

## Rare Plant Registers in Wales

Dr Polly Spencer-Vellacott BSBI Welsh Officer

## Rare Plant Registers in Wales

- What is a Rare Plant?
- What are Rare Plant Registers?
- Why are they useful in recording?
- How do you go about making a Rare Plant Register?

– How can a Country Officer help?



Genista pilos



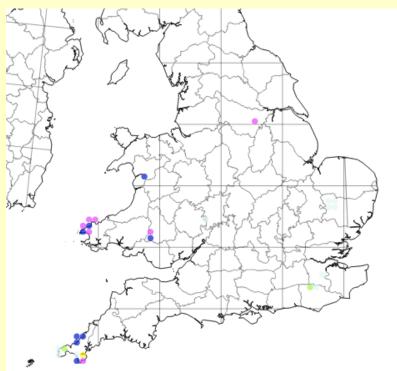


Botanical Society of

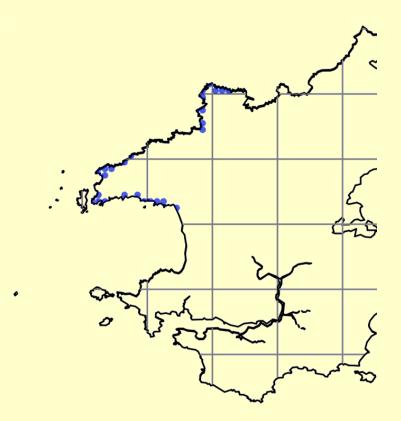
Britain &

Ireland

*Genista pilosa:* Nationally Rare GB Red list: Near Threatened Wales Red List: Vulnerable



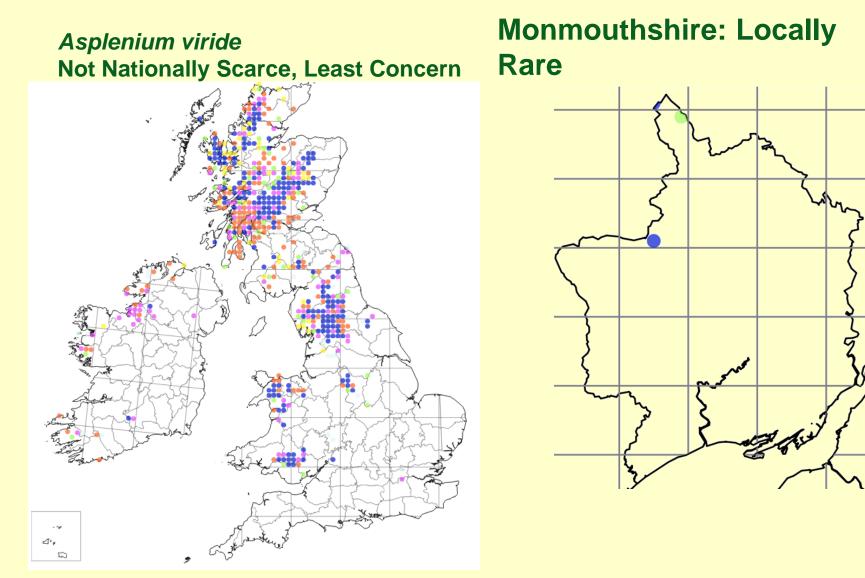
Cyfoeth Naturiol Cymru Natural Resources Wales Pembrokeshire: Not Locally Scarce (31 monads)



Asplenium viride







# What is a Rare Plant Register?

- Details of the sites occupied by Rare Plants in the county – especially Locally Rare - 3 or fewer "sites"
- (also usually includes species with national threat/ scarcity status, and Locally Scarce – ~10 or fewer sites)



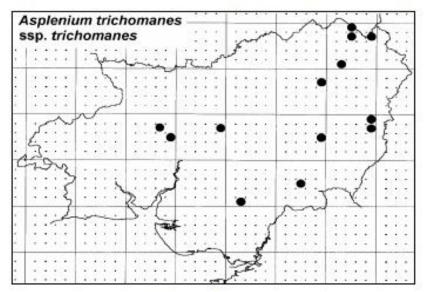
### VASCULAR PLANTS Cardiganshire – 1978 – 2012...

