn** **SH60T[1] and SH60Y [41]** On Friday we woke to the awful weather that Wales can do! Sarah, Jacky and Margaret went first to SH60Y where we were warmly welcomed by the new owners, and we had a guided tour, in the torrential rain, in the ravine above their house for a couple of hours. We couldn’t get very high owing to the steep rocks of the waterfall, but there was really no sign of any base rich rock to offer any alternative to the predictably acid-loving plants. Later, on our own, we explored the lower land around the garden and added a few nice things, and we found Pilosella aurantiaca, Fox-and-cubs so we weren’t sure that the Marsh Marigold, [*Caltha palustris*] was native there either . Before we left the tetrad we made a few more records along the side of the road.

After lunch eaten in the shelter of the cars we tackled a new tetrad above Abergynolwyn. Here the Afon Dysynni is diverted by glacial moraine from its direct route to the sea, instead it threads through h the rounded hills which buttress the Cadair Idris massif. We walked steeply up a stream bed on one of these, and in a big circuit on the slopes, we made another nice list of over 100 taxa. Along the river bank we found several garden throwouts including Privet, *Ligustrum ovalifolium,* *Crocosmia x crocosmifolia* and the unusual *Sorbaria sorbarifolia*, a shrubby member of the Rosaceae, with its dense panicles of small white flowers like Meadowsweet. This is apparently only the second ‘wild’ site in Wales.

**Llangelynin SH50T [63 - all in SH5606**

**Crawcwellt SH63V** or Walking in the Rain Mags Crittenden and Sally Peacock

From the very beginning, rain fell as if St Swithun had forgotten his promise. Streams which would normally flow through their normal conduits had decided that footpaths were a much better way of making their way down hill turning some of them into rapids. Nevertheless, we found 125 species mostly those well adapted to boggy conditions. Habitats also included three disused farm houses where a large number of species were picked up. Walking through some regenerating woodland, we were rewarded with *Lythrum portula,* Water Purslane and further on a small patch of *Rhynchospora alba,* White Beak-sedge. We then tried to reach a small lake but tussocks of *Deschampsia cespitosa*, Tufted Hair-grass and  *Molinia caerulea, Purple Moor-grass,*  defeated these intrepid botanists. The fantastic array of bog plants kept us going including the pretty *Stellaria alsine,* Bog Stitchwort, the fascinating *Scrophularia nodosa,* Common Figwort and the voracious *Drosera rotundifolia,* Round-leaved Sundew. On our return to Caerdeon the hot meal and a glass of wine was much deserved after such a wet day and much appreciated.

**Rhoslefain SH50S**

Graeme and Martyn met at the Penmaenpool toll bridge in appalling weather, nonetheless they donned waterproofs and set out for the tetrad at Rhoslefain. The first interesting plant they saw was *Rumex x pratensis*, the hybrid *Rumex obtusifolius x R. crispus*, Broad-leaved x Curled Dock. The roadside hedgerows produced the usual common plants and the path along the heavily grazed hillside was poor until they found a very old Small-leaved Lime, *Tilia cordata*. Further along the footpath they found *Jasione montana*, Sheep’s-bit, and lots of patches of *Hypericum humifusum*, Creeping St John’s-wort. Returning to the car they collected a sample of the *Rumex x pratensis* and noticed on the other side of the gateway another dock that was very abortive and trying to re-flower. It was later sent to the referee, John Akeroyd, who confirmed it as *Rumex x dufftii*, the hybrid *Rumex obtusifolius x sanguineus*, Broad-leaved x Wood Dock, only the second, and the first located record in the vice-county. They made 153 records of which 101 were new for the tetrad.

**Cader foothills SH71H**– Polly, Andy, Phill, Flora

The group met at lunch time in very wet weather, on the edge of Dolgellau with the ambitious aim to cross a tetrad and refind *Genista pilosa* (Hairy Greenweed). However, as soon as we entered the tetrad we encountered the most tussocky, wet *Molinia caerulea* (Purple Moor-grass). We struggled up through rain, *Pteridium aquilinum* (Bracken) and more *Molinia*, but eventually realised we would miss dinner if we persisted. We picked up a few interesting records including *Festuca vivipara* (Viviparous Fescue) and *Achillea ptarmica* (Sneezewort), and added 51 new taxa to bring the total for this somewhat featureless acidic upland tetrad to 118 species.

