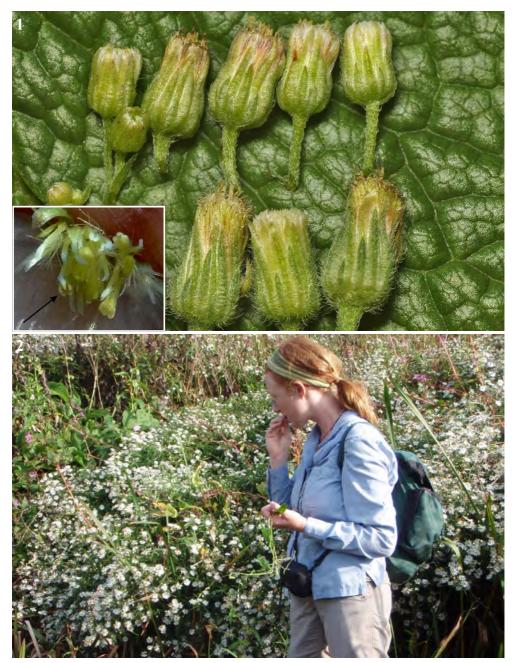


Welsh Bulletin

No. 89 Jan 2012



Editors: Richard Pryce, Katherine Slade & Sally Whyman



Front Cover Image : *Filago vulgaris* (Common Cudweed), Anglesey (v.c.52). Photo: Ian Bonner. See article on page 11.

- **1:** Capitula of *Conyza floribunda* above, *C. sumatrensis* below. Photo: Barry Stewart. Inset: *C. floribunda* capitula squashed between finger and thumb to expose 5 lobes on central disc florets. Photo: Richard D.Pryce. See article on page 18.
- **2:** *Aster* agg. (Michaelmas Daisy) in *Persicaria mitis* habitat along the River Wye. Photo: Andy Jones. See article on page 27.

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Welsh Bulletin

Issue 89 Jan 2012

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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.88 released in July 2011.

Back issues over one year old are currently being 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 June 2012 issue should be sent to an editor by the 1st May 2012.

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

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Welsh Officer Editorial

POLLY SPENCER-VELLACOTT,

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Just a very quick note to let Welsh members know I am still here! I have now visited over 90% of Welsh vice-county recorders, and have met at least a few members on field meetings and at the AGM this summer.

This year (and hopefully also in the future) the BSBI has received a significant grant from CCW which partly funds my position as well as some of the other ongoing projects. In return, we are finding more ways that CCW can benefit from the BSBI's expertise and data.

One of the commitments that our work contributes to is the Global Strategy for Plant Conservation (GSPC). This is part of the Convention on Biological Diversity, and includes 16 targets, grouped into four objectives based on understanding, conservation, sustainable use, education and capacity building. In Wales a number of organisations, including Plantlife, the National Botanic Garden and the National Museum of Wales are working towards these objectives and the BSBI contributes hugely to many of them. Without the data collected by BSBI members the distribution of many plant species could still remain a mystery. Wales is leading the way in some areas, for example, we are

hoping to be one of the first countries to get complete coverage of the County Rare Plant Registers.

For next year, I am working with CCW to identify rare plant populations on SSSIs which have not been monitored in recent years. Plant species may include Hammarbya paludosa (Bog Orchid), Lycopodiella inundata (Marsh Clubmoss), Melittis melissophyllum (Bastard Balm) or Hypochaeris glabra (Smooth Cat's-ear). The aim will be to achieve a relatively even spread over the different regions of Wales, so if you fancy joining me to visit one of these very special sites and look for a species you may not often see, please get in touch and I will contact you when visiting a site near to you. I will be contacting the vice-county recorders individually before visiting sites in their county, so this is especially an invitation to other members. I hope that some of the vice-county recorders will be involved, but others may be more than busy enough with their general recording, so this is an opportunity for any members to get involved with a very interesting and useful survey.

One of the other projects I will be trying to advance is the digitisation of a number of paper datasets held by some of our long-standing vice-county recorders. We are seeking funding for this, but if any members are interested in becoming involved in such projects I would be very keen to hear from you. There is a great advantage to digitisation by those with taxonomic knowledge (including familiarity with name changes), relatively local geographic knowledge and obviously at least basic computer skills. Sitting with a large pile of record cards and a computer is not everyone's idea of fun, but if you think you may have the

patience and spare time and might find such a project interesting please get in touch.

I will be trying to keep some information on the Welsh section of the BSBI website including links to relevant Welsh websites www.bsbi.org.uk/wales.html

I'm looking forward to meeting many more of you in 2012.

BSBI Wales Annual General Meeting 2012

50th Welsh AGM & 30th Exhibition Meeting

Wednesday 20th to Friday 22nd June 2012 Bryn Howel Hotel, Trevor, Llangollen, Denbighshire (v.c.50)

DRAFT PROGRAMME

There is a wide range of interesting habitats within easy reach of this area, from limestone to bog and industrial to aquatic. Members will be able to choose from a range of options. The BSBI Committee for Wales extends a warm welcome to all members, whatever their experience, to this 50th celebration AGM. The hotel is 10 mins driving from the main A483 trunk road and we can arrange lifts from the nearest train stations of Ruabon or Wrexham.

Croeso cynnes i bawb

Wednesday 20th June

1.00pm	Welcome and Registration.
	Exhibition area for setting up exhibits.
2.30pm	Afternoon walk to Trevor Rocks, or the Canal Basin, or t.b.a.
4.30pm	Tea/coffee.
6.30pm	Evening meal and talk at Bryn Howel.

Thursday 21st June

7.30-8.45am Breakfast & collect packed lunch.

9.30am Depart for excursions to e.g. Cors Maen Llwyd, Fenn's Moss,

Brymbo Steelworks, etc.

3.00pm Return to Bryn Howel for tea, followed by Wales AGM. All

members encouraged and welcome to attend the 50th Welsh AGM.

5.00-6.00pm Workshops and identification of members' specimens and material

collected during day.

6.30 Conference Dinner at Bryn Howel.

8.00 Talks to be arranged, but with an historical emphasis in celebration.

of the 50^{th} AGM.

Friday 22nd June

7.30-8.45am Breakfast, collect packed lunch and check out.

9.30am Depart for excursions to e.g. Alyn Waters Country Park, Marford

Quarry, Bonc-yr-hafod.

Excursions (yet to be finalised!) will finish by 4.00pm.

Bryn Howel Hotel

The AGM will be based at the premier Bryn Howel Country Hotel and Restaurant, set in the magnificent Vale of Llangollen. (www.brynhowel.com 01978 860331, reception@brynhowel.com) The hotel has 37 rooms, all en-suite with tea/coffee, telephone and television. WiFi is free.

'....Our emphasis is on offering excellent food and a truly personal service...'

Rooms will be allocated on a first-come-first-served basis. Rooms are being held until 30th April 2012 after which there is NO GUARANTEE of a room. Full board per person for two nights, including breakfasts, dinners, packed lunches and teas/coffees is £137.50

Exhibits

Exhibits are an important part of the AGM. Do please bring along any specimens, photos or articles that you think might be of interest to other members, or that you would like to have identified.

Booking

For residents: Please note that if you wish to be resident at the Bryn Howel, bookings must be made by you direct to the hotel by 30th April 2012 with a non-returnable deposit of £25. Full payment for accommodation to be made to the hotel on your departure. Please allow time for this on the day.

For non-residents: Please order any meal requirements on the booking form below but pay the hotel for these on your departure

For residents and non-residents: Conference Fee: Please complete the booking form below and return with a cheque for £10 for the conference fee. Please make cheques payable to 'BSBI Committee for Wales' and send to Sarah Stille, The Quillet, Berwyn St., Llandrillo, Corwen, Denbighshire LL21 0TH. Receipts and final details of the programme will be sent out by email, otherwise please enclose a stamped addressed envelope.

If you have any queries, please contact Delyth at <u>delyth@siriolbryn.co.uk</u> or phone 01824 702196.

