



Two national projects:

Current:
Atlas 2020 –
broad but shallow
on detail



Completed:
Threatened Plants
Project –
limited scope but
detailed





pre 1987

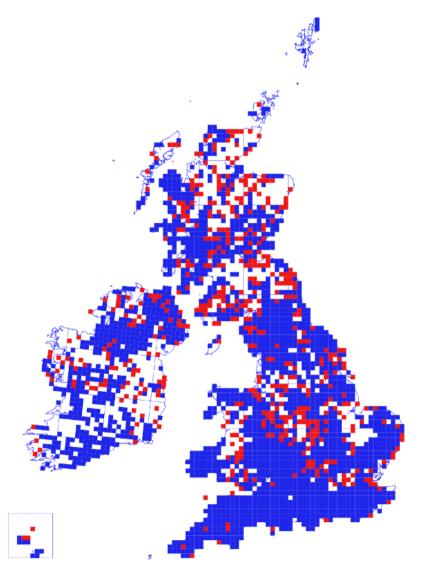
Atlas 2020: the challenges

Over 5,000 taxa to be considered

Uneven baseline coverage at the chosen resolution (2x2 km)

Uneven spread of available manpower

Wide range of skills and expertise in pool of volunteers



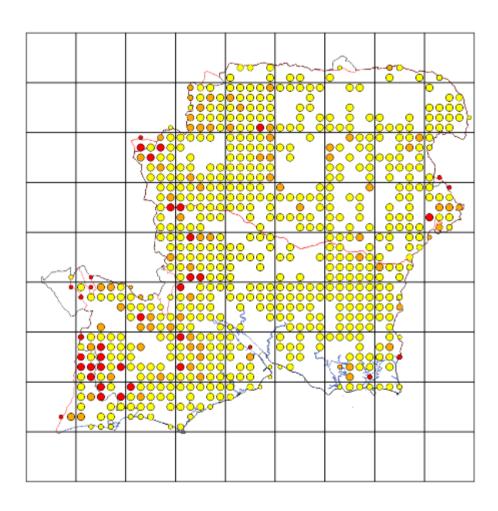


Planning at a local level means:

