

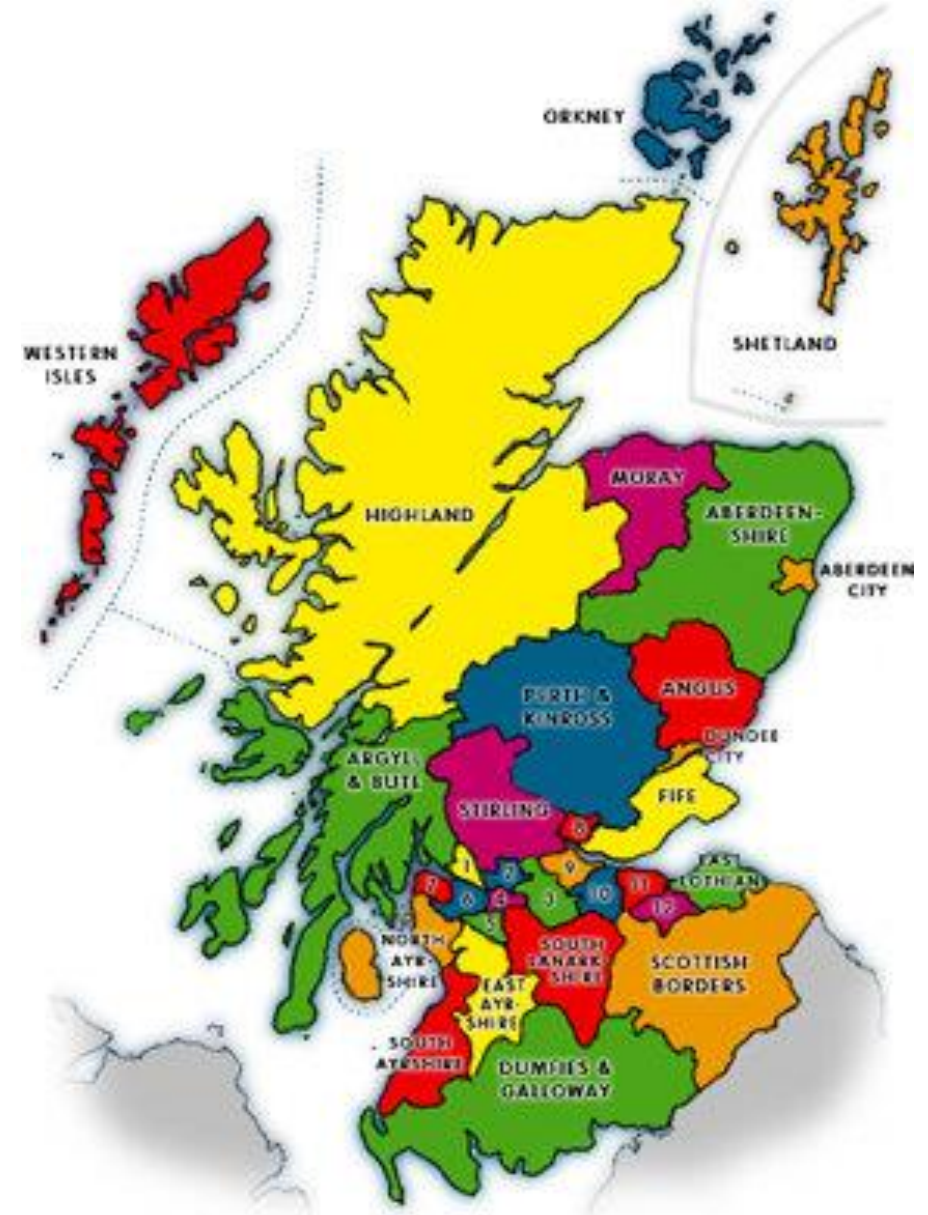


# Filling the Void

Generating records from a sparsely-populated area

Ro Scott

- HBRG's recording area is the area administered by the Highland Council
- Largest local government area in the UK
- Covers 30,659 km<sup>2</sup>
- Which is 33 % of the total land area of Scotland
- Includes all or part of 351 ten km squares (1,107 in Scotland)
- Bigger than the whole of Wales
- The human population of this area is 234,000 (in 2015)



- We have the Highest mountain
- The deepest loch

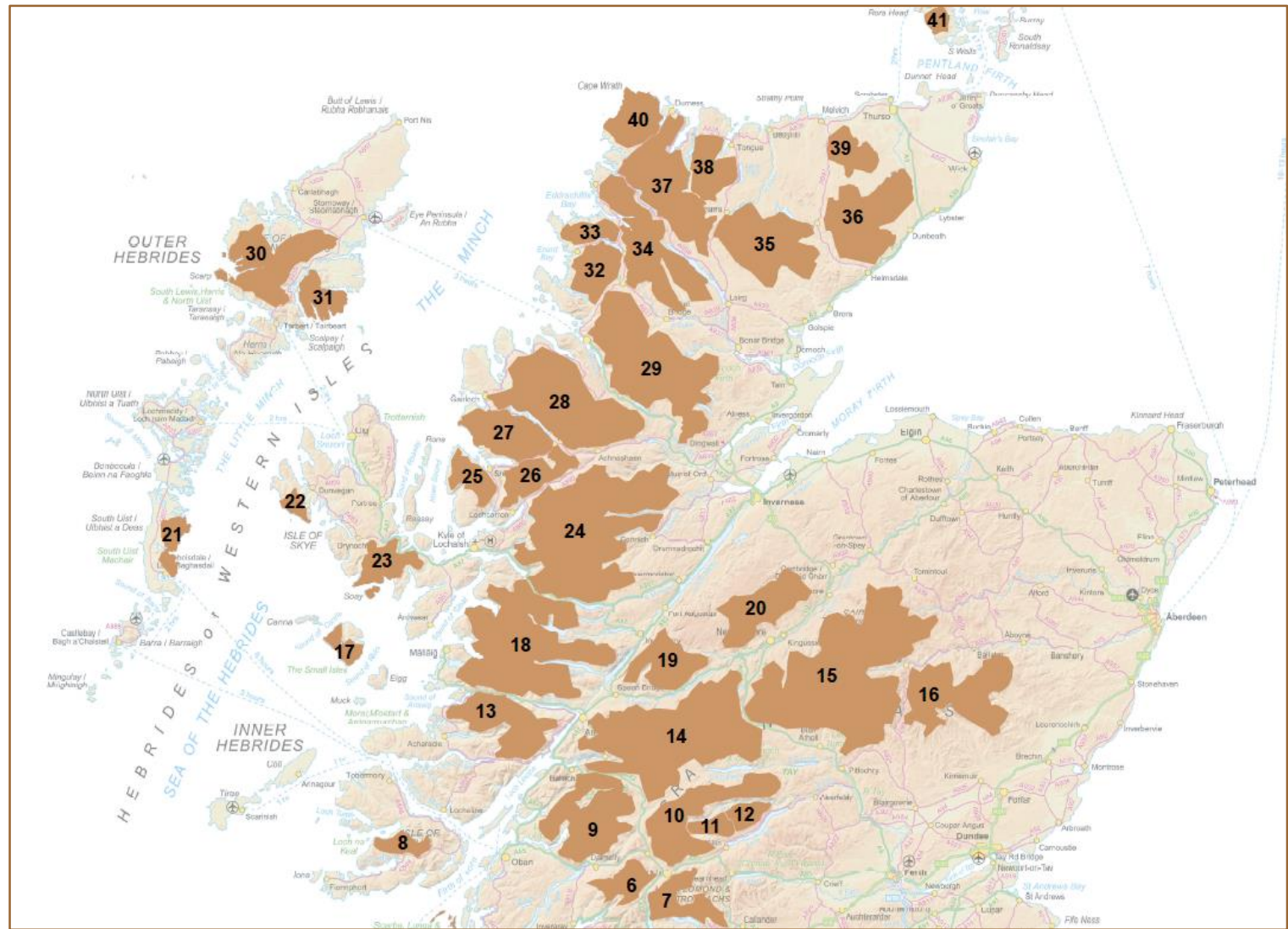




- We have the Highest mountain
- The deepest loch
- Most westerly point on British mainland
- Most norther-easterly point on British mainland (not John O'Groats!)



