Navigating the growing diversity of systems to submit, view and share wildlife sightings

David Roy





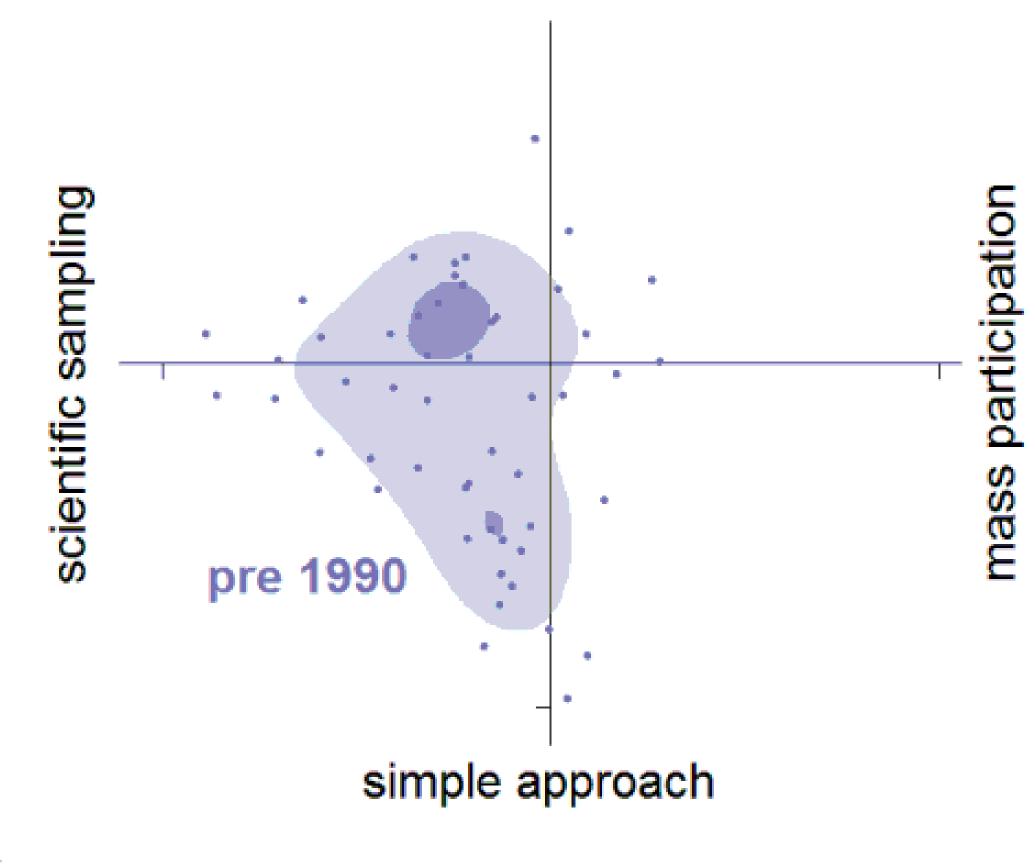
**UK Centre for Ecology & Hydrology** 



## Citizen Science continues to evolve and diversify

## Citizen science in ecology & the enviroment

elaborate approach





