

# A time to reflect

*Rachel Stroud, NBN Secretariat. Friday 18<sup>th</sup> November, 16<sup>th</sup> National Biodiversity Network Conference, National Museums Scotland, Edinburgh*

Originally I had planned to reflect on the past 12 months when I wrote the abstract for this talk, however over the past two months as I have been musing over my title and abstract, and reading a wide selection of historic literature on our community and our shared history, it dawned on me that today we need to reflect back further than 12 months. I couldn't look back a year, without going further and instead of just looking back over the past year I want to look how far we have come, and what we still need to achieve.

As part of the SBIF review (which I will come on to later) I have been undertaking a historic literature review of all the documents relating to biological recording in the UK and subsequently the formation of the NBN. These reports have ranged from Government Commissioned reports through to opinion pieces by individual recorders and local recording groups. Indeed you may recognise some of your own reports here.

I said I was going to take us back further than 12 months, and this quote could have been said last year, but in fact this comes from 1975. It struck me when reading the Biological Recording In Scotland *BioRec75* Conference report how many phrases are still so relevant today, these included "*the current diverse and uncoordinated network of data bodies should be improved to cope with the increasing amount of biological information*" and "*that there is a great need to coordinate the local schemes with national ones*".

Then in 1978, the BRC Handbook for Biological Record Centres stated that "*it would be tragic if the wealth of amateur talent for, and interest in natural history in this country remains largely untapped because of the lack of a system for ensuring the flow of data from those who have it to those who require it*".

We have of course come a long way since then, with the formation of our coordinated community, under the banner 'The National Biodiversity Network', however it pained me to read this, phrases used before I was born, which are still so relevant today. Every increasing volumes of data put increasing pressure on our Network members as they manage, collate, verify and make these data available, and yet our systems for ensuring smooth flow of data continue to be interrupted with data often not reaching their end destination, perhaps stuck in a data eddy waiting to be verified, or held captive in a data silo waiting to be set on their way again.

Well let's keep going.... We then jump forward a few years to 1984 to a reflective piece written by Charles Copp in the Biology Curators' Group Newsletter. For those of you who may not have heard of Charles Copp, we have a lot to thank him for. He played a fundamental role alongside Paul Harding in setting up the National Biodiversity Network, which later came into fruition under the leadership of Sir John Burnett. At the time of writing Copp was reflecting on where next for local records centres and biological recording, however I would like to stress now that the points I wish to extract cover our entire Network, and are relevant to us all.

Copp reviews the current situation as of 1984 and describes the declining funds for biological recording, the challenges of data flows, and the role of BRC, Local Record Centres and national scheme and societies. These points I do not wish to dwell on as what really caught my eye in this report was Copp's forward looking assessment of 'What can be Done?'. He says

*"Clearly the problem lies at both the local and national level and is not so much one of lack of effort but a need for coordination and organisation."*

Copp recognised that the problems that lay before the biological recording community at the time lay with no **one** organisation, but what was missing was clear coordination and organisation.

Copp then looks to a two tiered solution focusing on both the Local and a National Scale developing a coordinated Network of data providers and users.

His vision was for a Local Network, “*typically members of such a network would include county trusts, planning departments, museums, natural history societies, county recorders, conservation volunteers, water authorities, educational groups, NCC and representative of other national groups with an interest in the area. ...*”

Combined with “*The National Approach: the second phase of the solution could be to create a national federation or umbrella organisation for local and regional environmental networks. ... By publicity and communication it could become an important force in the integration of recording into the whole framework of planning and conservation!*”

Copp discovered that one thing was very clear from this exercise, this was that everyone has a part to play in this network and everyone can play a positive role. He also stressed that there was a clear need for ‘coordinators’ both at a local and a national level.

*To be successful the establishment of the network must make few extra demands on the available labour as it is always the already busy people who have to take up these tasks.*

What strikes me here is that while we have made progress to developing a local network and a national approach, arguably lead under the umbrella organisation the NBN, we are yet to realise Copp’s vision of a fully functioning network where everyone “*with an interest in the area*” are all able to rapidly access the information they require in a fully coordinated manor. To a degree this is possible through the NBN Gateway, yet funding constraints still govern much of the way we handle, manage and make available our data holdings.

So we move on, now a lifetime ago to 1990 where Paul Harding, head of BRC at the time states that “*the challenge of the future will be to strike a balance between utilising the existing information, and acquiring new information to update and enlarge the database. New computer-based technologies must be exploited to the full so that the scarce resources of manpower can be used to best effect... The solution most likely to success will depend on enlightened self-interest; each participant will recognise the advantages of adopting consistent standards.*”

We can all say with pride that we are adopting and using consistent standards such as the UK Species Inventory, a standard and consistent data exchange format and the use of auto-verification tools such as Record Cleaner and its associated rulesets. However, can we say with confidence that we are efficiently exploiting the technologies available to us, to free up the “scarce resources of manpower”? I am afraid I would have to say that no, we are not, and as a result we continue to expend precious ecological expertise on a host of data management and extraction activities which one could argue could have more elements automated, allowing these expertise to be used for verification, training and interpretation.