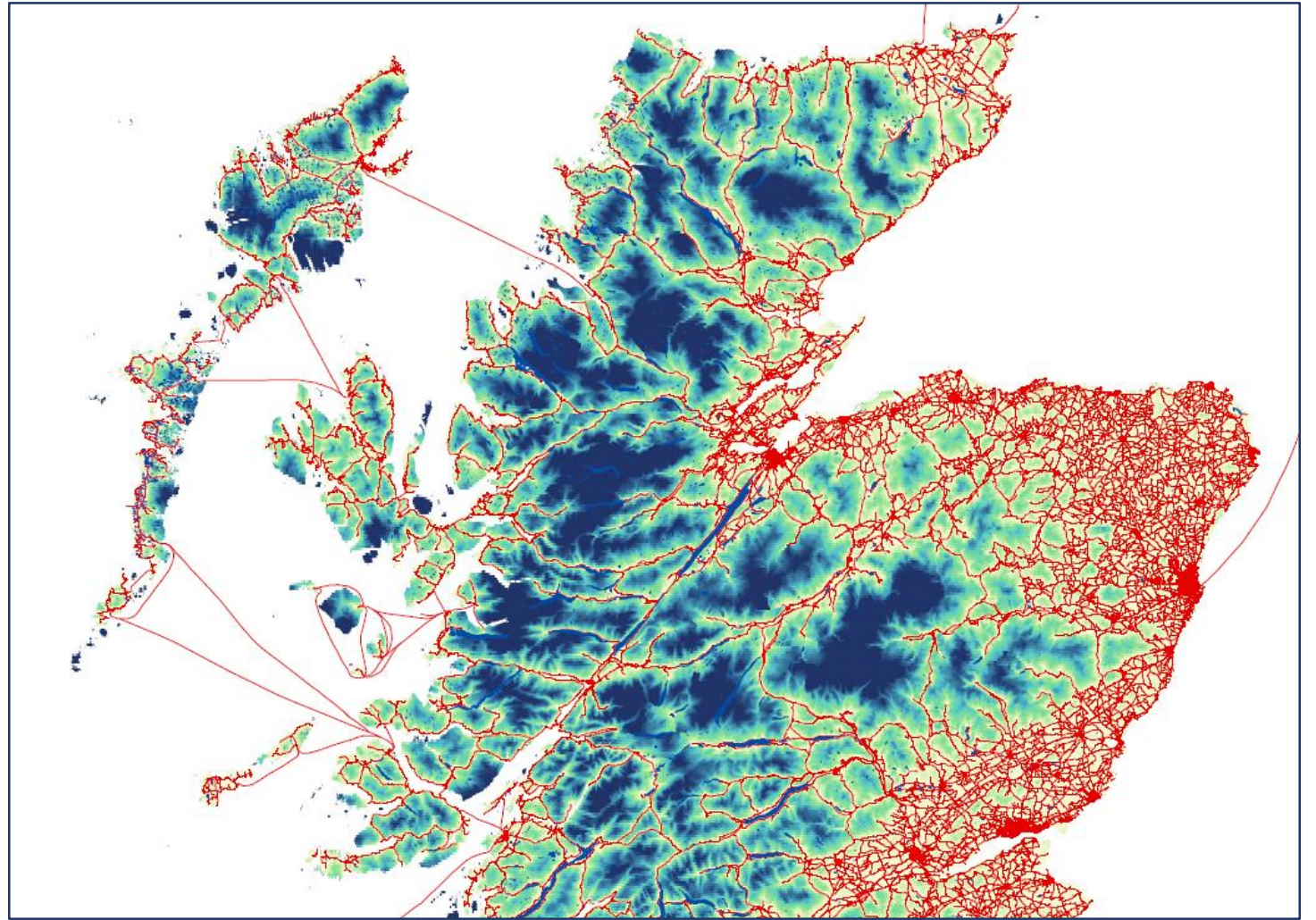
- We have the Highest mountain
- The deepest loch
- Most westerly point on British mainland
- Most northerly point on British mainland (not John O'Groat's!)
- A high proportion of remote wild land
- Many areas lacking road access