Commander John Martin Williamson Topp OBE (1937-2011)

DELYTH WILLIAMS, BSBI Recorder for Denbighshire (v.c.50) & Chair BSBI Committee for Wales. Bryn Siriol, Graig Fechan, Ruthin, Denbighshire, LL15 2HA. delyth@siriol.myzen.co.uk

BSBI members in Wales will no doubt be delighted and amused to hear of an index-linked bequest from John, to the tune of £1,252.91. It has been left to the Welsh Branch of the BSBI with the request that it should "enable the membership of the said Society to enjoy drinks at my expense at the Society's [Welsh] Annual General Meeting".

Those of us who knew John will recall how much he enjoyed the Welsh AGMs and I am confident that we will be able to fulfil his request at the 2012 AGM in Llangollen. Most regrettably, it will be without the pleasure of his company.

See BSBI News No. 119 January 2012 for the obituary.

BSBI Field Meetings Wales – 2012

These dates are for your diary only. Full details will be in the BSBI Year Book early in 2012. Please note that bookings will not be taken until then.

Saturday 12th May. Church Stoke, Montgomeryshire, v.c.47 Leader: Kate Thorne

Wednesday 6th June. Hay on Wye, Breconshire, v.c.42 Leader: John Crellin

Wednesday 20th - Friday 22nd June. Welsh AGM, Llangollen, Denbighshire, v.c.50 Leader: Delyth Williams

Saturday 30th June. Whitford, Glamorgan, v.c.41 Leader: Barry Stewart. (Glamorgan weekend)

Sunday 1st July. Upper Rhondda, Glamorgan, v.c.41 Leader: Julian Woodman. (Glamorgan weekend) Saturday 14th - Saturday 21st July. Glynhir, Carmarthenshire, v.c.44 Leaders: Richard and Kath Pryce

Tuesday 24th - Friday 27th July. Plas Caerdeon, Merionethshire, v.c.48 Leader: Sarah Stille

Saturday 28th July. Llyn Geirionydd, Caernarvonshire, v.c.49 Leader: Wendy McCarthy

Saturday 11th August. Rhydymwyn, near Mold, Flintshire, v.c.51 Leader: Polly Spencer-Vellacott [Beginners Training Day]

Saturday 15th September. Ynyslas, Cardiganshire, v.c.46 Leader: Andy Jones

I am very grateful to all those who have offered to lead meetings. Perhaps **you** would be prepared to lead one in 2013? You don't need to be an expert, just suggest an interesting site and make sensible arrangements for parking, etc.

Meetings can be targeted at beginners, for recording or for general interest. If you would like to volunteer, please contact me, Sarah Stille, at mossysal@btinternet.com.

Abstracts of Exhibits shown at the 29th BSBI Welsh Exhibition Meeting, Pembrokeshire 2011

Corsican Heath on Holyhead Mountain

IAN BONNER, BSBI Recorder for Anglesey (v.c.52).

Specimens and pictures of *Erica terminalis* (Corsican Heath). This was originally planted as landscaping around a telecommunications mast; but has now seeded itself for over 50m into the adjacent heathland SSSI. (See article p11 & photo 12 on back page).

Black Poplar on Anglesey

IAN BONNER

For many years a tree in Menai Bridge was thought to be the only Black Poplar on Anglesey; but it was felled 2-3 years ago.

In 2010 a possible Black Poplar was reported from near Valley. From pictures and herbarium material on display this was confirmed as *Populus nigra* subsp *betulifolia*.

Filago vulgaris (Common Cudweed) on Anglesey

IAN BONNER

Specimens and pictures of Common Cudweed. With no records since before 1971 it was a surprise in July 2011 to receive two separate sightings within a few days of each other. (See photo on

front cover).

Sanguisorba officinalis (Greater Burnet) on Anglesey

IAN BONNER

Pictures and a specimen from two nonflowering plants found by the Anglesey Flora Group from a wetland near Gwalchmai. This appears to be the first localised record since the two sites listed in the Flora of Caernarvonshire and Anglesey in 1895.

Pembrokeshire Rare Higher Plant Register

STEPHEN B. EVANS, BSBI Recorder for Pembrokeshire (v.c.45).

A draft of the Pembrokeshire Rare Higher Plant Register/Dossier prepared by Stephen Evans was displayed. The 642 pages in two lever-arch folders were printed in October 2007. Electronic copies had a limited circulation to BSBI/Plantlife and CCW in 2007

2003 report on Chamomile in Pembrokeshire & sample specimen

STEPHEN B. EVANS

A flowering pot grown specimen from Rhos Fach, Gors Fawr, SN131302 was displayed. Alongside a tabled report Abstracts of Exhibitions, Pembrokeshire 2011

for 2003 detailed the situation with Chamomile in the county, including photographs along with population forms for about 20 colonies.

Revised Dale Flora

STEPHEN B. EVANS

A draft 1987 revision by Juliet Brodie of Martin George's 1961 Dale Flora was exhibited.

Portulaca oleracea

STEPHEN B. EVANS

This exhibit displayed a specimen of Portulaca oleracea in a pot from Pigscot Organic Farm, Herbrandston, Pembrokeshire, SM872077.

Cordyline australis in Pembrokeshire

STEPHEN B. EVANS

Seedlings have been found at three locations under parent trees. Two seedlings had been potted up and were exhibited. The smaller one was from a garden at Marloes SM795083 and had been collected in August 2010. The larger one had been collected in June 2009 from outside the Grove Hotel, St. David's at SM756252.

Juncus effusus var. spiralis

STEPHEN B. EVANS

Juncus effusus var. spiralis from marshy grassland at Dinas Cross, Pembrokeshire, SN024386. A fine example of this variety in flower in a

large pot.

Fagopyrum dibotrys (D.Don) H.Hara (Tall Buckwheat) in West Wales

ARTHUR O. CHATER, BSBI Recorder for Ceredigion (v.c.46).

& STEPHEN B. EVANS

(See article on page 14).

Competition: "Herbarium Plants" can you identify all of them with Latin and English names?

TREVOR G. EVANS, *BSBI Recorder for Monmouthshire* (v.c.35) (See article on page 15).

Ratty's Tail

or How Water Vole Habitat Mitigation near Llanelli has had spin-off benefits for the local flora

KATH PRYCE &

RICHARD D. PRYCE, BSBI Welsh Bulletin Co-editor & Recorder for Carmarthenshire (v.c.44).

(See article on page 16).

What is this *Conyza* from Pwll Llanelli?

KATH & RICHARD D. PRYCE

Although not definitively determined during the meeting, it was subsequently identified as *Conyza floribunda*. (See article on page 21).

Dale Fort Species Survey 2009

JOHN ARCHER-THOMPSON & JANE WARR

Several new species from various habitats were added to the Dale Fort Species survey 2009 by participants during the meeting.

Some 'Arables' from Julian's garden

JULIAN WOODMAN, BSBI Recorder for East Glamorgan (v.c.41).

Carex divisa from Dale Limekilns

JANE WARR

Flowering specimen pressed earlier in the year.

Anglesey Plants in 2011

IAN BONNER, BSBI Recorder for Anglesey (v.c.52), Cae Trefor, Tynygongl, Anglesey, LL74 8SD. BSBI@caetrevor.co.uk

Joanna Robertson came to the rescue this year and took over the organisation of the more social side of the Anglesey Flora Group – arranging five field visits – and Jane & Ivor Rees kindly led a BSBI Field Meeting to the Crigyll estuary and adjacent Tywyn Trewan dunes, in less than pleasant August weather.

Threatened Plant Project (TPP) species for Anglesey this year were just two: *Baldellia ranunculoides* (Lesser Waterplantain) and *Cuscuta epithymum* (Dodder). Anglesey is important for the 'Near Threatened' *Baldellia* with records from over 30 monads (1 km

squares), which includes two locations for the rare subspecies *repens* (Creeping Lesser Water-plantain).

The parasitic Dodder, listed as 'Vulnerable', is a much more local plant, despite its usual hosts, heather and gorse, being very widespread. Regular sightings are from the Carmel Head area, with more sporadic records from heaths on Holy Island. This is a favourite of Jane & Ivor who meticulously completed the survey forms this summer.

There was a welcome new location for *Hypopitys monotropa*, (better known as

Monotropa or Yellow Bird's-nest) a TPP species in 2008 that was hard to relocate in its traditional dune slack habitats associated with Creeping Willow (*Salix repens*). The new location was in Menai Bridge, between the rugby pitch and the Menai Strait, where a number of flower spikes were counted growing from rock filled gabions – under a line of willow trees!

