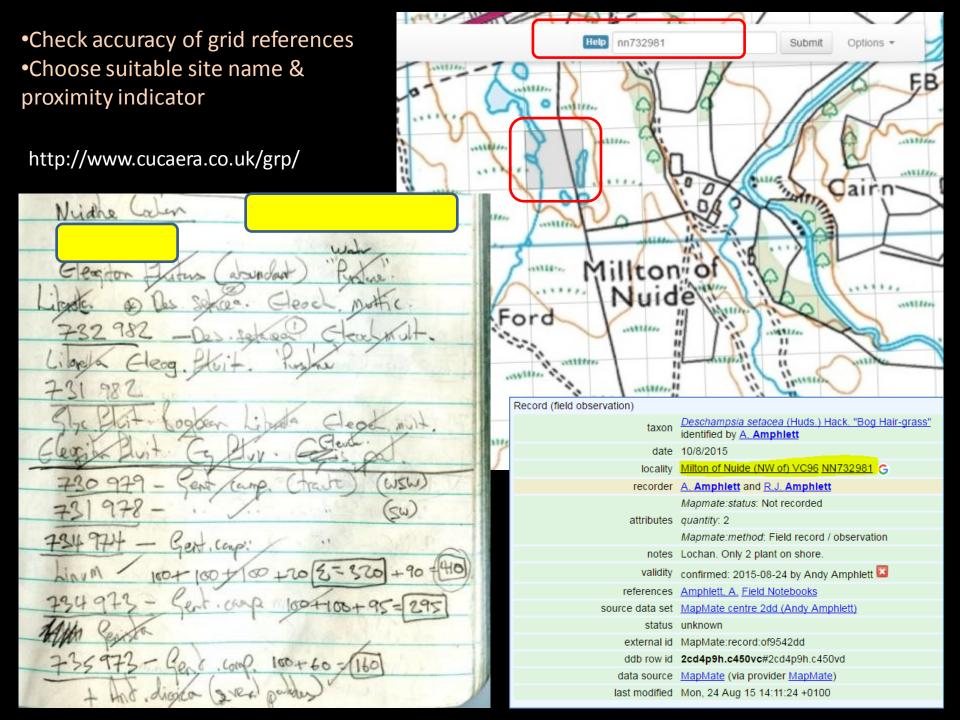
# Tools and techniques to keep your records clean, tidy and correct before synching to the BSBI Hub / DDb

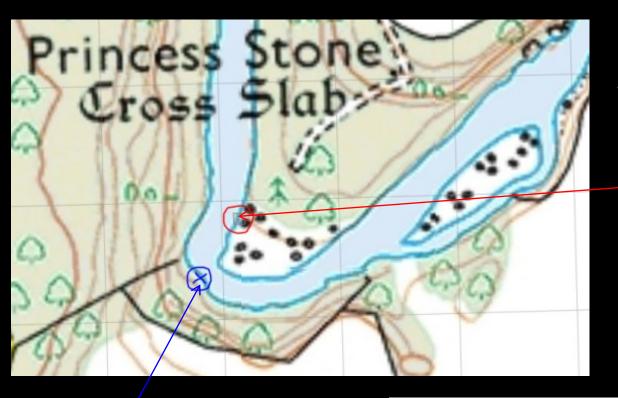
**Andy Amphlett** 



# Real world GPS accuracy

- •On Garmin GPS units, the displayed EPE (Estimate of Precision Error) is the 50% probability radius of the indicated location. So if the GPS gives an EPE of 5m (pretty good reception conditions) then there is a 50% chance that the actual location is within 5m of the indicated position, but a 50% chance that it is more than 5m away. The EPE is often >5m, and when reception is poor, may be >10m.
- •Therefore in practice, the more precise the grid reference, the less accurate it is:
- •1m precision (10 figure) grid references are almost always incorrect
- •10m precision (8 figure) grid references are quite often incorrect
- •100m precision (6 figure) grid references are occasionally incorrect
- •1000m precision (4 figure) grid references are almost always correct
- •The best compromise between precision and accuracy, using currently available GPS units is a 100m precision (6 figure) grid reference

I use a mix of 6 and 8 figure grid references and check every grid reference using http://www.cucaera.co.uk/grp/



