



BRISC

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Recorder News

CONTENTS

Bird life of the Musselburgh Lagoons	pg 1
Chair and Editors page	pg 3
Hawker changes in D&G	pg 5
Smart Recording with Guerrilla Tactics	pg 7
BRISC Projects	pg 9
SBIF Update	pg 12
BRISC Conference	pg 13
Reviews and Information	pg 14
NBN News	pg 15

BIRD LIFE OF THE MUSSELBURGH LAGOONS

In 1964, the South of Scotland Electricity Board constructed a 1.7-mile-long concrete sea wall and reclaimed an area of intertidal flats east of the Esk mouth. The wall encompassed four large lagoons which were used to dispose of fly-ash pumped as a slurry from the nearby Cocksenzie Power Station. For many years, the whole site was hugely important as a wader roost and the only people who visited this rather bleak site were a few local birdwatchers. Gradually the area was

filled in, grassed over and trees were planted, but thankfully plans for a golf course were shelved. The power station closed in 2013 and in the latter years of its life, the ash was still being pumped alternately into the western and easternmost lagoons. Now, the only wet areas are the man-made scrapes which occupy just a small part of the formally extensive site.



Wading birds are a key feature of the Musselburgh Lagoons (grid ref NT358735) – they feed on the intertidal Firth of Forth and roost on the

scrapes. Not only is it a nationally important site in terms of numbers and variety, it is also simply a great place to see them. The site is conveniently situated on the eastern outskirts of Edinburgh and can be easily reached by bus, car, bicycle or even train. It is this proximity to a population centre that really highlights the site's importance for education and recreation.

The Musselburgh lagoons site has a high level of protection – in fact the highest possible, in that it forms part of the Firth of Forth Ramsar Site. This

from Portobello east to Port Seton (and probably beyond). Their feeding regime is dictated by the tides (not day and night), which is maybe just as well given the alarming level of disturbance at Fisherrow by dog walkers these days. As the tide rises and pushes the birds inshore, the seawall near the River Esk mouth provides a superb viewing platform to look down onto the various wader species and offers opportunities to hone your identification skills!

After Oystercatcher, the most abundant waders are Curlew, Redshank and



status was achieved by virtue of the large number of waders that roost here, and it is secure, undisturbed roost sites that are in such short supply and are crucial in supporting the bird populations involved.

At low tide, waders disperse along the mud, sand, rocks and mussel beds

Bar-tailed Godwit, but there are many more. At the scrapes, the birds gather at high tide, and before they settle down to roost, they often bathe and preen – again a good time to observe the differences between the species.

Continued on pg 4



The Chairman's Column

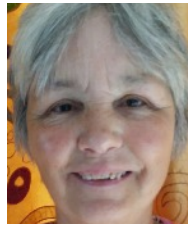
Well it isn't quite my last column as I suggested in the last Recorder News, but soon there will be another author of this

section. Autumn is certainly in the air with the first of the skeins of Greylag Geese flying over my house today. The leaves are turning and the insect-eating birds are migrating. The Large White caterpillars are still munching on my uncovered Kale, but you have to let them have something to munch...

The BRISC Conference and AGM is nearly a month away. It doesn't seem like we were in Grantown-on-Spey for the last one. I hope that the discussion on the conference topic of Local Nature Conservation and Biological Recording is as good as we had last year. Local sites and local recording do make a difference and this sort of data was used to compile the State of Nature Report: http://www.rspb.org.uk/Images/StateOfNature2016_Scotland_1%20Sept%20pages_tcm9-424988.pdf It is getting harder for government to ignore that their policies are actively harming biodiversity.

The SBIF group working on the Review of the Biological Recording Infrastructure in Scotland has begun and from what I heard at the meeting recently, it looks like quite an undertaking. There will be lots of talking to people involved in biological recording. It is only a review but it is doing something new and its findings on what sustainable data management structures and volunteer support Scotland requires should be difficult to ignore. We will of course keep you informed.

Jonathan Willet



Editorial

A little BRISC business to start: as mentioned in the last issue of BRISC news there will be three issues in 2017 – January, May and September. Note also that annual

membership runs from April 1st; the individual rate is still £15 p.a.

Now the meeting / conference season is upon us with many groups - Butterflies, BSBI, Bats, holding their annual events over the next few months. If you don't get notification as a member of something, do google their websites as such conferences welcome new people and are also fantastic places for learning and meeting people.