A post-script to the note about "Heathers on Holyhead Mountain" in BSBI Welsh Bulletin No. 88 (July 2011) was that Ted Phenna and Richard Robinson independently visited and added a third introduced heather, *Erica vagans* (Cornish Heath) (see image 12 on back page), to the mix on the Mountain.

An orchid success story concerns *Platanthera chlorantha* (Greater Butterfly-orchid) near Plas Newydd. In 2001 three flowering spikes were reported as the first, certainly the first recent, county record. Small numbers were recorded in the following years and then the National Trust started managing the area in a traditional way and this summer a staggering 100 plus inflorescences were counted over quite a wide area

Continuing with successes – two species were rediscovered which had been labelled "possibly/probably extinct" in the county.

The first concerns Sanguisorba officinalis (Greater Burnet), which was

listed in the Flora of Caernaryonshire Anglesey (1895) from & Erddreiniog and Lligwy but no record appeared in Flowering Plants and Ferns of Anglesey (1982). We have traced an unpublished record from 1983-84 by the Wildlife Trust's Biological Survey team from Malltraeth Marsh but nothing since. In August this summer Anglesey Flora Group members found two non-flowering plants in extensive area of wet grassland near Gwalchmai – despite a careful search no further plants could be found.

The second is about *Filago vulgaris* (Common Cudweed) (see image on front page) a remarkably uncommon plant in recent years. In fact there only seem to have been four recorded localities between 1959 and 1971 and no sightings since then. However this July two separate records were received within a few days of each other. John Bratton counted 6 plants on a recently cleared area in a former quarry near Brynsiencyn and Charles Aron recorded 50 – 60 plants in an open stony area adjacent to a trackway in Pentraeth Forest.

There was a single record of a Black Poplar tree from Menai Bridge for many years but it was never examined critically and was not seen after 2008 – presumed felled! However in 2010 Jill Jackson pointed out that several of us had regularly been walking past a second specimen on our way to monitor *Ranunculus tripartitus* (Threelobed Crowfoot). So this year we

photographed the fine tree near Valley and took some foliage to the AGM at Dale where various experts determined it as *Populus nigra* ssp. *betulifolia*, again giving Anglesey a single known locality for this species.

Two interesting sedge records - the first is from Cors Erddreiniog and was spotted in 2009 by Chris Metherell but only confirmed this year as the hybrid between Carex elata (Tufted-sedge) and Carex nigra (Common Sedge) going under the scientific name of Carex x turfosa. The Anglesey fens are important for Tufted-sedge and this is at least the third finding of this unusual hybrid since the 1970s. The second, from the Cefni Estuary on the final field excursion, Flora Group members collected a piece of possible Carex (Dotted-sedge) punctata from foreshore and this has now been confirmed, making this the third currently known location for Dottedsedge from the Anglesey coast.

There seem to be fewer interesting records of so called "aliens" this year but a couple are worthy of mention. It was in 2008 that the neophyte, *Senecio inaequidens* (Narrow-leaved Ragwort) was first noticed on Anglesey, from near Beaumaris. We expected a flood

of additional records to follow but it has taken until this year for a second plant to be reported, this time from a nursery near Brynsiencyn, some 12 km away. *Yucca gloriosa* (Spanish-dagger) has been known from the coast at Newborough for a good few years now but of special interest is that Julian Driver reports finding young plants near the adults – a first clear record of the plant propagating itself on Anglesey.

I am writing this to meet the deadline for the next BSBI Welsh Bulletin but still with quite a few 2011 records to process – it is likely that the number of computerised records will reach 80,000 before we start the 2012 field season.

As always I am very grateful to all those who have contributed records and to those who have helped with the identification of specimens this year.

EXHIBIT ARTICLE

Fagopyrum dibotrys (D. Don) H. Hara (Tall Buckwheat) in West Wales

ARTHUR O. CHATER, BSBI Recorder for Ceredigion (v.c.46), Windover, Penyrangor, Aberystwyth, Dyfed, SY23 1BJ. aochater@nildram.co.uk STEPHEN B. EVANS, BSBI Recorder for Pembrokeshire (v.c.45). Glan-y-Mor, Dinas Cross, Newport, Dyfed, SA42 0UO

Fagopyrum dibotrys has been known for 50 years from the seaward side of the B4327 north of Townsend, Dale, Pembrokeshire (v.c.45) SM8113 0616. It is native of Asia, from the Himalaya to China, and was introduced to Britain before 1846. The Dale colony was found by Martin George in or before 1961 (George 1961), although it was then named for him as F. esculentum by C.E.Hubbard of Kew. George described it as "a strong colony". It was correctly identified as F. dibotrys by J.E.Lousley in 1975 (Lousley 1976), who described it as "a large patch". In 1976 T.A.W. Davis recorded it as a patch c.9 x 3m, and in 1984 SBE recorded it as c.10 x 2m, and as a colony c.9m long in 2003, but as only "just surviving", with "three tiny shoots that had been cut more than once", in 2008. In 2010 Jane Warr reported that it "grew well after the June cut but was cut down in August". A few non-flowering stems were visible during the meeting in August 2011. The site is on a low roadside bank at the top of a sheltered cliff. partly in mown grassland and partly in scrub.

This was thought to be the only site in Britain where it was naturalised until in

2010 AOC noticed a thriving colony 7 x 4m on top of a high roadside bank at the edge of scrubby woodland opposite houses at Y Rofft on the outskirts of Aber-porth, Cardiganshire (v.c.46) SN2555 5152. It was in full flower at the end of October, the stems being 150-210cm tall, and it was surprising that such a large and conspicuous colony had not been noticed before.

Specimens and a photograph of the colony were exhibited (see image 11 on inside back cover). An additional photograph by Richard Pryce of the Dale colony is now added (see inset of image 11 on inside back cover). John Poland points out that, apart from being a perennial, *F. dibotrys* differs from *F. esculentum* particularly in having all the leaves petiolate (not the upper ones sessile) and hollow (not solid) stems.

References

George, M. (1961) The flowering plants and ferns of Dale, Pembrokeshire. *Field studies* **1** (**3**).

Lousley, J. E. (1976) Three species of Polygonaceae established in Britain. *Watsonia* **11**: 144-146.

Plant Identification Competition Exhibit

TREVOR G. EVANS M.B.E., BSBI Recorder for Monmouthshire (v.c.35). La Cuesta, Mounton Road, Chepstow, Gwent, NP16 5BS

I presented 70 herbarium specimens of plants, which have turned up somewhere in the wild in the UK, for naming as a competition in case bad weather ruled out field trips at Dale Fort and visitors were at a loose end. In the event, the sun shone more-orless for the whole time, but most who attended managed at least to look at some of the specimens!

With English names omitted here are the answers 1. *Erodium cicutarium*.2. Filago vulgaris. 3. Moeringia trinervia. 4. Deschampsia cespitosa cespitosa. 5. Epilobium lanceolatum. 6 Lepidium didymum. 7. Scutellaria minor. 8a. Trifolium scabrum. 8b. Veronica hederifolia lucorum. 9. Populus tremula. 10. Cochlearia anglica. 11. Medicago arabica. 12. Carthamus tinctorius. 13. Aphanes arvensis. 14. Wahlenbergia hederacea. 15. Genista tinctoria. 16. Glaux maritima. 17. Kickxia elatine. 18. Cynodon dactylon. 19. Lepidium draba. 20. Digitaria sanguinalis. 21. Carex canescens. 22. Lathyrus nissolia. 23. Trisetum flavescens. 24. Arenaria serpyllifolia ssp. serpyllifolia. 25. Ranunculus lingua. 26. Geranium lucidum. 27. Geranium molle. 28. Galium odoratum. 29. Valerianella locusta. 30. Stachys palustris. 31. Erigeron karvinskianus. 32. Parapholis strigosa. 33 Anisantha madritensis 34 Sison amomum 35 Silaum silaus 36

