



BRISC

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during newt egg searches, and the author had excellent views of the distinctive pale neck collar as it swam into the pond, confirming the identification. The pond in which the grass snake was recorded was far from any population centres, and located at the border of semi-natural mixed woodland and agricultural land, meaning it cannot be readily explained as an escaped pet, and is likely to be wild or feral. It is interesting to note that grass snakes had previously been reported where the author made his record in 2010, but had been dismissed out of hand without further investigation as they were not believed to be present in Scotland.

This find encouraged Caledonian Conservation Ltd. to research other grass snake records in Scotland, and an outline of results are provided here. This research provides a useful case study of biological recording, which is the focus of this article.



Grass Snake *Natrix natrix helvetica* © John Wilkinson

GRASS SNAKES (*NATRIX NATRIX*) IN SCOTLAND

By Chris Cathrine

Background

It is generally believed that wild grass snakes (*Natrix natrix* – Figure 1) do not occur in Scotland, although they are sparsely distributed in both northern Cumbria and Northumberland. While there are a number of records in Scotland, grass snakes were popular pets during the 20th Century, and records from the Central Belt have been attributed to escaped pets.

However, while undertaking great crested newt (*Triturus cristatus*) surveys on behalf of Amphibian and Reptile Conservation Trust (ARC) as part of a predictive habitat modelling project on 10 May 2010, the author recorded a grass snake in Dumfries & Galloway. The grass snake was flushed

Analysis of records

Original grass snake record data were gathered from as many sources as possible, including the National Biodiversity Network (NBN), Scottish Natural Heritage (SNH), Amphibian & Reptile Conservation Trust (ARC) and other charities, Biological Records Centre (BRC – including Arnold's 1995 atlas data), local records centres, local authorities, Amphibian & Reptile Groups, and individuals.

These data were then plotted in ArcGIS 10 (Figure 2 p.4), and thoroughly verified. Verification involved checking grid references, notes, descriptions, habitat, context (with other Scottish and English grass snake records), local knowledge

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Chairman's Column

Spring is certainly in the air and the blackthorn is in bloom as are the primroses. The birds are creating a racket early in the morning and all memories of the two really cold winters we had have receded. On the subject of cold winters, a few weeks ago I was disabused of the erroneous fact that midge larvae get killed in very cold winters. They do not, I was told by the midge expert. I also found out that there was a midge forecast website see <http://2010.midgeforecast.co.uk> I should say that this is a commercial site promoting a midge repellent, and BRISC is not promoting that. Wear a midge net, it is the only sure-fire way to protect yourself.

The midge expert was Dr Alison Blackwell, who was giving a talk on midges in Scotland at the Tayside Recorders Conference in Dundee. It was really interesting, especially the commercial interest in midges now that they could potentially be carriers of new domestic livestock diseases that have appeared in England (and were eradicated). The conference itself was very well attended with over 40 delegates and a great hubbub of chatter in-between the talks and at the breaks. These types of get together are very important to allow recorders across all groups to catch up with what everyone is doing. The fact it is done on a shoestring and keeps going is a credit to Cath Lloyd, the Tayside Biodiversity Officer, and the organisations that host the conference as it moves round Tayside annually.

The first BRISC Committee meeting 2012 was held at the beginning of March and as ever there was plenty to discuss, Scottish Biodiversity Information Forum being a major topic but I will return to that later in this article. The future of BRISC was briefly discussed and it was agreed that until we find out what SBIF is going to do there is no point deciding what BRISC's future outputs should be, as one way or another they will be shaped by SBIF. The Bursaries are going well with all the five candidates confirmed, the committee agreed that this was a very important output from BRISC and should continue as long as we can fund it. The coming conference down in Dumfries was discussed and it will be on the 6 October so get the date in your diary! Talking of diaries one of the other discussions was about the lack of a single site where you can find out when recording organisations or groups are having their AGMs or Spring/Autumn meetings. Andy Wakelin, our website manager, bravely volunteered to collate the AGMs of all these organisations on one of our webpages. This will hopefully lead to minimising the number of clashes that always occur when meetings are being arranged.

SBIF

There is an article talking about the process in this edition of *Recorder News* but I wanted to discuss the broader issues around the creation of SBIF and what it can realistically achieve. There is a great deal of skepticism about what SBIF could do as many people are "experienced" enough to have heard of similar initiatives over the years. As I have said previously I am optimistic that SBIF can deliver positive action for biological recording and data management in Scotland. How much it can deliver and also how much it needs to, is a different matter. I think we need to rein in any large expectations and be content with a few key projects being developed and starting to be delivered. Starting small and building on successes: I think this approach is realistic in the current financial situation and can also be sustainable in the long term.

In my twelve years as a Biodiversity Officer I have been involved at the national level in a hugely complex and bureaucratic system of the UKBAP and Scottish Biodiversity Strategy. Both of these have delivered quite a few actions and projects on the ground but have these been the right ones? No-one can answer that question because of the complexity of biodiversity and also the lack of clarity about what the UKBAP and SBS was going to/should achieve in the short term. Some thought (or hoped) it could lead to a paradigm shift in land management and nature conservation in Scotland, although it had insufficient funding and buy-in at the highest levels to do so. So they are disappointed. However, if it was a mechanism to deliver lots of projects and activities for species, habitats and public awareness/engagement, then it has succeeded.

The point I want to make with this is that creating a complex and bureaucratic plan with no funding or leverage to achieve it has been done before and has left many people disappointed, nay disillusioned or even apathetic. I feel very strongly that whatever SBIF agrees to should be from the top of a prioritised list (not the whole list), have broad agreement, and be fundable and deliverable in the short term. In my view SBIF needs to get the ball rolling by delivering smallish but national projects and building on these in the medium to long term. I hope to see you at the SBIF pre-Forum discussion meeting in Stirling in May to discuss just what these projects could be.

Jonathan Willet. March 2011.

18 June 2012 is copy deadline for the next issue of *BRISC Recorder News*. All material - preferably in electronic format - to anne-marie@smout.org or Postal address as per 'BRISC Contacts' on this page.



Editorial

You can now find BRISC on Facebook, thanks to our excellent secretary, Louisa Maddison. My grandchildren tell me that it is via these social networking services that today's people communicate, so hopefully lots of people will find us on www.facebook.com/BrisceScotland

The very warmweather in much of March has brought spring on very fast., and there is much to be investigated and recorded on the wildlife front. I am most indebted to Chris Cathrine for his excellent article on grass snakes. I only know this very fine beast from Denmark, but it would be wonderful to find it here in Scotland. Now is the time to go out and look, and if you encounter a tick on the way, the Tick Recording Scheme will be pleased to have it!

The bumblebees are already out in full force, and we have recorded five species of bumblebees in March this year, which is a record for us. We have seen three species of butterflies on the wing, and the early moth species are about too. There were 15 individuals in my trap of four species last night. Great! Not much compared to what people get down south, but I should be overwhelmed by the 1193 individuals of 26 species in the trap, as someone reported from the Malvern Hills a few days ago. If you have a trap, please use it for National Moth night. See the Events diary for details.

April is a little too early for damsel and dragonflies up here, but do take note of Jonathan's article on the National Dragonfly atlas and the need to fill in gaps this year.

The Natural Talent project has been a great success, and BTCV is keen to get funding to continue with this kind of training. Good luck to BTCV and John McFarlane with this.

Anne-Marie Smout

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and provenance/ recorder. In total, 86 records of grass snake in Scotland were collated, of which 32 were collected from the National Biodiversity Network (NBN) database.

The process of thorough verification highlighted a number of categories of common data errors (Table 1). It was possible to address all sources of record error during this study, with the exception of race, which would require clear photographs and/or DNA analysis to determine.

Table 1. Common record errors encountered during verification of Scottish grass snake records.

