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Recorder News

WHAT'S SPECIAL ABOUT INVERKEITHING & VISMIG

By Alistair Shuttleworth

At first glance the Fife coastal path at Preston Hill Quarry, Inverkeithing, is an ornithologically unassuming kind of place. The path itself is a busy route for commuters and enough undisciplined dog walkers to make keeping one eye to the ground a wise idea. The harbour is serenaded by the sound of cranes moving masses of scrap metal, while Preston Hill Quarry is a site heavily populated by abandoned fridges, fly-tipped rubbish, and the occasional smouldering stolen car. It is not the kind of place that birdwatching magazines run expensive tours to.

Throughout the year this small area plays host to a rotating collection of birds which could be described as "vanilla". For between half an hour and an hour of your time you could reasonably expect to see around thirty bird species. In the winter you can try your luck on the water. There will be great crested grebes and probably little grebe, and often a red-throated diver or two, usually best seen by telescope but occasionally a few metres from the rocks. There will be ducks, with goldeneye and red-breasted merganser supplemented by teal and wigeon. In the harbour waders will include curlew, redshank and maybe a few dunlin. The incoming tide does not leave much room to play. Away from the water, in the path-side vegetation, you will find the usual collection of crows, commoner finches and tits. This past winter the stars to light up the stage were an Iceland gull and red necked grebe, both of which stayed all too briefly.

Early morning 'vismigging' at Inverkeithing – Ali Shuttleworth

When summer comes your list would continue to feature the commoner resident species – dunnock, wren, blackbird, song thrush, but now the grebes and divers, and most ducks except eider and mallard will been replaced by terns, and the bushes will gradually gather a complement of summer visitors. Chiffchaffs will sing from March, with willow warblers, blackcaps and whitethroats joining the chorus later.

Against such a background one would have to wonder what it is about Inverkeithing that makes me spend so much time there. Like many romances it began with a chance encounter. For some years now I have been watching visible migration ("vismigging") either at Dalgety Bay or at Cullaloe (a small former reservoir, situated two miles inland and now a Scottish Wildlife Reserve), both nice places to spend a morning watching and counting passing migrants. One fine evening in late August my wife and I took a bicycle trip to Dalgety Bay. Having arrived there we sat watching swallows flow over the rocks west, before we ventured out along the coastal path.

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Chair's Column

It seems like a case of déjà vu with the June weather, windy and wet but not as cold as last year. However my vegetable patch is suffering from the cold April, with very slow growth, that is what you get from planting early. This year was the first time on record that on average March has been warmer than April. It was a very strange spring with the leaves half out on the trees for weeks as they waited for the temperatures to warm up. This must have had a major impact on some species as there simply must have been no food for them. The blue tits that were nesting in my garage nest box were very busy feeding chicks in early April but abandoned the nest when the weather got cold, presumably due to a lack of food. Sadly all six chicks perished.

On a happier note all our bursaries have been allotted and there was a great response with 28 applications received. We are really pleased that so many people did. At the committee meeting at the end of June we decided to try and get some more funding for the bursaries, so I will be sending letters round organisations asking for a few hundred pounds to fund training for volunteer recorders to expand their knowledge or hone their skills.

Also at the committee meeting Andy Wakelin, our website manager, updated us on the AGM and key meetings page. We are trying to get a list of all the major AGMs and spring and autumn meetings for Scottish and regional biological recording organisations to minimise the clashes that inevitably occur. Do have a look at it on our website at http://www.brisc.org.uk/events.php . If you have any key meetings that we have missed, do get in touch with Andy at info@brisc.org.uk

I attended the National Federation of Biological Recording AGM and Conference down at Stanstead in April. It was very interesting to hear updates from England, Wales and Ireland. The main issue discussed at the AGM was the change for the NFBR constitution so that it could become a charity, allowing it to tackle larger biological recording projects without incurring tax. Their ambitions are similar to those of BRISC in so far as getting a broad agreement on a national strategy for tackling the key issues facing biological recording and its recorders.

Which brings me neatly to Scottish Biodiversity Information Forum (SBIF). BRISC arranged a pre-meeting for biological recorders on Friday 18 May to discuss the main topics we wanted to bring forward at the workshop. We had a very good attendance with 18 people present. Most stayed on for the afternoon discussion concerning issues affecting local record centres. Those that attended brought thoughtful and well informed opinions and were keen to reach a consensus, so that things could start happening. There has been almost glacial inertia in tackling key biological recording issues over the years, so people are very keen for SOMETHING to happen.

The agreement of the morning was that *a*. The status quo is unacceptable, it does not really deliver for any of the stakeholders; therefore something must be done. *b*. There need to be regional support networks for volunteer recorders to maximise the effectiveness of current recording effort and encourage new recorders, and *c*. There need to be regional data hubs to process, validate and verify the data that *b*. do and will collect. The key thing for *b* and *c* is that they need to cover the whole of the country. The detail of all this obviously needs to be discussed, but the vision of what has been agreed is something we must not lose sight of when dealing with small, but important biological recording issues.

The first meeting of the SBIF Steering group will take place in the next two months, and the big challenge for that group is to deliver something tangible in its first year of existence to keep stakeholders "on board". BRISC will support this group to deliver the aims/ objectives outlined above.

Also don't forget the date of the BRSIC Conference and AGM, now on Saturday 27 October in Dumfries. Jonathan Willet

Editorial

How good are you at learning the Latin names of species? My knowledge leaves a lot to be desired. Funnily enough, Chris and I know some groups mainly by their vernacular names, such as birds, butterflies and moths, and others entirely by their Latin names, such as bumblebees, dragonflies and hoverflies. For flowering plants and ferns we use a mixture. Interestingly most species of fungi have in the last few years acquired vernacular names, which for me is certainly easier to remember, although I did 'do' Latin at school for 3 year back in Denmark. The latest ID book on bryophytes also give vernacular names for all species, and so does the recent excellent ID guide to seaweeds.

Certainly I remember very few Latin names for macro moths, and so it was a great comfort to me to read Roy Leverton's letter in *Atropos* (no 45, winter 12) about Latin versus vernacular names for moths. The generally accepted view is that the binominal scientific names are universal and used across all languages, but his argument is that this does not make vernacular names irrelevant as is sometimes claimed, especially when trying to research old records. For one thing, the scientific names for moths, at least, have changed much more often than the vernacular names. As a test Roy went through the scientific names used by South (1907-08), and found that of the 751 species of macro-moths listed by him, only 234 (31%) still bear the same scientific name, for 453 (62%) the generic name has changed, while for 165 (22%) the specific name has changed. In 111 (15%) cases both the generic and specific name have changed. By contrast he found only eight changes in vernacular names (1%).

But of course, the best thing is to know both, and I am sure Roy would be the first to acknowledge the importance of knowing scientific names when talking with people in Europe and elsewhere.

We missed the National Moth Night weekend, because we were away with our campervan in France. As usual I had our old actinic 6w Heath trap in the van and ran it in most of the campsites where we were staying. We kept driving south, trying to leave the rain behind, which northern France seems to have suffered as much as we have, and not surprisingly, the further south we went an increasing number of the moth species could not be found in my British ID guides. Fortunately I also had *Guide des papillons nocturnes de France* (Roland Robineau ed), the French equivalent to our Skinner, recommended by Mark Young at some past moth events, and that was invaluable.

To locate a particular species in the French book I first had to look up the Latin name in Skinner or Waring, then check the index for that in the French volume, and so on, and it would have saved me a lot of time if I had known the Latin better. However, even in my brief searches some of the Latin generic names were no longer the same, which of course was very confusing. With more advanced scientific techniques, such as the use of DNA, scientific names are bound to change. Roy Leverton points out that for many species the original descriptions were slight and illustrations crude. If the type specimen has been lost there may be real doubt now about which species the author was describing, and as to naming, the British list lags behind those of other European countries, especially with generic names. Apparently a completely revised checklist is currently in preparation. Will scientific names ever be completely stable? Roy Leverton thinks not. Anne-Marie Smout

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Fly-tipping and burnt out stolen car at Preston Hill Quarry © Ali Shuttleworth

As we did so the swallows went along with us and when we reached Inverkeithing we stopped for a rest on the concrete gantry opposite Preston Hill Quarry. Since the swallows continued to pass, I decided that I would later give it a try for a bit of vismigging.

Early morning fishing on the Firth of Forth, with Edinburgh and Arthur's Seat in the distance © Ali Shuttleworth

On the 26th of August a brief evening visit after work resulted in an Arctic skua, a wheatear and a lesser whitethroat. Autumn vismig is generally an early morning affair, and these are not your typical vismig species, but I took it as a good omen. The first morning visit produced some activity, but not on a grand scale, and then the following day the first tree pipit went past – another good sign. Numbers thus far were consistent with, or better than, either Cullaloe or Dalgety Bay, and it was also more convenient for pre-work sorties. It was in the first part of September, though, that the site really began to deliver. Firstly, on the 3rd, what appeared to be five gulls flying west along the coast turned out to be adult long-tailed skuas. The next day over 200 siskins passed in two hours, along with a typical early September assortment of hirundines, pipits and finches. To put things into perspective my day record for siskins at Cullaloe was 45, with none at Dalgety Bay. By the 8th a massive surge of siskins saw almost 1000 in one day, and with more watching time it would have probably been several thousand as they poured south throughout the day. There were many other vismigging highlights between then and the arrival of late November waxwings. By that time I had logged over 25,000 birds of over 100 species, including ten days which featured crossbills (total 122). Over three months there were 3628 siskins, 1832 linnets, 1596 chaffinches and 2300 Meadow Pipits.