Rapistrum rugosum. 37. Inula conyza. 38. Crithmum maritimum. 39. Campanula alliariifolia. 40. Euphorbia stricta, 41. Bolboschoenus maritimus. 42. Calamagrostis epigejos. 43. Cardamine quinquefolia. 44. Geranium rotundifolium. 45. Hieracium umbellatum. 46. Geranium psilostemon. 47. Lappula squarrosa. 48. Panicum capillare. 49. Datura ferox. 50. Guizotia abyssinica, 51. Artemesia biennis, 52. Coincya monensis ssp cheiranthos. 53. Geranium nodosum. 54. Chenopodium hybridum. 55. Descurania Sophia. 56. Galactites tomentosa. 57. Egeria densa. 58. Stellaria nemorum ssp. montanum. 59. Lithospermum purpureocaeruleum. 60. Arabis procurrens. 61. Cardamine impatiens. 62 Geranium rubescens 63 Geranium macrorrhizum 64 Sherardia arvensis 65. Potentilla indica. 66. Anthemis punctata ssp cupaniana. 67. Geranium columbinum. 68. Scabiosa columbaria. 69. Geranium pyrenaicum. 70. Lythrum salicaria. Graeme Kay led the competitors with over 50 correct with Wendy McCarthy a close second also with over 50 correct

Those who attended the disclosure of the identities will notice that I gave you the incorrect names for nos. 52 & 57. I collected most specimens in 2011 but submerged no. 57 I had collected two years before. I didn't recognise it so

looked up my records for that stretch of water at Rogiet and came up with a plant named 11 years ago Lagarosiphon by a person I know well and would back his judgement. The current plant has never flowered to my knowledge and when I saw Egeria in a basin in the Brecon – Monmouth Canal vears ago there were numerous white flowers held proud above the surface of the water on fine stems. No. 52 (Coincya monensis ssp. cheiranthos) I had seen on waste ground around Newport several times back in the 70s. but this plant seemed different and when I checked it with the drawing in the Crucifer Handbook it matched perfectly with the illustration of Coincya monensis ssp. monensis. When I presented it to NMW Tim Rich said "I don't think so!" and a folder of

NMW herbarium specimens of *Coincya monensis* ssp. *cheiranthos* showed what a variety of foliage it could have, with one matching my specimen. So sorry folks my memory isn't what it was.

In BSBI News no.115 there is a picture of *Arabis procurrens* which matched a plant (no. 60) that turned up in my garden in 2010 after a big disturbance of the soil there in 2009. This one has turned up with only 3 or 4 other sites in widely separated places in the UK. I originally put it down as a hybrid and have submitted my reasons for believing it to be a hybrid between Iberis and another crucifer for the next BSBI News. *Arabis procurrens* is native in 4 countries in the Balkans; has that been identified incorrectly?

Ratty's Tail *or*How Water Vole Habitat Mitigation near Llanelli has had spin-off benefits for the local flora

EXHIBIT ARTICLE

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A poster comprising a series of Microsoft Powerpoint slides was displayed as follows.

After the Second World War, a large part of the Llanelli Levels landscape east of Llanelli was taken by the Trostre Steelworks. Over the last twenty years, the Levels grazing marshes have continued to be progressively swallowed up by the Welsh Wetlands Centre, the Jack Nicklaus golf-course, business parks, new roads and housing. This was well demonstrated by comparing the 1946 aerial photograph which shows the Levels to still consist primarily of grazing marsh fields, with the 2006

aerial photograph which shows the extent of recent development.

Conservation work undertaken at the Welsh Wetlands Centre has ensured that the last population of Water Voles in Carmarthenshire has not been exterminated despite habitat losses contributed to by the reduction of the Levels marshlands. On the contrary, the past few years have seen an expansion in the animals' range as a result of abandonment of grazing pending development, allowing the growth of areas of rank and rushy grassland between the now-overgrown drainage ditches.

In recent years, Carmarthenshire County Council, as Local Planning Authority, has imposed (and continues to impose) conditions on consents for development schemes, requiring the provision of substantial areas of flood storage capacity, together with managed Water Vole habitat mitigate for continuing habitat losses. This has resulted in the construction of a large wetland habitat area by Cuddy Group, a local civil-engineering contractor, an area for which the name, the "Cuddy Scrape", has been coined. This seasonally-wet depression and nearby areas have been subject to extensive earthworks to provide new and enhanced Water Vole habitat. Several pictures were shown of the recently created scrape and associated canals and ponds. The scrape has flooded several times during the year following its construction and, during

2011, remained largely devoid of vegetation over much of its area although relatively sparse, natural vegetation colonisation was evident towards mid-summer.

Expected colonists in this coastal, possibly slightly brackish environment included *Ranunculus sceleratus* (Celery-leaved Buttercup) and *Oenanthe lachenalii* (Parsley Waterdropwort) — but only one plant. Presumably also arrived from the nearby saltmarsh were the few plants of *Spergularia media* (Greater Seaspurrey).

More characteristic of grazing marsh drainage ditches were the hundreds of plants of Veronica catenata (Pink Water-speedwell), their seed capsules frequently galled by the Nationally Notable weevil Gymnetron villosulum. Also a characteristic grazing marsh species is Berula erecta (Lesser Waterparsnip), two stands of which were established near the northern edge of the scrape. More unexpected were at least six plants of Myosoton aquaticum (Water Chickweed), although several plants had been recorded on new road verges nearby in 2008. Of particular interest were the hundreds of plants of Rorippa islandica (Northern Yellowcress), a new record for SS59 - the species continues relentless its colonisation of the county!

Finally, and an update to the AGM poster as they had not matured until late October, were several stands

comprising of hundreds of plants of *Conyza floribunda* (named Asthmaweed or Horseweed in *Flora of North America*), a species apparently enjoying a population explosion in South Wales, extensively recorded in

October and November 2011 (see article on page 21).

Conyza in Wales – We haven't been paying attention!

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canadensis (L.) Crong. Conyza (Canadian Fleabane) has been known for a long time in the British Flora, at least since 1690. It was the only species of Conyza given in the first and seconds editions of the Flora of the British Isles (Clapham, Tutin & Warburg (1952 & 1962)). Later, British botanists were made aware of another, similar species called C. bonariensis (L.) Cronq., and more recently we have become aware of two other taxa named C. floribunda Knuth and C. sumatrensis (Retz.)E. Walker. A series of notes written by Jack Marshall and David McClintock between 1973 and 1985 clarified some of the confusion in the synonymy and

identification of C. sumatrensis (eg. Watsonia 9, p372 (1973); Watsonia 11, p116 (1974); BSBI News 40, p11 (1985); BSBI News 108, p40 (2008)). Conyza floribunda was later brought to the attention of British botanists by Paul Stanley (BSBI News 73, p47 (1996)), who had noted a mixed population of Convza species in Southampton which consisted of C. canadensis and a hitherto unknown species that was later identified as C. bilboana J. Rémy, later renamed C. floribunda. One of the most significant features distinguishing C. floribunda from C. canadensis are the 5-lobed (hermaphrodite) disc florets in the centre of the capitula. Conyza

floribunda appears to be a South American taxon, first described by E. J. Rémy in Chile in 1849, which has spread throughout the Southern Hemisphere and is now expanding its range in the Northern Hemisphere. Paul Stanley predicted that "it is almost certain to have a meteoric spread in southern Britain".

Recently, it has become increasingly clear to us that C. floribunda is now well established in South Wales and may be the most abundant species here. It seems to have crept in under the radar, so that many of the plants we had been recording as C. canadensis in the last few years have in fact been C. floribunda. At least, this seems to be the case in Glamorgan (v.c.41) and Carmarthenshire (v.c.44). Furthermore, it also looks as if there is a significant amount of C. sumatrensis out there as well (at least in v.c.41 and 44). There is one 1974 C. floribunda specimen from Flintshire (v.c.51) too in NMW. Over border, Clive Lovatt reports abundant C. floribunda from Bristol, Cheltenham and Gloucester, and C. sumatrensis from Bristol

The 3rd edition of Stace's New Flora (2010) provides an adequate key, which allows a fairly unambiguous identification of all the British *Conyza*. But there is much variation in inflorescence structure and it is hard to identify species from a distance, so you need to examine the capitula. The length of outer ligules should be looked at on flowers with open disc

florets as ligules seem to shrivel in dried material and are then less visible. The number of lobes on disc florets is most easily seen in fresh material on mature flowers (x 20 lens), and can be hard to see in dried material unless it is soaked and dissected out. The following synopsis based on our own local observations may help in identifying and clarifying the status of these species in Wales (see image 1 on inside front cover).

