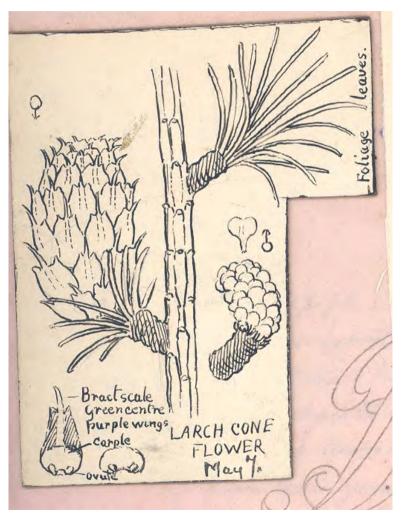


Welsh Bulletin

No. 92 June 2013



Editors: Richard Pryce, Sally Whyman & Katherine Slade





Front cover: Larch Larix decidua drawn by Harry Thomas (J.D.Shanklin's great grandfather) from an entry in his diary from May 1916, during the First World War. Photo: J.D. Shanklin. See article page 11.

- **1& 2:** Lesser Butterfly Orchid / Tegeirian llydanwyrdd, *Platanthera bifolia:*
- **1.** habitat at Dowrog Common, Pembs. 11th June 2009 and,
- 2. flowering plants at Dowrog on 16th June 2009. Photo: S.Evans. See article page 16.



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Issue 92 June 2013

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Most back issues are still available on request (originals or photocopies) @ £2 per issue, please contact Sally Whyman or Katherine Slade. Cheques are payable to BSBI Wales. The last issue was no.91, released in January 2013.

Back issues over one year old are uploaded to the website.

www.watsonia.org.uk/html/
welsh bulletin.html

All articles, news, photos, guest editorials and other items for inclusion in the Jan 2014 issue should be sent to Richard Pryce by 1st December 2013.

Please send any plant records to your Vice-County Recorder (see BSBI Yearbook).

Contents

Editorial	4
Annual General Meeting 2012 Chairman's Statement Hon. Secretary's Report Hon. Treasurer's Report Welsh Officer's Report Election of Officers	6 6 6 7 7 8
Calendar of Welsh Meetings 2013	9
Rose workshop moved to 31st August 2013 Sarah Stille	9
Botanical recording in Breconshire John Crellin	10
Diaries from the First World War <i>Jonathan D. Shanklin</i>	11
Conifer workshop at Betws-y-Coed 2013 Rachel Cassidy	14
The Lesser Butterfly Orchid / Tegeirian llydanwyrdd, <i>Platanthera bifolia</i> , in Pembrokeshire <i>Stephen Evans</i>	16
Looking for Sibthorpia europaea Paul Green	20
Welsh Plant Records 2012	21

Editorial

SALLY WHYMAN, Department of Biodiversity & Systematic Biology, Amgueddfa Cymru National Museum Cardiff, Cathays Park, Cardiff, CF10 3NP sally.whyman@museumwales.ac.uk

As museum curators we are constantly being called upon to showcase the botanical collections of the people of Wales. We also want to explain elements of botany in dynamic ways very often to people who didn't realise they wanted to know more about plants. This is where our collections come in; these may be donated personal collections, or vouchers collected as part of specific scientific study or survey from a particular geographical area. On the whole, whatever the reason for originally collecting the plant, it was not usually collected for museum display.

Over the past year herbarium specimens have been used in a variety of ways in many different events, to help us communicate our collections and explain botanical life. A fictitious murder occurred at the Museum for Halloween, and was entitled 'Who Killed Martin?' (see image 11 on back cover). We asked budding young forensic and plant scientists to deduce which *Apiaceae* caused the death from a line-up of seven suspects. Martin obviously didn't know his *Apium* from his *Oenanthe*.

Spring and New Life were the themes for an open day at the Museum in March allowing us to show visitors a diverse selection of seeds from across the world; from the largest, Coco de Mer (*Lodoicea maldivica*) from the Seychelles to tiny orchid seed collected in Wales. Everyone loves to see the Coco de Mer with its 'interesting' shape originating from an exotic locality, but people become equally spellbound when you explain the

orchid seeds' essential relationships with mycorrhizal basidiomyceteous fungi which provides the necessary nutrients for germination.

At the popular Museum stand at the Royal Horticultural Societies (RHS) Cardiff Flower Show in April we used herbarium specimens to show crop wild relatives, which included Beta vulgaris ssp. maritima (Sea Beet), Malus sylvestris (Crab Apple) and Asparagus prostratus (Wild Asparagus). The latter is a UK BAP priority species, and its inclusion in this display gave us the opportunity to explain the active conservation work being carried out to maintain its distribution.

The food related topic was chosen for this RHS event as a 'taster' for an exhibition currently running at the Museum - 'Bîns ar Dost - Beans on Toast', the food on your plate and its source (25th May – 29th September 2013) funded by the British Ecological Society and part of it's Festival of Ecology. The exhibition's theme is where our food comes from and food security. Throughout its making, there have been numerous news articles relating to directly to these issues: such as the horse-meat scandal and the rather worrying report by the British Nutrition Foundation saying that a third of primary school pupils think cheese is made from plants and 10% of secondary school pupils think tomatoes grow underground and that potatoes grow above ground. This exhibition has enabled us to display both herbarium specimens and models from our wonderful and rarely seen botanical wax

model collection. Seeds, herbs and spices from our extensive *Materia Medica* and economic collections have also been utilised to explore the various themes and show exactly where our food comes from. You can see part of the exhibition in construction on the back cover of this issue (image 12).

To emphasise the breeding selection Bread Wheat (*Triticum aestivum*) has undergone, seven specimens are displayed in *Beans on Toast* with different traits which have subsequently been bred out of the modern wheat cultivars such as weak or tall stems and sparse ears (see image 3 below). These specimens are a small selection from a

collection of 302 different wheat cultivars donated to the Museum in September 1926 by the National Institute of Agricultural Botany.

The botanist collecting specimens on the windy Welsh hillside may not have had any idea their collection would be used in this way, but does this matter? So keep collecting prudently, your specimens may be used to stir young minds – who may also be the next generation of BSBI Wales members.



Image 3. Wheat herbarium specimens on display in Bîns ar Dost - Beans on Toast. Photo: Kath Slade.

BSBI Wales Annual General Meeting 2012

The 50^{th} AGM of BSBI Wales, held at Bryn Howel Hotel, Trefor, Llangollen on Thursday 21st June 2012 at 4:00pm.

1. Welcome

The Chair, Delyth Williams welcomed all assembled to Bryn Howel. There were 49 people present including Chair, Secretary and Treasurer.

2. Apologies for Absence

Julian Woodman, Gill Barter, Gwynn Ellis, Wendy McCarthy, Clive Lovatt, Margot Godfrey, Elsa Wood, Ray Woods, Heather Colls and Paul Day.

3. Minutes of 2011 AGM

Minutes of the 49th Annual General Meeting held at Dale Fort Field Studies Centre, Pembrokeshire on Saturday 13th August 2011 were approved as printed in Welsh Bulletin No.90, pp. 7-10. They were proposed by I. Bonner and seconded by M. Perring and were then signed by Delyth Williams.

4. Matters Arising

Trevor Evans asked about publishing a list of those present as emphasis was placed on those not attending by listing apologies. A list was circulated for those present to sign, but those present did not consider it practical or necessary to publish it.

5. Chairman's Statement

Delyth Williams thanked the officers, the Committee members and those who have organised meetings for all their hard work during the year. She also thanked all those who volunteer to lead field meetings. Delyth went on to thank Stephen Coker who has agreed to take over from Gwynn Ellis who has done a sterling job as collator and checker of *Welsh Plant Records* for the past 35 years. The meeting gave a round of applause to Gwynn.

Delyth then congratulated Trevor Evans MBE on his award, which prompted another round of applause. He is stepping down from his post as Vice-County Recorder for Monmouthshire (v.c.35) having completed forty years of service culminating in the publication of his *Flora of Monmouthshire* in 2007. He is also resigning from his membership of the Wales Committee, his place being taken by his successors as Vice-County Recorders, Stephanie Tyler and Elsa Wood.

Delyth also welcomed Steve Chambers who is to become joint Vice County Recorder for Cardiganshire (v.c.46) with Arthur Chater. She appealed for a volunteer or for nominations to take over from Sarah Stille as Hon. Treasurer who wishes to relinquish that role, having taken over as Wales Meetings Secretary, also serving on the national BSBI Meetings Committee, as well as being joint Vice-County Recorder for Merioneth (v.c.48).

6. Hon. Secretary's Report

Richard Pryce echoed Delyth's thanks and thanked her and all those involved in the

organisation of this Welsh AGM. He thanked Sarah for her work as both Treasurer and Meetings Secretary and also joint Vice-County Recorder and echoed Delyth's appeal for a new Treasurer. Richard again thanked all the Committee and all those present. He drew attention to the seven further meeting in this year's calendar, details of which are published in the Welsh Bulletin. He commended the Welsh Bulletin to the members present and reminded them that it is also available to non-Welsh residents at £2 per copy, from Kath Slade or Sally Whyman at NMW. There are two issues per year, which include articles of varying content as well as Welsh Plant Records and notices. Richard then thanked Kath and Sally for their excellence in producing the Welsh Bulletin and appealed for members to contribute short notes and pictures for future issues (email them to RDP, SW or KS) and reminded Vice-County Recorders to submit Welsh Plant Records.

Ian Bonner then gave details of the 2013 Welsh AGM at the Bwlch Arms, Beaumaris, Anglesey, which is to follow the BSBI national AGM at the same venue. The meeting is being staged in Anglesey in celebration of the 200th Anniversary of the publication of Hugh Davies's flora of Anglesey - the first Welsh County Flora.

7. Hon. Treasurer's Report

The Treasurer presented the accounts for 2011, which are reproduced below.

BSBI Committee for Wales Account: 1 January 2011 - 31 December 2011

Receipts	£	Payments	£
Welsh Bulletin subs	148.00	WB #87	294.60
Plantlife article in WB 86	160.00	WB # 88	456.82
AGM	3,828.00	Committee expenses	100.44
coffee cash	55.50	AGM bookings refunds	164.00
		unpaid cheque	34.00
		FSC for AGM	3,020.00
		travel expenses	30.00
Totals	4,191.50		4,099.86
Receipts less payments	91.64		
B/F from 31/12/2010	80.37		
Balance	672.01		

There were no questions and the accounts were adopted unanimously. Sarah also spoke of the Treasurer's post and described it as fiddly but said that the most onerous part was the AGM.

8. BSBI Welsh Officer's Report

Polly Spencer-Vellacott has now been employed as Welsh Officer for a year and said that the grant from CCW part funding the post has now been extended to three years. She drew attention to her blog and to a poster displayed with the exhibitions about a Christmas/greetings card photographic competition, the profits from which would go to BSBI in Wales.

9. Election of Officers and Committee Members

As Delyth Williams as Chairman and Julian Woodman as Vice Chairman have completed only two years of their four year terms, they continue in post. Richard Pryce agreed to stand for a further year as Secretary.

There were no volunteers to take over the Treasurer's post from Sarah Stille so she agreed to continue for the time being but wished it to be recorded that she was not prepared to deal with the 2013 AGM finances.

The following members retire from the Committee in 2012 under the four-year rule and have agreed to stand for re-election: Trevor Dines, Kath Pryce (Hon. Minutes Secretary), Richard Pryce (Hon. Secretary & Bulletin Co-editor), Kath Slade (Bulletin Co-editor), Sally Whyman (Bulletin Co-editor) and Ray Woods. Their re-election was approved.

Trevor Evans retires from the Committee in 2011 and, regrettably, is not standing for reelection. He was again thanked by the Chair for his long service.

Richard Pryce then asked for nominations from the floor but none were forthcoming. He clarified that the committee is making the following nominations to join the Committee: Steve Chambers; Stephanie Tyler alternating with Elsa Wood; and Liz Dean alternating with Sue Spencer. All were proposed by Sarah Stille and seconded by Trevor Evans and were elected by those present.

The Committee now comprises:

Chairman: Delyth Williams
Vice Chairman: Julian Woodman
Secretary: Richard Pryce
Treasurer: Sarah Stille

Bulletin Editors: Richard Pryce, Sally Whyman & Katherine Slade

Meetings: Sarah Stille Minutes: Kath Pryce

Members: Ian Bonner, Steve Chambers, Arthur Chater, Natasha De Vere, Liz Dean, Trevor Dines, Stephen Evans, Andy Jones, Mike Porter, Sue Spencer, Kate Thorne, Stephanie Tyler, Elsa Wood, Julian Woodman and Ray Woods.

Kate Thorne, Stephanie Tyler, Elsa Wood, Julian Woodinan and K

BSBI Welsh Officer: Polly Spencer-Vellacott

CCW Observer: Paul Day.
Plantlife Representative: Trevor Dines

10. Any Other Business

- 1. Natasha De Vere asked for attendees to sign & comment on the National Botanic Garden for Wales Welsh Women Botanists exhibition displayed during the meeting.
- 2. Delyth thanked the hotel staff and said they had been particularly helpful and the accommodation and meals have been excellent.
- 3. Stephanie Tyler again thanked Trevor Evans for his forty years of service as Vice-County Recorder for Monmouthshire and the meeting echoed her appreciation.

The meeting closed at 4:30pm.

Calendar of Meetings 2013

Full details and procedure for booking are also available in the BSBI Yearbook 2013 and the BSBI Welsh Bulletin no. 91, January 2013 (also see note below about Rose workshop).

Friday 14th to Saturday 15th June: Welsh AGM. The Bulkeley Hotel, Beaumaris, Anglesey. Delyth Williams. We regret to announce that both the national and Welsh AGM at Beaumaris from etc are now booked to capacity and we are unable to accommodate any more requests.

Sunday 23rd June: Elan Valley Near Rhayader, Powys, Radnorshire. Ray Woods, Sue Spencer & Liz Dean

Saturday 29th June: Grass workshop at Penallt, Monmouthshire. Paul Green & Stephanie Tyler

Saturday 29th June to Saturday 6th July: Glynhir Recording Week, Carmarthenshire. Kath & Richard Pryce

Tuesday 2nd July: Brwyn-llynau Fields, Merioneth, v.c.48. Rod Gritten

Sunday 21st July: Aberystwyth's twin hills: Pendinas and Craig Glais, Cardiganshire, v.c.46

Steve Chambers & Andy Jones

Saturday 10th August: Coed Cilgroeslwyd, Denbighshire. Delyth Williams

Saturday 31st August: Churton House, Pulverbatch, Shropshire. Dr Kate Thorne

Rose workshop moved to 31st August

Sarah Stille, BSBI Wales Field Meetings Secretary. The Quillet, Berwyn Street, Llandrillo, Corwen, Denbighshire, LL21 0TH. mossysal@btinternet.com

After the Yearbook went to press we discovered that Kate Thorne's Roses workshop clashed with the Recorders' Conference to be held on 7th September. She has now rearranged it for 31st August.

Everyone who had already booked has been notified of the new date, but there may be some people who preferred to be at the conference but would now like to come. There are still one or two places left for what will undoubtedly be a really interesting day. All other details are in the Yearbook so please contact Kate direct if you would like to be there.

I would be grateful for any offers of ideas for meetings for 2014. You don't have to be an expert, just prepared to find an interesting site with suitable facilities – car parking and toilets for instance. It is useful to run it past the Vice-county Recorder in case s/he has ideas to share as well. Please contact me with any proposals you can offer.

Botanical recording in Breconshire (v.c.42)

JOHN CRELLIN, Joint BSBI Recorder for Breconshire. john@crellin.org.uk 01497 821116

floralimages.blogspot.co.uk

As a new Recorder for the county (I have become joint recorder with Mike Porter who has been recording in the county for over 40 years), I want to establish a recording group to assist with recording for the next atlas. I also hopefully want to re-find some local rarities not seen for many years.

I have already stated my intention to be "out" every Thursday and to inform my email group a little in advance where I next intend to go – with an open invitation to join me. We also have five dates set for major meetings:

Saturday 22nd June Darren Fawr (a Brecon Wildlife Trust meeting on the mountain

above Merthyr Tydfil), SO01

Thursday 27th June Allt Rhongyr, a new BWT reserve with many old records of

interesting species, SN81

Thursday 8th August Traeth Mawr, a very interesting rainfall-fed raised mire, SN92

Thursday 22nd August Llangors lake (Llyn Syfaddon. Wales' largest natural lake. OK so

Bala was largest before it was artificially engrossed.) SO12

I am keen to encourage anyone with an interest in botany to join us on these days. Please email me to join my mailing list if you are interested.

Diaries from the First World War

JONATHAN D. SHANKLIN

My great grandfather, Harry Thomas, of Llandudno, kept diaries for many years. Only those for 1913 to 1916 survive, though they contain passing references to earlier His father, Henry Thomas, a homeopath, was the owner of the Hydro at Llandudno. Harry, born at Llanrhos in 1864, was a jobbing gardener, though clearly at the 'head gardener' end of the scale. He organised local natural history exhibitions and gave public lectures. On 1914 October 22, he gave a lecture to the Chester Society of Natural Science, Literature & Art on 'Notes on some Marine Forms of Animal Life found in Llandudno Bay.' The diaries are mostly concerned with the Great War, weather and astronomical events, natural disasters, family concerns and natural history. Accompanying the diary entries are sketches, photographs, postcards newspaper cuttings. Of interest to me (as a meteorologist with the British Antarctic Survey) are several cuttings relating to the exploratory voyages of Scott and Shackleton.

In 1998, I went through the diaries and extracted all the astronomical entries, which were published in an article in the Journal of the British Astronomical Association in October 2003 [Astronomical diaries and observations from the time of the Great War, J. Brit. Astron. Assoc., 113, 262-265]. I am the Director of the BAA Comet Section, so entries describing comets were of particular interest. One drawing shows comet 1913 Y1 (Delavan), which was discovered by Pablo Delavan from La Plata, Argentina on 1913 December 18. Its conspicuous position under the Plough attracted general attention during September 1914. In October 1914, the tail was so bright that several people mistook it for the searchlight of an airship. Another entry recounts the discovery of a comet by his brother Bernard, who was a homeopathic doctor in Tasmania, though as he was the fourth person to discover it the comet is named 1914 S1 (Campbell) (see image 4 below).

In 2008, I went through the diaries and

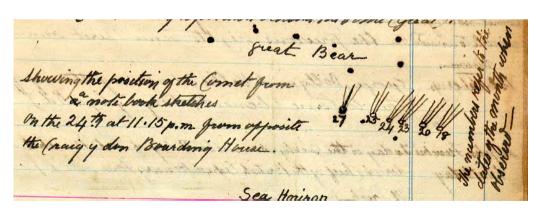


Image 4. Comet Delavan under the Plough in September 1914

extracted 337 botanical and one bryological entry, putting them into a spreadsheet for data import to the BSBI and the British Bryological Society. Most of the records are for Caernaryonshire (v.c.49), five are for Denbighshire (v.c.50) and one is for Co. (v.c.H38). Given Caernaryonshire only had 2284 records in the BSBI database up to 1920, and Denbighshire 592, these are a significant contribution. They are mostly for common species. although records have some greater interest.

Some entries used local names, for example "Shepheard rattle in full bloom in the fields" is *Rhinanthus minor* (Yellow Rattle), and "Hen and chickens" scabious was probably *Knautia arvensis* (Field Scabious). An entry for *Carex nigra* (Common Sedge) quotes "It is rather difficult to identify with only the illustrated edition of Bentham". I suspect that the BSBI Vegetative Key might have helped!

Harry Thomas paid a visit to Sutton Lodge, just east of Wrexham in January 1913, where his son Jack was undergoing training as an army cook. Jack was later posted to Chesterton near Cambridge, not far from where I live, though Harry does not appear to have visited him there. Many postcards from Jack are pasted into the diaries, but these give no botanical details. He was posted to France in December 1916 and died there the following March, aged 20. I hope to visit Sutton Lodge in 2013 and add to the relatively few records from the tetrad.

The entry for 1913 March 22, records "Cochlearia officinale in bloom from the Great Orme. Scrophularia vernalis in bloom from Gloddaeth (a place of feast). The umbelliferous plant at Cartreffle, Abbey Road – with a strong taste like celery & very [undecipherable] shoot with fine handsome

leaves is I believe *Peucedanum ostruthium*." The sketch and comments suggest perhaps that it was *Apium graveolens* (Wild Celery) (see image 5 below).



Image 5. Leaves of the umbellifer seen on 22nd March 1913

On 1913 July 15, he visited the Bodafon Hills and the diary records "Convolvulus soldanella in abundance on the road side". Calystegia soldanella (Sea Bindweed) has not subsequently been recorded from the hectad, but is present on the North Wales coast. It is not clear, if the roadside was the coast road or the Bodafon road, but if the latter, it may be a misidentification of Convolvulus arvensis (Field Bindweed) or perhaps Calystegia pulchra (Hairy Bindweed).

He noted *Acaena novae-zelandiae* (Pirripirri-bur) in Llandudno on 1913 December 3. Although this was probably a garden plant and doesn't seem to have spread into the wild, it is the first record from Wales. *Antennaria dioica* (Mountain Everlasting) was seen on 1915 May 30 at Castell, which seems to be the first record from this part of v.c.49 and two specimens are pressed in the diary.

The diary notes that a botanical excursion of the Llandudno Field Club on 1915 June 4, led by Professor Phillips of Bangor, found *Botrychium lunaria* (Moonwort) on the Great Orme, and that five specimens were seen.

In October 1916, Harry was visited by Mr Charles Waterfall of Chester, who earlier had published 'Plants from the County of Chester in his Collection 1910 - 14'. Mr Waterfall discovered hvbrid the Willowherb, E. x waterfallii near Helsby station, which has nearly 400 records in the BSBI database. The diary notes on October 6 "Mr Waterfall finds Samphire, Horn Poppy & Polygonum maritimum in fl. on the West Shore." Two days later, they walked to the shore together "Walk with Mr Waterfall to West Shore. Samphire, Sea Spinach and Polygonum maritimum! The last a rare plant recorded only from 4 Southern Counties." Sea knotgrass Polygonum maritimum has no other records from North Wales, and is listed as vulnerable; it would be a surprising addition to the local flora.

Spotting plants on New Year's Day seems to have been something of a local tradition. There is a list of 16 plants that Harry found in flower on 1911 January 1, and a newspaper cutting gives a list of 48 plants found on 1917 January 1 by A.C.A. I have encouraged the Cambridge Natural History Society to continue the tradition and on our outing this year, we recorded 157 species or subspecies near Cambridge.

There are no diaries after 1916. Harry Thomas was attending first aid classes in Llandudno and missed the evening bus to get to the class. He borrowed a bicycle (never having ridden for years) and fell off his bike on the way home. He was

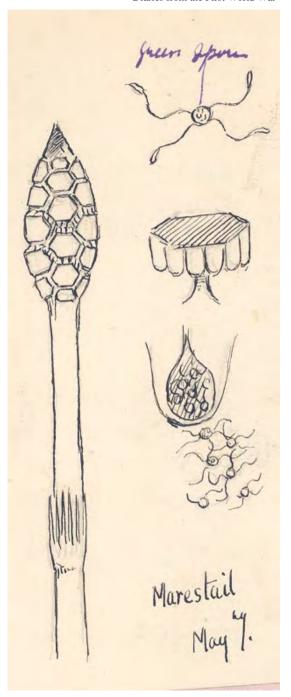


Image 6. "Marestail" drawn on 7th May 1916

found in the morning, and remained in a witless condition until his death on 1938 April 27. He must have had a relatively comfortable time as the Doctors said that 'He must never be contradicted'!

Having extracted these entries, I then went through some books of pressed flowers that I, with help from my mother, had collected as a child and also several that my mother had herself collected. Many finds were made on excursions with the Liverpool Geological Society, and I remember that the coach company generally used the oldest buses that they had, as the sites were often at the end of narrow lanes. The driver then had to reverse back up the lane resulting in numerous scratches along the side of the bus. Some of the pressings did not give sufficient information to be adequately localized in time or space, but I did manage to extract another 250 or so records, of which nearly 100 came from Wales, with the majority from Denbighshire.

I was born in Wrexham and initially went to Acton Park Primary School, where I learnt a

little Welsh, which I fear I have mostly forgotten. The earliest of the books were made for school when I was eight, and some include plants that perhaps should not be picked today as they are in the draft Rare Plant Register for Denbighshire, mostly as locally scarce. For example, I collected a sample of Viola lutea (Mountain Pansy) at Minera in 1964. My mother found Gentianella amarella (Autumn Gentian) at Maeshafn in October 1966, though I (and others) failed to find it in 2012. On a recent visit to Minera I was pleased to find Melampyrum pretense (Common Cowwheat), which my mother had collected from Hope Mountain in June 1964. We moved to Dodleston just over the border in 1966, where the garden of the Old Rectory has the remains of a Norman motte and bailey castle that formed part of the defences of Chester against the Welsh. My botanical interests then waned until I was asked to become President of the Cambridge Natural History Society in 2003, and have flourished ever since.

Conifer Workshop at Betws-y-Coed, 2013 March 9-10th

RACHEL CASSIDY, 42 Stockholm Park, Wantage, Oxon, OX12 9HQ

Eleven members and guests met at Rhyd-Y-Creuau Field Centre in North Wales, and settled in for two days of studying conifers. The plan was to spend the Saturday in the classroom with hand lenses and reference material, then on the Sunday there would be a field trip to a nearby Pinetum, to test our newly acquired skills on the wide range of conifers growing there.

Matt Parratt, leading the workshop (see

image 10 on back page), started us off with a short presentation of conifers in various forms and locations, including a groangenerating photo of a suburban house completely engulfed by *Leylandii*. He then got us started on the practical part of the day, with a succession of specimens to be inspected and compared. Conifers come in, broadly speaking, three classifications: needles, flat leaves, and scales, and we were soon eagerly working through either Poland

or Stace, depending on preference, and locating the features which identified the species. As always, there was some exciting new jargon to be learned, and by the end of the day, most of us were pretty sure we could recognise a dorso-ventrically flattened leaf when we saw one.

An evening meal had been arranged for those of us staying at the Field Centre, after which we had a chance to relax and discuss not just conifers, but also county recording, and the BSBI's work in general in the bar.

On Sunday, after a solid breakfast, we made our way to Cae'n y Coed, a mile or two outside the village: this was a Forestry Commission Pinetum, planted in the 1930s and lightly managed in recent years. Matt told us that it offered an opportunity to see conifer regeneration, and promised us some interesting seedlings, as well as a wide range of mature trees. It was starting to snow as we arrived, so we all wrapped up warmly and headed out: typically for any botanical outing, our first stop was about two yards out of the car park, where Matt blithely pointed to the first conifer and smiled. Out came the hand lenses, people started squeezing the fallen cones, and we all chorused "Picea sitchensis!" That's Sitka Spruce, by the way: easy to identify by the squashy, papery cones, the pegs on the branches, and the fact that the needles are hard and prickly to the touch. Matt looked pleased.

Making our way up the steep winding paths, we suddenly realised that in places we were level with the tree-tops of those planted lower down, which meant we had clear views of high-level cones and foliage: this was Matt's cunning plan to show us how the shape of a tree can sometimes help with an

ID. After a couple of hours, we were all pleased just how many of the conifers we were able, with the help of hand lens and keys, to identify.

At lunchtime, we returned to the cars, most of us driving off to use the nearby toilets and get warmed up: then we wrapped up again, and continued into another section of the Pinetum. The range of conifers was impressive, and perfect for an ID workshop. As well as most of the commonly-found conifers, there were, as you would expect, some that were too obscure to be in anything other than specialist conifer books, but - as Matt had promised - even if we couldn't ID to species level, we were all able to ID the genus.

We did indeed see many seedlings, including *Araucaria araucana* (Monkey Puzzle) as well as more common *Pseudotsuga menziesii* (Douglas Fir, the adults have cones with forked tongues, very easy to ID!) and *Tsuga heterophylla* (Hemlock Spruce) which has, as the name suggests, uneven foliage.

