### Atlas 2020 – some early findings by Andy Amphlett



Crassula tillaea (Mossy Stonecrop) – Fort George (E. of) (NH768566) vc96. Masses on old track. A native species (assumed alien in Scotland) with an expanding distribution.

### Atlas 2020 - some early findings - Scotland

Top 45 winners cf losers pre cf post 2000

	Winners	Losers
Native	2	35
Archaeophyte	0	8
Neophyte	43	2

#### Atlas 2020 - some early findings - Scotland

Crassula tillaea (Mossy Stonecrop) Carex pendula (Pendulous Sedge)

	Winners	Losers
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#### Atlas 2020 – some early findings – Scotland

#### The top 45 winners

Abies grandis Juncus tenuis

Abies procera Lamiastrum galeobdolon

Acer platanoides Larix decidua x kaempferi = L. x marschlinsii

Alchemilla mollis Ligustrum ovalifolium

Berberis darwinii Lonicera nitida

Berberis thunbergii Lysichiton americanus
Buddleja davidii Lysimachia punctata
Carex pendula Muscari armeniacum
Centaurea montana Paeonia officinalis

Chamaecyparis lawsoniana Phacelia tanacetifolia

Cortaderia richardii Picea sitchensis
Crassula tillaea Pinus contorta

Crocosmia aurea x pottsii = C. x crocosmiiflora Polygonatum multiflorum x odoratum = P. x hybridum

Crocosmia paniculata Pseudotsuga menziesii Epilobium ciliatum Rhododendron luteum

Escallonia rubra Rosa rugosa Fuchsia magellanica Salix euxina

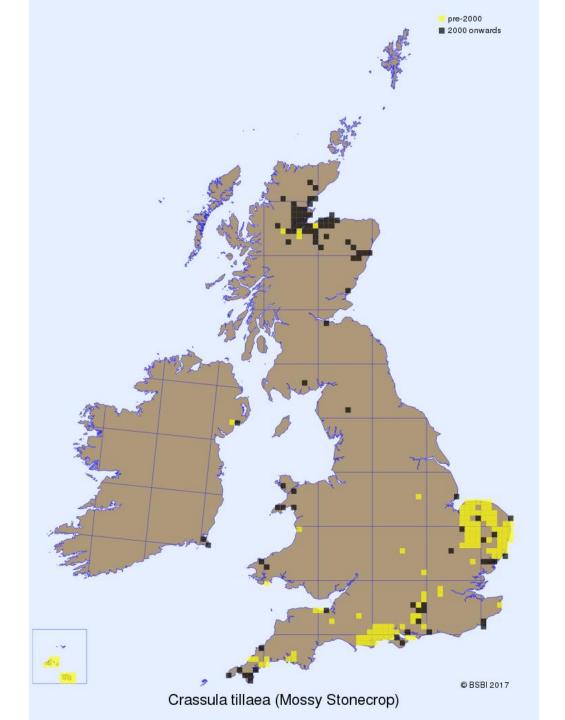
Geranium endressii x versicolor = G. x oxonianum Sedum spectabile
Geranium macrorrhizum Tellima grandiflora

Gunnera tinctoria Tsuga heterophylla Hyacinthoides hispanica Tulipa gesneriana

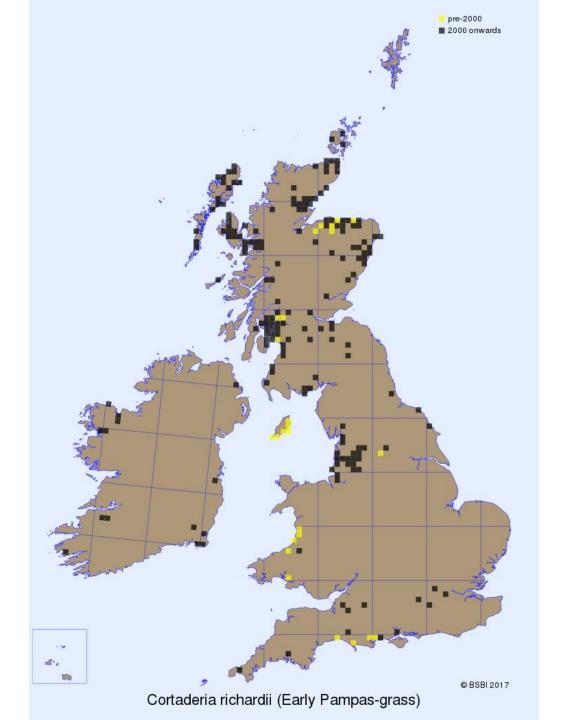
Hyacinthoides non-scripta x hispanica = H. x massartiana Viola altaica x lutea x tricolor = V. x wittrockiana

