

Atlas 2020

– Progress Report

Jim McIntosh

BSBI Scottish Officer



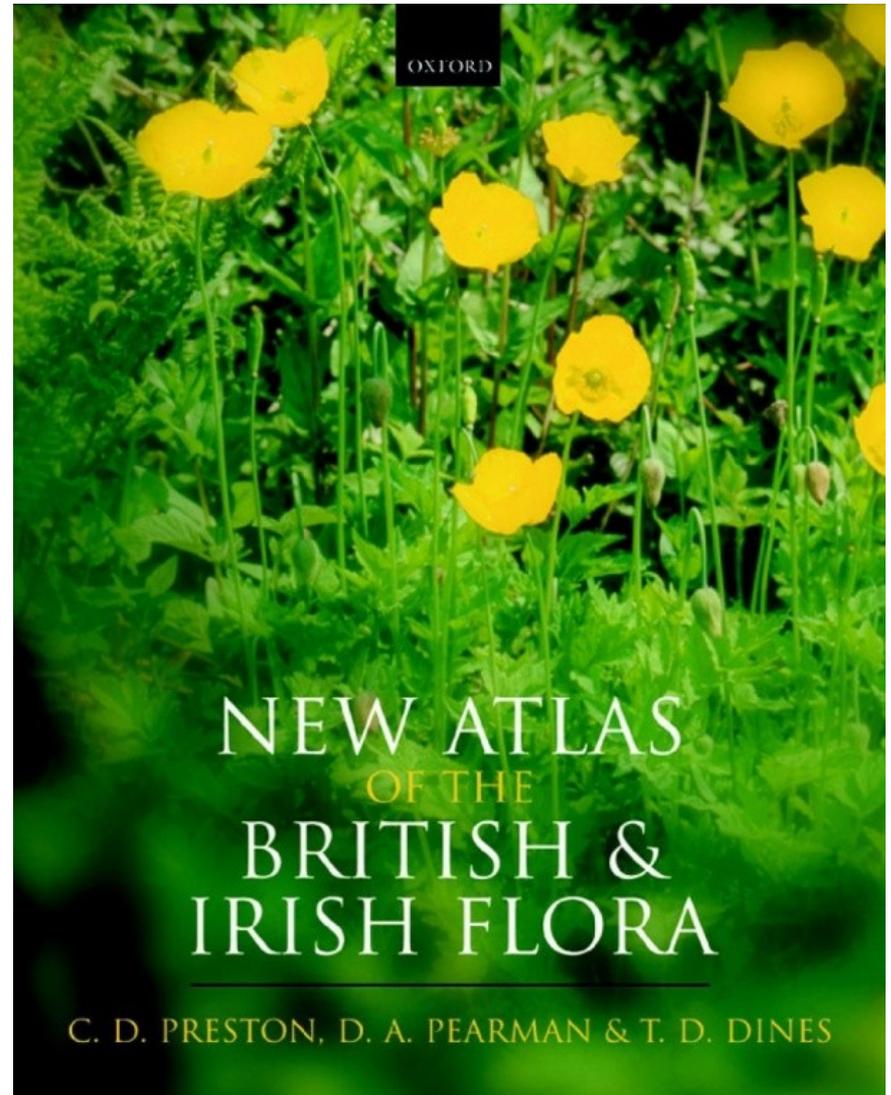
Atlas 2020: Overall Aim

Like previous atlases it aims to:

- Produce comprehensive maps for both native and introduced taxa occurring in Britain and Ireland
- Analyse and report on the changes that have occurred in recent decades.

Unlike previous atlases we plan to:

- Provide maps online
- Produce interactive maps that can display frequency and distribution at a variety of scales
- Produce maps for infraspecific taxa, rare aliens, hybrids, etc.