A case study in inaccuracy – Juncus balticus on bank of the River Findhorn

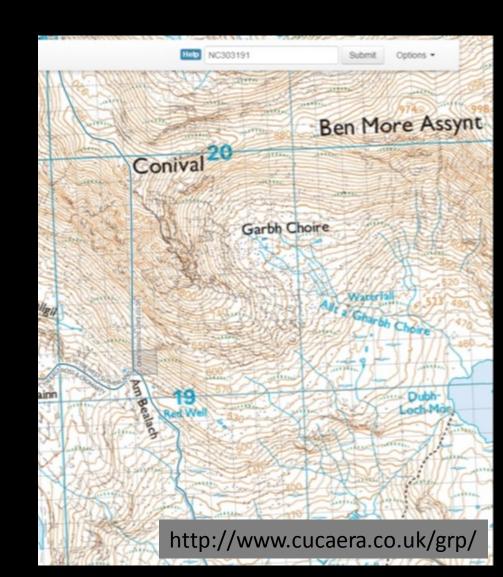
Where the GPS said the plant was ..

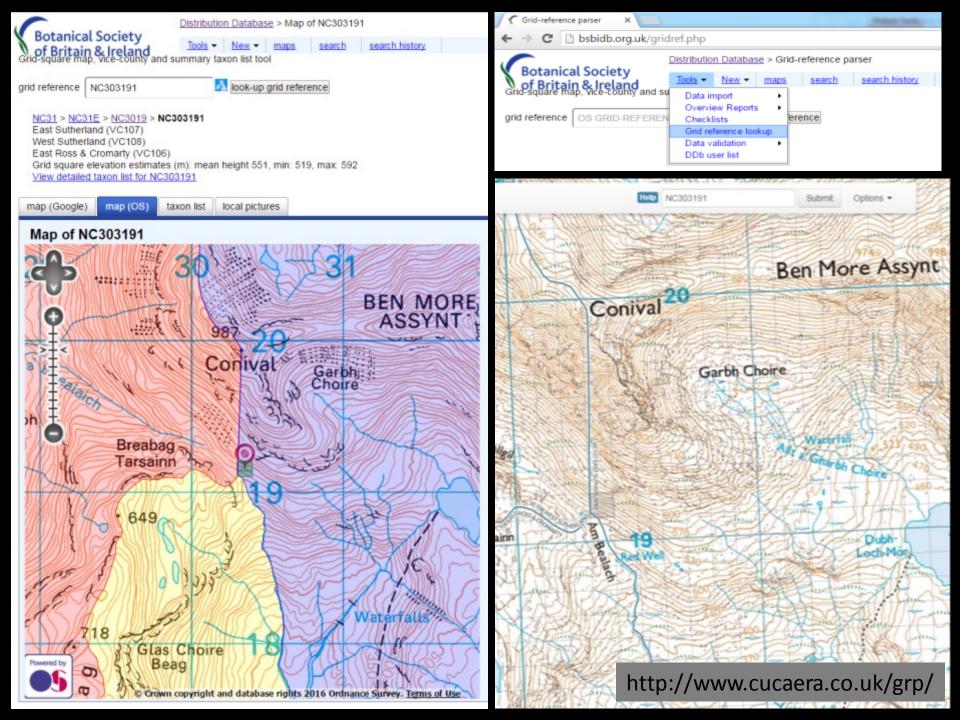
Where the plant actually was ...

Different side of the river & different 100m grid square!