Hypericum androsaemum

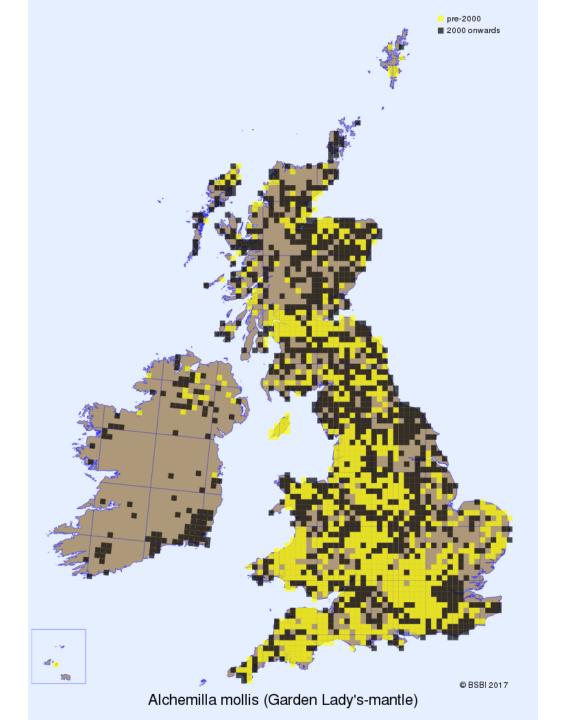
### Earliest on top



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# Atlas 2020 – some early findings – Scotland The top 45 losers

	Winners	Losers
Native	2	35
Archaeophyte	0	8
Neophyte	43	2

Lolium multiflorum (Italian Rye-grass)
Trifolium hybridum (Alsike Clover)