Not least of these we hope you will attend is the annual BRISC conference. This year the subject is '**Local Nature Conservation and Biological Recording**' with main speaker Dr Alison Hannah. The conference is in the handsome Linlithgow Burgh Hall, Saturday 29th October. Full details and booking information can be found on page 13.

Many thanks to this issue's contributors. There is an inspiring article from the Outer Hebrides Recording Group and a welcome review of the recently published Amphibians and Reptiles of Scotland by Chris McInerney and Pete Minting on pg 14.

Sorry no room for BRISC contacts list - see the website or previous issues!

DEADLINE FOR NEXT ISSUE
January 20th 2017

Articles in Word & photos in jpeg preferably, please. Email to: saraheno@riseup.net

Birdwatchers know the site as a Mecca for birds; and so do Sparrowhawks and Peregrines. The mass eruption of the wader flocks may be a good tactic, but a surprise visit can often catch a wader unawares. A Sparrowhawk is as adept at picking up a Snipe as it flashes over the scrapes, as a Peregrine is stooping out of the sky and grabbing a Knot. If the birds you are looking at suddenly look skywards and freeze – look up. They are better at spotting something than we are!

Waders are seen at Musselburgh in every month. A winter population frequents the area from November to February; spring passage is March to May; then autumn passage is evident from late June through to October.

You will see few waders in mid-June, but as the end of the month approaches, the number of Redshanks rapidly increases from just one or two birds to tens and then many tens. At first it's just failed and non-breeding birds, but locally bred, young birds start appearing at the scrapes towards the end of July. Young Redshanks, Curlews, Oystercatchers and Dunlins are first, but then juveniles from the far-distant breeding populations of Knots, Bar-tailed Godwits and Turnstones make their appearance. They may have flown over 2,000 miles in just a few days to get to Musselburgh.

Returning to mid-summer, a few non-breeding Bar-tailed Godwits remain through the summer. These are one-year-old birds that don't venture north to breed, but choose to stay and moult

on the Forth. July also sees a significant number of adult Black-tailed Godwits passing through – something that has definitely become more frequent with the establishment of the scrapes (and highlights the previous lack of vital, freshwater habitats on the south Forth). Again, it's failed and non-breeding adults that pass through first, later accompanied by the juveniles. These are Icelandic birds en route to their winter grounds further south, and many only stay at Musselburgh for a few hours to rest, before continuing on their way. An excited, vocal flock of 50 birds can drop out of the sky and be gone again a couple of hours later.

With this continual turn-over of birds, the total numbers using the site is difficult to estimate. It's easier with obvious flocks like Black-tailed Godwit (and other scarcities), but the turn over in passage Oystercatcher, for instance, is unknown and the published 'monthly peaks' are probably massive underestimates of the totals. Suffice it to say that the 2,000 birds you see one week are almost certainly not the same 2,000 you may see a week later. Rarities also give an indication as to how long individuals stay at the scrapes. Although this varies, a ball-park figure would be something like one to three days.

It's not just about waders and the scrapes though; Musselburgh's inshore waters are prime habitat for sea ducks, divers, grebes and auks. One species stands out as a Musselburgh speciality – the Velvet Scoter. Rarely can you get as close to these northern, black-and-

white sea ducks as you can off the Musselburgh seawall. Some Common Scoters are usually mixed in (their numbers tend to peak in summer rather than winter). If you are lucky you may get sight of the rare Surf Scoter. But it would be a red letter day to get one of those close in!

Rarities add spice to the Musselburgh birding experience, with more rare vagrants turning up here than anywhere else of comparable area in south-east Scotland. Rare waders, terns and gulls are identified each year, with Wilson's Phalarope, White-rumped Sandpiper and Western Sandpiper coming to mind.

And I haven't even mentioned the Short-eared Owls that were such a feature of the winter of 2015/16...

The site is managed by East Lothian Council and promoted as both a 'Leisure Park' and a Nature Reserve – and visitor pressure on the area can at times be detrimental to wildlife. Nonetheless, the partnership between Scottish Power (the previous occupiers of the site) and the Council has successfully produced the scrapes and its 'hides', and plans have been on the table for many years for additional wildlife habitats. Fingers crossed, these will materialise soon.