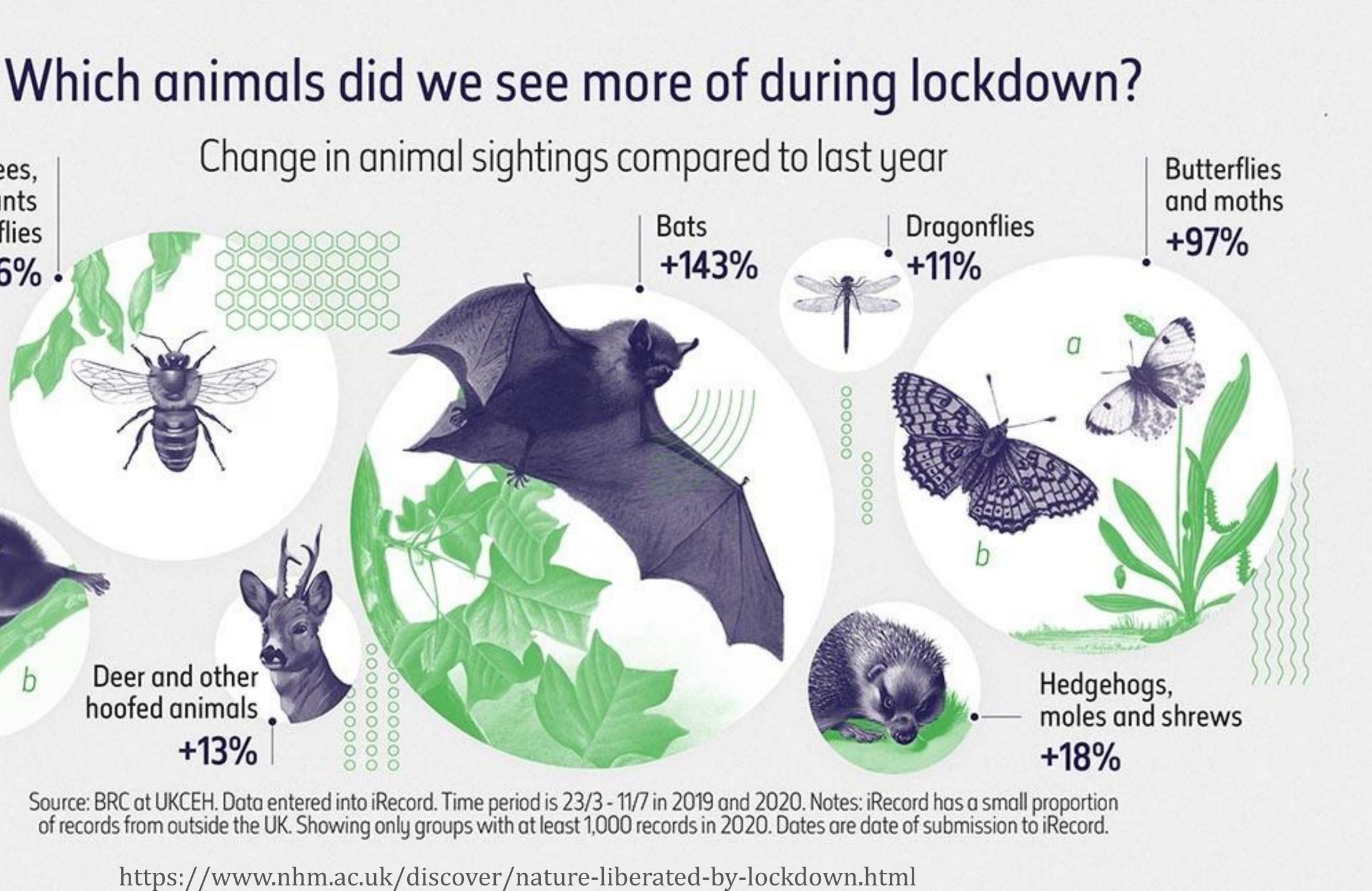
Associated with technological advances

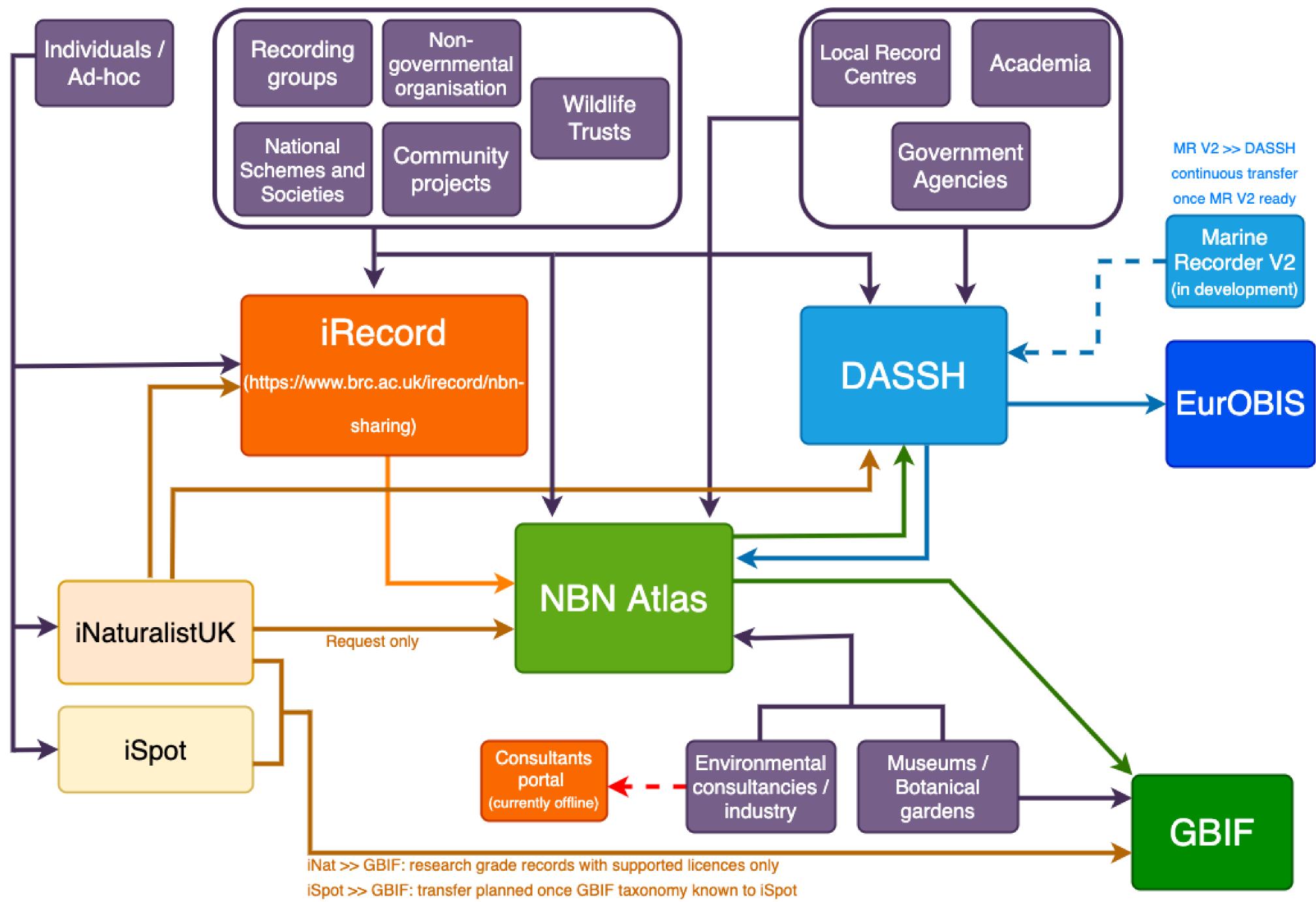
Pocock, et al. (2017). The diversity and evolution of ecological and environmental citizen science. *PLoS One*, *12*(4), e0172579.

## Bees, wasps, ants and sawflies +66% . Squirrels and other rodents +33% Deer and other hoofed animals +13% 0000

Source: BRC at UKCEH. Data entered into iRecord. Time period is 23/3 - 11/7 in 2019 and 2020. Notes: iRecord has a small proportion of records from outside the UK. Showing only groups with at least 1,000 records in 2020. Dates are date of submission to iRecord.