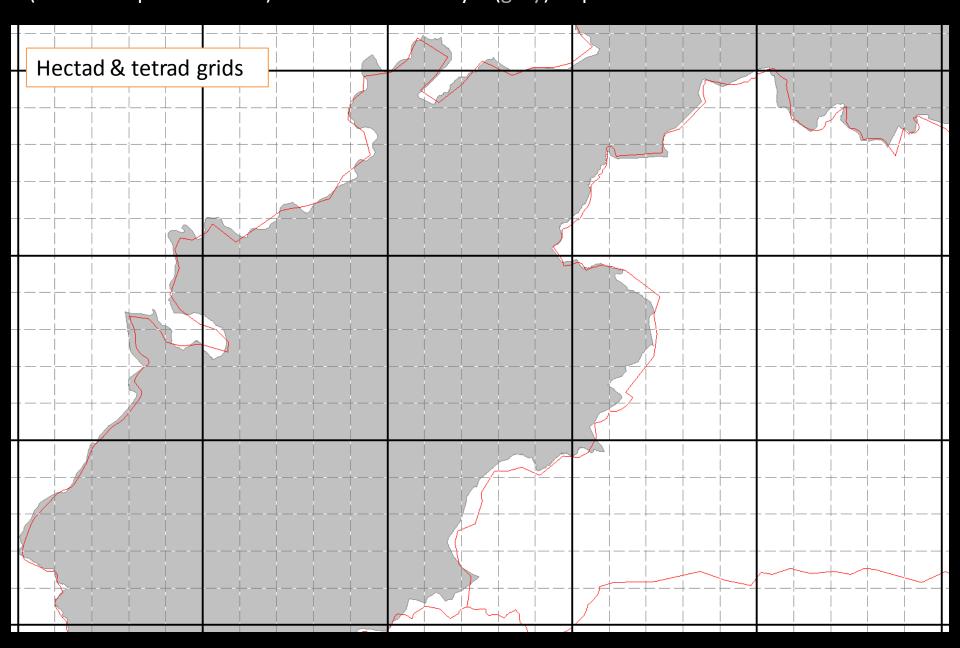
Record (field observation)	
taxon	Juncus balticus Willd. "Baltic Rush" identified by A. Amphlett
date	1/6/2015
locality	River Findhorn (W. side) VC96 NH934424 G
recorder	A. Amphlett
attributes	Mapmate:status: Not recorded
attributes	Mapmate:method: Field record / observation
notes	Patch c. 1m square, on sandy soil covered rocks close to river, in spate zone.
validity	confirmed: 2015-08-21 by Andy Amphlett 🗵
references	Amphlett, A. Field Notebooks
source data set	MapMate centre 2dd (Andy Amphlett)
status	unknown
external id	MapMate:record:8tz712dd
ddb row id	2cd4p9h.c30qfp#2cd4p9h.c30qfq
data source	MapMate (via provider MapMate)
last modified	Tue, 16 Jun 15 12:58:52 +0100

While 'cucaera' mapping is excellent, for greatest clarity of vc boundaries use the DDb grid reference lookup tool ...

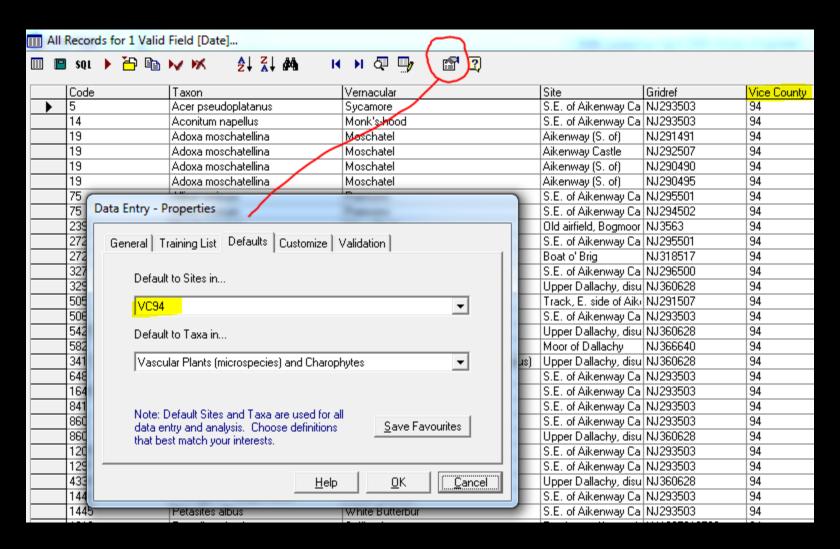




MapMate vc boundaries are NOT very accurate! (vc94 example – red line) cf NBN vc boundary – (grey) - up to 1km mismatch