The 1999 Source Book for Biological Recording in Scotland, published by BRISC stresses a further point that again, is very relevant today. I appreciate that this may appear like teaching a granny to suck eggs when

speaking to this audience but here goes anyway. "One observation tells us rather little, but as the number of observations increases so does their usefulness... For all of these we need databases, the flow of new data into those databases, and hence the recording schemes... We also need the tools for analysis so that answers can be found for a host of questions."

At this time of change with regards to our national database I think it is important to reflect on this statement. While the NBN Gateway serves as a huge database, providing access to over 150million records, the scope of the tools that it was able to offer to data users is extremely limited. With the strategic move to the NBN Atlas infrastructure we have an amazing opportunity to be able to offer data users, which include our network of data providers, recorders and volunteers advanced tools to start exploring, overlaying and analysing their data alongside the data of others to start asking and answering their own questions. We should never underestimate the power of the recorder, and the inquisitive nature of all of our minds. Often I feel that it is assumed that recorders just want to record and provide data, and are not necessarily seen as data users themselves.

And so my journey brings us back to the now, and a chance to recap

In 1987 there was a great need for coordination.

In 2000, the NBN Trust was formed, bringing coordination and common standards

By 2015, the launch of the refreshed NBN Strategy gave us a clear shared vision and direction

So as we look to the future....

- We remain a diverse Network of data bodies, which we should be proud of. No country in the world has the diversity of recording groups and taxonomic expertise as the UK continues to display
- We now have coordination and direction, clarified by the collaborative creation of the NBN Strategy 2015-2020
- We now need to work together to take a real solid stock check of our Network, what roles are we all playing, how can we work better together and avoid the feeling of competition. There is more than enough work to go around!!

Which leads me on to introducing a review which is underway focussing on the Infrastructure in Scotland lead by Ellen Wilson, SBIF Chair. This might be Scotland but this review will be looking at the infrastructure across the whole of the NBN and how we are structure, so is so relevant to us all. The review has arisen for a request from SNH to have clearer steer from the recording community as to how things can be made better, and this cannot be done without a thorough look at where we are at now. I am confident that we have an opportunity before us to come together to work together to stop history repeating itself and another report being written!

The SBIF review will be looking in detail at the 10 key roles in our Infrastructure and the 10 key stakeholder groups

This will help us fully understand the position today.

- What unique roles are we all playing, where does our work need to overlap and collaboration occur
- What is problematic at the moment
- What could and should be a local, national or central model.

The ultimate aim is to identify how our Network and biological recording can be sustainable, with each of us playing a positive vital role which supports the rest of our Network around us.

Over the next 10 months the SBIF Working group will be carrying out this review and will be regularly updating the NBN Website. So from now until Christmas we will be finalising the information gathering on the 'now' position. After Christmas a series of workshops will bring everyone together to look at options moving forward, with recommendations being presented to SNH and Scottish Government in August 2017

We want you to be involved and help us help shape the future. Take part in the questionnaire, encourage others to do so, visit the SBIF stand if you haven't already and pick up a copy of the leaflet there. This review is so relevant to the NBN and biological recording and has the potential to look at how we can unlock resources and support our partners to start overcoming some of the challenges facing us. We need to have confidence that together we can make a difference.

Much of what is being tackled, and will be achieved in the SBIF Review was laid out by Copp in 1995. He said If a re-organisation for improved coordination and accuracy of biological recording is to be implemented the options necessary to support a business case must be expressed clearly, the necessity for change being spelt out rationally and be defined in specific policies, after the potential roles of participants have been clarified and agreed by the recording community.

It is clear we have come a long way but we still have work to do. We have an opportunity to lead the way in developing a strong, and cohesive community made up of recorders, technical service providers, data users and decision makers. The evidence from the development of the NBN Strategy shows that the willingness to own a shared vision is there. Now is the time where we need to have collaboration rather than conflict – creating inclusion and empowerment, and a safe space for innovation and revolution. We need to put our best foot forward at all times, as the landscape we create today, will shape the way future generations take what we have left for them forward. Do we really want another generation to be reading reports we have written, wondering why little has changed and why we are still having the same conversations or instead, do we want to stick our necks out and reshape the way we all work together?

People have asked us 'what's the rush?' and to be totally honest I don't think we are rushing. I think we are dragging our heels. We have been having many of the same conversations now since well before I was born and I believe the National Biodiversity Network has a great opportunity to build an infrastructure that provides confidence, improves the reputation of biodiversity data provision and ensures that everyone contributes to a shared vision and a positive agenda. To do this we need strong leadership, smarter resourcing and sharing of skills. We need to find ways to resolve our areas of competition and our internal struggles to be a truly resilient Network who can provide access to data with pride, knowing we are the best in the world at what we do.

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