Data Error	Description
Escapes	Grass snakes were popular pets during much of the 20 th Century, and there is a possibility that records from before the 1980s relate to escaped pets. Most of these records are from unsuitable habitat (e.g. urban amenity grassland areas). The possibility of escaped pets in populated areas meant that records from such locations during much of the 20 th Century could not be confirmed as wild grass snakes, and so were disregarded.
Releases	During the data search and verification process, this study found that 200 baby grass snakes were deliberately released into Loch Lomond during the late 20 th Century. However, it was not possible to confirm the date of release, and therefore any records from Loch Lomond could not be confirmed as wild grass snakes. As habitat is suitable for the species, there is a possibility that grass snakes may have been present in the wild prior to the release, but this cannot be confirmed.
Grid reference errors	Data entry errors are always a possibility, such as incorrect grid references. The most common error found lies with the unique two letter 100km National Grid square codes. Careful examination of notes and location names often reveals these errors. For example, the fairly well-known Langholm population, which can be found in Arnold's 1995 atlas and on NBN, actually refers to a record from Windermere, where 'NY' was entered instead of 'SD', as revealed by the location name data.
Misidentification	A number of records were disregarded where the recorder was inexperienced or known to be unreliable.
Races	There are c.15 races of grass snake in Europe, of which only one is known to be native to the UK (<i>Natrix natrix helvetica</i>). Escaped pets have resulted in non-native races becoming established in the UK. For example, a population of grass snakes of Romanian origin (<i>Natrix natrix persa</i>) have become established in Yorkshire and North East England. It was not possible to control for race in this study.
Common names	The common name 'grass snake' refers to the adder (<i>Vipera berus</i> – Figure 3) in Argyll & Bute, and to the slow worm (<i>Anguis fragilis</i> – Figure 4) in much of Scotland – particularly north of the Central Belt. However, previous recording projects have simply requested records of 'grass snakes' and so some people in Scotland will have submitted records of what they term 'grass snakes' quite genuinely. However, unknown to the organisation receiving these data, these records refer to a different species. Some records clearly indicated these species based on habitat, description, notes and confirmation from recorders, and so were disregarded.

Revised Distribution

After verification, three records can be confirmed as wild grass snakes – all from Dumfries & Galloway and recorded since 2009 (Figure 5). None of these records are included in the NBN dataset.

A further six remain as possible wild records that cannot be immediately explained as erroneous or escapes, and range in date from 1960 to 2004 (Figure 5). Three of the possible records are from Dumfries & Galloway, and are from less experienced but reliable sources, from appropriate habitat and relatively near confirmed records.

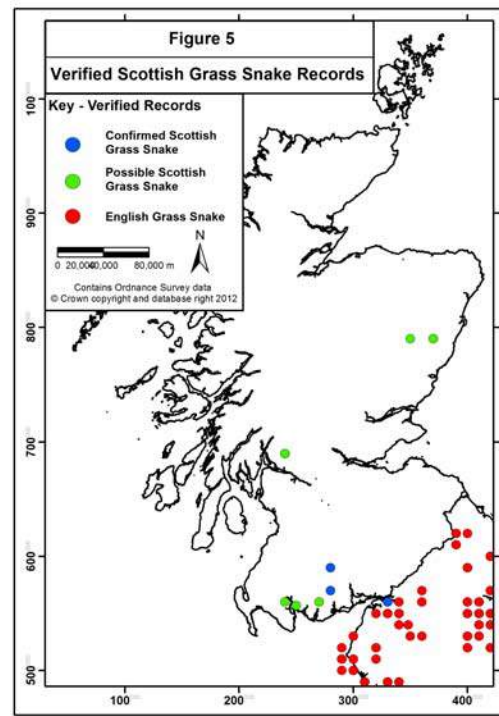
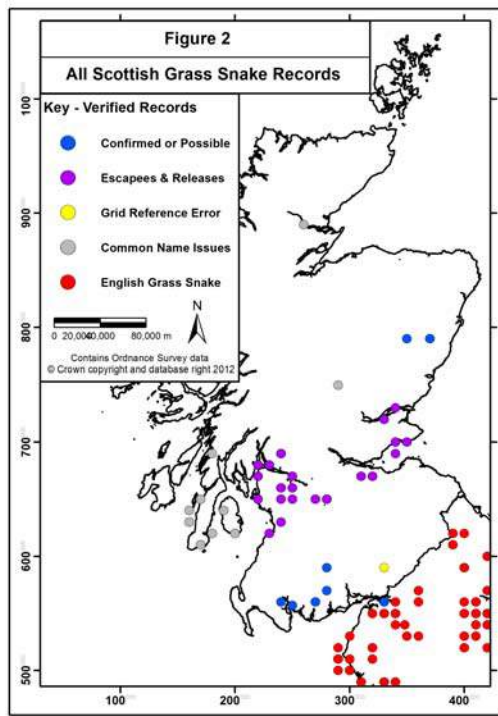
Two independent records from Aberdeenshire in themselves seem unlikely, but in context become interesting as both are from the same catchment.

The final possible record at Loch Lomond is from a reliable source, but may relate to an introduced population as 200 grass snakes were released here at an unknown date in the late 20th Century.

These possible records warrant further investigation, while surveys of Dumfries & Galloway will help determine the extent of this population.

Scottish Grass Snakes

This study has confirmed that grass snakes are present in the wild in Scotland, although it is not possible to determine if they are a recent arrival or have been present far longer.



Grass snakes occur at higher latitudes in Scandinavia, relying on compost heaps and manure piles for egg laying sites, and as such may exist as a synanthropic species in the north of their range. Although this study cannot confirm whether grass snakes are breeding in the wild in Scotland, it is interesting to note that the confirmed records are in areas offering semi-natural woodland, freshwater habitats and agricultural land that may provide manure piles and compost heaps for egg laying.

There is no inherent biological or ecological reason that grass snakes would not occur naturally in Scotland. Post-glacial colonisation of the UK by some animals followed multiple successional routes, with different races persisting in the north after they have been replaced in the south. This possibility should not be dismissed when investigating grass snake race in Scotland. However, it is possible that topography and habitat may prevent the Dumfries & Galloway population from expanding north.

Further research is required to clarify the range and origins of Scottish grass snakes. In particular, photographs and/or DNA studies may help address the race question, while targeted surveys may determine whether grass snakes are breeding in the wild in Scotland. Encouraging further recording amongst experienced biological recorders and the wider public will also help provide a clearer picture of the distribution of this species in Scotland.

The study has also highlighted that record errors go unnoticed and can become part of widely referenced datasets such as NBN and atlases (e.g. Arnold's 1995 atlas of amphibians and reptiles) even in relatively small datasets. It has also shown that common names can be a confusing issue even for a charismatic and easily identified vertebrate such as the grass snake, and so the importance of using scientific names when recording cannot be stressed enough. It is essential that records are thoroughly verified, particularly in the case of datasets that are often used to inform the decisions of ecological consultants and Planning Authorities.

Amphibian and Reptile Groups of the UK (ARG UK) will be launching a Scottish Grass Snake Recording Scheme with

online data entry facilities shortly. In the meantime, please send any grass snake records (old or recent) to Chris Cathrine, at chris.cathrine@caledonianconservation.co.uk and they will be incorporated into the ongoing research.

Other relevant websites are

- The Scottish Grass Snake Recording Scheme's website will go live this April at www.scottishgrasssnakes.org
- For Caledonian Conservation Ltd visit www.caledonianconservation.co.uk
- For information about the work of Clyde ARG and how to join, go to <http://c-arg.webnode.com/>
- For more information about how to get involved in reptile and amphibian surveys, go to: www.arguk.org

This research and the distribution maps include data provided by ARC, BRC, British Trust for Ornithology/ARC, CARG, Dumfries & Galloway Environmental Resources Centre (DGERC), Environmental Records Information Centre North East (ERIC), Fife Nature Records Centre (FNRC), Frank Bowles, Glasgow Museum Resource Centre, John Durkin, NBN/BRC, NBN/National Trust for Scotland (NTS), North East Scotland Biological Records Centres (NESBReC) and Cumbria Biodiversity Data Centre at Tullie House Museum.

Chris Cathrine, Director of Caledonian Conservation Ltd, member of Clyde Amphibian and Reptile Group and Scottish Representative for Amphibian and Reptile Groups of the UK



*For comparison and to avoid confusion:
(left) Adder © Chris Gleed-Owen
(right) Slow Worm © Chris Cathrine*

Go on! - TRY! with HBRG!

The Highland Biological Recording Group are, as always, busy being inventive, encouraging people to record unusual and under-recorded species. They call it Try! and Sue Tarr and Murdo Macdonald have prepared two pdf files, TRY1HollySpeckle.pdf and TRY2HollyLeafGallFly.pdf with information on two new species to look out for in 2012, and there will be more to come as the season progresses. Both species are to be found on or near holly. One is a leaf gall miner fly, *Phytomyza liscis*, the other a fungus, *Trochila ilicina*, occurring on leaves dropped below the holly. Neither are supposed to be rare, just under-recorded. If you live in the Highland Region you will already know all about this; however, if you live elsewhere but plan to visit the area, then it is definitely worth checking out the HBRG's website at records@hbrg.org.uk



Phytomyza liscis



Trochila ilicina –

from the HBRG Website.

Tick Recording Scheme



www.britishticks.org.uk



This tick recording scheme was already publicised last year in *BRISC Recorder News* No 82 (July 2011), but seeing that the new survey season is starting and the fact ticks are ever more widely distributed throughout the country (and abroad), it seems appropriate to remind everyone of this recording scheme, and also that ticks may carry Lyme disease, which can have serious effects if not treated in time.

