

NBN Conference 2017 Workshop #4: Improving Use of Our Data.

Workshop aim:

To undertake an assessment of the current uses of data that are accessed via the NBN Gateway, and highlight gaps where data could be made more readily available and increase its use.

This group focussed on the following four questions. Workshop delegates separated into three groups to discuss each question, then combined again and identified key points. The text below describes those key points. Raw flipchart comments are appended for further reference.

1. *IMPROVING ACCESSIBILITY: What are the blockages to greater data sharing, and what steps can we take to unblock each?*

The main blockages to greater data sharing identified were a lack of funding and resources (for which better endorsement and education were seen as solutions), a failure to recognise the value of data (solved by improved communication), and problems with data flow, particularly difficulties with verification. Implementing data quality status flags on records was clearly identified as a necessary solution. Tackling unnecessary possessiveness with data by better grassroots engagement and more involvement in verification was also identified, and there were some who don't share data because of concerns about the potential misuse of sensitive data.

2. *INCREASING RELEVANCE: This means ensuring our data can meet users' needs. What data / types of data do different kinds of users (public, policy-makers, conservation managers, academics, education) need? How can data providers respond to make their data more relevant?*

The different groups approached this question in different ways. One key point was the feeling that providing 'equality of access' to data was important. There is a wide range of user needs to satisfy with NBN data, and different users will have different skills and abilities – ensuring these are adequately supported would ensure data has more relevance. The human dimension (advice and support) was also important – understanding needs through direct contact could foster better provision of data products and services, and thus make data more relevant. Network members could make better use of existing lists as well – such as local axiophytes.

3. *TOOLS: What are the different ways we want to interrogate and visualise NBN data?*

All three groups identified many of the common data interrogation and visualisation tools currently offered by the Gateway. Providing stable web services was universally seen as an essential requirement. Better tools to interrogate the Species Inventory (using Taxon Keys),

a 'Data cleaner', the development of new tools as NBN Atlas 'add-ons', 'r' (statistics) tools, and innovative gaming apps were also identified. The use of infographics to illustrate key points from data was highlighted, as was data integration, consuming third party web services, and links to new systems such as Pantheon (provides invertebrate assemblage analysis from sample species lists).

4. *APPLICATION: What are some recent examples of uses or applications of NBN data – where did NBN data and tools add value?*

Two groups did not have much time to consider applications or case studies. The third identified a wide range of applications or uses for NBN data, broadly categorised as targeting recording effort in different ways, or monitoring biodiversity trends.

Appendix: Flipchart comments.

Q1 NOTES:

GROUP 1:

Inertia – county recorders; concerns about data sensitivity, resource issues. (Need grassroots engagement, education).

Technology – different data formats means lots of different possible routes / software. Lack of support is a problem.

There is an opportunity here – what software should we develop?

Free commercial tools – do we need a Technology Working Group?

Verification backlog: a role for sub-verifiers?

Recorder ability (self-classification) – Automated scoring based on previous records/species difficulty/accuracy.

Data quality, and coverage. [?]

GROUP 2:

Lack of verifiers – don't verify everything; release unverified data and tag as unverified.

Timeliness of data – resolve verification; improve connectivity and flow (iRecord to Gateway)

Complexity of the data and interpretation

Complexity of licensing – Atlas approach; suite of CC licences

Funding for Openness – better promote value of open data and biodiversity data; engage with ODI.

Permissions to share from individuals

Not necessarily an organisational priority to make data open

Inconsistency of coverage, time, depth, formats etc

Lack of discovery eg links to data.gov.uk.

Not enough people for survey on the ground.

GROUP 3:

Funding (grants and users)

Perceptions – not recognising importance / value as it exists: costs (centre, gateway, application)

More awareness raising of value

Added value – raw data into answers

Branding (links to funding)

Enforcement and compliance (links to funding) – environmental legislation; data licensing

Potentially data owners – open data; loss of ownership / control.

Relationship building

Good examples of where data used – two-way process

Inequality of access – making it relatable to users

Trusting other organisations – NBN and members

Being transparent

Share data

Language (links to inequality of access)

Confusion – where to send records to; data flow (black holes); finding and communication

Lack of joined-up thinking – research, management, consultancy

Partnerships locally and nationally.

Q2 NOTES:

GROUP 2:

Planners

Ecosystem services

Tourism

Climate Change indicators

Natural Capital

Regulators need locations and range

What's interesting to people locally (non-technical)

Phenology data

Right format and level of technical language associated with metadata for different audiences.

GROUP 3:

Users – conservation organisations, local authorities, academics, local public, developers, consultants.

Range of abilities / understanding - equality of access; terms and conditions; metadata; added value; developing a range of user products

Perceptions – relationships; limitations; translators – between needs and what there is.

Human interaction – managing data; engagement.

Q3 NOTES:

GROUP 1:

Databases – Queries

Online mapping; storing other info.

TVK Index: Taxonomy updates.

Atlas Add-ons – Tools and Overlays.

Date Cleaner – this would be a big time-saver!

'r' tool for NBN-held data.

GROUP 2:

Reliable 100% upgraded Gateway with new stable web services

System integration and data integration

Promote alternative uses eg gaming (Pokemon Go)

Multiple views for different audiences – specialist, general public

Custom view for local situations (local indicator species can be uploaded)

Automated web service feeds into Atlas from data providers

3D Virtual Reality digital terrain.

GROUP 3:

Books

Printed Atlases

Story telling

Case studies

NBN Gateway – atlas

Local websites + atlas

Web services

GIS – QGIS + TomBIO tools

Infographics – telling you more about a site

Pantheon.

Integration.

Q4 NOTES:

GROUP 1:

Improve biodiversity outcomes in the UK

Charting changes in species distributions

Looking at temporal trends on the Gateway (*)

Identify under-recorded groups

Biodiversity trends, especially abundance (*)

Hotspot maps to advise agri-environment schemes

Data flow to GBIF

Tracking and informing taxonomy

Can look at data at different spatial resolution for different applications

Public engagement

Targeting recording effort

Advise sustainable development

Incorporate species info into natural capital

Snapshot predictions, esp for rare or unfamiliar species

Access to recorders for species groups

GROUP 2:

EA Regulation at locations

Environmental monitoring and change

New ideas – Tourism view of what's of interest in local area for national parks and hotels

Use of remote sensed data eg drones

Natural capital and planning

GROUP 3:

HLF Biodiverse Society Project in Lancs / N Merseyside

Training and building up a network of recorders

Training / knowledge-sharing / networking with volunteers, local groups and experts.

Paid traineeships – addressing skills gaps.