



NBN Trust

# ANNUAL REPORT

2009/2010

# Introduction

The National Biodiversity Network is a partnership of organisations which are all committed to establishing agreed standards for the collection, collation and exchange of the UK's wildlife information and to improve public access to it. The NBN Trust is the body which promotes and facilitates these aims.

The NBN Trust's report for 2009/2010 focuses on how the NBN and the services it provides are being used and how these are being developed for the future.

## The aims of the NBN Trust are:

To enable people to find out about the wildlife of the UK, so that they can better appreciate, understand and conserve it.

To ensure that the Network will provide the most accessible, reliable and comprehensive source of biodiversity information, whether locally, regionally or nationally, to which people can turn.

To help individuals, and organisations of all kinds, contribute data and participate in the Network so that the information is the best available, keeping pace with changes in wildlife.

## The NBN Trust's vision for the NBN is:

Making all biological records freely and easily available to everyone.

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**NBN Trust**

# ANNUAL REPORT

# Chairman's Report

The NBN is now ten years old and has grown greatly both in scope and impact since its inception. So the time has come for the NBN to think very hard about what it wants to achieve during the next ten years.

Over recent meetings, the NBN's Board of Trustees, has devoted a lot of time to drawing up a strategic plan for the years 2010 to 2020, beginning, fittingly enough, in the Year of Biodiversity. We have also consulted with a large number of people and organisations who are part of the broad NBN partnership. I thought that it would, therefore, be helpful to outline now some of the main features of the strategy.

Our vision for the NBN is to make all biological records in the UK freely and easily available to everyone. Given that we have such a rich store of biological records within the UK this is no mean task. We have now passed our fifty millionth record, but there is still a long way to go before we can come close to realising our ambition. But sheer quantity of data is not the yardstick by which we wish the NBN to be judged; it is the usefulness of such data which is of paramount importance. We plan to increase the NBN's usefulness in five ways, and in each case we have set ourselves targets. First of all, we plan to increase the supply of good quality records to meet user needs. The records will have to be of good quality both in terms of the species identification, the locational information that they contain and in terms of the temporal information. Our target for the first five years is to have 50% of National Schemes and Societies regularly sharing high quality data through the NBN Gateway. On top of this we will bring out a new set of tools that will improve the way in which users of the NBN validate and verify biological records available through the Gateway.

Second, we plan to increase the effectiveness with which the NBN works with the research sector, public agencies, and others involved in land management. This will involve a lot of collaborative working, and also work by the NBN to provide training and guidance on how best to use biological records on

the Gateway. Our five-year target is to run at least three training courses a year to this end, as well as providing web services and tailor-made advice for our partners.

Third, we plan to ensure that the NBN keeps fully abreast of the latest technological developments so that users can access NBN records more easily, more quickly and in a way that more closely suits their individual needs. Amongst our five-year targets here, we intend to develop online recording; to make it possible to view records on mobile phones; and to make it possible for users to choose the quality of data that they view. We also intend to develop further the excellent Species Dictionary.

Fourth, we aim to improve the principles and standards which underpin the sharing of data through the NBN. Within the next five years the NBN will review all of its existing standards and ensure that they are fit for purpose; it will publish the criteria by which the quality of datasets on the Gateway can be assessed; and it will agree a list of sensitive species where access must be controlled to protect them.

Finally, the NBN plans to strengthen and develop the partnership that it has with the public and with organisations for whom biological records are important. We plan to increase the size of the membership over the next five years, and have developed a new Membership Scheme so that many more people and organisations will feel themselves to be active participants within the NBN.

To find out more about our ambitious strategy for the next ten years I hope that you will read the strategy document in full, which is to be found on the website with all our [publications](#). Clearly the national and global financial environment in which we shall be working will be tough, and we shall have to deliver exceptional value for money if our strategy is to be successful. I do hope that all of you will work with the NBN to ensure that, together, we do indeed deliver the strategy over the next ten years to the benefit of everyone and to the benefit of Britain's biodiversity.

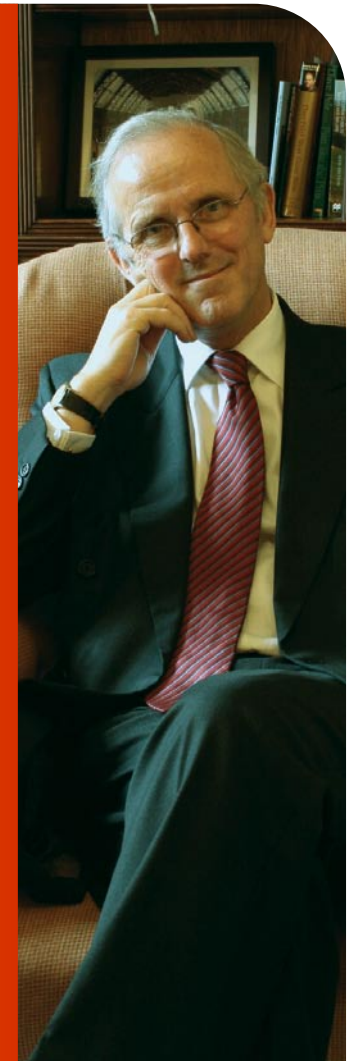


Neil Chalmers

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# Chief Executive's Report

From time to time, any organisation needs to draw breath and think about its future direction. Any walker will know the feeling; when the initial adrenaline rush that comes from setting out on a new route begins to fade, the eyes look down as you focus on avoiding the rocks and puddles, and the miles seem just a little longer. That is the time to find a handy place to sit down, admire the scenery and wildlife, get the map out, think about the distance already covered, and plan the best route forward. And that is what we have been doing; reviewing our progress to date and thinking hard about where we collectively want to go – and who we want to join us along the way.