| Acer campestre   | 3 | 593798 | 2000 |    | Penparcau       |
|--|---|--------|------|----|-----------------|
| (Field Maple)  |   | 594862 | 2000 |    | Wallog          |
| (Native sites only)  |   | 600835 | 2000 |    | Cwm Woods       |
| ! Acorus calamus<br>(Sweet Flag)                             | 1 | 498427 | 2000 |    | Highmead        |
| Alchemilla filicaulis ssp vestita                            | 3 | 317462 | 1997 |    | Brongest        |
| (Hairy Lady's Mantle)  |   | 322460 | 1997 |    | Brongest        |
|  |   | 467611 | 1996 | NT | Ddol-wen        |
|  |   | 726581 | 1994 |    | Cwm Berwyn      |
| Alchemilla xanthochlora                                      | 3 | 679722 | 1971 |    | Llanafan        |
| (Alpine Lady's Mantle)                                       |   | 698665 | 1994 |    | Swyddffynnon    |
|  |   | 702677 | 1987 |    | Ystrad Meurig   |
| ! Allium roseum ssp bulbiferum                               | 2 | 448612 | 1999 |    | Henfynyw        |
| (Rosy Garlic)  |   | 455617 | 1996 |    | Aberaeron       |
| ! Allium subhirsutum<br>(Hairy Garlic)                       | 1 | 410588 | 2000 |    | Gilfachreda     |
| ! Allium triquetrum  | 2 | 387594 | 2000 |    | New Quay        |
| (Three-cornered Leek)  |   | 598810 | 1996 |    | Llanbadarn Fawr |
|  |   | 599819 | 2000 |    | Waun Fawr       |
| <ul> <li>! Alnus x pubescens<br/>(A hybrid Alder)</li> </ul> | 1 | 628752 | 2000 |    | Llanilar        |

#### Carmarthenshire Rare Plant Register, J

### Carmarthenshire – 1984 – 1999...

| SN734417   | yes | 5/4/1988   | J & M Iliff and | none |
|------------|-----|------------|-----------------|------|
|            |     |            | R D Pryce       |      |
| SN767478   | yes | 23/10/1997 | A O Chater and  | SSSI |
|            |     |            | A C Jermy       |      |
| c.SN75-48- | yes | 3/8/1983   | I K Morgan      | none |
| SN74Y      | yes | 1972       | Mrs I M Vaughan | none |
| SN74Y      | yes | 1972       | Mrs I M Vaughan | none |
|            |     |            |                 |      |



| ne  | Merchon Valley near Cilycwm: on quarry face in Gala Shales.         |
|-----|---|
|     | Det.G Hutchinson 13/3/89, Hb NMW                                    |
| SSI | Allt Rhyd-y-groes: on shaded rock outcrop in east-facing<br>oakwood |

Cribyn Du

Ystradffin, Rhandirmwyn

Rhuddallt, Rhandirmwyn



Asperula cynanchica, Pendine Burrows

| Asplenium               | viride       | Green Sp   | leenwort  |            |   |
|-------------------------|--------------|------------|---|------------|---|
| SCARCE in               | SCARCE in vc |            | No of Wells sites: 1                                    | 0          | Probably no change in status since production of 19 |
| Monitoring rea          | quired       |            |   |            |   |
| GRID REF                | NATIVE       | LAST SEEN  | RECORDER  | PROTECTION | SITE NAME, HABITAT, etc                             |
| SN679184                | yes          | 28/6/1997  | A O Chater, Jim<br>Bevan, R D Pryce<br>and G Hutchinson | SSSI NP    | Pal-y-Cwrt: limestone crags and low cliffs          |
| SN719195 to<br>SN720194 | yes          | 28/6/1997  | A O Chater, Jim<br>Bevan, R D Pryce<br>and G Hutchinson | SSSI NP    | Clogau Bach: limestone outcrops and old quarries    |
| SN71H                   | yes          | 5/1983     | G Hutchinson  | SSSI NP    | Foel Deg  |
| SN724195                | yes          | 15/10/1991 | I K Morgan & RDP  | SSSI NP    | Clogau Bach: limestone outcrops and old quarries    |

984 list

May 2007

### Euphrasia nemorosa x pseudokerneri - a hybrid Eyebright

### National rarity:

Local rarity: 1 Wells site

| Grid Ref   | Date | Site | Location                       | Habitat | Number      | Threat |
|------------|------|------|--------------------------------|---------|-------------|--------|
| ST 466 921 | 2003 |      | M.o.D. Caerwent (1 of 6 sites) |         | c.50 plants |        |