Ian J. Andrews

Further information can be found at http://www.the-soc.org.uk/whats_on/local-branches-2/lothian/

Hawker changes in Dumfries & Galloway

If you live in SW Scotland, Common Hawker is a good name for *Aeshna juncea*. They can be watched at countless lochs and ponds, from the highest at 710 m in the Moffat Hills to just above sea level at more easily accessed sites such as Kirkconnell Flow and the Almorness Peninsula, both in Kirkcudbrightshire. Twenty years ago, the only place where you had to check hawker ID was in Galloway Forest Park, for Azure Hawker *Aeshna caerulea*. Now, we have **four** hawkers: so you have to look more carefully at any *Aeshna* dragonfly!



I first saw Southern Hawker *Aeshna cyanea* (photo above) here in 2003, at woodland pools on the edge of a bog near Canonbie, and have seen them at the same spot many times since. They've been recorded in 22 tetrads across the three vice-counties, but are mostly in Dumfriesshire, which is hardly surprising, as the species has been

expanding its range from Northern England. Some of these records are of wandering individuals away from potential breeding sites, but they are already showing their adaptability. The photo shows a small, shallow garden pond so thick with decaying vegetation that I could hardly use my colander, but managed to dig out two fully grown larvae on 8 July 2016. I had visited because Karen Millar photographed a female ovipositing here, at her home near Lockerbie, in 2014. Last summer, the owner of a much larger garden pond near Ecclefechan, eastern Dumfriesshire, counted 100 exuviae, but watched many of the emergents

reached South Cumbria in about 1999 and the north of the county in 2003. One was possibly seen in Dumfriesshire that year and certainly in 2004. They've now been recorded in 16 tetrads across Dumfriesshire and Kirkcudbrightshire, but not yet in Wigtownshire, with the main concentration in the coastal strip between Dalbeattie and Southernness, one of the most odonata-diverse parts of the region. Last year, Bob Merritt found the first larva, in a ditch at Mersehead RSPB Reserve. Later in the season, I watched a male, perched on the hedge along the main path, at virtually the same spot.

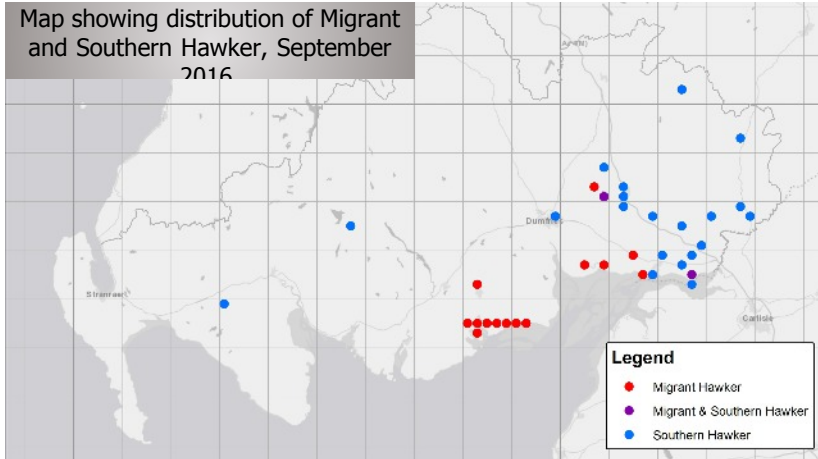


Barbara (right) with Karen Miller at her garden pond where Southern Hawker breeds.
(Photo Richard Mearns)

The known distribution of odonata in the south-west has changed rapidly since 1996 when the *Atlas of the dragonflies of Britain and Ireland*, Merritt et al, showed 13 species, all of which bred. The new atlas by Steve Cham et al (2014) shows that 21 species have now been recorded. New additions include Banded Demoiselle and Keeled Skimmer, both well established, though how long they have been here is uncertain – they may well have been overlooked for many years. Emperor is not recorded every summer, but has occurred sporadically right across the region since 2003 and Broad-bodied Chaser has been seen several times: both may breed in the future.

being snaffled up by Reed Buntings and Grey Wagtails. This summer, she didn't see a single adult or find any exuviae. Migrant Hawker *Aesha mixta* has been moving northwards, from SE England, for the last century. It

However, despite the greater diversity, it's not all good news. As climate change allows more species to move in, it's likely that we will lose Azure Hawker, an arctic-boreal dragonfly on the very southern edge of its range.