https://www.nhm.ac.uk/discover/nature-liberated-by-lockdown.html





# **Two key considerations for recorders?**

# What support do you need? > For identification Community engagement

## How do you want your data to be used? Local decision-making National reporting and influence **Global research use**



## **Community online platforms with crowd-sourced identification**



https://nbn.org.uk/inaturalistuk/



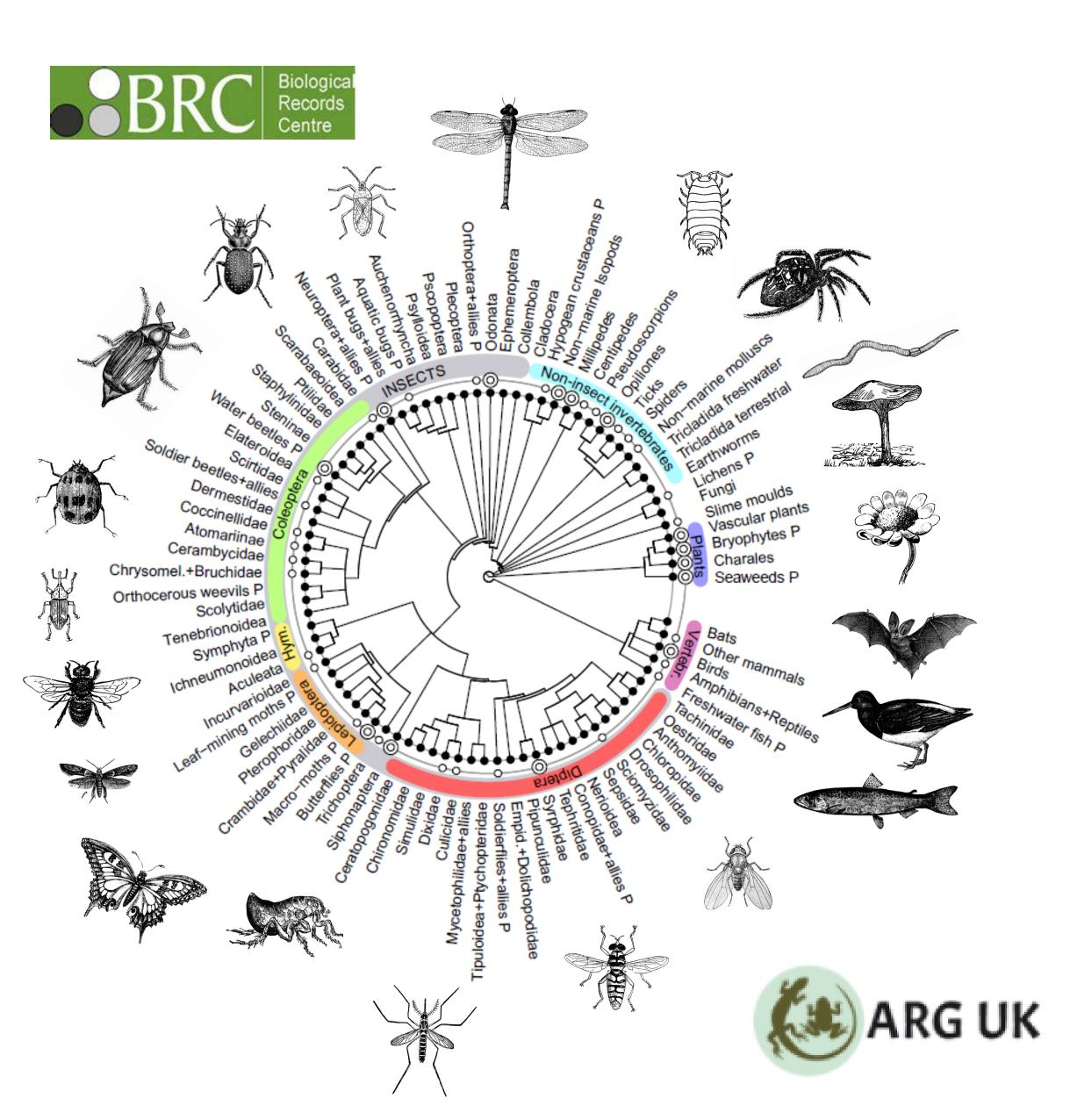
## **Image classification to suggest IDs**