In our tenth year, I suppose the most obvious sign of the progress we have made comes from the 50 million plus records that can now be viewed on the NBN Gateway, but a more solid achievement is the strong partnership that underlies that simple number. During the past ten years we have focussed on the recording element of the partnership; we have worked with national schemes and societies and local record centres to develop the standards that underpin data exchange. We have developed the technical glue that helps to hold the partnership together and achieve its prime purpose of making records accessible and available. The NBN Gateway, and its associated species dictionary, still leads the way amongst national systems for sharing biodiversity records. However, I think the dynamic partnership of independent organisations, that is the true representation of the NBN, is something we should all take pride in.

This work will continue, we will maintain the excellence of the technical infrastructure, we have to critically examine data flow through the network, and we have to clearly signpost the quality of our data records. The new validation tool will help in this respect as it will allow data collators to check the quality of records (see page 11). However, the next ten years will see a focus on use. For some time now the NBN technical team has been developing a suite of web services which deliver the NBN directly to a client web site. We have been successfully incorporating these web services into 'business tools' that meet specific business needs. Some of these new tools used in spatial planning and the agri-environment programme are the subject of specific articles in this report (See pages 6 & 8).

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Web services also drive public interest web sites such as [Scottish Natural Heritage's](#) site which brings information on Scotland's nature to the public. The public's participation in the NBN, both as recorders and users of our services, is important to us. The NBN is part of the [OPAL](#) (Open Air Laboratories) programme funded by the Big Lottery Fund. The OPAL programme has shown that recording by the general public can be successful if well supported. This reinforces the experience from the [Harlequin ladybird monitoring project](#), which was supported by the NBN, and has charted the spread of *Harmonia axyridis* across Great Britain. In the case of OPAL, the national surveys have been underpinned by excellent guides produced by the Field Studies Council. We will clearly identify data gathered by the general public and distinguish it from data originating from more highly skilled recorders so that users of the NBN will be able to choose if they wish to include all sources of data in their analyses.

As part of its contribution to OPAL, the NBN has developed a product called [Indicia](#) which is a programmer's tool that makes it much easier to develop an online recording site. We have used Indicia in a project called [RISC](#). More information on both of these projects can be found on pages 9 & 10.

The NBN is not all about the use of new Internet based technology; there is a vibrant system of data collection and collation that has maintained the importance of biological recording in these islands for many years. Volunteer recorders,

and the recording schemes and societies, are the mainstay of the NBN with over 70% of all records coming from this source. Without their efforts the NBN simply could not exist. Likewise, local record centres provide the localised service and support for recorders, data collation, dissemination and interpretation. To highlight this we have modified the way in which we list data providers on the NBN Gateway to show the logos of individual organisations to emphasise that the data are theirs; the NBN Gateway is the mail service delivering data, not the owner.

My congratulations to the local record centre community on the formation of the Association of Local Environmental Records Centres, [ALERC](#). Their Chairman, Adam Rowe is also the newest Trustee of the NBN Trust.

The main theme of our future strategy is use of the NBN. We know we cannot deliver this strategy alone, and we are confident our members and partners will work together to ensure the development of the network. The NBN is not static and we will be encouraging new members to join and be part of this collective enterprise to ensure its future success.

**Jim Munford**

# The NBN Gateway



At the core of the NBN is the Gateway. This is the internet portal which allows users to search and interrogate species data. Development of the Gateway to meet user need is now a key focus for the NBN, with the following overview highlighting the main advancements during 2009-10.

The Gateway now also provides a mechanism for alerting registered users to the presence of sensitive records without providing actual details of the record. Further details of these records may be given to appropriate users through the existing administration functionality. This enhancement to the handling of sensitive records by the Gateway allows the secure sharing and use of these records by appropriate users. With work also underway on the development of a new mapping interface, the implementation of these user driven enhancements will enable the Gateway to continue to provide an important function in the sharing and use of biological records into the future.

## Development

This year, the development of the NBN Gateway has focussed on implementing the requirements of last year's user review. This review highlighted the need to improve the profile of data providers, enhance the handling of sensitive records, improve the access administration pages, and allow the mapping and download of single datasets. Development over the year has focussed on new functionality to implement both the improvement of data provider profile and enhancement of sensitive record handling. This was completed and released as part of the new Gateway version 3.4 in March 2010. In addition, this new version incorporated 12 BAP priority habitats from England and Wales, displayed as a backdrop to species records on the interactive map, and the release of two new web services.

The release of the latest version of the NBN Gateway raised the profile of contributing organisations through the use of individual organisation logos, which are displayed more prominently in both the grid map and site reports pages. Organisations providing most records to these reports are now displayed at the top of the list of contributing datasets. Within the site reports page, organisations can also provide site descriptions including further information with links to their own website. Additionally, contributing organisations can now be acknowledged alongside the administering organisation within the dataset metadata. All of this makes it easier for a user to decide which datasets they want to view.