The earliest and most common symptom of Lyme disease is a pink or red circular rash that develops around the area of the bite, three to 30 days after someone is bitten. The rash is often described as looking like a bull's-eye on a dart board. For more details see <http://www.nhs.uk/conditions/Lyme-disease/Pages/Introduction.aspx>

With much of the tick distribution data in the British Isles largely historical, in 2005 the Health Protection Agency, in collaboration with the Biological Records Centre (BRC), electronically digitised previously published tick records and established the Tick Recording Scheme to update and continue this data resource. All the records are freely available via the National Biodiversity Network (NBN) gateway for research and public use. The primary aims of the recording scheme are to determine the diversity of ticks commonly infesting humans and animals and to monitor tick distribution on a nationwide scale.

Analysis of the data collected up to 2009 can be viewed on the survey website. Through engagement with a variety of public and veterinary health agencies and practitioners (e.g. clinicians and veterinarians), wildlife groups (deer society, zoos, animal refuge centres, academics) and amateur entomologists, a total of 4172 ticks were collected, constituting 962 separate records.

Fourteen tick species were identified, although the vast majority have been of the species *Ixodes ricinus*. The predominant host group is termed 'companion animals' (pets?), followed by humans, but host groups also included wild birds and large wild mammals, and some records from small and medium wild mammals, livestock, the environment and domestic birds.

Individuals and groups are invited to assist in the development of tick distributions by sending in any ticks collected, preferably live ones(!) along with details of:

- date of collection
- specific location (grid reference)
- general location (nearest town/village)
- local habitat (e.g. woodland, pasture)
- host from which tick was collected (e.g. human, dog)
- contact details of the individual sending in the sample

to:

Tick Recording Scheme
Microbial Risk Assessment
Emergency Response Department
Health Protection Agency
Porton Down, Wiltshire, SP4 0JG

The Royal Mail not unreasonably requests that live specimens are carefully packaged for posting, so that there is no danger of the ticks escaping or posing any risk to mail handling staff if the package becomes damaged during transit. Please use the screw-top plastic containers provided or ensure that other crush-proof containers are securely fastened (e.g. with tape). Please post the container in a padded envelope with a visible return address and mark the package as 'urgent - live creatures'.

Containers can also be requested by contacting the scheme at tick@hpa.org.uk

If you are not able to post the ticks immediately or soon after collection, please place them in a fridge or cool, dark place until ready to post. This will prevent any deterioration of the specimens.

For further information and to down-load recording forms please go to the Tick Recording Scheme's website at www.britishticks.org.uk,

Reports on BRISC Projects

BRISC AND GNHS BURSARY SCHEME

By Louisa Maddison

The bursary scheme is running again for 2012 with 28 applications received for courses such as the identification of freshwater algae, small mammal trapping and NVC surveying of heathlands. Thanks to a generous anonymous donation we were able to fund 5 courses in 2012 to the following candidates:

- Dave Holloway: Invertebrate Surveying Techniques
- Ian Boyd: Spiders - an Introduction to Identification
- Jenny Grant: Harvestmen Spider Ecology and Identification
- Laura Whitfield: Identification of Hoverflies
- Robert David Williams: Identifying Freshwater Invertebrates

These courses will all be run by the Field Studies Council at Kindrogan this year. The attendees write a short note for the BRISC / GNHS newsletters, so keep an eye out for them later in the year.

For any queries relating to the bursary scheme please contact secretary@brisc.org.uk

BRISC's E-PETITION and the SCOTTISH BIODIVERSITY INFORMATION FORUM

By Jonathan Willet

Just to remind you, the creation of national data forum was a key recommendation that arose out of BRISC's e-petition to the Scottish Parliament regarding the need for data sharing and management structures in Scotland. In my second last chairman's column I expressed my frustration at a lack of movement about the creation of this national data forum and in my last one I expressed some optimism about some things starting to happen. Well that optimism has been well founded as things have been developing apace! You may have received more than one email about the Scottish Biodiversity Information Forum (SBIF), apologies for the scattergun approach but we did not want to miss any organisation out of the emailing. The lack of a single contact list of all the relevant organisations involved in collecting, using, sharing, etc. biological data is one of the first issues this process has raised. See Claire Seymour's SBIF Article for more information.

BRISC and SNH have been working closely on the questionnaire and it attendant information. We are hopeful that the responses will highlight a consensus about what the key issues are and what needs to get done. If this is the case then rather than talking about the issues those attending could actually talk about (and agree on?) ways to deal with them! It is a novel idea, but it just might work.

The Forum does represent the best opportunity to do something about all the biological data issues that have not been addressed since they were identified. The 1975 report that led to the formation of BRISC said pretty much the same thing as all the subsequent reports (and there have been many) so at least we have a very good understanding of the problems. The solutions have been more difficult to agree on, but at least SBIF sets out to be a doing Forum to start to address these issues.

Between the closing date for the questionnaire, mid-April, and the Forum meeting on the 25 May BRISC will be organising a stakeholder's meeting, most likely to be in Stirling, to discuss the issues around data collection. This would be the opportunity to have a more detailed discussion of the key issues and what could be done about them. As there will be limited time to discuss all the issues on the day of the Forum, we hope that this pre-Forum event will prove productive and allow the presentation of a collective view from a large number of stakeholders at the Forum itself to guide the action plan of it over the next year.

If The Forum works then it will help all biological recorders in Scotland. I certainly hope so. A report from the Forum will appear in the next Recorder News.

Setting up the SCOTTISH BIODIVERSITY INFORMATION FORUM (SBIF)

By Claire Seymour

Scottish Natural Heritage is facilitating the set up of a Scottish Biodiversity Information Forum (SBIF), an exciting opportunity in response to the Government e-Petition lodged by BRISC in 2009.

The SBIF will be a community-led forum bringing together stakeholders from organisations involved in the collection, management, sharing or use of species or habitat data (the data flow system) both in the terrestrial and marine environment.

The aims of SBIF will be to collectively identify the key challenges relating to the flow of biodiversity data in Scotland and then to tackle them.

This is our opportunity, as a biodiversity data community, to get together and actively make changes that will improve our experiences in producing and working with data.

The SBIF is based on the successful Welsh Environmental Information Forum which has been running since 2008. The Forum will take advantage of the structures, partnerships and initiatives that already exist in Scotland, including the National Biodiversity Network (NBN).

Organisations from all relevant sectors are invited to join, and help establish, the Forum. This includes academia, consultancies, developers, Government, local authorities, local and national schemes and societies, local record centres, museums and collections, Non-Departmental Public Bodies including national parks, research institutes and statutory agencies.

There are three stages in the establishment of the Forum.

1. **Online questionnaire:** Intended to help organisations to think about the key challenges faced in the data flow system and identify potential solutions, and to establish their level of interest in participating in the Forum. If you would like to participate but have not received the questionnaire please follow this link: www.surveymonkey.com/s/RVR372Z. The questionnaire remains open until **18 April**. A single return per organisation is requested; respondents should consult with colleagues to ensure they represent the collective thoughts of their organisation.
2. **Sector discussions:** Contributors are invited to discuss their questionnaire responses with colleagues in other organisations in their sector. Sharing of views, experiences and knowledge could lead to sectors agreeing on common challenges and best practice that the Forum could pursue. SNH may be able to offer meeting rooms and some assistance in the set up of discussions, if requested.
3. **Forum workshop:** A workshop for all interested parties will be held at Battleby (near Perth) on Friday **25 May 2012**. The main aims will be to:
 - endorse and set up the structure of SBIF;
 - identify challenges for the Forum to take forward in an Action Plan;

- endorse the Forum vision, or vote for an alternative

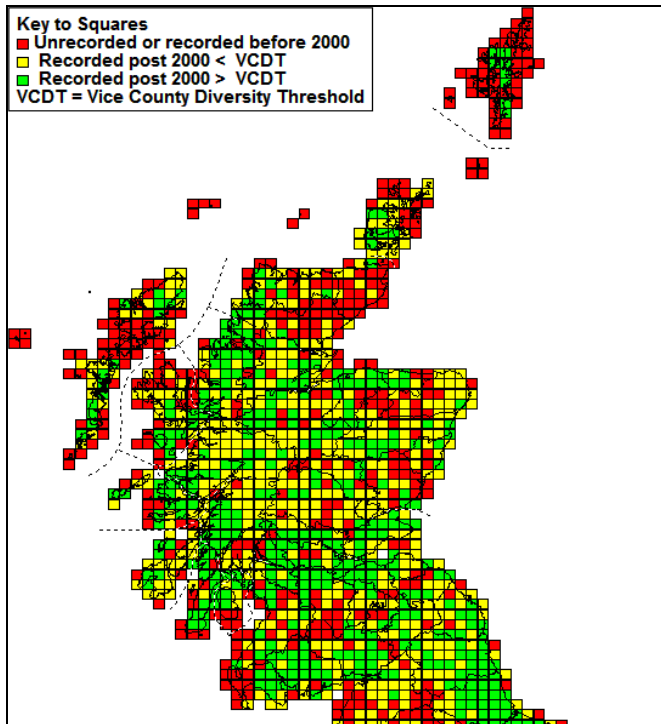
For more information, contact:

Claire Seymour
 Scottish Natural Heritage,
 Great Glen House, Inverness
 Office: tel 01463 – 725 311
 Email: sbif@snh.gov.uk

DRAGONFLY ATLAS OF THE UK: LAST YEAR OF FIELD WORK

By Jonathan Willet

Work on the UK Dragonfly Atlas is entering its final field season, lots of new records have been collected and the knowledge of the distribution of the species in Scotland (and the UK) has never been so good. However in Scotland the story is not quite the same as the rest of the UK. There are still quite a few squares, marked red on the map, that have no records since 2000 or have never been recorded. Some of these are tiny bits of land at the coast whose 10km square is made up mainly of sea and can be discounted; and some are in remote areas such as the hinterlands of Rannoch, the Cairngorms, and the north and northwest Highlands that are hard to get to. However there are quite a few in Ayrshire, the Borders and Angus that are relatively easy to get to, and I would encourage you to get out and have a look if one of these under-recorded squares is near you.



Visit the British Dragonfly Society's website to see the full UK map (ed)

Strangely enough Harris on the Western Isles seems to have no surveying done on it at all, but I have been in contact with the recorders' group there, and I am sure that situation is about to change. There is also a lot of red in Shetland but there is only one breeding species there, the large red damselfly. It is not certain if it is a regular breeding species but hopefully the surveying done there will be able to tell us.

I have been in touch with the biodiversity officers in the under-recorded area and also any recorders' groups that are

there, giving them the co-ordinates of the squares that have not been surveyed recently, so as to pass this information on to the local recording community. The British Dragonfly Society is hopeful that we will be able to colour the map mainly yellow or green by the end of this field season.



Brilliant Emerald – sideways on/ © Jonathan Willet

I should explain that the yellow and green squares represent the number of species recorded in that square in comparison with what is expected to be found there. The magic number is known as the Vice-County Diversity Threshold. This is a proportion of all the species that have been recorded in that Vice-County to give an indication of how well recorded a square is. Yellow is under-recorded in terms of species, and green represents sufficient recording. Looking at the map with this in mind gives an indication of under-recording due to inaccessibility, etc., or it could also indicate that a lack of habitat in that square is leading to a low number of species being recorded there.

If you would like more information on the under-recorded 10km squares near you then please do get in touch with me at chair@brisc.org.uk to see more maps go to the Atlas pages of the British Dragonfly Society <http://britishdragonflies.org.uk/content/national-dragonfly-atlas>



Golden-ringed Dragonfly mating © Jonathan Willet

DRAGONFLY FIELD TRIPS JUNE/JULY 2011.

By Jonathan Willet

Monadh Mor. 18 June.

The trip to Monadh Mor took place on Saturday 18 June, being a joint British Dragonfly Society / Highland Council event with the Easter Ross Highland Council Countryside Ranger. Almost 20 people attended the day, which started out almost sunny but unfortunately ended up overcast and showery. However those attending were treated to a copy of

the new Dragonflies of Scotland leaflet that had just been published, and all were very keen to see some dragonflies.

We walked for half-an-hour to the main waterbody, known locally as Simon's Loch. Monadh Mor itself is a mix of plantation woodlands and very large areas of bog woodland, possibly the most extensive area of this habitat in Scotland, most of it being so wet as to be impenetrable. Thankfully Simon's Loch is very accessible. Our arrival at the site coincided with a slight drizzle starting, however those with their own colander or net were soon guddling away and discovering some larvae. There was some ooh-ing at the sight of large common hawker larva and some squinting at the tiny posterior lateral spines that identifies the black darter from the common darter and white-faced darter. I was saying to the group how I expected to find some larvae of the latter species but that there did not seem to be any. Just as I had said it someone found a white-faced darter larva, and with a burst of enthusiasm the group found seven in total, and one keen eyed person found an exuvia.

In all we recorded seven species, against a total of ten species having been recorded at the site, so we had a not too bad total for the day.



(Above) White-faced Dragonfly larva – showing the three dark diagnostic longitudinal lines on the underside of the abdomen, © Jonathan Willet

(Below) Northern Emerald Dragonfly larva, the diagnostic features having a rounded rear end with no spines and being somewhat hairy © Jonathan Willet



Blar Mor. 19 June.

The next day it was another BDS / Highland Council field trip. This time with the Lochaber Countryside Rangers. The site being explored was Blar Mor, a very large area of blanket bog very close to Fort William. Over the years the edges of it have been cleared of peat to gain farmland, but the remaining area is still pretty wet and presumably pretty deep. I was revisiting the site for the first time in twelve years since I visited it on one of my first ever BDS field trips. It was memorable because that day it was nearly 25 degrees and gloriously

sunny, plus I almost fell into a deep pool in a peat cutting. We visited Blar Mor as Betty Smith, Scottish Dragonfly Recorder, felt sure that there would be northern emerald dragonflies breeding here. Unfortunately we did not find any that day.

This time we had keen a group of seven with one of our number a very keen-eyed chap who was eight years old. Our first sighting was a northern eggar moth case. We trudged round the site in the sunshine, though this time it was only 16 degrees but at least not raining, which is always a bonus in Fort William. We were searching for the peat cutting pool that I almost fell into all those years ago. In spite of quite a bit of trudging we failed to find it but were having a great time exploring the place. After lunch we made our way back to the car park, and suddenly the bog got a whole lot wetter, large areas of shallow sphagnum-choked pools and runnels appeared. So we got busy guddling away with quite an array of colanders and sieves. Lo and behold, after a black darter larva we did find northern emerald larvae, not one but fourteen! We had just found the site that Betty was sure was there. So that was very pleasing. A little further on we found another similar site but with only one northern emerald larva. In the end we recorded five species: all bog pool specialists. No doubt there are more species to find here but we really enjoyed seeing the ones we found.

Lenzie Moss. 8-10 June.

This visit was in conjunction with the Friends of Lenzie Moss. Lenzie Moss is a relict raised bog that was cut into two by the Glasgow to Edinburgh railway, and after the Second World War it was commercially exploited for fuel, but thankfully it was all hand cut, so the damage did not lead to utter destruction. This left a drained and cut-over secondary bog (meaning than no original bog surface remain) on the northern side of the train tracks, and to the south a relatively undisturbed area of bog, though it is the drier of the two. The Friends of Lenzie Moss have been instrumental in getting the ditches blocked and re-wetting much of the southern bog, so they were keen to see what dragonflies were there.

The reasons I got involved in this visit were numerous. I had grown up in Lenzie but had never gone looking for dragonflies on the moss because I was not into that sort of thing at school; also a friend's mother was treasurer of the Friends of Lenzie Moss and had asked me to do a walk and talk for the group, and finally on a biology field trip at school my teacher Mr Walkinshaw had shown us sundew and, if my memory is correct, a common darter dragonfly, the first time I can remember seeing a dragonfly.

I did a 'recky' of the site and recorded two species: common hawker and black darter larvae. It was hard to get onto the main bit of the bog as it was so wet. Once I had devised a route for the two field trips that I would be running at the weekend, I got cleaned up and gave a talk on dragonflies at the local church hall. Imagine my surprise to see my former teacher Mr Walkinshaw there, who had not changed (much) in the intervening 24 years. Our reunion even made the local paper.

The two days of field trips were very well attended. Over twenty people came along and were treated to some sunshine. As well as seeing some larvae we saw some large red, blue-tailed and common blue damselflies in the hand, and later on I surprised myself by managing to catch a four-spotted chaser that was feeding in some long grass. This fantastic looking male insect had plenty of pictures taken of him. One species

that I expected to see was the emerald damselfly and of course the common darter. I also got a 2006 record of an emerald damselfly for the site from someone attending on the Sunday, so that took the species list up to seven, not too bad a total at all.

If you are near Glasgow then I would recommend a visit to Lenzie Moss. It is five minutes walk from the train station and has a great path all the way round. It is a wee gem of a place. I will certainly be back again this summer.



NATURAL TALENT. and there's more....?