So what makes Inverkeithing a good vismig spot? Why is it better than Dalgety Bay or Cullaloe? Dalgety Bay benefits from being on the coast - a topographical circumstance which allows for the flow of birds being squeezed as some choose to follow the coast rather than cross the Forth. It does quite well for seabirds, but poorly for finches and thrushes. Cullaloe unsurprisingly, does quite poorly for seabirds (but not badly for waders, with Temminck's stint and pectoral sandpiper recorded here), but has a regular passage of finches and winter thrushes. But there is a clue to be had at Cullaloe when you follow the chosen paths of certain species. Where the wind does not dictate otherwise, many species choose to follow the ridge of the Cullaloe Hills southwest. Across the north of Dalgety Bay that ridge becomes the ridge of Letham Hill Wood to the northeast of Inverkeithing (see Google maps, select the view "terrain") and this ridge terminates exactly at Preston Hill Quarry. So the site benefits from both the coastal squeeze and its leading line of woodland.

So in the harbour, in the quarry, on the river and in the bushes you may not find much to inspire you - indeed, at first glance Inverkeithing is an ornithologically unassuming place. If, on the other hand, you direct your attention to the skies, and the weather is not being unhelpful, you may just find that that the second glance is much more fulfilling than you could have reasonably expected.

If you want to have a look at the migration records of the last year from Inverkeithing, they can be found at: http://www.trektellen.nl/trektelling.asp?taal=2&land=5&site=0&telpost=1071

Dawn breaks over the Forth © Ali Shuttleworth

Copy Deadline for the October issue of BRISC Recorder News is Monday **17 September 2012.** All material to the editor at Hanne-marie@smout.orgH – or Tel 01333 310330

THE MUTE SWAN IN THE LOTHIANS AND FIFE:
The Value of Long-term Monitoring

By Allan W. & Lyndesay M. Brown

Background

The mute swan (*Cygnus olor*) population of Scotland has been the subject of several national censuses, the most recent in 2002 when a total of 7028 birds were recorded including 1012 breeding pairs (Brown & Brown, 2005). These were the highest ever totals recorded for Scotland and represented 22% of the British population. Such repeat censuses provide an indication of population trends, determine the territorial/breeding and non-territorial components of the population and any variation between different parts of the country.

Mute Swan with small cygnets: Stenton Pond, Glenrothes, Fife, 14 May 2012 © A & L Brown

However, whilst such surveys provide a snapshot of what a population is doing in a specific year they do not identify the fluctuations which can occur between census years and the possible factors affecting such changes. This can only be achieved by more regular monitoring. In 1977 a census of the mute swan in Lothians, organised by Lance Vick, found only 20 territorial pairs compared with 59 pairs recorded in the national census of 1961. A national census in 1978, coordinated in the Lothians by the authors for the British Trust for Ornithology and the Wildfowl & Wetlands Trust, again recorded only 20 pairs and 76 non-territorial birds (compared with 132 in 1961). These findings, and thus evidence of a substantial decrease in the population, led to the establishment of an annual census, which has continued ever since, and in 1992 was extended to cover Fife. The Lothians study is now one of the longest-running such studies in the UK.

Methods

Undertaking an annual census of any species requires a consistent approach to data gathering to ensure that the data are comparable from one year to the next. The principal data gathered during this study are the number of territorial and breeding pairs, the number of young fledged at each breeding site, the number of non-territorial birds present in mid-April, the number of moulting birds (including failed breeding pairs) present in mid-July, and the monthly peak counts at the key flock sites throughout the year. To achieve these data the following fieldwork is required:

1. Visits to all known and potential breeding sites from late March to early May to determine the territorial and breeding population. This can require repeat visits to confirm presence and/or breeding activity.
2. Visits to all confirmed breeding sites in May/June to identify if breeding pairs hatch young.
3. Visits to all breeding sites from late August to early October to identify the number of fledged cygnets.
4. Visits to all known swan flock sites in mid-April and mid-July as well as recording any birds (from one upwards) at other locations to obtain a total population count at those times. If possible, the number of juveniles is recorded in the April count.
5. Visits to the principal flock sites throughout the year to record how numbers vary at each site within and between years.

Gathering this level of data enables aspects such as habitat preference and site vulnerability to be examined in relation to breeding success and helps to identify factors which contribute to the value of specific sites to swan flocks.

In 1982 the scope of the study was extended through the introduction of an extensive colour-ringing programme, primarily of breeding adults and their cygnets, which has enabled data to be gathered on such aspects as survival, movements of adults and cygnets both within and outwith the study area and return to natal area to breed. Consequently this has increased the level of monitoring required as it is necessary to identify if territorial/breeding pairs are ringed, and the presence of ringed birds in the flocks. The support of other observers has been essential to ensure that as full a coverage as possible is obtained for all of these various aspects of the study.

Results

It is only possible to highlight in this article some of the findings from this study given the large amount of data that has now been gathered over the last 35 years in Lothians and 20 years in Fife. Annual reports are available from the authors for both Lothians and Fife, with the Lothians census published every year in the Lothian Bird Report, and papers for the Lothians have been published on changes in the spring population (Brown & Brown 1999) and pre-fledging survival (Brown & Brown 2002).

Mute Swan nest: Newport Slipway, Fife 12 May 2012 © A & L Brown

Some of the key findings can be summarised as follows:-

1. The Lothians population, since 1978, showed a continual expansion until the early 2000s since when both the territorial and non-breeding components have declined. The total April population increased from 117 birds in 1978 to a peak of 619 birds in 2005 but had subsequently declined to 391 birds by 2010. The number of territorial pairs increased from 20 pairs in 1978 to around 100 pairs

from 2002 to 2006 but had declined to 78 pairs by 2010. (Figure 1a & b).

2. The Fife population, since 1992, recorded an expansion in the total April population from 181 birds in 1992 to a peak of 381 birds in 2010, but with a greater fluctuation between years than in the Lothians owing to variable use of some flock sites. The number of territorial pairs increased from 40 pairs in 1992 to a peak of 92 pairs in 2010, contrasting with the situation in the Lothians (Figure 2 a & b).
3. The percentage of territorial pairs which bred has varied between 66% and 100% in Lothians (mean 84%) and between 60% and 89% in Fife (mean 76%).
4. The number of cygnets fledged per breeding pair was 2.5 in Lothians and 2.6 in Fife, both of which are considered to be more than sufficient to sustain the population (Brown 1997).
5. In the Lothians, as the population expanded, more flock sites became established, in particular in urban locations where the public provided supplementary feeding e.g. St. Margaret's Loch and Inverleith Pond in Edinburgh. Fife has fewer urban water bodies and the flocks there occurred on larger waters (e.g. Loch Ore, Loch Gelly and Loch Fitty), where natural feeding was a key factor in regulating flock size, or at coastal locations (the Eden Estuary and Tay Estuary) where counts were often dependent upon tidal conditions as well as feeding, e.g. birds at Tayport shore would often move over to Broughty Ferry and thus outwith the study area. This accounts in part for the less dramatic rise in the overall Fife population compared with the Lothians.
6. The rise in the total population saw a concurrent rise in the moulting population in July when birds gather at safe sites with suitable feeding in order to undertake their annual moult, when they are flightless for six weeks. In the Lothians this element of the population increased from only 28 birds in 1982 (when this aspect was first counted) to a peak of 564 birds in 2004 followed by a drop to 338 birds in 2010. The River Esk mouth at Musselburgh has become one of the main moult sites with only one bird in 1982 increasing to over 150 birds every year since 1999 (peak 236 in 2006). Fife has also seen an increase in this sector of the population with a peak of 349 recorded in 2007, but numbers have fluctuated considerably between years according to the availability of natural feeding at inland waters (mainly the presence or absence of Canadian pondweed, *Elodea canadensis*) and the presence of alternative moulting locations outwith the Fife section of the Tay Estuary as well as moult sites elsewhere such as Montrose Basin.
7. The colour ringing programme has identified that once pairs become established at a breeding site they remain faithful to that site for the rest of their lives, even if they produce few young, and that once an adult dies the site is quickly reoccupied either by the surviving bird finding a new mate or a new pair moving in to occupy it. In many cases the new occupants will be a bird returning to its natal site to breed.
8. In the period 1982 to 2010 a mean of 61% of fledged cygnets in the Lothians were ringed, whilst between 1992 and 2010 in Fife this figure was 33%. Monitoring of the movements of these ringed birds has shown that most cygnets join flocks local to their natal site but that some birds wander considerable distances, either moving regularly between flock sites or even leaving the study area altogether. A regular movement occurs between Edinburgh and the Glasgow area, and movement south to Berwick and even as far south as Yorkshire has been recorded, with others moving north to Montrose and as far as the Loch of Strathbeg. Ringed birds from elsewhere have also been recorded in both the Lothians and Fife. This information confirms that the swan populations of these areas are not closed but that considerable mixing takes place – and of course shows that describing populations by artificial areas such as 'Lothians' and 'Fife' is very misleading.
9. Survival of individual birds is key to a population sustaining itself, with the effects of immigration and emigration also contributing to this. Initial examination of the survival of ringed birds indicates that a third of cygnets do not survive their first year and that only a third of these attain breeding age (at age 3 or 4 years) with only a small percentage of these actually breeding. Further work is taking place on these data, but it seems likely that examination of life-time reproduction will suggest that a relatively small number of birds actually contributes to the total and breeding population. A handful of breeding birds survive for up to 20 years but most do not survive beyond about 12 years old.
10. Over 100 territorial sites have been occupied in both the Lothians and Fife during the study periods. However, every site is not occupied each year and many appear to be ephemeral in nature, either occupied by a young prospecting pair or generally unsuitable for breeding due to factors such as lack of natural feeding, exposure, disturbance etc. In the Lothians, as the population began to expand during the 1980s, several sites were occupied and have been occupied continuously ever since, often by the same pair for over 10 years.

