



# ATLAS 2020 – PROJECT UPDATE AND PROGRESS REPORT

BSBI Scottish Recording Conference 2018

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# Atlas 2020: Recap

Like previous atlases it aims to:

- Produce comprehensive maps for all native and introduced vascular plant and charophyte taxa occurring in the wild Britain and Ireland, and
- Analyse and report on the many changes that have occurred since the last Atlas 20 years ago...



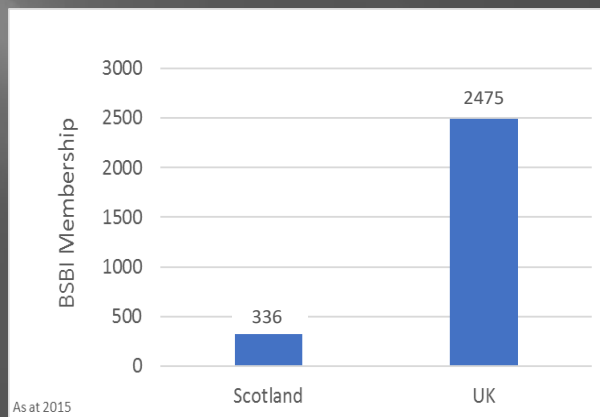
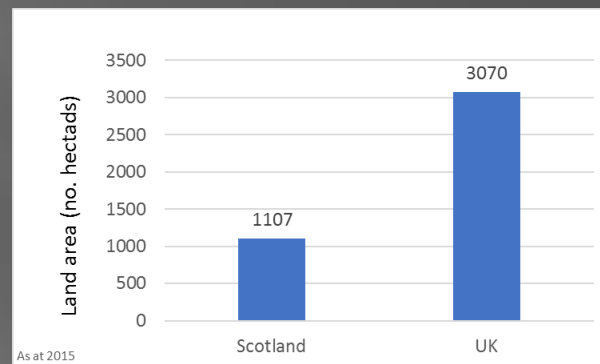
# Atlas 2020: Recap

Unlike previous atlases we are recording a sample of tetrads 2x2km squares (or better) in every hectad throughout the BI

- We suggest a minimum of 5 tetrads per hectad (10x10)
- Survey each lowland square twice - in different seasons
- Just two field seasons to go

## A BIG challenge in Scotland

- where we have one third of the total land area of the UK
- half of which is very remote and / or mountainous
- But just 12% of the BSBI membership!



Given the size of the challenge, we need to support and encourage all BSBI Recorders & members and non-members to participate fully!

# Atlas 2020: Update

## 1. An eAtlas

- Maps of all species covered by Atlas 2020
- Edited captions similar to those in the New Atlas
- Hosted by CEH and would replace the Online Atlas

### Online Atlas of the British and Irish Flora

HOME / *ADOXA MOSCHATELLINA* (MOSCHATEL)

#### *Adoxa moschatellina* (Moschatel)

Summary

Photos

Maps

Habitats

Life Form

Distribution

Conservation Status

References

##### Ecology

A perennial rhizomatous herb of mesic brown earth soils on the shaded banks of rivers and streams, in deciduous woodlands and shaded hedge banks; also occasionally in shaded base-rich sites in mountains. This is a vernal species which disappears by May or June in the lowlands. It is self-fertile, reproducing by seed and vegetatively. 0-1065 m (Ben Lawers, Mid Perth).

##### Status



Native

##### Trends

Populations of *A. moschatellina* within old woodlands have remained stable. In some areas *A. moschatellina* is possibly under-recorded due to its early season. Its native status in Ireland has been questioned (Hackney, 1992).

##### World Distribution

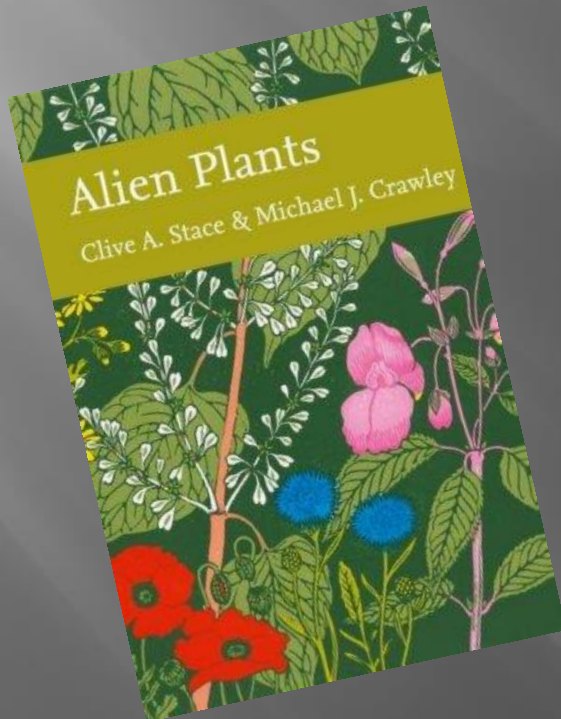
Circumpolar Boreo-temperate element, with a disjunct distribution.



# Atlas 2020: Update

## 2. A book

- A general and readable account of the British & Irish flora using the results of Atlas 2020
- Colour photographs and figures throughout
- Maps of selected species will be included
- Topics might include: Why study our wild flora?  
Who studies our wild flora?  
What shapes our wild flora?  
How many species do we have?  
Where do they occur?  
How and why has our flora changed?



The book may be similar in format to this New Naturalist series volume.



# Atlas 2020: Update

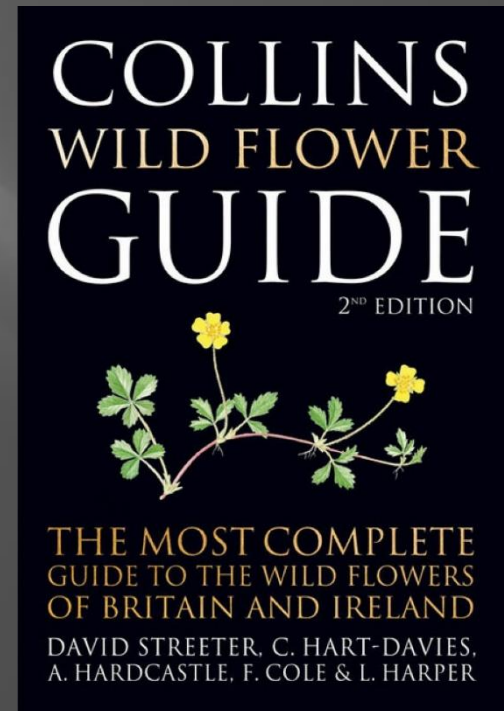
3. A concise summary of key results aimed at government, statutory agencies, and conservation organisations

4. Have been asked by a few members if we could produce a book of hectad maps. If it's financially viable it would follow the layout of the first atlas.