## Number of records

Over the last year, 69 organisations have contributed 192 new or updated datasets to the NBN Gateway, a third more than received the previous year. This higher submission of datasets resulted in an additional 17.5 million records on the NBN Gateway, increasing the total number of records by a half to over 50 million. Three quarters of the organisations contributed new datasets; helping to add a further 2,000 species and bringing the number of species represented on the NBN Gateway to over 40,000. Significant new species datasets included those provided by Butterfly Conservation, British Trust for Ornithology (BTO), Royal Society for the Protection of Birds (RSPB), People's Trust for Endangered Species, and Tachinid Recording Scheme (parasitic fly family).

The significant increase in the number of new records on the NBN Gateway was, in part, due to the addition of a number of large datasets. The two largest of these were provided by Butterfly Conservation, through the National Moth Recording Scheme (NMRS) and RSPB, through the 2009 Big Garden Birdwatch Survey. NMRS scheme contributed 7.5 million macro-moth records collated from three quarters of the UK vice-counties. RSPB provided public access to 2 million garden bird records. BTO also submitted bird records from two of their atlases on breeding and wintering birds. Throughout the year mobilisation of species records through local record centres also continued, with the number of records provided by 45 LRCs now exceeding 10 million.



# Using the NBN



Success can be measured in many ways, for example through financial gain or recognition. For the NBN, the main aim in charting its success is how well it is being used and how it is helping to improve business processes. This can take time to achieve, but over the last year the NBN has been used in many different ways and some examples are detailed below. Using, and use of, the NBN will be promoted and encouraged within more organisations into the future.

## Spatial Planning

Throughout 2009-10 work has continued in association with Greenspace Information for Greater London and Natural England on the development and roll-out of the planning screening toolkit to London boroughs and beyond. This work is now entering the final phase. Several changes to the pilot toolset have been made, and preparations for operational deployment to several London boroughs are now under way.

Recent changes to the toolset include the ability to carry out screenings in a batch, to account for multiple planning factors and prepare for the integration with ALGE's (Association of Local Government Ecologists) Biodiversity Toolkit.

The final report from this work will be delivered in 2010. The work has attracted a lot of interest from other parts of England and the wider UK and we have been involved in demonstration and promotion activities in Wales and Scotland. Every audience, which has seen it, has provided positive feedback.

In early 2010, work started with local record centres in the North West of England with a view to helping them better engage with their partners and provide more standard products. Whilst this work is still at an early stage, it is hoped that this pilot study area can be used to investigate further the potential and opportunities for rolling out the planning screening toolset to a wider audience, outside of London.

There are, however, significant revenue and cash flow issues and implications, which it is hoped can be addressed in the North West Pilot area. The planning screening tools need to support, rather than undermine the viability of existing data and information flows and provisions. Ensuring that the screening tool will work within a viable local record centre framework is essential to its successful implementation within local authorities and beyond. If, or when, a pilot implementation is established in the North West of England, consideration will again be given as to how best to engage and implement within the Planning Portal and Planning 360 framework.

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## Biodiversity Screening

### Forestry Commission

This year saw the re-opening of discussions and engagement with the Forestry Commission. A Defra-sponsored project around how best the Forestry Commission could engage with the NBN partners in Wales saw close working with the respective LRCs to identify further products and opportunities for NBN Gateway / LRC derived data for various FC functions. With the LRCs already having contractual relationships in place to deliver specific data products there was a solid base to build on.

We identified types of data which could be drawn from the NBN Gateway and made available to a wide FC audience using a web-based mapping application. We also identified more specific detailed information for collation by the LRCs, which would be available for activities by a discrete group of FC staff using a desktop Geographic Information System (GIS) application.

This project also provided a way for NBN Trust staff to better engage with the Forestry Commission in England and Scotland. Following some initial user needs analysis, it has been possible to provide FC staff across the UK, with publicly downloadable data from the NBN Gateway for inclusion in their own internal web-based systems. Efforts have concentrated initially on the provision of UK BAP list species, with data provided as GIS layers.

The next stage of the project is to try to increase the volume and resolution of data available through this mechanism by registering FC countries as users on the Gateway and applying for more detailed access to data. A parallel work stream to secure further funding under Service Level Agreements in Wales is underway. This should result in an increase in total funding for Welsh LRCs from Forestry Commission in Wales.

### Environment Agency

Work has continued with Environment Agency to get data from the NBN Gateway into their licensing and permitting work flows. This work is ongoing, but should hopefully see EA making use of NBN Gateway web services later in 2010.



## Web services

The use of NBN web services has steadily increased over this year with 27 professional organisations and voluntary recording schemes now using them to view species distribution maps or data directly within their own websites or applications. This increase in the use of web services is reflected by the higher demand placed on the two dedicated web servers used to process the web service requests. This year, two examples of where web services have been used for the first time to view information on species' distributions are within moth recording, and the provision of information on UK non-native species.

