

3.6 Biological Recording and Data Management

Clàradh Bith-eòlasach agus Rianachd Dàta

Objective: To improve the management and sharing of biological records, and encourage the collection of new records, specifically targeting under-recorded species.

Amas: Rianachd agus co-roinn chlàran bith-eòlasach a leasachadh, agus cruinneachadh chlàran ùra a bhrosnachadh, ag amas gu sònraichte air gnèithean nach eil air an clàradh gu leòr.

Background

Cùl-fhiosrachadh

The 2007 UK Biodiversity Action Plan identified 1,150 priority species and 65 priority habitats as priorities for action within the UK. 606 of the UK priority species occur in Scotland, and Highland supports 75% of these (455 species). Highland also holds over three quarters of the UK priority habitats (51 habitats)¹.



Biological recording and management of the resulting data is an issue that features in all Local and Highland BAPs. Our knowledge of the natural environment and biodiversity is

increasing all the time. However there are still significant gaps in the distribution maps of all but the most popular species groups, which makes it difficult to gauge the real effects of new developments and changes in land use.



Annex 4 lists the UK national priority habitats and species that occur in Highland. This currently is the most up to date list that is available. There is a Scottish Biodiversity List but this is very long, with 1,946 species. It is hoped that a short list of species and habitats requiring action will be available from the Scottish Biodiversity Strategy Species and Habitats working group soon.

¹ Figures taken from the first Highland BAP, (Highland LBAP Review: Highland Biodiversity Plan, Envirocentre, 2006)

Opportunities

Cothroman

National Biodiversity Network: There have been many developments in the last 10-20 years in terms of information technology.

The National Biodiversity Network (NBN) is an information network of biodiversity data provided by a collaboration of organisations such as the UK nature agencies, wildlife trusts, local biological records centres, etc. For the last ten years the NBN Gateway has acted as a “data warehouse” for biodiversity information, storing records and helping us access data and distribution maps on particular species.

Data Coverage

Còmhdach Dàta

Issues

Cùisean

There is a lack of up-to-date, important ecological information and data in Highland on many of the species and habitats that have been identified as national priorities.



Ispot: Ispot is an online resource run by the Open University whereby people can get help to identify species from an online network of experts.

There are opportunities for the national agencies to work together in terms of data management and storage, which would be to everyone’s benefit.

The issues, updates, project ideas and case studies for Biological Recording and Data Management are grouped under the following three sub-headings:

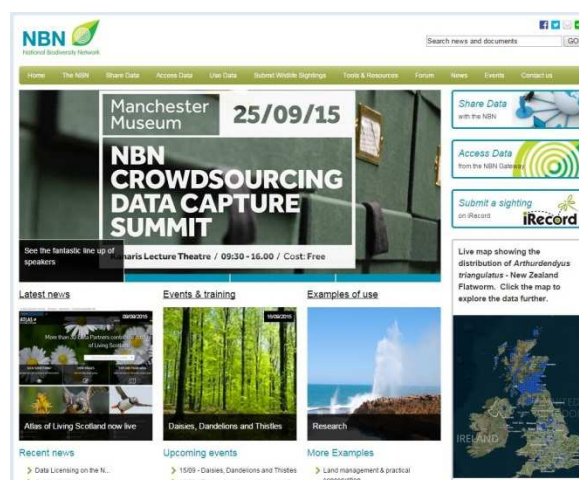
Data Coverage

Records Management

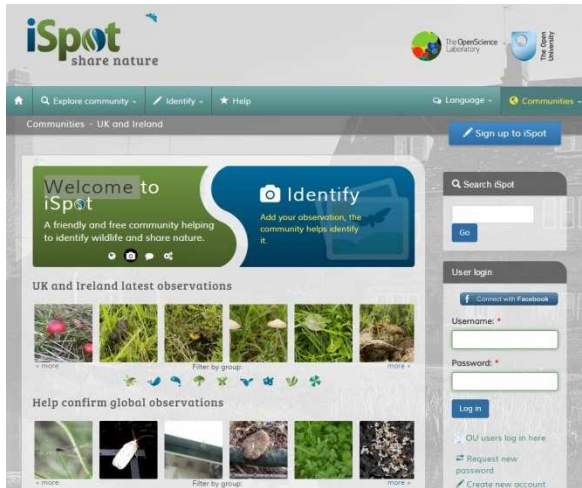
Data Capture

Update

Cunntas às Ùr



National Biodiversity Network: The NBN now offers individual online recording accounts.



iSpot offers online species identification.