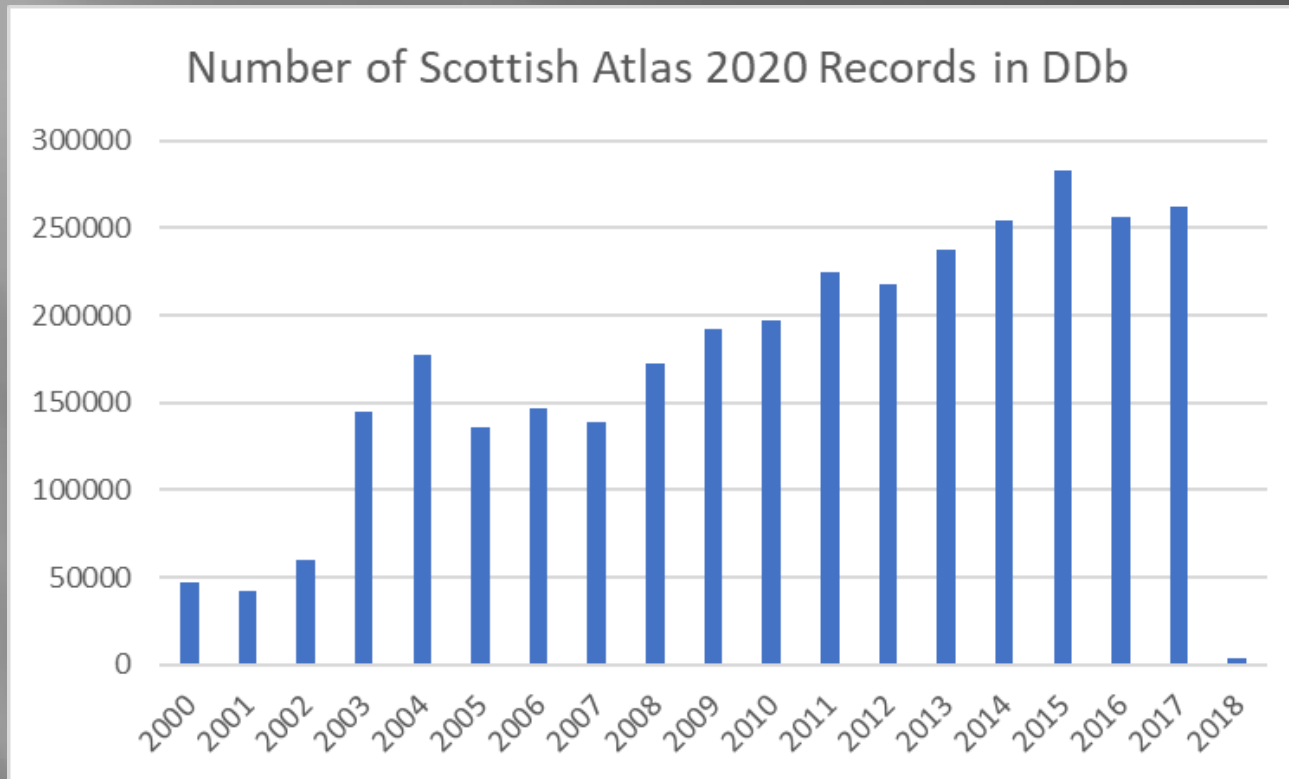
# Atlas 2020: Update

## A Smartphone App

Harper Collins are keen to produce a smartphone app of the *Collins Wildflower Guide* (Streeter *et al*) which would incorporate the BSBI maps from Atlas 2020.



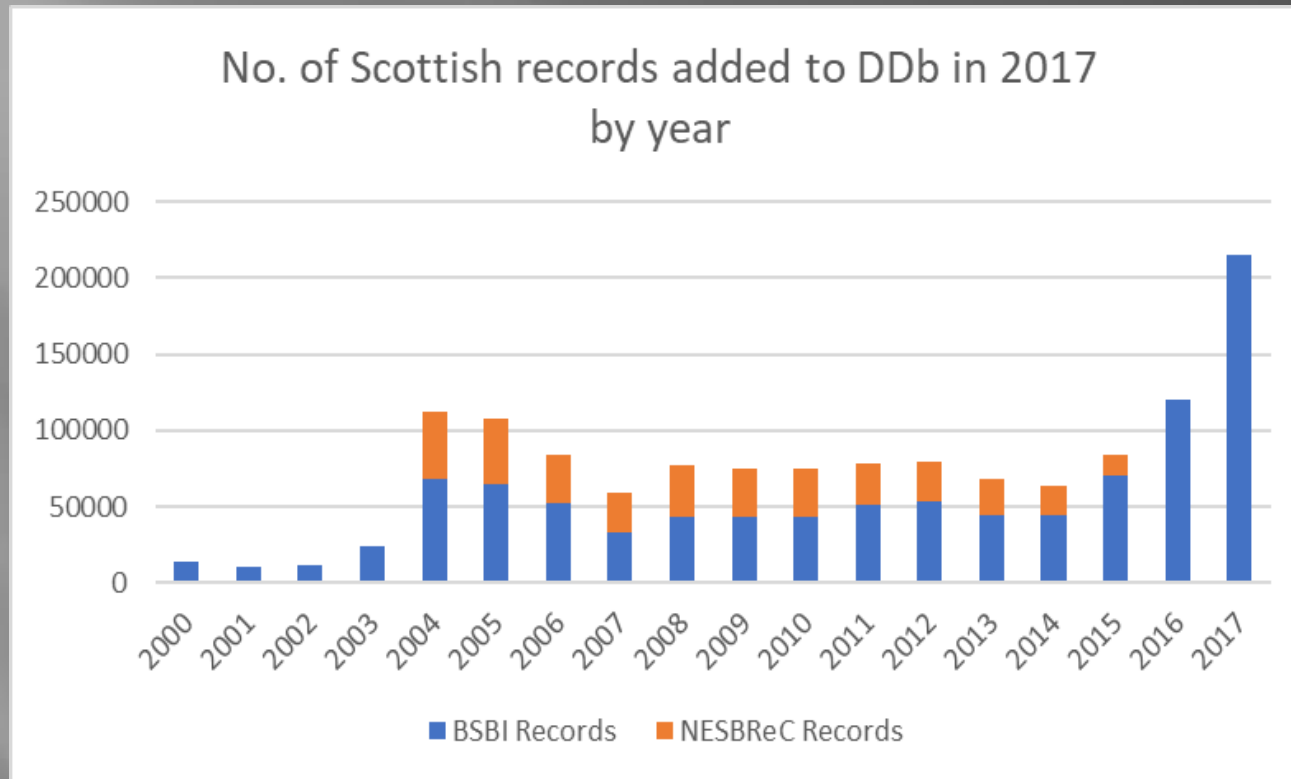
# 1.



- Amazing amount of recording & digitising going on in Scotland
- Digitisation and uploading to the Database (DDb) is quicker
- Total number of records increasing year by year