## **Crowd-sourced identification support**

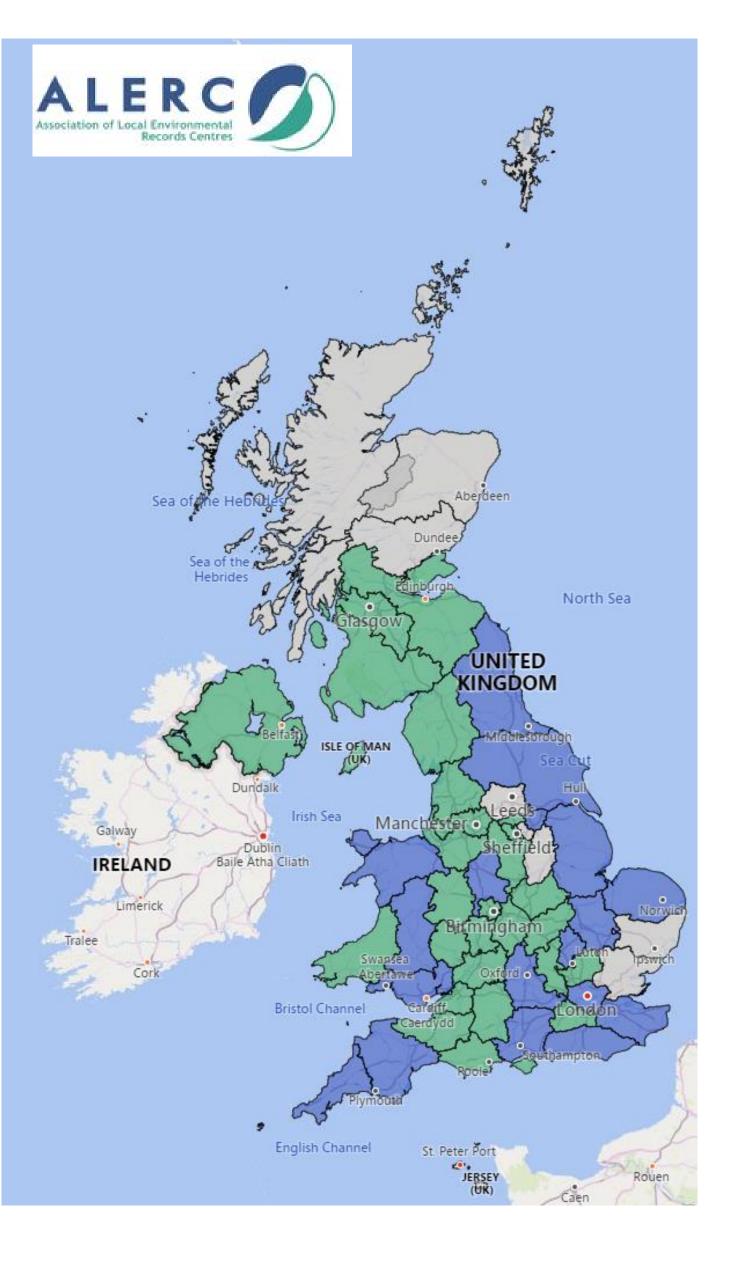
## Learning and development opportunities