Mute Swan: Tayport Pond, Fife 12 May 2012 © A & L Brown

Conclusions

A long-term study of this nature is not something that anyone probably sets out to do. Over the years the authors have been close to ending the study but as each year goes by the data which are generated become more and more fascinating and new questions arise, e.g. what would be the impact of a hard winter on the population? The decline of the Lothians population between 1961 and 1978 was in part attributed to the severe winters of 1961/62 and 1962/63 but the hard winters of 2009/10 and 2010/11 did not appear to result in increased mortality. Yet the Lothians population has not only stabilised but has been in decline since the mid-2000s and the reasons for this require further investigation, especially as the Fife population is still increasing. Has the opening-up of the Union Canal to boat traffic had an adverse impact? Certainly from a peak of 15 pairs in 2000, in what was a very productive habitat, there are now only five pairs on the canal, which as a consequence may have longer-term impacts upon the overall

population, because swans using this habitat were highly productive. All of these questions can only be answered by continued monitoring.

To undertake a study such as this requires a strong commitment, but the results are very rewarding. It would be fascinating to see what was happening in other regions of Scotland, so that the trends in the Lothians and Fife could be put into a wider context. Work, which the authors recently undertook in Orkney, concentrating upon identifying the territorial/breeding and non-territorial population, has shown how the population there is at its highest level since 1990, and identified differences between different parts of the islands (Brown & Brown 2011). Similar studies could be undertaken elsewhere in Scotland.

Mute Swan non-breeding flock: Cameron Reservoir, Fife 12 May 2012
© A & L Brown

What is very important to appreciate is that such a study could be applied to many other waterfowl species. Many observers have become involved in national and local atlases, add their records to BirdTrack or take part in national schemes such as WeBS or one-off bird surveys. These are all vital elements of the data gathering on bird distribution and numbers, so important to assisting with the identification of conservation concerns and priorities, and in some respects they make use of the 'listing' phenomenon which drives many of the new 'breed' of birdwatcher. However, if only a handful of observers were to initiate their own study and persevere with it for a number of years, this would add considerably not only to local knowledge of population trends but would contribute to a wider understanding of the threats and challenges facing individual species in a wider context. In this regard we would suggest that species such as little grebe, great crested grebe, coot and tufted duck could all be the subject of on-going local annual monitoring of their breeding populations, as could other species such as black-headed gull colonies and rookeries. Such studies are time-consuming but their value cannot be overestimated at a time when bird populations are under increasing threat from factors such as habitat and climate change.

Our obsession is with swans (and geese) but we would urge others to take their interest further and become equally obsessed with other species – or Mute Swans elsewhere.

Finally, any offers of help with the census in the Lothians and Fife would be greatly appreciated, including just *ad hoc* records, which can help to fill in gaps, while observations of colour-ringed birds would be especially welcome (Figure 3 shows the colour rings used). Contact details: swans@allanwbrown.co.uk.

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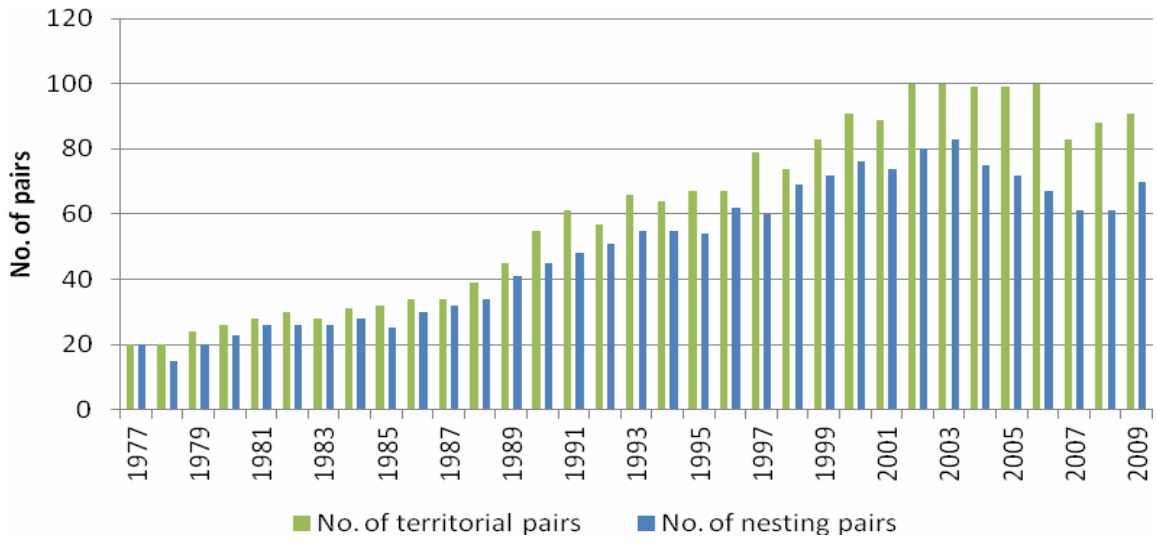
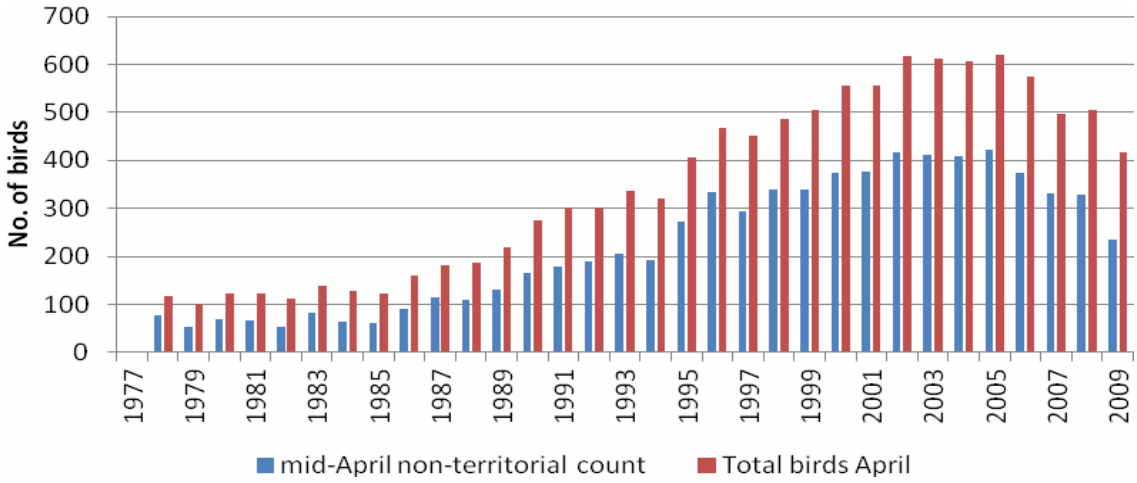
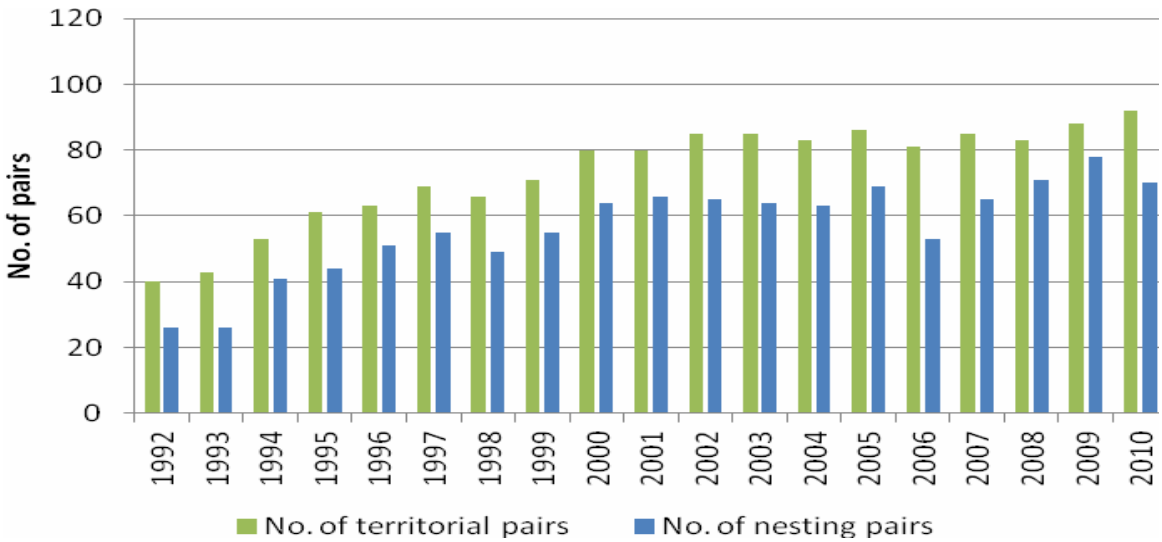