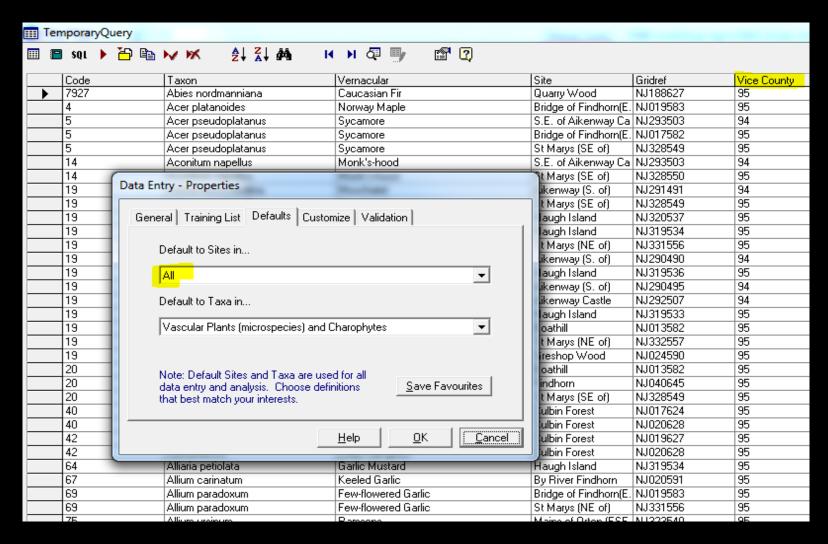


### MapMate F5 query – check vc of your records



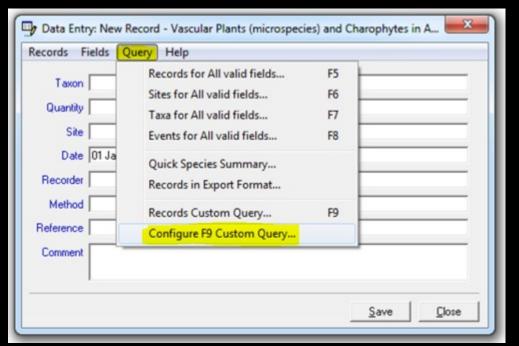
Ensure that options are set to 'Default to Sites in ALL'

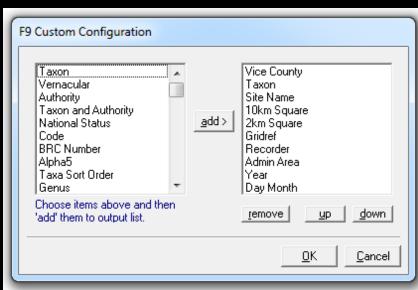
#### MapMate F5 query – check vc of your records



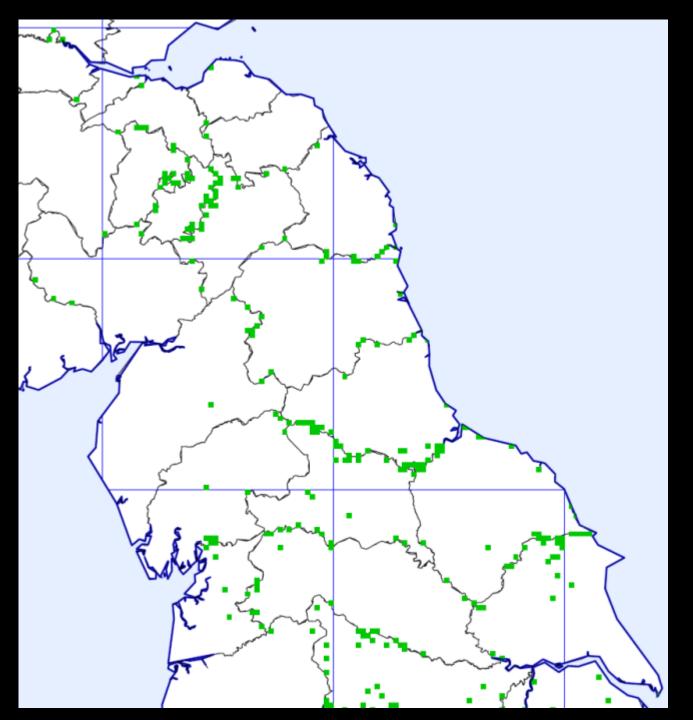
Ensure that options are set to 'Default to Sites in ALL'