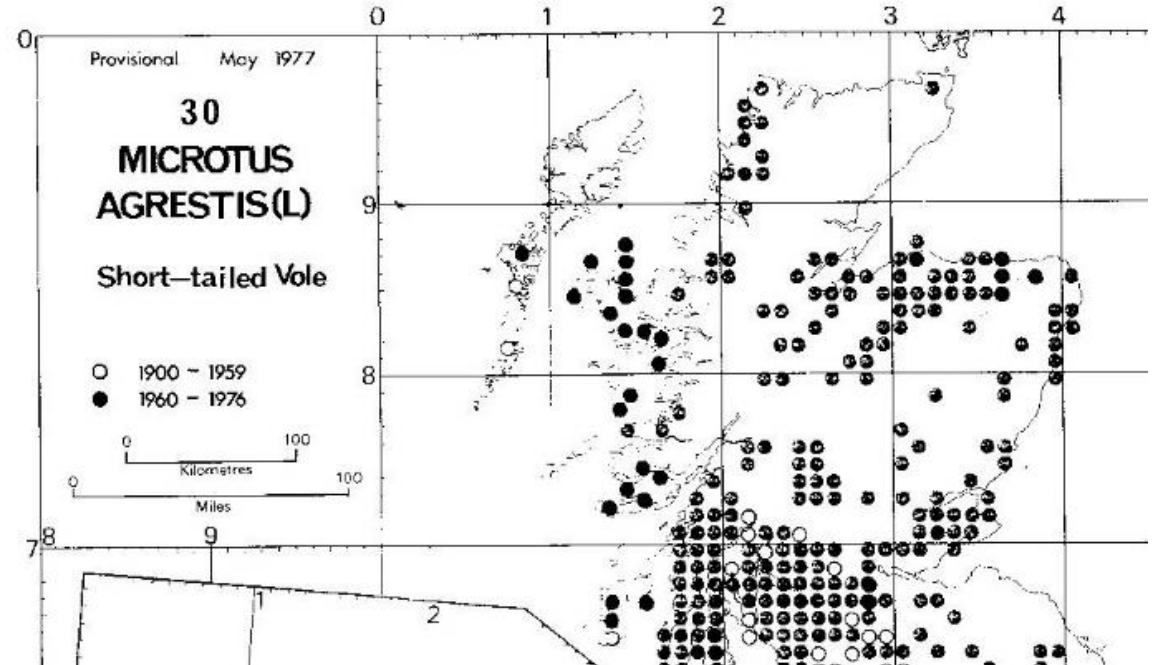
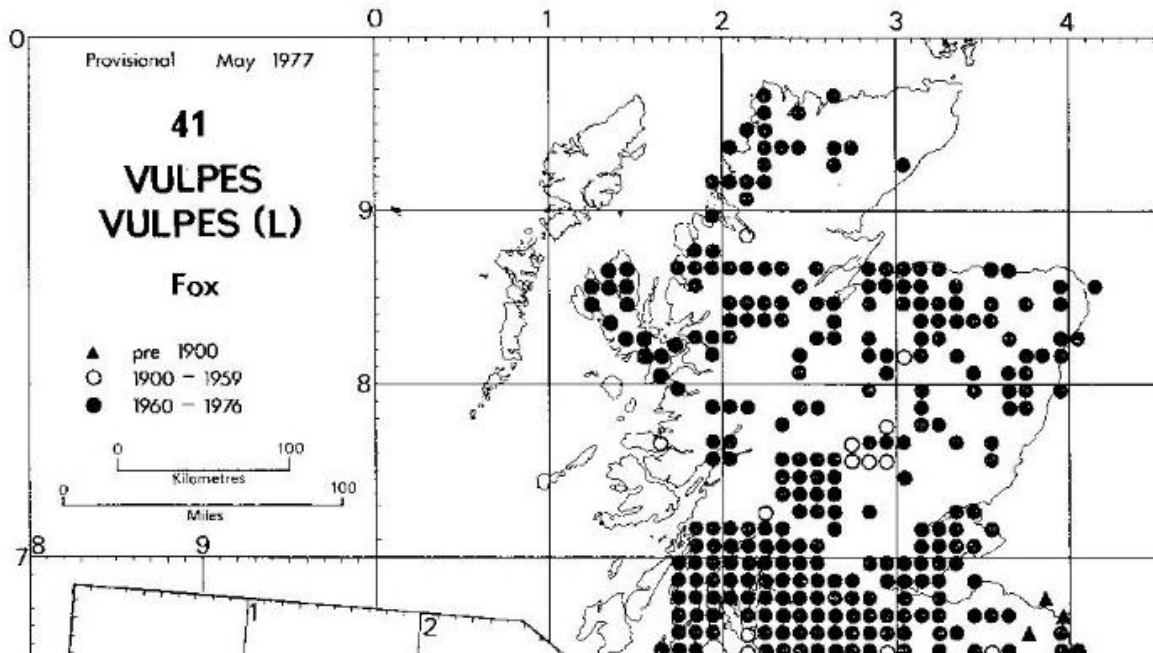
SNH Wild Land Areas



- We have the Highest mountain
- The deepest loch
- Most westerly point on British mainland
- Most northerly point on British mainland (not John O'Groats!)
- A high proportion of remote wild land
- Many areas lacking road access



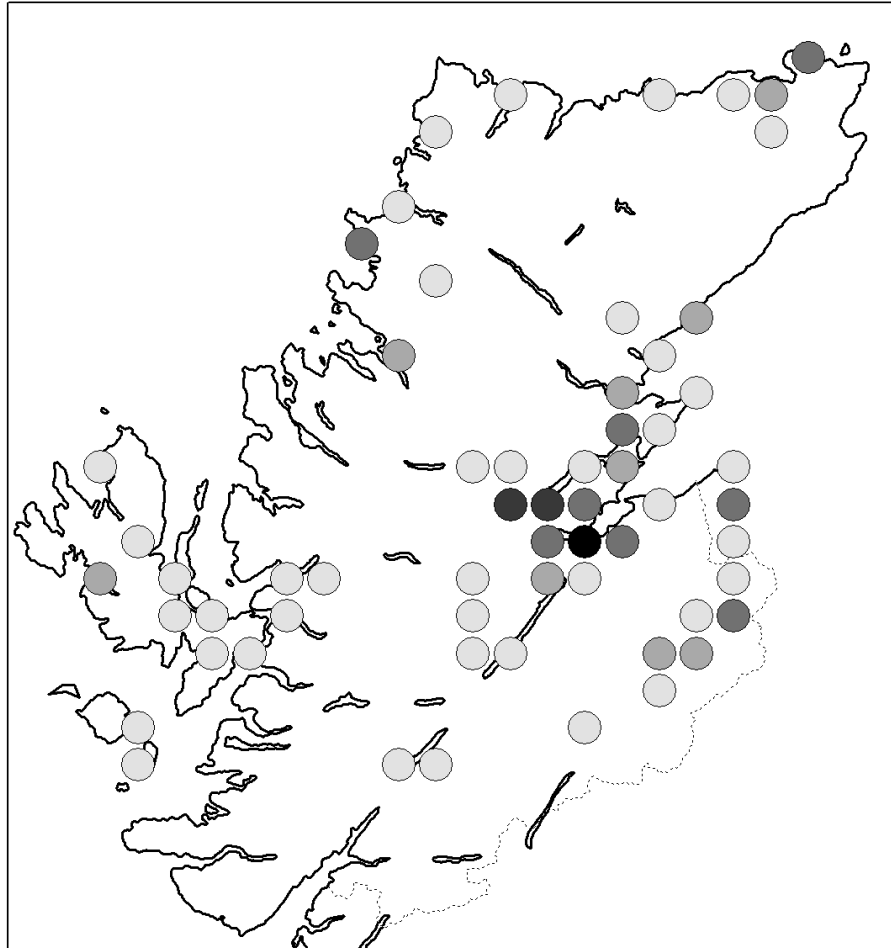
SNH Remoteness from infrastructure



Many early published Atlases show large blank areas in Highland



HBRG was founded in 1986 by a group of local naturalists



Map by Murdo Macdonald using D-Map



HBRG's 25<sup>th</sup> Anniversary cake - 2011

We currently have  
about 120 members

Not on map:

↑ 2 in Orkney

→ 7 elsewhere in mainland Scotland

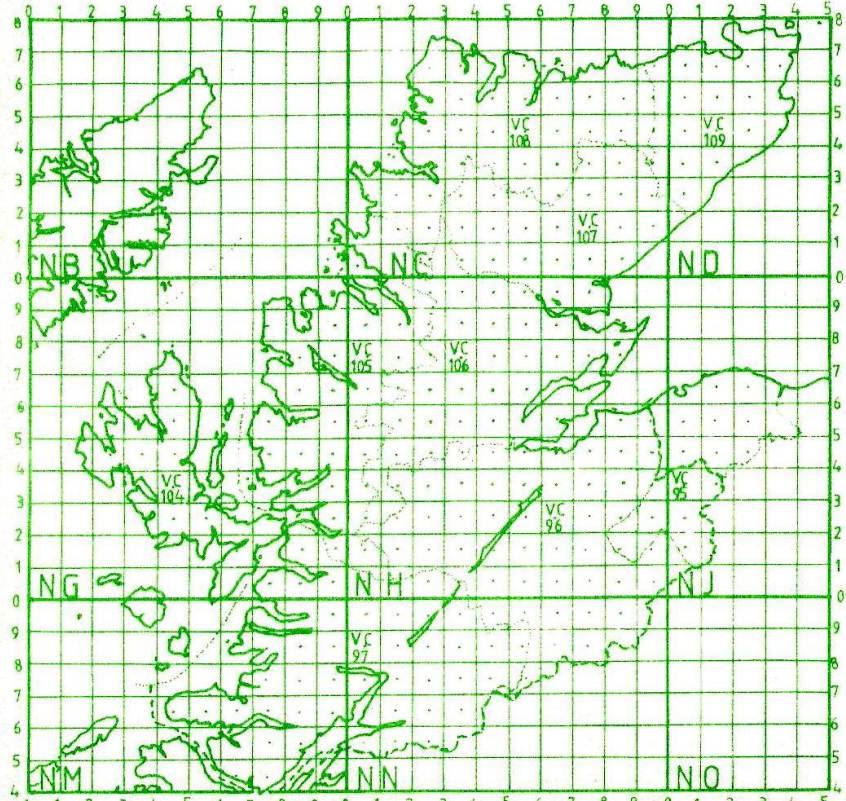

↓ 7 in England



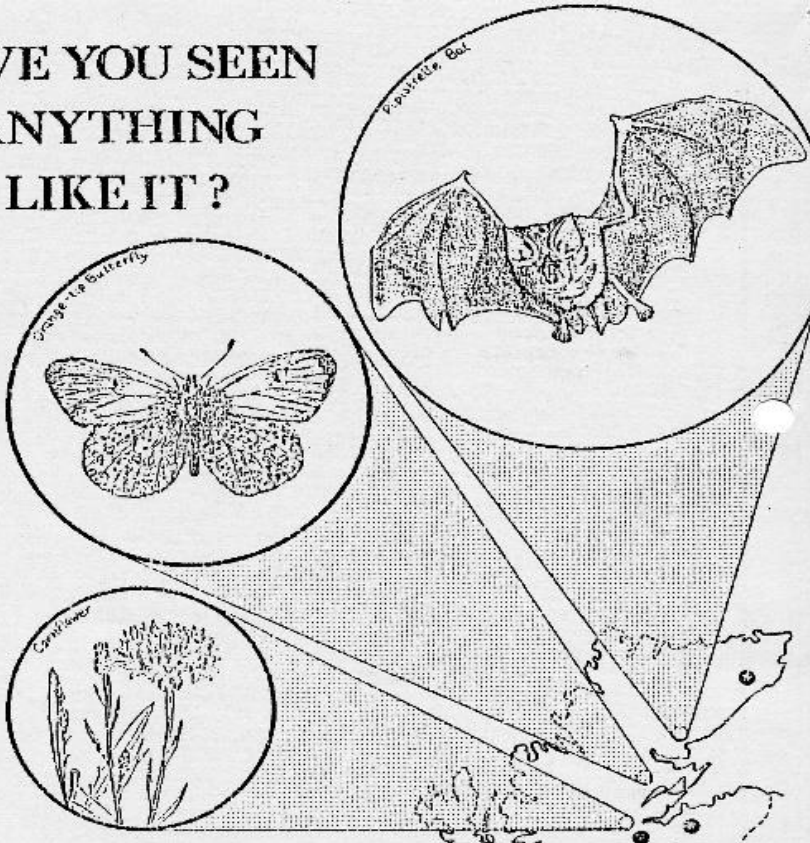
## Early species-recording projects

Order No.(B.R.C.):	Species:	Group/Order:
Species No.(B.R.C.):		Family:

		Notes:
Highland Region Boundary: ----- Vice-county Boundary: -----		
Present in islands- VC 102 S.Ebudes..... <input type="checkbox"/> VC 103 Mid Ebudes.... <input type="checkbox"/> VC 110 O.Hebrides.... <input type="checkbox"/> VC 111 Orkney Is..... <input type="checkbox"/> VC 112 Shetland Is... <input type="checkbox"/>		
 Highland Biological Recording Group [HBRG 01]		


# HAVE YOU SEEN ANYTHING LIKE IT?



IF YOU HAVE ,WE WANT  
TO KNOW WHERE AND WHEN.

BATS,BUTTERFLIES and CORNFLOWERS are  
the 1987 Summer Project targets for  
the HIGHLAND BIOLOGICAL RECORDING GROUP.

Interested ? Then contact your nearest  
centre for more details:-



or write to : "Summer Projects"  
Highland Biological Recording Group  
c/o Inverness Museum & Art Gallery  
Castle Wynd, INVERNESS, IV2 3ED.





Highland  
Biological  
Recording  
Group

# THE HIGHLAND NATURALIST



Highland  
Biological  
Recording  
Group

Incorporating the  
newsletter of the  
Highland Biological  
Recording Group

Number 10 - April 2014

HIGHLAND B  
CORDING  
NEWSLET  
May

issue of th  
"Summer Pr  
the group  
a consti  
Cttee

years  
ails  
still  
s a

# THE HIGHLAND NATURALIST



1986 \* Silver Jubilee Year \* 2011



Highland  
Biological  
Recording  
Group

Incorporating the  
newsletter of the  
Highland Biological  
Recording Group

Number 7 - May 2011



## Field trips to under-recorded areas



Crowlin Isles 2012



Rona (N of Raasay) 2015



## Field trips to under-recorded areas



Pabay (off Skye) 2013



Cape Wrath 2015



#### Quick links:

[Home](#)  
[About HBRG](#)  
[Latest news](#)  
[TRY - The Recorder's Year](#)  
[Focus on Highland Wildlife](#)  
[Submitting records](#)

#### Winter challenge 2016-17

Large Willow Aphid *Tuberolachnus salignus*

This distinctive and enigmatic aphid has been of interest to HBRG for a few years, but before this year had been found in Highland only at Strathpeffer in December 2012. Autumn 2014 was a very good year for the aphid, found in good numbers and hugely extending our knowledge of the insect in Highland. In contrast, 2015-16 produced only two reports, so it obviously has good and bad years.

Good sources of background information are the [NHM site](#), [Influential Points](#), [Harper Adams University](#), [LNHG](#) and [EOL](#). Unlike most aphids, this one is easy to recognise from the large size (up to 5-6mm), association with willow in winter, and the 'shark-fin' tubercle on the back.

#### Focus on Highland Wildlife

##### Invasive Non-native Species

Species: [Wireweed](#) [Rhododendron](#) [Japanese Knotweed](#) [Himalayan Balsam](#) [Giant Hogweed](#) [Salmonberry](#) [Alpine Cotula](#) [New Zealand Flatworm](#) [Australian Flatworm](#) [Mediterranean Fruit-fly](#) [Harlequin Ladybird](#) [American Signal Crayfish](#) [American Mink](#) [Raccoon](#) [Wild Boar](#)

The New Zealand Flatworm *Arthurdendyus triangulatus* was first noted in the British Isles in the 1960s and is now well established in Scotland, Ireland and Faroe. It is easily spread in soil as rooted plants are moved between gardens, and can also be carried on the fur of cats, making confinement very difficult. In much of the west it has 'escaped' and can reduce local earthworm populations dramatically, with knock-on effects on moles

overnight. In the morning, check underneath for the flatworms. They are up to 15cm and usually seen curled into a flat spiral. Egg-capsules look like blackcurrants. We have habits.