In 1996, on a BDS outing at Silver Flowe with Bob and Betty Smith and David Clarke, the group easily found large numbers of Azure Hawker larvae and watched adults. By 2007, David and other experienced odonatists were failing to find any larvae. Jonathan Willett has spent eight days searching for larvae during the last eight years and this season, on 30 May, found one – the first recorded since 2001. They seem to be barely hanging on.

With such rapid developments, and only a handful of local dragonfly recorders, if you visit the region, please be sure to send your records to the Scottish Recorder Betty Smith or to DGERC, <http://www.dgerc.org.uk/> so that we can track changes in status and distribution.

Barbara Mearns

Smart Recording with Guerrilla Tactics

The biological recording community is currently devoting much of its attention to developing national systems to organise and optimise the flow of biological data. One of the smallest biological recording organisations in Scotland, Outer Hebrides Biological Recording (OHBR), has been contributing to this debate, although our primary concern is the collection rather than the flow of the data.

In 2014 a preliminary biological audit, based on the records available from NBN for the Outer Hebrides, confirmed the extent of the under-recording in the islands. It highlighted the significance of the serious gaps in our knowledge of the species composition and distribution of most of the major taxa. It also supported our contention that for many taxa in VC110 the NBN distribution maps were often more of a reflection of recording activity and reporting than regional biogeography.

For a very small biological recording group, operated by volunteers with extremely limited financial resources, to begin to make a significant difference to the *status quo* required careful consideration of the various options, the formation of a strategic plan and eventually the implementation of Smart Recording.

Naturalists and scientists have been visiting the islands since the late 19th century and their observations on the flora and fauna of the Outer Hebrides are scattered throughout the scientific literature, secreted in published and unpublished government reports and museum collections. The majority of these sources are not easily accessible and only a tiny percentage of the data has been extracted and incorporated into the BRC or NBN databases.

Employing historical data and information derived from even the more recent scientific literature to fill gaps in our biogeographical knowledge is fraught with problems but it can make a contribution to the compilation of systematic checklists and provide an impetus to investigate new sites and taxa. Therefore, whilst these sources of information have an important contributory role, their value is probably diminished by the time and effort required to locate, access and extract the material.

A more pro-active approach was to organise a programme of fieldwork to survey under-recorded areas at 1 km grid square level using a recording team. With information from the biological audit and local knowledge, the base-line data for the programme and rapidly confirmed the hypothesis that, with the exception of a few well known sites and the resident recorders' 'home squares', there was a high probability that selected sites would yield a significant number of new records to add to the distribution maps of a wide range of species.

Biological recording in the Outer Hebrides is best described as 'challenging'. The archipelago comprises 119 islands and contains over 4000 freshwater lochs in a land area of 3,070 sq km. With a limited road network and ferry service, large areas of the archipelago are extremely difficult to access, a situation compounded by topography and climate. Therefore the choice of survey sites is constrained by geography and topography and as the scheduling of field work is dictated by the weather, recorders have to be prepared to go anywhere at very short notice and be prepared to tackle anything from a peat bog to an uninhabited island (guerrilla tactics).



master class in stoneworts and aquatic plants by Nick Stewart"

The programme of targeted recording is now in its second year and fulfilling its aim of increasing the annual number of records, and expanding the geographical coverage of the datasets. This co-operative approach is very popular with OHBR recorders; it has enhanced the social cohesion of the group and helped to develop and expand their range of skills through mentoring and team work. The small size and commitment of the team has contributed to the success of the programme, however, with only 12 active recorders, our ability to increase the

number of taxa recorded is limited. Each individual has a specialist interest, and although they have all been prepared to learn how to identify new taxa and improve their existing skills, there are still some where we have been unable to make any significant progress. Still, if an entomologist can develop an interest in aquatic plants and a mycologist can become enthusiastic about marine algae and mollusca, perhaps there is still time for someone to become passionate about coleoptera.

Targeted recording, raising public awareness, developing links with visiting research teams, compiling systematic checklists and providing training opportunities is the key to the success of OHBR's Smart Recording programme. Targeted recording may not be an appropriate method of data collection in other locations, but the application of an integrated strategic approach to organising data collection may be more widely applicable. OHBR advocates the need for diversity in biological recording and this applies to data collection and support for local recorders.