### Euphrasia pseudokerneri - An Eyebright

### National rarity: Scarce, Red List 'Endangered'

Local rarity: 1 Wells site

| Grid Ref | Date | Site | Location                | Habitat                              | Number      | Threat |
|----------|------|------|-------------------------|--------------------------------------|-------------|--------|
| ST 47 91 | 2003 | None | S.of Little Dinham Wood | turf over Carboniferous<br>Limestone | c.30 plants |        |

### Euphrasia scottica - An Eyebright

National rarity:

Local rarity: 1 Wells site

| Grid Ref | Date | Site | Location  | Habitat                 | Number     | Threat |
|----------|------|------|-----------|-------------------------|------------|--------|
| ST 24 92 | 1986 |      | Twmbarlwm | wettish area, S.W. side | 1-5 plants |        |

### Festuca altissima - Wood fescue

National rarity:

Local rarity: 5 (1) Wells sites

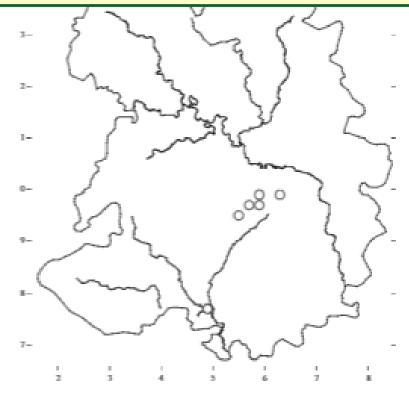
| Grid Ref   | Date | Site | Location       | Habitat   | Number       | Threat |
|------------|------|------|----------------|-----------|--------------|--------|
| SO 544 139 | 1905 | AONB | N.of Suckstone | woodland. | 1000+ plants |        |

### Frank Perring found in 1975, where it Shropshire – 3<sup>rd</sup> edition 2005...

Wigginton (1979), Walker (1987-1992) and Perring again (1993). Walker added Marton Pool, Chirbury (SJ2902) to the site list in 1988. In 1990 Pat Parker and Jane Ing found it in Walford Pool (SJ4320), where it had apparently been introduced with other rare water plants, and where it persisted until 1991.

### Callitriche hermaphroditica





### Campanula patula L. Spreading Bellflower Native. Scarce.

The natural habitat of this plant is woodland edge alongside rivers. It is also found on hedgebanks along quiet lanes. It is Nationally Scarce and declining in Britain, with just 37 dots in the New Atlas. In Britain it is almost entirely restricted to the catchment of the River

### County Rare Plant Registers

Counties with Registers in Britain and Ireland

Cyfoeth Naturiol

Cymru **Natural** 

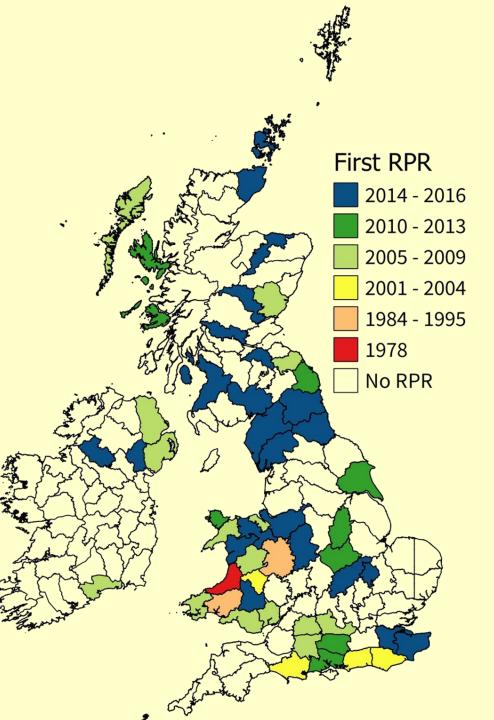
Wales

Resources

Botanical Society of

Britain &

Ireland



# Why are Rare Plant Registers useful?

- Interesting for Vice-County Recorder allows them to value rare species objectively
- Recording suggests areas to target
- Planning locally rare species may be listed separately
- Conservation allows those working in conservation to locate most important local