© [Urby](#) (adult); Murdo Macdonald (egg).

[Non-native Species Secretariat](#) - the key site for INNS in UK

[SNH and INNS](#) - information and resources

[DEFRA and INNS](#) - identification sheets for a wide range of invasive aliens

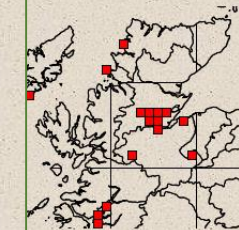
[European Network on Invasive Alien Species \(NOBANIS\)](#)

[Mapping Highland INNS](#) - report to Highland LBAP

Compiled by or with advice from Barbara Macritchie, Mary Legg, Marina Swanson, Derek Mayes, Stan Whitaker, Murdo Macdonald.

When you encounter, find a Large Willow aphid patches (the aggregations of aphids) on willow, they do not seem to prefer the soft, thin-leaved willow.

*Tuberolachnus (Tuberolachnus) salignus*



Powered by [NBN](#)

#### Quick links:

[Home](#)  
[About HBRG](#)  
[Latest news](#)  
[TRY - The Recorder's Year](#)  
[Focus on Highland Wildlife](#)  
[Submitting records](#)  
[Records Database](#)  
[Access NBN data](#)  
[Links and resources](#)  
[Atlases](#)  
[Calendar](#)  
[Join HBRG](#)  
[Contact HBRG](#)  
[Search HBRG website](#)  
[Grundtvig Exchange](#)  
[HBRG Yahoo! Group](#) (external)



#### TRY! - the Recorder's Year



'The Recorder's Year' features species to be looked for from spring through the year.

Each species has been selected because it is

- readily and confidently identifiable;
- easily found, in at least parts of Highland (often in gardens, and always in easily accessible habitats);
- under-recorded, so that new information will be easily obtained.

##### TRY! targets, and their seasons

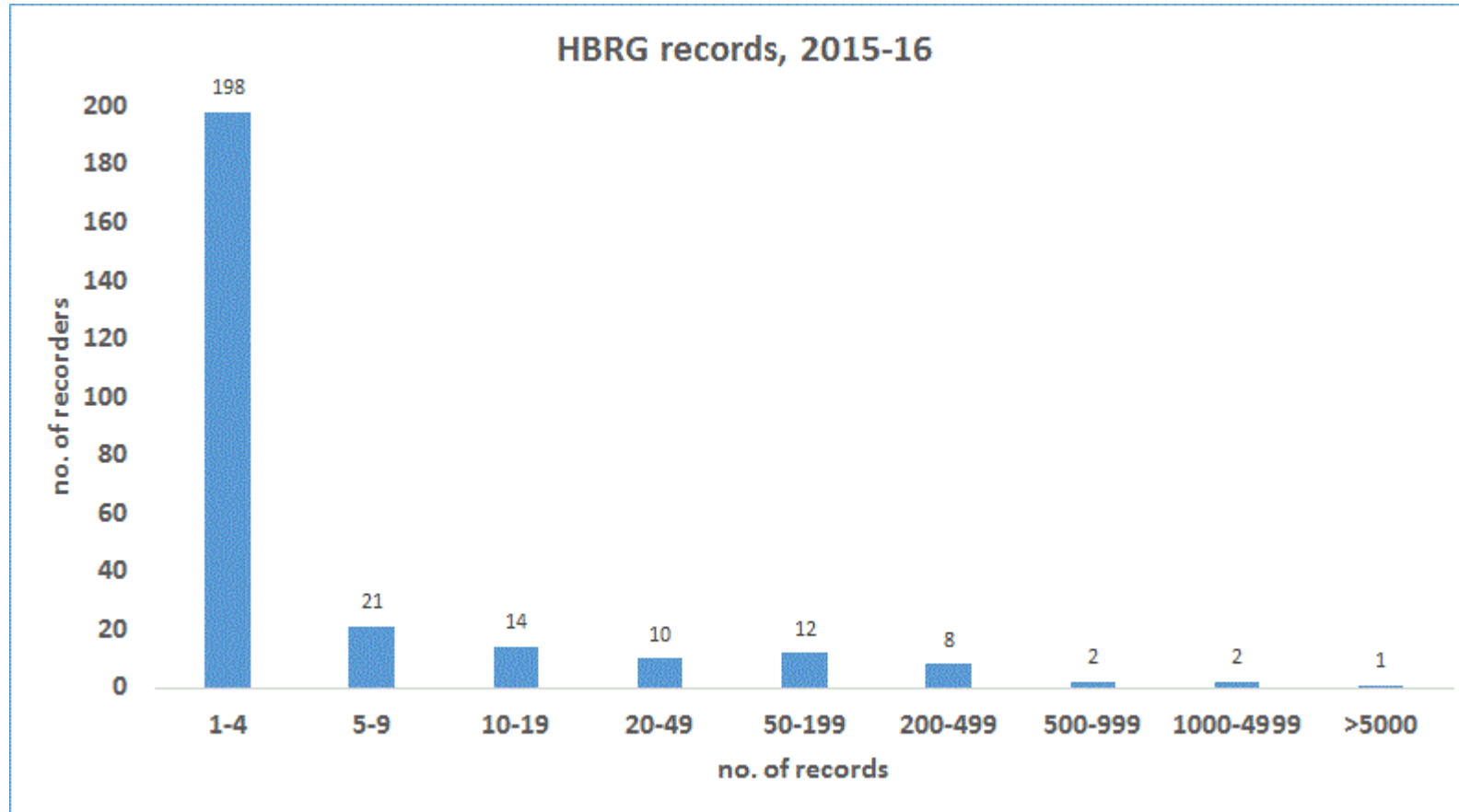
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
<a href="#">A tachinid fly</a>												
<a href="#">Bee-fly</a>												
<a href="#">Celandine rusts</a>												
<a href="#">St Mark's Fly</a>												
<a href="#">Noon-fly</a>												
<a href="#">Bird Cherry Fungal Gall</a>												
<a href="#">Orange-spot Piercer</a>												
<a href="#">Birch Felt-mite Gall</a>												
<a href="#">Shieldbug Fly</a>												
<a href="#">Laburnum Leaf-miner</a>												
<a href="#">Bee Beetle</a>												
<a href="#">Alder galls</a>												
<a href="#">Hawthorn Shieldbug</a>												
<a href="#">Heather Fly</a>												
<a href="#">Spiked Shieldbug</a>												
<a href="#">Oak Knopper Gall</a>												
<a href="#">Holly Leaf Gall Fly</a>												
<a href="#">Holly Speckle Fungus</a>												
<a href="#">New Zealand Flatworm</a>												

Links in the table are to .pdf files which can be printed out at A5 size for easy use in the field. Right-click and choose 'Save target as ...' or the equivalent in your browser to save them. Click the image at the top of the page to see current maps on NBN Gateway.

The entire set can be downloaded [here](#) (.pdf file, 1.5Mb).