As the day grew colder, we walked faster, and we were all grateful when Matt told us that we had completed his planned loop of the Pinetum and, in view of the increasing cold, we would finish the afternoon a little earlier than planned. All in all, a very interesting and informative weekend. I for am now quietly confident about one identifying conifers, so many thanks to Matt for his excellent and enthusiastic teaching. to Paul Green for making arrangements.

The Lesser Butterfly-orchid/Tegeirian llydanwyrdd, Platanthera bifolia, in Pembrokeshire (v.c.45)

STEPHEN EVANS, BSBI Recorder for Pembrokeshire. glanymor.dinas@onetel.net

Old records

Dr. R.W. Falconer was first to report Platanthera bifolia (Lesser Butterfly-orchid) from Pembrokeshire in his 1848 publication 'Contributions towards a catalogue of plants indigenous to the neighbourhood of Tenby'. He described it as "Not common. Near Water Winch. -Near Step-Aside" (see location map). In the c.1868 5th edition of Mason's 'Guide to Tenby and its Neighbourhood', Platanthera bifolia is mentioned as being in "Waterwinch, a sequestered glen, three quarters of a mile from Tenby. The sloping banks on each side abound in wild flowers. Among them are several kinds of heath, the Lesser Butterfly Orchis, (Habenaria bifolia,) and the pretty little Bog Pimpernel, (Anagallis tenella,) etc." There are two other early records from the Tenby area. On 2nd July 1900, it was found near Folly Bridge, Knightston by E.H. Edwards, of Tenby, and in June 1904 Eleanor Vachell, of Cardiff, collected a specimen from Tenby, which is held at Amgueddfa Cymru - National Museum Wales.

Bertram Lloyd, who made many visits to Pembrokeshire, described it in his diary on 15th June 1927, as "Common in bogs below Rosebush -many in meadow near Mynachlogddu" and in June 1937, he found one on a moor at Kilgetty. Miss L. Abell found it here again at Kingsmoor, Kilgetty, in 1945. Also in the1930's, E. Cicely Howells, of Haverfordwest, found it behind the school at Ludchurch on a "furze moor no grazing" and at Lamber Moor, west of Haverfordwest, and at Plumstone Mountain.

In Lillian Rees' 1950 'List of Pembrokeshire Plants' she describes *P. bifolia* as "In profusion, together with the Yellow Star of the Moors (*Narthecium ossifragum*), on Dowrog Moor. Treveithan Moor. Parc Rolfe near Tenby (since ploughed). Fields near Waterwynch, Tenby (since ploughed). Under the bracken on the hill slope behind Stepaside."

Not only do these early records give us an idea of the scattered distribution of *P. bifolia* in Pembrokeshire but they also suggest it favoured heathy fields and unenclosed moorland where it was sometimes locally abundant. Moreover, the records provide sufficient information to suggest that by 1950 a decline had begun at its sites near Tenby. Lillian Rees' report of it having been lost to ploughing, most likely during the drive to maximise food production during the Second World War, is most revealing.

More Recent Records

Post World War II records were, with one interesting exception, confined to the north of the county. Most were from the scattered, lowland heathland commons between St. David's and Fishguard where it persists to this day on the large heathland commons immediately east and north-east of St. David's.

The other scattered sites in the north seem to have lost their populations. The last records from small, unimproved fields around Mynydd Prescelly at Tycanol and at Fagwr Goch were in the mid 1950's. It was last found at Trerhos Common in 1968 where

there was a large colony and a single flowering spike was found at Ambleston Common in 1979. About 40 spikes were found at Rhos Lleow common, near Fishguard in 1980 but since then this common has neither been grazed nor burnt and has become overgrown by scrub. There have also been two unconfirmed records, one from wet fields at Good Hope Farm near Strumble Head in 1993 and another at Foulbridge near Lamber Moor in 2003.

The one site in the south of the county, where it survived until 1972, was on the tiny

Freestone Common, on the edge of the Pembrokeshire coalfield, just north of Carew. Anne Conolly found it there in 1963 and Tommie Warren Davis and Jack Donovan found 'four very large and showy' plants on 4th July 1972. One plant had 2 flowering spikes. Other plants present that year included *Genista anglica* (Petty Whin), *Briza media* (Quaking-grass), *Listera ovata* (Twayblade), *Dactyorhiza maculata* (Heath Spotted-orchid), *D. praetermissa* (Southern Marsh-orchid) and *D. purpurella* (Northern Marsh-orchid). At a much earlier time, this same common had *Gentianella amarella*

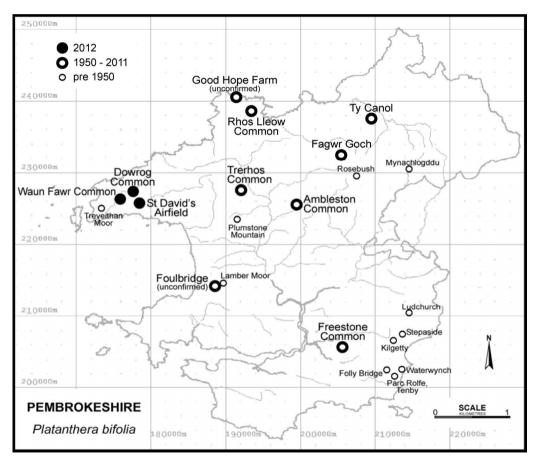


Image 7: Pembrokeshire records of Platanthera bifolia

(Autumn Gentian) in September 1880 when visited by Charles G. Barrett. Unfortunately, lack of management since 1972 has resulted in Freestone Common becoming completely overgrown by secondary woodland.

So by the 1980's this orchid was only surviving on the North-west Pembrokeshire Commons on places such as Dowrog Common where efforts were being made by the Wildlife Trust to restore the heathland vegetation through grazing and controlled winter burns. Elsewhere in Pembrokeshire wartime agricultural reclamation continued apace fuelled by generous grants to drain, fertilise and reseed so called unimproved land. In the uplands, sheep numbers had increased dramatically and the most difficult land, both enclosed and unenclosed, which could not be reclaimed or grazed by sheep, was often left un-grazed and slowly became colonised by scrub and ultimately woodland.

Current Sites

Today P.bifolia is limited to the managed wet lowland heathlands of St David's Airfield Heaths, Waun Fawr Common and Dowrog Common where it is largely Vegetation confined to the National Classification type M24 Molinia – Cirsium dissectum (Purple Moor-grass /Meadow Thistle) fen-meadow, in particular the Juncus acutiflorus-Erica tetralix (Sharp-flowered Rush/Cross-leaved Heath) sub-community M23a Juncus to transitions to acutiformis – Galium palustre (Sharpflowered Rush/Common Marsh Bedstraw) rush-pasture. It also strays into M25 Molinia caerulea –Potentilla erecta (Purple Moorgrass/ Tormentil) mire.

In 2012, 339 flowering spikes were counted at these three locations. 310 of these were on Dowrog Common and the others were on the St. David's Airfield Heaths. None were found at Waun Fawr Common where there

had been two in 2009 and one in 2010.

Since 1993, some populations of flowering spikes of *P. bifolia* at Dowrog Common have been counted systematically. Holly Harries and Bridget Thurston started the project at the behest of the Management Committee for this Wildlife Trust Nature Reserve. Its aim was 'to monitor the abundance of Lesser Butterfly-orchids in response to existing management types and treatments.' Initially the study area was confined to roadside firebreaks and the adjoining heath where various cutting, burning and grazing regimes were practised. The hope was that this would clarify which management treatments helped the orchid to flourish. The first five years showed that the combination of cutting in the winter months, occasional winter burns and grazing were beneficial. unmanaged wet heath within the study area has had no orchids over the last 20 years so growth of tall, dense closed heath is clearly unfavourable

In 1999, Stephen and Ann Evans continued and extended the study to include other populations on Dowrog. From 2001, counts were also undertaken on St. David's Airfield and Waun Fawr so from that year all flowering P. bifolia spikes in Pembrokeshire have been recorded. Total numbers have fluctuated from a start of 299 in 2001, to a low of 54 in 2007, to a maximum of 359 in 2010 with a mean count of 262 over the 12 years. In 2007, every Pembrokeshire colony counted had far fewer flowering spikes irrespective of its management. exceptionally hot dry April could, perhaps, have been responsible for this poor show. In that year, it was noticed in one place that there were six non-flowering plants where there had been a similar number of flowering spikes the previous year. The total count had been 260 the year before and numbers recovered to 187 in 2008, 308 in 2009 and

peaked at 359 in 2010.

It has become clear from the 20 years of observations that numbers of flowering P. bifolia on actively managed wet heathland experience natural will population fluctuations but that these broad, life cycle or climatic population trends, can be modified by management practices. Where there is no grazing, winter burning can be beneficial to the orchid but there has been very little controlled winter burning in the last 10 years. Cutting outside the growing season, which continues until end of September, may be a partial alternative to burning. Whilst grazing by cattle or ponies without burning or cutting, can allow the orchid to flourish as it creates hummocky vegetation with variable patches of short open turf with occasional bare ground. Perhaps the right sort of small patches of bare soil is critical for recruitment of young plants.

Peak flowering time is usually in mid or late June but sometimes extends into early July. In 1996, a first count was made on 3rd of July and the second as late as 15th July. In contrast, in 2011 the severe drought during the early months of the year meant that the count date was brought forward to 11th June. On that date, many of the flowers had wilted and were bent over half way up the spike and others had browned off because of the drought.

The strongest population on Dowrog Common in 2012, was in an area where there had been several years of moderately heavy grazing by beef cattle which ceased three years earlier. Their legacy has been a more varied vegetation structure with many small species-rich hummocks and shorter vegetation, which seems to suit the orchid. Here in 2012 as in 2011 and 2010, there have

been numerous clumps of robust flowering spikes often in close proximity and growing on the sides of the hummocks. Interestingly, but not unsurprisingly, there were very low counts in this location 2006-2008 when the cattle were still grazing heavily at a time when the orchids were in flower.

We have also learnt from the last 12 years of observations that P. bifolia is not a rapid coloniser, at least not in Pembrokeshire. In this period there has been no extension of its range within any of the three sites near St. David's, nor has there been colonisation of other nearby heathlands. This has been a disappointment as a lot of resources have gone into restoring and extending the heathland habitats in this part Pembrokeshire. Other notable plant species such as Pilularia globulifera (Pillwort), Cicendia filiformis (Yellow Centaury) and Ranunculus tripartitus (Three-lobed Crowfoot) have, however, expanded their populations as a consequence of all the heathland management by voluntary and statutory nature conservation organisations which started on Dowrog Common at the beginning of the 1980's.

References

Falconer, Dr.R.W. (1848) Contributions towards a Catalogue of Plants indigenous to the Neighbourhood of Tenby. Longmans, London.

Mason, R, (ca.1868) *Guide to Tenby and its Neighbourhood.* 5th edition, R. Mason, Tenby.

Rees, F.Lillian. (1950) List of Pembrokeshire Plants Tenby Museum and West Wales Field Society, Tenby.

Looking for *Sibthorpia europaea* (Cornish Moneywort) under the snow

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Looking on the BSBI web tetrad maps I was surprised to see there was a record for Sibthorpia europaea that fell just within Breconshire (v.c.42). I thought in Wales S. europaea only occurred in Monmouthshire Glamorgan (v.c.41), (v.c.35).Carmarthenshire (v.c.44). Pembrokeshire (v.c.45) and Cardiganshire (v.c.46). Next, I looked at the BSBI Distribution Database (DDB) online, found out the record was made in 2000 by Chambers, S.P., Jacques, R. & Williams, R.J. from Mynydd Llangatwg, north of Brynmawr, at an altitude of 440m. I contacted John Crellin the joint vice-county recorder for Breconshire (v.c.42), and said would he like to join me for a visit to the site.

We arranged a visit for 28th March this year; Tim Rich said we would never find it because of the snow! Another colleague, Ben-Evans from the National Museum Wales looked at the photos taken from the speed cameras in the area and said we would be better to postpone our visit. Not listening to Tim or Ben, the next day John headed from Hay on Wye where there was no snow. I could see the snow on the high ground from Cardiff, even I was surprised at how much there was up at Brynmawr. Anyway, it was a lovely sunny chilly day. We made our way through the snow, a good half metre deep in places, using our GPS to work out where we should start looking. Reaching the stream Nanty v Hafod we headed along the banks looking, feeling this was going to be a lost

cause! We soon realised we had walked too far north and turned around. On reaching the given grid reference SO205135, I started to dig in the snow to see what I could find. It wasn't long before I had found the Sibthorpia. We continued looking as we headed downstream. Wherever there was an area free of snow there was Sibthorpia. Mostly in the damp rushy areas, but also on the bare banks of the stream, and one population grew in a very wet open area of Sphagnum moss. Even though only 10% of the ground was free from snow, we saw so much Sibthorpia it was breath taking! The site stretched for just over ½km, putting it in two monads, within the tetrad.

This is likely to be one of, if not the largest population in Wales. At the time of writing, I have visited some of the sites for *Sibthorpia* in all the vice-counties listed at the start of this article, apart from Monmouthshire (v.c.35). Their combined populations are not a patch on this site. It is approximately at an altitude 100m higher than any other site in Wales. The nearest site is 20km south of Brynmawr, at a little north of Cwmfelinfach in Monmouthshire.

Never be deterred by the snow!

(See images 8 and 9 on inside back cover).

Welsh Plant Records 2012

Welsh Plant Records are compiled by Stephen Coker, Mountain Grove, Clarbeston Road, Haverfordwest, Pembs, SA63 4SG, from reports of BSBI vice-county Recorders to whom records should be sent. Plants are listed for each vice-county in the order of D.H. Kent's *List of Vascular Plants of the British Isles* (1992) and *Supplements 1*, 2 & 3 (1996 & 2000) the number in those lists preceding the name so that names changed since 1996 can be given without giving the former name. Latin names follow the 3rd edition of C.A. Stace's *New Flora of the British Isles* (2010) or, if not in that Flora, E.J. Clement & M.C. Foster's *Alien Plants of the British Isles* (1994). T.B. Ryves, E.J. Clement & M.C. Foster's *Alien Grasses of the British Isles* (1996) or Sell & Murrell's *Flora of Great Britain and Ireland* (1996-2009). Authorities for Latin names are not given unless the name is not in any of these works. English names are those in Stace (2010) or *English Names of Wild Flowers* ed. 2 (1986) by Dony *et al*, or, if not in either of those, Clement & Foster (1994), Ryves, Clement & Foster (1996) or Sell & Murrell (1996-2009). English names enclosed by square brackets do not occur in any of these books but have been used elsewhere. Welsh names are those in *Planhigion Blodeuol*, *Conwydd a Rhedyn*, published by Cymdeithas Edward Llwyd (2003).

The following symbols are used:

- * to indicate a new v.c. record; \otimes to indicate an updated VCCC record; \Re to indicate a record demonstrating the rediscovery of a taxon published as extinct in the VCCC
- + to indicate a new hectad record; \oplus to indicate an updated hectad record; \ominus to indicate a new tetrad record
- † indicates archaeophyte; ‡ indicates neophyte; © indicates casual.
- †‡© before the species number: to indicate that the species is regarded as an archaeophyte, neophyte or casual at least somewhere in the British Isles.
- †‡© after the species number: to indicate that the species is regarded as an archaeophyte, neophyte or casual generally within the vice county, different from that of the British Isles.
- †‡© before the record: to indicate a species which although a native, archaeophyte or neophyte at least somewhere in the vice county, is not so in the locality recorded.
- [] to indicate that the record, previously published in error, should be deleted.
- $\ensuremath{\mathtt{z}}$ to indicate an update to a rare or scarce taxon.
- Ø to indicate that the taxon is now believed to be extinct in the locality cited.
- N, S, E, W indicate points of the compass.

In general, only records which update the *Vice-county Census Catalogue* [VCCC] (2003) or the *New Atlas of the British & Irish Flora* (2002) will be listed. Other records are included at the discretion of the vice-county recorder. The minimum grid reference is to a hectad but, if supplied by the recorder, references to a 1km or even a 100m square may be included. A letter in parentheses following a grid reference indicates a tetrad.

The Vice-county Recorders from 1/1/2013 are:.

MONMOUTH, v.c.35; Dr S.J. Tyler, Yew Tree Cottage, Lone Lane, Penallt, Mons, NP25 4AJ; steph_tyler2001@hotmail.com & Mrs E. Wood (all correspondence to Dr Tyler).

GLAMORGAN, v.c.41 (West); Mr B. Stewart, 36 Pencaecrwn Road, Gorsenion, Swansea, SA4 4FU. 01792 539447; moonmoths@virginmedia.com

GLAMORGAN, v.c.41 (East); Mr J.P. Woodman, c/o CCW, Rivers House, St Mellons Business Park, Fortran Road, St Mellons, Cardiff, CF3 0EY (Please mark PERSONAL). 029 2077 2400; Julian.Woodman@ccw.gov.uk

BRECON, v.c.42; Mr M. Porter, Aberhoywy Farm, Cyffredyn Lane, Llangynidr, near Crickhowell, Powys NP8 1LR. 01874 730354; mikechris1@btinternet.com

RADNOR, v.c.43; Miss E.R. Dean, Enmore House, Croft Lane, Kingsland, Leominster, Herefordshire, HR6 9PP. 01568 780769; edominater (all correspondence to Miss Dean).

CARMARTHEN, v.c.44; Mr R.D. Pryce, Trevethin, School Road, Pwll, Llanelli, Carmarthenshire SA15 4AL. 01554 775847; pryceeco@aol.com

PEMBROKE, v.c.45; Mr S.B. Evans, Glan-y-Mor, Dinas Cross, Newport, Pembrokeshire SA42 0UQ. 01348 811539; glanymor.dinas@onetel.net

CARDIGAN, v.c.46; Mr A.O. Chater, Windover, Penyrangor, Aberystwyth, Ceredigion SY23 1BJ. 01970 617409; aochater@nildram.co.uk & Mr S.P. Chambers (all correspondence to Mr Chater).

MONTGOMERY, v.c.47; Dr A K Thorne, Churton House, Church Pulverbatch, Shropshire, SY5 8BZ. 01743 718270; k.thorne@btinternet.com & Mr M. Duffell (all correspondence to Dr Thorne).

MERIONETH, v.c.48; Mrs S.E. Stille, The Quillet, Berwyn Street, Llandrillo, Corwen, Denbighshire, LL21 0TH; mossysal@btinternet.com

CAERNARFON, v.c.49; Mrs W.N. McCarthy, 5 Tyn-y-coed, Great Orme, Llandudno, Conwy LL30 2OA. 01492 877451; Wendorme@aol.com

DENBIGH, v.c.50; Mrs D. Williams, Bryn Siriol, Graigfechan, Ruthin, Denbighshire, LL15 2HA. 01824 702196; delyth@siriolbryn.co.uk

FLINT, v.c.51; Ms E. Meilleur, 1 Fron Goch, Llanberis, Gwynedd, LL55 4LE. 01286 870173; emilytheameilleur@gwynedd.gov.uk

ANGLESEY, v.c.52; Mr I.R. Bonner, Cae Trefor, Tyn y Gongl, Anglesey LL74 8SD. Tel: 01248 852651; bsbi@caetrefor.co.uk & Mr N.H. Brown (all correspondence to Mr Bonner).

MONMOUTH, v.c.35 (comm. T.G. Evans)

- +004/1.7. **Equisetum sylvaticum** (Wood Horsetail) (Marchrawnen y Coed). Edge of woodland ride, Tintern, ST504999, Elsa & Adrian Wood, 27th Aug 2012, 40-50 plants overgrown with bracken.
- +004/1.9. **Equisetum telmateia** (Great Horsetail) (Marchrawnen Fawr). Springline in hedgerow, Devauden, ST471013, Stephanie Tyler, 10th Jul 2010, patch ca 2 sq metres by hedge in seepage area.
- +027/1.1. **Ceratophyllum demersum** (Rigid Hornwort) (Cyrnddail Caled). Base of M4 bank facing shore, Caldicot Pill, ST489872, T.G. Evans, 4th Jun 2010, several plants at base of bank; (+) pond, Treowen, SO4611, Heather Colls, 11th Sep 2012, in small pond near Treowen House.
- +†043/1.13. **Chenopodium ficifolium** (Fig-leaved Goosefoot) (Troed-yr-Wydd Ffigys-ddail). ©Cattle-poached ground, Typicca, Nr.Dryslwyn, SN538206, R.D. & K.A.Pryce, det.R.D.Pryce, 22th Sep 2012, three plants by barn.
- +‡046/07.03. **Cerastium tomentosum** (Snow-in-summer) (Clust-y-llygoden y Felin). By side of link road A466, near Newhouse roundabout, Chepstow, ST533917, T.G. Evans, 25th May 2010, large patch, W. side, A466 link road.

- +046/17.4. **Spergularia rubra** (Sand Spurrey) (Troellig Arfor Coch). By fence in field by dual carriageway, Mitchel Troy, SO497108, Heather Colls, 15th Jul 2012; (+) roadside, Raglan, SO 41750746 to SO4180740, Heather Colls, 20th Jun 2012, along 100m of roadside.
- ¤047/1.15. Persicaria mitis (Tasteless Water-pepper) (Y Dinboeth Ddi-flas). Riverside, north of Tintern to north of Llandogo, SO530524 to SO536545, Elsa & Adrian Wood, 8th Jul 2012, 1000's plants along the river bank -probably recorded as P. hydropiper in the past but definitely increased over the last 10years.
- +047/8.10. **Rumex hydrolapathum** (Water Dock) (Tafolen y D^r). Lake edge, Bryn Bach country park lake, SO128097, Jim Davies, det.several vigorous clumps, 2012.
- ¤050/1.1. Elatine hexandra (Six-stamened Waterwort) (Gwybybyr Chwebrigerog). Kettle-hole lake, Llyn Pencarreg SSSI, SN5345, M.Jenkins, det.S.D.S.Bosanquet 19092012, 18th Sep 2012, second site in vc, NMW.
- +†062/30.5. **Lepidium ruderale** (Narrow-leaved Pepperwort) (Pupurlys Culddail). Roadside, Mitchel Troy, SO488103, Heather Colls, 6th Aug 2012.
- +‡073/1.3. **Crassula helmsii** (New Zealand Pigmyweed) (Corchwyn Seland Newydd). †Pond, Bettws Newydd, Usk Golf Course, SO360059, Dave Green, 14th Dec 2012.
- +‡074/05.02. Saxifraga cymbalaria (Celandine Saxifrage) (Tormaen Arenddail). Introduced in garden, Penallt, SO517093, Stephanie Tyler, 12th May 2012; (+) introduced in garden/alleyway, Monmouth, SO507125, Stephanie Tyler, 14th May 2012.
- +075/19.14. **Alchemilla glabra** (Smooth Lady's-mantle) (Mantell-Fair Lefn). Roadside, Nantyglo, SO192103, Colin Titcombe, det.T.G.Evans, 19th Jul 2010, one plant on east side A467; last seen in tetrad in.
- +075/28.24. **Sorbus torminalis** (Wild Service-tree) (Cerddinen Wyllt). Hedgerow, Raglan to Kingcoed, SO431068, Linda Smout, 2011.
- +077/07.1.a. **Anthyllis vulneraria ssp vulneraria**.(Kidney Vetch) (Plucen Felen) Floor of quarry, Livox Quarry, ST543977, Elsa & Adrian Wood, 10th Jun 2012.
- +077/08.1.‡ **Lotus glaber** (Narrow-leaved Bird's-foot-trefoil) (Pysen-y-ceirw Gulddail). Edge of saltmarsh, St Pierre Pill, ST522896, Elsa & Adrian Wood, 19th Aug 2012.
- +077/14.01. Vicia orobus (Wood Bitter-vetch) (Ffacbysen Chwerw). Along roadside, S.Tallistown, SO192104. Peter Sturgess. 1st Jul 2010. also extending into SO10 where already known.
- +077/19.20. **Trifolium striatum** (Knotted Clover) (Meillionen Rychog). Brackish meadow, adjacent to the River Wye below Blackcliff, ST535971, Elsa & Adrian Wood, 10th Jun 2012.
- +077/19.22. **Trifolium scabrum** (Rough Clover) (Meillionen Arw). Saltmarsh, near Hunger Pill, ST539908, Elsa & Adrian Wood, 8th Aug 2012, 3 plants on saltmarsh.
- +†107/10.1. **Smyrnium olusatrum** (Alexanders) (Dulys). Roadside bank, Chepstow, ST533919, T.G.Evans, 25th May 2010, pre 1920 record in hectad; linear patches E, verge A466 link road to M48; noted since at least 2000 (Stephanie Tyler).
- +107/43.3. **Torilis nodosa** (Knotted Hedge-parsley) (Troed-y-cyw Clymog). Road verge A4046, South of Tallistown, SO188044, T.G.Evans, 29th Jul 2010.
- +116/02.1. **Echium vulgare** (Viper's-bugloss) (Gwiberlys). Field at City Farm, Community Farm, Cwmbran, ST2795, Kris Roberts, det.Stephanie Tyler on 26 July 2012, 24th Jul 2012, photographed.
- R‡118/03.1. Leonurus cardiaca (Motherwort) (Mamlys). Ruderal in young broad-leaved plantation, Jingle Street, SO4610, Heather V. Colls, 13th Jul 2012, photographed.
- ¤+‡124/01.01 **Verbascum blattaria** (Moth Mullein) (Pannog y Gwyfyn). Rail ballast, Rogiet Countryside Park, ST463874, Tom Ward-Jackson, det.Stephanie Tyler on 26 July 2012, 12th Jul 2012, photograph taken of white-flowered form.
- +125/2.08. **Orobanche hederae** (Ivy Broomrape) (Gorfanc Eiddew). Suburban industrial, Abergavenny, SO289145, Graham Motley, Mar 2012, entrance to Robert Price's yard.
- +125/2.10.min. **Orobanche minor var. minor**. (Common Broomrape) (Gorfanc Lleiaf) Garden, Nurtons, Tintern, SO537010, Elsa & Adrian Wood, 10th Jun 2012, two flowering spikes on Trifolium.