Biological recording is changing rapidly and whilst we are pre-occupied with reviewing organisational systems, data management and the implementation of new technologies it should be remembered that even the most sophisticated system of data flow relies on the input of high quality data. Knowledgeable and experienced biological recorders are a valuable resource and the ability to utilise their skills to provide high quality data depends on developing an infrastructure that is responsive to their needs and understands what is required to put dots on the map in the right places.

Christine Johnson
Outer Hebrides Biological Recording

BRISC PROJECTS

BURSARY REPORTS

Introduction to the families of Diptera

Whilst volunteering at Orkney Wildlife Information and Records Centre I often get asked to identify invertebrates, particularly Diptera, which I have a keen interest in. These are often under-recorded on Orkney and having completed an MSc in Biological Recording I am familiar with using keys to identify various invertebrate families. However, until I attended a Hoverfly Workshop last year, run by Roger Morris and Stuart Ball from the Hoverfly Recording Scheme, I had not really tackled flies before. Since then my interest has grown and I have recorded several new species to Orkney, often with identification help out-with the islands.

But I felt I needed to expand my knowledge if I wanted to make any difference to Diptera recording on Orkney so I was pleased to receive a BRISC/GHNS bursary enabling me to attend a course at



Microscopes at the ready - class hard at work

Preston Montford Field Centre in Shropshire (also run by Roger Morris and Stuart Ball) running from the 1st-5th August 2016.

The course was well attended and it was good to spend time with people who were interested in learning more about flies. As well as inspirational classroom sessions and lectures we were able to get out (despite the rain) to collect specimens from around the grounds at Preston Montford and also from Loamhole Dingle near Ironbridge.

It was fascinating observing Roger and Stuart identifying Diptera in the field and demonstrating how to collect specimens which were then identified under the microscopes back at the centre. We learned how to confidently take specimens to family level using a key, and once we had all got to grips with that, we progressed on to genus and species.

There were lectures on collecting, preserving, pinning and recording specimens and for the technically-minded there was a session on photo-stacking aimed at those interested in photographing pinned fly specimens.

The course has given me confidence to broaden the range of Diptera families I can identify, many of which I had previously decided were too difficult to attempt. Hopefully I will now be able to add more to the knowledge of which species are present here on Orkney and to inspire others to look more closely at flies and record what they see here.

Many thanks to BRISC/GNHS and Northlink Ferries for contributing to the cost of the ferry journey.

Lee Johnson

Mammal Identification

I recently attended a Mammal Society course led by the John Haddow, famous in the bat world. However, bats were put aside for the weekend as we ventured through time, learning about the variety of terrestrial mammals (native and non-native) found throughout Britain.

From tracks and signs to specimens galore and small mammal trapping to analysis of owl pellets, I can now identify mammals, other than bats, using a variety of techniques previously unknown to me. A lack of equipment is no longer a problem, recording mammals is so simple, especially with the number of recording tools and apps at our fingertips.

Now I've dabbled a little in small mammal trapping before and a bit of badger surveying here and there, but my focus has mainly been on bats. So I was delighted



when I received my certificate in Basic Mammal Identification, stating that I had demonstrated competence in British land mammal field identification skills by passing the written assessment with distinction. With that in the bag, there's a whole heap of things I now feel confident to go out and do and to contribute to the recording of mammals.

I have been inspired to be more active not only with the newly formed Stirling Mammal group but also my local group for the Lothians, taking my newly learned skills and putting them into practice. I thoroughly enjoy the small mammal trapping side of things and would like to carry out small projects within my local area.

Not only that but I have also recently become an Ecologist, my first full-time role that doesn't just consist of bat activity surveys. After completing the course, I now feel more confident in my role at work and will now be able to use my newly formed skills in mammal identification through the use of field signs when out carrying fieldwork.

All in all the course was immensely useful. I am grateful for the opportunity to participate. Whether it's for work or just for fun, I can now record mammals wherever I am.

Heather Campbell

Glasgow Natural History Society / BRISC Bursaries - then & now

Bursaries developed from a series of articles The Scotsman newspaper ran, inviting readers to send in records of wildlife that they came across and found interesting. This involved BRISC in answering so many questions that a potential paid post got turned into offering bursaries to help with taxonomic training. From two bursaries offered in 2009 it has grown to seven in 2015. However, the numbers of bursaries available in any year, depends on the generosity of GNHS, BRISC and other sponsors (and more welcome).