# Recording challenges on website

# Records per recorder

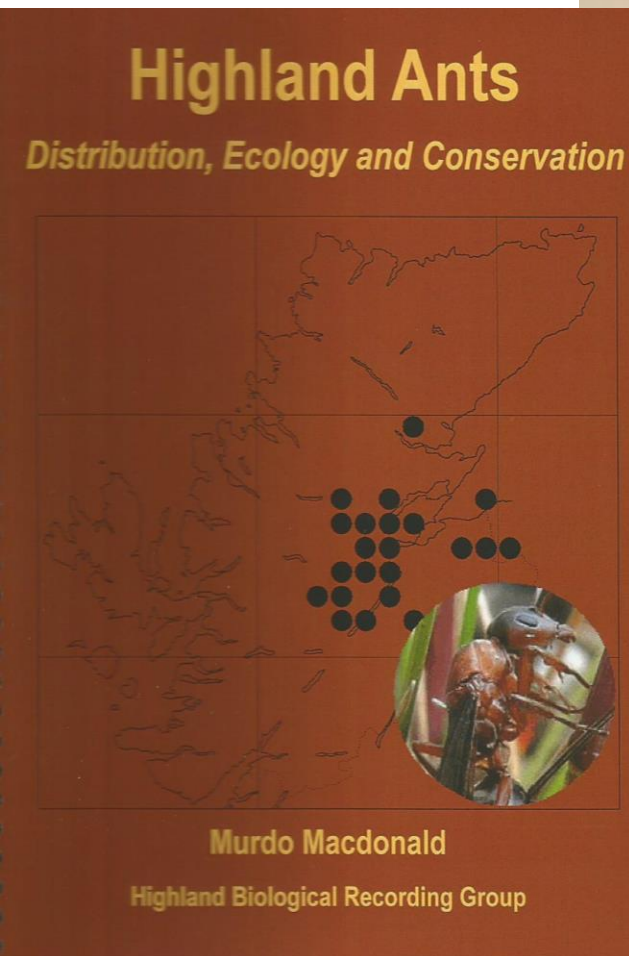


Totals:

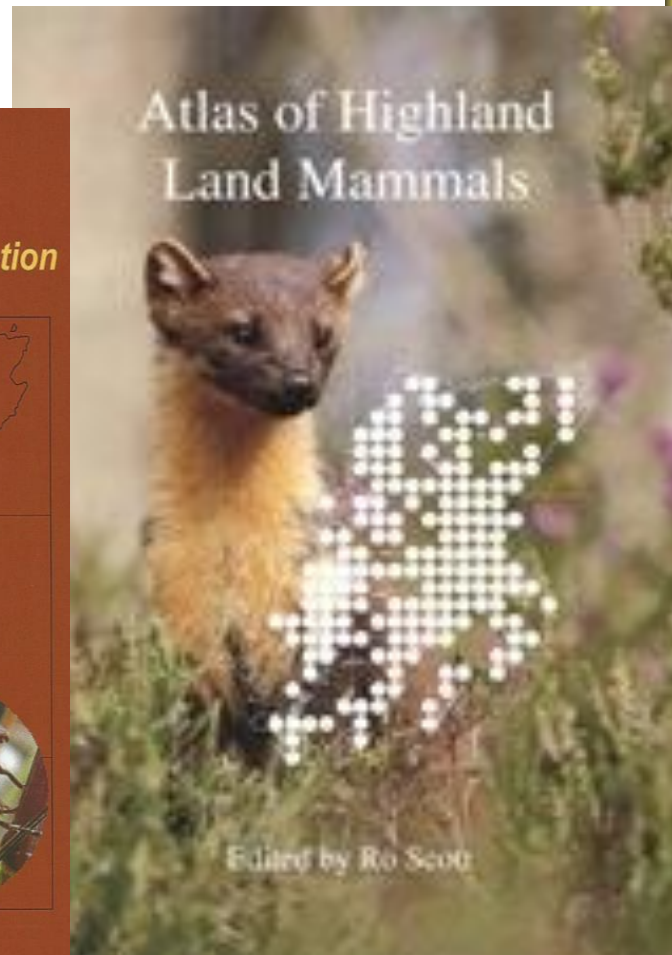
- 268 recorders
- 16,403 records
- 91% of recorders contributed fewer than 50 records