- +‡129/1.10. **Campanula poscharskyana** (Trailing Bellflower) (Clychlys Ymlusgol). Road verge B4248, Waun Afon, SO221108, Chris Hatch & T.G. Evans, 19th Jul 2010.
- +134/5.1. **Scabiosa columbaria** (Small Scabious) (Clafrllys Bach). Road verge A4046, S. Tallistown towards Cwm, SO1804, Peter Sturgess, 1st Jul 2010, 3 sites S. of Tallistown, SO18880447, extending 300m N.N.W. of Cwm, SO18480544, road junction with one from Cwm SO18310572.
- +135/28.08.123. **Hieracium stenstroemii** (Stenstrom's Hawkweed). Side of lane and wooded stream, Llanthony, SO270263, Dave Green, conf. D. McIntosh, Jun 2011, 80 plants + 15 plants.
- *‡135/28.08.132. **Hieracium oblongum** (Weedy Hawkweed). Roadside verge, Llanthony, SO289274, Dave Green, conf. D.McIntosh, Jun 2011, two populations 100m apart below Llanthony Priory; ca 40 plants in all, NEW WELSH RECORD.
- +135/40.4.‡ **Solidago gigantea** (Early Goldenrod) (Eurwialen Gynnar). On river bank by Wye, Llandogo, SO533042, T.G.Evans & Colin Titcombe, 31th May 2010.
- +‡135/41.3×4. **Aster x versicolor** (Late Michaelmas-daisy) (Blodyn-Mihangel Diweddar). On river bank by Wye, Llandogo, SO503044, T.G.Evans & Colin Titcombe, 18th Sep 2010, one clump.
- +©135/GUI.aby. **Guizotia abyssinica** (Niger) (Guizotia). ‡By bird feeders in garden, La Cuesta, Mounton Road, Chepwstow, ST5293, T.G.Evans, 8th Aug 2010, three plants August to November 2010.
- +‡138/4.2. **Elodea nuttallii** (Nuttall's Waterweed) (Ffugalaw Nuttall). †Pond, Kings Wood near Monmouth, SO472133, Stephanie Tyler, 15th Feb 2013, abundant in pond in forest by track.
- ⊗143/1.1. **Ruppia maritima** (Beaked Tasselweed) (Tusw Arfor). Brackish pool, Caldicot, ST485873, Elsa & Adrian Wood, 8th Aug 2012, a few plants with Ranunculus baudotii; (⊗) brackish ditch, St Brides, ST305821 to ST307823, Julian Woodman, 30th Jul 2012, many plants in small pools at back of saltmarsh.
- +151/1.20. **Juncus maritimus** (Sea Rush) (Brwynen Arfor)). Saltmarsh, near Magor Pill, ST433845, Elsa & Adrian Wood, 29th Aug 2012, 7 plants on saltmarsh.
- +152/16.41. **Carex distans** (Distant Sedge) (Hesgen Blodau Pell). Brackish meadow, adjacent to the River Wye below Blackcliff, ST543973 & ST544976, Elsa & Adrian Wood, 10th Jun 2012, 25 plants in 2 main clumps.
- +‡153/38.2. **Phalaris aquatica** (Bulbous Canary-grass) (Pefrwellt Goddfog). Cornfield edge, Manson Lane, Osbaston, Monmouth, SO504415, Dave Green, 28th Jun 2012, **HR.**
- +153/40.1. **Calamagrostis epigejos** (Wood Small-reed) (Corsen Fach y Coed). Bank of ditch on farmland, Llangovan, SO4606, Steven Heaton, 5th Jul 2012.
- +153/46.1.‡ **Polypogon monspeliensis** (Annual Beard-grass) (Barfwellt Unflwydd). Landfill site, near Lamby Way, ST219783, Julian P. Woodman, 5th Jul 2010.
- +‡153/46.2. **Polypogon viridis** (Water Bent) (Barfwellt y D^r). Footpath, Saltmarsh Lane, ST345824, Dave Green, 27th Jul 2012; (+) garden centre, Millbrook, SO503113, Dave Green, 28th Jul 2012.
- +†153/50.7. **Bromus secalinus** (Rye Brome) (Pawrwellt Bach). Edge of mustard crop, Manson Lane north of Osbastion, south of the road, SO505153, Dave Green, Jul 2010, appeared again in 2011, **HR.**
- +162/06.1. **Neottia ovata** (Common Twayblade) (Caineirian). Roadside grassland, Waitrose, Abergavenny, SO292135, Graham Motley, 26th May 2012.
- +162/23.3. **Ophrys apifera** (Bee Orchid) (Tegeirian y Wenynen). Moorland, Head of Blaenserchan valley, SO238025, Chris Hatch, 19th Jul 2010, one plant; (+) east side of entrance, Blaenavon Railway Museum, SO236095, Chris Hatch, T.G. Evans & Colin Titcombe, 19th Jul 2010, two plants.

- +c1-4-fle.f **Nitella flexilis var. flexilis** (Smooth Stonewort). Stream / flush depression, Nant lesc, SO1028607830, J.P. Woodman, 20th Sep 2012.
- +001/1.1. **Huperzia selago** (Fir Clubmoss) (Cnwp-fwsogl Mawr). Cwm Fforch, SN8501, Charles & Hilary Hipkin, 26th Aug 2012, with Lycopodium selago on north-facing heathy bank.
- +001/3.1. **Lycopodium clavatum** (Stag's-horn Clubmoss) (Cnwp-fwsogl Corn Carw). Cwm Fforch, SN8501, Charles & Hilary Hipkin, 26th Aug 2012, north-facing heathy bank with Huperzia selago, Calluna vulgaris, Deschampsia flexuosa, Hypochaeris radicata, Vaccinium myrtillus, Diplophylum albicans and Sphagnum fimbriatum.
- +011/1.1×2. **Polypodium x mantoniae**. Slade Lane, SS490860, B. Stewart & S.J. Stewart, 12th Oct 2012, microscope det.
- +011/1. **Polypodium cambricum** (Southern Polypody) (Llawredynen Gymreig). Limestone rocks under woodland canopy, Penrice Wood, SS499882, Barry Stewart, 21st Jan 2012; (+) Swansea University Botanic Gardens, SS629917, B. Stewart & G.H. Jones, 18th Feb 2012, single plant at SS62909170 possibly introduced?
- +013/1.1. **Pteridium aquilinum** (Bracken) (Rhedynen Ungoes). Burry Holms (Vome Hole), SS399925, Barry Stewart, 11th Aug 2012.
- +014/2.1. **Phegopteris connectilis** (Beech Fern) (Rhedynen Gorniog). Shaded marshy grassland near stream, Pelena Forest 3, SS8098, Charles & Hilary Hipkin, 19th Jun 2012.
- +017/1.2. **Polystichum aculeatum** (Hard Shield-fern) (Gwrychredynen Galed). Neath Canal Tonna, SS7698, Charles & Hilary Hipkin, 19th Feb 2012.
- +028/13.25.b. **Ranunculus penicillatus ssp. pseudofluitans**. (Stream Water-crowfoot) (Crafanc y Nant) Pwll-y-Glaw, SS7992, Charles & Hilary Hipkin, 29th Mar 2012; (+) Abergarwed, SN8102, Charles & Hilary Hipkin, 14th Apr 2012.
- +031/5.03. **Fumaria bastardii** (Tall Ramping-fumitory) (Mwg-y-ddaear Grymus). Old Hall pond and grounds, Cowbridge, SS991749, Rob & Linda Nottage, 7th Jun 2012.
- +036/1.1. **Urtica dioica** (Common Nettle) (Danhadlen Boeth). Burry Holms (Vome Hole), SS399925, Barry Stewart, 11th Aug 2012.
- +039/4.5. **Quercus petraea** (Sessile Oak) (Derwen Mes Di-goes). Woodland canopy, Bullhouse (west wood), ST077674, Barry Stewart, 24th May 2012.
- +‡042/8.2. **Carpobrotus edulis** (Hottentot-fig) (Ffigysen yr Hotentot). ©Horton cliff, SS478855, I.F. Tew, 25th Oct 2012, 40 plants with one season's growth and two or three larger patches (2m-3m across) that presumably have been there for a couple of seasons. The plants were along a short section of soft cliff between SS47868555 and SS47898556.
- +043/1.06. **Chenopodium rubrum** (Red Goosefoot) (Troed-yr-Wydd Ruddog). †Bank Farm Caravan Park, SS472858, Barry Stewart, 21th Aug 2012.
- +045/3.1.d. **Montia fontana ssp. chondrosperma**. SS8399, SS8399, Charles & Hilary Hipkin, 30th Mar 2012.
- +046/01.1.a. **Arenaria serpyllifolia ssp. serpyllifolia** (Thyme-leaved Sandwort). (Tywodwlydd Gruwddail). Vegetated spoil, Criag y Bedw (Cwmdulais), SN621039, Barry Stewart, 18th Jul 2012.
- +046/07.10. **Cerastium diffusum** (Sea Mouse-ear) (Clust-y-llygoden Arfor). Open spoil, Creunant tip, SN791056, Barry Stewart, 16th May 2012.
- +046/10.1. **Sagina nodosa** (Knotted Pearlwort) (Corwlyddyn Clymog). Burry Holms (Vome Hole), SS399925, Barry Stewart, 11th Aug 2012.
- *046/10.3. **Sagina subulata** (Heath Pearlwort) (Corwlyddyn Mynawydaidd). Open spoil, Creunant tip, SN791056, Barry Stewart, 16th May 2012, voucher specimen + photograph.
- +046/10.7.b. **Sagina filicaulis** (Slender Pearlwort). Slipway verge, Junction 38 (n) of M4, SS795862, Barry Stewart, 26th Jul 2012.

- ¤047/1.16. Persicaria minor (Small Water-pepper) (Y Dinboeth Fach). Tidal river bank mud, Afon Rhymney, Llanrumney, Cardiff, ST20967920, J.P. Woodman, 6th Sep 2012, single plant amongst lots of Persicaria hydropiper.
- +‡047/5.2. **Fallopia sachalinensis** (Giant Knotweed) (Y Glymog Fawr). Rheola Forest, SN8204, Charles & Hilary Hipkin, 14th Oct 2012.
- +‡047/5.3. **Fallopia baldschuanica** (Russian-vine) (Clymog Rwsia). ©Slade, SS487859, B. Stewart & S.J. Stewart, 12th Oct 2012.
- +061/2.10×11. **Salix x reichardtii**. Bankside walls/rocks, Crown Bridge, Cwmtwrch (VC41), SN76721015, Barry Stewart, 7th Jul 2012.
- 062/12.3. **Rorippa islandica** (Northern Yellow-cress) (Berwr Melyn Gogleddol). Garden in building site, Pentyrch, ST1025882029, J.P. Woodman, 30th Sep 2012.
- +‡062/17.1. **Lunaria annua** (Honesty) (Swllt Dyn Tlawd). †Crugau, Resolven, SN8303, Charles & Hilary Hipkin, 22th May 2012.
- +‡062/34.2. **Brassica napus** (Rape) (Rape) (Rep). †Wheat stubble, arable between Junction 38 and Crematorium, SS794860, Barry Stewart, 10th Oct 2012.
- +066/1.3. **Pyrola rotundifolia** (Round-leaved Wintergreen) (Glesyn-y-gaeaf Deilgrwn). Cwm Fforch, SN8501, Charles & Hilary Hipkin, 26th Aug 2012, small population (about 2 square metres) with Salix cinerea at side of Forestry Road (SN8556601079) P. rotundifolia ssp. maritima.
- ¤069/6.3. Centunculus minimus (Chaffweed) (Gwlyddyn-Mair Bach). Marshy grassland, Cefn Cribwr, SS8575183357, J.P. Woodman, 13th Sep 2012, 14 plants in 10 x 3 m patch poached by horses over the previous year and winter.
- +072/2.1. **Ribes rubrum** (Red Currant) (Llwyn Cwrens Coch). Neath Canal & surrounds, Resolven, SN8403, Charles & Hilary Hipkin, 6th May 2012.
- +‡073/1.3. **Crassula helmsii** (New Zealand Pigmyweed) (Corchwyn Seland Newydd). Garden pond, Hunter's Hollow, Penmaen, SS531887, Barry Stewart, 4th Jun 2012; (+) pond, Cefn gelligaer Common, SO093064, J.N. Davies, conf. J.P. Woodman, 15th Apr 2012.
- +074/05.15. Saxifraga granulata (Meadow Saxifrage) (Tormaen y Gweunydd). Neath river and Craig Ynys Nedd, SS7999, Charles & Hilary Hipkin, 24th May 2012; (+) shaded woodland bank of River Neath, Ynysgollen, SN7900, Charles & Hilary Hipkin, 25th May 2012; (+) along river, Crugau, Resolven, SN8303, Charles & Hilary Hipkin, 5th May 2012.
- 074/05.16. **Saxifraga hypnoides** (Mossy Saxifrage) (Tormaen Llydandroed). Cliff face, Craig y Llyn, above Llyn fach, SN9134603394, J.P. Woodman, 13th Jun 2012, last recorded here in 1905, large patch 1x1m.
- +±074/08.1. **Tellima grandiflora** (Fringecups) (Clychau'r Clawdd). Glyn Castle, SN8302, Charles & Hilary Hipkin, 17th May 2012, naturalised along streams in Glyn Castle Wood.
- +075/15.1. **Agrimonia eupatoria** (Agrimony) (Llysiau'r Dryw). Coastal grassland, Burry Holms (Vome Hole), SS399925, Barry Stewart, 11th Aug 2012.
- +‡075/17.3.b. **Poterium sanguisorba ssp. balearicum** (Fodder Burnet) (Bwrned Ebran). Cwn Nant Lleiky, SN7307, Charles & Hilary Hipkin, 4th Jun 2012.
- +075/20.1. **Aphanes arvensis** (Parsley-piert) (Troed y Dryw). Vegetated spoil, Criag y Bedw (Cwmdulais), SN621039, Barry Stewart, 18th Jul 2012.
- +‡075/22.03. **Prunus cerasifera** (Cherry Plum) (Coeden Goeg-geirios). Resolven (north), SN8203, Charles & Hilary Hipkin, 11th Apr 2012.
- +075/22.11. **Prunus padus** (Bird Cherry) (Coeden Geirios yr Adar). Old Hall pond and grounds, Cowbridge, SS991749, Rob & Linda Nottage, 3rd May 2012.
- *‡075/28.23. **Sorbus latifolia** (Broad-leaved Whitebeam) (Cerddinen Lydanddail). Cadoxton, Neath, SS7598, Charles & Hilary Hipkin, 18th May 2012, possibly naturalised in wooded area above Cadoxton.
- +‡075/32.11. Cotoneaster dammeri (Bearberry Cotoneaster) (Cotoneaster Dammer). Cadoxton, Neath, SS7598, Charles & Hilary Hipkin, 13th Jun 2012.

- +‡075/32.11×18. **Cotoneaster x suecicus** (Swedish Cotoneaster) (Cotoneaster Sweden). Penmaen Burrows, SS531878, Barry Stewart, 1st Dec 2012; (+) Langland Bay, SS608874, Barry Stewart, 3rd Dec 2012.
- +±075/32.33. Cotoneaster simonsii (Himalayan Cotoneaster) (Cotoneaster Simons). Glanrhyd, SN7104, Charles & Hilary Hipkin, 9th Jun 2012; (+) bankside walls/rocks, Crown Bridge, Cwmtwrch (VC41), SN76721015, Barry Stewart, 7th Jul 2012.
- +‡075/32.39. Cotoneaster franchetii (Franchet's Cotoneaster) (Cotoneaster Franchet). Waste ground, Glyn-neath, SN8706, Charles Hipkin, 1st Mar 2012.
- +‡077/13.1. **Securigera varia** (Crown Vetch) (Ffacbysen Goronog). †Neath Canal (Aber-pergwm Colliery), SN864058, Barry Stewart, 16th Aug 2012, large patch along 8m of canal.
- +077/19.14. **Trifolium pratense** (Red Clover) (Meillionen Goch). Burry Holms (Vome Hole), SS399925, Barry Stewart, 11th Aug 2012.
- +078/1.1.‡ **Hippophae rhamnoides** (Sea-buckthorn) (Rhafnwydden y Môr). ©Scrubby edges around species-rich M25, NPT pSINC (Croeserw adj. to cemetery), SS870955, Barry Stewart, 18th Jun 2012.
- +081/1.3. **Lythrum portula** (Water-purslane) (Troed y Gywen). Roman Rd above Llettybella Wood, SN7901, Charles & Hilary Hipkin, 12th Feb 2012.
- +084/1.07. **Epilobium roseum** (Pale Willowherb) (Helyglys Gwelw). Hirwaun (Waungron), SN958050, Barry Stewart, 14th Oct 2012.
- *‡107/01.ran. **Hydrocotyle ranunculoides** (Floating Pennywort) (Dail-ceiniog Arnofiol). Twyn-yrhydd, Margam CP, SS812853, Paul Beckwith, 10th Jan 2012, photograph in field.
- +107/43.1. **Torilis japonica** (Upright Hedge-parsley) (Troed-y-cyw Talsyth). Burry Holms (Vome Hole), SS399925, Barry Stewart, 11th Aug 2012.
- +‡107/44.1. **Daucus carota** (Carrot) (Moronen). Burry Holms (Vome Hole), SS399925, Barry Stewart, 11th Aug 2012.
- +108/3.2. **Centaurium erythraea** (Common Centaury) (Y Ganrhi Goch). Burry Holms (Vome Hole), SS399925, Barry Stewart, 11th Aug 2012.
- *111/3.2×3. Calystegia x scanica. Canal towpath, Neath Canal, S.E.corner of Square Pond, SS740960, Barry Stewart, 30th Jul 2012, voucher specimen + photograph.
- +‡111/3.3. Calystegia pulchra (Hairy Bindweed) (Taglys Blewog). Heolcae'r-Bont (by Eglwys Nunydd Resr.), SS790855, Barry Stewart, 10th Oct 2012.
- +116/04.3.‡ **Symphytum tuberosum** (Tuberous Comfrey) (Cyfardwf Glorog). Field margins, Hunter's Hollow, Penmaen (field), SS531886, B. Stewart & S.J. Stewart, 4th Jun 2012.
- +‡118/04.1.c. Lamiastrum galeobdolon ssp. argentatum. Limeslade, SS622870, Barry Stewart, 3rd Dec 2012.
- +118/20.1. **Origanum vulgare** (Wild Marjoram) (Penrhudd). Maesteg, Mynydd Caerau (west), SS8794, Charles & Hilary Hipkin, 26th Oct 2012.
- +118/23.2×3.‡ **Mentha x piperita** (Peppermint) (Mintys Poeth). Heolcae'r-Bont (by Eglwys Nunydd Resr.), SS790855, Barry Stewart, 10th Oct 2012.
- +120/1.7. **Callitriche brutia var. hamulata** (Intermediate Water-starwort) (Brigwlydd Canolig). Canal aquatics, NPT SINC025 (Tennant Canal), SS757984, Barry Stewart, 9th Aug 2012.
- +121/1.4. **Plantago media** (Hoary Plantain) (Llyriad Llwyd). ©Baglan Energy Park (north), SS7393, Charles & Hilary Hipkin, 8th Aug 2012, probably introduced via grassland seed mixture.
- +‡124/04.2. **Mimulus guttatus** (Monkeyflower) (Blodyn Mwnci). Cymmer, SS8696, Charles & Hilary Hipkin, 8th Sep 2012.
- +124/20.01.a. **Euphrasia officinalis ssp. pratensis**. Wasteground, Amazon site, SS708934, Barry Stewart, 25th Jun 2012.
- +124/20.07×09. **Euphrasia nemorosa x confusa**. Grassland/heath mosaic, NPT pSINC (Earlswood golf course), SS724943, Barry Stewart, 15th Jul 2012; (+) track, NPT pSINC (Tyle'r Waun), SS835978, Barry Stewart, 9th Aug 2012; (+) established vegetation on spoil, Penstar Tip, SN860061, Barry Stewart, 24th Jul 2012.

- +130/5.1. **Asperula cynanchica** (Squinancywort) (Mandon Fach). Burry Holms (Vome Hole), SS399925, Barry Stewart, 11th Aug 2012.
- +‡131/5.1. **Leycesteria formosa** (Himalayan Honeysuckle) (Bachgen Llwm). Quarry floor, Horton, SS473858, Barry Stewart, 21st Aug 2012.
- +134/1.1. **Dipsacus fullonum** (Wild Teasel) (Cribau'r-pannwr Gwyllt). Riverbank, River Loughor, Ty'n-y-cerig, SN605074, Barry Stewart, 11th Jul 2012.
- +135/03.2.sl. **Arctium minus** (Lesser Burdock). (Cyngaf Bychan). Burry Holms (Vome Hole), SS399925, Barry Stewart, 11th Aug 2012.
- +†135/11.3. **Centaurea cyanus** (Cornflower) (Penlas yr Yd). ©Swansea Uni. Coll. Campus, SS6291, Charles Hipkin, 10th Oct 2012, introduced in seed mixture near site of ILS building.
- 135/15.2. **Hypochaeris glabra** (Smooth Cat's-ear) (Melynydd Moel). Sandy field, Sker, SS7954279472, J.P. Woodman, 2nd Aug 2012, new site near to previously known site, 1 of 3 extant sites in Glamorgan; disturbed sand dune, Pant Marie Flanders, SS88047580, J.P. Woodman, 23th Aug 2012, new site, but previously recorded from hectad.
- *135/27.2.off. Pilosella officinarum ssp. officinarum (a subspecies of Mouse-ear-hawkweed). Swansea Enterprise Park, SS67139612, K.A. Pryce & R.D. Pryce, 14th Jun 2012, significant component of lichen-bryophyte community.
- *135/27.2.trl. Pilosella officinarum ssp. tricholepia (a subspecies of Mouse-ear-hawkweed). Swansea Enterprise Park, SS67169610, K.A. Pryce & R.D. Pryce, 14th Jun 2012, significant component of lichen-bryophyte community.
- +135/27.2.trso. **Pilosella officinarum ssp. trichosoma** (a subspecies of Mouse-ear-hawkweed). Swansea Enterprise Park, SS67149610, K.A. Pryce & R.D. Pryce, 14th Jun 2012, significant component of lichen-bryophyte community.
- +‡135/27.6. **Pilosella aurantiaca** (Fox-and-cubs) (Clust-y-llygoden Euraid). Old Hall pond and grounds, Cowbridge, SS991749, Rob & Linda Nottage, 28th Jun 2012.
- +135/28.02.6.© **Hieracium umbellatum** (Umbellate Hawkweed) (Heboglys Culddail). 36 Pencaecrwn Road, Gorseinon, SS58469949, Barry Stewart, 24th Aug 2012, unusually growing as an apparent bird seed alien in an area weeded clear 6 weeks previously! Identification to be confirmed from specimen; (+) Port Mead Common (Vi.oro. site), SS62679679, Barry Stewart, 10th Jul 2012, other general associates on Vi.oro. bank.
- +135/28.07.77. **Hieracium submutabile** (Variable Hawkweed). Cwm Ivy Tor, SS434940, Dave Green, 7th Jul 2012, limestone grassland SS4346694085. Det. question by T.C.G. Rich and D.G. as specimens did not compare well with herbarium sheets.
- *‡135/28.08.115. **Hieracium scotostictum** (Dappled Hawkweed). Swansea Enterprise Park, SS67139612, K.A. Pryce & R.D. Pryce, 14th Jun 2012, significant component of lichen-bryophyte community.
- +135/30.1. **Filago vulgaris** (Common Cudweed) (Edafeddog Lwyd). Open spoil, Creunant Tip, SN790055, Barry Stewart, 16th May 2012.
- ¤135/31.1. Antennaria dioica (Mountain Everlasting) (Edafeddog y Mynydd). Calcareous grassland, Twynau Gwynion, near Merthyr Tydfil, S00633611068, J.P. Woodman, 16th May 2012, 3 small colonies, all female; calcareous grassland, Morlais castle, SO0482609696, J.P. Woodman, 16th May 2012, single patch 100 x 50 cm; disused quarry floor, Twynau Gwynion, near Merthyr Tydfil, SO0651210434, Dave Green, conf. Dave Green, 12th Jun 2012, one patch 100 x 50 cm.
- +‡135/40.4.a. **Solidago gigantea ssp. serotina**. Resolven, SN8202, Charles & Hilary Hipkin, 26th Aug 2012.
- +‡135/44.2. **Conyza sumatrensis** (Guernsey Fleabane) (Amrhydlwyd Guernsey). ASDA roundabout and adjacent verges, SS594987, Barry Stewart, 23rd Nov 2011, http://moonmoths.blogspot.com/2011/11/gorseinon-conyza.html
- +‡135/44.flo. **Conyza floribunda** (Bilbao's Fleabane). Port Eynon (dunes and lane to hostel), SS467850, Barry Stewart, 21st Oct 2012; (+) Glyncorrwg Cycle Path, SS8697, Charles & Hilary Hipkin, 19th Aug 2012.

- +138/2.1.‡ **Stratiotes aloides** (Water-soldier) (Alaw Diosgo). Pond, Bedlinog Fishing Pond, SO087020, J.N. Davies, 6th Jun 2012.
- +‡138/6.1. **Lagarosiphon major** (Curly Waterweed) (Ffugalaw Crych). Pond, Alveley, SS426869, Barry Stewart, 25th Feb 2012; (+) garden pond, Hunter's Hollow, Penmaen, SS531887, Barry Stewart, 4th Jun 2012; (+) Ty-llwyd, Resolven, SN8301, Charles, Hilary & Mark Hipkin, 23th Mar 2012.
- +142/1.15. **Potamogeton berchtoldii** (Small Pondweed) (Dyfrllys Bach). Pond, Bedlinog Fishing Pond, SO087020, J.P. Woodman, 6th Jun 2012.
- +‡148/2.4. **Lemna minuta** (Least Duckweed) (Llinad Bach). Garden pond, Oxwich Green, SS495860, Barry Stewart, 11th Mar 2012; (+) garden pond at, Ty'n-y-cerig (buildings & surrounds), SN608073, Barry Stewart, 11th Jul 2012.
- +151/1.15.koc. **Juncus bulbosus ssp. kochii**. Glanrhyd, SN7104, Charles & Hilary Hipkin, 9th Jun 2012.
- ¤151/1.25×26. Juncus x diffusus (Diffuse Rush) (Brwynen Dryledol). Edge of pond/lake, Rhaslas Pond, SO0930706984, J.P. Woodman, 20th Sep 2011, single large colony.
- +151/1.26×27. **Juncus x kern-reichgeltii**. Marshy grassland, Moorlakes Wood, SS567904, Barry Stewart, 2nd Jun 2012.
- +152/07.2. **Schoenoplectus tabernaemontani** (Grey Club-rush) (Llafrwynen Arfor). Shallow ponds on spoil, Penstar Tip, SN860062, Barry Stewart, 24th Jul 2012.
- +152/11.1.‡ Cyperus longus (Galingale) (Ysnoden Fair). ©Pond area, Alveley, SS426869, B. Stewart & S.J. Stewart, 7th Sep 2012.
- +152/13.1. **Rhynchospora alba** (White Beak-sedge) (Corsfrwynen Wen). Soakway, Mynydd Maendy (south-west), SS9785, Mark Hipkin & Charles Hipkin, 16th Aug 2012.
- +152/16.09.a. **Carex divulsa ssp. divulsa** (Grey Sedge) (Hesgen Lwydlas). Verge, Horton, SS473857, Barry Stewart, 21st Aug 2012.
- +152/16.26 Carex riparia (Greater Pond-sedge) (Hesgen Braff-dywysennog). On verge of NE corner of crossroads, Pontardawe Road / Abernant crossroads, SN703086, Barry Stewart, 21st May 2012.
- +152/16.29. Carex vesicaria (Bladder-sedge) (Hesgen Chwysigennaidd). Pond, Cefn Gelligaer Common, SO09730721, J.N. Davies, conf. J.P. Woodman, 24th Jun 2012.
- +152/16.44×46.b. **Carex hostiana x viridula ssp. oedocarpa**. Crynant Forest, SN7903, Charles & Hilary Hipkin, 9th Aug 2012.
- +152/16.51. Carex caryophyllea (Spring-sedge) (Hesgen Gynnar). Burry Holms (Vome Hole), SS399925, Barry Stewart, 11th Aug 2012.
- +152/8.2. **Isolepis cernua** (Slender Club-rush) (Clwbfrwynen Fain). Ty'n-y-cwm, Mynydd Resolven, SN8402, Charles & Hilary Hipkin, 22nd Sep 2012, an interesting inland population. Field identification confirmed after microscopic examination of seed coats.
- +152/9.1. **Eleogiton fluitans** (Floating Club-rush) (Clwbfrwynen Arnofiol). Mynydd Maendy (southwest), SS9785, Mark Hipkin & Charles Hipkin, 16th Aug 2012.
- +153/16.2. **Puccinellia distans** (Reflexed Saltmarsh-grass) (Gwellt-y-morfa Atblygedig). Road verge, A470 slip road, Tongwynlais, ST1280382600, J.P. Woodman, 14th Aug 2012; (+) central road verge, North road, Cardiff, ST1576080410, J.P. Woodman, 19th Apr 2012.
- +153/17.1. **Briza media** (Quaking-grass) (Crydwellt). Bryn (East), SS8292, Charles & Hilary Hipkin, 7th Aug 2012.
- +153/21.1. Catapodium rigidum (Fern-grass) (Gwenithwellt Caled). Vegetated spoil, Criag y Bedw (Cwmdulais), SN621039, Barry Stewart, 18th Jul 2012.
- +153/21.2. Catapodium marinum (Sea Fern-grass) (Gwenithwellt y Morfa)). Road verge, A470 slip road, Tongwynlais, ST1280382600, J.P. Woodman, 14th Aug 2012.
- +†153/47.6. **Alopecurus myosuroides** (Black-grass) (Cynffonwellt Du). ©Bird seed alien, 36 Pencaecrwn Road, Gorseinon, SS58469949, Barry Stewart, 13th Jul 2012.
- +153/50.2. **Bromus commutatus** (Meadow Brome) (Pawrwellt y Ddôl). Old Hall pond and grounds, Cowbridge, SS991749, Rob & Linda Nottage, 7th Jun 2012.