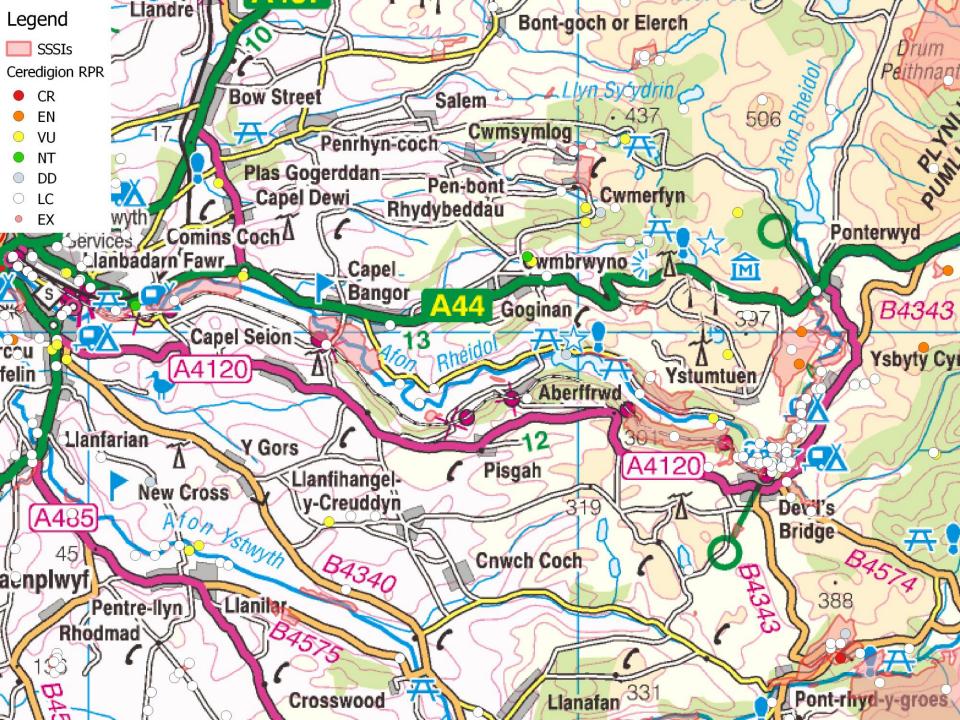


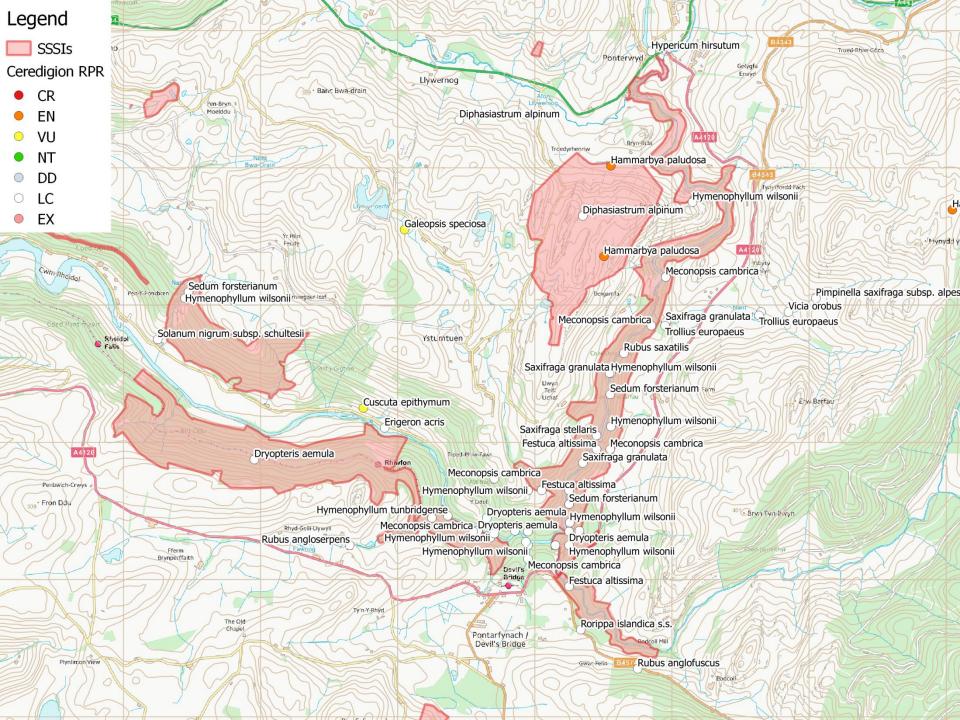
# Use in GIS

- Conservation professionals e.g. Natural England, Natural Resources Wales, Local Government Ecologists, etc. etc....
- (and you too if you have the desire, and will to learn a new computer program)
- Display in Arc/ MapInfo/ QGIS over maps or aerial photographs