Histogram by Murdo Macdonald

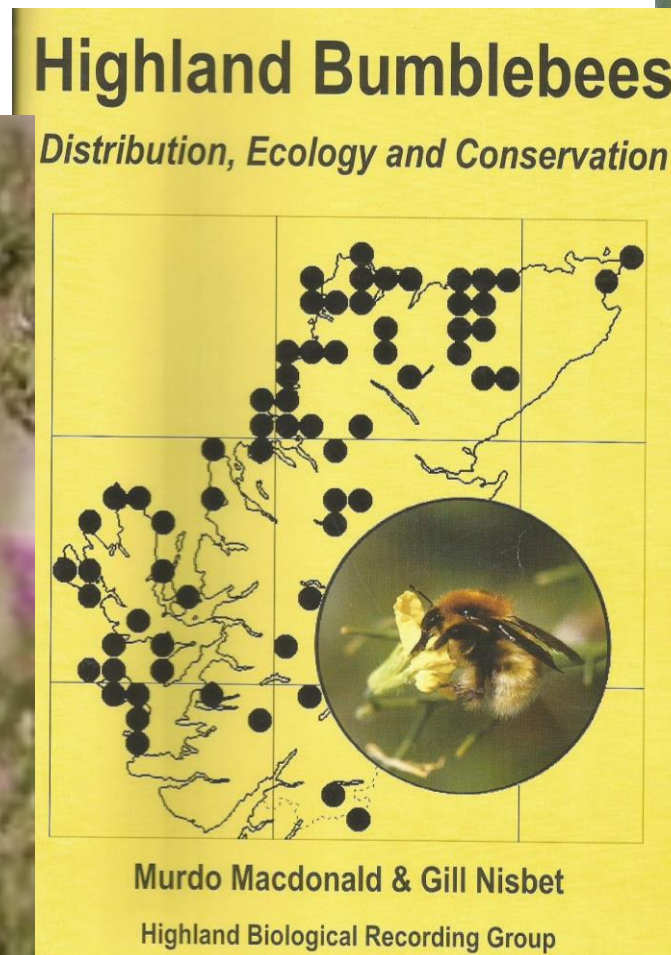




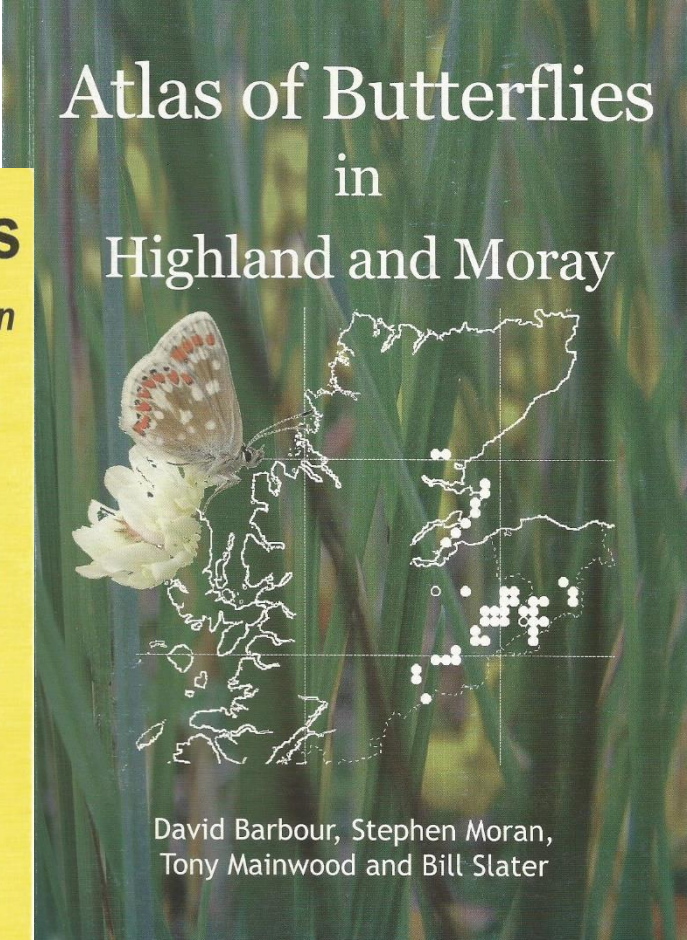
2013



2011



2006



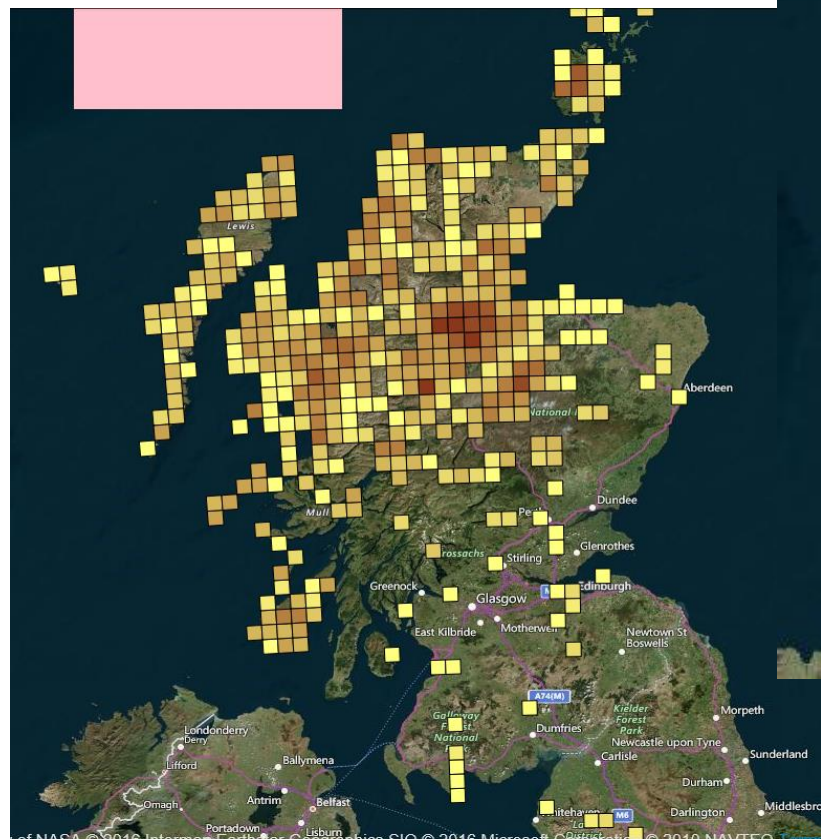
1998 & 2008 (2nd edn.)

Publication of Atlases

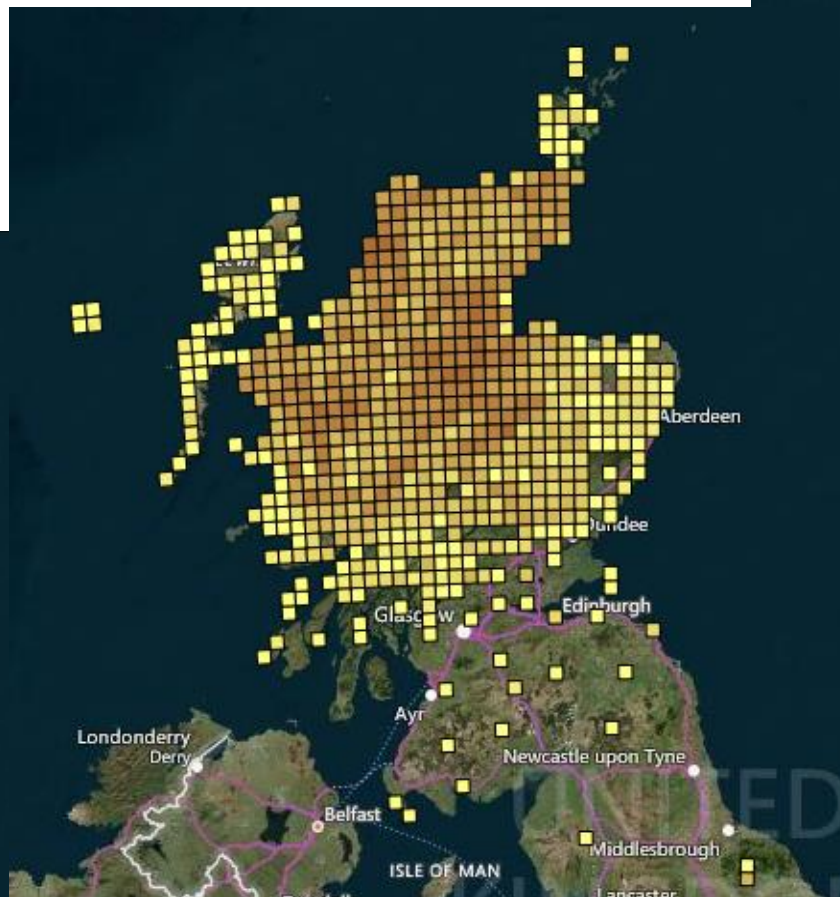


HBRG currently has over 200,000 records on the NBN Gateway

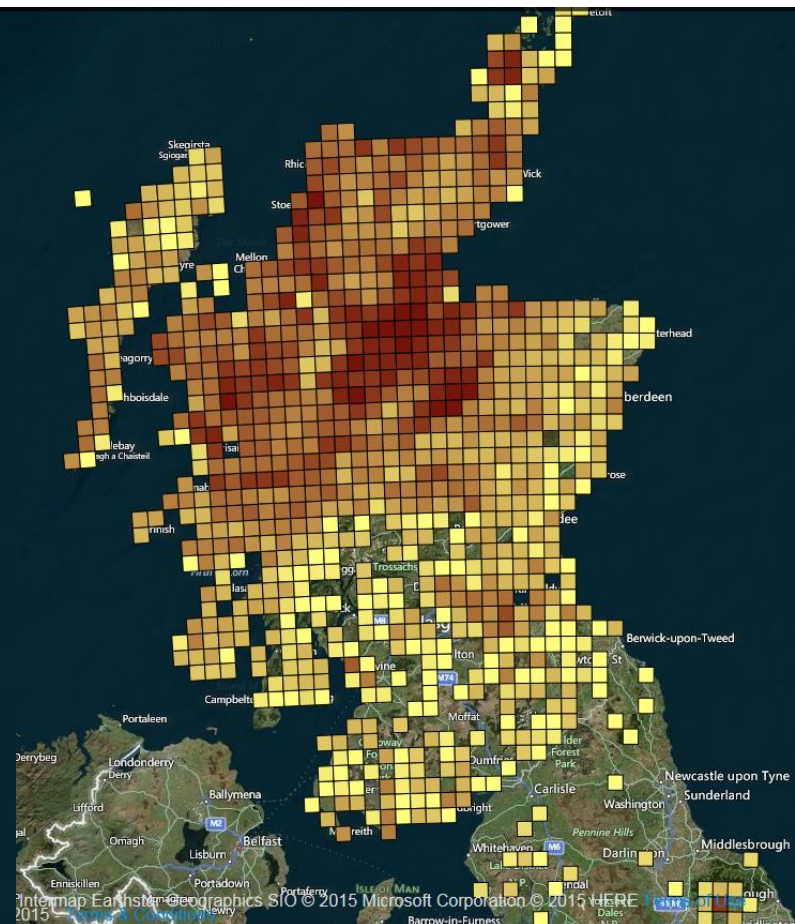
More than 99% of which are available to the public at full resolution