- +153/56.cam.a. **Elytrigia campestris ssp. maritima** Scrubby soft cliff, Overton Mere, SS46298484, Barry Stewart, 28th Jul 2012; (+) dock edge, Brunel Dock: Area between tower and mitigation area, SS736935, Barry Stewart, 22th Jul 2012.
- +‡153/59.3.© **Hordeum jubatum** (Foxtail Barley) (Haidd Cribog). ‡Road verge, Llantwit Fardre, ST0760283945, J.P. Woodman, 16th Oct 2012, 2 plants.
- +158/14.1. **Polygonatum multiflorum** (Solomon's-seal) (Llysiau-Solomon). ©Naturalised in woodland along Rivet Tawe, Pontardawe, SN7304, Charles & Hilary Hipkin, 26th May 2012; (+) Glyn Castle, SN8302, Charles & Hilary Hipkin, 30th May 2012.
- +158/18.umb.umb. **Ornithogalum umbellatum ssp. umbellatum**. Glyn Neath Aberpergwm, SN8605, Charles & Hilary Hipkin, 23th May 2012, several plants naturalised in woodland along River Neath near Aberpergwm.
- +158/20.2×3. **Hyacinthoides x massartiana** (Clychau'r-gog Croesryw). Neath Canal & surrounds, Resolven, SN8403, Charles & Hilary Hipkin, 6th May 2012.
- +‡158/20.3. **Hyacinthoides hispanica** (Spanish Bluebell) (Clychau'r-gog Sbaenaidd). Clyne, River Neath & surrounds, SN8001, Charles & Hilary Hipkin, 31st Mar 2012, not differentiared from hybrid bluebell.
- +‡158/32.1. **Galanthus nivalis** (Snowdrop) (Eirlys). Pontardawe, SN7304, Charles & Hilary Hipkin, 25th Feb 2012.
- +158/35.1. **Ruscus aculeatus** (Butcher's-broom) (Celynnen Fair). †Woodland, Bullhouse (east wood), ST080671, Barry Stewart, 24th May 2012.
- +162/14.1. **Anacamptis pyramidalis** (Pyramidal Orchid) (Tegeirian Bera). Bryn Du and Llech Sychryd, SN9907, Martin Bevan, 4th Jul 2012, Mark Evans visited the site on 24/07/2012 and counted 37 flower spikes.
- *162/18.1×2. **Dactylorhiza x transiens**. Swansea Enterprise Park, SS67149625, K.A. Pryce & R.D. Pryce, 14th Jun 2012.
- +162/18.2×4. **Dactylorhiza x hallii**. Species-rich M25, NPT pSINC (Croeserw adj. to cemetery), SS870955, Barry Stewart, 18th Jun 2012

BRECON, v.c.42 (comm. M.Porter)

- +‡069/3.1. **Cyclamen hederifolium** (Sowbread) (Bara'r Hwch). Damp deciduous wood, 1.5 km W of Bwlch, SO163217, M. & C.Porter, 14th Sep 2012, two plants; probably garden outcast.
- +075/08.10.242. **Rubus longithyrsiger**. Scrub beside track, nr Craig y Nos, SN843157, M.& C.Porter, 30th Jul 2012; (+) hedge, 0.5km N of Llangenny, SO238184, M. & C.Porter, 20th Jul 2012.
- *‡075/21.01. **Rosa multiflora** (Many-flowered Rose) (Rhosyn Amlflodeuog). Field hedge, Gilwern, SO257154, M. & C.Porter, 4th Oct 2012, first record for vc42.Spread from amenity planting along A465, **Herb.M.P.**
- *‡075/32.35. Cotoneaster rehderi (Bullate Cotoneaster) (Cotoneaster Deilgrych Rehder). Scrub on hillside nr old limestone quarry, Blackrock, Cwm Clydach, SO212125, M. & C.Porter, 4th Oct 2012, 1st record for v.c.42. Several bushes, Herb.M.P.
- +079/2.3. **Myriophyllum spicatum** (Spiked Water-milfoil) (Myrdd-ddail Ysbigog). Pond in disused quarry, Dan-y-darren, Cefn Coed, SO024090, J.Crellin, 8th Aug 2012, update of pre1970 record.
- +‡085/1.3. **Cornus alba** (White Dogwood) (Cwyrosyn Rhisgl Coch). Rough grassland, Coelbren Common, SN842116, M. & C.Porter, 21st Oct 2012, 2nd record for v.c.42. Garden outcast, **Herb.M.P.**
- *091/2.07. **Euphorbia stricta** (Upright Spurge) (Llaethlys Syth). Road verge, Llangenny, SO237188, M. & C.Porter, 20th Jul 2012, 1st record for v.c. 42. Three plants on disturbed roadside, **Herb.M.P.**
- +†091/2.09. **Euphorbia lathyris** (Caper Spurge) (Llaethlys Caprys). Roadside bank, nr Waun-y-mynach Common, SO094297, D.A. Broughton, 12th Sep 2012.

- +‡093/2.1. **Parthenocissus quinquefolia** (Virginia-creeper) (Dringwr Fflamgoch). Wooded bank, Cwmgiedd, SN789124, M. & C.Porter, 23rd Jul 2012, 3rd record; garden outcast.
- +‡099/1.1. Acer platanoides (Norway Maple) (Masarnen Norwy). Canal towpath, Brecon, SO051280, B. Gibson & S.Coates, 11th Apr 2012, update of pre1970 record.
- +‡116/03.1. **Pulmonaria officinalis** (Lungwort) (Llysiau'r Ysgyfaint). Path along disused railway, Hayon-Wye, SO223422, J. Crellin, 10th Jun 2012.
- +†118/01.8. **Stachys arvensis** (Field Woundwort) (Briwlys y Tir Âr). Arable field, Talybont-on-Usk, SO108229, 102012, conf. FR, 0000, update of pre1987 record.
- ⊗125/2.08. Orobanche hederae (Ivy Broomrape) (Gorfanhadlen Eiddew). Shrub border in garden, Brecon, SO048287, K. & A. Noble, 13th Jul 2012; (⊗) base of wall and roadside bank, Brecon, SO049288, P.M.F. Benoy, 13th Jul 2012, second record, within 0.5 km of 1995 record.
- +‡129/1.4. **Campanula persicifolia** (Peach-leaved Bellflower) (Clychlys Meinddail). Disturbed road verge, nr Llangenny, SO237189, S. Coates, 2012.
- +‡131/3.orb×mic. **Symphoricarpos** × **chenaultii** (**S. microphyllus** × **S. orbiculatus**) (Hybrid Coralberry) (Llusen Gwrel Groesryw). Rough grassland, Coelbren Common, SN836119, M. & C. Porter, 21st Oct 2012, small thicket established on common, **Herb.M.P.**
- ⊗135/06.3×9. **Cirsium x forsteri**. Rough damp grassland, Waun-y-mynach Common, SO094297, D.A. Broughton, 12th Sep 2012, one plant with both parents nearby. First record since 1899.
- +135/22.2. **Lactuca virosa** (Great Lettuce) (Letusen Chwerw). Canal towpath, E of Llangynidr, SO179196, M. & C. Porter, 8th Aug 2012.
- *135/28.01.4. **Hieracium salticola** (Bluish-leaved Hawkweed). Disused railway, Llyswen, SO142383, M. Porter, det.D.J. McCosh (2012), 10th Aug 1978, first record for v.c.42, **Herb.M.P.**
- *‡135/28.08.115. Hieracium scotostictum (Dappled Hawkweed). Gravel paths in garden, Crickhowell, SO218192, S. Furber, det.D.J. McCosh (2012), 19th May 2009, first record for v.c.42. Not deliberately introduced, but well established, Herb.M.P.
- +‡135/44.1. **Conyza canadensis** (Canadian Fleabane) (Amrhydlwyd Canada). Hay-on-Wye pavement, Hay-on-Wye, SO227421, J. Crellin, 25th Oct 2012; (+) edge of car park, Hay-on-Wye, SO229422, M. & C. Porter, 8th Sep 2012.
- +‡135/80.2. **Galinsoga quadriradiata** (Shaggy-soldier) (Galinsoga Blewog). Path along disused railway, Hay-on-Wye, SO226422, J. Crellin, 10th Jun 2012.
- +137/4.2. **Alisma lanceolatum** (Narrow-leaved Water-plantain) (Llyriad-y-d^r Culddail). Canal, E of Llangynidr, SO179196, M. & C. Porter, 8th Aug 2012.
- +‡138/6.1. **Lagarosiphon major** (Curly Waterweed) (Ffugalaw Crych). Pond in disused quarry, Cefn Coed, SO024090, J. Crellin, 8th Aug 2012.
- *‡153/62.1. Cortaderia selloana (Pampas-grass) (Peithwellt). Rough grassland, Coelbren Common, SN842116, M. & C. Porter, 21st Oct 2012, first record for v.c.42. Established from garden outcast, Herb.M.P.; (+) disused quarry, Blackrock, Cwm Clydach, SO213124, M. & C. Porter, 4th Oct 2012, 2nd record for v.c.42. Garden outcast.
- +‡158/25.1. **Nectaroscordum siculum** (Honey Garlic) (Garlleg y Mêl). Path along disused railway, Hay-on-Wye, SO228425, J. Crellin, 10th Jun 2012.
- *©159/05.04×vir. **Iris x robusta** (Windermere Iris) (Gellesgen Windermere). Marshy pasture, 1km E of Garth, SN964494, J. Crellin, 2012, established from planted clump.

RADNOR, v.c.43 (comm. Miss E.R.Dean & Mrs S.M.Spencer)

- *047/8.13×19. **Rumex x pratensis** (Meadow Dock) (Tafol y Maes). Riverside, Glasbury, SO179392, E.R. Dean & S.M. Spencer, 4th Sep 2012, under road bridge over the Wye.
- *109/1.3.oxy. Vinca major var. oxyloba. Hedgerow, Glasbury, SO181387, E.R. Dean & S.M. Spencer, 7th Apr 2012, garden escape.

- *‡124/01.01 **Verbascum blattaria** (Moth Mullein) (Pannog y Gwyfyn). Base of stone wall, Builth Wells showground, SO040521, Andy Shaw, 2012, numerous plants.
- *148/2.1. **Lemna gibba** (Fat Duckweed) (Llinad Crythog). Lake, Llandrindod Lake, SO062602, Andy Shaw, 2012, very small quantity in a number of areas.

CARMARTHEN, v.c.44 (comm. R.D.Pryce)

- +001/3.1. **Lycopodium clavatum** (Stag's-horn Clubmoss) (Cnwp-fwsogl Corn Carw). Vegetated grit quarry, Mynydd Du: east of Pen Rhiw-ddu, SN73061879, BSBI Meeting, det.S.D.S. Bosanquet, 19th Jul 2012, three patches: 1m x 0.5m, 0.3m x 0.1m and 1m x 0.5m.
- +001/4.1. **Diphasiastrum alpinum** (Alpine Clubmoss) (Cnwp-fwsogl Alpaidd). Vegetated grit quarry, Mynydd Du: east of Pen Rhiw-ddu, SN73061879, BSBI Meeting, det.S.D.S. Bosanquet, conf. A.O. Chater, 19th Jul 2012, three patches: the first Carms sites away from Mynydd Mallaen and representing a southern and south-western extension in range by some 30km.
- +015/2.5.a. **Asplenium trichomanes ssp. trichomanes** (a subspecies of Maidenhair Spleenwort). Acidic rock faces of quarry, Llanddowror, track to Pant yr Huad, SN22931240, I.K. Morgan, 14th Feb 2012, several plants; (+) on rock outcrops and portion of old wall, Allt-y-Gwydre, SN80022720, I.K. Morgan & R.N. Stringer, det.I.K. Morgan, 23th Aug 2012, growing on natural rock. First record for Carms part of hectad.
- +017/1.1×2. **Polystichum x bicknellii**. Valley woodland, Ystradowen, SN75491240, R.D. Pryce & K.A. Pryce, det.R.D. Pryce, 31st Mar 2012, also at SN75501241: one or two plants with both parents in both locations.
- +017/3.08×09. **Dryopteris x deweveri**. Basin mire, Mynydd Figyn, SN588300, I.K. Morgan, 11th Jul 2012, growing with parents.
- +‡028/09.hup×vit. **Anemone x hybrida** (Japanese Anemone) (Blodyn-y-gwynt Japaneaidd). Boundary hedge of minor road, Cynheidre, SN491078, I.K. Morgan, 12th Sep 2012, small clump on NW side of minor road. 2nd v.c.r. in the wild.
- +033/1.1.1. **Ulmus glabra** (Wych Elm) (Llwyfen Lydanddail). Rock outcrop, Allt-y-Gwydre, SN80022720, I.K. Morgan & R.N. Stringer, 23rd Aug 2012, first record for Carms part of hectad.
- +†043/1.13. **Chenopodium ficifolium** (Fig-leaved Goosefoot) (Troed-yr-Wydd Ffigys-ddail). Disturbed ground, Cwmcrwyth Farm, Broad Oak, SN57612489, Fiona Park, R.D. & K.A. Pryce, 11th Sep 2012, one plant in bare soil under fence at edge of pig pen. Also on 22/9/2012, 3 plants in bare, poached ground by barn at Typicca, Dryslwyn, SN53822061.
- +©043/1.qui. **Chenopodium quinoa** (Quinoa). Hedgebank by dung heap, Pont Cydrych, SN49491518, R.D. Pryce, det.J.P. Poland, 19th Jul 2012, abundant over >10m of the western, stone faced hedgebank of roadside layby used for storage of dung, against which the dung has been piled.
- +043/7.2. **Suaeda maritima** (Annual Sea-blite) (Helys Unflwydd). At base of steep dune front above strandline, Pembrey Country Park, SS39909996, R.D. Pryce & K.A. Pryce, 28th May 2012, frequent locally, with many seedlings.
- +‡046/18.1. **Lychnis coronaria** (Rose Campion) (Lluglys Gwridog). Roadside, Tumble, Heol Hirwaun Olau, SN53861247, I.K. Morgan, 15th Mar 2012, many plants dumped at end of road and all growing well.
- *046/25.car.© **Dianthus carthusianorum** (Carthusian Pink). Gravel paths in garden, Ty'r-Maes, Ffarmers, SN64604263, R.D. Pryce & K.A. Pryce, det.John Brooks, 9th Jun 2012, abundantly self-sowing in gravel paths around garden from original sowing many years ago by the owner John Brooks.
- +†047/4.6. **Polygonum rurivagum** (Cornfield Knotgrass) (Canclwm y Tir Âr). Edge of barley field, Penlan Farms, Kidwelly, SN39830782, BSBI Meeting, det.A.O. Chater & G.M. Kay, 18th Jul 2012, locally frequent.

- +047/8.10. **Rumex hydrolapathum** (Water Dock) (Tafol y Dwr). Bank of Afon Dulais, Pont Cydrych, nr. Cwmisfael, SN49511515, R.D. Pryce, 19th Jul 2012, rare.
- +047/8.13.b. **Rumex crispus ssp. littoreus** (a subspecies of Curled Dock). Ungrazed upper saltmarsh, Whitehill Down, SN28941387, BSBI Meeting, det.R.D. Pryce, 20th Jul 2012, occasional; also at SN28981395 and SN28981397.
- ¤050/1.1. Elatine hexandra (Six-stamened Waterwort) (Gwybybyr Chwebrigerog). Kettle-hole lake, Llyn Pencarreg, SN5345, M. Jenkins, det.S.D.S. Bosanquet, 18th Sep 2012, second v.c. record, NMW.
- ¤062/12.3. Rorippa islandica (Northern Yellow-cress) (Berwr Melyn Gogleddol). Crack in concrete surfaced yard, Henfryn Farm, Pentrecwrt, SN38203902, A.O. Chater, R.D. & K.A. Pryce, 17th Sep 2012, a few plants only. First record for Carms part of hectad.
- +‡062/14.4. Cardamine raphanifolia (Greater Cuckooflower) (Blodyn Llefrith Mawr). Banks of streamlet, Stradey Woods, Llanelli, SN490016, I.K. Morgan, 2nd May 2012, naturalised alongside a trackside streamlet. Also a plant naturalized on a schoal in the centre of the Cille Stream inlet to Sandy Water Park lake at SN49700045 was recorded on the same day by R.D. Pryce.
- +062/23.5. **Cochlearia danica** (Danish Scurvygrass) (Llwylys Denmarc). Bare ground, Ystradowen School (disused), SN75231229, R.D. Pryce & K.A. Pryce, 31th Mar 2012, frequent in angle between base of wall and tarmac play-ground.
- +‡062/8.1. **Hesperis matronalis** (Dame's-violet) (Croes yr Hwyr). Disturbed soil mounds, Pembrey Country Park, SS40919972, R.D. Pryce & K.A. Pryce, 28th May 2012, five large stands of white flowered plants. First record for Carms part of hectad.
- +†063/1.1. **Reseda luteola** (Weld) (Melengu). Partly vegetated shingle shoal by Afon Tywi, Ro-fawr Farm, Cilsan, SN57612037, R.D. Pryce & K.A. Pryce, 29th Sep 2012, one plant.
- +063/1.3. **Reseda lutea** (Wild Mignonette) (Melengu Wyllt Ddi-sawr). Disturbed soil by railway, layby near Bromyrddyn School, Carmarthen, SN40811797, R.D. Pryce & K.A. Pryce, 4th Jun 2012, one plant.
- +069/1.1×3. **Primula x polyantha** (False Oxlip) (Briallen Groesryw). Rank, scrubby area disturbed in past, Whitehill Down, SN28991352, R. Harding, A. Heath and K.A. & R.D. Pryce, det.R.D. Pryce, 14th May 2012, few spontaneous clumps; also at SN29171307 and SN29341308. Primula veris locally frequent in vicinity but P. vulgaris not seen; (+) grass-dominated hedgebank, Llansaint School, SN38660846, R.D. Pryce, 10th Apr 2012, Primula vulgaris frequent and one plant of apparently self-arisen Primula x polyantha, although no P. veris seen.
- +‡074/08.1. **Tellima grandiflora** (Fringecups) (Clychau'r Clawdd). Banks of stream, Nant-gwyn, Bwlchnewydd, SN36722383, R.D. Pryce & K.A. Pryce, 4th Jun 2012, naturalized plant on north bank and a larger plant on south bank. Tolmeia menziesii also naturalized in vicinity.
- +075/09.13.b. **Potentilla erecta ssp. strictissima** (a subspecies of Tormentil). Acid grassland, Mynydd Figyn, SN588300, I.K. Morgan, 11th Jul 2012.
- +075/09.13×14. **Potentilla x suberecta**. Disturbed secondary marshy grassland, site of new Furnace C.P.School, Llanelli, SN49750123, R. Pryce, J. & P.Hartley, det. R.D. Pryce, 27th Jul 2012, several plants in this vicinity, site since destroyed by construction work, **NMW**; (+) dry-damp, acid grassland on rampart between 'pingos', Helfa Hall, Llanpumsaint, SN42182764, BSBI Meeting, det.A.O. Chater & G.M. Kay, conf. J.P. Poland, 16th Jul 2012, one sprawling plant; (+) dry, quite species-rich MG5/6 hay meadow, Pentwyn, Capel Isaac, SN58052637, B.J. & D. Wright and K.A. & R.D. Pryce, det.R.D. Pryce, 22nd Jul 2012, also at SN58082634: single plants at each location, **NMW**.
- +‡075/21.05.06. **Rosa rugosa** (Japanese Rose) (Rhosyn Japan). Dune scrub, Pembrey Country Park, SS39959995, R.D. Pryce & K.A. Pryce, 28th May 2012, dense stand, deep pink flowered plants on rear of second, tall dune ridge back from beach, sabilized by scrub.
- +†075/22.05.b. **Prunus domestica ssp. insititia** (a subspecies of Wild Plum) (Coeden Eirin Bwlas). Trackside hedge, Henfryn Farm, Pentrecwrt, SN38163910, A.O. Chater, R.D. & K.A. Pryce, det.A.O. Chater, 17th Sep 2012, large uncut bush.

- +‡075/32.11×18. **Cotoneaster x suecicus** (Swedish Cotoneaster) (Cotoneaster Sweden). On old Pennant Sandstone wall, Robinson St, Llanelli, SN507001, I.K. Morgan, 26th Sep 2012, self-sown into wall from adjacent garden.
- *‡075/33.1. **Pyracantha coccinea** (Firethorn) (Llosgddraenen). Scrub, Ammanford, SN633119, I.K. Morgan & R.N. Stringer, 10th Oct 2012, growing in riverside scrub alongside path; presumed bird sown.
- +084/1.01×02. **Epilobium x subhirsutum**. Disturbed secondary marshy grassland, site of new Furnace C.P.School, Llanelli, SN49690115, R. Pryce, J. & P.Hartley, det.R.D. Pryce, 27th Jul 2012, locally frequent; site since destroyed by construction work, **NMW**.
- +084/1.02×09. **Epilobium x rivulare**. Dry rampart of 'pingo' mire, Helfa Hall, Llanpumsaint, SN42142753, BSBI Meeting, det.A.O. Chater, 16th Jul 2012, a few plants. Two plants also noted at SN41992763.
- +084/1.06×08. **Epilobium ciliatum x obscurum**. Hedgebank, Henfryn, Pentrecwrt, SN37833913, A.O. Chater, R.D. & K.A. Pryce, det.A.O. Chater, 17th Sep 2012.
- +084/1.07. **Epilobium roseum** (Pale Willowherb) (Helyglys Gwelw). Bridleway from Oaklands Cottage to Cwm Ffrwd Uchaf., SN41i, Chris Cheffings & Guy Moss, 19th Jul 2012.
- +084/4.1×4a. **Oenothera cambrica [f] x Oenothera glazioviana [m]**. Mown dune grassland, Laugharne Burrows, western end of MoD C9 Track, SN26940740, BSBI Meeting, det. Rose Murphy, 15th Jul 2012, one plant. Second confirmed Carms record.
- +103/2.1. **Erodium maritimum** (Sea Stork's-bill) (Pig-y-crëyr Arfor). Bare shifting dune sand and limestone blockstone sea defences, Laugharne Burrows: MoD East 5 Range, SN31170704, BSBI Meeting, 15th Jul 2012, rare on remnant of forward dune ridge to south of buildings at south end of range. Also at SN31080704.
- *103/2.cor×rei.© **Erodium x variabile**. Steep, south-facing graveyard, Holy Trinity Church, Pwll, Llanelli, SN48050115, R.D. Pryce & K.A. Pryce, det.R.D. Pryce, 3rd Aug 2012, naturalized locally in churchyard.
- +107/19.5. **Oenanthe crocata** (Hemlock Water-dropwort) (Cegid.y Dwr). Yellow dune ridge dominated by Ammophila, c15-20% bare sand, Pembrey Country Park, SS39919997, R.D. Pryce & K.A. Pryce, 28th May 2012, one small plant, presumably originated as sea-borne material washed up on strandline. Another plant at SS39989991.
- *107/29.2. **Petroselinum segetum** (Corn Parsley) (Eilunberllys). Locally frequent over castle mound and on some river banks. Specimen grown on and material kept for herbarium at NMW, Newcastle Emlyn Castle, SN31144072, Andrew Stevens, 2nd May 2012, locally frequent over castle mound and on some river banks. First recorded here (but never confirmed by referee) by Tony and Viv Lewis and since seen by other observers who have referred it to various species including Sison amomum and Pertroselinum crispum. Specimen grown on and material kept for NMW.
- +107/43.1. **Torilis japonica** (Upright Hedge-parsley) (Troed-y-cyw Talsyth). Rock outcrop, Allty-Gwydre, SN80022720, I.K. Morgan & R.N. Stringer, 23rd Aug 2012, first record for Carms part of hectad.
- +116/04.3.‡ **Symphytum tuberosum** (Tuberous Comfrey) (Cyfardwf Glorog). Wet woodland, South of Furnace Pond, Llanelli, SN50470174, I.K. Morgan, 8th May 2012, frequently naturalized on both sides of shady track and on overgrown disused quarry floor. Known from here for at least twenty years.
- +116/15.10. **Myosotis discolor** (Changing Forget-me-not) (Sgorpionllys y Amryliw). Disturbed ground around buildings, Welsh Museum of Childhood, Pen-ffynnon, Llangeler, SN36604001, R.D. Pryce & K.A. Pryce, 25th May 2012, rare. First record for Carms part of hectad.
- +†118/05.4. **Lamium hybridum** (Cut-leaved Dead-nettle) (Marddanhadlen Dorddail). Rank weedy vegetation on stable arisings, Pembrey Country Park, SS40959966, R.D. Pryce & K.A. Pryce, 28th May 2012, first record for Carms part of hectad.