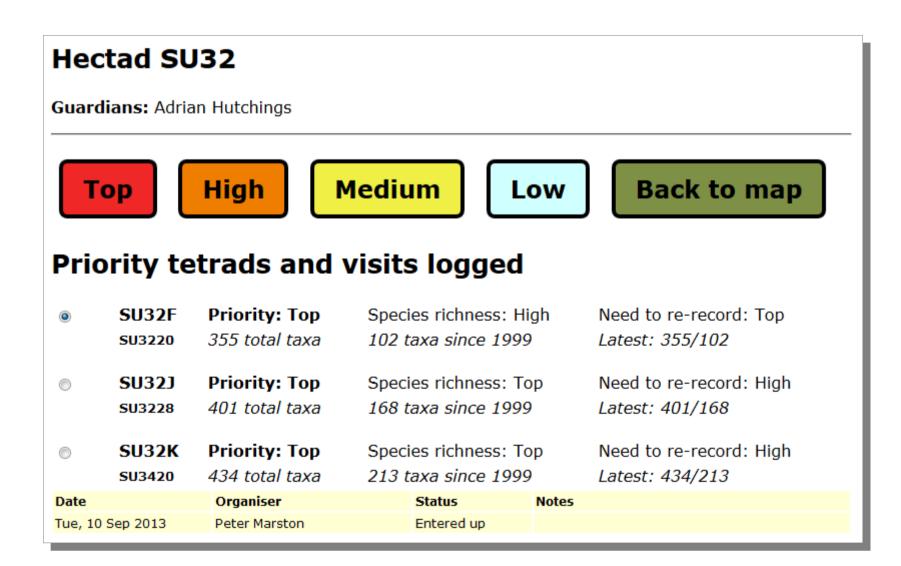
Prioritisation of effort

Giving (at least some) people responsibilities

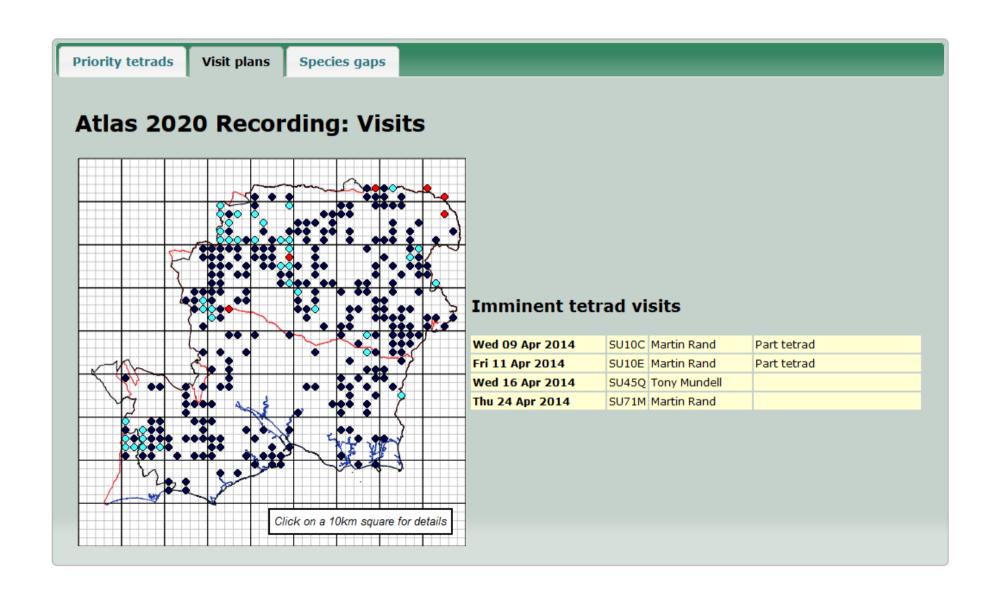
Tracking and getting feedback













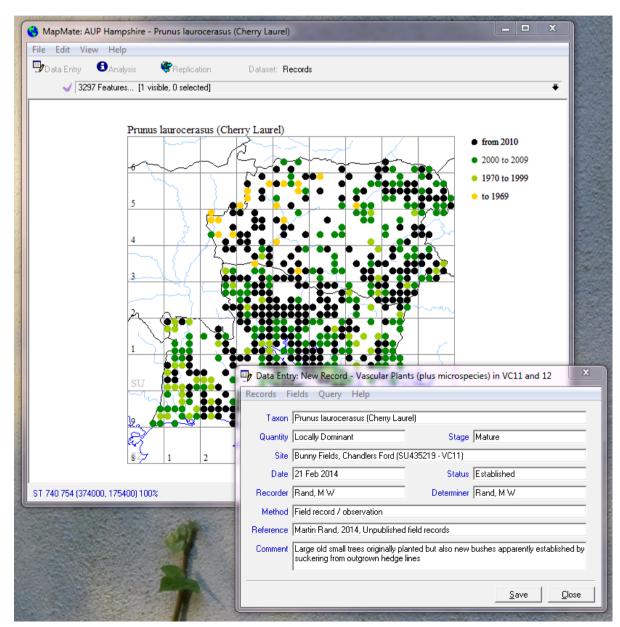
Priority tetrads and visits logged										
•	SU33C SU3034		ty: Top tal taxa	•	ies richness: axa since 199		Need to Latest: 2	re-record: Top 247/63		
Date		Organ	iser	er		Notes				
Thu, 01	Thu, 01 May 2014 Martin		Rand	Proposed						
Fri, 11 J	Fri, 11 Jul 2014 Martin		Rand	Proposed						
Commo	on Species List	Checklist For	mat							
O New	New Forest list		Short scien	tific name						
© Sout	th Hants (other	Scientific na	ames							
O Nort	h Hants Heaths	© English names								
Nort	h Hants (other)	Old records / unrecorded common species only								
Printable recording form - select required tetrad / options above										