**Saturday 22 July**

**Bryn Crug SH60B**

Sarah, Clive and Graeme parked in the village centre of Bryn Crug to explore this lowland tetrad and at once made for the dykes and ditches towards the Dysynni Estuary. On the way we recorded a fine Black Poplar not located by BSBI since 1904, though the municipal fence along our path had been carefully diverted round this fine specimen!

We crossed into the next tetrad to record along the ditches towards the river and with a mix of wetland and salt marsh we racked up a good number of species.such as *Alisma plantago-aquatica,* Water-plantain and *Schoenoplectus tabernaemontani,* Grey Club-rush. *Phragmites australis,* Common Reed and *Phalarais arundinacea*, Reed Canary-grass dominated the river bank and splashes of colour from *Lythrum salicaria*, Purple Loosestrife were the only occasional brightness.

Miraculously we stayed fairly dry, although we could see the black rain clouds rolling around the Cader Idris massif beyond the stark truncated spur of Craig Aderyn, or Bird Rock where Cormorants and Choughs have nested on the rock for many ages.

Retracing our steps back to the first tetrad we found an alarming patch of the invasive alien *Myriophyllum aquaticum*, Parrot’s-feather, almost blocking one of the ditches draining this reclaimed agricultural land. We ended by touring the village footpaths, making a further lengthy list of ruderal and casual plants, finishing with a splendid total of 240 records for the two tetrads.

**Pont Aber-Geirw SH72U**

A large party of 8 met up at Pont Abergeirw, which crosses the Afon Mawddach in the remote uplands near its source. We split into three groups: Gethin and Mari made for the top of Craig y Dinas and found *Linum catharticum,* Fairy flax, *Viola canina,* Heath Dog-violet and *Polygala vulgare,* Common Milkwort, indicating where gabbro bedrock is exposed, rather than the surrounding mudstones,

The other two groups investigated the valley bottom and the slopes below the high ground to the south, where gabbro again outcrops at the summit. Martyn, Tara and Flora found *Carex caryophyllea,* Spring Sedge and *Thymus polytrichus,* Wild Thyme, growing on slopes above the road. They followed the stream uphill and saw *Carex pulicaris,* Flea Sedge, *Pinguicula vulgare,* Common Butterwort and *Drosera rotundifolia*, Common Sundew, its leaves as big as pennies.

David, Margaret and Jacky started recording along wet ditches at the side of the minor road, where *Epilobium palustre,* Marsh Willowherb, *Galium palustre*, Marsh Bedstraw and *Lotus pedunculatus*, Grester Bird’s=foot-trefoil were frequent, and there were large tufts of *Oreopteris limbosperma,* Lemon-scented Fern and Lady Fern, *Athyrium filix-femina.* At a bridge over the Afon Ceirw the group turned off to investigate the river banks. *Tussilago farfara,* Coltsfoot, was growing strongly at the riverside and in the stony river-bed, with *Geum rivale* Water Avens doing well on the bank.

On the eastern slopes of Rhobell-y-big a single flowering spike of *Dactylorhiza maculata* was growing in the meadow, and here, spread alongside a small stream, a fine, large colony of *Pedicularis palustris* was found, one plant nearly 40 centimetres tall. There were a few plants of *Achillea ptarmica*, Sneezewort, and scattered patches of *Pedicularis sylvatica, too.*  Further down the hill, where it was boggier, there was *Eriophorum vaginatum* and *Narthecium ossifragum.* The road was regained via a farm track back to the cars; a good variety of habitats had provided a very enjoyable day’s recording.

**Craiglyn Dyfi SH82R [63]** Polly, Andy, Phill

The day started well with a generous lift from the farmer’s son at Nant y Barcud, saving us a mile’s walk to reach our tetrad. We made our way up through semi-improved grassland and then onto grazed acidic grassland, with a small range of species. Reaching Craiglyn Dyfi, we managed to reach *Isoetes lacustris* (Quillwort) in the lake, and left Andy looking all around the shore while Polly and Phill headed up to explore around the base of the cliffs below Aran Fawddwy. The rocks were generally acidic, but we managed to find a number of interesting species including *Selaginella selaginoides* (Lesser Clubmoss) as well as *Diphasiastrum alpinum* (Alpine Clubmoss) and *Huperzia selago (*Fir Clubmoss). We also found *Saxifraga hypnoides* (Mossy Saxifrage) and *Phegopteris connectilis* (Beech fern), as well as the partially buried remains of a plane (probably WW2). In total we found just over 100 species.