Conyza canadensis: Key features include (i) the capitula are small (3-5mm wide), almost tubular in shape with phyllaries (bracts) more or less glabrous, (ii) the central disc florets are 4-lobed and (iii) the outer ray florets and central disc florets clearly overtop the phyllaries of the capitulum, and (iv) in mature, open flowers the long outer ligulate florets spread out conspicuously. This species may have been over-recorded in recent years, but it still occurs in our area.

Conyza floribunda: Key features include (i) the capitula are small (3-5mm wide), pear or flask-shaped (like a Chianti bottle) and the phyllaries are sparsely hairy or glabrous (ii) the central disc florets are 5-lobed and (iii) the outer ray florets do not (or hardly) overtop the phyllaries of the capitula. This species appears to be the most common species of Conyza in South Wales

Conyza sumatrensis: Key features include (i) the capitula are large (>

5mm wide) and tapered and the phyllaries are very hairy (noticeable without a lens!) (ii) the central disc florets have 5 lobes. Robust plants have noticeably dense inflorescences. This species is certainly more abundant than we previously thought but not as common as *C. floribunda*.

Convza bonariensis: Similar to C. sumatrensis, but with obvious redtipped phyllaries and virtually untoothed, linear-oblong (like an icelolly stick) leaves. Note that, Paul Stanley also describes red-tipped phyllaries for some specimens of C. floribunda and this may also be true for some specimens of *C. sumatrensis* too which maybe weakly coloured red; if you are not sure if it is really redtipped or not, then it is probably C. sumatrensis We have little information or experience of C. bonariensis in South Wales; there are specimens in NMW from Newport rubbish tip (1980) and Cardiff Docks (Glamorgan. 1924, 1927).

This will not be the end of the *Conyza* story. It is abundantly clear in the literature that the taxonomy and systematics of *Conyza* are very complicated and the extent to which any of us understand the species boundaries here is limited. Names and concepts are bound to change in future. This is nowhere more clear than in the distinction between *C. sumatrensis* and *C. bonariensis*. It is notable that, according to David McClintock, the

distinguished North American plant taxonomist, Arthur Cronquist, did not recognise C. sumatrensis as a distinct taxon, and John Strother has not included it in his recent account of Convza in the Flora of North America (volume 20). Nevertheless, we hope there is enough information here to allow people to look at Conyza a bit more critically on their local patch and, hopefully, record taxa according to the guidelines given above. Understanding the way in which a new taxon expands its range in a region is one of the Holy Grails of ecological biogeography and we have a rare opportunity here to do this at a fairly early stage.

The long growing season this year, extended by an exceptionally mild allowed the autumn, has more thermophilic C. floribunda and C. sumatrensis to produce abundant flower and fruit until the beginning of winter and this, undoubtedly, has made them more noticeable. Both species produce overwintering rosettes and flourish in a warmer climate. contrast C. canadensis appears mature earlier and die back rather quickly during the early part of autumn

Inspection of the current distribution maps on the BSBI web site would lead you to believe that *C. canadensis*, *C. sumatrensis* and *C. bonariensis* are more common than *C. floribunda* in Wales. Our observations suggest that this needs to be corrected!

Carmarthenshire Conyza Recording 2011

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Further to the articles (beginning on pages 18 and 24) referring to the recent amongst South awareness recorders of Conyza floribunda and C. sumatrensis, I list in the following two tables all the sites from where these species have been recorded Carmarthenshire during October to December 2011. Prior to October the only records of either species were from between 2003 and 2005 in South Llanelli (SS59). This autumn, C. floribunda has been recorded from additional hectads sumatrensis from two, including the latest C.sumatrensis from the National

Botanic Garden. It is worth noting that during November 2011, it is also worth noting that over the past couple of months, *Conyza* has been searched for without success in suitable habitat at Whitland (SN11, SN21), St. Clears (SN21) and Llandeilo (SN62): plants apparently have not yet dispersed this far away from the more urban areas? In all but a few sites, populations of both species comprise of only one or a few plants.

What was particularly noticeable during the October-November period was the paucity of *Conyza canadensis*

Table 1: Carmarthenshire Conyza sumatrensis Records

Site	Date	Grid. ref.	Observer	Alt (m)
National Botanic Garden of Wales, on	24/12/2011	SN52091839	T.C.G. Rich & N.	75
waste ground by greenhouses			De Vere	
Libanus Chapelyard, Elgin Rd, Pwll, 2	23/12/2011	SN48310110	R.D. Pryce	30
plants in flower.				
Stradey Home Farm, Llanelli, few	19/11/2011	SN488013	I.K. Morgan	20
plants on ruined walls and by track –				
known here since 2005				
Penrhyngwyn, South Llanelli	29/08/2005	SS50789785	Tony & Viv Lewis	10
Delta Lakes Site, Machynys, Llanelli,	17/07/2004	SS50819847	R.D. & K.A. Pryce	10
one plant confirmed				
Machynys Roundabout, Llanelli, one	29/10/2003	SS513984	I.K. Morgan	10
plant confirmed				
Vacant site, Marine St, Seaside,	23/10/2011	SS50199939	R.D. Pryce	10
Llanelli, few plants				
Vacant site, Llanelli Station, few plants	23/10/2011	SS50769935	R.D. Pryce	10

plants where they had been recorded in the past. Bearing in mind that it appears likely that some past records of *C. canadensis* were recorded in error for either *C. floribunda* or *C. sumatrensis*, it is still very evident that *C. canadensis* plants had completed their life cycle and died-down before the other two species had reached maturity.

Voucher specimens have been collected for subsequent deposition in the Welsh National Herbarium (NMW).

See table 1 (page 21) for *Conyza canadensis* records & table 2 (page 23) for *C. floribunda* records.

Image 3 (below): Usual sized plant of *Conyza floribunda* c.60cm tall at Coracle Way, Carmarthen (SN41). Photo: R.D.Pryce, October 2011





Image 4 (above): One very large branched plant of *Conyza floribunda* at Ffos Las Racecourse (SN40). Photo: R.D.Pryce, October 2011.

 Table 2: Carmarthenshire Conyza floribunda Records

Site	Date	Grid. ref.	Observer	Alt (m)
Tanylan Caravan Site, 1 large plant	10/11/2011	SN38040688	R.D. Pryce	20
Ferryside Railway Station, few plants		SN36631042	R.D. Pryce	10
Llanelli North Dock Council Depot, 1 plant	22/11/2011	SS49549995	I.K. Morgan	10
School Rd, Pwll, c.50 plants in cracks in concrete forecourt	02/08/2011	SN47700116	R.D. Pryce	50
Trenel Pembrey building site roadside, c.50 plants	21/10/2011	SN42000175	R.D. Pryce	10
Stradey Park demolished rugby ground, many plants	16/10/2011	SN49820091 SN49770090 SN49690095 SN49750089	R.D. Pryce	10
Ffos-las Racecourse: opencast spoil, 1 very large plant (see image 3, p22)	10/11/2011	SN46680590	R.D. Pryce	80
Burry Port street weed, 1 plant	02/11/2011	SN44790081	P. Spencer- Vellacott, R.D. & K.A. Pryce	10
Coracle Way, Carmarthen street weed, 3 plants (see image 4, p22)	29/10/2011	SN41291989	R.D. & K.A. Pryce	10
Delta Lakes Site, Machynys, Llanelli, several plants	24/09/2004	SS50799848 SS50829846	BSBI meeting	10
n n	01/07/2005	SS50959856 SS50789846 SS50809848	I.K. Morgan	10
Delta Lakes Site, Machynys, Llanelli, 1 plant	23/10/2011	SS50899855	R.D. Pryce	10
Cuddy Scrape, Morfa, Llanelli, hundreds of plants	07/08/2011	SS52509877 SS52479878	R.D. & K.A. Pryce	10
Cuddy Scrape, Morfa, Llanelli, 2 plants	23/10/2011	SS51919873	R.D. Pryce	10
Min y Mor, Llanelli, near Afon Lliedi, 1 plant in garden	13/11/2011	SN502002	I.K. Morgan	10
Bres Road, Llanelli, c.50 plants (secondary growth)	12/11/2011	SN50770018	I.K. Morgan	10
Dafen Architectural Recycling yard, 1 plant	03/11/2011	SN53130121	R.D. Pryce	20
"	03/11/2011	SN53120116	R.D. Pryce	20
National Botanic Garden of Wales, on waste ground by greenhouses		SN52091839	T.C.G. Rich & N. De Vere	75
Bethesda Road, Tumble, 3 plants	25/10/2011	SN53541192	R.D. Pryce	120
LBS Depot, Betws, Amman ford, 1 plant	25/10/2011	SN64511216	R.D. Pryce	80

Cardiff Conyza Census

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Locality in Cardiff

Following a request for information on the frequencies of *Conyza* species in Cardiff from Charles Hipkin, we drove around Cardiff for about three hours on 27 and 28 November 2011 looking for populations of *Conyza*.