### Examples of RPR data

- Hammarbya paludosa
- Western distribution in GB (LC in GB Red List but EN in Wales)
- Not scarce in Cardiganshire
- Scarce in Pembrokeshire
   and Caernarvonshire
- Rare in Merionethshire, Monmouthshire (discovered 2015!), Radnorshire, Breconshire and Carmarthenshire
- Absent from other counties



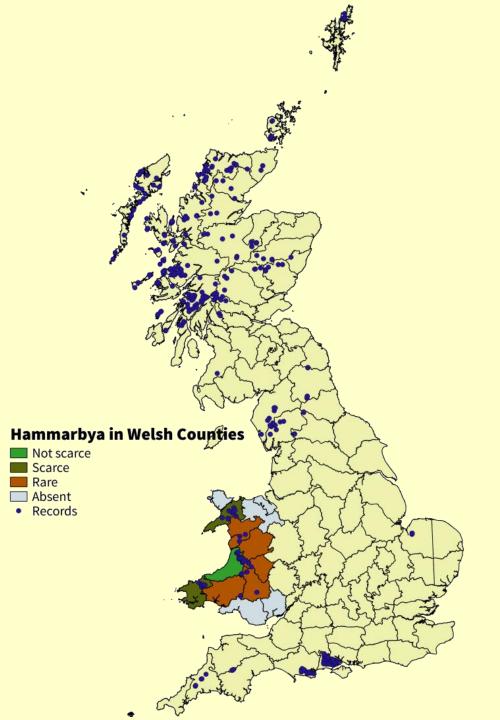


Photo: Sarah

### Examples of RPR data

- Hammarbya paludosa
- Western distribution in GB (LC in GB Red List but EN in Wales, VU in England)
- Not scarce in Cardiganshire
- Scarce in Pembrokeshire and Caernarvonshire
- Rare in Merionethshire, Monmouthshire (discovered 2015!), Radnorshire, Breconshire and Carmarthenshire
- Absent from other counties

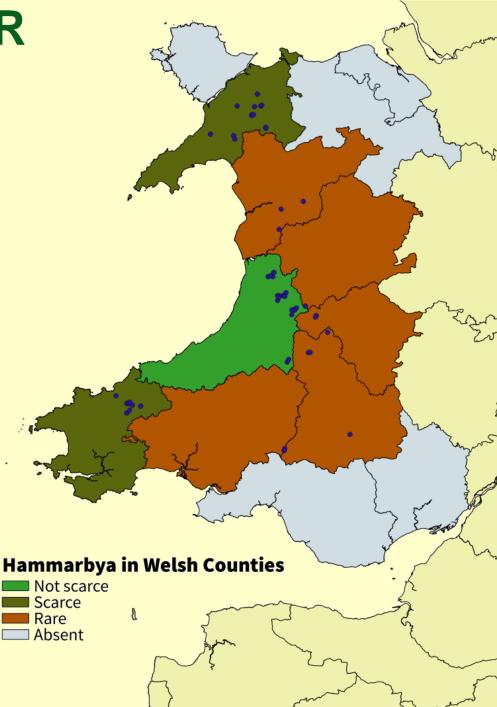




### Examples of RPR data

- Hammarbya paludosa
- Western distribution in GB (LC in GB Red List but EN in Wales, VU in England)
- Not scarce in Cardiganshire
- Scarce in Pembrokeshire and Caernarvonshire
- Rare in Merionethshire, Monmouthshire (discovered 2015!), Radnorshire, Breconshire and Carmarthenshire
- Absent from other counties No





How to make a Rare Plant Register?

- 1. Create a species list
- 2. Add information for each species
- 3. Create a spreadsheet of sites
- 4. Format a printable version



# Create a species list

- Spreadsheets available from Andy Amphlett allow download and selection according to varying criteria from DDB; automate first draft list (based on number of tetrads/ monads)
- Add species of national importance (Red Data Books, Nationally Rare/ Scarce)
- Review list using local knowledge (may for example exclude *Taraxacum/ Hieracium/ Rubus*