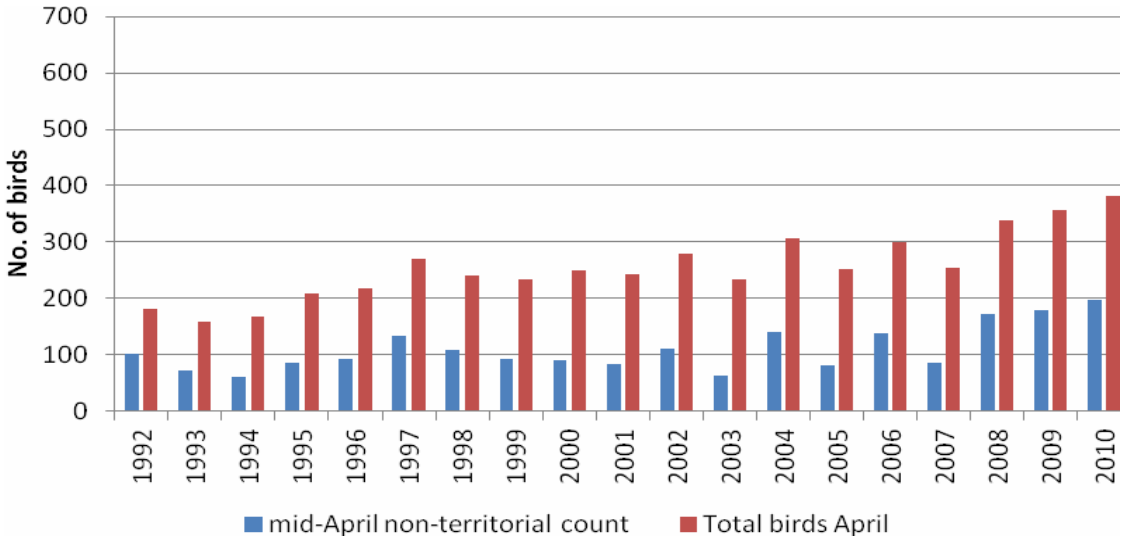
(above) Figure 1a Number of territorial and number of nesting pairs within this of Mute Swans in the Lothians, 1977 to 2010



(above) Figure 1b - Total number of Mute Swans and the number of non-territorial birds within this in the Lothians in April, 1978 to 2010



(above) Figure 2a: - Number of territorial pairs and number of nesting pairs within this of Mute Swans in Fife, 1992 to 2010



(above) Figure 2b :- Total number of Mute Swans and the number of non-territorial birds within this in Fife in April, 1992 to 2010

Figure 3:Old (pale green/lime) and new (dark green) colour rings used on Mute Swans in the Lothians and Fife © A & L Brown

SHORT NOTES:

History Repeats Itself

By Chris Smout

It is well known that both the *Old Statistical Account of Scotland* of the 1790s and the *New Statistical Account* of the 1830s, compiled from ministers' descriptions of their parishes, sometimes contain really valuable information about past bird life. Of our own Fife parish of Anstruther Wester, for example, the Rev. James Forrester wrote in 1791 that 'the woodcock, fieldfare and curlew, visit the coast regularly in winter, and the Bohemian jay [waxwing] is sometimes seen in the neighbourhood; as are also wild geese, when the higher grounds are covered with snow. The swallow, cuckoo, water wagtail, and plover, make their appearance in summer. The early arrival of the woodcock and Bohemian jay, indicates the severity of the winter on the continent, while the cuckoo's early visit is a sure mark that fine weather might soon be expected'. All the species he mentions are still to be found as he indicates, though the cuckoo now only very seldom.

His colleague, the Rev. Alexander Brodie in the neighbouring parish of Carnbee, on higher ground, was no less informative: 'the birds of passage here are dotterel, woodcock, swallow, cuckoo and lapwing'. He said that owing to 'the uncommonly open winters we have had for some years past' lapwing were returning earlier. Then he goes on to discuss 'crows', by which he means rooks, considering that their reputation for destroying corn was probably outweighed by their usefulness in destroying pests, and related how some, that had been shot on a field of newly sown oats, had been found to be 'quite full of cobworm and not one grain of oats'. Again, almost all these birds can still be found at Carnbee, and a rookery is still a conspicuous feature of the parish.

Almost all these birds are still about—but not quite all. The most conspicuous absentee today from these lists is the dotterel with which Brodie's list begins, and ever since I read these words I have had a wish to find dotterel at Carnbee, though I had imagined that to do so one would need to be a regular visitor to Kellie Law, a conspicuous hill 182 meters above sea level, from which the minister considered the visitor would see 'one of the most delightful views to be seen in almost any part of Scotland'. But I have only been up Kellie Law twice.

On the morning of 13th April, 2012, I was counting meadow pipits on migration over the edge of Carnbee reservoir, about 100 metres above sea level, as part of a regular watch there in spring that I enter on the website "trektellen". It was not particularly exciting, though it was enlivened by a few passing golden plover and curlew, so my attention wandered to the surrounding fields, which were sown with beans just beginning to push through the ground. My mind went back to my student days in Cambridgeshire, where it had been discovered that passage dotterel were visiting fields sown with legumes on the chalk escarpment near Royston, next to a farm still known as Dotterel Hall, though no dotterel had been seen there for a century before they were rediscovered. So I cast my binoculars over the nearest field, and saw, distantly, two brown birds with big eye-stripes. Surely they were not dotterel?— this sort of thing simply does not happen; maybe mistle thrushes and I was wrong about the eye-stripe? No. Maybe red-legged partridges and I was wrong about the size? No. They were indisputably dotterel, the first to be reported in Fife for thirty years, and obviously the first to be reported in Carnbee for about 220. Of course, dotterel breed on the Angus hills, which were within sight to the north: and more come to Scotland, fairly regularly to sites in Dumfries and Galloway and in Lothian, en route to Scandinavia. But several dozen birdwatchers put dotterel on their Fife lists over the next four days, when these two individuals stayed in the field. Now I would like to find them here every year and please the shade of the Rev. Alexander Brodie. How history added relish to the sighting!


One of the dotterels at Carnbee on 13 April 2012, not quite yet in full breeding plumage. Note the muddy bill! © John Anderson

[*The editor would warmly welcome more short notes like the above of any unusual and interesting wildlife sightings. ed]*

PROJECT REPORTS

E-petition.

[It has taken some time, but finally we are seeing some positive outcome of BRISC's e-petition, which many of you signed back in 2009. The press release below was published by Scottish Natural Heritage's data unit, Battleby, following the inaugural meeting of Scottish Biodiversity Information Forum.(SBIF) ed]

E-petition leads to new biodiversity information forum

A new forum has been established to improve the flow of biological information between conservation and scientific organisations and data users to benefit biodiversity.

The Scottish Biodiversity Information Forum was set up at an inaugural workshop hosted by Scottish Natural Heritage at Battleby on 25 May. The initiative is partly in response to the Scottish Government e-Petition lodged by BRISC in 2009. The petition asked the Scottish Government to establish integrated structures for collecting, analysing and sharing biological data to inform decision-making and benefit biodiversity. The workshop, attended by about 70 delegates, prioritised some key challenges relating to the flow of species and habitat data in Scotland, both in the terrestrial and marine environment.

A Steering Group has been established, made up of representatives from a cross-section of organisations. The Group will identify and action issues to improve data-flow, and will oversee the appointment of an SBIF Coordinator role.

For further information, please email SBIF@SNH.gov.uk.

Bursaries

BRISC / GNHS Bursary Scheme 2012

As already mentioned in the April issue of *BRISC Recorder News*, 28 applications were 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 five courses in 2012: All successful candidates have been asked to write a short article for BRISC and Glasgow Natural History Society. For the first article see below.

The successful candidates and their courses are:

- Dave Holloway (funded by BRISC)

Invertebrate Surveying Techniques – Kindrogan, 21 - 25 August

- Ian Boyd (funded by GNHS),

Spiders: an introduction to Identification – Kindrogan, 29 June - 02 July

- Jenny Grant (BRISC)

Harvestmen Spider Ecology and Identification - Kindrogan, 28 September - 1 October

- Laura Whitfield (GNHS)

Identification of hoverflies - Kindrogan, 17 August - 20 August

- Robert Williams (BRISC)

Identifying Freshwater Invertebrates - Kindrogan, 30 April - 4 May. (see his article below)

BRISC Secretary

Identifying Freshwater Invertebrates Course, Kindrogan Field Centre

By Robert Williams

As a project officer for Froglife I can often be found around the edge of ponds, net in hand, looking for signs of amphibian life. On too many occasions our amphibian search will go unrewarded, and yet after a single sweep through the pond, the net it is normally jumping with life.....aquatic invertebrate life that is.