By John McFarlane

The 32nd Natural Talent apprentice 'turned the lights off' for the last time as this final tranche of apprentices came to an end on the 15th of March 2012. But is this REALLY the end for Natural Talent? And if it is, then what next?

At present, we have several funding applications simmering away, including an invite from Heritage Lottery Fund to re-apply for more Heritage Skills money. If successful, and assuming we can tap into the expertise required to shape and mould these apprentices, our new apprenticeships could include Caledonian pinewood, freshwater diatoms, urban habitats, invasive non-native species, fishery management, marine zooplankton, natural flood management, inter-tidal invertebrates, upland grassland fungi, bryophytes of temperate Scottish rainforests, and many more. Many of these apprenticeships are already agreed and will go ahead if our funding is successful.



(above) Cathy Fiedler on Islay, carrying out *Colletes floralis* work.

Natural Talent has received recognition as an effective means of creating the environmental specialists needed to undertake critical work in lower plants, invertebrates and specialist habitat management. Apprenticeships to date have included machair, peatland management, coleoptera, bryophytes, lichens, fungi, molluscs, seaweed, soil



(above) Neville Kilkenny with mentor Roy Watling

invertebrates, grassland fungi, saltmarsh habitat, brownfield ecology, riverflies, saltmarsh habitats, hymenoptera and hoverflies amongst others. .



Cathy Fiedler at the Hunterian Museum

The scheme has delivered 32 high quality training placements across Scotland and Northern Ireland since its launch in 2006. Each apprentice has been trained in either a taxonomic specialism or specialist habitat, in areas where there is a recognised heritage skills gap. As well as addressing these shortages, the scheme has produced environmental professionals who have progressed into employment and further research in the sector.

But this only scratches the surface. The programme has also provided apprentices with the platform to share their expertise with others, delivering or contributing to dozens of identification workshops, wildlife walks, community engagement days, BioBlitz events and members' days.



Hoverfly identification workshop with Geoff Wilkinson



They have helped BTCV and other partners engage with tens of thousands of people at events such as BBC Live & Deadly and Gardening Scotland. They are responsible for the collection of many thousands of biological records with many of our apprentices holding positions of responsibility within UK recording schemes. And the sector is now filled with a new breed of naturalist. The next generation if you will, passing on THEIR expertise to others.

(left) *Engaging with new audiences in local communities in Glasgow*

The work that our apprentices have carried out across the sector has provided many opportunities for BTCV, at a strategic level and in our more familiar areas such as conservation volunteering and reaching new audiences. And as a result of this, BTCV has developed strong links with many key players in the sector and many more people from a wide ranging demographic are aware of the wonderful wildlife we share together.



Inspiring the next generation at the North Uist Blitz

Natural Talent has developed into a brand. It stands for quality, enthusiasm, dedication, expertise and passion. We have broadened the suite of skills available to our apprentices, allowing them to develop their training skills and outreach skills and now more than ever, even in this difficult economic climate, apprentices are being snapped up by employers who are looking for something more than a graduate with a degree. The apprentices have set the bar extremely high and for many prospective employers, they are seen as the gold standard. I certainly wouldn't fancy my chances against one in an interview situation!



(above) *Learning in the field*

Over the past 6 years, many of you have contributed towards making the programme a HUGE success, with 30 of the 32 completed apprentices in employment or studying. This includes 26 working in the natural heritage sector and 3 carrying out PhD's.

And on behalf of BTCV, I'd like to thank you all for supporting the programme and making it a huge success. And we hope we can rely on you for further support over the years.

On a personal level, every one of the apprentices has made me smile. I have had some incredible experiences whilst 'managing' the programme. From my first visits to the many Museums and Institutions that have supported us over the years, walking open-mouthed like a child in a sweetie shop, to joining Cathy Fiedler on Islay to assist her with her *Colletes floralis* work. It has been the most rewarding and enlightening experience of my career thus far. And I hope it continues.

And finally. Whilst carrying out some evaluation for HLF, all of which was overwhelmingly positive, a few questions were raised about the programme, including this one:

'Where would the conservation sector (in Scotland) be if it hadn't had Natural Talent? And what will it look like without it in the future?'

I don't have the answers, but many of you might have some thoughts about this. All I can say is that from feedback provided from some of our partners, the sector has benefitted hugely from the scheme. In fact, might I be as bold as to say that most people who have met with, worked with, learned from or learned with an apprentice has benefitted from the experience? And if Natural Talent ends now, then who or what will fill the void that is left?

For more information about the programme, go to www.btcv.org/naturaltalent or contact me, John McFarlane (j.mcfarlane@btcv.org.uk) 01786 476180 or PLEASE have a look at our BLOG and meet an apprentice!! <http://blogs.btcv.org.uk/natural-talent/>

John McFarlane,
Environment Development Officer, BTCV, Scotland



BTCV Scotland



BTCV's NATURAL COMMUNITIES TRAINEESHIPS

By Anthony Morrow and Amanda Joaquin
The British Trust for Conservation Volunteers Scotland's Natural Communities is an innovative programme funded by the Heritage Lottery Fund, working to increase community environmental engagement skills. Natural Communities provides a twelve month long programme to equip trainees with the skills to engage communities with the environment.

After a successful and varied first year, the second year promises to be just as exciting with the new intake of seven trainees settling into their placements. This year's trainees are:

- Amanda Joaquin, based with BTCV Scotland and working in Falkirk, Stirling and Clackmannanshire
- Lucy Tozer, based with the Glasgow Clyde Valley Green Network, working in North Lanarkshire and Glasgow City
- Claire Bates, based with the Royal Botanic Gardens Edinburgh, working in Edinburgh and the surrounding areas
- Kate Williamson, based with Stirling Council, working across the Stirling Council area
- Helen Simmons, based with Glasgow City Council, working within Glasgow City and neighbouring communities
- Judith Hartley, based with the Dumfries and Galloway Biodiversity Partnership and working throughout the region
- Faith Hillier, based with Froglife, working in North Lanarkshire and Glasgow

For all the trainees this year, a strong focus will be upon engaging communities and individuals with conserving and improving local habitats and undertaking biological recording. With a wide range of partnerships and a variety of interests being developed, Natural Communities is well placed to help stimulate biological recording even further throughout Scotland this year.

Case Study: Discovering Nature trainee, BTCV Scotland

Hello! My name is Amanda Joaquin and I am one of the new Natural Communities trainees for 2012 based with BTCV Scotland in Stirling.

Over the next twelve months I will assist BTCV and partners in establishing links with new communities in Stirling, Falkirk and Clackmannanshire, creating an awareness of biological recording and assisting in contributing to the survey efforts of local Non-Government Organisations (NGOs). I will also assist in supporting existing recording communities whilst establishing a support/mentoring network for individuals who want to become more active recorders or participate in new recording activities. It is a very similar project to the Wildlife Counts project that BRISC delivered between 2006 and 2008, and I am extremely excited about the year ahead.

With help from our partners, local expert recorders and previous Natural Talent apprentices I am planning a range of activities aimed at everyone. This will include a suite of identification workshops to broaden the skills of individual recorders, targeted surveys identified by the Local Authorities, attending local community events to show communities how much fun wildlife recording can be and most importantly providing a network of local support for less experienced recorders. Currently, I am looking into how we can help carry out the Dragonfly Atlas Survey in the Stirling area.

Since graduating from the University of the West of Scotland in 2010 I became involved with BTCV Scotland as a Volunteer Officer (VO) in the Glasgow office for just over a year. The role of a VO is an amazing experience from leading and assisting groups of volunteers in practical conservation

tasks, undertaking biological surveys, supporting the day to day running of the office and so much more.

From gaining and learning new skills in the environmental sector I then gained employment as a Seasonal Park Ranger at Loch Lomond and the Trossachs National Park. This was a great experience. I undertook a variety of tasks such as water and land byelaw enforcement, effective management of National Park facilities such as informal camping areas and other facilities that are available for public use through engagement with visitors and wildlife and visitor surveys including the park's nest box surveys.

This year is going to be life-changing for me, providing the perfect opportunity for me to broaden my skills in biological recording and community engagement, do a lot of networking with partner organisations and undertake countless natural and community heritage training opportunities.

If this article sparked your interest in biological recording or would you like to discover nature or you are already a member of a recorder group I would love to hear from you. Email: a.joaquin@btcv.org.uk

For more details about the Natural Communities programme, contact Anthony Morrow (a.morrow@btcv.org.uk)



Introducing the seven new Natural Communities trainees in the first row. From the left they are Faith Hillier, Helen Simmons, Claire Bates, Amanda Joaquin, Lucy Tozer, Kate Williamson, and Judith Hartley. © Graham Burns

THE ROLE OF ALERC (ASSOCIATION OF LOCAL ENVIRONMENTAL RECORDS CENTRES)

By Alexa Tweddle & Tom Hunt

The proposal to create a national organisation to support and represent the best interests of Local Records Centres was first discussed at a National Federation of Biological Recording conference, held in Edinburgh in November 2005. This was the second such conference for LRC and provided an opportunity to discuss, amongst other things, data verification, providing on-line access to users, ensuring data quality and the biological recording software Recorder 2002 and 6.