lf a s	All oth subspecies is m	er spec	ies (ind	cluding unlisted	d specie cies als	es) sho o listed	id can be recor uld have a deta I but not marke es = not curren	rded by ailed grid d comm tly on da	markin d refer non, re- atabas	ence and locat cord the subsp se, or not recor	espondi tion reco ecies if	ng to to orded o you a		the sup	pleme		e species.
BSBI Affas 2020 SUSSC Page 1																	
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	Acer campest	2010		Bras nap ole Briza media	_		Chenop rubru			Eupho hellos	2006		llex aquifoliu Impati capen	1997		Malva sylvesz Matri chamo	1997 2011 2006
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	Acer campest Acer platanol Acer pseudo Achii milierol Adonis annua	2010 1997 1999 1908		Bras nap ole Briza media Bromop erecz Bromo ramos Bromu horde	1997		Chenop rubru Circa luteda Cirsiu acaul Cirsiu arvens Cirsiu palustr	2010 1997 2010		Eupho helios Euphor peplu Euphr nemor Fagus sylvati Fallo convolv	2006 2010 2006		llex aquifollu Impati capen Impati glandul Inula conyzae Iris foeddissi	1997		Malva sylvesz Matri chamo Matrica disco Medica lupuli Melic unifior	1997 2011 2006 1997
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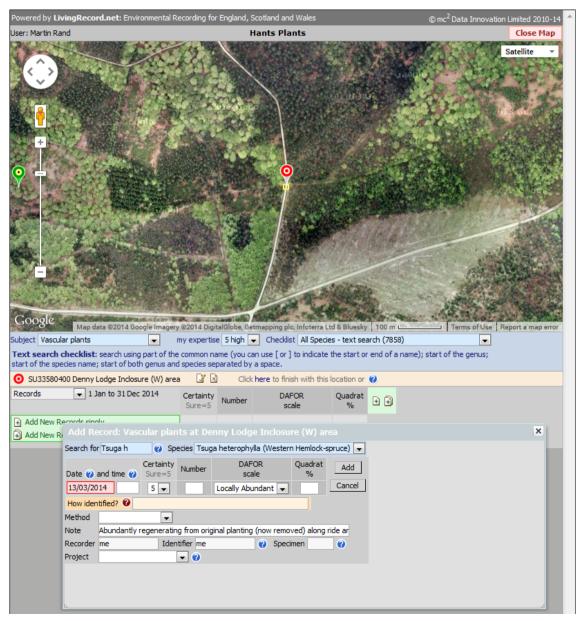