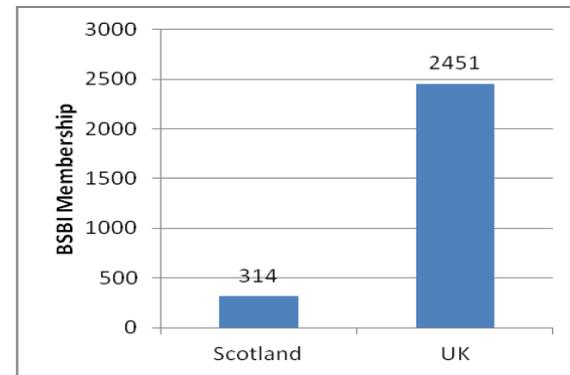
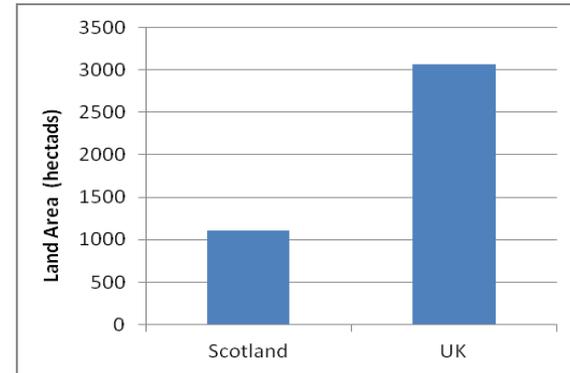


Atlas 2020: Recording Aim

Like previous atlases we are aiming to record a full list of vascular plants and stoneworts in the wild in every hectad throughout the British Isles.

Unlike previous atlases we want to record at tetrads (or better) resolution for a sample of squares in every hectad

- We suggest a minimum of 5 tetrads per hectad!
- Surveying each twice
- Just three seasons to go...



A Big Challenge in Scotland!

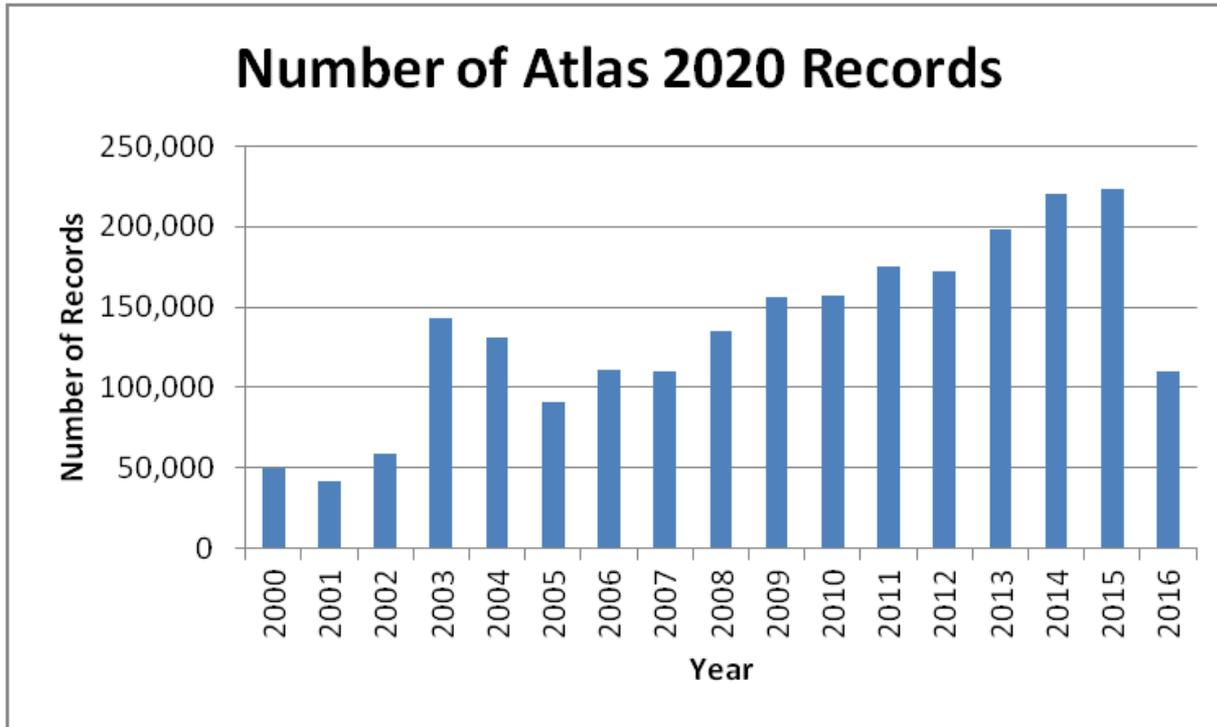
We need to support and encourage all BSBI Recorders & members and non-members to participate fully!