# F9 query is customisable eg. include vc, hectad and tetrad in results

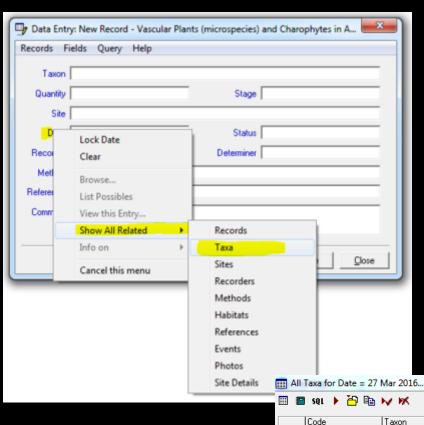




	Vice County				2km Square			Admin Area	Year	Day Month
<b>•</b>	Moray (Elgin) .	Abies nordmanniana	Quarry Wood	NJ16	NJ16W	NJ188627	Green, Ian P.	Moray	2016	24 Feb
	Moray (Elgin) .	Acer platanoides	Bridge of Findhorn(E. of)	NJ05	NJ05E	NJ019583	Amphlett, A., Green, Ian P. & Moray Botany Group	Moray	2016	26 Mar
L	Banffshire .	Acer pseudoplatanus	S.E. of Aikenway Castle	NJ25	NJ25V	NJ293503	Amphlett, A. & Amphlett, E.C.	Moray	2016	25 Mar
	Moray (Elgin) .	Acer pseudoplatanus	Bridge of Findhorn(E. of)	NJ05	NJ05E	NJ017582	Amphlett, A., Green, Ian P. & Moray Botany Group	Moray	2016	26 Mar
	Moray (Elgin) .	Acer pseudoplatanus	St Marys (SE of)	NJ35	NJ35H	NJ328549	Amphlett, A. & Amphlett, E.C.	Moray	2016	27 Mar
L	Banffshire .	Aconitum napellus	S.E. of Aikenway Castle	NJ25	NJ25V	NJ293503	Amphlett, A. & Amphlett, E.C.	Moray	2016	25 Mar
	Moray (Elgin) .	Aconitum napellus	St Marys (SE of)	NJ35	NJ35H	NJ328550	Amphlett, A. & Amphlett, E.C.	Moray	2016	27 Mar
	Banffshire .	Adoxa moschatellina	Aikenway (S. of)	NJ24	NJ24Z	NJ291491	Amphlett, A. & Amphlett, E.C.	Moray	2016	25 Mar
I	Moray (Elgin) .	Adoxa moschatellina	St Marys (SE of)	NJ35	NJ35H	NJ328549	Amphlett, A. & Amphlett, E.C.	Moray	2016	27 Mar
	Moray (Elgin) .	Adoxa moschatellina	Haugh Island	NJ35	NJ35G	NJ320537	Amphlett, A. & Amphlett, E.C.	Moray	2016	27 Mar
	Moray (Elgin) .	Adoxa moschatellina	Haugh Island	NJ35	NJ35B	NJ319534	Amphlett, A. & Amphlett, E.C.	Moray	2016	27 Mar
	Moray (Elgin) .	Adoxa moschatellina	St Marys (NE of)	NJ35	NJ35H	NJ331556	Amphlett, A. & Amphlett, E.C.	Moray	2016	27 Mar
		• • • • • • • • • • • • • • • • • • • •			T			1	1	J



MapMate gridref x vc mismatches (7/4/2016)