MapMate



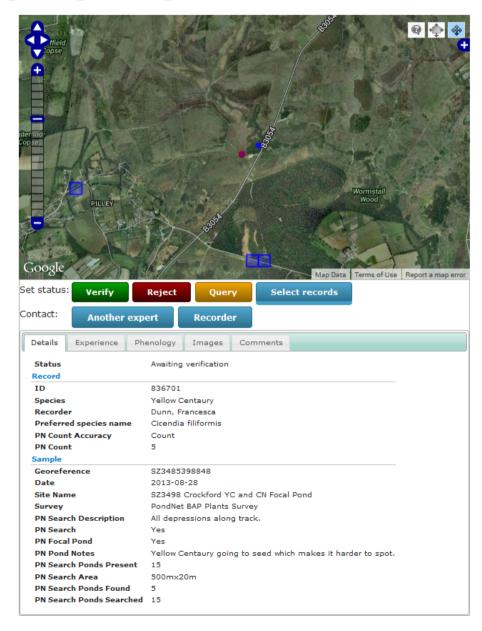


Living Record

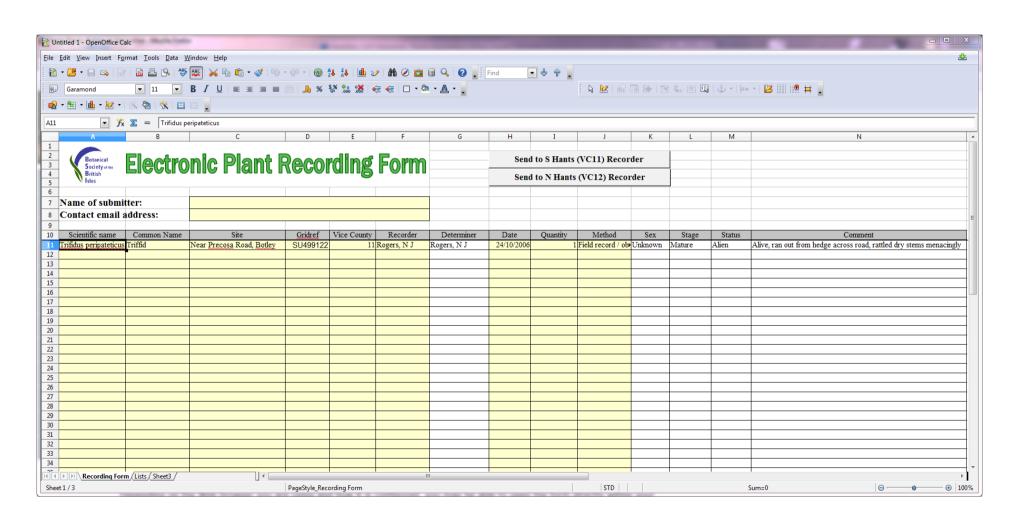




iRecord









Priority tetrads and visits logged										
•	SU10B	Priority: Top	Species richness: To	ор	Need to re-record: High					
	SU1002	448 total taxa	187 taxa since 1999	9	Latest: 448/187					
Date		Organiser	Status	Notes						
Thu, 1	7 May 2012	Geoffrey Field	Entered up							
Wed, 1	13 Aug 2014	Martin Rand	Proposed	Part tetr	rad					
0	SU10C	Priority: Top	Species richness: H	igh	Need to re-record: Top					
	su1004 399 total taxa		84 taxa since 1999		Latest: 399/84					
Date		Organiser	Status	Notes						
Wed, 0	09 Apr 2014	Martin Rand	Proposed	Part tetr	rad					
Thu, 1	4 Aug 2014	Martin Rand	Proposed	Part tetr	rad					
0	SU10E	Priority: Top	Species richness: M	edium	Need to re-record: Top					
	SU1008	251 total taxa	3 taxa since 1999		Latest: 305/3					
Date		Organiser	Status	Notes						
Fri, 11	Apr 2014	Martin Rand	Proposed	Part tetr	rad					
Mon, 2	5 Aug 2014	Martin Rand	Proposed	Part tetr	rad					



Workshops on technique and identification

Already

Atlas recording methodology
Preservation techniques and herbaria
Improvers' workshop (terminology, techniques, equipment)

Ferns
Conifers
Goosefoot family (Amaranthaceae)
Willowherbs (Epilobium)
Daisy family (Asteraceae)
Sedges (Cyperaceae)
Grasses (Poaceae)

To come:

Aquatics
Cotoneaster
Dandelions (Taraxacum)
etc..







Online resources for identification

All workshop notes
Localised keys for critical groups e.g. *Hieracium*Short notes on particular species aggregates
Links to external sites such as the BSBI *Plant Crib*

Formalised field meetings

Opportunities for learning as well as recording

Recorders' personal 'trips out'

Learners always welcome to join them





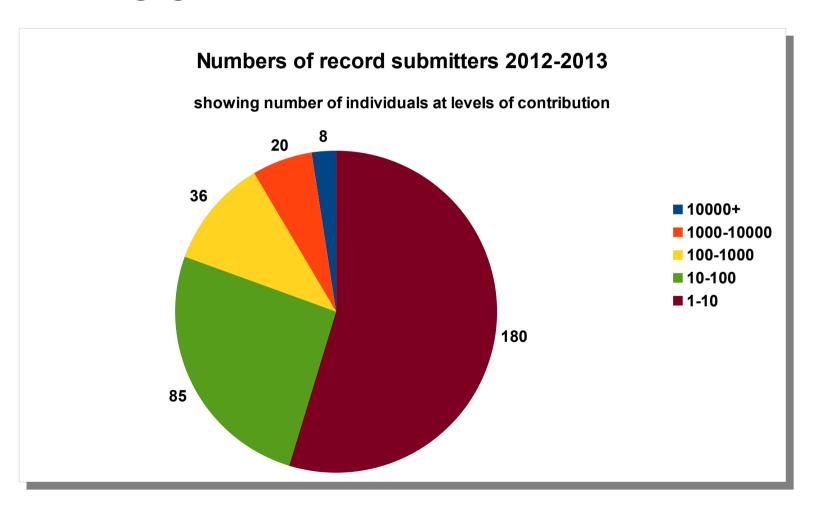
Spreading the word

Bioblitzes
Walks led for other organisations
Talks to societies
Stands at meetings