Bursaries are currently offered towards a course in natural history, often ID training in a particular taxon in order to encourage

field recording and then mobilisation to the NBN or to relevant schemes. Since 2009, forty-six people have studied 22 different taxa including Dragonflies, Leafhoppers, Mammals, Aquatic invertebrates, Lichens, Freshwater Algae and a range of botanical taxa. Bryophytes has been the most popular with Harvestmen & Spiders second but Diptera has had one intrepid student. (Full list can be seen on BRISC website).

Notable absences for study include Strand-line and Marine species and habitats, Aquatic Plants, Amphibians and Reptiles, many of Beetle groups such as Ladybirds, Carabids etc; and there a gaping hole for soil-living organisms such as Molluscs and Crustaceans and especially Nematodes and Annelida.

We know less about what happens to students: what careers you take up, whether you continue to record formally or casually and whether your records eventually go to the NBN. It would not be surprising if many students actually had to or chose to go in other directions as they leave student life.

However, Ali Murfitt who went on a week long Grasses ID course Kindrogan Field Studies Centre in 2011, says "I went as almost a complete beginner to grasses. After a week, my brain was melting but a new world had awoken, and suddenly I was noticing 'hairy knees', pointed ligules and glumes all over the place! Jokes aside this course gave me a firm grounding in grass identification which has been invaluable in the years since. Almost immediately I completed a number of grassland fungi surveys, and the course helped me to note more detail about the habitat in which the fungi grew. It continues to be useful now in my role as Site and Community Officer at Borders Forest Trust, where as grassland converts to woodland, the

composition and abundance, the species change". We know of other students working in various ways in ecological or conservation related works. So bursaries are good value!

GNHS & BRISC welcomes applications however, for the less studied taxa. There is a huge range of courses available between the 17 Field Studies Centres spread across Great Britain and Northern Ireland <http://www.field-studies-council.org/centres.aspx>. There are also a number of recording schemes or Local Records Centres (see www.brisc.org.uk for links and bursaries) which offer occasional introductory courses, usually free.

Sarah Eno

TWIC Autumn Conference & AGM November 2016

Sea Change? A Conference on Marine Recording and Conservation

Date: Saturday 26th November, 10:30 - 16:30

Location: Bo'ness Town hall, Falkirk (EH51 9NJ).

Details: Talks will highlight some of the excellent work undertaken by marine recording schemes and citizen science projects to improve knowledge of marine species in our area as well as some of the challenges associated with managing and conserving marine biodiversity.

Cost: FREE, including buffet lunch, but booking is essential as numbers will be limited.

Getting there: The nearest train station is at Linlithgow and from there it is a short trip on the bus (Bus No. 45) to Bo'ness. There is also free on-street parking

SBIF UPDATE

Since the alignment of SBIF with NBN in April this year it has been full steam ahead with planning the review of biological recording infrastructure in Scotland. Underpinning the review is the fundamental aim and original vision of SBIF: "High quality species and habitat data will be collected and managed through a sustainable, co-ordinated and integrated local and national framework of organisations, partnerships and initiatives. These data will be available to ensure Scotland's biodiversity, ecosystems and people benefit".

We have a list of objectives which include: to build the energy and confidence of key stakeholders; to establish what funding and other income sustains the current infrastructure and what sources may continue to be available, or become available, in future; to identify where improved use of technology can help reduce duplication of effort and increase the efficiency of the biological recording infrastructure; and to consult stakeholders on the infrastructure that they and their sector need to meet their requirements. The consultation process will be starting in late October.

The background to the review and more information can be found at <https://nbn.org.uk/about-us/where-we-are/in-scotland/review/>. Please sign up to the NBN's Network News (at <https://nbn.org.uk/news-events-publications/latest-stories-from-our-network/enews-sign-up/>) to be kept informed of this and other news from the Network.

There will be a full report by Ellen Wilson, chair of SBIF, at the BRISC Conference on the 29th October.