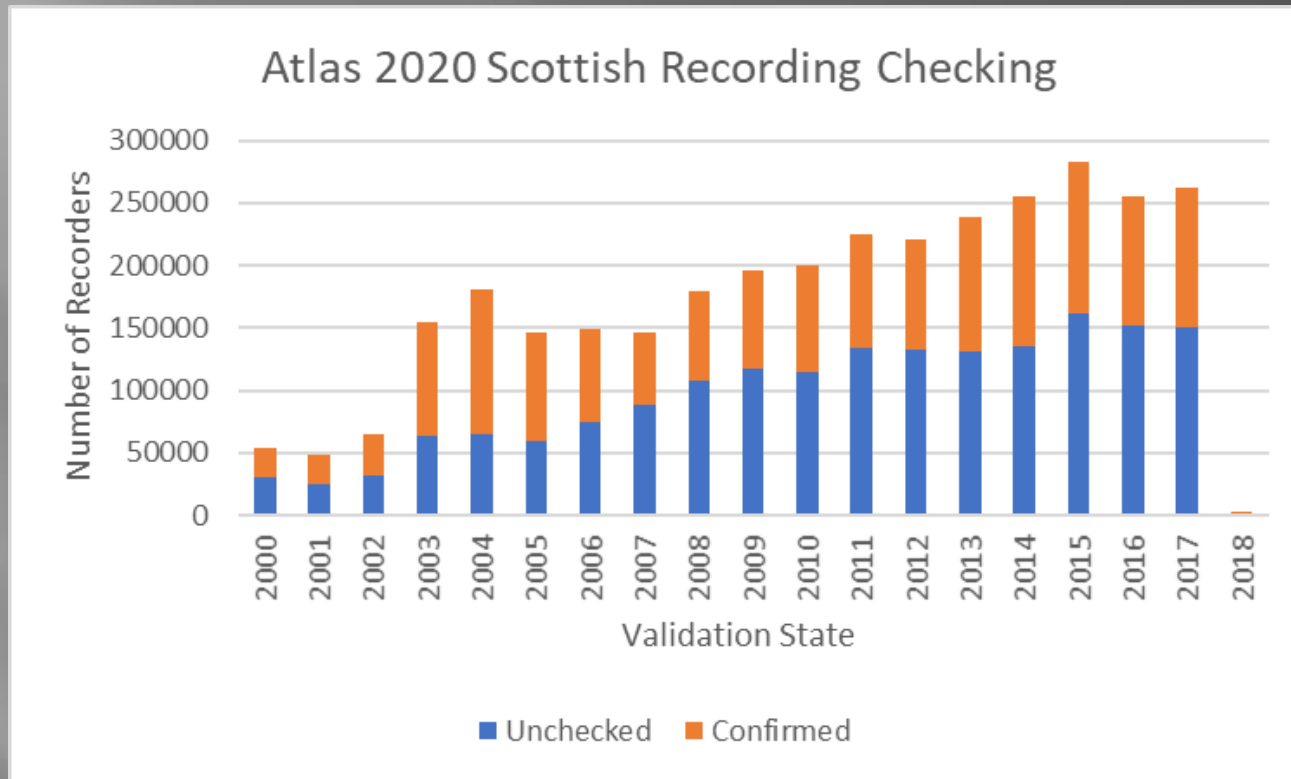


# 2.



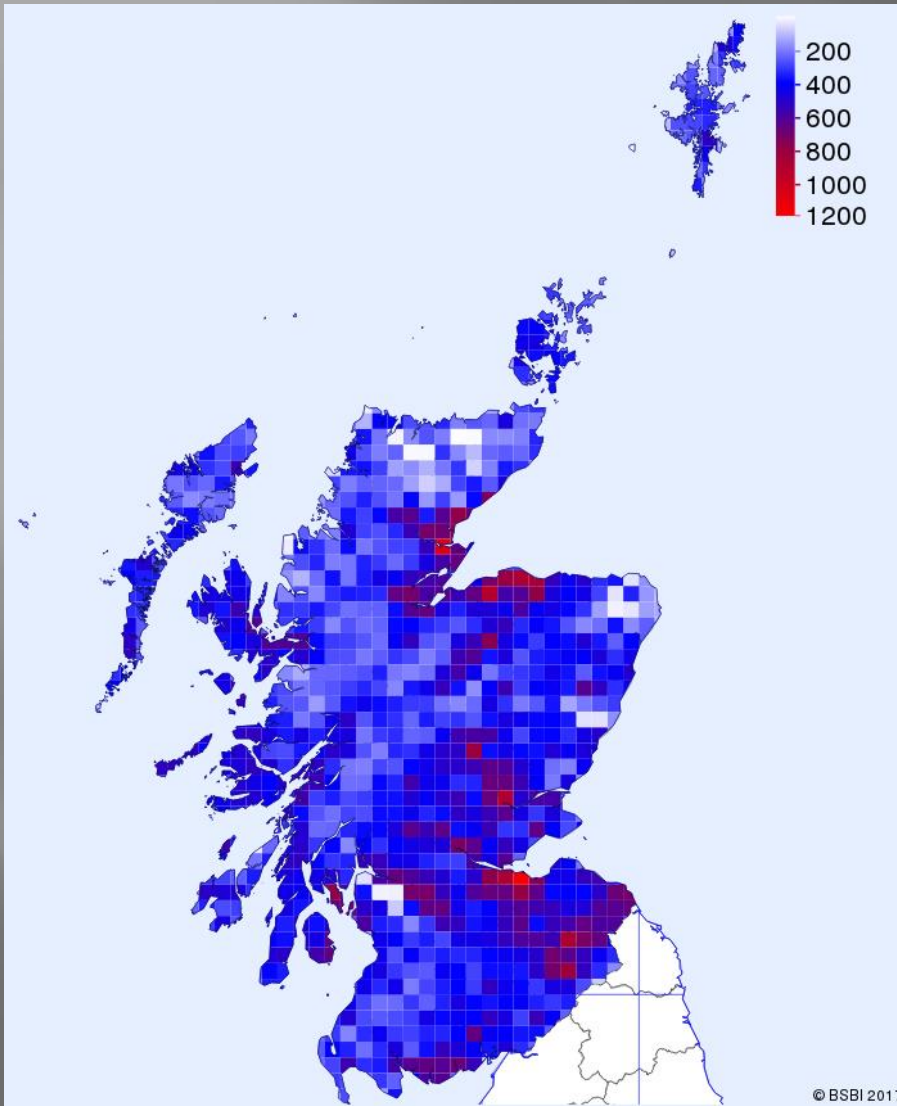
- Amazing amount of old records being digitising
- Amazing number of datasets being uploaded
- Including some quite big ones
  - like the NESBReC dataset which contains 360,000 records

# 3.



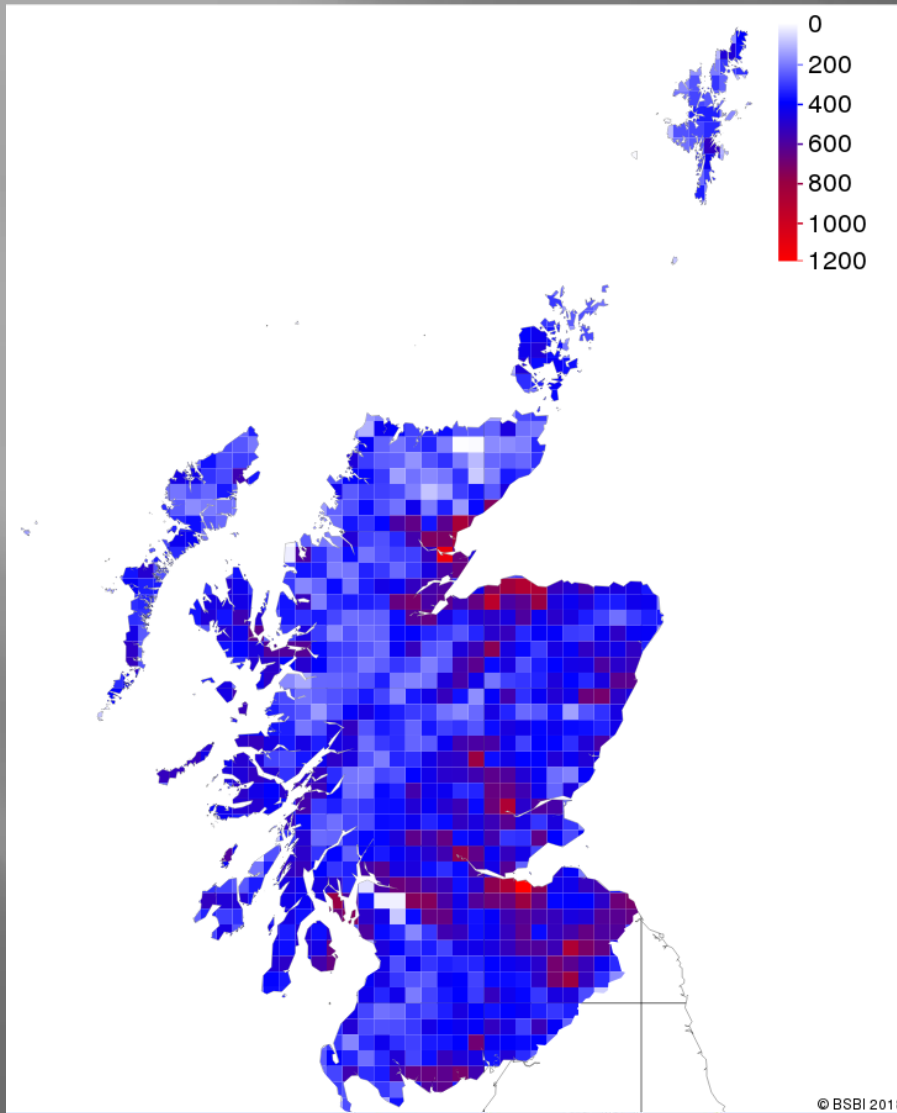
- The proportion of records being checked is increasing
- Like digitisation it is best done little and often
- Ideally we'd like all records checked for Atlas 2020 – at least all records of notable or less common species

## 4. Number of taxa recorded in each 10x10km square one year ago



- Map shows more taxa per hectad in central Scotland, the borders, around Inverness, in Speyside and fewer in the north & west highlands
- Some of the islands are very well recorded.
- Less well recorded areas in the far north, north east and south west.