- +‡118/23.1×2×3. **Mentha x smithiana** (Tall Mint) (Mintys Coch). Bank of Afon Teifi, Henfryn Farm, Pentrecwrt, SN37843930, A.O. Chater, R.D. & K.A. Pryce, det.A.O. Chater, 17th Sep 2012, few plants.
- +118/23.1×3. **Mentha x gracilis** (Bushy Mint) (Mintys Culddail). Shingle island in Afon Teifi colonised by Phalaris arundinacea, Henfryn Farm, Pentrecwrt, SN37973926, A.O. Chater, R.D. & K.A. Pryce, det.A.O. Chater, 17th Sep 2012, locally frequent. First record for Carms part of hectad.
- +‡118/24.1. **Rosmarinus officinalis** (Rosemary) (Rhosmari). Stone boundary wall, Backlane leading north from Old Castle Road, Llanelli, SN501002, I.K. Morgan, 18th Dec 2012, one plant self-sown into wall mortar.
- +120/1.ham.agg. Callitriche hamulata (Intermediate Water-starwort) (Brigwlydd Cyfryngol). In Afon Teifi, Henfryn Farm, Pentrecwrt, SN38013922, A.O. Chater, R.D. & K.A. Pryce, conf. A.O. Chater, 17th Sep 2012, occasional; also at SN37973926 and SN37903928. First records for Carms part of hectad.
- *124/03.2. **Phygelius aequalis** (Yellow Trumpet). Disturbed dune grassland, Ferryside, SN36521029, R.D. & K.A. Pryce, 9th Aug 2012, established from garden throw-out on disturbed dune grassland between railway and high-tide line 100m south-west of level crossing.
- +‡124/11.2. **Cymbalaria pallida** (Italian Toadflax) (Trwyn-y-llo-dail-Eiddew yr Eidal). In gravel driveway, 13 Pine Tree Close, Burry Port, SN45180101, R.D. & K.A. Pryce & P.A. Jones, 17th May 2012, numerous self-sown plants.
- +‡124/16.18. **Veronica peregrina** (American Speedwell) (Rhwyddlwyn America). Trackside outside plant nursery, Cwmffrwd, SN43471791, Chris Cheffings & Guy Moss, 19th Jul 2012, about 4sq m with hundreds of tiny plants. 4th v.c. record.
- +130/6.03. **Galium uliginosum** (Fen Bedstraw) (Briwydd y Fign). Carboniferous Limestone outcrop, Western end of eastern cliffs of Blaen-y-Cylchau, Mynydd Du, SN76291876, BSBI Meeting, det.T.C.G. Rich, 19th Jul 2012, one plant at west end of cliff. First record for Carms part of hectad, **NMW**.
- +135/25.01.3. **Taraxacum argutum** (Sharp-toothed Dandelion). Disused limestone quarry, Crwbin Quarry, SN47701342, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 19th Apr 2009, **NMW**; (+) demolished colliery site, disused Cynheidre Colliery (3 & 4 shafts), SN52541055, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 17th Apr 2011, **NMW**.
- *135/25.01.7. **Taraxacum degelii** (Degelius's Dandelion). Demolished colliery site, disused Cynheidre Colliery (3 & 4 shafts), SN52621064, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 17th Apr 2011, 1st v.c. record, **NMW**.
- +135/25.04.35. **Taraxacum faeroense** (Faeroes Dandelion). Upland, acid rock crag, Foel Fawr, Mynydd Du, SN74141892, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 31st May 2009, **NMW**.
- +135/25.05.44. **Taraxacum richardsianum** (Richards's Dandelion). Damp, semi-improved grassland, Pwlledrychiad, Carmel, SN58491597, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 25th Apr 2011, 2nd v.c. record, **NMW**; (*) upland, limestone cliffs by waterfall, Foel Fawr, Mynydd Du, SN74261892, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 31st May 2009, 1st v.c. record, **NMW**.
- +135/25.05.45. **Taraxacum stictophyllum** (Stiff-leaved Dandelion). Demolished colliery site, disused Cynheidre Colliery (3 & 4 shafts), SN52671067, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 17th Apr 2011, 2nd v.c. record, **NMW**.
- +135/25.07.55. **Taraxacum bracteatum** (Dark-green Dandelion). Woodland edge, Pant-y-Llyn Farm, Abernant, SN34752574, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 8th May 2010, **NMW**.
- +135/25.07.56. **Taraxacum britannicum** (British Dandelion). Woodland edge, Coed Ystrad, Alltycnap, Carmarthen, SN39571870, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 29th May 2011, **NMW.**

- +135/25.07.58 **Taraxacum cambricum** (Welsh Dandelion). Coastal dune grassland, Tywyn Point, SN36330562, RAF Pembrey Sands Conservation Group, det.A.J. Richards Dec 2012, 13th Apr 2011, 2nd v.c. record, **NMW**.
- +135/25.07.59 **Taraxacum celticum** (Celtic Dandelion). Woodland clearing, Bwlchau, Carmel, SN59491629, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 23rd Apr 2011, **NMW**; (+) roadside verge, Banc Du, Mynydd Llanybydder, SN53734051, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 3rd May 2010, **NMW**.
- +135/25.07.64. **Taraxacum gelertii** (Gelert's Dandelion). Stream-bank below road bridge, National Woollen Museum, Drefach-Felindre, SN354391, T.C.G Rich, det.A.J. Richards Dec 2012, 2nd Apr 2009, **NMW**.
- +135/25.07.69. **Taraxacum lancastriense** (Lancashire Dandelion). Colliery spoil, Disused Cynheidre colliery (3 & 4 shafts), SN52751094, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 17th Apr 2011, **NMW**.
- +135/25.07.72. **Taraxacum nordstedtii** (Nordstedt's Dandelion). Stream-bank below road bridge, National Woollen Museum, Drefach-Felindre, SN354391, T.C.G Rich, det.A.J. Richards Dec 2012, 2nd Apr 2009, **NMW**.
- +135/25.07.78. **Taraxacum porteri** (Porter's Dandelion). Stream-bank below road bridge, National Woollen Museum, Drefach-Felindre, SN354391, T.C.G. Rich, det.A.J. Richards Dec 2012, 2nd Apr 2009, **NMW**.
- +135/25.07.80. Taraxacum subbracteatum (Dark-bracted Dandelion). Semi-improved neutral grassland, Cwm Farm, nr.Trelech, SN26202788, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 17th May 2010, NMW; (+) roadside verge, Brynhawddgar, Cilsan, SN59852327, Wildlife Trust of South and West Wales meeting, det. A.J. Richards Dec 2012, 30th Apr 2011, NMW; (+) disused limestone quarry, Glan Gwenlais Quarry, Pentregwenlais, SN60381651, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 10th Apr 2011, NMW; (+) edge of oxbow lake, Afon Tywi floodplain, Dinefwr Park, Llandeilo, SN60822215, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 30th Apr 2011, NMW.
- +135/25.08.84. **Taraxacum atactum** (Narrow-bracted Dandelion). Trackside in woodland, Allt Goch, Cenarth, SN25944156, A.O. Chater, R.D. & K.A. Pryce, det.A.J. Richards Dec 2012, 4th May 2011, **NMW**; (+) grassland on limestone, Pwllydrychiad, Carmel, SN58281613, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 25th Apr 2011, **NMW**.
- +135/25.08.85. **Taraxacum boekmanii** (Bokman's Dandelion). Grassy clearing at edge of wood, Tregyb Wood, Llandeilo, SN64292136, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 14th Apr 2011, **NMW**.
- +135/25.08.87. **Taraxacum hamatiforme** (Asymmetrical Hook-lobed Dandelion). Grassland, National Woollen Museum, Drefach-Felindre, SN354391, T.C.G Rich, det.A.J. Richards Dec 2012, 2nd Apr 2009, **NMW**.
- +‡135/25.08.92. **Taraxacum lamprophyllum** (Lustrous-leaved Dandelion). By path in limestone woodland, Garnffrwd, Drefach, SN50941446, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 28th Apr 2011, **NMW**.
- +135/25.08.94. **Taraxacum marklundii** (Marklund's Dandelion). Grassland, National Woollen Museum, Drefach-Felindre, SN354391, T.C.G Rich, det.A.J. Richards Dec 2012, 2nd Apr 2009, **NMW**.
- +135/25.08.98. Taraxacum pseudohamatum (False Hook-lobed Dandelion). Semi-improved neutral grassland, Cwm Farm, nr.Trelech, SN26202788, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 17th May 2010, NMW; (+) by path through beech wood by Afon Teifi, Allt Goch, Cenarth, SN25974163, A.O. Chater, R.D. & K.A. Pryce, det.A.J. Richards Dec 2012, 4th May 2011, NMW; (+) vegetated rubble, site of Penwaunynys Farm, nr.Brynamman, SN70221411, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 12th Apr 2009, NMW.

- +135/25.08.99. **Taraxacum quadrans** (Fleshy-lobed Dandelion). Rocks by stream, National Woollen Museum, Drefach-Felindre, SN354391, T.C.G Rich, det.A.J. Richards Dec 2012, 2nd Apr 2009, **NMW**.
- +135/25.08.sah. **Taraxacum sahlinianum** (Sahlin's Dandelion). Wild area of garden, Pant-y-Llyn Farm, Abernant, SN34822565, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 8th May 2010, **NMW.**
- +135/25.09.108. **Taraxacum alatum** (Green Dandelion). Demolished colliery site, disused Cynheidre Colliery (3 & 4 shafts), SN52621064, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 17th Apr 2011, **NMW**.
- *‡135/25.09.109. **Taraxacum altissimum** (Tall Dandelion). Garden weed, Pwll, Llanelli, SN47690118, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 18th Apr 2011, v.c. Recorder's garden. 1st v.c. record, **NMW**.
- +135/25.09.111. **Taraxacum ancistrolobum** (Few-lobed Dandelion). Disturbed ground, Ffos Las, Trimsaran, SN45370541, B.Stewart, R.D. & K.A. Pryce, det.A.J. Richards Dec 2012, 11th Apr 2011, **NMW.**
- +‡135/25.09.113. **Taraxacum angustisquameum** (Multilobed Dandelion). Semi-improved neutral grassland, Maesycrygiau Churchyard, SN47334128, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 25th Mar 2011, 2nd v.c. record, **NMW**.
- +135/25.09.130. **Taraxacum dilatatum** (Grassland Dandelion). Garden weed, Pwll, Llanelli, SN47710120, R.D. Pryce, det.A.J. Richards Dec 2012, 16th Apr 2011, v.c. Recorder's garden, **NMW**; (+) demolished colliery site, disused Cynheidre Colliery (3 & 4 shafts), SN52631075, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 17th Apr 2011, **NMW**.
- +135/25.09.139. **Taraxacum hexhamense** (Hexham Dandelion). Roadside bank on limestone, Torcoed Woods, SN49481414, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 18th Apr 2009, 1st hectad record, **NMW**.
- +‡135/25.09.145. **Taraxacum intumescens** (Red-tipped Dandelion). Roadside verge, Hafodneddyn, Pentrefelin, SN59622394, Wildlife Trust of South and West Wales meeting, det.A.J. Richards Dec 2012, 30th Apr 2011, **NMW**; (+) by track in limestone woodland, Glan Gwenlais Quarry, SN60351635, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 10th Apr 2011, **NMW**.
- +135/25.09.150. **Taraxacum laticordatum** (Decumbent Dandelion). By path in limestone woodland, Garnffrwd, Drefach, SN50961445, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 28th Apr 2011, **NMW**.
- *135/25.09.151. **Taraxacum latisectum** (Broad-lobed Dandelion). Garden weed, Pwll, Llanelli, SN47710120, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 1st May 2010, v.c. Recorder's garden. 1st v.c. record, **NMW**.
- +135/25.09.195. **Taraxacum sagittipotens** (Smooth Dandelion). Surface of green lane, Garnffrwd, Drefach, SN51051449, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 28th Apr 2011, 2nd v.c. record, **NMW**; (*) unimproved, dry, acid grassland, Castell Du, Betws, SN65441163, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 3rd May 2009, 1st v.c. record, **NMW**.
- +135/25.09.203. **Taraxacum subcyanolepis** (Reddish-bracted Dandelion). Wooded bank of Afon Duar, by footbridge, Llanybydder, SN52744389, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 3rd May 2010, **NMW**.
- +135/25.09.207. **Taraxacum sublaeticolor** (Small-headed Dandelion). Edge of oxbow lake, Afon Tywi floodplain, Dinefwr Park, Llandeilo, SN60822215, R.D. Pryce & K.A. Pryce, det.A.J. Richards Dec 2012, 30th Apr 2011, **NMW**.
- *135/28.07.80.© **Hieracium maculoides** (Small-spotted Hawkweed). Gravel paths in garden, Glan-yr-Afon, Salem, SN60432749, R.D. Pryce & K.A. Pryce, 8th Jul 2012, abundantly self-sown and spreading.
- +135/28.08.129. **Hieracium pellucidum** (Pellucid-leaved Hawkweed). Carboniferous Limestone crags, Blaen-y-Cylchau, Mynydd Du, SN763187, S.D.S. Bosanquet, det.T.C.G. Rich, conf. D. McCosh July 2012, 19th Jul 2012, first Carms record away from Llyn-y-Fan cliffs, **NMW**.

- +135/40.4. **Solidago gigantea** (Early Goldenrod) (Eurwialen Gynnar). Sparsely vegetated shoal by Afon Tywi, Ro-fawr Farm, Cilsan, SN57562042, R.D. Pryce & K.A. Pryce, 29th Sep 2012, at least two plants in flower.
- +‡135/43.4. **Erigeron karvinskianus** (Mexican Fleabane) (Amrhydlwyd y Cerrig). Hedgerow, South of Garn, SN513139, I.K. Morgan, 12th Sep 2012, spreading from cottage garden to adjacent wall and hedge-bottom.
- +©135/55.aus. **Anthemis austriaca** (Austrian Chamomile). Cereal field headland, Penlan Farms, SN40840852, R.D. Pryce & K.A. Pryce, det.R.D. Pryce, 2nd Jun 2012, two self-sown plants derived from previous year's sown 'bird-seed mix' field-margin. Also seven self-sown plants in weedy field corner at SN41000857 and one self-sown plant in farm yard at SN41050858, **NMW**.
- *‡135/71.2. **Petasites japonicus** (Giant Butterbur) (Yr Alan Mwyaf). Dry pond bank, Old Castle Pond, Llanelli [east side], SN50080040, I.K. Morgan, 27th Apr 2012, large, well-established stand, presumably has been there for years but cut down by mowing.
- +‡135/79.2×pau. **Helianthus x laetiflorus** (Perennial Sunflower) (Blodyn-yr-haul Lluosflwydd). Burry Port, (probably SN40k), H.J. Riddelsdell, det. M.A. Spencer, Sep 1902, apparently the earliest British record, **BM.**
- +‡138/6.1. **Lagarosiphon major** (Curly Waterweed) (Ffugalaw Crych). Enclosed pond in OS0430 with floating Potamogeton natans and abundant submerged Lagarosiphon, Pentwyn, Capel Isaac, SN58062632, B.J. & D. Wright and K.A. & R.D. Pryce, det.R.D. Pryce, 22nd Jul 2012, abundant, originating from introduction c.2 years previously.
- +142/1.15. **Potamogeton berchtoldii** (Small Pondweed) (Dyfrllys Bach). Small pond in shoal of Afon Teifi, Henfryn Farm, Pentrecwrt, SN37983923, A.O. Chater, R.D. & K.A. Pryce, det.A.O. Chater, 17th Sep 2012, small pond at west end of Impatiens glandulifera thicket under large Fraxinus excelsior. Potamogeton berchtoldii specimen collected, occurrence rare, **NMW**.
- *‡147/2.2. Lysichiton camtschatcensis (Asian Skunk-cabbage) (Pidyn-y-gog Asiaidd). Wet woodland, Stradey Woods, Llanelli, SN490016, I.K. Morgan, 2nd May 2012, planted and persisting by streamlet.
- +148/2.3. **Lemna trisulca** (Ivy-leaved Duckweed) (Llinad Dail Eiddew). West end of lake, Waun las Farm, Merthyr, SN35712098, West Wales Biodiversity Information Centre Recording Meeting, det.R.D. Pryce, 9th Aug 2012, locally abundant; (+) shady limestone quarry pond, Pistyll Quarry, nr Llandybie., SN624167, I.K. Morgan & R.N. Stringer, 8th Aug 2012.
- +151/1.26×27. **Juncus x kern-reichgeltii**. Oligotrophic pingo mire, Helfa Hall, Llanpumsaint, SN42052752, BSBI Meeting, det.R.D. Pryce, conf. A.O. Chater, 16th Jul 2012.
- +152/16.25. Carex acutiformis (Lesser Pond-sedge) (Hesgen Ganolig-dywysennog). North end of dry oxbow, Tywi valley, Typicca, Dryslwyn, SN53762080, R.D. Pryce & K.A. Pryce, det.R.D. Pryce, 22nd Sep 2012, also on shoal at SN53492080 and on 29/9/2012 in flood plain ponds and ditches at Ro-fawr, Cilsan at SN57582047, SN57632047 and SN57672055.
- +152/16.26 **Carex riparia** (Greater Pond-sedge) (Hesgen Braff-dywysennog). Floodplain pond, Dinefwr Oxbows, Tywi valley, SN60542221, R.D. Pryce & K.A. Pryce, det.R.D. Pryce, 15th Sep 2012, very small stand at NW edge of pond.
- +152/16.44×46. **Carex x fulva**. Wet flushed grassland with abundant Carum verticillatum, Whitehill Down, SN28831363, BSBI Meeting, det.R.D. Pryce, conf. A.O. Chater, 20th Jul 2012, only one plant seen.
- +153/11.1. **Milium effusum** (Wood Millet) (Miledwellt y Coed). Streamside woodland, Welsh Museum of Childhood, Pen-ffynnon, Llangeler, SN36513989, R.D. Pryce & K.A. Pryce, 25th May 2012, a few clumps only.
- +153/13.1×2.‡ **Lolium x boucheanum**. Headland along southern side of barley field, Penlan Farms, Kidwelly, SN39980768, BSBI Meeting, det.A.O. Chater, 18th Jul 2012, several plants with both parents.

- +153/24.2×3. **Glyceria fluitans x declinata**. Vegetated oxbow on Tywi flood plain, Ro-fawr, Cilsan, SN57672055, R.D. Pryce & K.A. Pryce, 29th Sep 2012, abundant over several sq.m, both parents nearby.
- +153/26.1. **Helictotrichon pubescens** (Downy Oat-grass) (Ceirchwellt Blewog). Carboniferous Limestone crags, Blaen-y-Cylchau, Mynydd Du, SN762187, S.D.S Bosanquet & G.S. Motley, 28th May 2012, abundant on one ledge, scattered elsewhere.
- +†153/47.6. **Alopecurus myosuroides** (Black-grass) (Cynffonwellt Du). Rank weedy vegetation on stable arisings, Pembrey Country Park, SS40959966, R.D. Pryce & K.A. Pryce, 28th May 2012, six large plants in rank weedy vegetation established on waste material from stables. First record for Carms part of hectad.
- ¤†153/50.7. **Bromus secalinus** (Rye Brome) (Pawrwellt Bach). In crack at edge of concrete yard, Henfryn Farm, Pentrecwrt, SN38203902, A.O.Chater, R.D. & K.A. Pryce, det.A.O. Chater, 17th Sep 2012, one robust plant with 6 stems.
- +154/1.2. **Sparganium emersum** (Unbranched Bur-reed) (Cleddlys Di-gainc). Drainage ditch, near entrance to Pendine MoD Ranges, SN26050874, R.D. Pryce & K.A. Pryce, det.R.D. Pryce, 16th May 2012, a few plants in recently cleared-out channel.
- +155/1.2. **Typha angustifolia** (Lesser Bulrush) (Cynffon-y-gath Gulddail). Small pond, 1-2m deep, constructed c.2 years ago, Pentwyn, Capel Isaac, SN58022647, B.J. & D. Wright and K.A. & R.D. Pryce, 22nd Jul 2012, locally abundant around one edge of pond, not knowingly introduced although several native species have been.
- +158/20.2. **Hyacinthoides non-scripta** (Bluebell) (Clychau'r Gog). Dry sand dunes, Pembrey Burrows Local Nature Reserve, SS41589950, R.D. & K.A.Pryce and S. & A.Coker, 13th May 2012, 0.5m x 0.5m patch of stressed plants by small dead Hippophae thicket. First record for Carms part of hectad.
- +158/20.2×3.‡ **Hyacinthoides x massartiana** (Clychau'r-gog Croesryw). Vegetated bund on east side of disused car park in dunes, Pembrey Burrows Local Nature Reserve, SS41429931, Llanelli Naturalists, det.R.D. Pryce, 22nd Apr 2012, a few plants (including one white flowered) at foot of bund in SE corner of car park.
- +‡158/24.07. **Allium triquetrum** (Three-cornered Garlic) (Garlleg Trionglog). Grass verge, Dryslwyn Castle car park, SN55282027, R.D. Pryce & K.A. Pryce, 29th Apr 2012, one well-naturalized clump near entrance.
- *‡159/13.2. Crocosmia masoniorum (Giant Montbretia) (Crib-y-ceiliog Fawr). Verge of cycle-track, Furnace, Llanelli, SN503013, I.K. Morgan, 28th Jul 2012, small clump of presumably dumped plants, NMW.
- +162/03.1. **Epipactis palustris** (Marsh Helleborine) (Caldrist y Gors). Currently vacant development site surfaced with limestone aggregate, adjacent to Lidl store, Machynys, Llanelli, SS51319855, R.D. Pryce, 12th Sep 2012, a total of 61 plants in this vicinity, about 25 with seeding stems.
- +162/18.3.a. **Dactylorhiza incarnata ssp. incarnata** (a subspecies of Early Marsh-orchid). Wet flushed grassland, Whitehill Down, SN28831363, BSBI Meeting, det.R.D. Pryce, conf. A.O. Chater, 20th Jul 2012, occasional in area where there is abundant Carum verticillatum. First hectad record for both species and subspecies.

PEMBROKE, v.c.45 (comm. S.B.Evans)

+009/1.1. **Pilularia globulifera** (Pillwort) (Pelenllys Gronynnog). A 6 x 4 paces mat of Pilularia globulifera was found on the western side of this relatively new pond. Pills were present on the pond margins and the Pilularia mat extended well out in the open water to almost half way over the centre of the pond to the other side. Yet another example of pond creation on the mineral margins of a Pembrokeshire valley mire that has allowed Pilularia to appear (?) presumably from buried spores, New pond, Western part of Corsydd Llangloffan NNR, SM 89584 31719, Stephen Evans, 2nd Jun 2012.

- +‡020/3.1. **Tsuga heterophylla** (Western Hemlock-spruce) (Sbriwsen-Hemlog y Gorllewin). Saplings and young trees of Tsuga heterophylla amongst parents. A range of generations indicate natural regeneration on the top of the slope of the Afon Dulas on the west side., Flat Wood, Ffynone, SN 23691 38179, Stephen & Ann Evans, 2nd Apr 2012.
- +‡020/7.5.© **Pinus radiata** (Monterey Pine) (Pinwydden Monterey). ‡Self sown less than 10 year old Pinus radiata below parent quite close to dune front, Priory Bay Dunes, Caldey, SS 14158 97053, Stephen & Ann Evans, 8th Sep 2012.
- +†030/1.5.a. **Papaver dubium ssp. dubium** (Long-headed Poppy) (Pabi Hirben). Unsprayed and unsown southern margin of barley crop, large, field 14, by Runwayskiln Lane, Trehill Farm, Marloes, SM 7754- 0794-, Stephen Evans, 15th Jul 2012; (+) a large population of Papaver dubium ssp. dubium was growing on a heap of old steam engine shed clinker at the base of a brick structure/ retaining wall alongside the railway embankment, Wern Road, Goodwick, SM 9443- 3802-, Stephen Evans, 25th Jun 2012.
- +031/5.01. **Fumaria capreolata** (White Ramping-fumitory) (Mwg-y-ddaear Gwyn). Fumaria capreolata in tall vegetation just south of the farm complex on the edge of a cereal crop. The field had been ploughed in March/April and sown with spring barley, Gupton Farm, Castlemartin, SR 8942-9894-, S.Evans & Clive Hurford, det. Stephen Evans, 12th Jul 2012.
- +031/5.03. **Fumaria bastardii** (Tall Ramping-fumitory) (Mwg-y-ddaear Grymus). Fumaria bastardii was found in seven fields. Some had been ploughed in March/April and spown with spring barley and others had been ploughed in May and sown with maize. The NGR is just for one field. It was also in the monad to the north, Gupton Farm, Castlemartin, SR 8941- 9887-, Cath Shellswell, Jul 2012.
- +031/5.05.b. **Fumaria muralis ssp. boraei**. Growing in the margins of the spring sown barley, field NE of Knowles Farm, Larenny, SN 02390 08622, S.B. Evans, A.E. Evans and Cath Shellswell, det. Stephen Evans, 9th Jul 2012.
- +‡035/2.1. **Ficus carica** (Fig) (Ffigysbren). A huge fig tree was growing above out of the eastern bank of the Ritec, Ritec River, the Salterns, Tenby, SN 12843 00617, Stephen & Ann Evans, 8th Sep 2012.
- +043/1.06. **Chenopodium rubrum** (Red Goosefoot) (Troed yr Wydd Ruddog). Margins of maize crop in a sandy field, East of Starmans Hall, Gupton Farm, Castlemartin, SR 893 997, Stephen Evans, 14th Aug 2012.
- +043/3.08. **Atriplex laciniata** (Frosted Orache) (Llygwyn Ariannaid). One small Atriplex laciniata plant in the strand zone with the clumps of Cakile maritima at the sandy tip of the Bennet., The Bennet, Newport Dunes, SN 05174 39996, Stephen & Ann Evans, 4th Jul 2012.
- +046/08.1. **Myosoton aquaticum** (Water Chickweed) (Llinesg y Dwr). ©In 2011 Myosoton aquaticum was first found as a small clump in a rhubard bed in the walled garden. By September 2012 it was a loose clump of 2 x 3 metres in the same by now uncultivated part of the garden. 2nd v.c. record, Walled garden, Dale, SM8068705801, Jo & Brian Dilly, Jane Warr, det. Jane Warr, 2011.
- +046/20.09.† Silene latifolia (White Campion) (Gludlys Gwyn). Silene latifolia on the left side of the track from the new car park down on the flat but well before the track reaches the railway line. Only recent hectad record, Forestry track to disused railway line, Rosebush, SN 0712- 3000-, Howard Williams, Jul 2012.
- +046/25.7.‡ **Dianthus armeria** (Deptford Pink) (Penigan y Porfeydd). 31 flowering clumps/mats of Dianthus armeria were found in 1 x 3 metres along with a very roughly estimated 100-150 seedlings. They were growing on a shallow soiled south facing slope in an area kept open by chickens. The first flowers were seen in 2011 but rosettes had been present in 2010. It is assumed that the plants are of garden origin perhaps derived from the landscaped grounds of the adjacent Plas Glyn-y-mel, Cwm Cwsgi, Lower Town, Fishguard, SM 96505 36974, Catherine Hammond, det. Stephen Evans, 28th Jul 2012.

- +‡051/1.03×04. **Hypericum x inodorum** (Tall Tutsan) (Dail-y-Beiblau Tal). Hypericum x inodorum cv 'Elstead' shrub growing behind car parking area. Not obviously planted, North of car park, East Angle Bay, Rhoscrowther, SM 89791 02061, Stephen & Ann Evans, 26th Jul 2012.
- +†053/1.7. **Malva neglecta** (Dwarf Mallow) (Corhocysen). Malva neglecta was found in 2011 in an area dug over during an archaelogical excavation near the edge of a soft cliff and the plant appeared on the bare ground afterwards. Present again in 2012., St Bride's, SM 8023-1094-, Jane Warr, Jun 2012.
- +‡062/11.4. **Barbarea verna** (American Winter-cress) (Berwr-y-gaeaf cynnar). A fine springhead with open upper margins grazed by cattle. Barbarea verna was occasional in the more open areas, Springhead, SW of Southwood Farm, Roch, SM 85626 21486, S.B.Evans & Madeline Tasker, det.Stephen Evans, 11th Sep 2012.
- +†062/28.1. **Thlaspi arvense** (Field Penny-cress) (Codywasg y Maes). The field was ploughed in May and sown with maize., Gupton Farm, Castlemartin, SR 8966-9884-, Cath Shellswell, Jul 2012.
- +†062/31.1. **Lepidium coronopus** (Swine-cress) (Olbrain). **Lepidium coronopus** was growing in the unsown fallow margin of a field ploughed in March/April and sown with spring barley, Fallow margin to field 11, NE. of Knowles Farm, Lawrenny, SN 0224- 0873-, S.B.Evans, A.E.Evans & Cath Shellswell, det. Stephen Evans, 9th Jul 2012.
- +‡062/34.3. **Brassica rapa** (Wild Turnip) (Erfinen Wyllt). Margins of spring sown barley field, Field NE of Knowles Farm, Lawrenny, SN 02390 08622, S.B.Evans, A.E.Evans & Cath Shellswell, det. Stephen Evans, 9th Jul 2012.
- +†062/35.1. **Sinapis arvensis** (Charlock) (Mwstard Gwyllt). Field sown with spring barley in March/April. Farmyard manure had been applied., Tregwynt Farm, Granston, SM 8867-3456-, Cath Shellswell, 14th Jul 2012.
- +‡062/38.1. **Hirschfeldia incana** (Hoary Mustard) (Mwstard Llwyd). A single plant of Hirschfeldia incana., Southwood Farmyard, Roch, SM 8599- 2162-, Stephen & Ann Evans, 11th Sep 2012; (+), outside the Walled Garden, Wiston, SN 0247- 1822-, Stephen & Ann Evans, 9th Jul 2012.
- +062/42.1.b. **Raphanus raphanistrum ssp. maritimus** (Sea Radish) (Rhuddygl Arfor). A single large fruiting and flowering Raphanus maritimus plant on the ca. 14 year old low frontal dune ridge on the south side of the estuary., Newport Estuary, SN 05590 39696, Stephen & Ann Evans, 27th Sep 2012.
- +‡072/2.4. **Ribes sanguineum** (Flowering Currant) (Llwyn Cwrens Blodeuog). A plant of Ribes sanguineum was naturalized on a 8-10 feet high lime mortared wall of the old walled garden., Walled Garden, Wiston, SN 024 182, Stephen & Ann Evans, 9th Jul 2012.
- +‡075/03.1×3. **Spiraea x pseudosalicifolia** (Confused Bridewort) (Ffug Erwain-dail-helyg). A patch of Spiraea x pseudosalicifolia in flower on the east side of the unfenced road., Roadside east of Carningli, Newport, SN 0704- 3760-, Stephen & Ann Evans, 23rd Jul 2012.
- +‡075/21.05.06.© Rosa rugosa (Japanese Rose) (Rhosyn Japan). ‡A ca. 6 x 6 feet clump of flowering Rosa rugosa was naturalised quite close to the front edge of the Salix which had grown well out from the toe of the soft cliff., Poppit Dunes, SN 15000 48729, Stephen & Ann Evans, 17th Jul 2012.
- +077/14.06. Vicia hirsuta (Hairy Tare) (Ffacbysen Flewog). Vicia hirsuta was growing in the small but diverse south facing garden on freely draining soil. Garden dominated by shrubs and apple trees with much Viscum album, Parcllwyd garden, Llwyncelyn, SN 2050- 4224-, S. Evans, A. Evans & Howard Williams, det. Stephen Evans, 2nd May 2012.
- +077/14.08. **Vicia tetrasperma** (Smooth Tare) (Ffacbysen Lefn). Vicia tetrasperma was growing within the forest where the main tracks intersect around the site of former Forestry buildings., Minwear/Canaston Wood, SN 0585- 1356-, Stephen Evans, 12th Jul 2012.
- +†077/17.1. **Melilotus altissimus** (Tall Melilot) (Yr Wydro Dal). Disturbed sandy side to farm track near to Carduus nutans. Also found in an occasional sandy trackway at SR8929698078 in Brownslade Burrows, Castlemartin Range on the same day, Gupton Farm, Castlemartin, SR 89250 99022, Stephen Evans, 14th Aug 2012.
- +‡077/17.2. **Melilotus albus** (White Melilot) (Yr Wydro Wen). Short grazed dune grassland that had been ploughed in the past, Newton Burrows, Middlehill Farm, Rhoscrowther, SR 8959- 9997-, Stephen & Ann Evans, 26th Jul 2012.