Reports from this conference (available in *BRISC Recorder News* No 60, (January 2006) and *NFBR Newsletter* No 34,

(April 2006)), state that the formation of an Association for Local Records Centres was well supported by the conference delegates, which included representatives from most Scottish LRCs, and a Steering Group was established to progress development of the Association. After several years of planning, the Association of Local Environmental Records Centres (ALERC) was formally launched on 1 October 2009 with the following objectives:

- To promote and encourage the completion of a UK-wide network of Local biodiversity and geodiversity Records Centres.
- To promote and develop good standards of practice in the collation, management, dissemination and analysis of biological and geological records.
- To promote Local Records Centres regionally, nationally and on a UK level to potential users and suppliers of data.
- To provide full representation of the UK with country specific solutions and equal emphasis on the individual countries requirements.
- To develop and promote accreditation schemes for biodiversity and geodiversity Records Centres and their staff.
- To encourage and facilitate networking between Centres to enable exchange of ideas, collaborative working, developing joint tools and sharing good practice.

In January this year, ALERC was able to take a further step forward and appointed its first member of staff, National Coordinator Tom Hunt. Tom's role is to progress the work of ALERC by engaging LRCs in the work of the NBN, managing the LRC accreditation system and facilitating communication between LRCs and the wider biodiversity community. For a more detailed view of the National Coordinator role, please visit the ALERC website:

www.alerc.org.uk/alerc-national-coordinator.

Tom's role is steered by representatives from the ALERC Board of Directors, NBN and Natural England. Despite the fact that NE are providing support for the role, ALERC's remit still covers the whole of the British Isles and Tom will be working for and with the LRCs of Scotland, Wales and Ireland as much as possible. As manager of Fife's LRC, Fife Nature Records Centre, I welcomed the opportunity to join the Board of Directors at ALERC's most recent conference, held in Birmingham last September. As a Board Member, I aim to represent the interests and views of the Scottish LRC community. If you have any questions or comments regarding LRCs and LRCing in Scotland or the rest of Britain, or would like more information about ALERC, please do not hesitate to contact Tom or I.

Contact Details

For more information about Fife Nature Records Centre please visit the website www.fifenature.co.uk or use the contact details here below:

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SNH's new LAND-USE USER TOOL

This is really a tool for site managers, but it is also interesting to investigate and play with for anyone else. It is a GIS tool, it is freely available on the web, and requires no specialist software or GIS expertise from the user. It can be accessed at: http://mapgateway.snh.gov.uk/maps/usertool_editor.html

It allows a user to view maps of existing habitats and the networks they create, and the user can zoom in or out to a range of scales. The real crunch point is that it allows the user to test out different plans for land management through drawing a shape on the screen, assigning a land use choice from a drop down list, and then viewing the effects the new change has on the existing habitats and networks. This can then be printed out, or amended, or refined, or the process begun again.

However, it is currently only available for the Central Scotland Green Network area, plus Loch Lomond and the Trossachs national park and the Scottish Borders. There are four different habitat layers to explore:

- **broadleaved woodland,**
- **heathland,**
- **neutral grassland**
- **'wetland'** (i.e. the landcover class 'fen, marsh and swamp').

The 'woodland', 'grassland' and 'wetland' layers have been produced by Forest Research under the 2009-11 Integrated Habitat Network studies: whereas the 'heathland' has been produced by Scottish Natural Heritage (2011) – The website makes clear that this is indicative only and needs quality assurance before it will be made more widely available.

A 'habitat network' contains the chosen habitat and any connecting non-habitat land – i.e. land into which the relevant species could disperse. This land may provide connections through for example hedgerows or shelter belts in woodland networks and/or through other connectivity such as urban greenspace where grassland species might disperse. For more detail see SNH's website and search for 'IHN' and 'key messages'.

The website is designed to go through the process of using the tool in easy steps. The opening page is a map of Central Scotland. To go to an area of interest, enter a postcode or zoom in manually: scroll across by left clicking the mouse and dragging. You can also zoom in by left clicking whilst holding the SHIFT key and highlighting the size of the area you're interested in.

Clicking on the 'View Habitat Networks' button selects one of the four habitats and networks you are interested in. You can select 'Habitat', and 'High Dispersal' and 'Moderate Dispersal' Networks, where moderate dispersal indicate species that are greater specialists than those of high dispersal. You can also select various other map layers (such as designated sites) by clicking on 'View Other Map Layers' and selecting from the list.

To test out particular plans for an area, you can draw the outline of the existing site on the map, then test out various scenarios, to see what effect your plan is likely to have.

The basis for the tool is all the habitat data collated for the Integrated Habitat Networks series carried out in Central Scotland so far.

What are Integrated Habitat Networks?

Members who were present at BRISC's Annual Conference 2009 at Chatelherault Country Park will remember the informative and interesting presentation on the Forest Habitat Network carried out by the Forestry Commission for the Glasgow and Clyde Valley Green Network Partnership. This approach to planning for conservation led the way to the Integrated Habitat Networks or IHN.

The reason for this new approach is that despite considerable conservation effort at a site-based scale, research and monitoring has revealed the continuing decline of biodiversity. The decline is thought to be due to the effects of habitat fragmentation and a reduction in habitat quality, caused by

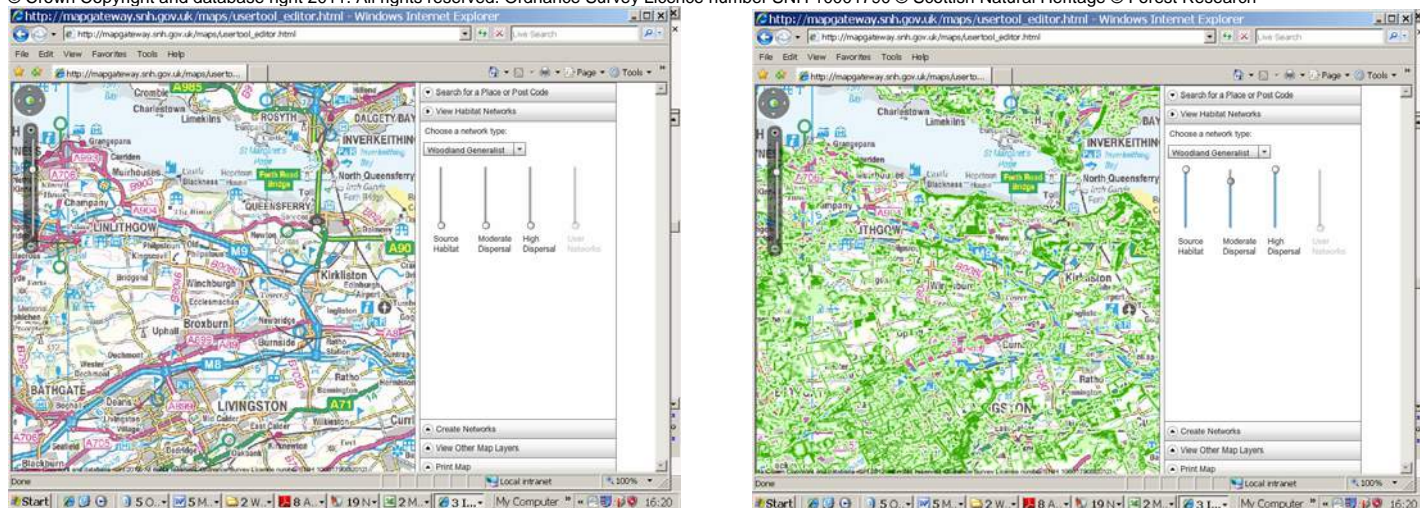
edge effects associated with intensive land management. Habitat networks are intended to reverse this decline by linking and expanding habitats which are capable of sustaining a greater biodiversity. The Integrated Habitat Networks also focus on more than one habitat.

The way that the IHN have been identified has been by detailed desk study, using digital data within a geographic information system (GIS). For more information about how the spatial position and extent of habitat networks were determined, see the Forestry Commission's website on Research at <http://www.forestry.gov.uk/ft/INFD-7S9ARR>

Now Phil Baada of SNH has produced an electronic tool which uses all the information gathered by the IHN studies. This will allow conservationists / managers to test out ideas and plans for expanding or linking different sections of a habitat and to see the potential benefits or otherwise to wildlife. It could also show up when a decision might be potentially disastrous. Other features which can be mapped include national and international site designations.