Atlas 2020: Progress in Scotland in 2016

- Everywhere Recorders have been extremely busy recording for Atlas 2020
- They have also been very busy digitising Atlas 2020 Records
- And a few have made a start to validating their records

- We held two one day Workshops in spring on the theme of Atlas 2020
- We held 12 Field meetings across Scotland to help with Atlas 2020
- Including two very successful Recording Weeks - in Shetland & Lanarkshire
- We've collected 23,000 records in the Cairngorm National Park
- We have managed to fill three of the four Recorder Vacancies in Scotland

Atlas 2020



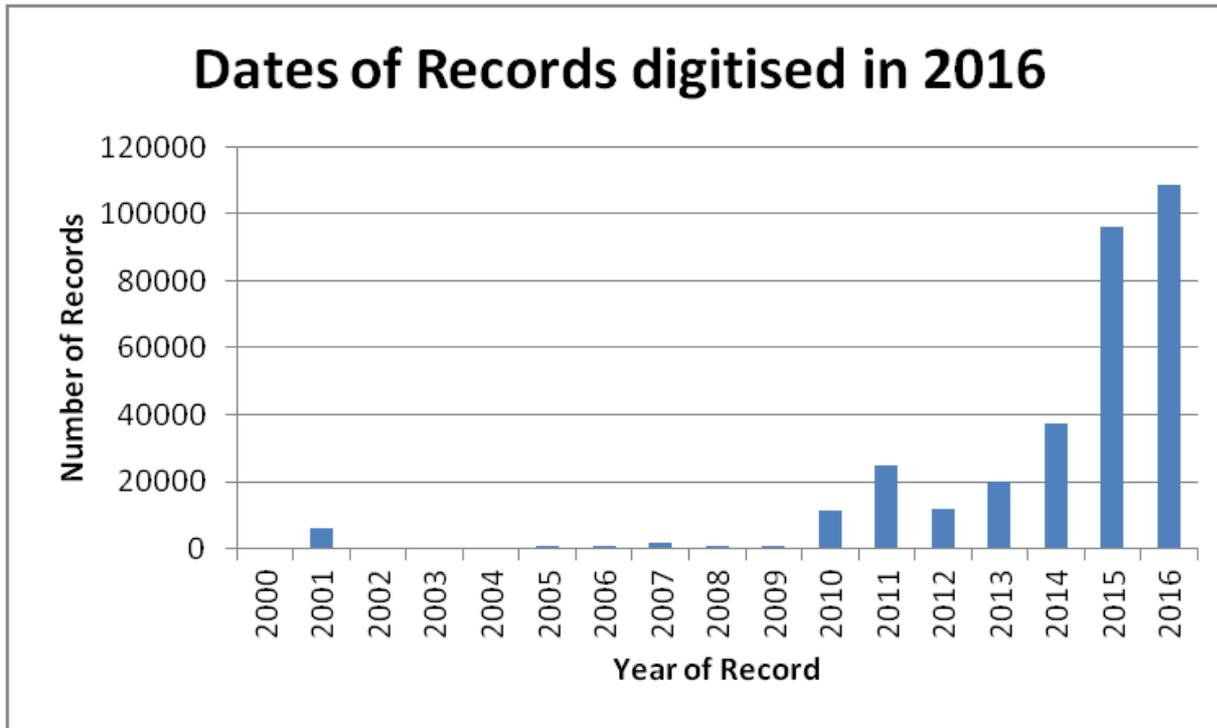
Last year there were 2 million Atlas 2020 records for Scotland

Now there are 2.3 million

Increase in 300,000 records.