Following this year's submission of 7.5 million National Moth Recording Scheme records to the NBN Gateway, NBN web services are now used to display the national distribution of 1000 moth species through the [moths count web page](#) on Butterfly Conservation's website, and also the species pages of the UK Moths' website. Additionally, web services are being increasingly employed to display local moth records. A good example of this is provided by Bedfordshire Natural History Society, which in partnership with Bedfordshire and Luton Biodiversity Recording and Monitoring centre, uses NBN web services to display 47,000 local moth records within their website.



Provision of information on UK non-native species, co-ordinated by the Non Native Species Secretariat, is provided through the [GB Non Native Species Information Portal](#). Within this portal, by incorporating the national species distribution map, NBN web services are used to contribute to species information for twenty invasive species. The use of these web services allows automatic updates of the species' distribution map following additional species records, from over 400 species datasets, submitted to the NBN Gateway.

With the employment of a full time developer, this year has seen improvement to both the existing NBN web services as well as the development of new web services. This continued improvement of NBN web services will enable the NBN to continue to provide an effective and flexible method for the sharing and use of biological records, as exemplified this year through the display of moth and UK non-native species information.

The NBN Trust itself took full advantage of web services last year for International Biodiversity Day on 22nd May. The theme for this annual event was non-native species and web services were used to create an online exhibition for 10 of the main invaders. In conjunction with [ARKive](#) and the Non Native Species Secretariat, images, video clips, fact sheets and maps were displayed for each species, which really brought the website to life. This is something that will be used in the future and a similar idea is already being utilised for the RISC project (see page 9).



## Habitats

The ability to display habitat data will continue to be developed during the coming year, but during the reporting period the advancements below have already taken place.

The range of habitat data that can be viewed through the interactive mapper on the Gateway has been extended by including 13 Biodiversity Action Plan Priority Habitat layers (7 in England, 6 in Wales). This includes a range of different types of terrestrial habitat from Maritime Cliffs to Upland Heaths. Each of these layers can be switched on to provide a backdrop for species records which may assist in revealing patterns of association between habitats and species. These data are also accessible via web services, giving the potential for this information to be used in a wide variety of tools and applications. For example, a user might use these web services to report on the presence of priority habitats within a pre-defined area, possibly as part of the process of screening Planning Applications. It is hoped that some tools will be developed this year to demonstrate the value of this “cookie-cutter” service for habitat data and further extend the number of layers available.

Many potential users will be consulted in the coming year in order to identify how the NBN can best provide improved access to habitat data. Some users would welcome a UK wide service to enable them to more easily download complete habitat datasets, ranging from polygon data in GIS format to quadrat records. It is also hoped that a discovery tool will be developed for browsing through catalogues of existing habitat datasets, and providing contact details where those data are not available through the Gateway.

Finally, the NBN Habitats dictionary will be reinvigorated and updated, and better integrated with the functionality described above.

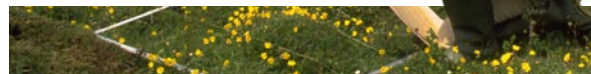
In summary it is hoped that the processes of discovery, exploration and use of habitat data will be improved, and synergies between species, habitat and site data will be created.

## Agri-environment screening with Natural England

2009-2010 was another important year for the NBN Trust’s engagement with Natural England on the agri-environment side of the business. The prototype tool, which draws data from the NBN Gateway to support Agri-environment assessment and management activities by Natural England staff and their agents, has been piloted with different audiences across England.

The work is now at the final evaluation stage. Decisions need to be taken around the value the tool provides and how it could be implemented as an operational system within England.

With the advent of the publication of the supporting science, *Managing for species: Integrating the needs of England’s priority species into habitat management*, NBN Trust staff are now engaged with the promotion and dissemination of lessons learned in Wales and Scotland.



## Internationally

The GBIF (Global Biodiversity Information Facility) Data Portal launched in 2007, as a proof of the concept that a worldwide-distributed network of biodiversity data publishers could be linked together and made searchable from a single point of access. The Portal allows complex searches on any taxon, country or dataset, or on a combination of these parameters. It works to the same premise as the NBN, that the data providers share their data, in this case globally, whilst retaining full ownership of them. Indeed, the NBN operates as the UK node for GBIF, with UK data making up about 15% of the records.

GBIF maintains an index of 111 datasets published through the NBN, with a total of 16,873,360 occurrence records indexed, out of which 16,840,058 are georeferenced. This number will soon increase dramatically to around 26 million. The total number of records that GBIF had indexed on March 31st 2010 was 199,968,845.

In 2009, UK visitors were the second strongest group with the number of site visits at 59,254 after the U.S. with 314,747 and before Germany, Spain, and France.

Since 2008, a series of critical improvements to the existing Portal have been made in response to user needs. For example, searches by altitude, depth and images are now integrated within the existing search filter, amongst other improvements.

For GBIF in 2010 there is a greater focus on building participant capacity for uptake and implementation, and on delivering technologies for participant access and connectivity. In addition, it provides for the inclusion of new biodiversity data and information types and analyses, as well as significant increases in data volumes.

# Defra contract



Many of the projects discussed under the “Using the NBN” section are funded through the NBN Trust’s contract with Defra. The current funding runs from 2008 – 2011 with many projects still in progress. The following work has, however, been completed during the reporting period.

## Seminar Programme

In order for the NBN to be used by as wide an audience as possible it is vital that potential users understand exactly what it can offer. To that end, the NBN has started a series of seminars to inform and engage both current and new audiences.