Cairngorms Nature is working closely with local experts, North East Scotland Biological Recording Centre (NESBREc), NBN and i-record to support local recording groups with training, equipment, skills development and funding.

Habitat Maps: The Scottish Government has undertaken to produce a habitat map of Scotland by 2019, primarily using remote sensing as the main survey tool.

There was a Phase 1 habitat survey carried out in Easter Ross, Inverness and Nairn over 20 years ago, but this data is old and not available digitally.



Advice: Several years ago, the Highland Biodiversity Partnership set up a sub group named Scientific & Technical Advisory Group (STAG). The purpose of the Group was to advise local biodiversity groups what they could be doing to help national priority species. The Group is not currently operational but local projects have been delivered by joint working between the groups and the lead partners.

For example the Bumblebee Conservation Trust worked with volunteers from the Caithness Biodiversity Group to survey a number of areas across the North Coast. The species was found across a much greater range than previously thought, and this knowledge has led to a habitat enhancement project with Scottish Agricultural College (now Scotland's Rural College) and local farmers to provide more nectar-rich areas for the bumblebees.



Future Action

Gnìomh san Àm ri Teachd

31. Specialist Species Advice

Comhairle Ghnèithean Speisealta

Rationale: The Local Biodiversity Groups are keen to undertake species related projects, and need specialist advice.

Project Proposals

31.1 Re-form the specialist group (STAG) to identify area-based citizen science projects that the Local Groups could carry out, and make the linkages with the national priority species lead partners. The group could also identify the gaps in our current knowledge and work up projects and funding bids to fill them.

Lead Partner: Highland Environment Forum

Supporting Partners: THC, SNH, RSPB, HBRG, BBCT, OU iSpot

Records Management

Rianachd Chlàran

Issues

Cùisean

The main repository and distributor of species data in Highland is managed by a single volunteer from Highland Biological Recording Group (HBRG). This is not sustainable. The main barrier to addressing this situation is a lack of national policy on managing and sharing biological data. Whilst attempts to help matters have been made in Highland, a consistent approach has not yet been agreed nationally.



The main problem is that there is no national strategy for dealing with biological records (and supporting the volunteers that collect it) at the local/ regional level. This means that there is no policy in large environmental organisations of what to do in terms of supporting local data hubs. This leads to a disjointed and ad hoc approach to managing data over the whole of Scotland.

Addressing biological data issues has been a priority since the first Highland BAP in 2006, however out of the Biodiversity Partnership and now the Highland Environment Forum only three of the members have financially supported the project. SNH is the main funder but not by any means the only user of data mobilised by this project. Many other Highland Environment Forum partners could benefit from using this high quality resource.



Update

Cunntas às Ùr

There is a lack of Scotland-wide and organisation-wide agreement on how best to manage this, which has led to lots of duplication in organisations and an inconsistent coverage of data hubs in Scotland. This is being tackled by the Scottish Biodiversity Information Forum, which has received funding for a further three years to try to address the key national data issues.

Highland Biological Database Project: This has been evolving over the last 10 years. It began as a way to mobilise biological records that were held at the Inverness Museum and Art Gallery, and continues to validate, verify and mobilise records collected in the Highlands to the NBN to make them accessible to all.

SNH and the Highland Biological Recording Group (HBRG) have been the main funders of this project until three years ago when The Highland Council, Trees for Life and the RSPB started contributing to this funding pot.

Now HBRG, working with colleagues in Argyll & Bute and the Western Isles have secured a joint funding package primarily from SNH until 2017. However, this will

maintain the status quo and is not a sustainable long-term solution. The new funding arrangement is one grant split between the Highland Biological Recording Group, Outer Hebrides Biological Recording and Lorn Natural History Group that covers Argyll. These three organisations will work together sharing expertise and maximising their outputs from the budget they have.



Assynt Community Archive Project: The Assynt Field Club recently completed a project to digitise and improve the management of thousands of biological records for the Assynt area.

Case Study

Sgrùdadh Cùise

Important Biodiversity Places

Àiteachan Bith-iomadachd Cudromach

The Caithness Biodiversity Group (CBG) wanted to list the important places in the county for biodiversity. One Group Member took this on as a project and spent a lot of time collecting, analysing and inputting data as well as working out how to display the information in a way that was accessible to the public.