AMS

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Two views of the same area. The left one shows the basic map, the right one shows the area with the option 'woodland' and high dispersal' of generalists selected.

FORTHCOMING EVENTS

19-20 May - Scottish Bird Fair. At Hopetoun House near Edinburgh. Wide range of activities and events for all ages. Tickets cost £12/£10 and can be pre-purchased at www.scottishbirdfair.org.uk

19-20 May - Dingwall BioBlitz, at the Greenhouse, Dingwall. Calling all botanists, entomologists, ornithologists and any other -ologists - Dingwalls' wildlife needs recording! Anyone interested, please contact Meryl Norris Tel 07828140392 or merylnorris@gmail.com . For more information see also www.highlandbiodiversity.com

19-27 May - Save Our Butterflies Week. A week-long series of events to promote BC's conservation work and encourage the public to visit our reserves and other selected, non-BC, butterfly-rich sites. Check out BC's website for details.

9 June and 28 July - HBRG trip to Crowlin Islands. Boat will be leaving Kyle of Lochalsh at 10.30am returning around 4pm. There will be 12 places available on each trip. If you are interested please contact Barbara MacRitchie at BSoutar@nts.org.uk - stating a preferred date and also area of recording expertise. Understandably the islands have had very few biological records up till now.

21-23 June - Moth Night 2012 . The theme will be the moths of brownfield habitats (such as old quarries, disused railway lines, reclaimed coal tips, gravel and clay workings etc.) and will include both daytime searches and the usual night-time recording. For more information go to www.mothnight.info

25 June-1 July - National Insect Week -. This is a national initiative run by the Royal Entomological Society. See www.nationalinsectweek.org.uk for more information.

14 July - 5th August - Big Butterfly Count 2012
Help to repeat the success of Big Butterfly Count 2011, which was the biggest yet - and probably the biggest butterfly count in the world!

6 October - BRISC Annual Conference – hosted by DGERC at Dumfries. Topic: What is new to Scotland? Investigating some of the many new species that are on the more north. Excursions to interesting places will also be organised. Why not make a weekend of it? Make sure that the date is in your diaries now!

NBN News

NBN Conference 2012

We are pleased to announce the date for the 2012 NBN Conference, which will be Friday 23rd November. This will be held at The Royal Society in London as it has been for the last two years.

The theme is “Biological recording – fit for purpose?” Whilst the speakers and presentations are still to be confirmed, we are delighted that Sir John Lawton will give the Sir John Burnett Memorial Lecture.

Please keep an eye on the NBN website as more details will be announced in due course.

Change of Chairman at the NBN Trust

After almost 7 years at the helm, Sir Neil Chalmers has now retired as Chairman of the NBN Trust. He has been succeeded by Michael Hassell CBE FRS.

When Sir Neil took on the role in 2005, it was a time of challenges for the NBN. He has however, ensured that the NBN partnership has strengthened and that the NBN Gateway has become a practical tool that is making a positive contribution to biodiversity, conservation and management.

Michael Hassell has been a lecturer at Imperial College, was President of the British Ecological Society, on the Councils of NERC, The Zoological Society of London and the Royal Society, and also spent several years as a Trustee of the Natural History Museum. He is looking forward to helping deliver the 10 year NBN strategy and will be looking for new ways in which we can further realise the potential of the NBN as an indispensable resource for the UK.

Gateway news

New datasets from John Muir Trust

In March, the John Muir Trust added six new datasets to the NBN Gateway, containing species records made between 1996 and 2010 on John Muir Trust properties. The data were gathered during National Vegetation Classification surveys carried out by expert surveyors to inform management of the Estates and consist primarily of botanical, bryophyte and lichen records, along with some records of birds, mammals and insects. Copies of the full NVC surveys are available on request from the John Muir Trust.

Data Access Controls update

As part of the ongoing consultation over a proposed new system of data access controls for the NBN Gateway, a set of screen shots and flow charts were released in February to illustrate key features and procedures within the new system, namely downloading data, applying to download a whole dataset and applying for enhanced access to a dataset. A prototype with test data will be released in April, and an area of the NBN forum has been dedicated to answering questions and providing progress updates on the proposed changes. The proposals have already been revised in response to feedback, and further input is being sought with the aim of reaching a collective decision by the end of April. The changes agreed upon will not be implemented until the beginning of July 2012, in order to give data providers time to review their access policy and consult with their recording community before the changes take effect.

Better profile for Local Records Centres on the Gateway

The Local Records Centre boundary dataset on the NBN Gateway now includes hyperlinks to each LRC’s website, e-mail address and data provider page, providing a useful signpost for users who would like more information about the data services provided by LRCs. Since December last year, the separate country-specific LRC boundary datasets have been merged into a single dataset which is managed by the Association of Local Environmental Records Centres (ALERC). ALERC now also have a profile page on the Gateway with their logo and a link to their website.

In Practice

NBN Record Cleaner demonstrated to BSBI Recorders in Scotland

Dr Graham French, NBN Trust Technical Liaison Officer, gave a demonstration of NBN Record Cleaner at a workshop for BSBI Recorders at Kindrogan on the 2nd-4th March. NBN Record Cleaner is a free software tool that enables data managers to rapidly check large numbers of records against validation and verification criteria. Last year, BSBI produced verification rules for Record Cleaner for over 5,000 species of plant. The workshop session was attended by around 30 BSBI recorders, predominantly vice-county recorders, who are interested in using Record Cleaner to help them to verify plant records prior to sharing the data via the NBN Gateway.

New verification rules for NBN Record Cleaner

Thanks to funding from Defra, the NBN Trust recently awarded contracts to the following organisations to develop verification rules for NBN Record Cleaner: British Lichen Society, British Bryological Society, Dragonfly Recording Network, Marine Biological Association, Spider Recording Scheme and the Mammal Society, who will be working in partnership with Bat Conservation Trust, ORCA and Cardiff University. These rules provide baseline data on the temporal and spatial distribution of each species, against which new records can be checked, and also classify species according to the level of expertise required to make an identification. In addition to developing verification rules, these organisations will also provide guidance on verification processes and produce a recommended list of species whose records should be treated as sensitive under certain circumstances. Further funding is available for the coming financial year, and expressions of interest are invited for the development of verification rules for other taxonomic groups. The new verification rules will be made available during April. Record Cleaner automatically alerts users to the availability of new and updated rules when the software is opened. Record Cleaner can be downloaded from the NBN website.

NBN Trust participation in SBIF

The NBN Trust supports the establishment of the Scottish Biodiversity Information Forum (SBIF) and will be actively involved in the Forum workshop on the 25th May. Through the NBN website and e-News, we are currently helping to disseminate information about SBIF and encouraging relevant organisations to respond to a questionnaire which has been designed to identify the main issues and opportunities relating to biodiversity data flow in Scotland.

Did you know?

Absence data on the NBN Gateway

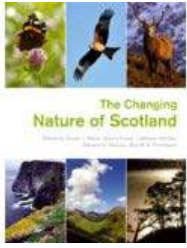
The NBN Gateway can now show absence (zero abundance) data.

Whilst currently only the Interactive Mapping Tool (IMT) supports reporting on this data, the absence records are clearly differentiated from presence records and both can be independently turned off using the advanced layer controls (the gear symbol).

When drilling down into the individual records, absence records are highlighted in orange on the species picker and all records are clearly labelled as presence or absence in the further detail of the record.

Absence records can be commented upon in the same way that presence records can and they can also be flagged as sensitive.

BOOK REVIEWS



Marrs, S., Foster, S., Hendrie, C., Mackey, E.C., & Thompson, D.E.A. (editors) (2011). *The Changing Nature of Scotland*. Scottish Natural Heritage. ISBN 9780114973599 Hbk £27.50

This 500 plus page tome is substantial both in weight and also in the detail and diversity of information it contains. If read in one sitting or dropped on the head of the reader, both actions would leave one stunned.

The content of the book comes from a conference held in 2009 by SNH about the range of recent changes affecting nature across Scotland. It is the proceeding of this conference, which have been updated to reflect more recent changes. It follows on from the 2002 SNH publication, "The State of Scotland's Environment".

It is divided up into nine sections with 42 chapters in total. Each section has an introduction to it, broadly summarising the chapters that follow. As already said the diversity of papers this book contains is quite something, from 'How Supportive Environments Create Good Health' to 'Scotland's Soil Resource', with 'Whisky and Water' in between.

The book does catalogue successfully the changing nature of Scotland, although its aim is not to catalogue all species or species groups and determine their trends but rather take a more holistic view of where we/ Scotland's Biodiversity are and what actions are being taken.