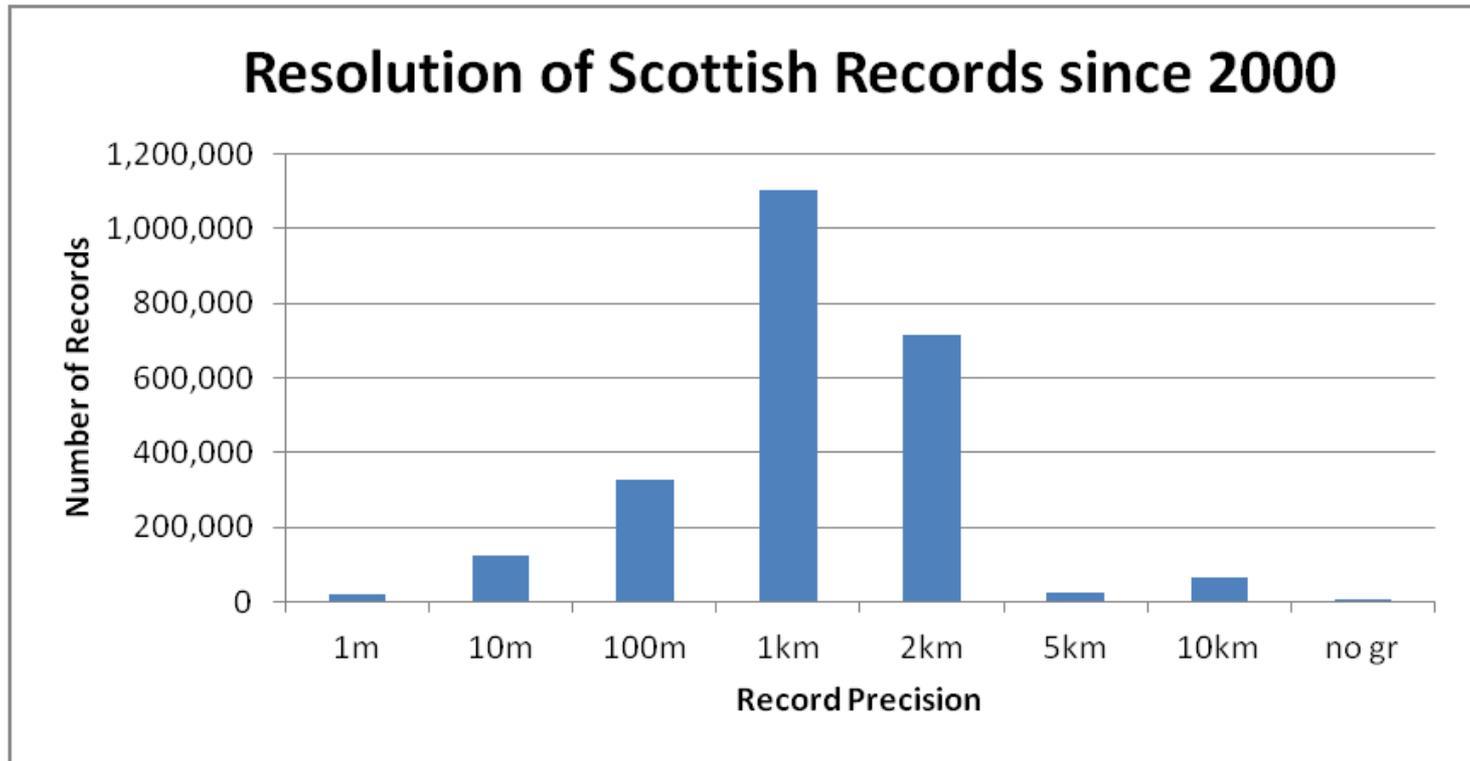
However so far only 100,000 2016 records have been added.

Atlas 2020



Breakdown of the 300,000 records digitised and added to the DDb in 2016 by year.