| File  | Home                   | Inse       | rt Pa        | ge Layou       | t Fo    | rmulas D         | )ata Re     | view Viev   | v Developer A                   | Add-In | s      |                         |             |        |            |          |
|-------|------------------------|------------|--------------|----------------|---------|------------------|-------------|-------------|---------------------------------|--------|--------|-------------------------|-------------|--------|------------|----------|
| Paste | K Cut                  |            | Calibri<br>B | U -            | · 11    | · A ∧<br>⊗ · A · |             |             | 📑 Wrap Text<br>📴 Merge & Center |        | eneral | ▼<br>00. 00.<br>0.€ 00. | Conditional | Format | Cell       | ↓<br>Ins |
|       | 💞 Format Pa<br>ipboard | unter<br>G |              | - Fo           | ont     | 6                |             | Alignm      |                                 | 6      | Number |                         | Formatting  | styles | r Styles * |          |
|       | A183                   | -          | . (=         | f <sub>x</sub> | =IF(IST | EXT(Analys       | sis!A156),/ | Analysis!A1 | 56,"")                          |        |        |                         | 1           | -      |            |          |

|     | А   | F                  | G                        | Н              |  |
|-----|---|--------------------|--------------------------|----------------|--|
|     |   | Native or          |                          |                |  |
|     | Species or hybrid                                 | Archaeophyte (from | VC Frequency             | Caveat applies |  |
| 1   | T   | VCCC) 🧊            | <b>T</b> .               | -              |  |
| 244 | Callitriche platycarpa                            | NATIVE             | Scarce                   |                |  |
| 248 | Calystegia sepium                                 | NATIVE             | Last recorded 1972       |                |  |
| 249 | Calystegia sepium x silvatica = C. x lucana       | NATIVE             | Rare                     |                |  |
| 250 | Campanula glomerata                               | NATIVE             | Rare                     |                |  |
| 253 | Campanula latifolia                               | NATIVE             | Rare                     | Check          |  |
| 257 | Campanula trachelium                              | NATIVE             | Rare                     | Check          |  |
| 259 | Cardamine flexuosa x pratensis = C. x fringsii    | NATIVE             | Last recorded 1972       |                |  |
| 261 | Cardamine impatiens                               | NATIVE             | no most recent year      |                |  |
| 262 | Carduus crispus x nutans = C. x stangii           | NATIVE             | Last recorded 1943       |                |  |
| 266 | Carex acuta                                       | NATIVE             | Scarce                   |                |  |
| 270 | Carex acuta x elata = C. x prolixa                | NATIVE             | Last recorded 1904       |                |  |
| 273 | Carex acuta x nigra                               | NATIVE             | Last recorded 1904       |                |  |
| 274 | Carex diandra                                     | NATIVE             | Last recorded 1950       |                |  |
| 275 | Carex dioica                                      | NATIVE             | Rare                     |                |  |
| 276 | Carex divisa                                      | NATIVE             | Rare                     | Check          |  |
| 277 | Carex elata                                       | NATIVE             | Scarce                   | Check          |  |
| 278 | Carex elata x nigra = C. x turfosa                | NATIVE             | Last recorded 1904       |                |  |
| 282 | Carex limosa                                      | NATIVE             | Rare                     |                |  |
| 283 | Carex muricata                                    | NATIVE             | Scarce                   |                |  |
| 286 | Carex muricata                                    | NATIVE             | Last recorded 1970Scarce |                |  |
| 289 | Carex oederi                                      | NATIVE             | Scarce                   | Check          |  |
| 291 | Carex otrubae x remota = C. x pseudoaxillaris     | NATIVE             | Rare                     |                |  |
| 292 | Carex paniculata x remota = C. x boenninghausiana | NATIVE             | Rare                     |                |  |
| 293 | Carex rostrata x vesicaria = C, x involuta        | NATIVE             | Last recorded 1927       |                |  |

# Add information for each species

- Could include:
  - Historical information (first county record, sites where not found since 19XX)
  - Local views (apparently declining in the county, widely planted in wildflower mixes, etc.
  - General species account may be available centrally



## Create a spreadsheet of sites

- Depends upon the nature of records
- Ideally, remove majority of repeat records for each site (but this is laborious)

*Hippocrepis comosa* (Horseshoe Vetch) GB/ Wales: Least Concern Caernarvon: Rare

Societvo





# Format a printable version

- With two spreadsheets this can be automated (Access = database program)
- I can create a printable version in a few hours
- Can include maps (to replace tables for species with numerous sites)
- Could include occasional photographs if desired
- pdf or spreadsheet could be downloaded
   from BSBI website (county page)

# How can we help?

- Advice on method (keeping it simple)
- Extracting information from DDB
- Providing national information Red Lists, National Status lists, Species Accounts?
- A second opinion for choices
- Formatting converting spreadsheet to printable



# Any questions?

- Thanks to
  - The Vice-County Recorders of Wales
  - Natural Resources Wales







Cyfoeth Naturiol Cymru Natural Resources Wales