## 5. Number of taxa recorded in each 10x10km square now

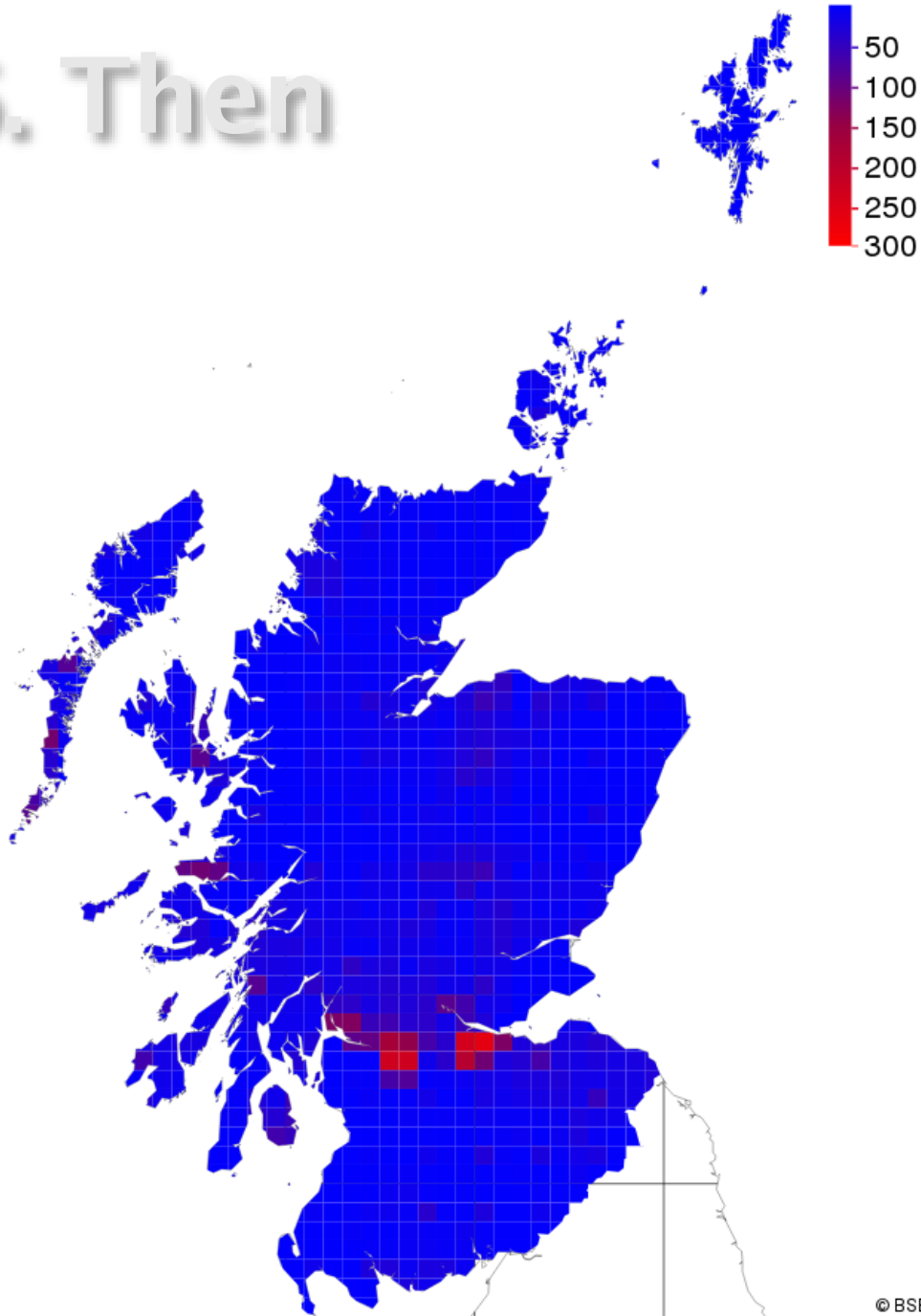


- Recording much improved in the far north – and in the north-east

The richest square is NT27 Edinburgh with 1203 post 2000 taxa recorded;

The second richest is NH78 which includes Tain and Dornoch with 1120 post 2000 taxa.

# 6. Then



## Ribwort Plantain (*Plantago lanceolata*)

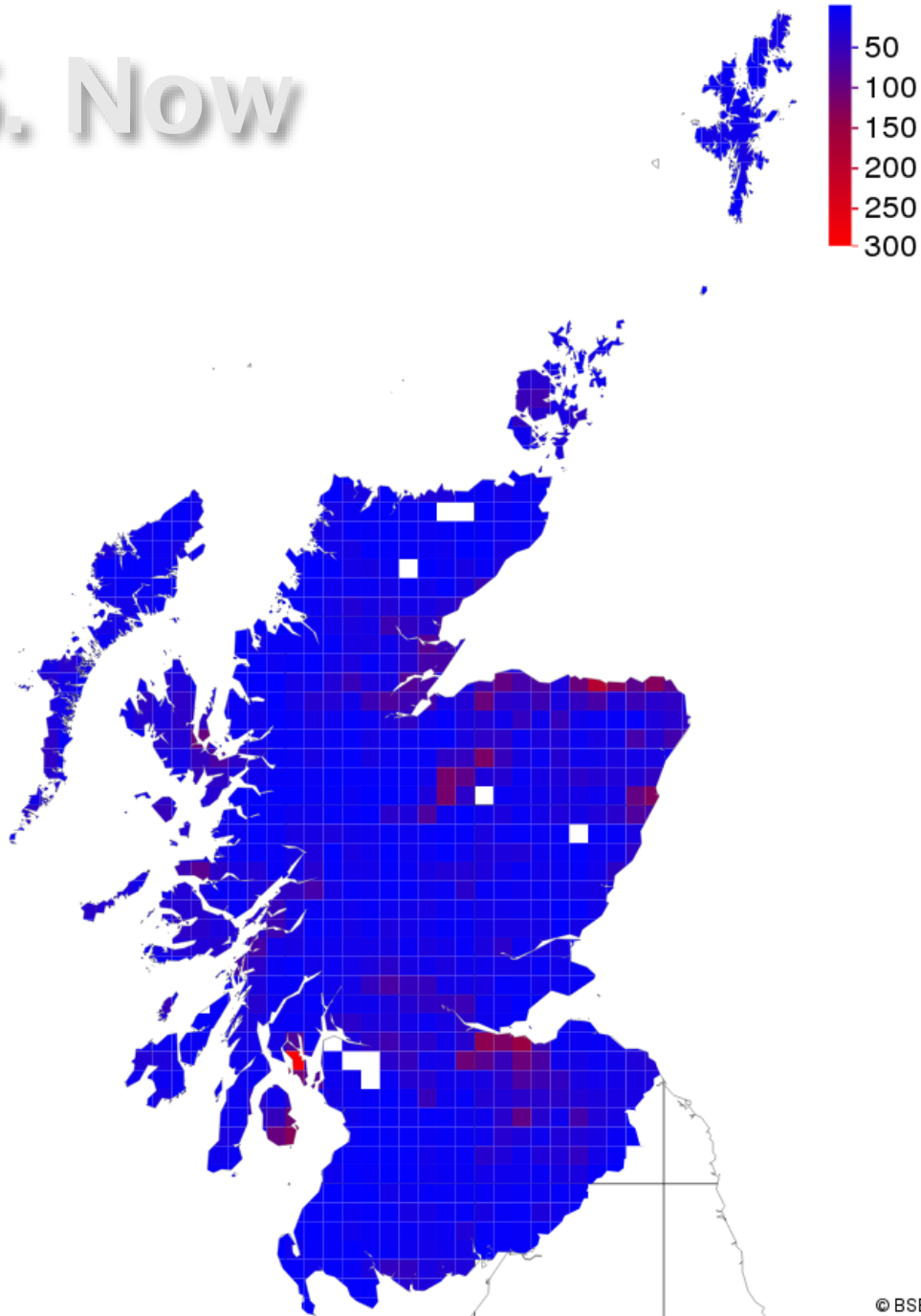
All Scottish pre 2000 records

Found in the greatest number of Scottish hectads (1085 hectads - out of a possible 1107)



© G. Toone, IWNHAS

# 6. Now



## Ribwort Plantain (*Plantago lanceolata*)

All Scottish **post** 2000 records  
In 1073 hectads (out of a possible 1107)