## Technical Seminar

On the 19th November 2009, the NBN convened a technical seminar. The idea behind it was to share news about new developments with the NBN technical community. For this first seminar invitations were selective and targeted at those organisations that were already actively sharing data through the NBN Gateway. The day focused on three areas: The emerging NBN Validator Tool (see page 11); the potential of Drupal (a content management system that greatly eases the task of managing a website) and Scratchpads (a Drupal implementation) for hosting biodiversity websites across the UK; and Indicia (see page 10 for more details)

Overall, the day was very well received and there is definitely an appetite to have further meetings of this kind since it allows valuable two way discussions. For instance, a number of pertinent points were raised in terms of the Validator’s functionality that will help inform how it develops from beta to release. As the NBN moves from development to roll-out and further adoption, much closer and frequent engagement is needed with the general technical community and the intention is to have further technical seminars in the coming year.



## Ecologists’ Seminar

Held in March, this successful seminar was set up to discuss how the NBN can better serve the Ecological Consultancy sector. There are already a number of consultants using the NBN, but opening up to a wider audience was the main aim here; to really understand the user’s requirements and how the NBN can better serve ecological consultants. With presentations from the NBN, a local record centre and RSPB, the discussions on the day have already influenced development work to address some of the issues highlighted during the seminar.

The NBN intends to hold further seminars in the future to engage and inform more of the audiences which are critical to ensuring full operational use of the NBN.

## Recording Invasive Species Counts (RISC)

Developed under the ‘engagement co-ordination’ theme, the RISC project aims to gain valuable data on the distribution and spread of six invasive non-native species. It is building on the success of the Harlequin Ladybird project, the success of which, has been primarily due to the involvement of the public and volunteers in registering their sightings.

The project, which is jointly managed by the NBN, Biological Records Centre at the Centre for Ecology and Hydrology, Anglia Ruskin University and the GB Non Native Species Secretariat launched on 22nd March at the Linnean Society of London. The project caught the imagination of the media with some excellent coverage in the press and on TV and radio.

A key aspect of RISC has been to involve national societies and recording schemes in the project and establish with them the suitability of the six chosen species: Muntjac, Water primrose, Chinese Mitten Crab, Tree-of-Heaven, American Skunk Cabbage and Zebra Mussel. The People’s Trust for Endangered Species, the Mammal Society, the Marine Biological Association, the Conchological Society and the Botanical Society of the British Isles are all pivotal to the success of the project.

To ensure that high quality records appear on the NBN Gateway, recorders are asked to upload a photograph of their sighting, which will be checked and verified by the relevant society.

The project utilises Indicia (see page 10) for the online recording aspect and all of the information is housed on the [Non Native Species Secretariat](#) website. On the site there is a wealth of supporting material available for the target species including a link to the NBN Gateway for a distribution map and aids for identification and photographs.

It is hoped that this sort of engagement with the public is an area that can be further developed in the future.



# Tools and Resources



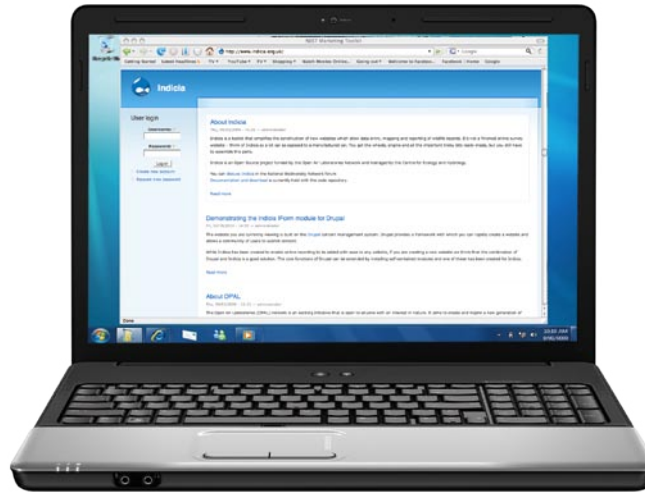
The Gateway may be the core of the NBN's business, but the provision and sharing of tools and resources has always been a key factor in the success of the Network. Here are some of the newest resources that have been developed over the last year.

## Indicia and online recording

Online recording is becoming a major part of gaining biological records in the UK. It usually comprises a website that lets users contribute their wildlife observations to a database - online. Through the OPAL (Open Air Laboratories) project an online recording system called Indicia has been developed. Indicia is a toolkit that simplifies the construction of new websites which allow data entry, mapping and reporting of wildlife records. It's not a finished online survey website, it's a toolkit that makes the development of online recording websites simple – it's more of a kit car as opposed to a manufactured car. The wheels, engine and all the important tricky bits are ready-made, but the parts still have to be assembled and body work attached.

Indicia is a bit like Google Maps in that there is a programmer's interface which makes it simple to incorporate mapping functionality into a website. It provides a set of services, tools and examples that can be dropped into a website to provide rich online recording functionality. Example sites will be developed using Indicia which can be used to build new sites, but it will ultimately give website designers the power to do what they want, more quickly and more reliably than if they started from scratch.

Indicia is entirely focused on data capture rather than subsequent analysis. So, the mapping and reporting facilities are targeted at making the websites more interesting for users, so they come back and contribute more records.