Christine Johnston

BRISC ANNUAL CONFERENCE AND AGM

LOCAL NATURE CONSERVATION AND BIOLOGICAL RECORDING

Linlithgow Burgh Halls, Cross Street, Linlithgow EH 49 7AH
Saturday 29th October 2016

Programme

- 0930-1000 Arrival and registration
1000-1010 New Chairman's welcome.
1010-1040 Local Nature Conservation sites and local recording. *Dr Alison Hannah. Dunnock Environmental Services.*
1045-1100 LRCs and local sites. *Graeme Wilson, TWIC.*
1105-1120 Bio Recording on your local site. *Roy Sexton*
1125-1140 LNC Sites and Councils. *Stuart MacPherson,*
East Lothian Council.
1145-1200 SBIF Update. *Ellen Wilson*
1200-1230 4 Bursary talks.
1230-1400 Lunch
BRISC AGM 1330 - 1400
1400 Official Goodbye and briefing for Field Visit to
Linlithgow Loch.
1410-1630 Field Visit
1630-1700 Last tea & coffee and Departures

Costs: Student £15; member £35; non-member £40

Booking:

Eventbrite: <https://www.eventbrite.co.uk/e/brisc-conference-agm-tickets-27759854472>

or Email: secretary@brisc.org.uk

Travel at time of printing:

Trains: Edinburgh to Linlithgow - Depart 0833 or 0845. Glasgow Queen St. to Linlithgow - Depart 0815 or 0845.

Linlithgow to Edinburgh - Depart 1717 or 1740. Linlithgow to Glasgow Q. St. - Depart 1709, 1735 or 1756. From Stirling check www.scotrail.co.uk

Buses: Regular services to Stirling, Falkirk and Edinburgh.

<https://www.firstgroup.com>

Book Review

The Amphibians and Reptiles of Scotland by **CJ McInerny** and **PJ Minting** (2016)

The Glasgow Natural History Society

A quick question: how many Scottish amphibians and reptiles do you know?

Common Frog *Rana temporaria*, Common Toad *Bufo bufo*, Adder *Vipera berus*, Common Lizard *Zootoca vivipara* ... Slow-worm *Anguis fragilis*, maybe a couple of newts? Few people will realise there are as many as 16 species (plus exotics). Frogs and Toads are probably familiar enough, though even they can be confused from time to time. The others will be much less familiar.

The heart of the book comprises accounts of each of the Scottish species divided into sections on identification, current distribution (with a map and histograms of distribution by altitude), habitat, annual cycle (with bar chart), history in Scotland, where and when to see the species, diet, population, threats (and legal protection) and, helpfully, an indication of current gaps in our knowledge. Throughout, it is illustrated with first-rate photographs of the animals and their habitats. The book draws on the literature and a great deal of original knowledge and research by the authors – there was a taster of McInerny's work in a recent issue of this newsletter (McInerny 2016). As such it is right up to date and thoroughly focused on Scotland.

As well as good accounts of the commoner species, recorders will be interested to read about our rarest native amphibian, the Natterjack Toad *Bufo calamita*, confined to a few sites along the Solway coast, Grass Snakes *Natrix natrix*, also in

the southwest, the fascinating case of Sand Lizards *Lacerta agilis* introduced to the island of Coll, and the alien Alpine Newt *Ichthyosaura alpestris* which is now common at a number of sites, mainly around Edinburgh, adding to the need to look carefully at all our smaller newts to correctly determine their identity. Scotland is also visited by four species of sea turtle, one an annual visitor, the other three less often encountered. Appendices cover conservation, a site guide and exotics.

This is a significant new work on an important part of our vertebrate fauna. Running to 312 pages, the standard of presentation is all that you would expect from Harry Scott at Pica Design. Thanks to generous sponsorship, the book is available free to download as a pdf from <http://www.glasgownaturalhistory.org.uk/books.html> and a (paid for) hard-copy version which will be printed later can be ordered from pete.minting@arc-trust.org.

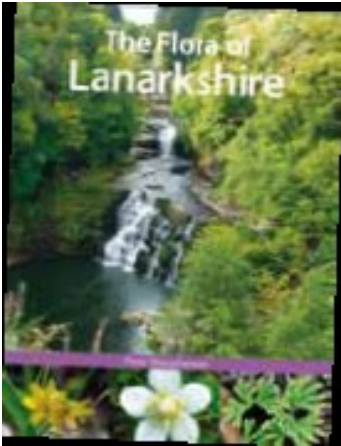
As a publication available firstly in an electronic format, it is a pity that hyperlinks were not included, at least from the contents and index pages to the species accounts and chapter heads to save a bit of scrolling. Notwithstanding, very strongly recommended and the maps should encourage readers to help fill in some of the gaps.