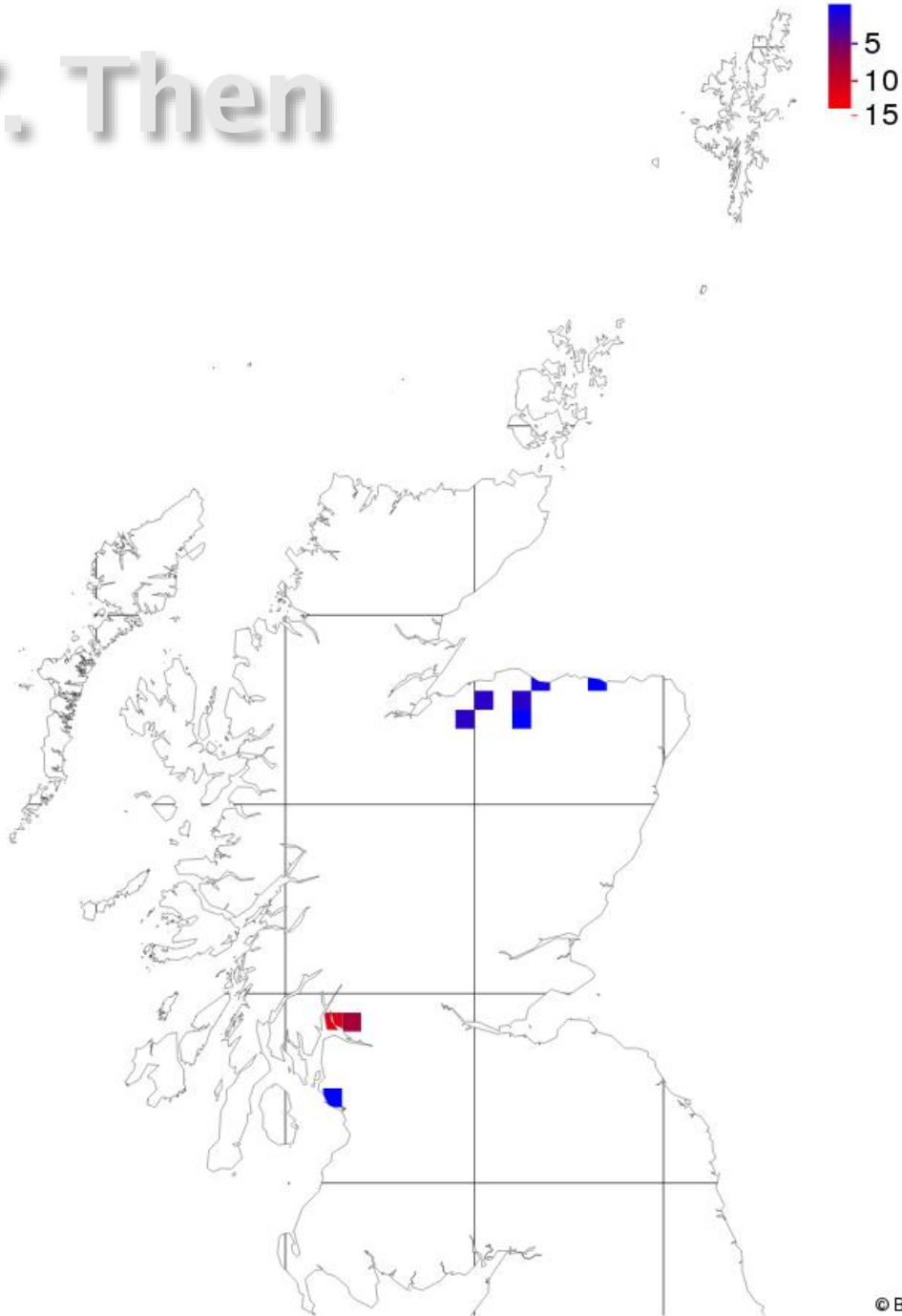


© G. Toone, IWNHAS

Just a few hectads where this common species has not been re-recorded.



# 7. Then



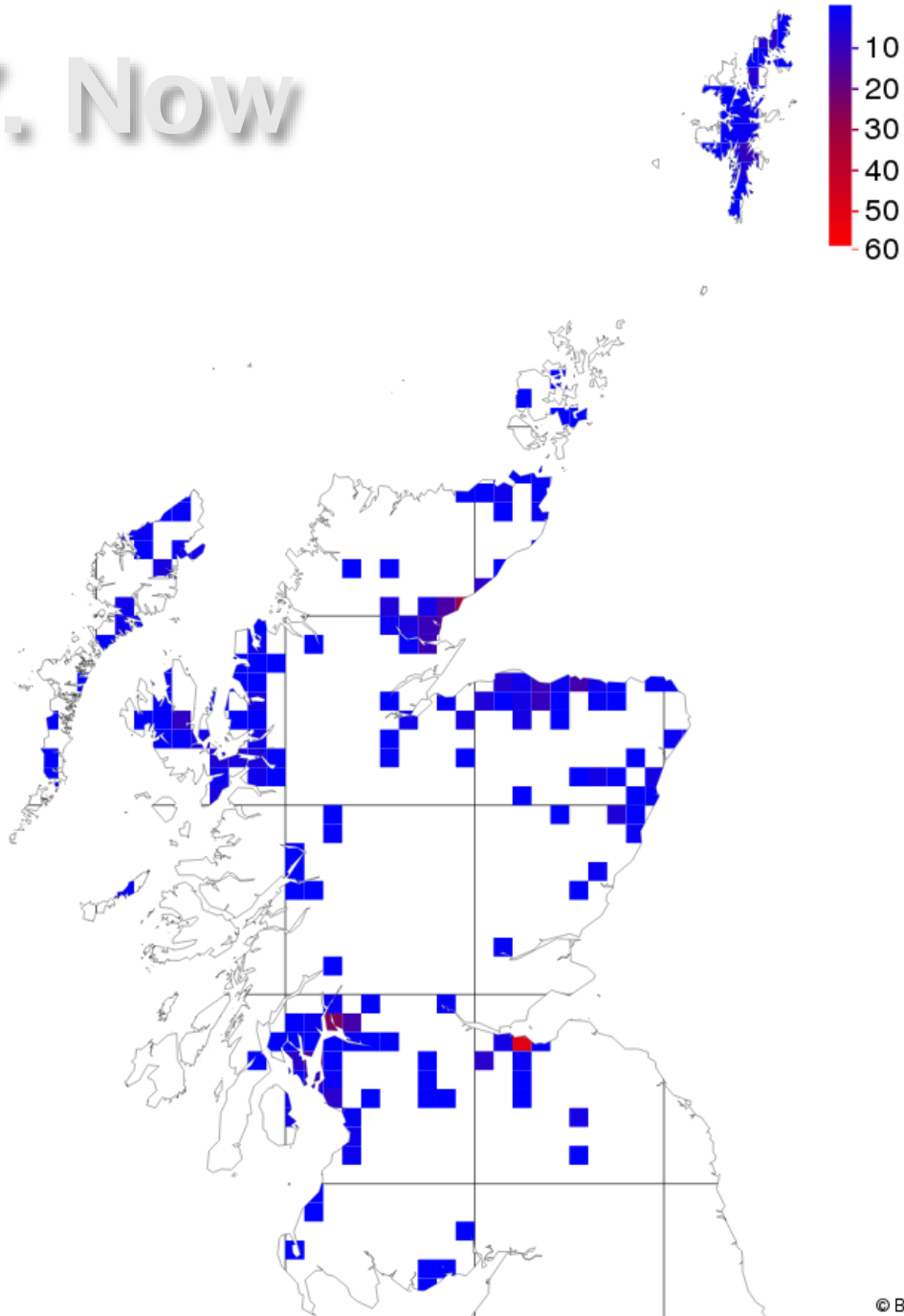
## New Zealand Pampas Grass (*Cortaderia richardii*)