## Users

There will potentially be three types of Indicia user. Firstly, the people who contribute wildlife observations. This includes anyone, from members of the general public or schoolchildren through to professional surveyors and scheme members.

The next group of users is the people who will host the websites being used for data capture. These include national recording schemes, local record centres and wildlife charities. Fundamentally, these are organisations that want to build up their store of biodiversity information by making it simpler for people to contribute wildlife observations.

Finally there is the team of people who provide the core services required by an online recording website. Things like managing the lists of species that are available to record, storing the actual data that is captured and so forth.

Although it is early days for the project, it is moving forward very quickly. This means that some bugs are still being resolved, but it is already possible to build data entry, browsing and reporting pages using Indicia.

## The following organisations or projects have already started to use Indicia:

- RISC (Recording Invasive Species Counts) see page 9 for more details on this project
- BBC Breathing Places – using Indicia for an online ladybird survey
- Marinelife – for the North East Cetaceans Project
- Luxembourg Common Birds Monitoring – this is using Indicia to record bird walks along transects.
- Paris Natural History Museum – they are currently developing a recording form for recording pollinators as they visit flowers, which will go live this summer.





### Data Validator and Verification Tool

Over the last few years the NBN has successfully mobilised an ever increasing number of biological records for their use in decision making for conservation, education, research and other public-benefit purposes. This is exemplified by the availability of over 50 million records supplied by more than 100 organisations through the NBN Gateway. Increasing use of this wealth of data requires that the data are of high quality, an issue that has become increasingly important within the NBN, but until now one that has been difficult to achieve given constraints imposed by limited time and expertise. The development of the Data Validation and Verification Tool by tackling these limitations aims to provide a desktop tool that, by enhancing current record management practices, will result in improvements to overall data quality within the NBN and the NBN Gateway.

This tool, due to be released in summer 2010, provides a method for quick automated checking of records picking up data entry errors in spreadsheet, text files and recording software packages. Following the screening out of invalid records the tool provides further methods to check records against both geographic and expert derived rules. Examples of these rules include testing species' records against site boundaries, species' distribution and phenology. Incorrectly identified records can be singled out for further checks and exclusion where appropriate. The tool additionally assigns records to the appropriate vice-county and checks NBN exchange format compliance prior to submission of datasets to the NBN Gateway.

In conjunction with the development of this Data Validation and Verification Tool, mechanisms have been developed to simplify the creation and distribution of the verification rules throughout the NBN. This tool, using an increasing source of accessible expert derived rules, will provide an important contribution to the improvement of data quality both at a national and local level, improving data quality on the NBN Gateway and within the NBN as a whole.

### The Darwin Guide to Recording Wildlife

The NBN works with hundreds of experts in the many different areas of biodiversity. Through the Trust's contract with Defra, over the last year it has carried out a specific project to engage the public in biological recording. More information can be found on page 9, but the project described here specifically set out to encourage those with an interest in wildlife, especially youngsters, to get more actively involved.

The Darwin Guide to Recording Wildlife was launched at the NBN Conference in 2009, four days before the 150th anniversary of the publication of the Origin of Species and also to mark the year of Darwin's bicentenary.

The challenge for all of us is to ensure there are enough enthusiasts, particularly the younger generation, who will carry the tradition of biological recording on in the future, and the aim of this guide is to stimulate interest and motivate people to do just that.

The guide, co-authored by Randal Keynes, great-great grandson of Charles Darwin, explains how Darwin himself observed wildlife and used his own and others' records in his work. With the main section written by Trevor James, NBN Trust



Advisor and Chairman of the National Federation for Biological Recording, the guide then explains how to become involved, what to look for and the basics of how to record.

To date, over 1000 Guides have been distributed to UK secondary schools, science learning centres, The Wildlife Trusts, The Field Studies Council, national schemes & societies, local record centres and individuals.

The Guide can be downloaded or ordered from the NBN website.

“ The challenge for all of us is to ensure there are enough enthusiasts, particularly the younger generation, who will carry the tradition of biological recording on in the future, and the aim of this guide is to stimulate interest and motivate people to do just that. ”



# The Future



The developments within the NBN over the last year have possibly been the most significant in its story to date. Many years have been spent establishing the way forward for the NBN, the shape it would take and the technical architecture needed to make it work. Now, organisations within the Network are using it within their business, using it as part of their decision making processes. The NBN is being used.



## Statements of Intent

In summer 2007 the development of partner Statements of Intent (SOI) commenced. The purpose of the statements is to outline partners' intentions with respect to in-house NBN-related activities and expectations and resource requirements they may have for the Trust officers and partnership as a whole. From the Trust's perspective they help formulate the strategic vision, provide information on effort being expended within the partners and assist with planning of the Trust officers' work.

SOIs have been completed by all the major partners of the NBN. With the establishment of the Association of Local Environmental Records Centres (ALERC) and increasing engagement with the National Federation for Biological Recording (NFBR), 2010-2011 should see the NBN Trust establish SOIs for these types of organisations.

# Financial Review

The accounts have been prepared under the historical cost convention and in accordance with the Financial Standard for Smaller Entities (effective January 2007) and Charities SORP 2005.