**Tyrrau Mawr S SH61W [0]**

Mags Criittenden, Sally Peacock, Ian Woodward

The highs and lows of Cader, or riding high on a giant’s shoulders – today we had the task of recording in a tetrad on the shoulders of Cader Idris. After parking in the National Trust car park, the team climbed up, to pause just inside the tetrad for a meal of Bilberries, *Vaccinium myrtilis*. Our first 15 records were acquired at this much needed break. *Empetrum nigrum,* Crowberry, was certainly strutting its stuff with some beautifully formed fruits. Onward went the intrepid trio only pausing for much-needed oxygen, and each time finding something interesting including *Huperzia selago*, Fir Club-moss, the first of the three clubmosses we found. The nature of this habitat does not lend itself to large numbers of records and we saw only 78 taxa in the day. However, there is always beauty and interest to be found in the eight species of *Carex* including the burgeoning utricles of *C. pilulifera,* Pill Sedge and the astonishing colour of *Erica cinerea,* Bell Heather. The team had an interesting look at the streams flowing off the shoulder which added a further eight species and one of us found that waterproof trousers are not waterproof if you sit in a stream! Climbing the hill again to explore some outcrops, we discovered a further two clubmosses; the delightful *Diphasiastrum alpinum* and *Lycopodium clavatum,* Alpine and Stag’s-horn Clubmoss. Walking down from the shoulder, the sun came out and Cader Idris was observed in all its grandeur. An interesting and tiring day was enjoyed by all the team.

**Sunday 23rd July**

**Llanbedr SH52Y [64]**

Today was perhaps our most productive day – there were already 64 taxa recorded here but we made 249 records of which 204 were new, so we felt well-rewarded. We had some very sharp eyes in our party of botanists and a good variety of habitat! From the cars in Llanbedr we walked west along a minor road, recording the usual ruderals until we got to the picnic site and foraged around there in the scrubby surrounds for quite a while collecting over 70 species. We then set out along the canalised banks of the Afon Artro in its lower reaches. It was quite a surprise to realise how brackish the banks were, and we picked up a lot of records such as Saltmarsh Rush, *Juncus gerardii, Sea Arrow-grass, Triglochin maritima,* Sea Milkwort, *Glaux maritima,* Common Centaury, *Centaurea erythraea* and our Meirionnydd speciality, Sharp Rush,  *Juncus acutus.* We crossed the footbridge over the river and the main road and then over reclaimed and well-manured pasture with some muddy ditches with *Alopecurus geniculatus,* Marsh Foxtail and *Phalaris arundinacea,* Reed Canary-grass and struggled up through rough scrubby woodland until we regained a small side road. Here we rested, cooled down a little and ate our lunch – in a somewhat dangerous place where cars coming down the hill looked sometimes as if they wouldn’t stop in time! At this point Sally realised she had lost her phone: the most likely place had been a comfort stop along the river bank so she set off to look for it while we carried on botanising through a strange development – some sort of static holiday camp, we thought. Finally through a farmyard where Sally caught us up again and we got back to the village in time for much-deserved refreshment in the local hostelry!

**Dyrysgol SH82I [1]** The Caerdeon group met local naturalist Andrew Graham near the Natural Resources Wales access point from where we’d had permission to drive some way into the tetrad. Although the geological maps show dolerite bedrock, there was little evidence of this apart from one “sweet spot” on a hillside with *Thymus polytrichus,* Wild Thyme, and most of the site was unremittingly acidic. The tough going along forestry roads and rides, where so many conifers had been blown down in severe gales, wasn’t very  productive– it depends so much on where the rock for the track has been quarried.

A long stretch over tussocky, ungrazed *Molinia* bog was difficult too but among the 14 sedges found for the day and some other nice bog plants were *Carex canescens*, White Sedge, *C. hostiana*, Tawny Sedge and *C. dioica,* Dioecious Sedge.

Less interesting, open, sheep-grazed country then made for easier walking  for the rest of the day with its common upland plants eventually producing a list of 140 taxa, from a ‘virgin’ tetrad. It was an enjoyable day with a variety of habitats and the Caerdeon people  appreciating Andrew’s  specialist skills, especially his entomological knowledge.