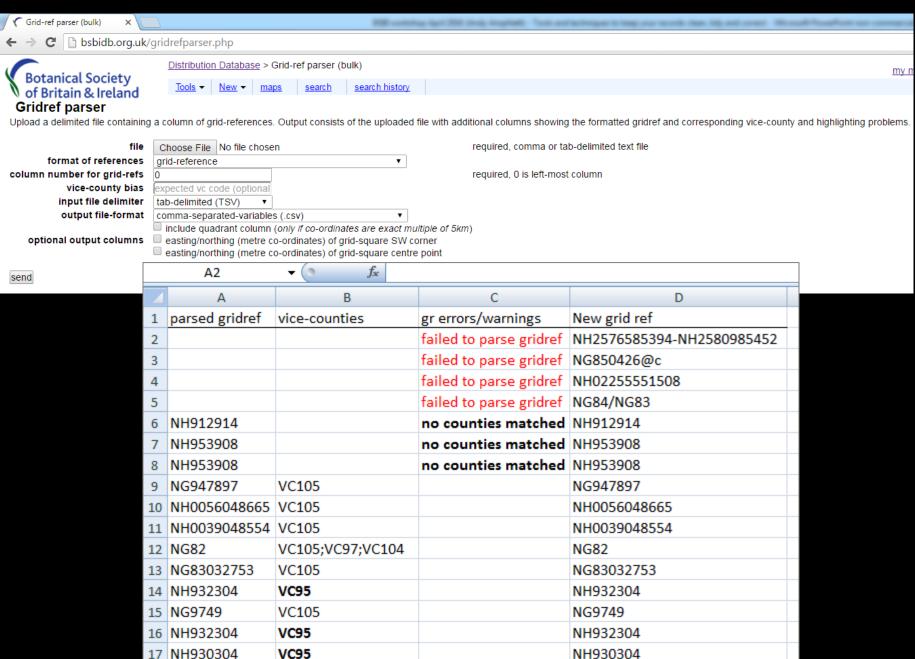


(Date) > Show all related > Taxa

•Did I see all these taxa on this date?

l sql 🕨 💾 🖺	N M ≜ I I I I I I I I I I I I I I I I I I			
Code	Taxon	Vernacular	Parent Taxon Status	
5	Acer pseudoplatanus	Sycamore	Aceraceae	
14	Aconitum napellus	Monk's-hood	Ranunculaceae	
19	Adoxa moschatellina	Moschatel	Adoxaceae	
20	Aegopodium podagraria	Ground-elder	Apiaceae	
64	Alliaria petiolata	Garlic Mustard	Brassicaceae	
69	Allium paradoxum	Few-flowered Garlic	Liliaceae	
75	Allium ursinum	Ramsons	Liliaceae	
77	Alnus glutinosa	Alder	Betulaceae	
239	Betula pendula	Silver Birch	Betulaceae	
505	Chrysosplenium alternifolium	Alternate-leaved Golden-saxifrage	Saxifragaceae	
541	Conopodium majus	Pignut	Apiaceae	
648	Doronicum pardalianches	Leopard's-bane	Asteraceae	
1528	Fallopia japonica	Japanese Knotweed	Polygonaceae	
1649	Ficaria verna	Lesser Celandine	Ranunculaceae	
860	Galanthus nivalis	Snowdrop	Liliaceae	
1209	Luzula sylvatica	Great Wood-rush	Juncaceae	
1291	Mercurialis perennis	Dog's Mercury	Euphorbiaceae	
2614	Narcissus agg.	Cultivated Daffodil	Liliaceae	
1443	Pentaglottis sempervirens	Green Alkanet	Boraginaceae	
	Petasites albus	White Butterbur	Asteraceae	
3338	Scilla luciliae	Boissier's Glory-of-the-snow	Liliaceae	
2014	Stellaria nemorum	Wood Stitchwort	Caryophyllaceae	
2028	Symphytum tuberosum	Tuberous Comfrey	Boraginaceae	
2112	Ulex europaeus	Gorse	Fabaceae	
	Code 5 14 19 20 64 69 75 77 239 505 541 648 1528 1649 860 1209 1291 2614 1443 1445 3338 2014 2028	5         Acer pseudoplatanus           14         Aconitum napellus           19         Adoxa moschatellina           20         Aegopodium podagraria           64         Alliaria petiolata           69         Allium paradoxum           75         Allium ursinum           77         Alnus glutinosa           239         Betula pendula           505         Chrysosplenium alternifolium           541         Conopodium majus           648         Doronicum pardalianches           1528         Fallopia japonica           1649         Ficaria verna           860         Galanthus nivalis           1203         Luzula sylvatica           1291         Mercurialis perennis           2614         Narcissus agg.           1443         Pentaglottis sempervirens           1445         Petasites albus           3338         Scilla luciliae           2014         Stellaria nemorum           2028         Symphytum tuberosum	Code Taxon Vernacular 5 Acer pseudoplatanus Sycamore 14 Aconitum napellus Monk's-hood 19 Adoxa moschatellina Moschatel 20 Aegopodium podagraria Ground-elder 64 Alliaria petiolata Garlic Mustard 69 Allium paradoxum Few-flowered Garlic 75 Allium ursinum Ramsons 77 Alnus glutinosa Alder 239 Betula pendula Silver Birch 505 Chrysosplenium alternifolium Alternate-leaved Golden-saxifrage 541 Conopodium majus Pignut 648 Doronicum pardalianches Leopard's-bane 1528 Fallopia japonica Japanese Knotweed 1649 Ficaria verna Lesser Celandine 860 Galanthus nivalis Snowdrop 1209 Luzula sylvatica Great Wood-rush 1291 Mercurialis perennis Dog's Mercury 2614 Narcissus agg. Cultivated Daffodil 1443 Pentaglottis sempervirens Green Alkanet 1445 Petasites albus White Butterbur 2028 Symphytum tuberosum Tuberous Comfrey	