Fifteen sites were investigated, mostly on waste ground, pavement edges, car parks and roadsides (see table 3, below). *Conyza floribunda* was the most abundant (10 sites), *C. sumatrensis* was nearly as widespread but generally in smaller quantity (10

Convea

sites) and *C. canadensis* much the rarest (2 sites). We did not find any *C. bonariensis*.

T.C.G.R. was amused to find he had completely over-looked *C. floribunda* in Cardiff. What was also slightly disconcerting was to return to a site which had *C. canadensis* in the summer to find it only had *C. sumatrensis* in November. Voucher specimens have been deposited in the Welsh National Herbarium (NMW).

Crid ref

Table 3: Cardiff Conyza Records Nov 2011

	Conyza	Locality in Cardiff	Grid. ret.
	C. canadensis	Bessemer Road, Grangetown	ST169752
t	C. sumatrensis	Colum Road, Cathays	ST178775
5	C. canadensis	Hadfield Road, Grangetown	ST167748
	C. floribunda	"	ST167748
	C. sumatrensis	"	ST167748
	C. floribunda	Martin Road, Tremorpha	ST210756
	C. sumatrensis	"	ST211758
	C. floribunda	National Museum of Wales Car Park, Cathays	ST183770
	C. sumatrensis	"	ST183770
	C. sumatrensis	North Road, Cathays	ST175779
	C. floribunda	Ocean Way, Adamstown	ST195758
	C. floribunda	Old Church Road, Whitchurch	ST154465
	C. sumatrensis	Park Lane, Cathays	ST185767
	C. floribunda	Penarth Road, near Central Station	ST181755
	C. floribunda	Penarth Road, Grangetown	ST169742
	C. sumatrensis	"	ST169742
	C. floribunda	Seawall Road, Pengam Green	ST214766
	C. sumatrensis	"	ST214766
	C. sumatrensis	Sloper Road, Grangetown	ST169753
	C. floribunda	Tesco's Car Park, Pengam Green	ST218772
	C. floribunda	Waste ground by Cardiff International Pool	ST179730
	C. sumatrensis	"	ST179730

Cotula coronopifolia-New to Wales?*

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At the end of August I found a large patch of *Cotula coronopifolia* (Brass Buttons) (see image 5 below & 10 on page 39) on the Merthyr Mawr side of the Ogmore River near the Water Treatment Bridge at SS8763 7658. On a subsequent search with Julian Woodman, CCW, plants were found along at least a 100 metres stretch of the river bank downstream of the bridge and also in isolated muddy pools of the sea marsh. Plants were also found on Ploran Mawr and upstream on the Ewenny River as far

as the meadow opposite the Castle. On the Portobello House side of the Ogmore River, plants were found on the upper (upstream of the house) & lower (downstream of the house) sea marshes. Members are asked to look out for this invasive plant when they are in suitable habitat and report sightings to their BSBI County Recorder and Local Biological Record Centre

[*Gwynn Ellis confirms that the species is new to Wales – ed]



Image 5: Cotula coronopifolia (Brass Buttons) patch on Ogmore River.

Photo: David Rich.

Fluctuations in *Sibthorpia europaea* L. in Cardiganshire

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The 'Flora of Cardiganshire' (Chater, 2010) notes that *Sibthorpia europaea*, Cornish Moneywort, has disappeared from two previously-recorded sites and declined significantly over c.20 years at its best-known locality, near Bangor Teifi (SN379938). There is only one record ("a few plants" in 1999) from its most northern site, a steep flush near Fforest Cerdin (SN395450) but the very large population growing along c.100m of flushed *Salix* carr west of Pont Tyweli (SN408403) seemed to be stable between 1995 and 2000.

A full survey in September 2011 found further very significant change at two of these sites since the last records, but no overall trend. At Pont Tyweli (where the habitat appeared relatively hard-grazed), only a few vegetative plants of Sibthorpia were found, scattered along one c.20 m flush. Near Bangor Teifi, however, the single extant patch was comparable in size to the last recorded measurement (< 1 m sq) in 2000. This population was at least flowering and probably setting seed but much reduced from its more widespread distribution, over c. 80 m of wet cliff and streamlets 30 years ago.

By contrast, the population of *Sibthorpia* near Fforest Cerdin seems to have greatly increased since 1999,

from a few plants over about one metre to being locally frequent along a total of 200m in two steep flushes. A large part of this population seemed to be flowering and numerous tiny, c.0.5 mm seeds were found in a sample of ripe fruits.

Clearly, populations of Sibthorpia in v.c.46 are subject to great instability – and could sometimes even disappear in the process. At the same time, they can also increase (and perhaps disperse or regenerate) in more favourable circumstances. The nature of these fluctuations is not clear, although both and behaviour of the ecology Sibthorpia in cultivation indicate that it is very sensitive to extremes of drought and cold (Preston, 1994). We need detailed observations more understand these dynamics; in part to help conserve such small, probably vulnerable populations and partly, perhaps, to shed light on this species' response to climate, especially here at the edge of its global range. Sibthorpia europaea is a good candidate for regular monitoring in south and southwest Wales – and a good plant to go looking for at this time of year.

My thanks to Arthur Chater and Jon Turner for help in the field and useful suggestions.

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A Sample of *Persicaria mitis* (Tasteless Waterpepper) Sites in Wales

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Fresh specimens of Persicaria mitis (Tasteless Water-pepper) can be instantly separated from P. hydropiper (Common Water-pepper) by their lack of burning after-taste - as the name implies. But this does not really help to detect P. mitis in the field because P. hvdropiper is far more abundant (and tastes awful) and it is a bad idea to put too many leaves from wet, muddy places in your mouth. The other distinguishing features (minute hairs on the leaf underside, shiny nuts, lack of glands on the tepals etc.) are inconspicuous or need practiced observation (e.g. the relatively upright and congested inflorescence). The situation is confused, perhaps, by the presence of hybrids with *P. hydropiper* and by great morphological plasticity in the two species (with plants ranging from 5-125 cm in both cases). Persicaria mitis is probably overlooked, especially in areas where it is not well-known.

In Wales, the known sites for P. mitis are mainly concentrated along the large river valleys and floodplains of the east but there are interesting outlier records from Breconshire (v.c.42), Carmarthenshire (v.c.44) Cardiganshire (v.c.46) and the boundary of Caernaryonshire (v.c.49) and Denbighshire (v.c.50) (see table 4 on page 28). The last of these, near Llanrwst, were only recently discovered but the others are all old (1940 or before) and not recently refound. In order to help understand this pattern we looked at a sample of sites in Monmouthshire (v.c.35), Glamorgan (v.c.41) and Denbighshire (v.c.50), especially where the species

has been quite well-recorded up to now.