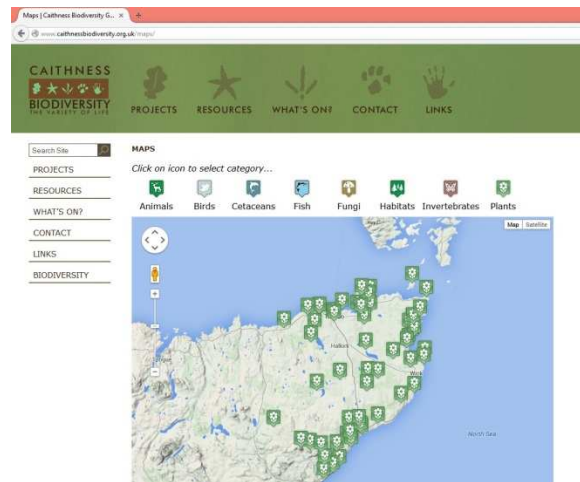
He started with the list of Sites of Special Scientific Interest (SSSIs) cited for biodiversity, and then held a series of

meetings with known local experts who each gave a list of places which are important in their field of study. Finally three public meetings were held in different areas of the county to find out which places the public valued for nature interest.

The information was edited down to a list of 240 places. A location by name and by Ordnance Survey map reference was given for each site. The biodiversity interest was described and a number indicating the importance of the site allocated – there were five categories ranging from “World or Europe-wide importance” to “valued by one or more members of the public”. Some time and care was taken over presentation of the information.



The final product was a set of Excel files containing the basic information described above plus some more technical information which makes the tables compatible with Geographic Information Systems (GIS) software. These files are now available on the Caithness Biodiversity Group website using Google Maps GIS facility.



One outcome of the project is that it is possible to say that the most highly rated places for nature in Caithness are Dunnet Head, The Flow Country, Dunbeath area, Reay area and Thurso river valley. The screenshot shows a map of the good wild plant sites in the county, as produced by the CBG website software. Clicking on a location will give pop-up information about the site name and what the site is valued for. Visit the website for further information².

² <http://www.caithnessbiodiversity.org.uk/maps/>

Future Action

Gnìomh san Àm ri Teachd

32. Highland Biological Database Project

Pròiseact Stòr-dàta Bith-iomadachd na Gàidhealtachd

Rationale: We await clarity on the national situation regarding the storage and management of biological records, but we lack adequate facilities in Highland.

Project Proposals

32.1 Once the national situation is clearer, secure funding for and run a project to create a Highland data management and biological volunteer co-ordination hub, building on the existing Highland Biological Database Project.

Lead Partner: Highland Biological Recording Group

Supporting Partners: SNH, THC, HEF partners

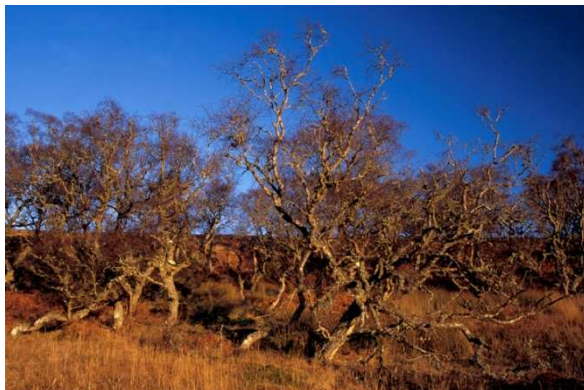
Data Capture

Glacadh Dàta

Issues

Cùisean

The collection of data is still limited to a single project or objective, and often not undertaken in ways that lend themselves to collation into broader biodiversity data collections. There is for example still no agreed way of capturing records from new developments such as wind farms.



We need more and better data collection, especially of pollinator populations. Unlike England and Wales, Scotland does not have a Pollinator Strategy.



Update

Cunntas às Ùr

Seashore Project: The Highland Seashore Project worked with local marine biologists and volunteers from Highland Biological Recording Group to develop an agreed method of submitting records. Records are submitted via an online recording form, verified by a local marine biologist and passed to the HBRG for addition to their biological records database and submission to the NBN.



Future Action

Gnìomh san Àm ri Teachd

33 Data Collection

Cruinneachadh Dàta

Rationale: Lots of species records are collected but not passed on by specialists and companies undertaking Environmental Impact Assessment surveys.

Project Proposals

33.1 Employ a volunteer or student within The Highland Council Development & Infrastructure Department to look into data collection from new developments and establish a protocol to ensure records are passed on to the National Biodiversity Network.

33.2 Lobby Scottish Government to produce a Pollinator Strategy, encourage the collection of more data on pollinator populations and feed this into management strategies and funding programmes.

Lead Partner: The Highland Council, Highland Environment Forum

Supporting Partners: SNH, HBRG