## If you receive lots of records in a spreadsheet, use the DDb 'gridref parser' to run a check



If you don't use MapMate or receive records from non-MM users, use a pre-formatted spreadsheet available on BSBI Resources webpage for entering records, eg.

	A10 $\bullet$ $f_{\kappa}$									
	Α	В	С	D	Е	F	G	Н	I	J
1 (	ode 1	Taxon	Common name	Site	Gridref	Check GR length	VC	Recorder	Determiner	Date
2	1055 J	Juncus balticus	Baltic Rush	W. side of R. Avon (Na Tri Chaochain)	NJ160119	ОК	94	Amphlett, A. & Green, I.P.	Amphlett, A. & Green, I.P.	26/06/2009
3	506 (	Chrysosplenium oppositifolium	Opposite-leaved Golden-saxifrage	Deskford: Linn Burn	NJ512617	OK	94	Amphlett, A. & Amphlett, R.J.	Amphlett, A.	20/04/2011
4	1912 9	Sherardia arvensis	Field Madder	Boyndie Airfield	NJ61706392	ОК	94	Amphlett, A. & Green, I.P.	Amphlett, A. & Green, I.P.	17/04/2011
5	1437 F	Parnassia palustris	Grass-of-Parnassus	Ailnack Gorge	NJ145149	OK	94	Amphlett, A. & Rothero, G.	Amphlett, A. & Rothero, G.	25/08/2007
6	555 (	Ceratocapnos claviculata	Climbing Corydalis			OK				
7	444 (	Centaurea nigra	Common Knapweed			ОК				
8	569 (	Crataegus monogyna	Hawthorn			OK				
9	891 (	Genista anglica	Petty whin			ОК				
10		#N/A	#N/A			ОК				
11		#N/A	#N/A			ОК				
12		#N/A	#N/A			ОК				
13	•	#N/A	#N/A			ОК				

J	K	L	M	N	0	P
Date	Quantity	Method	Sex	Stage	Status	Comment
26/06/2009		Field record / observation	u	Not recorded	Not recorded	2 clumps.
20/04/2011		Field record / observation	u	Not in flower	Not recorded	Basal leaves only.
17/04/2011		Field record / observation	u	Flowering	Not recorded	Several good sized plants, with a few flowers open, most still in bud.
25/08/2007	500	Field record / observation	u	Flowering	Not recorded	West side of river.
		Field record / observation	u			
		Field record / observation	u			
		Field record / observation	u			
		Field record / observation	u			
		Field record / observation	u			
		Field record / observation	u			
		Field record / observation	u			
		Field record / observation	u			

#### Mapmate Importing Sheets

The following spreadsheets (xlsx format) were created by Andy Amphlett to assist in importing data to Mapmate:

- BRC codes sheet (GB)
- BRC codes sheet (Ireland)
- Species names sheet (GB)
- Species names sheet (Ireland)

IMPORTANT PLEASE READ THIS - notes for using the 'Recording sheet for Mapmate Import (using BRC codes)' file

#### **In Summary**

- •Make sure you set your GPS to give the most accurate readout possible; that is with WAAS enabled and using both GLONASS and GPS satellite systems (if available on your GPS).
- •Enter records to MapMate / spreadsheet / database as soon as possible after making the records. This ensures the greatest accuracy of records, as still fresh in your mind.
- •Sync MapMate records to the BSBI Hub regularly. Do not wait until end of the year.
- •MapMate records are uploaded to the DDb every 2 weeks.
- •Correct any errors in MapMate and send a sync to the Hub there and then.
- •Watch for newly added records to appear on the DDb.
- •Because you will have submitted clean and tidy records, few errors should reach the DDb. Validate records as they arrive on the DDb (only takes 5 minutes every 2 weeks).