I realised that if I could improve my identification skills I could turn the net full of mystery invertebrates into valuable biological records. Thanks to a bursary kindly provided by Biological Recording in Scotland and Glasgow Natural History Society I was able to take my first step toward that goal. In May, I attended the Identifying Freshwater Invertebrates course taught by Craig Macadam of Buglife/BRISC and hosted by the Field Studies Council at Kindrogan.

Sampling a pond at Kindrogan © Irene Tierney

The course ran for three full days and luckily for us the sun shone the whole time. After an initial introduction to aquatic invertebrate groups and the sampling techniques, everyone was keen to grab a net and get stuck in. The first sample site was the Loch of the Lowes, and during the course we sampled a variety of different habitats, from ponds and lochs to rivers and burns. The first thing that struck many of the course participants was just how much invertebrate life is hiding above and below the surface. Each sample seemed to have hundreds of aquatic invertebrates and even after 10 minutes staring into the same sample tray 'new' invertebrates were still appearing. With Craig's patient guidance participants were all soon telling the difference between stoneflies and mayflies and water bugs and water beetles.

Craig talking about the invertebrates in our sample © Robert Williams

After sorting our samples it was back to the labs at the field centre, and now for the tricky part. Microscopes at the ready, participants started to get to grips with the subtle differences between the unique cases of caddisfly larvae and between the relative length of a stonefly larvae's tarsal segments. With Craig's help, people were soon getting their eye in and everyone's ID skills were coming on in leaps and bounds. It was really useful being able to sample a variety of different habitats as each one brought new invertebrate groups and species to develop our skills. Our final day at the course was

spent collecting and identifying samples from three points along the River Ardle to enable us to calculate a Biological Monitoring Working Party (BMWP) score. This was a great test of our new skills and everyone successfully managed to identify their samples and correctly calculate their scores.

'Spot the Invertebrate' Competition © Craig Macadam

One of the best things about the course was that I left feeling I could now go out and use the Biological Monitoring Working Party (BMWP) to score a water body for its quality. While species identification will take more practice having a practical application to apply what I learnt is a real motivation to continue learning about aquatic invertebrates.

The course was great fun and all credit to Craig as he successfully transferred his endless enthusiasm for aquatic invertebrates to all course participants. I would recommend the course to anyone with an interest in learning more about aquatic invertebrates and their identification. As a result of the course, I have already started to collect records of species that can be identified in the field and have also started to gather the equipment to collect and identify my own samples. Best of all, due to this opportunity I will never again need to come back from a survey and exclaim "I didn't find anything!"

(Robert is North Lanarkshire Living Water Project Officer)

Things BRISC Members need to know:

Banking problems – a Note from the Treasurer

Some of you will be aware that your membership standing order has not been paid this year. Or rather it was paid and then returned to your account. This was not a gesture of generosity by the committee as you might have thought, but a more serious issue with our bank account. About three years ago, there was a spate of unauthorised withdrawals from the account – don't worry, they were all refunded – and with the bank's cooperation, I put a debit block on the account. This meant that there could be no withdrawals of any sort made against that account. A separate linked account was opened so that we then had two accounts – one for pay-ins and one for pay-outs.

This worked well up until the point where the bank changed its processes in such a way that disallowed individual types of account blocks. From last September, there was only one type of block and that was a complete transaction block. That is, no transactions at all could be performed against our "pay-in" account. This change was made without any discussion with me and I was not informed that it had happened. I made several payments over the counter without any problem and it transpires that staff had to apply a manual over-ride to allow these pay-ins to take place, all without my knowledge. Standing orders from other branches of the same bank were also allowed through manual over-ride but any payments originating from other banks were rejected.

The first I knew of the problem was when some of you got in touch in early April to say that your standing orders had been returned and it took another month for the above facts to become clear. Unfortunately, this means that all standing orders will have to be changed to pay in to a different account. I am writing to all of you who pay by standing order or bacs, with amended payment forms and I should be very grateful if you would return them to me as quickly as possible. The bank has funded the printing and postage costs!

Duncan Davidson
Treasurer

BRISC Website Update

Our aim with the BRISC website is to provide a good starting point for finding out about wildlife recording and wildlife events in Scotland. This means we are always on the look-out for new ideas for the website, that will be useful to our members and may not be available from other websites.

Our Training page has proved a popular new addition, with many people checking it regularly as a starting point for finding training, ranging from one-day workshops to three year academic courses.

The News section on the homepage is a good place to look for up-coming events and updates on issues. In the course of collating events on our News section it was noticed that there were date clashes that might prove troublesome for some people wanting to attend both events. Clashes of this sort can lead to frustration for members and reduced attendance at the events. As many of these events are expensive to put on and need a minimum number of attendees to be financially viable, it seems a good idea to try to space them out.

To promote better planning of events, a dedicated page on the website has been set up to trial the system by listing AGM and Members Days for organisations,
.(see http://www.brisc.org.uk/events.php). If this proves successful, we will extend it to show other meetings and training days. We would like to hear as soon as possible about planned events, so that we can populate our calendar, so please send them in to info@brisc.org.uk and we will publish them.

The main problem with these pages is trying to keep them up-to-date and we do rely on visitors to the website letting us know when there are errors or omissions, so if you see something that needs correcting or adding, then please drop me an email.

We are always keen to hear from anyone with ideas for inclusion on the website, so if there is something that you think we should be doing, please get in touch.

Andy Wakelin
Website Manager

The date for BRISC Annual Conference and AGM has had to be changed. It is now Saturday 27 October 2012 at Dumfries – Read more on p. 16 of this issue.

IT page

New website for BWARS

BWARS, the national society dedicated to studying and recording bees, wasps & ants (aculeate Hymenoptera) in Britain & Ireland, launched their new website in early May this year. BWARS has been assisted financially and otherwise by The Big Lottery (Heritage Lottery), OPAL (Natural History Museum), and BRC (Biological Records Centre), but it could not have been achieved without the vast input by volunteer members.

The announcement of the launch stated that 'The site features a page for every British species, pages on easy to identify species - "beginners aculeates", over 2,700 images of species, a fully searchable database, information sheets, and much more.'

Also 'To celebrate the launch, BWARS are making the text of their proposed book – *Bees in Britain* - available as a free download. This is the first extensive overview of Britain's bee fauna since 1896, and will make an invaluable reference for anyone interested in bees'.

Typing www.bwars.com into the browser takes you straight to the site, which is indeed very easy to negotiate. The home page gives you just five tab heading to search. They are listed horizontally below an ever changing image of different species, but when you rest the curser over any of the tabs, they display a drop down menu for further selection.

The first tab is termed 'Bees, Wasps & Ants'; which expands into a subheading called 'About bees, wasps and ants'. This page has basic descriptions of each of the three group and their habits. There are also links to individual species accounts.

Next subheading is 'Species'. This gives access to the vast number of very impressive species accounts, with a page for each of the ca 590 British and Irish species. You can browse these either one by one (select 'Gallery') or by name (select 'A-Z search'). Ants, bees and wasps are dealt with separately. Selecting e.g. ants will list the main families, and selecting one of these will result in a series of thumb-nail photograph of all the species within that family, each with its Latin name. Clicking on a photo will enlarge it, clicking again will shrink it. You have to click on the name to open the species account page, which is extremely informative. Not only does it hold all the photos available, it shows a map of the known distribution pre 1980, 1980-1999 and post 2000, as well as short text under headings such as status, flight period, habitat, flowers visited, when the profile was last updated and the author. A search window is also provided at the top right corner of every page for typing in any new search. This will respond to both common and Latin names, at least for the bumblebees I tried out. Many others species will only have Latin names. The 2,700 images of species are truly astonishing, although visitors are warned that aculeates are difficult and cannot often be identified merely from photos:

The next subheading allows the user to download different fact sheets; this is followed by a tab where people are invited to submit personal observations on specific species on-line; the next tab opens a page which lists UK Guides, available on-line or in printed format; while the final heading offers a downloadable spreadsheet of all UK and Irish aculeate species.

Going back to the home page, the next main tab is called 'About BWARS', where the 'Introduction' tells you about BWARS – which has 500 members, so it is not a huge society, but obviously very active. 'Diary events' comes next (this year's AGM is 29-30 Sept in Cardiff), then 'Forum' for members' input and discussion – currently there are just two topics to take part in; followed by 'how to join' and what you get by joining, and lastly 'Contacts'.

The third main tab on the home page deals with ID and recording. It opens with a 'Beginners bees, wasps and ants' page, where some easily and fairly common species are illustrated, suggesting that anyone new to the groups should try those out first. A nice idea, although some of the examples may not be present in Scotland!? This is followed by 'Identifying' listing Key ID works for each of the three group, again warning people that many aculeates are difficult. The next option lists some ID guides that can be downloaded from the internet; then there is a page with details of ID workshops (the recent workshop on wild bees organised by Brian and Stephanie Little at the National Museum's outstation at Granton was however not mentioned!); followed by detailed instructions of 'How to submit records.