My one minor criticism of the layout would be that the authors of the chapters do not have any detail listed about their organisation or post within that organisation in the chapter itself. There is list of contributors but this gives no information on what their role was/ is.

Some highlights from the text in no particular order are: The reappearance of Nature Heritage Futures (Chapter 8), after a review and update in 2009. These looks forward into the future are useful as most organisations are terrified of producing anything that smacks of a vision that has any kind of detail to it. However, what we really need is a sensible discussion of what Scotland's natural landscape should or could look like and these documents go some way to starting that discussion.

In Chapter 13, Harry Burns from the Scottish Government's Health Directorate highlights how our health is affected by the environment and that our early years' experiences are likely to determine the extent to which we engage with nature. Something that should be of great concern seeing how few children informally engage with their environment (it used to be called playing outside). The next chapter on the John Muir Award highlights, "the study showed that those in the poorest circumstances were much less likely to have visited wild places before their Award experience, and that perhaps this group was most positively affected by the experience."

Three of the Farming Chapters (25-27) made very interesting reading. The first highlighted the conflicting nature of some Government policies affecting farmers, Chapter 26 basically said current Agri-environment Schemes are not fit for purpose and the findings of Chapter 27 could be confidently extrapolated ten years hence to say that the EU 2020 biodiversity target will not be met unless the land management

that is publicly funded fundamentally changes. The final sentence in this summary for this chapter does seem like a bit of an add on, "Any future policy change... to increase farmland biodiversity... will however, require a robust evidence base to inform that change." Evidence is required certainly and arguably enough is there. The obvious facts of habitat simplification and field expansion in nearly all lowland farms is blindingly obvious and links well with the findings of Chapter 10 that re-photography can be a very effective tool in documenting environmental change.

The contention in Chapter 31 that the 1950-70's were the nadir of the state of the Scottish environment is interesting as it could be argued that this was the downward slope and we are really in the nadir now and for the foreseeable future as even with all the efforts to conserve biodiversity, the pressures both directly from people in terms of habitat loss/ modification and indirectly from climate change are having a huge impact that in some cases we can do little about, see Chapter 36 for more on that.

To finalise on the doom and gloom (don't worry there is hope), the preface states that in 1961 the global ecological footprint was 50% below the planet's biocapacity and in 2007 it was 50% above. At the latter date the UK's ecological footprint was 365% of the planet's biocapacity. The final summarising chapter also is gloomy as it states that the need for greater policy integration to deliver greater environmental benefits identified in key papers from 1997 and 2002 has to happen but "a hard-headed analysis suggests that not much has changed." Oh dear.

The point I wish to make in selecting the above chapters and quoting from them is that there is a great deal in this book that points to a way forward to deliver action that will start to address nearly all of the issues highlighted in this book. The fact that this is not highlighted in the closing chapter specifically is a disappointment as it could be the best thing to come out of an excellent publication. The authors will no doubt point out that such recommendations were beyond the scope of the book.

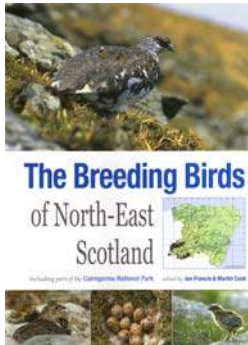
But I would argue that this is not the case. The underlying theme of the book is that of the need for a comprehensive and up to date evidence base to drive or influence policy. But the thinking round this and some papers wanting more surveillance of well studied species are missing a couple of the key points. Firstly that current surveillance is incredibly patchy over the taxa and skewed to vertebrates and secondly surveillance (if done corporately rather than personally) of anything should be a means to an end. If what you are studying is declining, then something needs to be done about this and continuing surveillance will tell you if what you have done has made a difference. Direct linkage with the Scottish Biodiversity Strategy should have been a way to do this but wasn't and also the requirement of surveillance of certain species identified under the Habitats Directive should also have been a mechanism for the creation of a surveillance – reporting – species action loop but this doesn't exist.

I may appear to be bashing on about this but the only reason I am doing so is that I feel this book is a very important publication whose findings need to be disseminated as widely as possible. I sincerely hope that

in 2021 another similar publication does not say that the findings of publications of 1997, 2002 and 2009 have still not been actioned. There are several simple, common sense actions, many identified in the text, which if taken forward over all of Scotland would have a very substantial positive impact on our biodiversity, possibly enough for us to reach the 2020 EU Biodiversity target or at least get pretty close. All these actions are in various case studies that have been produced for at least the last 20 years. One key one for biological recording would be the support and liaison with volunteer recorders and many chapters make this point, albeit indirectly.

I would like to reiterate that this is an excellent publication and I would urge everyone to have a look through it if they possibly can. Its chapters are available for free download at <http://www.tsosshop.co.uk/bookstore.asp?FO=1159966&Action=Book&ProductID=9780114973599&From=SearchResults>. It is full of interesting papers on a wide variety of subjects and if read closely it suggests a way forward to tackle some of the key biodiversity issues that all this surveillance has identified.

Jonathan Willet



Francis, I. & Cook, M. (editors)
(2011) *The Breeding Birds of North-East Scotland*. The Scottish Ornithologists' Club, Aberdeen.
ISBN 978-0-9561126-3-7 Hbk £25 +p&p

This splendid book is an atlas of the breeding birds of Aberdeen, Aberdeenshire and Moray, including part of the Cairngorm National Park. Almost 150 years ago, A G More published a paper in *Ibis* "On the

distribution of birds in Great Britain during the nesting season" based on lists supplied by correspondents from each county. It was a brave attempt at a comprehensive account, but it rested on how well his correspondents knew their counties and, indeed, he obtained no information from many counties. Furthermore, it was based on his correspondents' accumulated knowledge rather than a programme of up-to-date fieldwork. A century passed before a systematic survey was organized (by C A Norris on behalf of the BTO) that asked observers to record what they actually found when they went out specifically to record what they observed in squares of the National Grid. Only 30 species were included but even so coverage of the 5x5km squares chosen as the recording unit was incomplete. Nonetheless, the seeds of modern "atlas-ing" were sown. In the 1960s, the West Midlands Bird Club pioneered the use of the methods that, with minor changes, we use today. This, and the publication of the Atlas of the British Flora in 1962, encouraged the British Trust for Ornithology to conduct the first nationwide atlas survey in 1969-72. Since then, hundreds of bird atlases have been produced around the world, covering areas ranging from single cities to entire continents.

The Breeding Birds of North-East Scotland covers an area that comprises 11% of Scotland's land, probably the largest area ever surveyed at the scale of 2x2km (tetrads). The scale of the survey is matched by the lavishness of the book, which is superbly laid out in full colour, with many photographs and maps. Most species are presented in a double-page spread, with a large map presenting the distribution as black dots on a

background that is coloured to show topography, water-bodies and rivers. A super-imposed 10km grid makes it easy to locate the individual tetrads. Additional small maps show the distributions at 10x10km (hectad) scale in all four atlases (local and national) that have covered the area, so that one can see the changes. More difficult has been the comparison at scales smaller than the hectad because *The Birds of North-East Scotland*, the previous atlas for Aberdeen and Aberdeenshire, was based not on tetrads but on units defined by topography and habitat, which averaged about 20km² rather than the 4km² of a tetrad. To allow comparisons, the team behind the current atlas have ascribed every tetrad to one of the previous units, allowing them to present maps of both the 1990 and the current distributions in these units.

The maps are accompanied by photographs of the species and by text that discusses changes in distribution and describes habitat and breeding biology in the region, status and distribution at both Scottish and local level, and estimates of population and trends.

Importantly for a full understanding of the results, and for those who organise future surveys, the methods and the data analysis are described in an introductory chapter, with more details in an annex. Another most useful chapter reviews the bird habitats, landscape and land-use of the region, including recent changes, with abundant photographs to illustrate the comprehensive text. Interspersed within the species accounts are descriptions of 20 special places, such as Fowlsheugh and the Forest of Birse, which add particularities to the general review of habitats in chapter 2. After the species accounts, there is a chapter reviewing species richness, both of the entire avifauna and of various groups of species defined taxonomically, by habitat or by conservation status. Another chapter covers overall changes in distribution and numbers. There is a comprehensive review of the conservation of breeding birds in the region. Annexes provide further details, including more on population estimates and status. Most usefully, a gazetteer is provided.

This book should be on the shelves of every birdwatcher in N E Scotland but they are not the only ones who will find it useful. The information provided on the species is relevant to ornithology across the country, that on the habitats to any Scottish naturalist, and that on the changes recorded and their possible causes to anyone interested in the management and future of the nation's biodiversity. I cannot recommend it too strongly.

Jeremy Greenwood

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