The most frequently-recorded population of *P. mitis* in Wales is at Penpergwm Pond, Monmouthshire (v.c.35) (SO326099), which is a Site of Special Scientific Interest for the species – and also for *Alopecurus a e qualis* (Orange Foxtail). Unfortunately, all the candidate *P. mitis* and *P. hydropiper* had dried up here when we visited in late September

– and much of the pool margin was heavily overgrown and eutrophicated by waterfowl. (Interestingly, however, a large population of *P. minor* (Small Water-pepper) (see images 6 and 7 opposite); was found here, where it had not been recorded earlier, indicating either significant oversight or wider changes in the native species assemblage). A search of some recently recorded sites in farm ponds near Overton, Denbighshire (v.c.50) (SJ3444), also failed to refind any

Table 4: *Persicaria mitis* Sites in Wales (Records in the BSBI Distribution Database)

Site Name	Grid. ref.	Vice-county	Recorder
Hadnock, R Wye banks	SO51	Monmouthshire (35)	Lewis, R.
* Penpergwm Pond, E edge	SO326099	Monmouthshire (35)	Evans, T.G.
Penperlleni	SO30	Monmouthshire (35)	Evans, T.G.
v.c.35 Monmouthshire	SO50	Monmouthshire (35)	
* Under normally dry arch of Monmouth	SO512126	Monmouthshire (35)	Evans, T.G.
road bridge over Wye			Colls, H.V.
			Titcombe, C.
Ely	ST07	Glamorgan (41)	Vachell, E.
* Langan	SS957776	Glamorgan (41)	Wade, A.E.
			Pinkard, A.
Dysgwylfa Ton-y-Ffildre	SN81	Breconshire (42)	Wade, A.E.
Kidwelly Burrows	SN30	Carmarthenshire (44)	Hamer, D.
Bangor-Teifi, pond nr river	SN374402	Cardiganshire (46)	Salter, J.H.
Carreghofa Hall	SJ2521	Montgomeryshire (47)	Perring, F.H.
Coedty reservoir	SH76N	Caernarvonshire (49)	McCarthy,
			Wendy
Llanrwst	SH792626	Denbighshire (50)	Lewis, R.
* Overton, field pond nr	SJ378404	Denbighshire (50)	Green, J.A.
* Penley, Little Green Farm	SJ412406	Denbighshire (50)	Green, J.A.

Sites visited in 2011

Images 6 & 7: Persicaria minor (Small Water-pepper) at Redbrook on the River Wye.



P.mitis, although here *P. hydropiper* was in good fruiting condition and there was more apparently suitable open habitat.

Several other previously recorded Persicaria mitis populations were refound, however, in Monmouthshire (v.c.35) and a new one in Glamorgan (v.c.41) – where it had not been seen for many years. These were nearly all present as few (<10) scattered or single plants, invariably amongst far more frequent P. hydropiper and, usually, disturbed areas of coarse bankside vegetation, such as Sparganium erectum (Branched Bur-reed) and Lythrum salicaria (Purple Loosestrife). The most extensive populations of \hat{P} . mitis were found along the lower banks of the River Wye, where it was locally frequent downstream from Monmouth Bridge (SO5112) to Redbrook (SO5309). It is worth noting, however, that only one of us (PSV) actually noticed this population to begin with, despite careful searching by all three authors. P. mitis is very easily overlooked - and we would most probably not have undertaken any follow-up surveys without this observation

Thus, in Glamorgan (v.c.41), JW found a new population of *P. mitis* in damp, seasonally flooded depressions in horse-grazed pasture near Ogmore Castle, between the Rivers Ogmore and Ewenny (SS8877). The habitat was recognised from local knowledge, after our survey of *Persicaria mitis* sites

along the River Wye - although, notably, several other areas of apparently suitable habitat such as Nedern Brook SSSI, north of Caldicot, were also searched without success.

These findings are not clear-cut, although they do indicate areas for more survey and possible management. Large populations of non-native plants, for instance; Impatiens glandulifera (Himalayan Balsam), Aster agg. (Michaelmas Daisy), Tanacetum vulgare (Tansy), Fallopia japonica (Japanese Knotweed) and Heracleum mantegazzianum (Giant Hogweed); are frequently present in *P. mitis* habitats – at least alongside the River Wye - but it is questionable if these actually pose a threat. One of the best populations of P. mitis was present here in neardominant Aster agg. (Michaelmas Daisy) (see image 2 on inside front cover), whereas, by contrast, there were no alien invasive plants present at former sites for this species in Denbighshire (v.c.50) or at Penpergwm Pond. The more critical factor here could be vegetation structure. Tasteless Water-pepper seems to need very damp, unshaded sites (most likely flooded in winter) and, probably, some form of disturbance to allow seedling germination and establishment. The best sites appear to be have been trampled by cattle and horses at drinking sites but footpaths (used by fishermen) and perhaps vehicle tracks could also have a role. The general increase in sheep-grazing and decline in small-scale countryside disturbance

has perhaps halted the regeneration of several sites for *Persicaria mitis* in Wales.

The habitats for Tasteless Waterpepper seem inherently dynamic, with small populations of the plant fluctuating in abundance amidst much more numerous *P. hydropiper*. The balance of associated species and the characteristic vegetation need more study, but there seems like a significant chance of oversight for this plant in Wales and the opportunity for habitat restoration - especially at former sites like Penpergwm Pond.

Carex elongata L. (Elongated Sedge/ Hesgen Hir) in Wales

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Carex elongata L. is a Nationally Scarce plant in Britain. It is Endangered in Wales (Dines, 2008),

with only five recorded sites (see table 5 below) and perhaps fewer than 1000 individuals. Its populations elsewhere

Table 5: Summary of the existing Carex elongata records

Vice-county	Location	Recorder (s)	Year
Monmouthshire (35)	Coed Robert	David, R.W., Evans, T.G., Fraser,	2002
	Wood	R.,	
Montgomeryshire (47)	Cors Cefn	David, R.W., Wainwright, M.,	2001
	Llwyd SSSI	Metcalfe, W.	
Montgomeryshire (47)	Lake Vyrnwy	Cadbury, C.J.	2006
Denbighshire (50)	Hanmer Mere	David, R.W., Wigginton, M.J.,	1982
	SSSI		
Denbighshire (50)	Chirk – Canal	David, R.W., Lousley, J.E.,	1981
		Spencer, A.G.*, Wainwright, M.,	

^{*} Geoffrey Spencer was P.S.V.'s maternal grandfather, and well-known to local naturalists in Clwyd between about 1956-1991.

seem to be very often small or unstable (David, 1994; Lockton, 2011). Of these five recorded Welsh locations, only two are currently protected as Sites of Special Scientific Interest (SSSI).

Each of these sites were visited between July and August 2011 in order to record their size and general management. For the two SSSI locations this would form the basis of Site Condition Monitoring, as *C. elongata* is a feature of both sites, and should be maintained in "favourable condition".

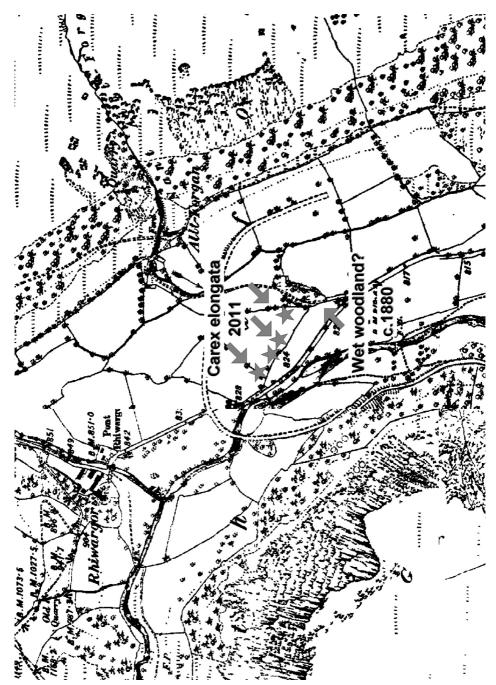
C. elongata is a distinctive species with very tight tussocks, probably formed by varying water levels (see image 13 on back cover). In addition to its floppy, yellowish green leaves, the elongated and strongly ribbed utricles can be a useful character, although very few individual plants appeared fertile in this survey. It seems to grow preferentially on rotting wood.