### Atlas 2020 – some early findings – Scotland The top 45 losers

Arabis hirsuta

Arctium nemorosum

Arenaria serpyllifolia

Botrychium lunaria

Callitriche brutia

Callitriche hermaphroditica

Coeloglossum viride

Euphrasia arctica

Euphrasia confusa

Euphrasia micrantha

Euphrasia nemorosa

Euphrasia scottica

Fallopia convolvulus

Festuca filiformis

Galeopsis speciosa

Glebionis segetum

Gnaphalium sylvaticum

Hieracium vulgatum

Hypericum humifusum

Isoetes lacustris

Lamium amplexicaule

Lamium confertum

Ligustrum vulgare

Lolium multiflorum

Mentha arvensis

Phleum bertolonii

Potamogeton alpinus

Potamogeton berchtoldii

Potamogeton gramineus

Potamogeton perfoliatus

Pseudorchis albida

Raphanus raphanistrum

Sagina filicaulis

Schedonorus pratensis

Sinapis arvensis

Sorbus aria

Sparganium emersum

Sparganium natans

Subularia aquatica

Trifolium hybridum

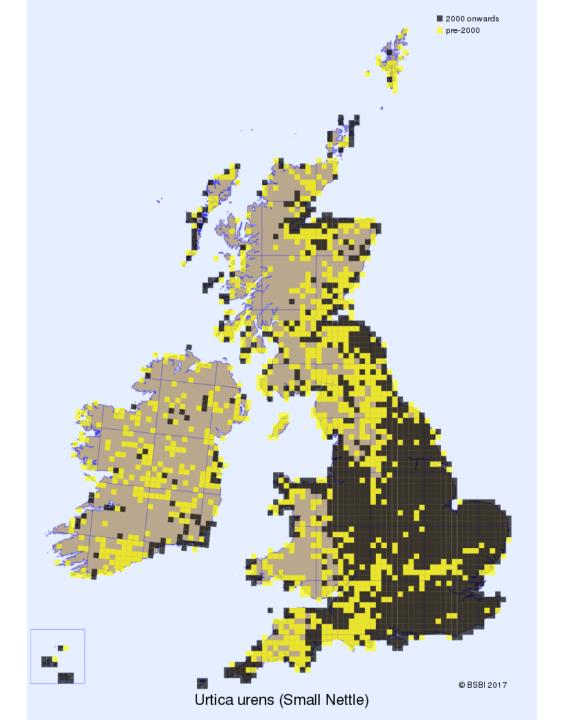
Urtica urens

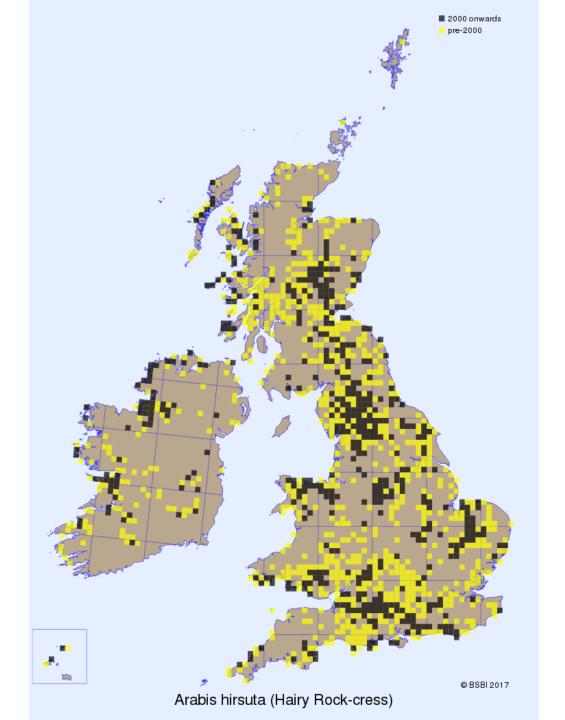
Veronica agrestis

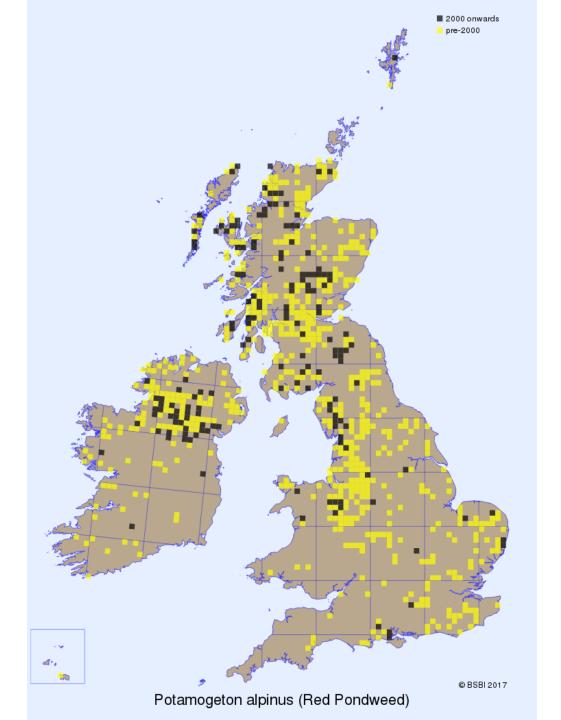
Viola canina

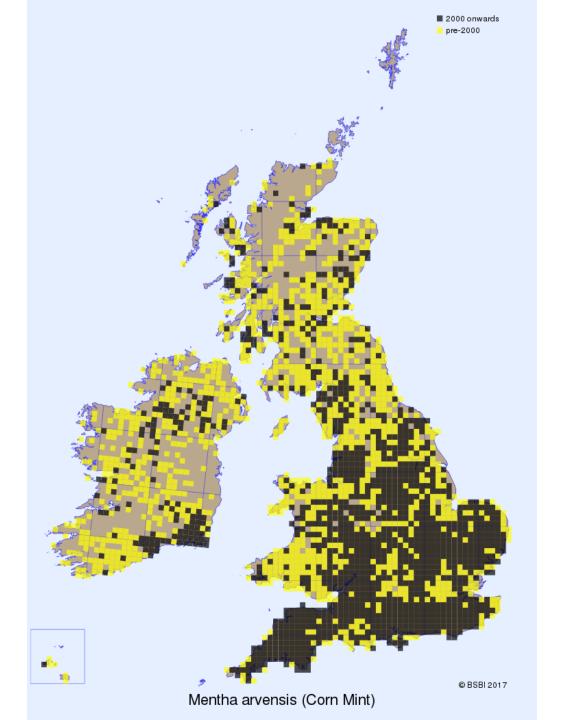
Viola tricolor

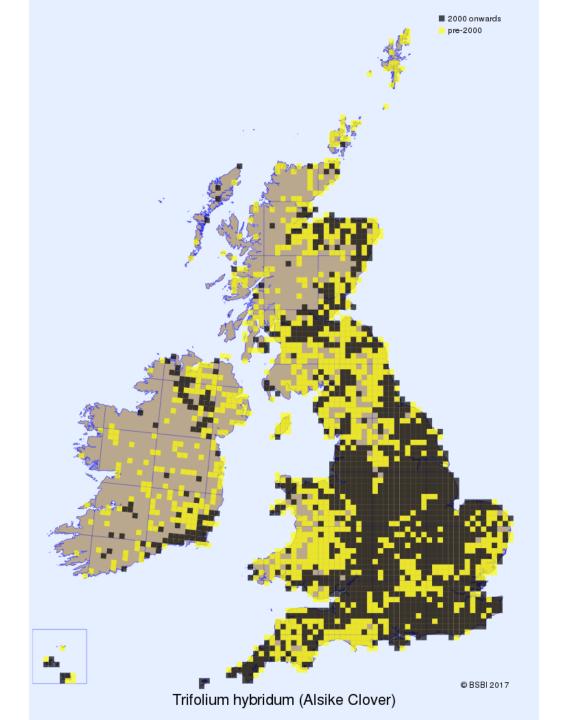
Vulpia bromoides





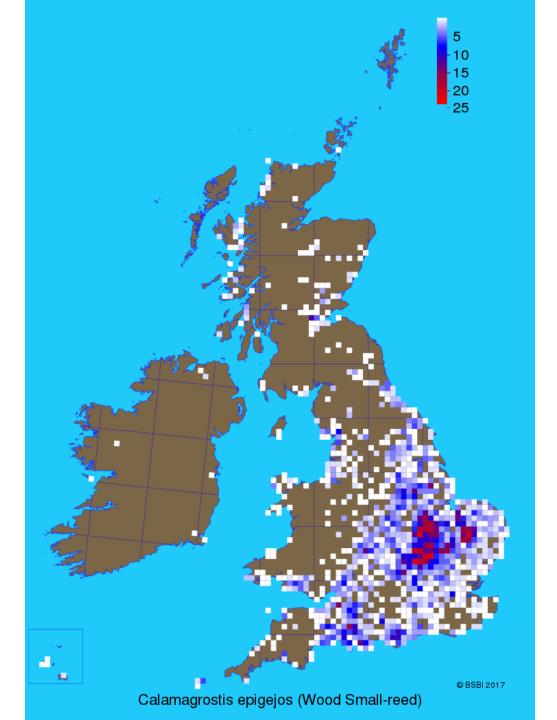




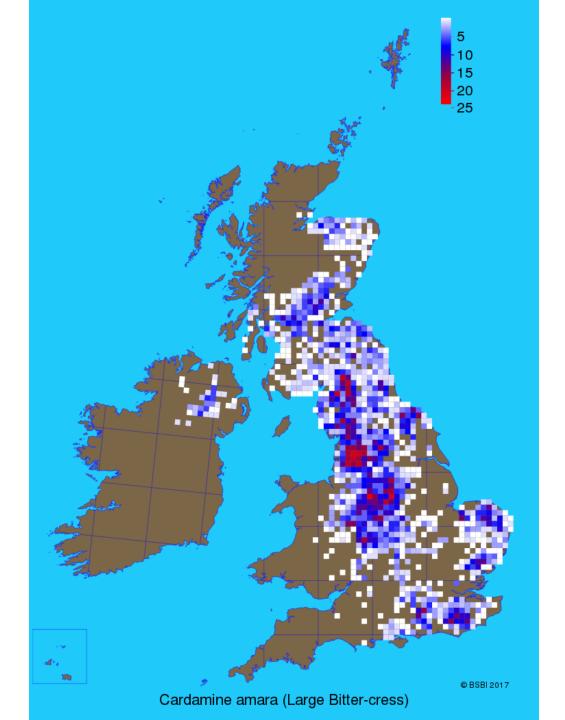


#### Tetrad frequency

Another way to map distributions, made possible by the huge number of detailed records now held on the DDb. Map shows number of tetrads with records per hectad.



### Tetrad frequency



## Atlas 2020 – some early findings – Scotland Taxa new to Scotland since 2000

•c.500 taxa new to Scotland!

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•c.500 taxa new to Scotland! – but includes 89 Narcissus cultivars & other aliens in urban and suburban areas.