Quality of Recording



Atlas 2020: Two years ago

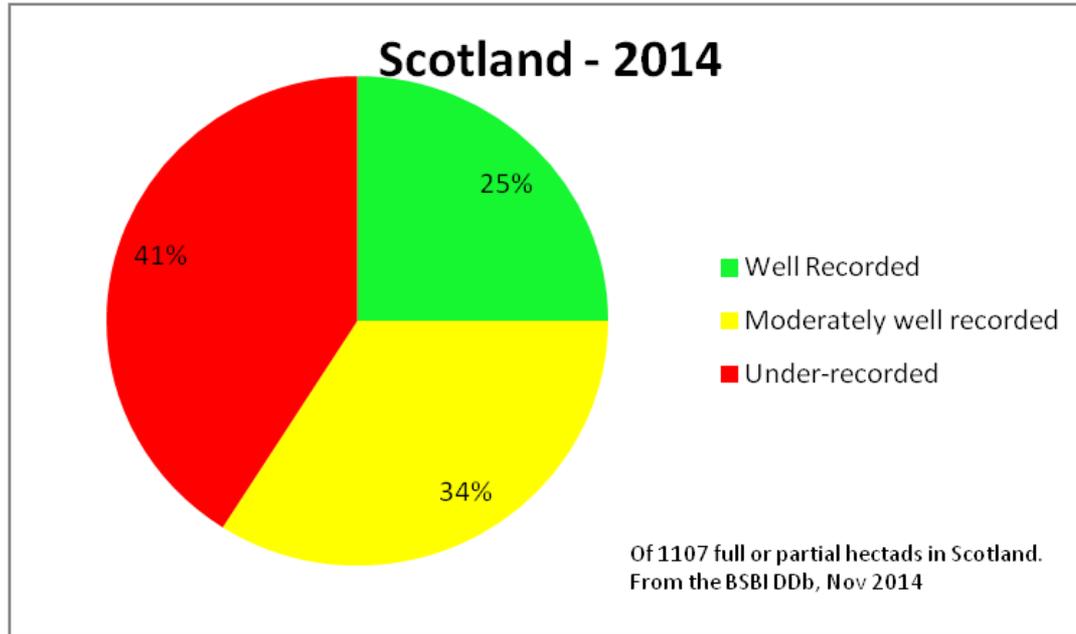
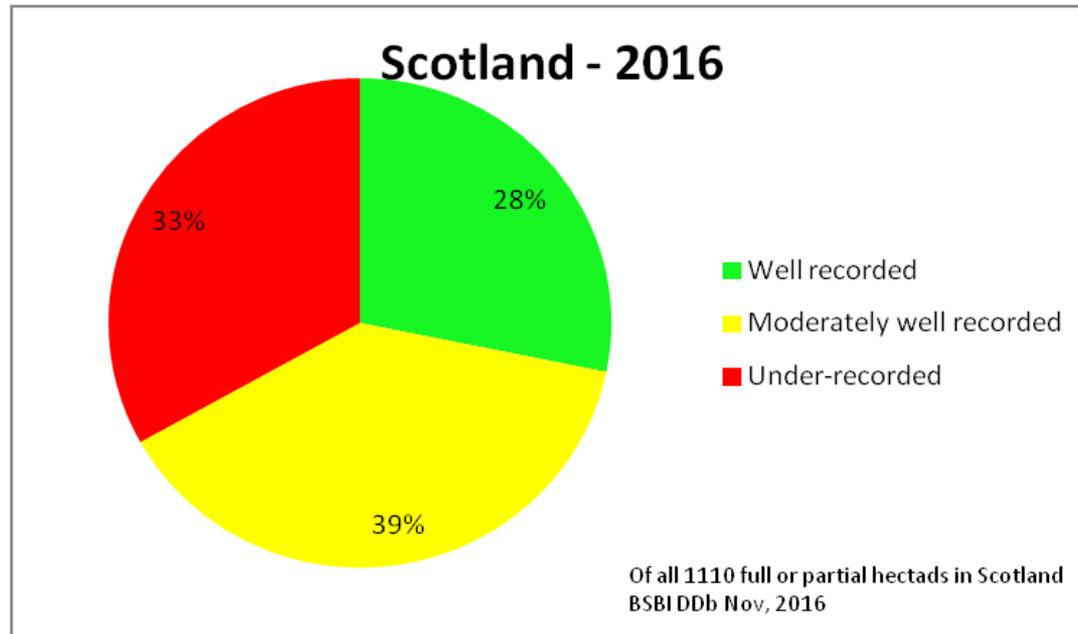


Chart showing proportion of the 1107 full or partial hectads in Scotland that are well recorded, moderately well recorded or under-recorded.