- +†091/2.10. **Euphorbia exigua** (Dwarf Spurge) (Corlaethlys). Several plants of Euphorbia exigua found in a garden, Hayscastle, SM 915 254, R.F. Taylor, 11th Nov 2012.
- +†103/2.2. **Erodium moschatum** (Musk Stork's-bill) (Pig-y-crëyr Fwsg). Two plants of Erodium moschatum in flower and fruit on SE edge of flat floor of small sandy farm quarry., Farm Quarry, Middlehill Farm, Rhoscrowther, SM 90351 00282, Stephen Evans, 26th Jul 2012.
- +103/2.4. **Erodium lebelii** (Sticky Stork's-bill) (Pig-y-creyr Ludiog). A single plant on the edge of a large blowout. First v.c.45 record since 1977 when it was also recorded on Stackpole Warren, Stackpole Warren, SR9868594644, Matt Sutton, Jul 2012.
- +‡105/1.4. **Impatiens glandulifera** (Indian Balsam) (Jac y Neidiwr). Impatiens gladulifera was present in the eastern corner of the baptistry and Rumex sanguineus var sanguineus was plentifully scattered around the baptist pool., Baptistry SW of Blaenllyn Chapel, SM 87747 29250, Stephen & Ann Evans, 2nd Jun 2012; (+) one small Impatiens glandulifera plant at the toe of the main dunes., Newport Dunes, SN 05359 40428, Stephen & Ann Evans, 4th Jul 2012.
- +†116/06.4. **Anchusa arvensis** (Bugloss) (Llysiau'r-gwrid y Tir âr). Anchusa arvenis was in a field sown with spring barley in March/April. Farmyard manure had been applied., Tregwynt Farm, Granston, SM 8867-3456-, Cath Shellswell, 14th Jul 2012.
- +118/18.4. **Clinopodium vulgare** (Wild Basil) (Brenhinllys Gwyllt). One plant of Clinopodium vulgare was found on the east side of the access track on the hedgebank., Pentre Ifan, Nevern, SN 09290 38279, Howard Williams, 26th Aug 2012.
- +124/02.2. **Scrophularia auriculata** (Water Figwort) (Gwrnerth y D^r). Small alder carr in bottom of valley alongside the A487., Jericho alder carr, Eglwyswrw, SN 1235- 3809-, Stephen Evans, 23rd Jul 2012.
- +†124/08.2. **Chaenorhinum minus** (Small Toadflax) (Trwyn-y-llo Bach). Two Chaenorhinum minus plants were found growing in disturbed ground, the remains of the former embankment of the Whitland and Cardigan Railway, Near Station Hall, Cilgerran, SN2009-4269- & SN2008-4268-, Richard Pryce, 12th Oct 2012; (+) a few plants of Chaenorhinum minus at the very far ESE end of the platform on the north side of the track, Manorbier Station, SS 06977 99395, Stephen Evans, 6th Nov 2012.
- +†124/09.1. **Misopates orontium** (Weasel's-snout) (Y Trwyn-y-llo Lleiaf). The field was ploughed in March/April and sown with spring barley., Gupton Farm, Castlemartin, SR 8990- 9902-, Cath Shellswell, Jul 2012.
- +‡129/1.10. Campanula poscharskyana (Trailing Bellflower) (Clychlys Ymlusgol). ©A single plant of Campanula poscharskyana was self sown into the SE end of the SW bridge parapet on the track side. It had almost certainly escaped from the Blackpool Mill forecourt/ garden tubs. The mill had been closed for at least a year, Blackpool Mill Bridge Parapet, SN 06012 14509, S.B. Evans, A.E.Evans, Karren Robinson & Barry Robinson, det. Stephen Evans, 7th Nov 2012.
- +‡129/7.2.© **Lobelia erinus** (Garden Lobelia) (Bidoglys yr Ardd). Lobelia erinus growing out of the junction between the paving slabs and the pine end of the cottage on the west side of the street just before it joins the main A487, Bottom of Upper St Marys Street, Newport, SN 05808 39123, Stephen & Ann Evans, 15th Nov 2012.
- +130/7.1. **Cruciata laevipes** (Crosswort) (Llysiau'r Groes). ©Cruciata laevipes was first found on a bare soil patch near where a car is parked alongside the house and garden. By September 2012 it had flowered and spread to extend to about 2 x 1.5 metres. Perhaps it was bird sown? Rhyd-y-beinw, Bridell, SN 1730641895, Celia Thomas, det. Celia Thomas & Stephen Evans, Sep 2011.
- +‡131/5.1. **Leycesteria formosa** (Himalayan Honeysuckle) (Bachgen Llwm). Leycesteria bushes growing out of the partially collapsed retaining wall on the west side of the garage parking area on the south side of the road, Bridge Street, Newport, SN 05591 39061, Stephen & Ann Evans, 15th Nov 2012.
- +†135/11.3. **Centaurea cyanus** (Cornflower) (Penlas yr Yd). ©A single plant of Centaurea cyanus was located at the southern edge of the organic oat and barley crop. A seed contaminant? Middlehill Farm, Rhoscrowther, SM 90035 00258, Cath Shellswell, 15th Jul 2012.

- +‡135/43.4. **Erigeron karvinskianus** (Mexican Fleabane) (Amrhydlwyd y Cerrig). Erigeron karvinskianus had self sown on the base of the building walls, Corn Mill, Middlemill, SM 80605 25897, Stephen & Ann Evans, 13th Jun 2012.
- *‡135/44.flo. **Conyza floribunda** (Bilbao's Fleabane). A plant of Conyza floribunda was found about 100m back from the shore, on the north side of the road, immediately below a steep public garden. There are car parks both above and below the garden. The whole plant was more than a metre high, Battery Road, Tenby, SN 1306-0015-, R.F. Taylor, det. Rodney Burton, 29th Sep 2012.
- +‡147/5.2.b. **Arum italicum ssp. italicum**. (Italian Lords-and-Ladies) (Pidyn y Gog Eidalaidd) Treffynnon Chapel, SM 849 287, Stephen & Ann Evans, 22nd Mar 2012.
- +‡151/1.02. **Juncus tenuis** (Slender Rush) (Brwynen Fain). A dense linear patch of Juncus tenuis was growing at the margin between the damp grassy verge and the edge of the tarmac on the east side of a minor road, NW of Bushford Bridge, Talbenny, SM 83343 10535, Stephen Evans, 5th Sep 2012.
- †153/14.3. **Vulpia myuros** (Rat's-tail Fescue) (Peisgwellt y Fagwyr). A single Vulpia myuros plant was found growing on compacted soil-less substrate, the remains of the former embankment of the Whitland and Cardigan Railway., Near Station Hall, Cilgerran, SN 2008- 4268-, Richard Pryce, 12th Oct 2012.
- +‡153/17.3 **Briza maxima** (Greater Quaking-grass) (Crydwellt Mawr). Roadside by front garden opposite Rugby Club, St. David's, SM 7574- 2585-, Stephen Evans, 25th Jun 2012.
- +153/21.1. **Catapodium rigidum** (Fern-grass) (Gwenithwellt Caled). Catapodium rigidum was growing along the track/bridleway and disused railway line, Forestry track/disused railway line, Rosebush, SN 071 301, Stephen & Ann Evans, 6th Sep 2012.
- +153/24.3. **Glyceria declinata** (Small Sweet-grass) (Melyswellt Llwydlas). Small shallow peaty sheep grazed pool set amongst sloping rock bedrock at toe of heather slope, pond on north side of Carn Ysgubor, Ramsey, SM 69984 24923, Stephen Evans, 29th May 2012.
- ‡153/50.5. **Bromus lepidus** (Slender Soft-brome) (Pawrwellt Main). One or two plants, perhaps relicts of past cultivation, in acid grassland. Also at SR9827494693. Last seen on the Warren on 05071963 by Anne Conolly, Stackpole Warren, SR9857694962, Matt Sutton, Jul 2012.
- +153/51.3. **Bromopsis erecta** (Upright Brome) (Pawrwellt Talsyth). A big stand of Bromus erectus was located between the cycle path and the edge of the pill/brackish lagoon, Westfield Pill Nature Reserve, Neyland, SM 96471 06606, Stephen & Ann Evans, 4th Jun 2012.
- +‡153/52.1. Anisantha diandra (Great Brome) (Pawrwellt Mawr). ©Anisantha diandra was growing on the edge of a cereal crop. The field had been ploughed in March/April and sown with spring barley, Gupton Farm, Castlemartin, SR 8936- 9891-, Stephen Evans, 12th Jul 2012; (+) ©a single Anisantha diandra plant was found alongside a winter soakway line down a field of organic oats and barley before it sank in the sand. A seed contaminant? Newton Burrows, Middlehill Farm, Rhoscrowther, SM 89646 00146, Stephen & Ann Evans, 26th Jul 2012; (+) ©Anisantha diandra was found on the western margins of the organic oat and barley crop. A seed contaminant? Middlehill Farm, Rhoscrowther, SM 90013 00346, Stephen Evans, 26th Jul 2012.
- +‡153/59.1.© **Hordeum distichon** (Two-rowed Barley) (Haidd Dwyresog). Barley growing on the side of the muck heap in the farmyard., Cil-mor, south of Maenclochog, SN 08305 26839, Stephen & Ann Evans, 21st Jul 2012.
- +153/59.2.† **Hordeum murinum** (Wall Barley) (Haidd y Mur). Hordeum murinum on sandy seaward edge of the main car park, Car Park, Newport Dunes, SN 0541-4052-, Stephen Evans, 10th Jul 2012.
- +‡153/68.1.© Echinochloa crus-galli (Cockspur) (Cibogwellt Rhydd). Seven sandy fields ploughed and sown in May with maize had flowering Echinochloa crus-gallii. There were big populations on the margins of some crops at this NGR. It was also in the monad to the west, Gupton Farm, Castlemartin, SR 891 995, Cath Shellswell, Clive Hurford, Jon Hudson & Stephen Evans, Jul 2012.
- +©153/72.bic. **Sorghum bicolor** (Great Millet) (Sorgwm). A single flowering Sorghum bicolor plant, presumably of bird-seed origin, was found growing on compacted soil-less substrate. Det. from photographs on 17/10/2012, Near Station Hall, Cilgerran, SN2008-4268-, Richard Pryce, det. M.C.Crawley & D.A. Pearman, 12th Oct 2012.

+162/06.1. **Neottia ovata** (Common Twayblade) (Caineirian). Neottia ovata was occasional to locally frequent and in full flower in the chapel graveyard. Briza media and Filipendula vulgaris were also present in the grassland. Two Neottia ovata spikes were also found in the small gravelled front garden of the adjacent Ty Capel at SM8778929291, Blaenllyn Chapel, SM 877 293, Stephen & Ann Evans, 2nd Jun 2012

CARDIGAN, v.c.46 (comm. A. O. Chater & S. P. Chambers)

- +017/3.05. **Dryopteris aemula** (Hay-scented Buckler-fern) (Marchredynen Bêr). Streamside rocks, Aberdauddwr, Aber-ffrwd, SN689786, A.J. Morton, 19th May 2011, 3 plants.
- +043/4.1.a. **Beta vulgaris ssp. maritima** (Sea Beet) (Betysen Arfor). Shingle behind sea beach, Llannon, SN506667, S.P. Chambers, 23rd Feb 2012.
- +043/7.2. **Suaeda maritima** (Annual Sea-blite) (Helys Unflwydd). Shingle at top of beach, Borth, SN607890, S.P. Chambers, 21st Jul 2012, a few plants in area disturbed by 2011 sea defence works.
- +046/07.12. **Cerastium semidecandrum** (Little Mouse-ear) (Clust-y-llygoden Fach). Sandy pasture, Mwnt, SN195519, S.P. Chambers, 9th May 2012, c.10 plants.
- +046/17.2. **Spergularia media** (Greater Sea-spurrey) (Troellig Arfor Mawr). Shingle at top of beach, Borth, SN607890, S.P. Chambers, 21st Jul 2012, a few plants in area disturbed by 2011 sea defence works.
- +047/8.13×19. **Rumex x pratensis** (Meadow Dock) (Tafol y Maes). Meadow, Henllan, SN358404, S.P. Chambers, 23rd Jul 2012, one plant with parents.
- ¤051/1.08. Hypericum undulatum (Wavy St John's-wort) (Eurinllys Tonnog). Overgrown field ditch, Blaenplwyf, SN57957565, A.O. Chater, 4th Sep 2012, scattered along ditch to SN58077560; (¤) gabion edge above railway ditch, Rhodfa Padarn, Aberystwyth, SN59258095, S.P. Chambers, 30th Jul 2012, c.32 plants along c.200m of ditch, NMW.
- +061/2.10×11. **Salix x reichardtii**. Heathy ledge above upland stream ravine, SW corner of Graig Ddu, Cwmystwyth, SN810738, S.P. Chambers, det. R.D. Meikle, 15th Jul 2012, solitary small bush, **NMW**.
- +‡062/16.1. **Aubrieta deltoidea** (Aubretia) (Cynfas Biws). Old wall, Lan-non, SN512675, S.P. Chambers, 23rd Feb 2012.
- +‡062/38.1. **Hirschfeldia incana** (Hoary Mustard) (Mwstard Llwyd). Disturbed road verge, above Llanbadarn Fawr, SN608814, S.P. Chambers, 17th Aug 2012, 2 plants.
- +†063/1.1. **Reseda luteola** (Weld) (Melengu). Waste ground, County Council depot, Rhippinllwyd, SN305505, S.P. Chambers, 12th Apr 2012, 2 clumps.
- +‡074/05.are. **Saxifraga x arendsii** (Garden Mossy-saxifrage). Roadside bank below house, Primrose Hill, Llanbadarn Fawr, SN601810, R.A. Jones & S.P. Chambers, 11th Mar 2012.
- +‡074/08.1. **Tellima grandiflora** (Fringecups) (Clychau'r Clawdd). Mixed woodland, 2km W of Llandysul, SN399409, A.O. Chater, 4th Jun 2012, extensively naturalised.
- +075/08.13.307. **Rubus conjungens**. Roadside hedgebank, 600m N of Carrog, Llanddeiniol, SN563731, D.E. Allen & A.O. Chater, det. D.E.Allen 2011, 26th Aug 1994, one clump, **BM**.
- +‡075/18.1. **Acaena novae-zelandiae** (Pirri-pirri-bur) (Pirri-pirri). Soil mound at demolition site, Llanbadarn College Campus, SN603810, S.P. Chambers, 11th Mar 2012.
- +075/21.19. **Rosa micrantha** (Small-flowered Sweet-briar) (Drysïen Bêr Fân-flodeuog). Hedge, 1km SW of Llangrannog, SN302535, R. Maskew, Sep 2012.
- +‡075/32.21. Cotoneaster horizontalis (Wall Cotoneaster) (Cotoneaster Asgwrn). Old wall top, Llechryd, SN217437, S.P. Chambers. 13th Feb 2012.
- +077/19.13. **Trifolium micranthum** (Slender Trefoil) (Meillionen Hopysaidd Eiddil). Sheep-grazed acid grassland, above Capel Bangor, SN657806, S.P. Chambers, 12th Aug 2012, scattered plants.
- +†091/2.09. **Euphorbia lathyris** (Caper Spurge) (Llaethlys Caprys). Sand dune, Penyrergyd, Gwbert, SN161485, A.O. Chater, 25th May 2012, several plants.

- +†109/1.1. **Vinca minor** (Lesser Periwinkle) (Perfagl Fach). Roadside bank by houses, Llan-non, SN511675, S.P. Chambers, 23rd Feb 2012, from dumped garden waste.
- +‡110/7.1.© **Solanum lycopersicum** (Tomato). Wall base on town pavement, Lampeter, SN579478, S.P. Chambers, 31st Aug 2012, 1 plant.
- +‡124/04.1. **Mimulus moschatus** (Musk) (Mwsg). Tall herb fen at head of stream gully, below A487(T) NE of Aber-arth, SN49506495, S.P. Chambers, 12th Jun 2012, patch c.1 x 1m, with satellite stems to c.3m away.
- +†124/16.19. **Veronica agrestis** (Green Field-speedwell) (Rhwyddlwyn-y-maes Gwyrdd). Edge of path in churchyard, Llangynllo, SN35224395, S.P. Chambers, 12th May 2012, 2 plants.
- +135/25.04.35. **Taraxacum faeroense** (Faeroes Dandelion). Edge of rhos pasture, Rhos Pil-bach, Plwmp, SN368529, S.P. Chambers, det.A.J. Richards, 24th May 2012, **NMW**.
- +135/27.2.eur. **Pilosella officinarum ssp. euronota** (a subspecies of Mouse-ear-hawkweed). Parched acid grassland, W bank of Afon Diliw, SE of Bryn Diliw forest, SN841774, S.P. Chambers, 26th Aug 2012, locally frequent; v.c. altitude record for the subspecies at 370m.
- *‡135/44.2. **Conyza sumatrensis** (Guernsey Fleabane) (Amrhydlwyd Guernsey). Car park shrubbery, Welsh Government offices, Rhodfa Padarn, Aberystwyth, SM591809, A.O. Chater & S.P. Chambers, conf. J.P. Woodman, 28th Sep 2012, 2 plants, **NMW**.
- *‡135/62.16.© **Senecio vernalis** (Eastern Groundsel) (Creulys y Dwyrain). Disturbed soil of newly sown verges, NHS car park, Plas Hendre, Aberystwyth, SN600823, S.P. Chambers, conf. E.J. Clement 2011, 9th May 2011, c.6 plants, **Herb. E.J.Clement.**
- +‡151/1.02. **Juncus tenuis** (Slender Rush) (Brwynen Fain). Pathside on sheepwalk, 500m SSE of Pumlumon Fawr summit, SN79148648, A.O. Chater, 22nd Sep 2012, large fruiting clump; v.c. and British altitude record at 680m.
- +153/11.1. **Milium effusum** (Wood Millet) (Miledwellt y Coed). Flushed wooded slope, WSW of Hafod, SW of Sarnau, SN311505, S.P. Chambers, 12th Apr 2012, 20+ plants.
- +153/12.02. **Schedonorus arundinaceus** (Tall Fescue) (Peiswellt Tal). Grassy margin of new pond, Coed Dolgoed Forestry car park, Abbey Road, SN737659, S.P. Chambers, 8th Sep 2012.
- *‡153/12.15. **Festuca brevipila** (Hard Fescue) (Peiswellt Caled). Grassy road verge, SW side of Ffordd Parc-y-llyn, Aberystwyth, SN59058093, S.P. Chambers, conf. A. Copping, 29th Mar 2012, c.6 tufts in area c.1 x 2m, **NMW**.
- +153/39.1×4. **Agrostis x murbeckii**. Estuarine rush pasture, S of railway, Ynys-hir, SN68209651, S.P. Chambers, 14th Aug 2012, 1 plant; A. stolonifers in the rush pasture, A. capillaris nearby on drier edge.
- +‡159/08.2. **Crocus tommasinianus** (Early Crocus) (Saffrwm Cynnar). Roadside bank by houses, Llannon, SN511675, S.P. Chambers, 23rd Feb 2012, one plant, from dumped garden waste; probably 'Claret'.

MONTGOMERY, v.c.47 (comm. Dr A.K. Thorne)

- +011/1.2. **Polypodium interjectum** (Intermediate Polypody) (Llawredynen Ganolig). Lake Vyrnwy (Llechwedd-du), SH9920, Dawes, Mrs R.A., 17th Jul 2012, lake Vyrnwy roadside verge (west side) survey for Montgomeryshire Wildlife Trust.
- +017/3.08. **Dryopteris carthusiana** (Narrow Buckler-fern) (Marchredynen Gul). Allt ddu, SN8994, Thorne, Dr A.K., 2007, central GR.SN895948, Blanket Bog; (+) W of Lake Vyrnwy (Hirddu Fach), SH9520, Montgomeryshire Field Society, det.Thorne, Dr A.K., 17th Jul 2012, moorland; (+) Corndon, SO39D, Thorne, Dr A.K., Jul 2007, hillside and farmland.
- +027/1.1. **Ceratophyllum demersum** (Rigid Hornwort) (Cyrnddail Caled). City, nr Sarn, SO2289, Dyer, Mr P., 2010, highways project, central GR. Road verge.
- +028/13.07. **Ranunculus parviflorus** (Small-flowered Buttercup) (Blodyn-ymenyn Mân-flodeuog). Meifod, SJ184148, Beare, Mrs E. & Meade, Ms R., 2012, field margin.

- +028/13.19. **Ranunculus omiophyllus** (Round-leaved Crowfoot) (Crafanc-y-frân y Rhostir). Green Hall Hill and George's Walks, SJ11P, Evans, Mrs G., 2007, upland farmland.
- +030/1.5. **Papaver dubium agg.** (Pabi Hirben). Caerbwla, S of Llangadfan, SJ0008, Montgomeryshire Field Society, det.Thorne, Dr A.K., 20th Jun 2007, hay meadows and mire.
- +033/1.2. **Ulmus procera** (English Elm) (Llwyfen Lloegr). nr Penybontfawr, SJ02S, Daly, Mrs A.P., 2009, road and lanes.
- +034/2.1. **Humulus lupulus** (Hop) (Hopys). Melinbyrhedyn and surrounds, SN89E, Brown, Mr T., 2007, mixed habitats in tetrad, with some upland communities.
- +043/1.06. **Chenopodium rubrum** (Red Goosefoot) (Troed yr Wydd Ruddog). Newtown, SO10579123, Hotchkiss, Mr A.J., 10th Jul 2012, wasteground/disturbed bare soil, a few plants; (+) Dolydd Hafren, SJ20500025, Thorne, Dr A.K., 10th Aug 2008, oxbow in floodplain.
- *‡045/2.2. **Claytonia sibirica** (Pink Purslane) (Porpin Pinc). Meifod, SJ1814, Beare, Mrs E. & Meade, Ms R., 2012, river bank.
- +045/3.1. **Montia fontana** (Blinks) (Porpin y Ffynnon). Lake Vyrnwy, SH9624, Dawes, Mrs R.A. & Swindells, Mrs S., 2011, boggy ground.
- +046/10.7. **Sagina apetala** (Annual Pearlwort) (Corwlyddyn Unflwydd). Talbontdrain, SN7795, Thorne, Dr A.K. & Thorne, Dr W.I.J., det.Thorne, Dr A.K., 19th Aug 2011, forest margins; (+) Llanwddyn (E of), SJ02F, Daly, Mrs A.P., 2009, moorland.
- +046/17.3. **Spergularia marina** (Lesser Sea-spurrey) (Troellig Arfor Bach). Penstrowed, SO0691, Montgomeryshire Flora Group, det.Thorne, Dr A.K., 4th Jul 2012, introduced, but frequent by main road between chapel and railway crossing.
- +046/20.04. **Silene vulgaris** (Bladder Campion) (Gludlys Codrwth). Y Fan, SN98N, Thorne, Dr A.K., 11th Aug 2007, mixed, old mine spoil dominant.
- +‡047/1.02. **Persicaria campanulata** (Lesser Knotweed) (Y Ganwraidd Fach). Cwm Pen Llydan, SH9206, Stretton, Ms T., 2010, dumped or planted (if not directly, with something else), I would guess. The site is very remote and had been out of use for some time, but the plant was not too far from the house. It was naturalising in a wet area.
- +047/8.14. **Rumex conglomeratus** (Clustered Dock) (Tafolen Fair). Hyssington, SO3296, Thorne, Dr A.K., 14th Jul 2012.
- +051/1.09. **Hypericum tetrapterum** (Square-stalked St John's-wort) (Eurinllys Pedronglog). City, nr Sarn, SO2289, Dyer, Mr P., 2010, highways project, central GR. Road verge.
- +051/1.14. **Hypericum hirsutum** (Hairy St John's-wort) (Eurinllys Blewog). NW of Meifod, SJ11H, Hazlehurst, Miss A. & Swindells, Mrs S., 2010.
- +051/1.16. **Hypericum elodes** (Marsh St John's-wort) (Eurinllys y Gors). Brithdir and Cubbulch, SO39C, Botanical Society of the British Isles, 5th Sep 2009, mix of grassland, marshy areas and hedges.
- +052/1.2. **Tilia cordata** (Small-leaved Lime) (Pisgwydden Dail Bach). Pont Llogel SSSI (Coed Cop'r Graig SSSI, SJ01H, Jones. Mr. A, Aug 2008, 3 trees on river bank; (+) Hirnant, SJ0321, Dawes, Mrs R.A. & Swindells, Mrs S., 15th Jul 2012, forest.
- +057/1.05. **Viola reichenbachiana** (Early Dog-violet) (Fioled y Coed). nr Bishop's Castle, SO29V, Thorne, Dr A.K. & Thorne, Dr W.I.J., 2008, tracks and lanes.
- +†057/1.13. **Viola arvensis** (Field Pansy) (Trilliw'r Tir Âr). Dolforwyn area, SO19M, Thorne, Dr A.K., Hazlehurst, Miss A. & Swindells, Mrs S., 2007, improved grassland.
- +†062/01.7. **Sisymbrium officinale** (Hedge Mustard) (Roced y Berth). Upper Wye Valley, SN8581, Montgomeryshire Flora Group, det.Thorne, Dr A.K., 8th Aug 2012, riverside and floodplain.
- +062/22.2. **Erophila verna** (Common Whitlowgrass) (Llysiau'r-bystwn Cynnar). Dovey Junction (Dyfi Junction), SN697980, Forster-Brown, C., 2007.
- +062/23.5.‡ Cochlearia danica (Danish Scurvygrass) (Llwylys Denmarc). A483, SO1191, Dawes, Mrs R.A., 2008, roadside, linear isolated patches; (+) A483, SJ2104, Dawes, Mrs R.A., 2008, roadside, linear isolated patches; (+) A490, SJ2510, Dawes, Mrs R.A., 2008, roadside, linear isolated patches.