Each year, for the purposes of the accounts, every support organisation produces a schedule of costs incurred in carrying out these services. These services are costed by the support organisation on the basis of an equitable sharing of its costs, or, where such figures are not readily available, at standard charge-out rates. These figures are shown as intangible income under "Donated services and facilities" (see note 10). We received intangible income, mainly in the form of staff resources and associated costs expended on NBN projects. The intangible income figures also include work undertaken by partners that have been funded by Defra through BioD Services Ltd (see below).

## Reserves policy

The Board of Trustees, through its Finance and Management Committee (FMC), has established a policy whereby a 'free reserve' of £100,000 is maintained. At this level, the Finance and Management Committee (FMC) of the National Biodiversity Network Trust considers that it would be able to continue the current activities of the charity should there be a significant drop in funding or loss of in kind contributions as identified by the risk register (see below). The reserves are currently held in a Charities Aid Foundation (CAF) Gold investment account with instant access.

## Risk register

The FMC has reviewed the major risks to the charity, and has systems designed to manage them. The main internal financial risks are minimised through procedures for delegation and appropriate authorisation of all transactions and projects and by ensuring consistent quality for all the charity's operations. The FMC review the risks at every meeting. Risks related to external funding agreements have their own risk management policy

## National Biodiversity Network Trust

Statement of Financial Activities (incorporating the Income and Expenditure Account) for the year to 31 March 2010

	Notes	2010 Unrestricted Funds £	2009 Unrestricted Funds £
<b>Incoming Resources:</b>			
Subscriptions		176150	170003
Donations and grants		129582	177006
Miscellaneous income		1841	16
Interest received		290	5655
Donated Services and Facilities	(9)	2077731	2142531
<b>Total Incoming Resources</b>		<b>2385594</b>	<b>2495211</b>
<b>Resources Expended:</b>			
Costs of generating funds	(1)	-	-
<b>Charitable Expenditure:</b>			
Cost of activities in furtherance of the charity's objects	(2)	2249674	2205182
Management and administration	(3)	132892	264141
<b>Total Resources Expended</b>		<b>2382566</b>	<b>2469323</b>
Net incoming resources for the year		3028	25888
Balance at 1 April 2009		146427	120539
<b>Balance at 31 March 2010</b>		<b>149455</b>	<b>146427</b>

Balance Sheet as at 31 March 2010

	Notes	2010 £	2009 £
<b>Fixed Assets:</b>			
Tangible Assets	(4)	-	-
<b>Current Assets:</b>			
Debtors and prepayments	(5)	27506	38241
Cash at bank and in hand		210015	171260
		<b>237521</b>	<b>209501</b>
<b>Creditors:</b>			
Amounts falling due within one year	(6)	88066	63074
Net Current Assets		149455	146427
		<b>149455</b>	<b>146427</b>
<b>Capital and Reserves</b>			
General Fund		149455	146427

## Notes

	2010 £	2009 £
<b>1. Costs of Generating Funds</b>		
Staff costs	-	-
<b>2. Cost of activities in furtherance of The Charity's Objects</b>		
Staff costs (see note 9)	2077731	2142531
Project Staff Costs	83067	-
Web site development	5949	21170
Promotional materials	1520	6658
Opal Project costs	81407	34823
<b>Total</b>	<b>2249674</b>	<b>2205182</b>

### 3. Management and Administration

Staff costs	55357	164642
Insurance	982	910
Printing, postage and stationery	24752	20798
Secretariat office expenses	8790	9423
Meeting and conference expenses	12383	11773
Legal and Consultancy fees	22032	49996
Accountancy	2232	2070
Training Costs	945	310
Sundry	501	547
Travelling expenses	3509	2903
Trustees travel and subsistence	1409	769
<b>Total</b>	<b>132892</b>	<b>264141</b>

	2010 £	2009 £
<b>4. Tangible Fixed Assets <i>Software</i></b>		
Cost: At 1 April 2009		1107
Additions		-
At 31 March 2010	1107	
Depreciation: At 1 April 2009		1107
Charge for year		-
At 31 March 2010	1107	
Net Book Values: At 31 March 2009		-
At 31 March 2010	-	

### 5. Debtors and Prepayments

Trade Debtors	25127	29930
Prepayments	2379	8311
<b>Total</b>	<b>27506</b>	<b>38241</b>

### 6. Creditors: Amounts falling due within one year

Trade Creditors	34673	36004
Other Creditors	53393	27070
<b>Total</b>	<b>88066</b>	<b>63074</b>

### 7. Called up Share Capital

The company is limited by guarantee.