#### •Native taxa new to Scotland since 2000 include:

Callitriche palustris

Carex elata x nigra = C. x turfosa

Carex nigra x recta = C. x spiculosa

Carex salina

Carex saxatilis x lepidocarpa = C. x marshallii

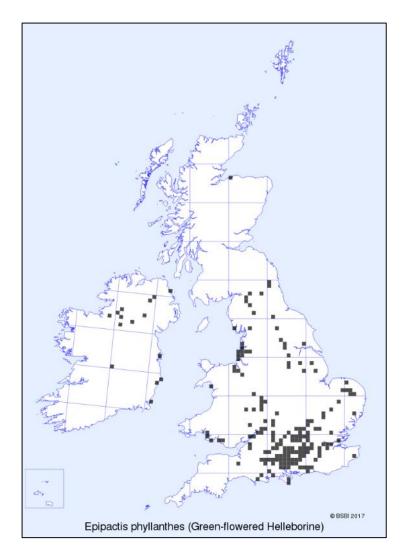
Epipactis phyllanthes

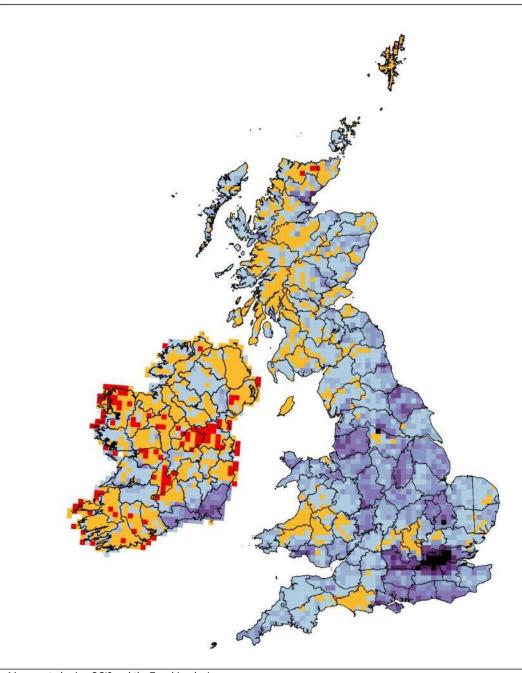
Equisetum fluviatile x pratense = E. x mchaffieae

Mibora minima

Ophrys apifera

Persicaria mitis





- •Map shows the number of taxa per hectad first recorded after 1999.
- •Hectads with <50 new taxa may be relatively under-recorded.
- •Marked contrast between adjacent vicecounties indicates different intensities of recent recording.
- •'Flora of London' effect botanising in urban and suburban areas, with many alien and planted taxa, is apparent.