- +062/27.1. **Teesdalia nudicaulis** (Shepherd's Cress) (Berwr y Bugail). Llangynog, SJ054265, Daly, Mrs A.P., 2010, heathy slopes among quarry waste.
- +‡062/31.2. **Lepidium didymum** (Lesser Swine-cress) (Olbrain Bach). Newtown, SO10479130, Hotchkiss, Mr A.J., 10th Jul 2012, wasteground/disturbed bare soil, a few plants.
- +†062/35.1. **Sinapis arvensis** (Charlock) (Mwstard Gwyllt). Foel, SH91V, Thorne, Dr A.K., 2008, roadside hedgerows.
- +065/12.3. **Erica tetralix** (Cross-leaved Heath) (Grug Croesddail). Coed Pendugwm, SJ11C, Hazlehurst, Miss A. & Swindells, Mrs S., 30th Jun 2010, woodland.
- +069/4.2. **Lysimachia nummularia** (Creeping-Jenny) (Siani Lusg). Melinbyrhedyn and surrounds, SN89E, Brown, Mr T., 2007, mixed, with some upland communities; (+) Clegyrnant WS, SH9208, Stretton, Ms T. & Stretton, Mrs J., 17th Aug 2009, moorland and wetland site, central GR SH927086.
- +‡073/1.3. **Crassula helmsii** (New Zealand Pigmyweed) (Corchwyn Seland Newydd). City, nr Sarn, SO2289, Thorne, Dr A.K. & Thorne, Dr W.I.J., det.Thorne, Dr A.K., 8th Apr 2012, little pool by lane to Pant Hill.
- +073/5.16. **Sedum anglicum** (English Stonecrop) (Briweg y Cerrig). Moel Bentyrch, SJ00P, Thorne, Dr A.K. & Thorne, Dr W.I.J., 2009, mixed, with some upland communities.
- +074/05.15. **Saxifraga granulata** (Meadow Saxifrage) (Tormaen y Gweunydd). Abermule Dingle, SO16509335, Thorne, Dr A.K. & Thorne, Dr W.I.J., 2007, a few plants in a group half of the group being mown, river edge.
- +‡074/08.1. **Tellima grandiflora** (Fringecups) (Clychau'r Clawdd). Abermule Dingle (S), SO19R, Thorne, Dr A.K. & Thorne, Dr W.I.J., 2007, riverside woodland.
- +075/09.15. **Potentilla reptans** (Creeping Cinquefoil) (Pumnalen Ymlusgol). Waun, SN99L, Thorne, Dr A.K., 2009, upland farmland.
- *‡075/13.3. **Geum macrophyllum** (Large-leaved Avens) (Mapgoll Fawr)). Pantperthog, SH75300445, Chater, Mr A.O., 5th May 2011, abundantly naturalised on road verge below Centre for Alternative Technology, E of Afon Dulas, 40m asl.
- +‡075/21.05.06. **Rosa rugosa** (Japanese Rose) (Rhosyn Japan). Newtown, SO1191, Hotchkiss, Mr A.J., 2012, hedges and bushes in rough grassland, naturalised.
- +075/21.16 **Rosa sherardii** (Sherard's Downy-rose) (Rhosyn Sherard). Ffridd Fawr, SH90M, Thorne, Dr A.K. & Thorne, Dr W.I.J., det.Thorne, Dr A.K., 2009, riverside habitat; (+) Lake Vyrnwy (Llechwedd-du), SH9920, Dawes, Mrs R.A., det.Thorne, Dr A.K., 17th Jul 2012, lake Vyrnwy roadside verge (west side) survey for Montgomeryshire Wildlife Trust; (+) Brithdir and Cubbulch, SO30059510, Thorne, Dr A.K. & Rand, Mr M.H., 5th Sep 2009, mix of grassland, marshy areas and hedges; (+) Lake Vyrnwy, SJ0120, Dawes, Mrs R.A. & Swindells, Mrs S., Sep 2010.
- +‡075/22.03.© **Prunus cerasifera** (Cherry Plum) (Coeden Goeg-geirios). Newtown, SO1089, Thorne, Dr A.K. & Thorne, Dr W.I.J., det.Thorne, Dr A.K., 31th Mar 2012, laneside.
- +077/10.3. **Ornithopus perpusillus** (Bird's-foot) (Troed yr Aderyn). Bontrhydgaled, SN8482, Montgomeryshire Flora Group, det.Thorne, Dr A.K., 8th Aug 2012, track, forest, river.
- +077/14.08. Vicia tetrasperma (Smooth Tare) (Ffacbysen Lefn). Upper Wye Valley, SN8581, Montgomeryshire Flora Group, det.Thorne, Dr A.K., 8th Aug 2012, riverside and floodplain.
- +077/18.1. **Medicago lupulina** (Black Medick) (Maglys Du). Bontrhydgaled, SN8482, Montgomeryshire Flora Group, det.Thorne, Dr A.K., 8th Aug 2012, track, forest, river; (+) City, nr Sarn, SO2289, Dyer, Mr P., 2010, highways project, central GR. Road verge.
- +±077/18.2.c. **Medicago sativa ssp. sativa** (Lucerne) (Maglys Rhuddlas)). Dolarddyn, Castle Caereinion, SJ154069, Hotchkiss, Mr A.J., 6th Sep 2012.
- +077/19.11. **Trifolium campestre** (Hop Trefoil) (Meillionen Hopysaidd). Llangadfan (Llety Mawr), SH9810, Beare, Mrs E., Jenkinson Mr A. & Jenkinson, Mrs G., det.Beare, Mrs E., Jun 2012, pasture.
- +081/1.1. **Lythrum salicaria** (Purple-loosestrife) (Llysiau'r-milwr Coch). Gregynog, SO0997, Thorne, Dr A.K., & Montgomeryshire Flora Group, det.Thorne, Dr A.K., 28th Jul 2011, near and around The

- Water Garden, central GR SO09179765; (+) City, nr Sarn, SO2289, Dyer, Mr P., 2010, highways project, central GR. Road verge.
- +084/1.02. **Epilobium parviflorum** (Hoary Willowherb) (Helyglys Lledlwyd). Penstrowed, SO0691, Montgomeryshire Flora Group, det.Thorne, Dr A.K., 4th Jul 2012, railway and adjacent woodland, central GR SO067916.
- +‡084/1.12 **Epilobium brunnescens** (New Zealand Willowherb) (Helyglys Seland Newydd). Trannon Moor, SN9195, Mrs J. Daly, det.Small, Mr C.A., 16th Aug 2012, road verge.
- +085/1.1. **Cornus sanguinea** (Dogwood) (Cwyrosyn). Pantperthog, SH7504, Thorne, Dr A.K. & Thorne, Dr W.I.J., Aug 2011, laneside; (+) Bwlchyddar, SJ12Q, Hazlehurst, Miss A. & Swindells, Mrs S., 2009, mixed woodland and pasture.
- +103/1.18. **Geranium lucidum** (Shining Crane's-bill) (Pig-yr-aran Loywddail). Abercegir, SH8001, Foulkes, Mrs G., 2012, garden; (+) Lake Vyrnwy, SH9721, Beare, Mrs E., Jul 2012, road verge survey for MWT.
- +103/2.3. **Erodium cicutarium** (Common Stork's-bill) (Pig-y-crëyr). nr Llanfechain, SJ19482209, Hazlehurst, Miss A. & Swindells, Mrs S., 2009, dry grassy slope. Associates Luz cam, Agr cap, Poa ann.
- +‡105/1.4. **Impatiens glandulifera** (Indian Balsam) (Jac y Neidiwr). Afon Lwyd valley, SN89Q, Thorne, Dr A.K. & Thorne, Dr W.I.J., det.Thorne, Dr A.K., Aug 2010, mire and heathland along river valley in monads SN8690 and SN8790; (+) Hyssington, SO3296, Thorne, Dr A.K., 14th Jul 2012, near stream.
- +107/05.3. **Chaerophyllum temulum** (Rough Chervil) (Gorthyfail Garw). Dovey Junction (Dyfi Junction), SN6997, Thorne, Dr A.K., Sep 2009, margins of railway line.
- ¤+†107/10.1. **Smyrnium olusatrum** (Alexanders) (Dulys). Melinbyrhedin, SN81709874, Brown, Mr T., Aug 2007, feral garden vegetable.
- +107/20.1. **Aethusa cynapium** (Fool's Parsley) (Geuberllys). Melinbyrhedyn and surrounds, SN89E, Brown, Mr T., 2007.
- +‡107/44.1. **Daucus carota** (Carrot) (Moronen). Y Fan, SN98N, Thorne, Dr A.K., 11th Sep 2007, mixed, old mine spoil dominant.
- +108/3.2. **Centaurium erythraea** (Common Centaury) (Y Ganrhi Goch). nr Penybontfawr, SJ02S, Daly, Mrs A.P., 2009, road and lanes.
- +110/8.1. **Solanum nigrum** (Black Nightshade) (Codwarth Du). Pen-y-groes, SJ22B, Hazlehurst, Miss A. & Swindells, Mrs S., 2007.
- +116/15.01. **Myosotis scorpioides** (Water Forget-me-not) (Sgorpionllys y Gors). Rhyd-yr-Onnen WS, SN8686, Stretton, Ms T. & Stretton, Mrs J., 23rd Jun 2009, central GR SN869865.
- +116/15.10. **Myosotis discolor** (Changing Forget-me-not) (Sgorpionllys y Amryliw). Allt ddu, SN89X, Thorne, Dr A.K., 2009, upland; (+) W of Lake Vyrnwy (Cwm yr Hafod), SH9621, Montgomeryshire Flora Group, det.Thorne, Dr A.K., 17th Jul 2012, upland pasture; (+) Jericho Hill, SJ12Q, Thorne, Dr A.K., Hazlehurst, Miss A. & Swindells, Mrs S., det.Thorne, Dr A.K., 2007, rough pasture.
- x+†117/1.1. **Verbena officinalis** (Vervain) (Y Ferfain). Berriew, SJ187007, Heard, Mrs J., 2nd Jul 2011, 8-10 plants.
- +118/01.5×6. **Stachys x ambigua** (Hybrid Woundwort) (Briwlys Croesryw). Afon Lwyd valley, SN8790, Thorne, Dr A.K. & Thorne, Dr W.I.J., det.Thorne, Dr A.K., Aug 2010, locally frequent in mire; (+) Hyssington, SO3195, Thorne, Dr A.K. & Thorne, Dr W.I.J., det.Thorne, Dr A.K., 22nd Aug 2012, near stream.
- +118/01.6. **Stachys palustris** (Marsh Woundwort) (Briwlys y Gors). Llanfechain, SJ12V, Hazlehurst, Miss A. & Swindells, Mrs S., 2009, mixed habitat.
- +118/04.1.b. Lamiastrum galeobdolon ssp. montanum. Foel, SH91V, Thorne, Dr A.K., 2008, roadside hedgerows.
- +118/06.5. **Galeopsis bifida** (Bifid Hemp-nettle) (Y Benboeth Hollt). Hafren Forest, SN88N, Montgomeryshire Flora Group, det.Thorne, Dr A.K., 17th Jul 2010.

- +118/10.2. **Scutellaria galericulata** (Skullcap) (Cycyllog). SW of Penybontfawr, SJ02R, Daly, Mrs A.P., 2010.
- +118/20.1. **Origanum vulgare** (Wild Marjoram) (Penrhudd). Llanidloes, SN9584, Thorne, Dr A.K., Aug 2011, development site.
- +118/21.3. **Thymus polytrichus** (Wild Thyme)) (Teim Gwyllt). Dolforwyn Castle WS, SO151950, Stretton, Ms T. & Lewis-Reddy, Ms L., 2007, grassland and ruins; (+) Dolforwyn Castle, SO19M, Thorne, Dr A.K. & Thorne, Dr W.I.J., 2007, grassland.
- +†124/08.2. **Chaenorhinum minus** (Small Toadflax) (Trwyn-y-llo Bach). Newtown, SO11789182, Hotchkiss, Mr A.J., 4th Jul 2012, wasteground/bare soil.
- +124/11.1. **Cymbalaria muralis** (Ivy-leaved Toadflax) (Trwyn-y-llo Dail Eiddew). City, nr Sarn, SO2289, Dyer, Mr P., 2010, highways project, central GR. Road verge.
- +‡124/16.23. **Veronica filiformis** (Slender Speedwell) (Rhwyddlwyn Main). Lake Vyrnwy, SH9624, Dawes, Mrs R.A. & Swindells, Mrs S., 2011, forest track; (+) Llangynog, SJ02N, Daly, Mrs A.P., 2010.
- +†124/16.24. **Veronica hederifolia** (Ivy-leaved Speedwell) (Rhwyddlwyn Dail Eiddew). Ffridd Fawr, SH90M, Thorne, Dr A.K. & Thorne, Dr W.I.J., det.Thorne, Dr A.K., 2009, riverside habitat.
- +†124/16.24.a. **Veronica hederifolia ssp. hederifolia**. Foel, SH91V, Thorne, Dr A.K., 2008, roadside hedgerows.
- ¤+124/20.05.b. Euphrasia arctica ssp. borealis. Llangurig (NE of), SN9283, Thorne, Dr A.K. & Thorne, Dr W.I.J., det.Thorne, Dr A.K., 10th Jun 2012, road verge; (¤+) Caerbwla, S of Llangadfan, SJ006082, Thorne, Dr A.K., Montgomeryshire Field Society, 2007, frequent in hay meadows.
- +125/1.1. **Lathraea squamaria** (Toothwort) (Deintlys). Machynlleth (N of), SH748039, Morgan, Jan, 29th Mar 2012, on willow roots, Afon Dulas, must be on or close to county boundary.
- +128/1.3. **Pinguicula vulgaris** (Common Butterwort) (Tafod y Gors). Bryn Titli, SN9376, Thorne, Dr A.K. & Thorne, Dr W.I.J., det.Thorne, Dr A.K., 24th Apr 2010, flush in upland pasture; (+) Llangurig (N of), SN9082, Thorne, Dr A.K., Jul 2012, mire; (+) Llangurig (N of), SN9182, Thorne, Dr A.K., Jul 2012, mires along small stream; (+) Bryncoch Farm, Llanerfyl, SJ0108, Reed, D., 21st Sep 2007.
- +128/2.6. **Utricularia minor** (Lesser Bladderwort) (Chwysigenddail Bach). Llyn y Mynydd, SJ009251, Dawes, Mrs R.A. & Swindells, Mrs S., det.Trueman, Prof. I.C., 27th Jul 2012, in reservoir.
- x+130/3.1. **Sherardia arvensis** (Field Madder) (Mandon Las yr ^d). Welshpool, SJ20I, Stretton, Ms T., 9th Jun 2009, welshpool and on nearby Maesydre recreation ground.
- +130/6.06. **Galium verum** (Lady's Bedstraw) (Briwydd Felen). Y Fan, SN98N, Thorne, Dr A.K., 11th Sep 2007, mixed, old mine spoil dominant; (+) St Melangell's Churchyard, SJ02I, Thorne, Dr A.K., Hazlehurst, Miss A. & Swindells, Mrs S., 2008, grassland with trees.
- +130/6.07. **Galium album** (Hedge Bedstraw) (Briwydd y Clawdd). Abercegir, SH8001, Foulkes, Mrs G., 2012, road verge; (+) nr Wern Reserve, SJ21L, Montgomeryshire Field Society, 2007, canal and adjacent marsh.
- ¤+†133/1.2. Valerianella carinata (Keeled-fruited Cornsalad) (Gwylaeth-yr-oen Ffrwythau Rhychog). Llandyssil, SO2095, Thorne, Dr A.K. & Thorne, Dr W.I.J., det.Chater, Mr A.O., 16th Jun 2012, roadside.
- +133/2.3. **Valeriana dioica** (Marsh Valerian) (Triaglog y Gors). Heldre Hill, Long Mountain, SJ2909, Thorne, Dr A.K., 22nd Mar 2011, grazed woodland and scrub.
- +‡135/19.1. **Tragopogon pratensis** (Goat's-beard) (Barf-yr-afr). Cefn Bran, Llanfyllin, SJ0820, Dawes, Mrs R.A. & Swindells, Mrs S., 10th Jun 2011, roadside verge.
- +†135/22.1. **Lactuca serriola** (Prickly Lettuce) (Letusen Bigog). Newtown, SO11529193, Hotchkiss, Mr A.J., 18th Jul 2012, edge of brownfield site growing between tarmac and brick wall; (+) Meifod, SJ19241501, Beare, Mrs E. & Meade, Ms R., 2012, roadside verge; (+) Welshpool, SJ22820754, Hotchkiss, Mr A.J., 19th Jul 2012, 30 flowering plants on wasteground/bare soil brownfield site.

- ¤+†135/28.07.arg. **Hieracium argillaceum** (Southern Hawkweed). Pistyll Rhaeadr, SJ073294, Thorne, Dr A.K., det.McCosh, Mr D.(2007), 3rd Jul 2006, hieracium argillaceum (specimen in NMW). Single plant on rockface, downstream of falls but not by river.
- x+†135/28.07.dae. **Hieracium daedalolepioides** (Petite-leaved Hawkweed). Pistyll Rhaeadr, SJ071296, Thorne, Dr A.K., det.McCosh, Mr D.(2007), 3rd Jun 2006, hieracium daedalolepioides (specimen in NMW). A few plants but only 1 flowering stem. On river rock, above falls.
- +‡135/43.4. **Erigeron karvinskianus** (Mexican Fleabane) (Amrhydlwyd y Cerrig). Llanfechain, SJ18782057, Hazlehurst, Miss A. & Swindells, Mrs S., 2009.
- +†135/59.1. **Matricaria chamomilla** (Scented Mayweed) (Amranwen Bêr). Upper Wye Valley, SN8582, Montgomeryshire Flora Group, det.Thorne, Dr A.K., 8th Aug 2012, riverside and floodplain.
- +135/81.2. **Bidens tripartita** (Trifid Bur-marigold) (Graban Teiran). Lake Vyrnwy, SH965239, Thorne, Dr A.K. & Wainwright, Mrs M., det.Thorne, Dr A.K., 17th Sep 2006, associate of Carex acuta.
- +138/2.1.‡ **Stratiotes aloides** (Water-soldier) (Alaw Diosgo). Gregynog, SO0997, Thorne, Dr A.K. & Montgomeryshire Flora Group, det.Thorne, Dr A.K., 28th Jul 2011, likely to be non native at this site, near and around The Water Garden, central GR SO09179765; (+) Brithdir Lock Reserve, SJ1902, Dawes, Mr A.P., 1st Aug 2007, abundant in offline reserve, introduced.
- +142/1.02. **Potamogeton polygonifolius** (Bog Pondweed) (Dyfrllys y Gors). Jericho Hill, SJ12Q, Thorne, Dr A.K., Hazlehurst, Miss A. & Swindells, Mrs S., det.Thorne, Dr A.K., 2007, rough pasture.
- +142/1.15. **Potamogeton berchtoldii** (Small Pondweed) (Dyfrllys Bach). Llyn Ebyr, SN9788, Montgomeryshire Field Society, det.Thorne, Dr A.K., 2009, lake; (+) Cefn Bran, Llanfyllin, SJ091199, Dawes, Mrs R.A. & Swindells, Mrs S., det.Thorne, Dr A.K., 20th Jun 2011, in spring fed pool with charophytes, Pot pol and Gly flu, GR.SJ09181995.
- +148/1.1. **Spirodela polyrhiza** (Greater Duckweed) (Llinad Mawr). Montgomery Canal, N of aqueduct, SJ2520, Dawes, Mrs R.A., 2008.
- +148/2.3. **Lemna trisulca** (Ivy-leaved Duckweed) (Llinad Dail Eiddew). Meifod ox-bow, SJ1714, Montgomeryshire Flora Group, det.Thorne, Dr A.K., 2009, oxbow.
- +‡151/1.02. **Juncus tenuis** (Slender Rush) (Brwynen Fain). Hafren Forest, SN88N, Montgomeryshire Flora Group, det.Thorne, Dr A.K., 17th Jul 2010; (+) Bryn Titli, SN9176, Thorne, Dr A.K. & Thorne, Dr W.I.J., det.Thorne, Dr A.K., 24th Apr 2010, roadside verge and hedge; (+) Lake Vyrnwy, SH9625, Dawes, Mrs R.A. & Swindells, Mrs S., 2nd Jun 2011, forest track; (+) Lake Vyrnwy, SJ0120, Dawes, Mrs R.A. & Swindells, Mrs S., Sep 2010.
- +151/2.2. **Luzula pilosa** (Hairy Wood-rush) (Coedfrwynen Flewog). Foel, SH91V, Thorne, Dr A.K., 2008, roadside hedgerows.
- +151/2.3. **Luzula sylvatica** (Great Wood-rush) (Coedfrwynen Fawr). City, nr Sarn, SO2088, Thorne, Dr A.K. & Thorne, Dr W.I.J., det.Thorne, Dr A.K., Mar 2011, forest track through clearfell.
- + **Trichophorum germanicum agg.** (NP.). Llyn y Tarw, SO0297, Thorne, Dr A.K., 29th Sep 2012, E of lake.
- +152/16.07. **Carex spicata** (Spiked Sedge) (Hesgen Ysbigog Borffor). Pennant Melangell (S of), SJ0224, Dawes, Mrs R.A. & Swindells, Mrs S., 2012, verge in forest.
- +152/16.32. Carex sylvatica (Wood-sedge) (Hesgen y Coed). Hafren Forest, SN88J, Montgomeryshire Flora Group, det.Thorne, Dr A.K., 17th Jul 2010; (+) nr Penybontfawr, SJ02S, Daly, Mrs A.P., 2009, road and lanes.
- +152/16.39. Carex laevigata (Smooth-stalked Sedge) (Hesgen Lefn). W of Lake Vyrnwy (Cwm yr Hafod), SH9721, Montgomeryshire Flora Group, det.Thorne, Dr A.K., 17th Jul 2012, track through plantation; (+) Pistyll Rhaeadr, SJ02U, Thorne, Dr A.K., 3rd Jul 2006, river valley hillside.
- +152/16.44×46. Carex x fulva. Llangurig (N of), SN9182, Thorne, Dr A.K., Jul 2012, mires along small stream.
- +152/3.1. **Eleocharis palustris** (Common Spike-rush) (Ysbigfrwynen). Lake Vyrnwy, SH965239, det. Thorne, Dr A.K., 17th Sep 2006, associate of Carex acuta; (+) upper Cwm Rhiwarth, SJ02J,

- det.Daly, Mrs A.P., 2009, steep-sided upland valley; (+) Llansantffraid, SJ22F, det.Thorne, Dr A.K., Hazlehurst, Miss A. & Swindells, Mrs S., 2008.
- ¤+152/9.1. Eleogiton fluitans (Floating Club-rush) (Clwbfrwynen Arnofiol). Lake Vyrnwy, SH96552395, det.Thorne, Dr A.K., 2006, SH96552395 SH96802395. locally frequent, river and lake at head of lake; (¤+) Lake Vyrnwy, SH96802395, det.Thorne, Dr A.K., 2006, sH96552395 SH96802395. Locally frequent, river and lake at head of lake.
- +153/12.01. **Schedonorus pratensis** (Meadow Fescue) (Peiswellt). Hirnant, SJ0321, Dawes, Mrs R.A. & Swindells, Mrs S., 15th Jul 2012, forest.
- +153/14.2. **Vulpia bromoides** (Squirreltail Fescue) (Peisgwellt Cynffon Gwiwer). W of Lake Vyrnwy (Cwm yr Hafod), SH9721, Montgomeryshire Flora Group, det.Thorne, Dr A.K., 17th Jul 2012, track through plantation.
- +†153/14.3. Vulpia myuros (Rat's-tail Fescue) (Peisgwellt y Fagwyr). Penstrowed, SO0691, Montgomeryshire Flora Group, det.Thorne, Dr A.K., 4th Jul 2012, railway and adjacent woodland, central GR SO067916.
- +153/17.1. **Briza media** (Quaking-grass) (Crydwellt). Bontrhydgaled, SN8482, Montgomeryshire Flora Group, det.Thorne, Dr A.K., 8th Aug 2012, track, forest, river.
- +153/18.04. **Poa humilis** (Spreading Meadow-grass) (Gweunwellt Ymledol). Cwm Rhiwarth, SJ0328, Montgomeryshire Field Society, det.Thorne, Dr A.K., 17th May 2012, laneside verges.
- +153/25.2. **Melica uniflora** (Wood Melick) (Meligwellt y Coed). City, nr Sarn, SO2289, Dyer, Mr P., 2010, highways project, central GR. Road verge.
- +†153/28.3. **Avena fatua** (Wild-oat) (Ceirchen Wyllt). Newtown (Peniarth), SO13939235, Hotchkiss, Mr A.J., 15th Aug 2012, 20 culms on road verge by barrier; (+) Dolarddyn, Castle Caereinion, SJ158062, Hotchkiss, Mr A.J., 28th Aug 2012.
- +153/35.1. **Aira caryophyllea** (Silver Hair-grass) (Brigwellt Arian). W of Lake Vyrnwy (Cwm yr Hafod), SH9721, Montgomeryshire Flora Group, det.Thorne, Dr A.K., 17th Jul 2012, track through plantation; (+) Seven Wells, SO08S, Thorne, Dr A.K., 2007, lane and small valley.
- +153/39.8. Agrostis vinealis (Brown Bent) (Maeswellt y Cwn). Machynlleth (S of), SN7499, Montgomeryshire Flora Group, 27th Jun 2012, trackside; (+) Waun, SN99L, Thorne, Dr A.K., 2009, upland farmland; (+) Llyn Coch-hwyad, SH9211, Thorne, Dr A.K. & Thorne, Dr W.I.J., 11th Jul 2012, upland lake and surrounds; (+) Nant y dugoed, SH9212, Thorne, Dr A.K. & Thorne, Dr W.I.J., 11th Jul 2012, forest (stream valley); (+) Gweunydd Penstrowed, SO067906, Thorne, Dr A.K., 28th Jul 2012, grassland and rush pasture. central GR for south fields and woodland which extend from SO066906 to SO068906; (+) Allt Dolanog, SJ066134, Stretton Ms T. & Faulkner, Mr C., 19th Jun 2008, central GR SJ066134; (+) North of Pont Robert, SJ11C, Hazlehurst, Miss A. & Swindells, Mrs S., 2009, mixed habitat; (+) Penygarnedd, SJ1023, Hotchkiss, Mr A.J., 19th Jul 2012, deciduous woodland/acid grassland&bracken/roadside/hedgebanks/stream; (+) Breidden Hill, SJ2914, Hotchkiss, Mr A.J., 2012, summit and North.
- +153/49.2. **Phleum bertolonii** (Smaller Cat's-tail) (Rhonwellt Penfain). Gregynog (Warren), SO08679721, Hotchkiss, Mr A.J., 17th Jul 2012, 4+ plants. Unimproved acid grassland in ancient wood-pasture setting. 4 specimens collected to make significant number of measurements to confirm as P. bertolonii; (+) Llanymynech Hill (Golf Course), SJ266225, Hotchkiss, Mr A.J., 11th Jul 2012, measurements from 7 speciments avg. Panicles 1.1-1.8cm, Spikelets 2.7-2.8mm, awn 0.6-0.9mm.
- x+153/59.2. Hordeum murinum (Wall Barley) (Haidd y Mur). Welshpool, SJ226076, Hotchkiss, Mr A.J., 19th Jul 2012, bank of 100's of plants with 100's of culms under pines near tourist information SJ22560757.
- +153/64.1. **Phragmites australis** (Common Reed) (Corsen). S of Llangynog, SJ02M, Daly, Mrs A.P., 2010; (+) nr Meifod, SJ11R, Meade, Ms R., 2009, mixed habitat adjoining floodplain; (+) Llanfechain, SJ12V, Hazlehurst, Miss A. & Swindells, Mrs S., 2009, mixed habitat; (+) W of Llanymynech, SJ22K, Hazlehurst, Miss A. & Swindells, Mrs S., 2008.
- +154/1.2. **Sparganium emersum** (Unbranched Bur-reed) (Cleddlys Di-gainc). Llwynbrain, SO09L, Thorne, Dr A.K. & Thorne, Dr W.I.J., 2009, floodplain; (+) Llyn y Mynydd, SJ0025, Dawes, Mrs

- R.A. & Swindells, Mrs S., 27th Jul 2012, in reservoir; (+) Meifod, SJ155127, Hazlehurst, Miss A. & Swindells, Mrs S., 30th Jul 2009, edge of pond with Epi cil, Oen cro, Per hyd, Eleo pal.
- x+154/1.3. **Sparganium angustifolium** (Floating Bur-reed) (Cleddlys Arnofiol). S of Bryn Amlwg, SN922973, Forster-Brown, C., Jul 2007, small pool, hundreds of plants with Cal ham.
- +158/17.1. **Paris quadrifolia** (Herb-Paris) (Cwlwm Cariad). nr Kerry, SO16158892, Rowe, Mr P., 17th May 2010, in damp shaded area.
- +161/1.1. **Tamus communis** (Black Bryony) (Cwlwm y Coed). Y Fan, SN98N, Thorne, Dr A.K., 11th Sep 2007, mixed, old mine spoil dominant.
- +162/06.1. **Neottia ovata** (Common Twayblade) (Caineirian). Melinbyrhedyn and surrounds, SN89E, Brown, Mr T., 2007, mixed habitats, with some upland communities.
- +162/18.2. **Dactylorhiza maculata** (Heath Spotted-orchid) (Tegeirian Brych y Rhos). City, nr Sarn, SO2189, Gillard, Mrs R. & Attwood-Wright, Mr S., 12th May 2011, around 20 plants, Lower View semi-improved fields.
- +162/20.2. **Orchis mascula** (Early-purple Orchid) (Tegeirian Coch y Gwanwyn). City, nr Sarn, SO2289, Dyer, Mr P., 2010, highways project, central GR. Road verge.