Atlas 2020: Now



After a big push to get records stuck into the Database AND
A year with lots of fieldwork

- We added 344,000 post 2000 records over the past year
- 200,000 of these records were from 2014 and 2015
- Amazing achievement but still leaves a lot to do -
- More than half of Scottish hectads need further survey effort

Atlas 2020: How you can help

- Join a local botany group - there are groups in Orkney, Skye, Inverness, Moray, Argyll, Perthshire, Glasgow, Ayr & Kirkcudbright.
- Go on a Recording Field Meetings or one of the Recording Weeks! Two this year – one in Cowal, Argyll and one in West Ross.

Torrison Recording Week: 9-16 July 2016 for botanists who like mountains!



Atlas 2020: How you can help

- Ask Recorders how you can help?
- Could you take on completely unrecorded squares?
- Could you record while on holiday in a remote area?
- Could BPS & BSS members help with Atlas recording?
- Could you plug gaps in local hectads?

Atlas 2020: Finding missing species

- Anyone can check the BSBI Database for species not recorded since 2000.
- You don't need to register.
- Just type hectad grid reference in the Grid Reference Lookup tool.
- Then click the “View Taxon list” button.

Botanical Society of Britain & Ireland

Distribution Database > Map of NO02

[user manual](#) | [message board](#) | [login](#) | [register](#)

Tools | maps | search | message board

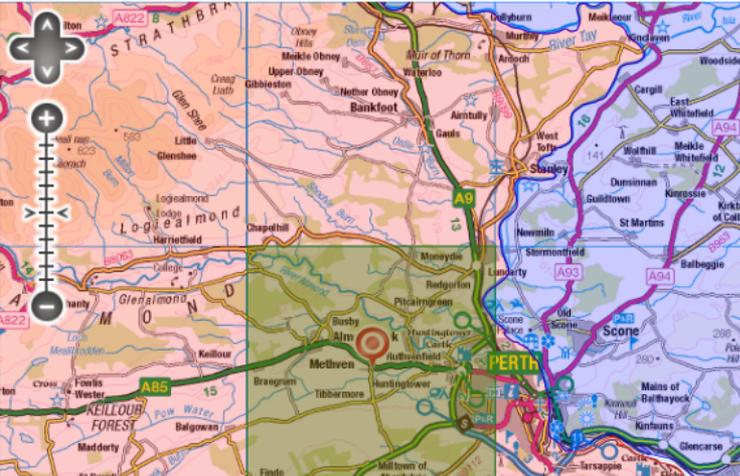
Grid-square map, vice-county and summary taxon list tool

grid reference [look-up grid reference](#)

NO02
East Perthshire (VC89)
Mid Perthshire (VC88)
Grid square elevation estimates (m): mean height 82, min: 6, max: 183
[View taxon list for hectad NO02](#)

map (Google) | map (OS)

Map of NO02



Atlas 2020: Finding missing species

- Tick “Sort recent records separately”; then “Show taxon list”
- All pre-2000 records that haven’t be re-recorded since 2000 are in feint at the top of the list.
- Some may be common whilst others rare. All would be interesting refinds!



Distribution Database > taxon list

[user manual](#) | [message board](#) | [login](#) | [register](#)

Tools ▾
maps
search
message board

grid reference

exclude taxa with fewer than records.