**Y Garn [629m] SH72B [8]**

Day 3 – Polly, Phill, Clive, Jacky, Tara

After a steep climb the target tetrad was begun in open mature forestry about 200 metres above sea level, with good roadsides. This allowed a reasonable number of common species to be ticked off. The target for the day was some crags below Y Garn, but on leaving the forestry a beautiful bog was found with *Wahlenbergia hederacea* (Ivy-leaved Bellflower), *Rhynchospora alba* (White Beak-sedge), and *Carex dioica* (Dioecious sedge) to name but a few. From here a further variety of habitats was visited – a disused mine building with ferns including *Asplenium ceterach* (Rustyback) and close-grazed grassland, then a small mine reservoir with *Littorella uniflora* (Shoreweed) and *Sparganium angustifolium* (Floating Bur-reed). Pressing on towards the crags *Saxifraga stellaris* (Starry Saxifrage) was recorded beside a small stream. Eventually picking a route below the crags *Huperzia selago* (Fir Club-moss) and *Hymenophyllum wilsonii* (Wilson’s Filmy-fern) were found. However, no species-rich ledges appeared and gradually the group descended back to the forestry, finding *Campanula rotundifolia* (Harebell) on the way. Here the list was increased further with *Myrica gale* (Bog myrtle) and at the very last moment *Melampyrum pratense* (Common Cow-wheat). Having remained in one upland monad all day it was most gratifying to find that nearly 200 species had been recorded (in a square with only 8 species previously recorded), in very pleasant weather.

**Monday 24th July**

**Aberdyfi W SN59X, Y and Z Clive Lovatt and Martyn Stead**

**Gelli Iago SH64J [3]**

Having packed up and left Caerdeon, we missed the road to Gelli Iago and took a tiny back lane, just wide enough between the mossy stone walls to get through. The Nantmor valley is a quiet byway between the tourist attractions of Nant Gwynant and the Aberglaslyn Pass. There were few other people visiting this National Trust area with scattered woodland and deserted farms and with its sheep-grazed hillsides lying under Cnicht and the Moelwyn Mountains. We found mostly ruderal species round the farmhouse early on, surrounded by dry acid grassland and steep slopes lying over stable scree. However, after Flora had left us, we headed higher towards the woods and the indefatigable Mari sallied higher still, and recorded the more interesting species such as *Hymenophyllum wilsonii,* Wilson’s Filmy-fern and *Cryptogramma crispa,* Parsley Fern. Sadly we failed to refind the old record for *Trollius europaea*, Globe-flower at this site.

After walking some way on the difficult terrain we returned down the valley, where we made our way through an extremely wet bog a habitat which improved our list with such species as *Narthecium ossifragum,* Bog Asphodel and a range of sedges including *Carex hostiana,* Tawny Sedge and *Dryopteris x deweveri,* the hybrid between *D, dilatata* and *D carthusiana.* Finally we picked up a few casuals as we trudged back along the dusty road to the cars and were sad to say our goodbyes after another enjoyable Caerdeon.

**Rhobell Ganol SH72Y [0]** Day 4 – Polly, Phill, Jacky, Margaret, Tara – SH72Y

After a long drive up forestry roads we parked on the eastern edge of the tetrad (which had no previous records), and found a marked footpath through solid *Picea sitchensis* (Sitka Spruce) plantation. As the lowest point of the day was close to 500 metres above sea level the range of species even on the forestry roads was very limited, but a good range of sedges were found including *Carex rostrata* (Bottle Sedge) after crossing the river on a well-maintained footbridge and heading across peat bogs. Exploring the outcrops around Rhobell Ganol, we found a few more species including *Lycopodium clavatum* (Stag’s-horn Clubmoss), *Vaccinium vitis-idaea* (Cowberry*)* and *Ulex minor* (Dwarf Gorse). We carried on up the slope of Llechwedd Llyfn,where *Diphasiastrum alpinum* (Alpine Clubmoss) was found, but very few new species, and the group then crossed through Cefn yr Eryr, including a final few hundred metres’ battle through dense plantation, before returning to the car. The day’s total was 95 species, disappointingly close to 100, but a realistic representation of the habitats visited.