	2010 £	2009 £
<b>8. Payments to Trustees for Expenses</b>		
Four trustees were reimbursed for their travel and subsistence expenditure in the year. This is referred to in Management and Administration Note (3).		
No trustee received any salary during the year.		
Trustees travel and subsistence expenses reimbursed.	1409	769

### 9. Transactions with Members and Associated Organisations

The Trust has been billed by some of its members for various services supplied as follows:

#### The Wildlife Trusts

Staff Costs and Overheads	-	14331
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#### Natural England

Staff Costs	27548	35588
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#### Natural Environment Research Council/ Centre for Ecology and Hydrology

Staff Costs and Overheads	81407	34823
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#### Joint Nature Conservation Committee

Staff Costs and Overheads	39697	61386
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#### Scottish Natural Heritage

Staff Costs	15000	15000
<b>Total</b>	<b>163652</b>	<b>161128</b>

## Notes

	2010 £	2009 £
The Trust received donated services and facilities, mainly in the form of staff, contributing to Trust objectives. The member organisations provided services costed by themselves, using criteria provided by Trustees as follows:		
Environment Agency	18830	9901
Natural History Museum	32060	36943
RSPB	71072	39550
Scottish Natural Heritage	163043	198187
Countryside Council for Wales	256875	225251
Joint Nature Conservation Committee	97000	101000
Centre for Ecology and Hydrology	446109	258000
Natural England	703036	680000
Defra	80000	285000
Defra with Natural England	-	92215
Defra with BioD	160500	216484
Marine Biological Association	46500	-
British Lichen Society	2156	-
Greenspace Information for Greater London	550	-
<b>Total</b>	<b>2077731</b>	<b>2142531</b>

## BioD Services Ltd

BioD Services Ltd was set up to help the Trust develop the Network through contractual work and was incorporated as a company limited by shares on 13 March, 2001.

The Articles of Association allow the company to transfer profits or income to the NBN Trust as gift aid. BioD Services Ltd will be donating over £38,000 to the charity from this year's profits, which will be used by the Trust to buy extra services to advance the work of the charity.

The fees billed are mainly attributable to the one principal

activity of the company and consist of invoiced sales of services to the Department of the environment, food and rural affairs. BioD Services Ltd also sells Ordnance Survey map tiles for use in Recorder 2002 and Recorder 6 on behalf of the NBN Trust. The financial information below shows the total income against expenditure.

More detailed financial statements are available for either the NBN Trust accounts or BioD Services Ltd. Please contact the NBN Trust Company Secretary on 0115 959 6434 for your copy.

Detailed Trading and Profit and Loss Account for the year ended 31 March 2010

	2010 £	2009 £
Fees billed and project contribution	202000	160900
<b>Less Project Costs:</b>		
Gateway	49678	35000
Mobilising Lichen Records	-	25800
Staff Salary	48920	45929
Consultancy Fees	-	-
General Sub Contract Work	23055	14869
<b>Total</b>	<b>121653</b>	<b>121598</b>
<b>Surplus on Projects</b>	<b>80347</b>	<b>39302</b>

### Profit on OS Map tile UK CD sets

Sales	164	223
Less Cost of Sales	48	103
<b>Total</b>	<b>116</b>	<b>120</b>

	2010 £	2009 £
<b>Other Income</b>		
Bank Interest	32	583
<b>Total</b>	<b>80495</b>	<b>40005</b>
<b>Less Overheads:</b>		
Website costs (Defra requirements)	4318	3364
Postage, Stationery and Printing	478	901
Travel and subsistence	13676	13189
Meeting Expenses	2400	1685
Accountancy	900	850
Legal and professional	45	50
Bank charges	289	223
Sundry	1247	1262
Depreciation	2373	2434
<b>Total</b>	<b>25726</b>	<b>23958</b>
<b>Surplus for the year</b>	<b>54769</b>	<b>16047</b>

# Administrative Information

The National Biodiversity Network Trust is a charitable company limited by guarantee, incorporated on 3rd April 2000 and registered as a charity on 25th August 2000.

The company was set up under a Memorandum of Association, which established the objectives and powers of the charitable company and is governed under its Articles of Association.

Under those articles, one third of the members of the Board of Trustees must retire at the AGM and may be re-appointed. The Board of Trustees is made up of fourteen people nominated from each member organisation. They meet three times a year and their AGM is in July. No Trustee may serve more than ten years in office in total without the approval of the members given by ordinary resolution.



**NBN Trust**

NBN Trust  
3-5 High Pavement  
Lace Market  
Nottingham  
NG1 1HF

## Directors/Trustees for the year ended 31st March 2010

Sir Neil Chalmers *Chairman*

Andrew Wood *Treasurer*

Mark Bailey

Dr Peter Carey

Dr Mark Diamond

Paul Harding MBE

Hugh Lucas – *appointed 14 July 2009*

Alan McKirdy

Dr David Parker

Dr Anne Powell OBE

Adam Rowe – *appointed 14 July 2009*

Professor Philip Rainbow

Deryck Steer – *resigned 21 August 2009*

Andrew Stott – *appointed 14 July 2009,  
resigned 11 March 2010*

Dr Johannes Vogel

Dr Barry Wyatt

## Other information

**Chairman:** Sir Neil Chalmers

**Chief Executive:** Dr James Munford

**Company Secretary:** Mrs Joanne Purdy

**Registered Office:** 3-5 High Pavement  
Lace Market  
Nottingham  
NG1 1HF

**Charity Number:** 1082163

**Company Number:** 3963387

**Auditors:** Barker Maule & Co.  
27 & 33 Castle Gate  
Newark  
Nottinghamshire  
NG24 1BA

**Bankers:** NatWest  
51 Market Place  
Long Eaton  
Nottinghamshire  
NG10 1JP

**Solicitors:** Manches LLP  
9400 Garsington Road  
Oxford Business Park  
Oxford  
OX4 2HN

For more information on the National Biodiversity Network and to search the NBN Gateway visit: [www.nbn.org.uk](http://www.nbn.org.uk)

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