

Workshop 3 – How can the NBN Atlas better support the NBN Data Flow Pathway?

Written by Barnaby Letheren, Natural Resources Wales – workshop lead

Summary

Firstly, I want to thank the group who made a fantastic effort with really good levels of engagement and enthusiasm. I was struck by how well aligned the group was in that everyone was pushing towards the same end goals; timely, high quality data available to support the management of the environment.

Verification was a key theme throughout the workshop and the group felt very strongly that this was a bottle-neck that needed addressing. There was a huge level of appreciation shown to those who give up their spare time to verify records, and all the knowledge and experience required to do so, but it was recognised that there are simply not enough people doing this work and an ever-increasing volume of data. This is expected to increase with increasing use of citizen science, automated data collection and availability of on-line data collection tools.

Key points

1. The actual process of verification is quite ‘murky’. Different organisations have different processes and mechanisms leading to a lack of consistency or even a clear understanding of what ‘verification’ actually means. It was felt that it would be helpful if organisations undertaking verification of records could write up their verification procedures and publish these on their websites. Keiron Derek Brown of the Earthworm Society of Britain has already done this and the information is [available here](#).
2. Record cleaner is seen as an excellent tool, but the group were conscious that it is in urgent need of updating. It has the potential to greatly reduce the amount of records that need manual verification and hence increase the amount of verification effort that can be used where it can have the most benefit. A number of steps were suggested:
 - a. Update and expand the current rule-sets – Taxonomic experts
 - b. Investigate more stochastic analysis so that records of common, widely distributed easy to ID species will not be rejected for failing a specific rule – **steering group**
 - c. Investigate use of machine learning and/or AI expert systems to expand the stochastic analysis idea, possibly through a masters degree project or similar – **Steering group**
3. Expand the guidance on the Darwin Core template. The guidance for the key fields was felt to be really good but it needed expanding to other fields e.g. vice county – **NBN Secretariat**
4. The speed of data moving between providers-NBN Atlas-users could be improved with better use of web services. In particular the group was interested in the potential for web services to be used to harvest data from providers. This could be of particular use for spatial data – **Steering Group**
5. The idea of a paid verification service was raised. It was noted that when groups are bidding for funding for projects, particularly citizen science projects, an element for verification could be included. There was a discussion around how this potential funding could then be used for verification given that most verifiers are volunteers – **verification working group with support from SBIF**
6. The issue of unavailable historic data was raised and the project initiated by the NBN was discussed. The group would like to see this project progressed as a large amount of data was identified and, if funding could be secured, this could provide a significant additional dataset – **NBN Secretariat**

7. The user interface of the Atlas is getting a bit crowded and confusing. The group felt that this needed review with the potential of having a separate 'advanced' tab containing some of the more complex mapping and querying tools. This would allow more casual users to see a cleaner and more simple screen at login – **NBN Atlas steering groups**
8. Records, and especially verifiers, can often feel isolated and under-appreciated. Greater connection between all those involved in the collection, collation and verification of biological records would help address this and could increase the recruitment and retention of volunteers who are so fundamental to the flow of biological data. MERIT/BioCollect were discussed as potential tools to help create a more inclusive 'community' of verifiers and potentially enable more communication between them.