## **Community support through national schemes and LERCs**

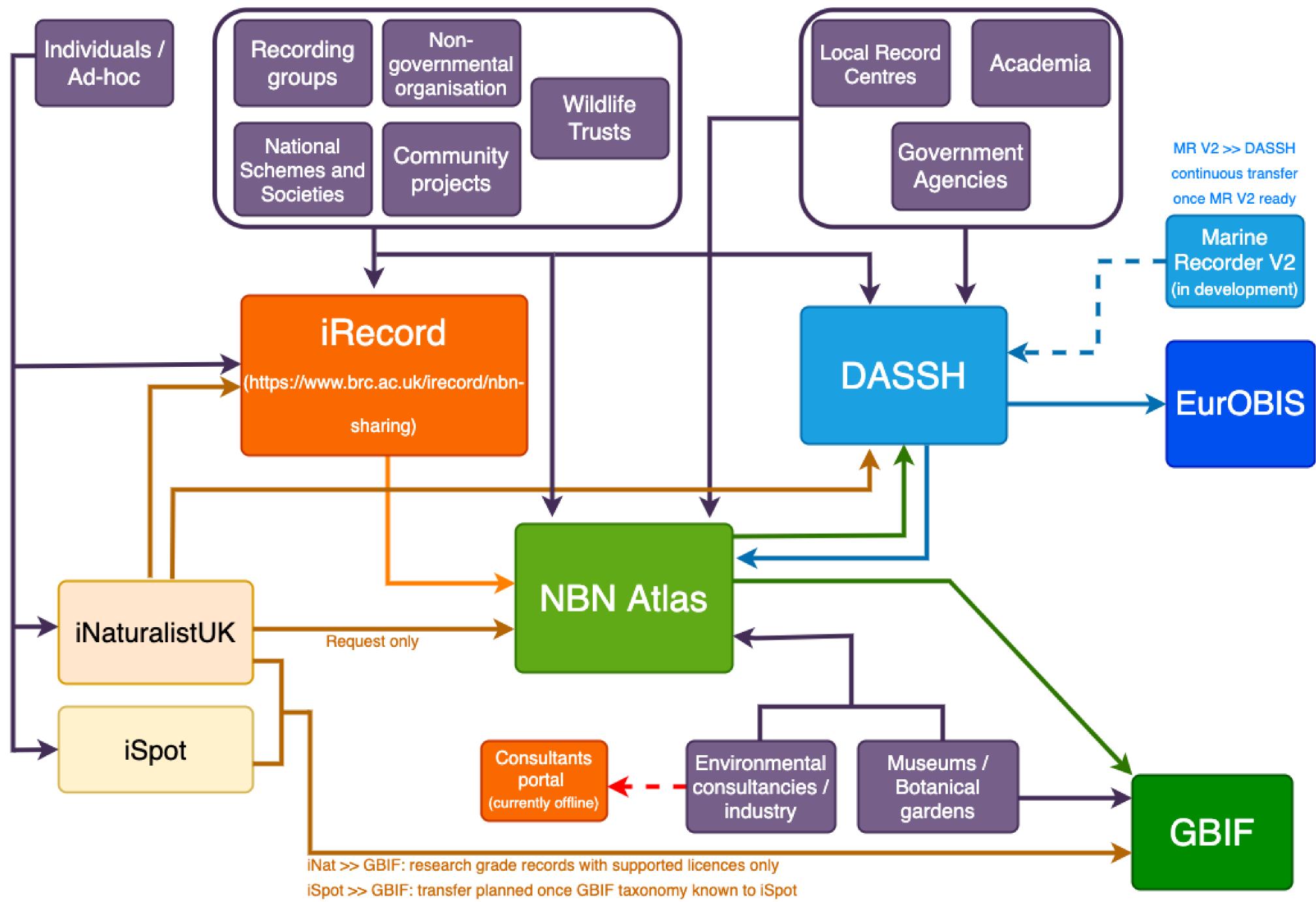














### United Kingdom **Butterfly Monitoring Scheme**

UKBMS Home Reporting Mapping Forum

UKBMS

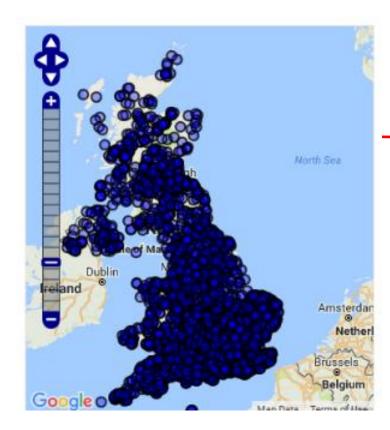
Login Register

### Home

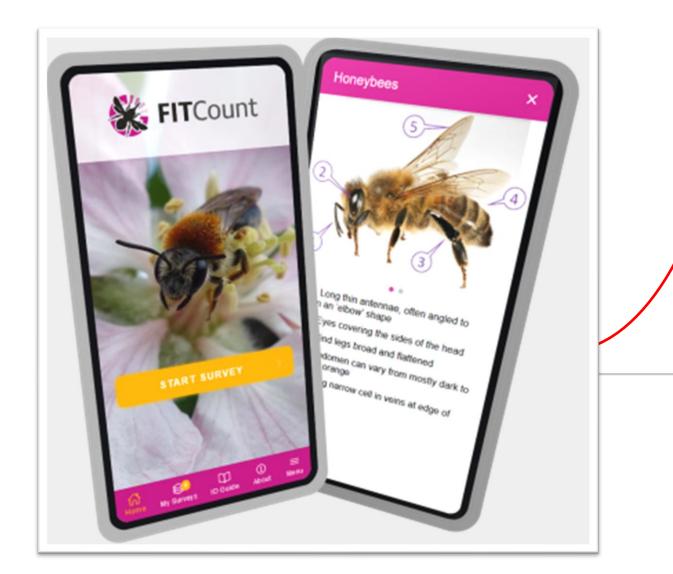
### Welcome to the UKBMS Transect Walker online.

This online system will become the primary route for submitting UKBMS data, although we will continue to support data submission via existing routes (e.g. via Transect Walker). The system can help to speed up data capture each year, as recorders will be entering their data directly onto a central database, and they will also be able to submit data on a weekly basis. The site enables progress with recording to be tracked through the season. Data can also be reviewed by transect coordinators.

The map on the right summarises recent recording activity (red symbols for sites recorded this year, blue symbols indicate sites recorded in previous years) and the website includes more detailed reports of recent activity. Please note that this website does not currently include historic UKBMS data.









### LERC Wales App

Record any species on the go in Wales.







Home

Home

## Welcome to the Indicia Warehouse!

Indicia is a toolkit that simplifies the construction of new websites which allow data entry, map & Hydrology.

- Indicia project website
- Indicia on GitHub



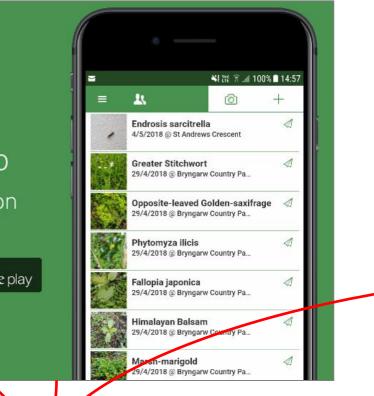
More information

Submit Sightings

### **CEDaR Online Recording**

For further details about how records submitted to this website are verified, managed, displayed, shared and used please read on...

Submit Single Record





Register now

### **Submit List of** Records





### Where was it?

Step 1: Select the Country of	r region.	e Auto Googi
Country or region:		
<select area=""></select>	~	9
Step 2: Please provide the m You can enter the reference dir click on the map to set it.	nap reference of the record. rectly, or search for a place then	scontante
Enter a grid reference and clic	the location on the map:	-United Kingo
British National Grid	~ <b>m</b>	
Or, search for place name or p record location on the map:	ostcode then click on the	fre / Ireland Manchest
Search		Wales
	ame of the site below:	1200





### Submit a sighting of Bombus hypnorum (tree bee)

Reporting your sightings of Bombus hypnorum BWARS is continuing its long-term mapping project in 2014, in which we are

plotting and monitoring the spread of Bombus hypnorum in Britain. If you have any records of this spectacular, and distinctively marked bumble please submit the full details via this online recording platform. There is a facility for uploading photographs to support records if you have them. Please use the boxes below to provide information on numbers, sexes, flower visitation, behaviour and nest sites, and include any additional information in the "Comment" section.