The fourth tab on the home page is 'Projects and Research', where the current main projects have a descriptive page, giving the aim of the project and how it is progressing.

One of the projects is to monitor the expanding distribution of the tree bumblebee *Bombus hypnorum*, which can be followed by clicking on yearly maps for 2009, 2010,and 2011. In 2011 it reached Northumberland, so do look out for it – now is a good time to do so.

(above) *Bombus hypnoru,* image from the BWARS website

Other pages list the 8 distribution atlases and maps so far published by BWARS, as well as a downloadable list of target species for a further two atlases in preparation.

The final tab on the home page is to do with 'Resources'. Here you can search for documents to download, including the *Bees in Britain* mentioned at the start. This is free but adds up to several hundred pages so people may decide to study it on line. Then there is an extensive bibliographic list, including a number of European publications; another subheading with 'Additional helpful resources', such as equipment suppliers; and other subheadings with books of historical interest, providing a kind of Wikipedia of the pioneers in aculeate recording; and finally some details of useful personal websites run by individual BWARS members' as well as links to other relevant organisations, such as Buglife and Bumblebee Conservation Trust, Flickr sites and helpful European sites.

A visit to this site is highly recommended, even if you just have a passing interest in aculeates. It is also immensely impressive just to look at all the wonderful photographs and the distribution maps. I am particularly pleased that bumblebees are very well covered, and it does now seem appropriate to remove the rather out-of-date bumblebee pages on BRISC's website and simply provide links to the new, up-to-date pages, at BWARS' and Bumblebee Conservation Trust's websites.

Anne-Marie Smout

NBN National Biodiversity Network

NEWS AND UPDATES

Summer 2012

NBN Gateway news

Scottish Natural Heritage Zones added to the Gateway

In response to requests from data users, SNH added a new geographic dataset to the NBN Gateway in May. The SNH Natural Heritage Futures dataset consists of the boundaries of 21 zones, each with a distinctive character, which provide a strategic framework for the conservation, enhancement, understanding and use of Scotland's natural heritage.

The zones are not intended as a classification of Scotland's natural heritage, but rather as an operational tool to help SNH plan and execute its work. These boundaries can be used as a backdrop to view habitats and species distribution on the Interactive Map and as a filter for data searches on the NBN Gateway.

Data access controls consultation outcome

From October 2011 to April 2012, the NBN Trust consulted with data providers and data users about a proposal to change the Data Access Controls. The aim of the proposed changes is to increase biodiversity data use, generate better feedback to data providers, improve the performance of the Gateway and generally make the system more flexible and easy to use.

We received an excellent level of response and gathered useful feedback, which has had considerable influence on the review process. We have received the original proposal in response to input from data providers and users, and we plan to implement the new system of Data Access Controls in October 2012.

A summary of the changes to be implemented can be downloaded from the NBN Website Hhttp://nbn.org.uk/News/Latest-news/Data-Access-Controls-Review.aspxH.

This link also provides access to a prototype system with test data, which has been set up to enable data providers and data users to familiarise themselves with the new system before the changes are implemented and to help them to consult with their recording community.

We would welcome your suggestions to improve the user interface.

75 million!

The 75 millionth record was uploaded to the NBN Gateway in May! The record is that of ***Impatiens-glandulifera*** (Himalayan Balsam).

The dataset containing the record has been compiled from a public survey by Nottinghamshire Biodiversity Action Group and submitted on their behalf by Notting-hamshire Biological and Geological Records Centre. This dataset has full download access and although this species is widespread across England this dataset addes a completely new 10km square (SK62) to the NBN Gateway.

You can read more at Hhttp://nbn.org.uk/News/Latest-news/75-million!.aspx

NBN News

NBN website survey

Following the launch of the new look NBN website, we developed a survey to help gather feedback. The survey is still open, so we'd love to hear what you think and make any improvements that are suggested. To take part please visit Hhttp://www.surveymonkey.com/s/GD3KCWCH Thank you for your time.

Indicia chat room

By now, you are probably all aware of Indicia, the online recording toolkit. If not, you can find out more at Hhttp://nbn.org.uk/Tools-Resources/Recording-Resources/Online-Recording-Toolkit.aspxH

As a support mechanism, an Indicia chat room has been created for people to share ideas, problems and generally chat about Indicia. You can read more about it on the forum at Hhttp://forums.nbn.org.uk/viewtopic.php?pid=13024#p13024H or visit the site at Hhttp://jabbr.net/#/rooms/indiciaH You will need to provide Google, Twitter, Facebook or OpenID login

In Practice

NBN Trust engagement with SBIF

The inaugural meeting of the Scottish Biodiversity Information Forum in Perth on the 25th May was attended by two members of the NBN Trust team, Geoff Johnson and Paula Lightfoot.

The aim of the meeting was to endorse and set up SBIF as a community led forum for organisations involved in the collection, management, sharing or use of biodiversity data, and to identify priority issues for the forum to tackle.

Paula Lightfoot chaired two workshop sessions on data sharing. It was agreed that there is scope to link and develop LRCs to form a series of regional hubs for data recording and data sharing covering the whole of Scotland. Tools such as the NBN Gateway, NBN Web Services and Indicia could help Local Records Centres to maximise the support they provide to data users and the recording community, enabling them to extend their reach to fill current gaps in LRC coverage.

Geoff Johnson has accepted a place on the SBIF Steering Group, ensuring that the NBN will be fully involved in the development of SBIF.

Did you know?

Searching the NBN website

You can search the whole NBN website and not just the NBN Gateway. If you type any word or phrase into the search box, Google will search the whole site and deliver the relevant results. Rather than appearing under the "Species" tab, the results appear under the "NBN website Google" tab. This can be a really handy way of finding specific information or news articles.

BOOK REVIEWS

Pawley, S., Dobson, M. & Fletcher, M. (2011). *Guide to British Freshwater Macroinvertebrates for Biotic Assessment.* Freshwater Biological Association. 80pp. ISBN 978-0-900386-79-4. Softback £25.00

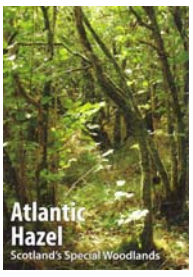
The Freshwater Biological Association has a long tradition of producing definitive guides to freshwater invertebrates. This tradition is continued with the current volume on British Freshwater Macroinvertebrates for biotic assessment, however this publication differs from previous offerings.

Typical FBA keys follow the dichotomous format, however, this key uses a combination of traditional dichotomous keys with tables and pictorial guides. The text is complemented by line drawings of diagnostic features. In addition, whilst most FBA keys allow the user to identify specimens to species this keys allows the identification to family of a wide range of freshwater invertebrates including crustaceans, flatworms, beetles, molluscs, etc. One exception to the family level treatment in this key is the aquatic worms which are grouped in the sub-class Oligochaeta.

In addition to the main identification materials there are also introductions to each Order including tips for general identification, habitat preferences and typical mature size for most groups. A limited bibliography of other keys is also provided.

A word of caution though - this publication is concerned with those invertebrates that are used for biotic assessments. As a result there is a bias towards those orders and families that are used in the calculation of commonly used water quality indices. Notable omissions include the Water fleas (Cladocera) and Seed shrimps (Ostracoda) which occur in the water column rather than on the bed of the waterbody. Particularly welcoming however, is the inclusion of keys the larvae of beetles and true-flies commonly found in freshwater. The lack of accessible keys to this life-stage of these taxa has long needed rectifying.

Craig Macadam



Coppins, Brian & Coppins, Sandy (2012). *Atlantic Hazel – Scotland's Special Woodlands.* Atlantic Hazel Action Group, Old Poltalloch, Kilmartin, Argyll PA31 8RQ, or info@ahag.org. 108pp; full colour. ISBN 978-0-9572034-0-2. Softback – unknown price.

Atlantic Hazel is a glossy A4 booklet of 108 pages published by the Atlantic Hazel Action Group. The authors are Sandy and Brian Coppins the well known lichenologists, who worked on contract for the action group, which itself was funded by Scottish Natural Heritage, Argyll and the Islands EU Leader Programme and the British Lichen Society.

The aim of this new book is to raise awareness of the western or oceanic hazel wood habitat and to give advice on its management. The authors have certainly put Atlantic Hazelwoods on the map, for those are George Peterken's words in his thoughtful foreword. George admits a southern perspective on hazel, normally associating it as an understory species in other mixed woods. Looking again at the Peterken Stand Types (which has fallen into disuse after it was eclipsed by the NVC) there is no separate hazel woodland type, but a distinction either side of pH 4.7 between oak/hazel (3D) and ash/elm/hazel (1D). What a wonderful piece of scholarly work the Peterken Stand Type classification is (Peterken, 1993)!

A large part of the book sets out to show the stand-alone special character of western Scottish hazel woods as a distinct part of the sub-boreal vegetation. I consulted Worrell (1996) which looks at the similarities of the Scottish remnant woodlands to the continental boreal woodland types, but he does not discuss hazel woods as such. Were he conducting such a review today I am sure he would take into account the case for regarding oceanic hazelwoods as a uniquely Scottish woodland type, perhaps with affinities to the post-glacial pioneering woodlands, since pollen analysis indicates great longevity of hazel in the north-west landscape.