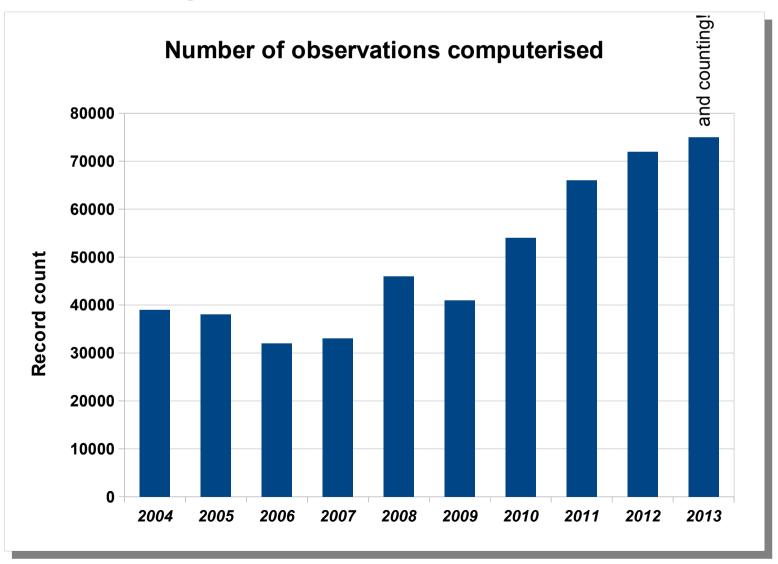


Levels of engagement





Levels of data capture





Threatened Plants Project

Aim: to gather detailed information on Red List species from sites selected across their British range

Population sizes, extents and exact locations (with mapping)

Details of habitat, vegetation communities and associated species

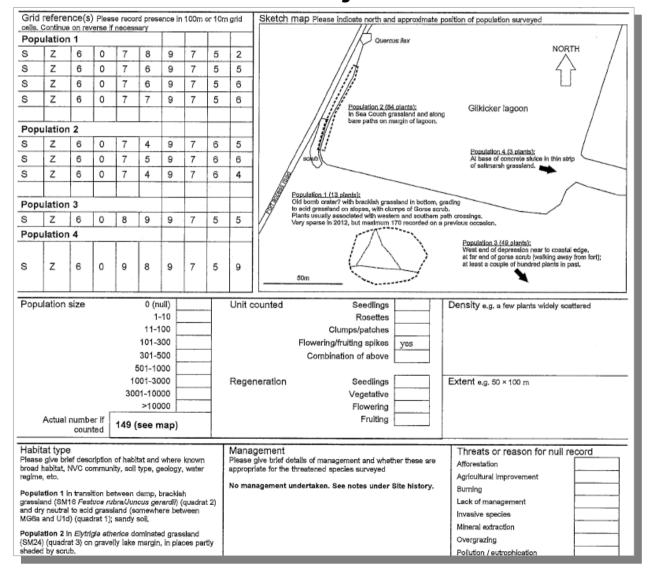
Past and current management at site, site condition

Assessment of threats





Threatened Plants Project







Threatened Plants Project

Associated species within a 1m radius of the target species Method for recording associated species:

- Select an area where the target species is abundant avoiding areas that include other habitats from which the target species is absent
- Select an individual of the target species and record all species only within a 1m radius
- Record the abundance of all species including the target species in this area using the DAFOR scale (D = dominant, A = abundant, F = frequent, O = occasional, R = rare)
- Record extra quadrats where the species occurs over a large area or occurs in more than one vegetation type

Associate list 1		Associate list 2		Associate list 3		
Grid reference: SZ 6076 9755	(Pop 1)	Grid reference: SZ 6076 9756	(Pop 1)	Grid reference: SZ 6074 9765	(Pop 2)	
	DAFOR		DAFOR		DAFOR	
Bupleurum tenuissimum	R	Bupleurum tenuissimum	0	Bupleurum tenuissimum	0	
Festuca rubra	Α	Festuca rubra	D	Elytrigia atherica	D	
Spiranthes spiralis	R	Senecio jacobaea	R	Plantago coronopus	0	
Achillea millefolium	R	Trifolium fragiferum	F	Plantago lanceolata	R	
Cynosurus cristatus	F	Daucus carota	0	Pilosella officinarum	0	
Lotus corniculatus	F	Poa pratensis	R	Senecio jacobaea	0	
Plantago lanceolata	. 0	Plantago lanceolata	R	Agrostis capillaris	. 0	
Leontodon saxatilis	R	Plantago maritima	0	Trisetum flavescens	0	
Plantago coronopus	0	Agrostis stolonifera	R	Festuca rubra	F	
Ulex europaeus	0	Leontodon saxatilis	Α	Arrhenatherum elatius	R	
Agrostis capillaris	Α	Festuca arundinacea	R	Festuca arundinacea	R	
Anthoxanthum odoratum	R	Centaurea nigra	R .	Dactylis glomerata	R	
Trisetum flavescens	R	Achillea millefolium	R	Lepidium heterophyllum	0	
Arrhenatherum elatius	F		R	, , , , , , , , , , , , , , , , , , , ,		
Trifolium repens	0					
Phleum pratense	R					
Elytrigia atherica	0					





Threatened Plants Project

Requires:

Ability to follow recording protocols methodically and consistently

Ability to ID almost all species encountered (vegetatively if necessary)

Appreciation of environmental and management factors

NVC understanding desirable but not essential

Many of the people best able to do the surveys are already fully engaged professionally!