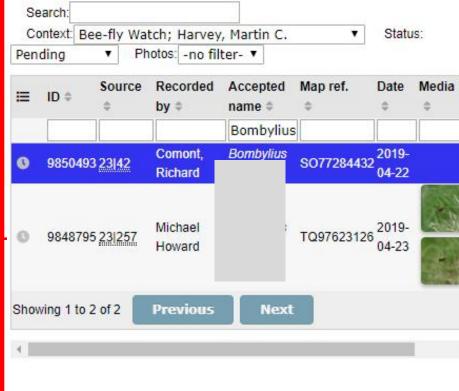
You are about to submit a sighting of a tree bee, Bambus hypnorum. First, tell us who identified it and provide photos of the record if you have any This information will help us confirm the record.





### Verification (new version)

We welcome feedback on this new version of the iRecord verification system, that is under development. It does not yet include all the functionality of the current verification system (available via https://www.brc.ac.uk/irecord/verification), but is ready for active use and it does provide most of the core functionality. Its main benefit is considerable improvement in performance. Please email irecord@ceh.ac.uk with any feedback on its use. See further information in this forum post.



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### ne Membership Information Resources ALERC Forum ALERC Accreditation Contact Us

Formed in 2009, ALERC is an association between Local Environmental Records Centres (LERCs) in Great Britain. The Association aims to provide a central voice for the views and concerns of the Records Centre community, whilst building a support-based network of knowledge and advice to meet the needs of its members.

#### What is an LERC?

Local Environmental Records Centres (LERCs) are not-for-profit organisations that collect, collate and manage information on the natural environment for a defined geographic area. LERCs support and collaborate with a network of experts to ensure information is robust, and make information products and services accessible to a range of audiences including decision makers, the public, and researchers.

#### Association Objectives

- To promote and encourage the completion of a UK-wide network of Local Environmental Records Centres.
- To promote and develop good standards of practice in the collation, management, dissemination and analysis of biological and geological records.
- To promote Local Environmental Records Centres regionally, nationally and at a UK level to potential users and suppliers of data.
- To provide full representation of the UK with country specific solutions and equal emphasis on the individual countries' requirements.
- To develop and promote accreditation schemes for biodiversity and geodiversity records
  centres and their staff.
- To encourage and facilitate networking between Centres to enable exchange of ideas, collaborative working, developing joint tools and sharing good practice.







e | Recording | Hosted scheme webpages | Publications | Resources | Research | Staff | Links | Contact

HOME - Recording Schemes

Recording Schemes and Study Groups

There are variety of national species recording schemes and study groups in the UK. Clicking on one of the taxonomic group names below will open a smaller window with contact details for that scheme.

Vascular Plants					
Botanical Society of the	British Isles				
Lichens	Myxomycetes	Marine Algae	Algae		
• Lichens	<u>Myxomycetes</u>	Marine Algae	<u>Characeae</u> (stoneworts)		
Bryophyta	Fungi				
Mosses and liverworts	British Mycological Society  Association of British Fungus Groups				
VERTEBRATE ZOOLOGY					
Birds	Mammals				
• Birds	Mammal Society  Bat Conservation Trust_National Bat Monitoring Programme				
Fishes	Amphibians and Reptiles				

Isle of Man

**Ireland**Dublin

Ireland

Leeds

Sheffield

Rennes

Nantes

Golfo de

Vizcaya

France

Leaflet | © OpenStreetMap contributors

Nouvelle

Aquitaine

Gronin

No

Sc Suisse

So

Nederland-

Den Haag

Belgie /

Auvergne-

Belgique / Köln Belgien

Letzebuer

Grand Est





# **Diversity of systems is inevitable**

ISpot

## **Key priorities should therefore be to: Adopt common standards (e.g. UKSI)** Help connect systems together Automate data checking (rules, visualisation) **Prioritised support for verification** Support local, national, international data flow

Consultants portal (currently offline)	←	Environmental consultancies / industry	Museums / Botanical gardens		GBIF
rade records with					

iNat >> GBIF: research g iSpot >> GBIF: transfer planned once GBIF taxonomy known to iSpot

# Thanks to volunteer recorders & co-ordinating organisations

## For presenta Martin Harvey





For presentation material:

Martin Harvey, Michael Pocock





Biological Records Centre