Alan Knox

Emeritus Head of Museums, University of Aberdeen

References

McInerny, C. J. (2016). The closer you look, the more you see: surveying reptiles at Loch Lomond. *BRISC Recorder News* No. 102, 1-2, 5-6.



NBN Conference and UK Awards 2016

Don't forget that this year's NBN Conference is being held at the National Museums Scotland, Edinburgh, on the 17th and 18th November 2016.

The theme of the conference is 'Going with the flow: Supporting the NBN Data Flow Pathway'. As the title suggests, this will focus on the stages of the data flow pathway across the two days.

The current [NBN Conference programme 2016](#) is available online.

We have built in a full afternoon of workshops on Thursday 17th November, which are built around the NBN Strategic Working Groups. You will need to select which workshop you wish to join when you complete your registration form. Places are limited, so please don't forget to book.

When booking for the Conference, member, non-member and student rates are available.

For those of you arriving on the Wednesday before the Conference, National Museums Scotland has kindly offered to arrange guided tours of the exhibits. Space is limited and booking is essential. If you are interested, please email Rachel Russell at r.russell@nms.ac.uk with a preferred start time between 3:00 and 5:00pm on Wednesday 15th November. Whilst the time cannot be guaranteed it will help the team to plan the tours around the number of people wishing to participate.

The Flora of Lanarkshire by Peter Macpherson, is the first comprehensive flora of this Scottish county. Past President of the BSBI, the author was official plant recorder for Lanarkshire VC 77 for over 35 years. This Flora represents decades of meticulous research and field work and contains historical and current records of plants growing in wild situations across the very diverse county.

Extending south to the source of the river Clyde, VC 77 includes upland regions, heaths, rivers, lochs and urban areas including part of the greater Glasgow conurbation. Over 2,000 taxa, including native and alien species, specific to different habitats are described in addition to detailed analysis of sites of particular botanical interest.

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UK Awards for biological recording and information sharing

Following its success in 2015, on Thursday 17th November 2016, we will again be holding an evening reception for the UK Awards for Biological Recording and Information Sharing. This will also be held at the National Museums Scotland between 6 and 7.15 PM. Drinks and nibbles will be served during the event and there are a number of restaurants available locally for dining afterwards.

We look forward to seeing you in Edinburgh!

The NBN Atlas Scotland has been shortlisted for a prestigious award at the [RSPB Nature of Scotland Awards 2016](#).

The shortlist, which was announced on 6th September, represents a cross section of businesses, charities, the public sector and individuals working towards conserving the country's unique wildlife and natural environment.

The [NBN Atlas Scotland](#) has been shortlisted in the Innovation Category of which there are 6 nominations in total:

- NBN Atlas Scotland
- Cairngorms Scenic Photo Posts
- The Great Trossachs Forest National Nature Reserve
- "Magic Margins"
- The Scottish Code for Conservation Translocations
- Shetland Peatland Restoration Project

We understand that this category received a considerable number of high calibre projects, so we are thrilled with the news!

Dr Jo Judge, NBN Chief Executive said "We are delighted that the NBN Atlas Scotland has been shortlisted for the 'Innovation Award'. Building the Atlas has been a truly collaborative project between many partner organisations, and using the Atlas will be a great way of engaging and captivating people with wildlife in Scotland. We are all very excited and are now keeping our fingers crossed for the next stage...!"

The winners will be announced at a ceremony in Edinburgh on 24th November. The ceremony will be hosted by wildlife TV presenter Chris Packham as 300 key decision-makers and supporters celebrate Scottish conservation's outstanding success stories.

Until then, fingers crossed!

Keeping in touch

If you want to receive NBN News updates direct to your inbox, remember that you can sign up to Network News, which is issued on a monthly basis on the first week of the month. Simply complete the online form and that it! <https://nbn.org.uk/news-events-publications/latest-stories-from-our-network/enews-sign-up/>

The Atlas of Living Scotland is the country's largest collection of biodiversity information
<http://www.als.scot/>