Threatened Plants Project

In Hampshire involved just 7 recorders over 5 years

Mix of professional ecologists and experienced amateurs

Resulted in several hundred record sheets for 36 target species in the county

Produced some interesting spin-offs (e.g. the mapping of every Juniper bush at Porton Down)

No speedy gratification for recorders – still awaiting the results of a rigorous appraisal process







But what does all this have to do...

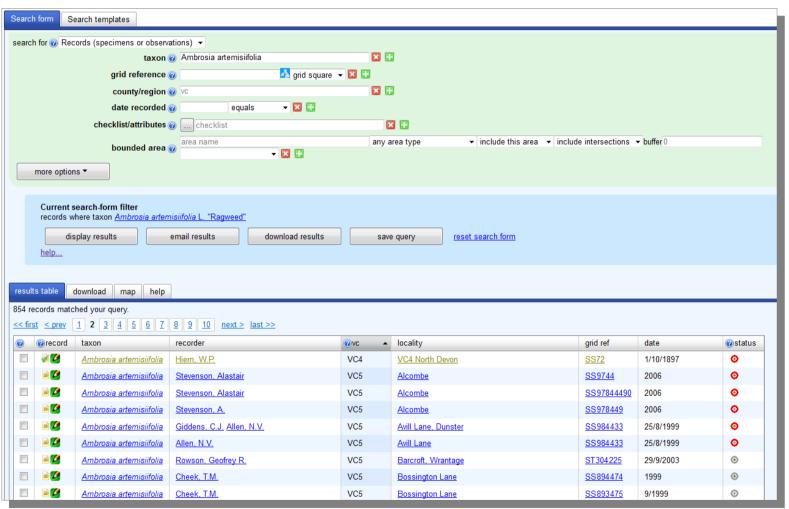




But what does all this have to do...

...with invasive non-native plants?



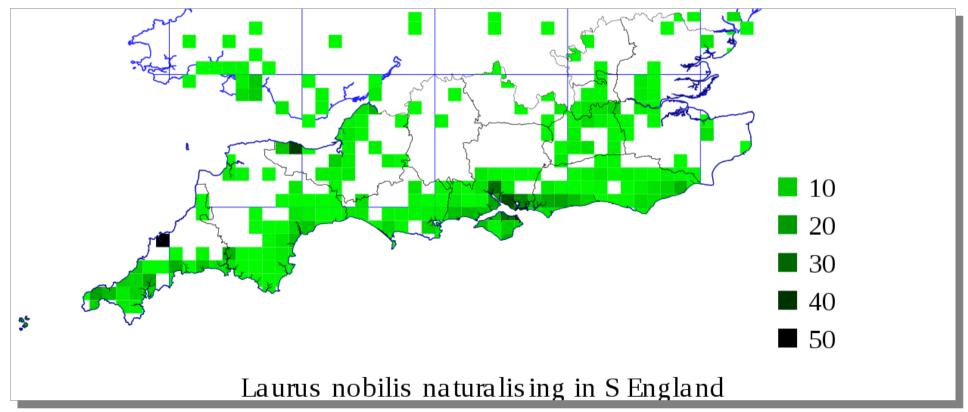


mine the archive!





A measure of pervasiveness









A Threatening Plants Project might consider:

Species in the "grey zone"

Means of arrival, level of establishment, regeneration

Sizes / extents of populations

Environment, habitat, vegetation communities, associated species – "in the patch", on the fringes, beyond

Site management and history





A Threatening Plants Project would monitor over time!

Colonisation and spread

Progressive effects on environment

Control / eradication – what happened next?

Level of re-establishment

A Threatening Plants Project could involve a sector of the amateur coommunity - with the right measures





A few online resources

BSBI Distribution Database

http://bsbidb.org.uk

Contact coordinator@bsbi.org.uk for full access rights

GB Non-native Species Secretariat

http://www.nonnativespecies.org

Delivering Alien Invasive Species Inventories for Europe (DAISIE) http://www.europe-aliens.org/

Preslia

http://www.preslia.cz

Some of the best coverage of European urban and invasion ecology (in English), many open access articles, others via JSTOR