HBRG non-insect invertebrates



HBRG Vertebrates  
(excluding badger)



HBRG Insects

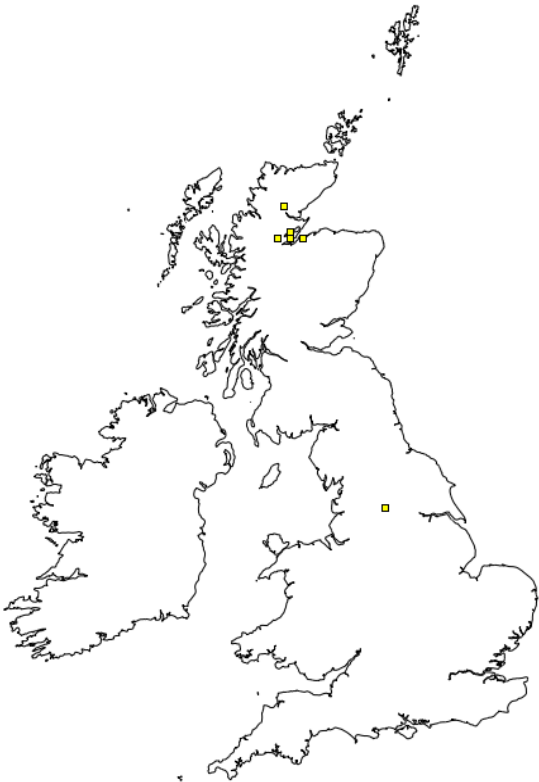
Species richness maps  
(densities not directly comparable)



# Notable discoveries

*Lasiobotrys lonicerae*

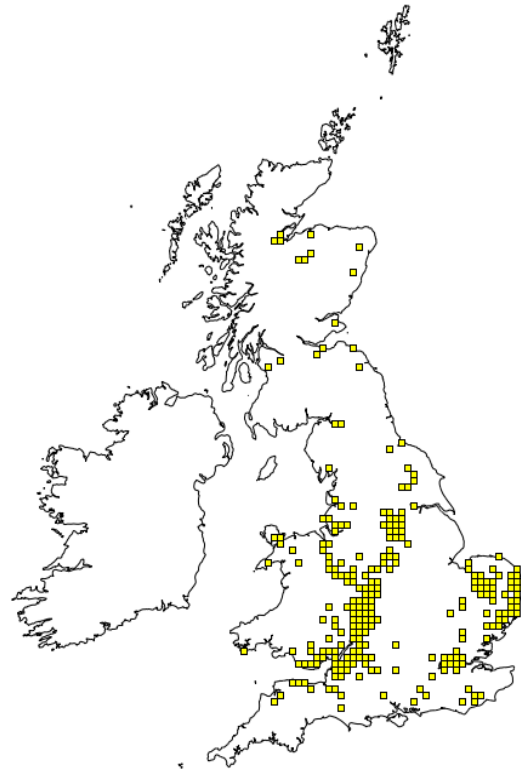
Map



© Crown copyright and database rights 2011 Ordnance Survey [100017955]

Knopper gall on oak

Map



© Crown copyright and database rights 2011 Ordnance Survey [100017955]



*Lasiobotrys lonicerae* on honeysuckle  
Photo: Murdo Macdonald

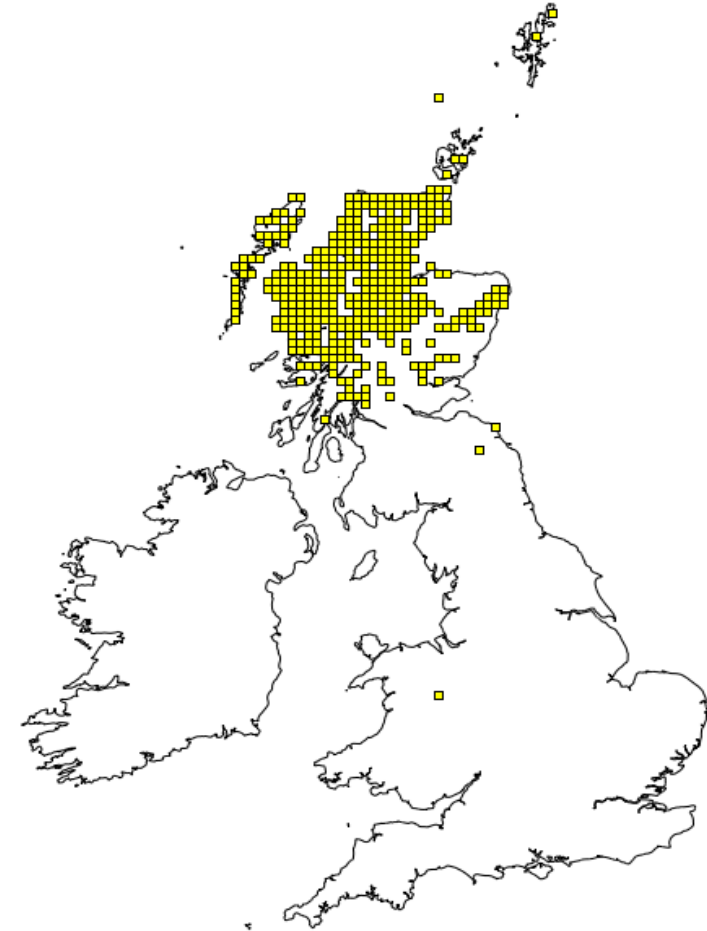


Knopper gall on oak  
Photo: Stewart Taylor

## Who uses it?

- In one year (2014/15) there were 246 downloads of HBRG data from the Gateway
- By people from 24 different organisations
- Including government, statutory agencies, universities, NGOs and others
- For a variety of purposes including statutory work, research, education, conservation, land management and personal interest.

### Map



© Crown copyright and database rights 2011 Ordnance Survey [100017955]

HBRG Otter records: the 5<sup>th</sup> largest open-access dataset for this species





Lorn Natural  
History Group



Outer Hebrides  
Biological Recording

## Problems:

- Current funding from SNH ends in March 2017
- Long-term sustainability of data management
- Too dependent on a small number of volunteers
- Concerns about utility of ALS for our purposes
- Concerns re demise of 'old' Gateway



Highland  
Biological  
Recording  
Group

---

[www.hbrg.org.uk](http://www.hbrg.org.uk)