MERIONETH, v.c.48 (comm. S.Stille & R.Gritten)

- ¤c1-1-vir **Chara virgata** (Delicate Stonewort). Llynnau Cregennen, SH6614, R A Jones & Caerdeon group, det.R A Jones, 27th Jul 2012, 1st hectad record since 1962.
- x+c1-4-fle **Nitella flexilis** (Smooth Stonewort). Ynys Fawr, SH5942, Merioneth Naturalists, det.S E Stille, 30th Aug 2012, **Herb. SES.**
- ¤+004/1.9. **Equisetum telmateia** (Great Horsetail) (Marchrawnen Fawr). Gwyn-fynydd Mines, SH737280, W McCarthy & Caerdeon group, det.W McCarthy, 26th Jul 2012.
- +017/1.2. **Polystichum aculeatum** (Hard Shield-fern) (Gwrychredynen Galed). Quarry face, Arenig quarry, SH8339, S E Stille, M W & C Rand, det.M W Rand, 6th May 2012, **Herb. SES.**
- +‡020/7.3.© **Pinus contorta** (Lodgepole Pine) (Pinwydden Gamfrig). Dol cyn-afon, SH7928, S E Stille, P Spencer-Vellacott & M W Rand, det.P Spencer-Vellacott, 26th Jul 2012.
- *027/1.1. **Ceratophyllum demersum** (Rigid Hornwort) (Cyrnddail Caled). Ditch, Las Ynys, SH588332, S E Stille & H M Garrett, 25th Oct 2012.
- +029/1.1‡ **Berberis vulgaris** (Barberry) (Pren Melyn). Dol cyn-afon, SH7928, S E Stille, P Spencer-Vellacott & M W Rand, 26th Jul 2012, a possible garden relict.
- +‡039/4.2. **Quercus cerris** (Turkey Oak) (Derwen Twrci). Roadside nr station, Llyn Tegid, SH9253, S E Stille, 26th Jun 2012.
- +‡039/4.7. **Quercus rubra** (Red Oak) (Derwen Goch). Trackside above river, Ganllwyd, SH728243, W McCarthy & Caerdeon group, det.G M Kay, 26th Jul 2012.
- ¤+043/3.10. Atriplex portulacoides (Sea-purslane) (Llygwyn Llwydwyn). Saltmarsh, Morfa Harlech, SH578353, A N Graham & J E Graham, 24th Jun 2012, 5th vc record. Surprisingly rare around Cardigan Bay.
- ¤†046/20.09.a. **Silene latifolia ssp. alba**. Dry hedgebank, Ty'n Celyn, SJ138432, S E Stille, 16th May 2012.
- x+046/20.09×01. **Silene x hampeana** ([Pink Campion]). Dry hedgebank, Ty'n Celyn, SJ138433, S E Stille, 16th May 2012, **Herb. SES.**
- *051/1.04.© **Hypericum hircinum** (Stinking Tutsan) (Dail-y-Beiblau Drewllyd). By buildings, Gwynfynydd Mines, SH737280, W McCarthy & Caerdeon group, det.W McCarthy, 26th Jul 2012, 1st v.c. record.
- *†061/2.04. **Salix triandra** (Almond Willow) (Helygen Dribrigerog). Hedge, Cwm Artro, SH611291, P. Spencer-Vellacott, M.W. Rand & R.C. Rand, 25th Jul 2012, 1st v.c. record.

- +061/2.09×11.‡ Salix ×holosericea (S. viminalis × S. cinerea) [S. ×smithiana] (Silky-leaved Osier) (Helygen Dail Sidan). Bank of R Dee, Cilan, SJ0237, S E Stille, det.R D Meikle, 4th Jun 2012, 2nd VC record.
- +061/2.10×11. **Salix x reichardtii**. Forest track, Ganllwyd, SH732251, W McCarthy and Caerdeon group, det.W N McCarthy, 26th Jul 2012.
- +061/2.11×12. **Salix x multinervis**. Coed Lletywalter, SH5927, S E Stille and Caerdeon group, det.G M Kay, 25th Jul 2012; (+) Dol cyn Afon, SH7928, S E Stille, M W Rand & P Spencer-Vellacott, det.M W Rand. 26th Jul 2012.
- *065/12.8.© Erica vagans (Cornish Heath) (Grug Cernyw). Light scrub, Trawsfynydd Lake, SH691379, S E Stille, 7th Oct 2012, 1st v.c. record, probably originally planted, Herb. SES.
- *‡065/4.2.© **Kalmia angustifolia** (Sheep-laurel) (Calmia Culddail). Lakeside, Llyn Mair, SH6541, S E Stille & Bioflits group, det.S E Stille, 30th Jun 2012, 1st v.c. record, **Herb. SES.**
- ⊗‡072/1.1. **Escallonia macrantha** (Escallonia) (Esgalonia). ©Llwyngwril N, SH51V, R Cope, 1st Jul 2012. 1st v.c. record since 1941.
- +073/5.11. **Sedum forsterianum** (Rock Stonecrop) (Briweg Gymreig). Cwm yr Allt Lwyd, SH7929, M W Rand, 26th Jul 2012.
- *‡075/01.1.© **Sorbaria sorbifolia** (Sorbaria) (Sorbaria). Roadside, Abergynolwyn, SH662075, S E Stille, 12th Jul 2012, 1st v.c. record. Probable garden throwout but well established away from cottage, **Herb. SES.**
- +‡075/21.05.06. **Rosa rugosa** (Japanese Rose) (Rhosyn Japan). Llanaber, SH61E, R Cope, 23rd Aug 2012.
- *‡075/30.1. **Amelanchier lamarckii** (Juneberry) (Criafolen Mehefin). Cwm Cau, SH7211, R Gritten, R Finch, J Langton & G Copsey, 25th Jul 2012, probable amenity planting.
- *‡075/32.34.© **Cotoneaster bullatus** (Hollyberry Cotoneaster) (Cotoneaster Deilgrych). Churchyard, Llyn Tegid, SH9235, S E Stille, det.J Fryer, 7th Sep 2012, 1st v.c. record, **Herb. SES.**
- *‡075/32.40.© Cotoneaster sternianus (Stern's Cotoneaster) (Cotoneaster Stern). Light woodland, Glasdir West, SH7322, Merioneth Naturalists, det.J Fryer, 21st Mar 2012, 1st v.c. record, **Herb. SES.**
- ¤+077/14.08.‡ Vicia tetrasperma (Smooth Tare) (Ffacbysen Lefn). Farchynys, SH6618, W McCarthy & Caerdeon group, det.W McCarthy, 24th Jul 2012, 1st hectad record since 1970; (¤+) roadside, Ty'n Celyn, SJ1343, S E Stille, 16th May 2012.
- +‡103/1.17.© **Geranium macrorrhizum** (Rock Crane's-bill) (Pig-yr-aran Wreiddfawr). Tyddyn Gwladys, SH735266, W McCarthy & Caerdeon group, det.W McCarthy, 26th Jul 2012, 2nd v.c. record.
- *‡107/38.1. **Levisticum officinale** (Lovage) (Llwfach). Derelict garden, Nant Pascan, SH6536, Merioneth Naturalists/Grwp Natur Meirionnydd, 19th Jun 2012, garden relict.
- ¤118/23.4. Mentha suaveolens (Round-leaved Mint) (Mintys Deilgrwn). Roadside, spreading, Rhydwen, SH9229, S E Stille, 16th Aug 2012, probably a garden relict.
- ¤+124/02.2. Scrophularia auriculata (Water Figwort) (Gwrnerth y D^r). Llwyngwril N, SH51V, R.Cope, 1st Jul 2012.
- x+†131/1.4. **Sambucus ebulus** (Dwarf Elder) (Ysgawen Fair). Hedgebank, Llandderfel, SH9837, S E Stille, 9th Jun 2012.
- ⊗†135/17.1. **Helminthotheca echioides** (Bristly Oxtongue) (Tafod-y-llew Gwrychog). ©Soft cliffs, Rhoslefain, Cae Du, SH5606, A N Graham & J E Graham, det.A N Graham, 11th Mar 2012, 2nd modern v.c. record and 1st since at least 1987 when it was recorded as a casual.
- +†135/48.1. **Tanacetum parthenium** (Feverfew) (Y Wermod Wen). Ganllwyd, SH72H, W McCarthy & Caerdeon group, det.W McCarthy, 26th Jul 2012.
- *¤142/1.06. **Potamogeton gramineus** (Various-leaved Pondweed) (Dyfrllys Amryddail). Drift line, Llynnau Cregennen, SH6614, R. A. Jones & Caerdeon group, det.C. D. Preston, 27th Jul 2012, 1st v.c. record, **Herb. SES.**

- +142/1.15. **Potamogeton berchtoldii** (Small Pondweed) (Dyfrllys Bach). Oxbow, Ynys Fawr, SH5942, Merioneth Naturalists, det.C D Preston, 30th Aug 2012, **Herb. SES.**
- +‡147/5.2.b. **Arum italicum ssp. italicum**. Plantation, Glasdir, SH745223, Merioneth Naturalists, det.S E Stille, 21st Mar 2012.
- *153/24.1. **Glyceria maxima** (Reed Sweet-grass) (Melyswellt y Gamlas). Artificial pond, Afon Cymerig, Lake, SH9333, Merioneth Naturalists, det.S E Stille, 27th Sep 2012, 1st v.c. records; (*) river bank, Cilan, SJ0237, S E Stille, 4th Jun 2012, 1st v.c. records, **Herb. SES.**
- x153/51.1. **Bromopsis ramosa** (Hairy-brome) (Pawrwellt Blewog). Broad-leaved woodland, Coed Lletywalter, SH6027, S E Stille & Caerdeon group, det.H V Colls, 25th Jul 2012.
- *158/14.1×2. **Polygonatum x hybridum** (Garden Solomon's-seal) (Llysiau-Solomon yr Ardd). Near cottage garden, Llyn Mair, SH6541, SH6541, S E Stille, Llen Natur + Cofnod Bioflits, 30th Jun 2012, garden origin.

CAERNARFON, v.c.49 (comm. Mrs W. McCarthy)

- +010/1.2. **Hymenophyllum wilsonii** (Wilson's Filmy-fern) (Rhedynach Teneuwe Wilson). Boulders near waterfall, Cwm Penmachno, SH7645, S.D.Bosanquet, 2012, 1st record for v.c.49 portion of SH74.
- +015/2.5.b×5.a. **Asplenium x lusaticum**. Rock face, Cwm Penmachno, SH7547, P.L.Reade, det.F.J.Rumsey, 2012.
- +017/3.05. **Dryopteris aemula** (Hay-scented Buckler-fern) (Marchredynen Bêr). Scree patches, Mynydd Rhiw, SH2329, W.McCarthy, det.F.J.Rumsey, 2012.
- +‡019/1.1. **Azolla filiculoides** (Water Fern) (Rhedynen y Dwr). Pond near farm, Porth Dinllaen, SH2740, W.McCarthy & M.Stead, 2012.
- *‡022/1.1. **Araucaria araucana** (Monkey-puzzle) (Cas Gan Fwnci). Woodland near lake, near Betws Y Coed, SH7855, J. & H.Lowell, 2012, presumably planted.
- +028/17.3. **Thalictrum flavum** (Common Meadow-rue) (Arianllys). Bank in wood, Great Orme, SH7883, W.McCarthy, 2012, probably established from Happy Valley gardens, although not currently growing there.
- +046/08.1. **Myosoton aquaticum** (Water Chickweed) (Llinesg y D^r). Drainage ditch at top of beach, Penrhyn Bay, SH8281, W.McCarthy, 2012, 2nd v.c. record.
- *‡049/1.1. Paeonia mascula (Peony) (Rhosyn-y-mynydd Gwyllt). Wood margin opposite hotel, near Betws Y Coed, SH7956, J. & H.Lowell, 2012.
- +062/12.3. **Rorippa islandica** (Northern Yellow-cress) (Berwr Melyn Gogleddol). Disused quarry, Talysarn, SH4953, E.Meilleur & S.P.Chambers, 2012, several small plants over c. 2 x 5 m. on open ground on edge of flat terrace at Dorothea Slate Quarry.
- +‡062/14.4. **Cardamine raphanifolia** (Greater Cuckooflower) (Blodyn Llefrith Mawr). River bank, Dolwyddelan, SH7352, S.Jones, det.W.McCarthy, 2012.
- +‡075/11.3. **Fragaria ananassa** (Garden Strawberry) (Llwyn Mefus y Gerddi). Wood margin opposite hotel, near Betws Y Coed, SH7956, J. & H.Lowell, 2012.
- +‡075/32.37. **Cotoneaster dielsianus** (Diels' Cotoneaster) (Cotoneaster Diels). Limestone grassland, Little Orme, Llandudno, SH8182, W.McCarthy, 2012.
- +‡075/32.40. **Cotoneaster sternianus** (Stern's Cotoneaster) (Cotoneaster Stern). Hedge near station platform, Abererch, SH4036, W.McCarthy, 2012.
- *‡075/32.43. Cotoneaster zabelii (Cherryred Cotoneaster) (Cotoneaster Zabel). Limestone cliff ledges, Great Orme, SH7782, W.McCarthy, det.Mrs. J. Fryer, 2010, 1st Welsh record.
- +077/14.12. **Vicia lathyroides** (Spring Vetch) (Ffacbysen y Gwanwyn). Sand dunes, Porth Towyn, Abersoch, SH2826, W.McCarthy, 2012.
- +‡077/17.2. **Melilotus albus** (White Melilot) (Yr Wydro Wen). Disturbed roadside, Bethesda, SH6462, W.McCarthy, 2012.

- *077/19.06. **Trifolium suffocatum** (Suffocated Clover) (Meillionen Fygedig). Short grazed turf, Sychnant Pass, Conwy, SH7477, F.J.Rumsey, 2012.
- +‡079/2.2. **Myriophyllum aquaticum** (Parrot's-feather) (Pluen Parot). Pond near farm track, Rhiwlas, SH5765, Caerns Recording Group, 2012.
- +084/1.03×06. **Epilobium ×aggregatum (E.× E. obscurum)** (a hybrid willowherb). Edge of field, Maes y Facrell NNR, SH7782, W.McCarthy, 2012.
- *084/1.06×12. **Epilobium ×obscurescens (E. obscurum × E. brunnescens)**. Banks of stream, Gyrn Wigau, Bethesda, SH6567, W.McCarthy, det.G. Kitchener, 2011.
- +084/1.07. **Epilobium roseum** (Pale Willowherb) (Helyglys Gwelw). Pavement edges, West Shore, Llandudno, SH7781, W.McCarthy, 2012.
- +‡084/1.12 **Epilobium brunnescens** (New Zealand Willowherb) (Helyglys Seland Newydd). Cracks between paving slabs, Llandudno, SH7881, W.McCarthy, 2012.
- +‡103/1.23. **Geranium phaeum** (Dusky Crane's-bill) (Gweddw Alarus). Scrub near roadside, Bryn Pydew, SH8179, W.McCarthy, 2012.
- +‡110/7.1.© **Solanum lycopersicum** (Tomato). Waste ground near caravan park, Abererch, SH4036, W.McCarthy, 2012.
- +113/2.1. **Nymphoides peltata** (Fringed Water-lily) (Lili'r-d^r Eddïog). River near railway station, Abererch, SH4036, W.McCarthy, conf. Iwan Edgar, 2012, well established in several lengths of the river.
- *‡122/1.2×3 **Buddleja x weyeriana** (Weyer's Butterfly-bush) (Coeden-fêl Weyer). Side of footpath to the sea, Little Orme, Llandudno, SH8182, W.McCarthy, 2012.
- +†135/22.1. **Lactuca serriola** (Prickly Lettuce) (Letusen Bigog). Disturbed ground near new house build, Llys Helig, Llandudno, SH7683, W. McCarthy, 2012.
- +135/28.04.34. **Hieracium sparsifolium** (Sparse-leaved Hawkweed). Rocks above lake, Cwm Edno, SH6549, W. McCarthy, 2010.
- +‡135/43.4. **Erigeron karvinskianus** (Mexican Fleabane) (Amrhydlwyd y Cerrig). Castle walls, Conwy, SH7877, W. McCarthy, 2012.
- *‡135/69.1×2×3. **Doronicum x excelsum** (Harpur-Crewe's Leopard's-bane) (Llysiau'r-llewpart Harpur-Crewe). Established clump under trees, Little Orme, Llandudno, SH8181, W.McCarthy, 2012, probably dumped from garden.
- +‡153/46.2. **Polypogon viridis** (Water Bent) (Barfwellt Diffaith). Flower beds at caravan park, Abererch, SH4035, W. McCarthy, 2012; (+) cracks between paving slabs, Penrhyn Bay, SH8181, W. McCarthy, 2012, appears to be rapidly increasing in v.c. 49, with new square records each year.
- +‡158/32.1. **Galanthus nivalis** (Snowdrop) (Eirlys). Roadside, Llanaelhaearn, SH3845, W.McCarthy & M.Stead. 2012.
- +‡159/02.1. **Sisyrinchium bermudiana** (Blue-eyed-grass) (Sisirinciwm Glas Gwyddelig). By footpath at top of saltmarsh, Foryd, near Caernarfon, SH4558, D. Brown, 2009, status unknown but probable escape from gardens.
- +162/05/1. **Neottia nidus-avis** (Bird's-nest Orchid) (Tegeirian Nyth Aderyn). Woodland bank, Dolgarrog, SH7765, J.Driver, 2011, dozens of plants; (+) limestone woodland, Gloddaeth, Llandudno, SH8081, W.McCarthy, 2012, 1 fine plant.
- +162/20.3. **Anacamptis morio** ([Green-winged Orchid]) (Tegeirian y Waun). Sand dunes, Porth Towyn, Abersoch, SH2826, W. McCarthy, 2012, 10 plants counted.
- +162/23.3. **Ophrys apifera** (Bee Orchid) (Tegeirian y Wenynen). Roadside bank, Esgyryn, near Llandudno Junction, SH8078, M.Cooper, 2012.

DENBIGH, v.c.50 (comm. D.Williams)

- *040/1.2.b. **Betula pubescens ssp. tortuosa** (a subspecies of Downy Birch). Peat bog, Fenn's Moss, SJ499369, BSBI Welsh AGM, det.Chater, A.O., 22nd Jun 2012, scattered plants across the Reserve.
- *040/2.1×2. **Alnus x hybrida**. At edge of meadow, Alyn Waters Country Park, SJ32695474, BSBI Welsh AGM, det.BSBI, 21st Jun 2012, a few saplings with A. incana & A. glutinosa.
- +†046/20.09.a. **Silene latifolia ssp. alba**. Canal bank, Froncysyllte, SJ24Q, BSBI Welsh AGM, det.BSBI, 20th Jun 2012.
- *‡053/4.1. **Alcea rosea** (Hollyhock) (Hocysen Fendigaid). On the beach against the sea wall, Pensarn, SH946788, Davies, A., 1st Aug 2012.
- +‡062/15.5. **Arabis caucasica** (Garden Arabis) (Berwr-y-cerrig yr Ardd). Roadside, Llanarmon DC, SJ1433, Denbs Group, 27th May 2012, garden escape; (+) pathside, Froncysyllte, SJ2640, Denbs Group, 10th Jun 2012, garden escape.
- *‡074/06.1. **Heuchera sanguinea** (Coralbells) (Clychau Cwrel). Woodland, Overton, SJ372414, Bell, K.K., 20th Jun 2012, established clumps in Mill Wood, Overton.
- *‡075/08.0.05. **Rubus odoratus** (Purple-flowered Raspberry) (Llwyn Mafon Pêr). Top of steep bank above railway line, Gresford, SJ341544, Smith, J., det.Williams, D., 9th Jul 2012, near Gresford Cemetery top of steep bank above railway line & bypass.
- *075/08.10.234. **Rubus flexuosus**. Marford Quarry, SJ35N, BSBI Welsh AGM, det.BSBI, 21st Jun 2012.
- *‡075/28.21. **Sorbus croceocarpa** ([Orange-berried Whitebeam]) (Cerddinen Ffrwythau Saffrwm). Wood edge, Bryn Euryn, SH832797, Rich, T.C.G., 21st Jun 2012, young tree on N side of car park behind reserve sign, **NMW**.
- *‡075/28.23.agg. **Sorbus latifolia agg.(Broad-leaved Whitebeam)** (Cerddinen Lydanddail). Bryn Euryn, SH832797, Rich, T.C.G., 21st Jun 2012, nR. coreocarpa or latifolia s.s., too young to be sure.
- +‡077/19.19.a.© **Trifolium incarnatum ssp. incarnatum** (Crimson Clover) (Meillionen Waetgoch). Field, Aberwiel, SJ199368, Williams, D., 16th Aug 2012, field adjacent to road. Cleared area just to S of gate. Part of sown seed mix.
- +‡130/4.1. **Phuopsis stylosa** (Caucasian Crosswort) (Croeslys y Cawcasws). Grassland, Conwy Urban Green Space in North Wales Police HQ, SH861784, Harold, J., 30th Sep 2009, 2 plants.
- *©135/55.aus. **Anthemis austriaca** (Austrian Chamomile). Open vegetation on canal-side towpath, Bryn Howel Hotel, Trefor, SJ251416, Chambers, S.P., conf. Poland, J., 20th Feb 2012, two plants. On towpath between Bryn Howel Hotel and Trefor Canal Basin. BSBI Welsh AGM. Spotted by several group members walking the path, **Hb S.P.C**, **to go to NMW**.
- *‡158/05.1. **Hemerocallis fulva** (Orange Day-lily) (Lili Undydd Oren). Roadside, Halghton, SJ429406, Bell, K.K., 1st Jul 2012, naturalised by roadside by E of New Gorse Covert.
- *162/16.1.b. **Gymnadenia densiflora**. Open woodland, Alyn Waters Country Park, SJ328551, Povey, S.M., 18th Jul 2012, probable correction of /addition to previously recorded G. conopsea s.l. at this site.

ANGLESEY, v.c.52 (comm. N.H. Brown & I.R. Bonner)

- +028/13.17.b. **Ficaria verna ssp. verna** (a subspecies of Lesser Celandine). Woodland edge, Home Farm, Dulas, SH482901, J & I Rees, 28th Apr 2011.
- ¤028/13.20. Ranunculus tripartitus (Three-lobed Crowfoot) (Crafanc-y-frân Dridarn). Pool near coast, Rhoscolyn, SH260752, E. Meilleur, conf. I Bonner & T Dines, 19th May 2011, small muddy area kept open by users of the coastal footpath.
- 028/13.25.a. **Ranunculus penicillatus ssp. penicillatus** (a subspecies of Stream Water-crowfoot). River, Afon Cefni, Llangefni, SH452765, Ian Bonner, 26th Jun 2012, not recorded since the 1978 record by Nigel Holmes, **Herb. IRB.**

- +061/1.3.a. **Populus nigra ssp. betulifolia** (a subspecies of Black-poplar). By small pond, Valley, SH286790, Jill Jackson, conf. AO Chater & J Poland, 6th Jul 2010, Nigel Brown estimates tree is c.75 years old. Currently only specimen known on Anglesey since original tree in Menai Bridge apparently felled in 2008, **Herb. IRB.**
- ⊗075/17.1. **Sanguisorba officinalis** (Great Burnet) (Bwrned Mawr). Wet grassland, Gwalchmai, SH3974, Anglesey Flora Group, 2nd Aug 2011, 2 non-flowering plants in an extensive area of wet grassland. No confirmed record since 1895, **Herb. IRB.**
- +‡091/2.15. **Euphorbia cyparissias** (Cypress Spurge) (Llaethlys Cypreswydd). Stony embankment, Stanley Embankment, Valley, SH283796, Nigel Brown, 1st Jun 2012, 2nd VCR; (*) waste ground between road and shore, Llanddona Beach, SH5780, Ian Bonner, det.Timothy Walker, 18th May 2012, very vigorous plants competing with taller growing herbs and grasses, **Herb. IRB.**
- *‡093/2.1. **Parthenocissus quinquefolia** (Virginia-creeper) (Dringwr Fflamgoch). Between path and shore, Malltraeth, SH4068, Nigel Brown, 27th Aug 2011; (+) waste ground between road and shore, Llanddona Beach, SH572808, Ian Bonner, det.John Poland, 18th May 2012, 2nd VCR. Growing horizontally amongst tall herbs and grasses, **Herb. IRB.**
- 135/30.1. Filago vulgaris (Common Cudweed) (Edafeddog Lwyd). Recently cleared ground, Llanidan, SH4866, John Bratton, conf. I. Bonner, 11th Jul 2011, (+) open stony area by forest ride, Pentraeth, SH5479, Charles Aron, conf. I Bonner, 18th Jul 2011, previous to these two no records since 1971.
- *148/1.1. **Spirodela polyrhiza** (Greater Duckweed) (Llinad Mawr). Garden pond, Glan-yr-afon, SH605807, J. Bratton, 10th Jun 2011, well away from main distribution. Not knowingly introduced.
- +152/16.47. **Carex pallescens** (Pale Sedge) (Hesgen Welw). Molinia-Cirsium dissectum fen (M24b), Llyn Hafodol, SH390889, S. Bosanquet, 18th Jun 2009, the only confirmed record for Anglesey since at least 1983 and possibly since 1970.

Images on opposite page:

8: *Sibthorpia europaea* (Cornish Moneywort) refound in Breconshire (v.c.42), possibly one of the largest populations in Wales.

9: John Crellin hunting for *Sibthorpia europaea* (Cornish Moneywort) in the snow.

Photos: Paul Green. See article on page 20.

Images on back cover:

10: Conifer workshop. Photo: Paul Green. See article on page 14.

11: Murder mystery in the vascular herbarium, Amgueddfa Cymru - National Museum Wales Halloween Open Day 2012. Whilst surrounded by our quarter of a million pressed herbarium specimens, you had to work out which plant the victim had eaten. Photo: K.Slade. See editorial on page 4.

12: Installing the Bîns ar Dost - Beans on Toast exhibition. Photo: K.Slade. See editorial on page 4.