Recorded in 9 Scottish hectads pre 2000



© Muriel Bendel / Wikimedia Commons / CC-BY-SA-4.0

# 7. Now



© BSBI 2018

## New Zealand Pampas Grass (*Cortaderia richardii*)

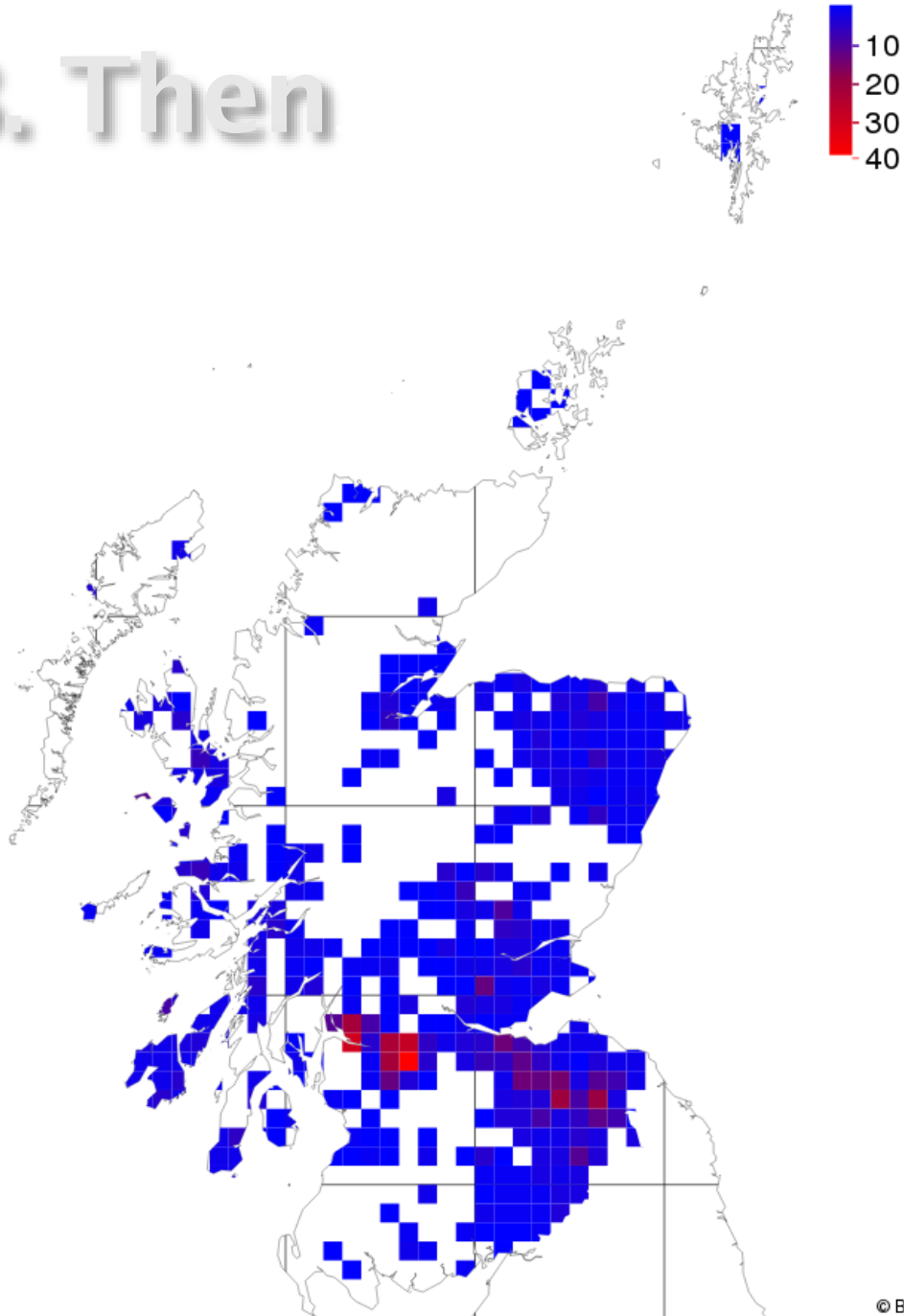
Recorded in 198 Scottish hectads post 2000



© Mick Crawley

A big increase in this alien species  
which readily sets seed outside gardens

# 8. Then



## Large-flowered hemp-nettle (*Galeopsis speciosa*)

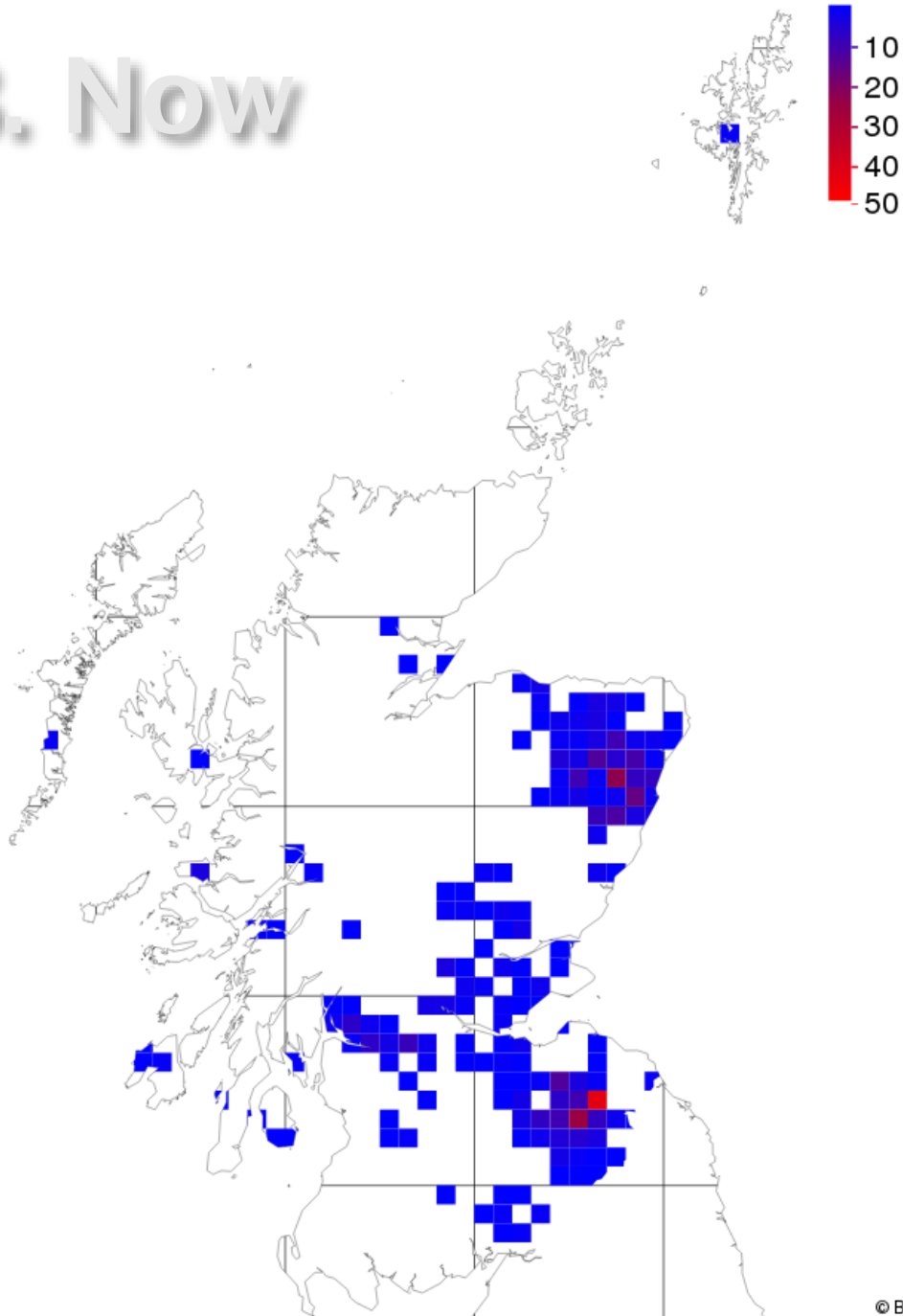
Recorded in 407 Scottish hectads pre 2000