Names are important in raising awareness of a hitherto un-noticed habitat. Even the term 'ancient semi-natural woodlands' was invented to help land managers recognise ancient woods for what they were, but no wonder it is usually shorted to ASNW as an acronym. Tsouvalis, 2000, tells the story of how this somewhat clumsy label was developed, and how it changed perceptions. So the action group are to be congratulated for coining 'Atlantic Hazel' as a catchy title. After an introductory section the second chapter is 'What's in a name', when the Atlantic term is discussed, full descriptions of the habitat given, and a debate on whether the habitat should be called scrub or woodland. The conclusion is that when on ancient woodland sites with ground flora and old map evidence indicative of ancient woodlands then the habitat is indeed 'Atlantic hazel woodland'. However, the recent spread of hazel onto limestone pavement in the Burren is relegated to being called 'hazel scrub', despite a discussion about scrub being commonly seen as a derogatory term! Perhaps in time the Burren stands will be accepted as woodland too.

The truth I think is that the hazel stands which are valued in this book are the currently lichen rich stands, which of course also tend to be those with long continuity on ancient woodland sites. The book is unashamedly promoting the habitat because of its lichen (and bryophyte) richness, so much so that one wonders if the woodland type had not been better called 'lichen-rich oceanic hazel', which is certainly not as snappy as Atlantic hazelwoods, but I think that is what the authors really meant.

I am not a plant ecologist and am ill equipped to argue about the place of hazel in woodland classifications. However I am reminded of the book *Signalarter,* which includes an extensive flora of signal or indicator species, and relates them to a selected number of 22 key woodland biotopes in Sweden. This list of biotopes or micro-habitats includes individual trees of great conservation value like old goat willows, or veteran oaks, and the list includes Hasselundar or 'old hazel groves'.

It is a pity that we don't have a similar short list of key woodland habitats in the UK around which conservation effort could be directed. We do have the rather bureaucratic lists of biodiversity action plan habitats, though I have lost track of that process since retirement. As far as I know the targets for biodiversity have not caught on in the public imagination in the way that one suspects the key woodland habitats concept in Scandinavia has. But then the Scandinavian countries do have a much more woody culture than the UK.

There is no doubt whatsoever that oceanic lichen-rich hazel stands would be included in any UK list of key woodland habitats, and now we have a comprehensive and beautifully illustrated book to describe that habitat. The photos are excellent, especially the lichen and fungi sections, for example Hazel gloves and the Glue fungus are given full coverage, species probably unfamiliar to many readers. In another section the associated vascular plants and ferns of hazel woods are also illustrated. The design, layout and printing of the book are all first class and its A4 size gives space for some magnificent photos.

That brings me to the subtitle – Scotland's Special Woodlands. Is this implying that the hazel stands are indeed that – the forgotten but only type of special woodland in Scotland? I prefer to read this as if this were issue number one of a series of forthcoming books on a range of special but little recognised woodlands in Scotland which might include: aspen woods, northern birchwoods, juniper scrub, alder wood pastures, old growth pine on crags, and so on. But then maybe I have the key woodland biotopes concept too firmly in my mind - no other way of dealing with woodland habitats satisfies me so much. One advantage of the selected biotopes idea is that man-influenced stands, including old pollards, or long grazed forests, indeed old oak coppice, can be included as of equal merit to other perhaps more natural types. The cultural influences that contributed to today's suite of vegetation are not always appreciated.

Hazel wood management is covered in some detail in two chapters, with grazing as the main topic since most hazel stands are subject to some degree of grazing. There is a rather defensive undertone which keeps surfacing in this book, with coppicing as the enemy, and regarding hazel woods as a Cinderella of the woodland world. The fear of coppicing is understandable when defending the lichen interest which can be severely set back by cutting entire stands to the ground, the normal definition of coppice. Much effort is expended in the book to persuade readers not to call hazel stands hazel coppice, and to dissuade anyone from carrying out coppicing in them.

Of course there are many woodland craft organisations who promote exactly the opposite. It is a consequence of the loss of broadleaved woodland management tradition in Scotland that we have to have such arguments, as I feel they are not helpful to the wider cause (of protecting and valuing all types of native woods) in the long run. In other words a workable compromise is required to allow some woodmanship to continue, and importantly to keep those woodland craftspeople alert for recognising and voluntarily protecting lichen-rich stands. This book does lay out a system of assessment of the biodiversity value of hazel stands, and this would need field trials to see how workable it actually was. The book recommends selected cutting of useful rods from hazel woods, (with the owner's permission of course) rather than coppicing per se.

I do wish we had a time machine available so that we could see exactly how Ballachuan hazel wood looked at 50 year intervals over the last (say) 400 years. I think it would be most instructive. By contrast we can realistically imagine the oak coppices around 200 years ago, the large numbers of people working in them, the smoke from innumerable charcoal kilns, the ponies grazing, and the dead hedges to protect the recently cut stands, and the piles of woodland produce of many types. But that is why I am drawn to woodland archaeology, to try to find evidence of this past use of native woodlands to help explain what we have today, unfortunately without a Tardis! I am sure that the coastal hazel woods were far too useful a resource not to have had management attention, though I can well believe that because of their importance to the adjacent communities that simple clear coppicing may not have been allowed in them either. Perhaps the lack of past clear cutting is due to their exploitation by visiting sailors and fishermen who just took what they needed, for making creels etc, as and when?

The time machine might also help solve the problem of hazel pollards and whether cutting by people influenced their current tree form. Perhaps we will never know for sure, though the science of dendrochronology is our best chance to actually find evidence for periodic pollarding. I feel the book is on weak ground showing what is clearly a hazel pollard in Stonethwaite, then more or less attributing its tree-form to natural causes only. This whole valley is full of pollarded ash along with pollarded elm, birch, sycamore and many other tree species – it is a valley of pollarded (or 'cropped' as they call it in Cumbria) woodlands, so why not use that proximity to help explain the hazel shape too? I do find it strange how conservationists will go so far out of their way to doubt or deny past human influences within seminatural woodlands.

Probably most single-stemmed hazels are the result of long periods of extreme grazing pressure but some are clearly previous pollards, and they look different. The best example I've seen yet was the magnificent stand of orchard-like hazels at Glenfinglas, which following changes in grazing are now fairly quickly reverting to the usual multi-stemmed bush shape. To me that represents something of a failure in cultural landscape conservation, even if to most foresters it is a logical step towards regenerating the stand. It's a pity they were not illustrated in this book as the Glenfinglas stand was probably a one-off feature we may not see again in Scotland. Actually they looked remarkably like the Stonethwaite hazel pollard illustrated, only there were tens of them. The book does acknowledge (p. 68) that many hazels are associated with old settlement ruins and woodbanks, while relict hedges of hazel within woods are not infrequent either.

The book ends with an appendix containing a methodology for assessing condition in a hazel stand. Ideally I would have liked to try this out in the field but there was not time before this review. No doubt some BRISC members will be interested to try it out for themselves. A key is presented for placing hazel stands into one of four structural categories, and then separate checklists and recording forms are given for each type, followed by a scoring system. Interestingly, just like *Signalarter*, photos of some key indicator species, lichens, bryophytes and fungi, are presented to help assign stand quality.

Overall, despite my niggles with regard to a reluctance to regard the possibility that hazel stands like many other seminatural woodland types are a form of biocultural heritage, the book is a very welcome addition to my shelves. It is not simply a technical bulletin, but is a provocative and an outstandingly attractive description of a resource that the authors, and many more of us, love so well.

Peter R Quelch 22/06/2012

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- Tsouvalis, J, 2000, *A Critical Geography of Britain's State Forests*, OUP, Oxford.
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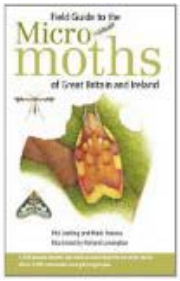


Sterling, Parsons & Lewington. (2012). *Field Guide to the Micro-moths of Great Britain and Ireland.* British Wildlife Publishing. ISBN 978-0-9564902-1-6 (softback) £29.95

My main leisure pursuit involves moth related activities and as such I believe that any book about moths is a good book. The question I should like to address in this review is whether the new field guide is a good *moth* book.

After a clear contents list and acknowledgements, the book starts with a substantial 25 page introduction, containing a wealth of information including the definition of a micro-moth, further reading lists, useful websites, advice on field studies, local societies and groups, and species from other orders that might be confused for micro-moths. The field studies section is particularly interesting. It includes tips on finding adults during the daytime – "place a large sheet of black cloth over the habitat and leave it for a few minutes. This simulates dusk, which encourages the moths to move up the grass stems to sit on the cloth" – and encouragement to search for early stages – "the skill in searching for larvae is to detect the clues that they leave behind, and to separate these clues from damage or disease." Of course, it does not claim to provide comprehensive coverage of these subjects, but is intended to pique one's interest and encourage further reading, research and practice.

Between the introduction and the species accounts are two rather novel and very welcome sections.

