

HOW TO SURVEY A HECTAD

For Atlas 2020

Jim McIntosh, BSBI Scottish Officer



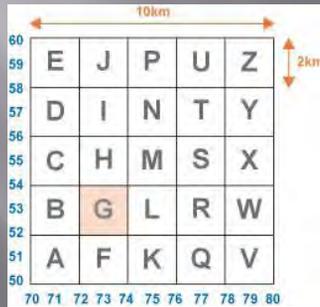
BSBI project aims

- ▣ To provide a fun and fulfilling projects for BSBI recorders



Atlas 2020 aims: recap

To record all native and alien vascular plant species *in the wild* in a sample of 2 x 2km squares (tetrads) - or better - in every 10 x 10km square (hectad) in Ireland & Britain.



Grid Reference		The Name of the Locality		Route Map																																																		
Tetrad		Habitat																																																				
Vice County		Recorder(s)																																																				
Date																																																						
<table border="1"> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </table>																																																						
Species	Locality	Grid Reference	Date	Notes																																																		

From Kent and Medway Biological Recording Centre. www.kmbrc.org.uk/recording/help/gridrefhelp.php?page=6 (accessed 10/3/16)

Atlas 2020 aims – ‘the wild’

- Everything up to boundary of private gardens include anything planted outside them, e.g. street trees.
- Anything growing wild and naturalised in public gardens & parks - including private estates.
- Ignoring cultivated crops other than arable weeds.
- Everything in woods, plantations and hedgerows.

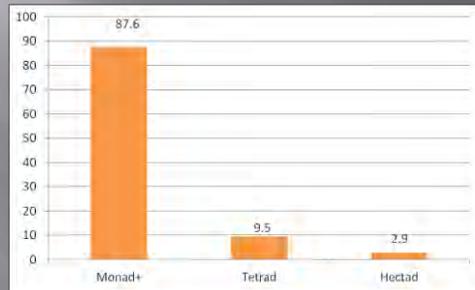
¹ There is detailed on the Atlas 2020 webpage entitled: “Where and What do we Record?”

Atlas 2020 aims

In Ireland we asked for three tetrads (or better) to be surveyed in each full hectad *or pro rata*.

- But...

Resolution of Irish Atlas 2020 Recording



Resolution of post 2000 records¹ in Ireland (%)

¹ Of a total of 941,500 records as at March 2016

Atlas 2020

- ▣ Monads (1x1kms) are easy to identify on a map,
- ▣ Are easy to work out a monad grid reference for &
- ▣ Are a good size to survey thoroughly
- ▣ Are a better way to target scarce recording effort on

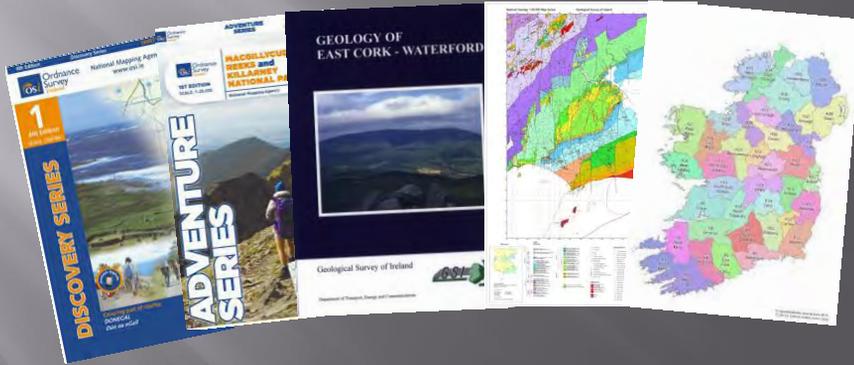
But you need to survey more than three monads to obtain equivalent coverage to three tetrads.

Planning for surveying a hectad

- ▣ What information do you need before deciding how to survey the hectad?

Planning for surveying a hectad

- Maps



Planning for surveying a hectad

- Online Mapping



Planning for surveying a hectad

- Where is there public access to the countryside?



Planning for surveying a hectad

- Local knowledge - speak to the VC Recorder!



Planning to survey a hectad

- Aim is to maximise the number of species recorded
- So you need to identify a sample of squares in the hectad that are likely to include the greatest diversity (and best examples) of habitats.
- Important to include aquatic, raised bog, montane, salt-marsh & ancient woodland habitats.
- Important to include sites that are known to have rare plant populations.
- ...and sites that may have rare plant populations – like outcrops of limestone or basic geological dykes

Planning to survey a hectad

- Then factoring in access constraints, decide which squares will be feasible to survey.



What do you need to take?



What tactics do you use IN the square

What tactics do you use IN the square

- ▣ Plan & follow a route through as many different habitats as possible. You might want to split group.
- ▣ Keep an eye out for potentially interesting ground and be prepared to make diversions
- ▣ Take details of all the rare & scarce species that have been recorded previously. (Or even a list of all species?)
- ▣ Visit sites that are known to have rare & scarce spp
- ▣ Look very hard in the vicinity of rarities as they sometimes eclipse other notable associated species
- ▣ If your path crosses a species rich patch – then follow it sideways or up and down.
- ▣ Visit any cliffs or gorges

What tactics do you use IN the square

- ▣ Use binoculars to look at inaccessible cliffs, gorges, or the opposite banks of rivers
- ▣ Watch out for any disturbed ground suitable for arable weed species, such as farmland, road or building works.
- ▣ If working with other botanists, develop a system to acknowledge species records that are called out.
- ▣ Half way through your time in the square (lunch?) you and others in party should check the card to see if you have missed striking any species off.
- ▣ Have a think about what species that are likely to occur but which you have failed to record – and look out for them.

Resolution of Records

Nationally & Locally Rare & Scare 100m+

Axiophytes 100m+

Everything else? 1 or 2km

Thanks