earliest year

recent record boundary year

county

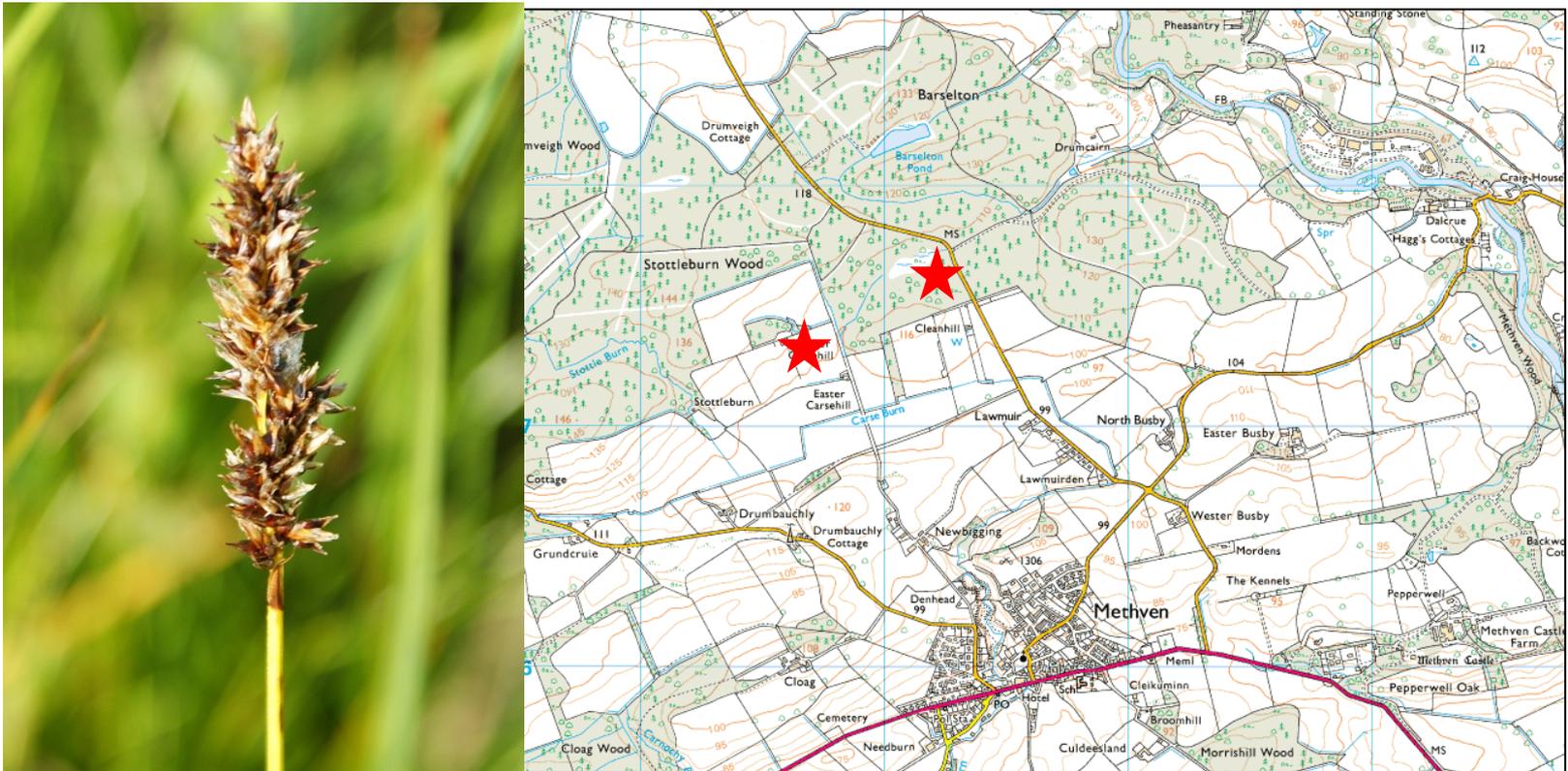
include taxon list from the whole county
 sort recent records separately
 include infra-specific taxa

Taxon list for [NO02](#) within VC88 only.