© Jim McIntosh, 2017



# 8. Now



## Large-flowered hemp-nettle (*Galeopsis speciosa*)

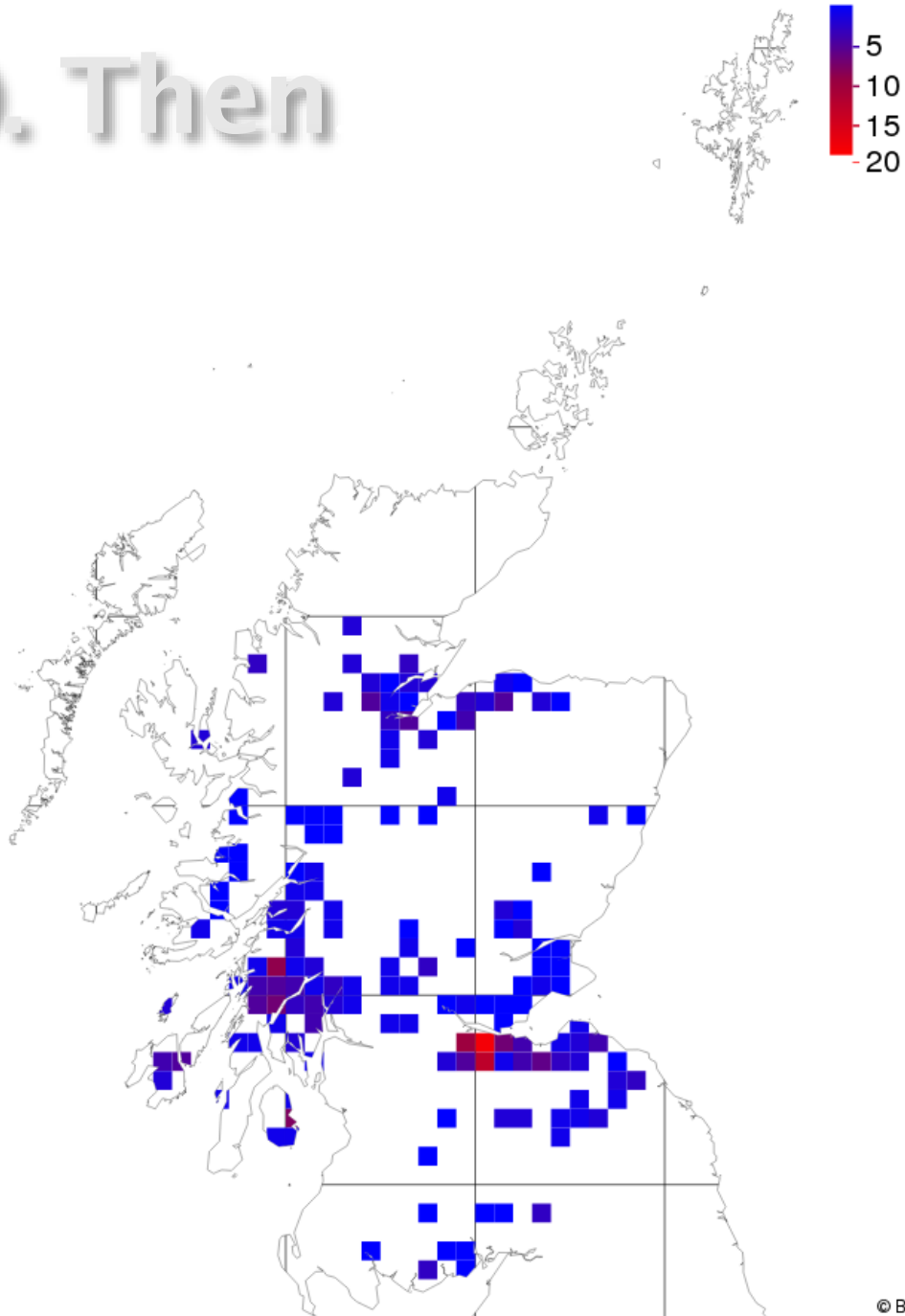
Recorded in 164 Scottish hectads post 2000



© Jim McIntosh, 2017

A marked contraction in range for this  
arable weed species.

# 9. Then



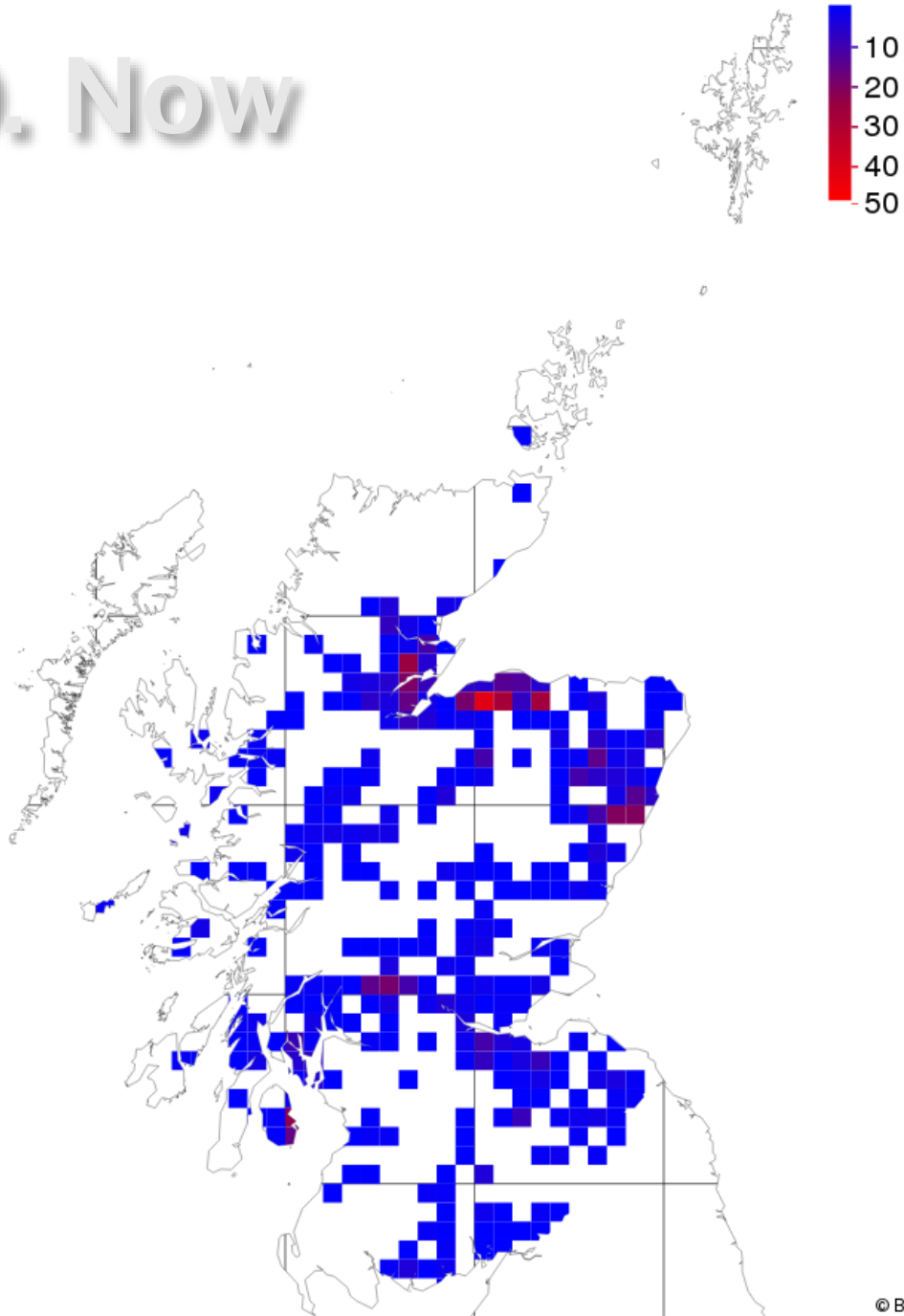
## Western Hemlock (*Tsuga heterophyllum*)