The first is a key to families – novel because it is not in the more usual form of a dichotomous key, but is designed to help the user identify significant features of different families and allow an unknown moth to be assigned to a likely group of families. The second of these sections is an "At-a-glance" guide showing some typical examples from each family. Used together, these sections should narrow down the candidate species considerably.

The species accounts contain the sort of information that those familiar with the companion volumes would expect. Each family has its own introduction, describing key features and characteristics, stating the number of species in the family and occasional advice regarding fieldwork. For example "...larvae can be spotted in spring from the large amounts of down hanging out of the previous year's flower spike of Bulrush..." There are also interesting facts about behavioural characteristics, an example being that some psychid females, being wingless, encourage bird predation by behaving like a maggot, so that egg dispersal can take place through bird droppings. Throughout each family section there are photographs of larvae and feeding signs. Individual species accounts have distribution maps, notes about abundance, size, general description, similar species, flight season, habitat and food-plant. The technical terms used in the general descriptions are explained in the main Introduction with the aid of illustrations. For example, there are pictures showing what is meant by a smooth head, what features are referred to as the ocellus, dorsum and tornus and what ciliate and pectinate antenna look like.

The species illustrations are separate from and bracketed by the species accounts, so that they are all together more or less in the centre of the book and the top corner of these pages is coloured to make them easy to find. The illustrations are superb. They are a sensible size rather than life-size and the magnification of each is given, where appropriate. In the majority of cases only one illustration is given per species, but we are told that the artist used a combination of live examples, photographic images and set specimens to reflect natural variation.

The book ends with a seven page introduction to dissection techniques, a species checklist and the index. The dissection pages have a few examples of species that are difficult to separate otherwise, and the reader is referred to more comprehensive works and websites for further information.

Back to the introduction: perhaps the most important part of this section is entitled "Using this field guide". It warns against diving straight to the illustrations and recommends using the key and the at-a-glance guide. It also states "To begin identifying micro-moths, choose only examples in good condition". This is excellent advice – not only regarding micro-moths - and I intend to follow it rigorously. I have already wasted too much of my life needlessly poring over worn Pugs that should have been released on sight. We are told that 927 species are illustrated out of the 1,627 on the British list. This means that a full 700 species are not illustrated! At first read, that is quite shocking, but there are explanations given for the omissions. For example, in some families, the species are very small and easily confused. Many require dissection to separate the species. Some are extremely rare or thought to be extinct or confined to a single site and so on. There is a sentence in bold type that is worth repeating: "**It would be unfortunate... if this guide led to misidentification through readers trying to shoehorn every micro-moth found into species illustrated here**." The authors claim to have taken steps to mitigate the risks of this happening.

So far so good, but I do have some small niggles. This book is set to popularise the recording of micro-moths beyond anything that could have been imagined a few years ago. Despite all the textual warnings people *will* go straight to the illustrations and then send records based on what they see there, so the mitigations within species accounts ("Comprehensive coverage of Coleophoridae is not possible in this guide. Only a few species can be identified from wing and other external characters") will be for nothing. I should have preferred to see some sort of indication within the illustrations. Notes could be intrusive but one simple measure could have been to include the Bradley number at each illustration and it would then have been obvious that some were missing, perhaps reinforcing the need to refer to the text. There are a number of such examples, some more obscure than others. In the family Adelidae, two of the 15 species are not illustrated or described. The only indication of this is in the species account of Nematopogon schwarziellus, where the missing species are mentioned as similar species, with a recommendation to dissect.

Niggle number two involves Bradley numbers again. I am a professional engineer and I like lists to be numbered. I think the checklist at the end of the book should have included Bradley numbers. I know that numbering systems become dated as more is discovered about relationships between species and I appreciate the reasons for listing the families according to Fauna Europaea rather than Bradley (how strange to see Plume Moths before the Tortricids!) but Bradley

numbers are so ingrained in many people's minds that I feel it was wrong to exclude them from this checklist.

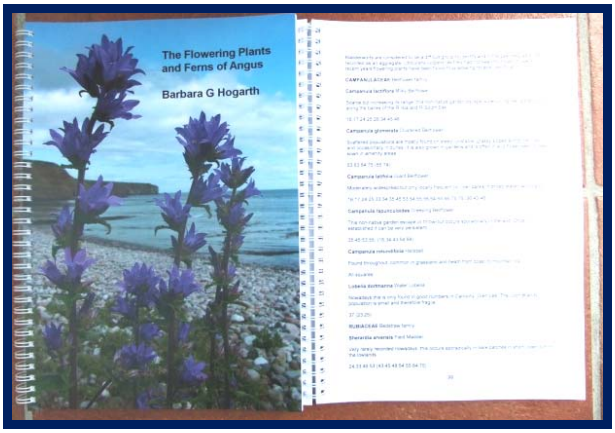
I think a nice addition to the species accounts would have been to include an English translation of the scientific names so that non-classicists like me could gain an appreciation of the origin and importance of the binomial, or at least the specific part of it. This could have been on the same line as the species name and needn't have increased the size of the book at all. An opportunity missed, I feel.

Finally, I do not like to have more than one index. If I look up Hawthorn, I will look under "H". I don't then want to find that I am looking in the "wrong" index!

These are trivial niggles and I have no doubt that this book will revolutionise the recording of micro-moths. For so long, the identification of micro-moths has been seen by many as a black art that can only be performed by a few experts, with access to specialist equipment and knowledge. Although many species will remain very challenging and will require expert intervention to identify, this field guide will open up the wonderful world of micro-moths to a whole new audience of enthusiasts. It brings together in a single guide what had previously been available only as a series of unrelated volumes, many of which are very expensive.

At under £30 this isn't a *good* moth book; it is an *excellent* moth book.

Duncan Davidson



Also received is a flyer for the above publication:

Hogarth, Babara (2012) *The Flowering Plants and Ferns of Angus.* Published privately by the author. Copies are available at £20 (including p+p) from the author, 12 Moyness Park Drive, Blairgowrie, Perthshire, PH10 6LX

This is a botanical audit of the flowering plants and ferns of the vice-county of Angus, and is an up-to-date account of the flora of Angus based on 30 years of experience doing field recording and vegetation surveys.

Contents include:
Introduction; factors leading to changes in the vegetation; a brief tour of the vice-county of Angus (20 pages with colour illustrations); the scope and format of the present flora; bibliography and acknowledgements.

The flora itself covers 142 pages (as illustrated above), and supplementary lists fill a further 7 pages of recent 'casuals' and old records not found recently.

DATES FOR THE DIARY

SNH's sixth annual Nature Photography Competition - open to both amateur and professional photographers. **Deadline is July 31** to get their photos to SNH. First prize a one-to-one tutorial with one of Scotland's leading professional nature photographers, Lorne Gill; second prize a Nikon D5100 Digital SLR camera with a tripod; third prize a Panasonic Lumix LX5 Digital Camera and a tripod. For more information go to SNH's website at http://www.snh.gov.uk/news-and-events/press-releases/press-release-details/?id=713

Saturday 21 July. Free **Plant Identification** training day at Haddo House, Aberdeenshire. Booking essential. Contact NESBReC at glenn.roberts@aberdeenshire.gov.uk or phone 01224 273633

Monday 20 August 2012 (10am - 4pm). Spider expert Chris Cathrine and the TCV are running an introduction to spider identification workshop at Balallan House, Stirling. These courses are very popular and a great opportunity to find learn. The course costs £40 and participants should bring a copy of the Collins Field guide to Spiders of Britain and Ireland, or can purchase a copy on the day (£29.99). To book e-mail Tricia Burden: Scotland-Training@TCV.org.uk or Telephone: 01786 479 697.

Saturday 25 August. Scottish Arachnologists' Meeting Perth Museum – 10.30-16.00.. Lunch to be booked in advance but paid for on the day (about £6, tea/coffee another £1.50. An optional field day be arranged. To register go to www.britishspiders.org.uk

5-7 October. Lichen Workshop at Glenmore, by Aviemore, held by Native Woodlands Discussion Group. Cost is £60 for NWDG members; £80 for non-members. Accommodation and food not included. For more info and to book, contact ruth@dundavie.wanadoo.co.uk / 01796 474327

19-21 October. Bryophyte Workshop by NWDG at Kilmore village, Argyll (NM876255). Tutor Ben Averis. Cost for members £60, non-members £80. To book contact Ben Averis, 6 Stonelaws Cottages, East Linton EH40 3DX

Saturday 27 October 2012 –BRISC Annual Conference and AGM. Please note change of date!
Venue: Easterbrook Hall, Dumfries,
Theme What is New In Scotland?

Four speakers in the morning, including Prof Alastair Dawson on Scotland's changing weather, the other speakers focusing on three climate sensitive groups: Barbara Mairns on dragonflies, Chris Catherine on amphibians & reptiles, and the local bat recorder on bats. In the afternoon delegates will have a choice of 3 excursions:

Kirkconnell Flow NNR, Lochwood Oaks SSSI, Caerlaverock WWT reserve. Also possibly a fungi walk round a local site.

A Sunday morning trip to Caerlaverock NNR before returning home is optional.

More information on BRISC's website.

Annual Report and Booking form will be mailed out separately early September.

Displays will also be most welcome!