<p><i>Alchemilla alpina</i> (1997) 4 0</p> <p><i>Alchemilla vulgaris</i> agg. (1991) 1 0</p> <p><i>Anisantha sterilis</i> (1991) 3 0</p> <p><i>Arenaria balearica</i> (1997) 7 0</p> <p><i>Campanula trachelium</i> (1991) 3 0</p> <p><i>Cardamine impatiens</i> (1991) 3 0</p> <p><i>Carduus crispus</i> (1991) 1 0</p> <p><i>Carex acutiformis</i> (1987) 3 0</p> <p><i>Carex diandra</i> (1991) 3 0</p> <p><i>Carpinus betulus</i> (1987) 2 0</p> <p><i>Cicuta virosa</i> (1991) 4 0</p> <p><i>Clinopodium vulgare</i> (1990) 2 0</p> <p><i>Crocus biflorus</i> (1987) 2 0</p> <p><i>Cymbalaria muralis</i> (1991) 3 0</p> <p><i>Epilobium brunnescens</i> (1997) 5 0</p> <p><i>Erodium cicutarium</i> agg. (1987) 1 0</p> <p><i>Euphrasia officinalis</i> agg. (1995) 3 0</p> <p><i>Geranium pyrenaicum</i> (1991) 3 0</p> <p><i>Glebionis segetum</i> (1987) 1 0</p> <p><i>Hieracium vulgatum</i> (1991) 1 0</p> <p><i>Hordeum jubatum</i> (1998) 7 0</p>	<p><i>Elymus caninus</i> (2011) 4 2</p> <p><i>Elytrigia repens</i> agg. (2015) 3 7</p> <p><i>Epilobium ciliatum</i> (2011) 3 5</p> <p><i>Epilobium hirsutum</i> (2016) 6 6</p> <p><i>Epilobium montanum</i> (2016) 9 7</p> <p><i>Epilobium palustre</i> (2016) 6 5</p> <p><i>Epipactis helleborine</i> (2011) 3 3</p> <p><i>Equisetum arvense</i> (2016) 6 14</p> <p><i>Equisetum × litorale</i> (2005) 0 1</p> <p><i>Equisetum fluviatile</i> (2011) 4 2</p> <p><i>Equisetum palustre</i> (2011) 4 3</p> <p><i>Equisetum sylvaticum</i> (2011) 0 1</p> <p><i>Eranthis hyemalis</i> (2013) 0 3</p> <p><i>Erica cinerea</i> (2006) 0 1</p> <p><i>Erica tetralix</i> (2011) 6 6</p> <p><i>Eriophorum angustifolium</i> (2011) 5 6</p> <p><i>Eriophorum vaginatum</i> (2011) 3 3</p> <p><i>Erophila glabrescens</i> (2016) 0 1</p> <p><i>Erophila verna</i> s.l. (2015) 0 6</p> <p><i>Euonymus europaeus</i> (2011) 0 1</p> <p><i>Eupatorium cannabinum</i> (2007) 0 1</p>	<p><i>Pinus jeffreyi</i> (2011) 0 1</p> <p><i>Pinus sylvestris</i> (2016) 10 14</p> <p><i>Pinus wallichiana</i> (2011) 0 1</p> <p><i>Plantago lanceolata</i> (2015) 12 16</p> <p><i>Plantago major</i> (2015) 8 12</p> <p><i>Plantago maritima</i> (2011) 0 1</p> <p><i>Platanus × hispanica</i> (2016) 0 2</p> <p><i>Poa annua</i> (2015) 9 20</p> <p><i>Poa humilis</i> (2016) 0 2</p> <p><i>Poa nemoralis</i> (2016) 8 10</p> <p><i>Poa pratensis</i> s.l. (2015) 5 7</p> <p><i>Poa trivialis</i> (2016) 6 12</p> <p><i>Polygala vulgaris</i> (2007) 0 1</p> <p><i>Polygonatum multiflorum</i> (2016) 2 2</p> <p><i>Polygonatum × hybridum</i> (2011) 2 3</p> <p><i>Polygonum aviculare</i> agg. (2011) 1 8</p> <p><i>Polypodium vulgare</i> s.l. (2011) 8 3</p> <p><i>Polystichum aculeatum</i> (2015) 8 9</p> <p><i>Populus alba</i> (2010) 3 2</p> <p><i>Populus × canadensis</i> (2010) 0 2</p> <p><i>Populus tremula</i> (2011) 8 4</p>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Atlas 2020: Finding missing species

- *Carex diandra* is one of the rare species in this (the Battleby) hectad
- A more detailed search of the BSBI Database found old records
- A search of the unforested island in the plantation quickly refound it
- Unforested areas in plantations are often last resorts of species that have become extinct elsewhere.





Thank you!