Recorded in 154 Scottish hectads pre 2000



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# 9. Now



© BSBI 2018

## Western Hemlock (*Tsuga heterophyllum*)

Recorded in 309 Scottish hectads post 2000

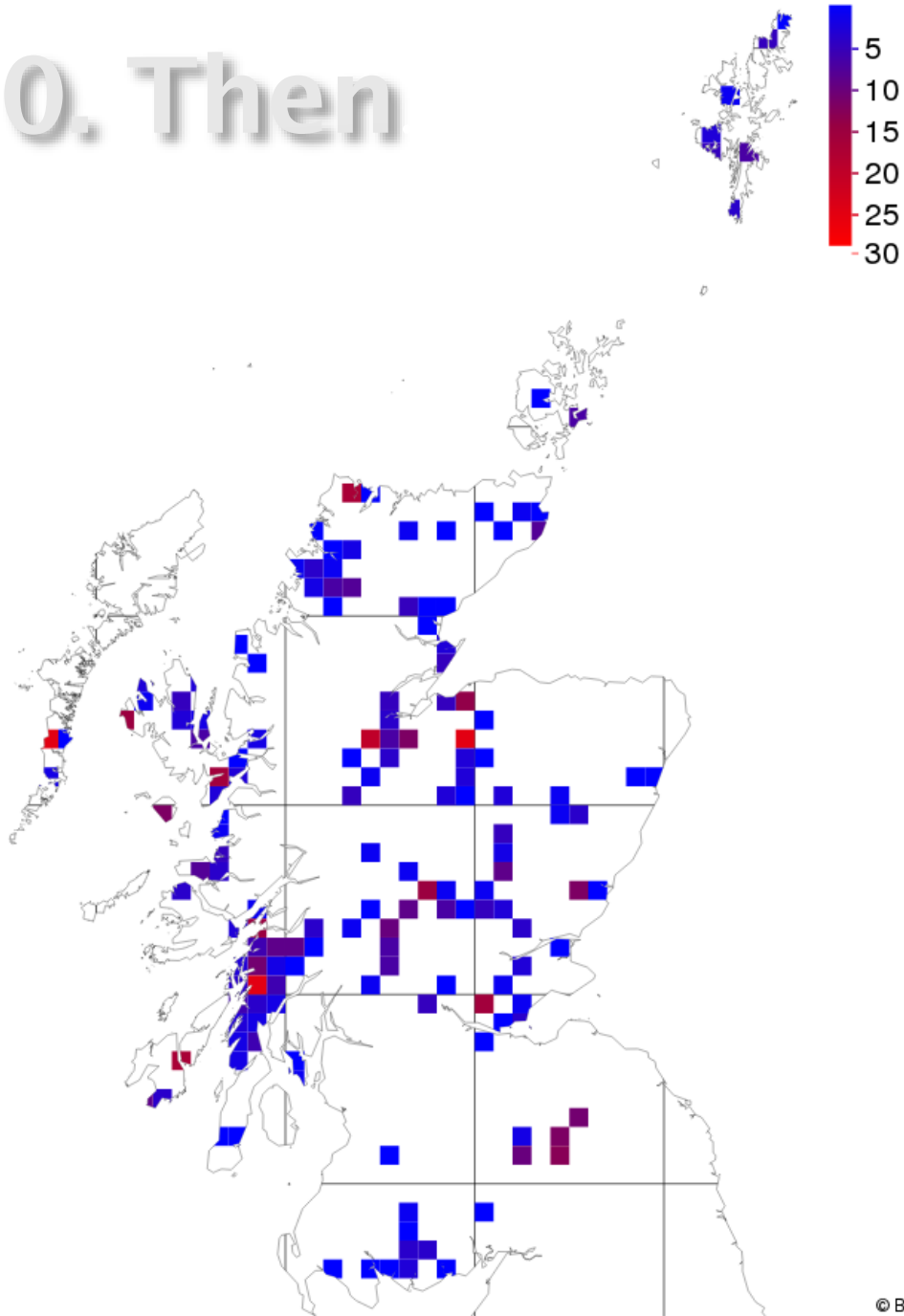


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We have become better at recording conifers, though this species is also expanding its range.



# 10. Then



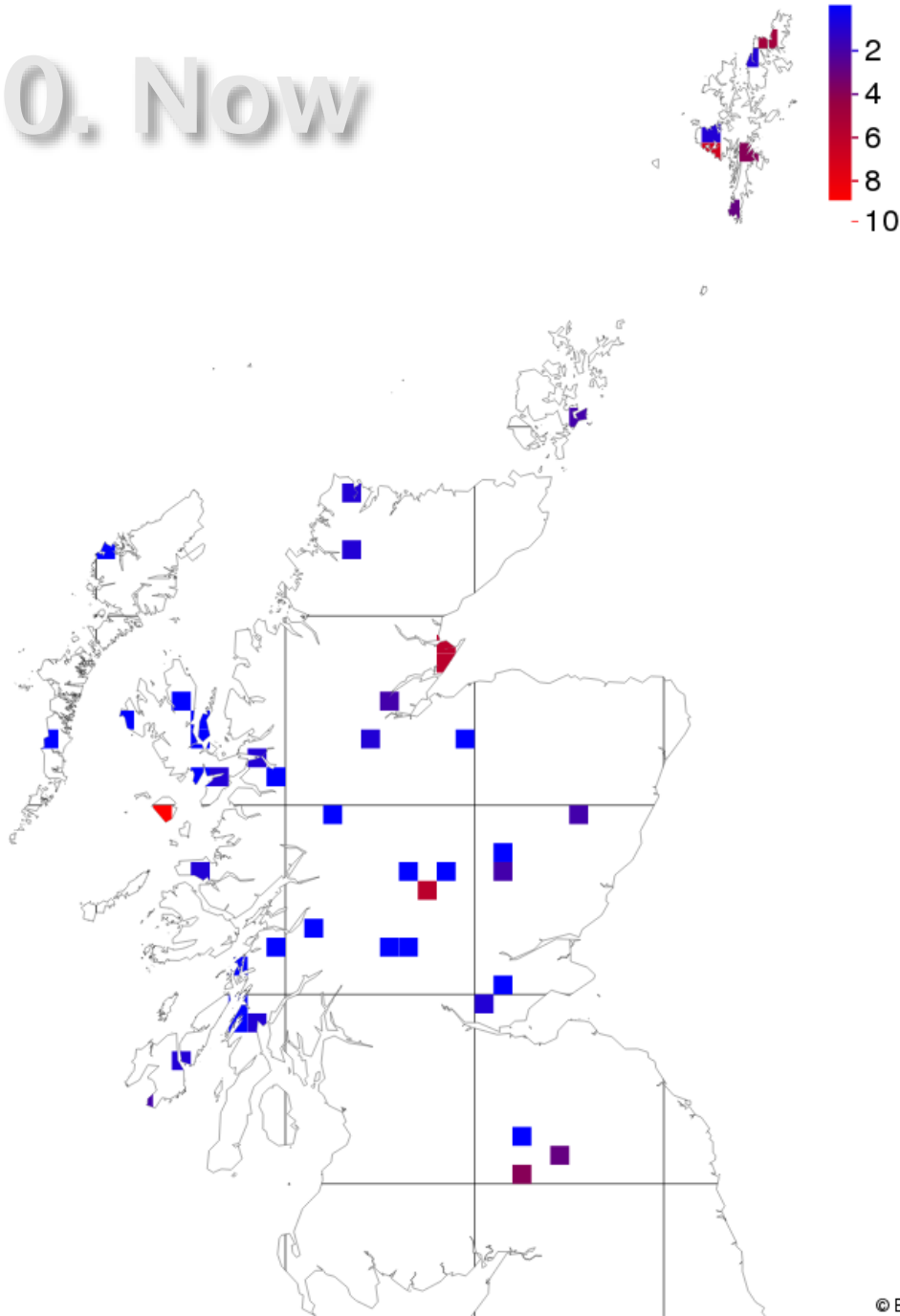
## Long-stalked Pondweed (*Potamogeton praelongus*)

Recorded in 162 Scottish hectads pre 2000



© Kristian Peters / Wikimedia Commons / CC BY-SA 3.0

# 10. Now



## Long-stalked Pondweed (*Potamogeton praelongus*)

Recorded in 48 Scottish hectads post 2000



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Aquatics were very well recorded by the Scottish Loch Survey in the '90s. Will be hard to match, but if we don't try it will appear that we have lost populations.



Thanks to everyone who has  
contributed to Atlas 2020!