At Cors Cefn Llwyd SSSI, near Meifod (Montgomeryshire, v.c.47) the woodland canopy was dominated by old, slightly gappy Alnus glutinosa (Alder) and Salix cinerea (Grey Willow) with an understorey of locally abundant (Nettles), Urtica dioica Rubus fruticosus aggregate (Bramble) and occasional Ribes nigrum (Blackcurrent). The site is believed to flood regularly in winter and Carex elongata was mostly found in areas covered with decayed vegetation that are most likely winter pools, growing on rotting,

fallen branches and stumps. The most frequent associate was C. remota (Remote Sedge) with occasional Geranium robertianum (Herb Robert). A notable associate at the woodland edge was Oenanthe aquatica (Fineleaved Water-dropwort), which is rare in Wales and declining elsewhere in Britain. C. elongata was present in most areas of the wood, except along the southern fringe where Urtica dioica Galium aparine (Goosegrass) were dominant (perhaps indicating enrichment from the adjacent fields). The population was estimated to be in the range of 300-1000 individuals showing an apparent age structure, from tiny seedlings on dead wood (rare) to scattered shoots and mature tussocks (frequent), occasionally setting seed. This is undoubtedly the largest population of C. elongata in Wales

Nearby, still in Montgomeryshire (v.c.47), there is another, smaller population of C. elongata at the head of Lake Vyrnwy / Llyn Efyrnwy, in a small area of periodically-flooded wet woodland. About 200 mature plants were present in 2011: largely as vegetative tussocks, growing on dead Salix cinerea and Alnus, with frequent C. paniculata, C. rostrata and C. vesicaria. Despite this seemingly natural habitat population and structure, C. elongata has almost certainly arrived here following the creation of Vyrnwy Reservoir, since there is no woodland on the first OS map: c.1880 (see image 8 opposite). Its

Image 8: OS Map of the head of Llyn Efrynwy in 1880



origins are obscure, but seed was perhaps transported by flood waters (note the presence of wet woodland nearby on this early map).

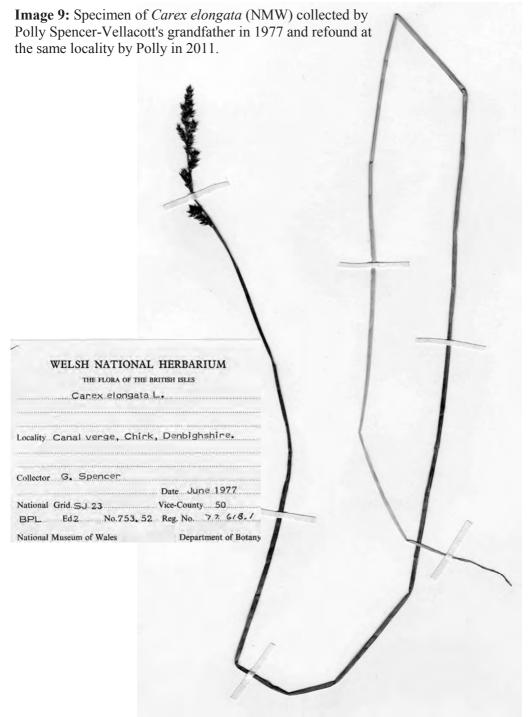
C. elongata seems to have spread widely in similar circumstances along canals in the 19th century, with an abundance of sodden wood pilings and periodic wetting from the wash of boats. However, in the age of metal pilings many sites seem to have been lost and the population of C. elongata from the Llangollen Canal (see image 9 opposite) at Chirk (Denbighshire, v.c.50) was not refound this year. Unfortunately, this seems to be the trend with C. elongata in Denbighshire (v.c.50).

The population at Hanmer Mere SSSI (where it is a designated site feature) is tiny and perhaps Critically Endangered. The lake margins here are dominated by *A. glutinosa* but, despite thorough searching, only three individual clumps of *C. elongata* were found. The main problem seemed to be overgrazing by sheep from the surrounding parkland, with severe poaching around the lake margins.

Coed Robert in Monmouthshire (v.c.35) is the most isolated population in Wales (and at the edge of its British range), with the nearest records on the outskirts of Birmingham. This wood is heavily managed for commercial forestry and the canopy is now dominated by non-native species (e.g. *Picea sitchensis* (Sitka Spruce) and

Populus spp. (Poplar)) with a dense Rubus understorey. It seems to have been drained and replanted over the last 30 or more years and is not floristically otherwise diverse, although a small population (<10 individuals) of Oenanthe aquatica was found in a dried-up pool at the northeast edge of the wood. This very much resembled some of the C. elongata habitat at Cors Cefn Llwyd (with several ancient *Alnus* stumps). C. elongata now grows in two other depressions which are shown as ponds on the Ordnance Survey map and, again, are almost certainly wet in winter. Approximately 60 mature individual tussocks were recorded: several with apparently fertile seed although both seedlings and immature plants seemed absent. Urtica dioica and Juncus effusus (Soft Rush) were evidently encroaching on the former wetland habitat

This is a story of decline. Carex elongata clearly has a fragmented distribution in Wales, at the edge of its British range. Where its habitat conditions are good (which appears to be where a lack of disturbance allows large quantities of dead wood to accumulate, with varying water levels) there is the potential for a population to flourish, as at Cors Cefn Llwyd. However, in other sites, such as Coed Robert and, especially, Hanmer Mere, drainage or excessive grazing can drastically endanger the population. At the same time. C. elongata seems to also have the capacity for long-distance



Carex elongata (Elongated Sedge) in Wales

dispersal, which could be a missing factor in its regeneration. There is room for more detailed study here, but we almost certainly have enough ecological understanding for conservation management, where required (see references; particularly

Jermy, *et al.* 2007 and Mallabar, 1998). There may be further practical difficulties with this, however, where sites do not have any kind of statutory protection (ie. Coed Robert).

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Vice-county 48, Merioneth 2011-2012

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Met Office statistics show that apart from those of February, May and June, all monthly rainfall averages in 2011 were well below normal. That explains our good luck in holding all six meetings of Merioneth Naturalists Group unaffected by rain! This was our second successful season, in which we made 16 new or updated hectad records. Altogether over 5000 records were added to the county database by all recorders during the year.

The only native first record for the county was Carex x decolorans [conf. M.J. Porter]. In 2002 Peter Benoit and I searched in vain for Carex bigelowii (Stiff Sedge), the rarer parent, on the summit ridge which had been grazed to billiard table smoothness. As a result of a changed grazing regime on the Berwyns NNR since then, it has now been recorded several times. With the consequent overlapping of range with that of C. nigra (Common Sedge), the hybrid has now been found there, at around 600 m. Mike Porter's comment. on my specimens, however, was "....any record should make reference to the range of introgressed forms present. I don't think you need to do another visit ... but if you happened to be passing one day... (!)" - the rather anomalous intermediate forms were certainly not typical. Another 'first'

for the county was Arthur Chater's, who found *Geum macrophyllum* (Large-leaved Avens) near Pantperthog while revisiting a known site for *Lathraea clandestine* (Purple Toothwort). It is spreading in Cardiganshire (v.c.46), but this was its first recorded appearance in Merionethshire.

Merioneth Naturalists Group [Grwp Natur Meirionnydd] is comprised of a faithful band of supporters, several of whom are regular visitors to Wales rather than permanent residents, but we are always hoping to find more active botanists in the county. There are such huge swathes of countryside which need systematic recording. would be interested in having our programme for next year, please get in touch with either Sarah Stille mossysal@btinternet.com or Rod Gritten: grittenecology@yahoo.co.uk.

And please take special note of our new Merioneth Residential: 24th - 27th July, for three or four days of botanising based in the glorious countryside of the Mawddach Estuary, near Barmouth. Details will be in the 2012 BSBI Yearbook

::STOP PRESS::

New Members of the Order of the British Empire

Trevor Evans and Pippa Bonner have both been recommended to The Queen for an award in the New Years Honours List 2012; they will receive an MBE in recognition of their outstanding achievements.

Pippa has been nominated for voluntary service to the North Wales Wildlife Trust; Trevor for services to Conservation and Wildlife in Monmouthshire.

Congratulations to them both!

Images on opposite page:

10: *Cotula coronopifolia* (Brass Buttons) on Ogmore River. Photo: David Rich. See article on page 25.

11: *Fagopyrum dibotrys* (Tall Buckwheat) at Y Rofft, Aber-porth, Cardiganshire (v.c.46) on 29th October 2010. Photo: Arthur O. Chater.

Inset: Dale colony of *Fagopyrum dibotrys*. Photo: Richard D.Pryce. See article on page 14.

Back Cover images:

12: *Erica vagans* (Cornish Heath) on Holyhead Mountain, Anglesey (v.c.52). Photo: Ian Bonner. See article on page 11.

13: *Carex elongata* tussocks in Cors Cefn Llwyd SSSI, near Meifod, Montgomeryshire (v.c.47) on July 2011.

Photo: Polly Spencer-Vellacott. See article on page 31.





