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**BRISC**

**BIOLOGICAL RECORDING IN SCOTLAND**

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# Recorder News

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species were collected throughout the year with a peak of 154 specimens submitted in July. The number of specimens received tailed off in the autumn, which is expected, though it is really important that we continue to receive specimens throughout the year. The main aim of the survey is to find out whether flight periods of mayflies are changing, so we really need specimens whenever they are hatching from the water – a great excuse for a walk along the river! We did receive some late records including a record of *Baetis rhodani* collected by Alan Ayre from the River Earn in Perthshire on 31 December.

This year the scheme is running the survey again and if anyone is interested in taking part they should contact Craig Macadam at the address below:



Large Brook Dun (*Ecdyonurus torrentis*) from the Water of Leith  
© Craig Macadam

## EPHEMEROPTERA (MAYFLY) RECORDING

By Craig Macadam

During 2008, the Ephemeroptera Recording Scheme ran a survey of adult Ephemeroptera<sup>1</sup>. Participants were asked to collect specimens of adult mayflies and send them in for identification. A total of 562 specimens were identified with submissions from as far afield as Assynt in north west Scotland to Devon in the south of England. 29 species were recorded, with the most common species being *Serratella ignita* with 122 records, followed by *Baetis rhodani* (85 records). The survey started in March with a fine hatch of *Rhithrogena germanica* from the River Deveron in the north-east of Scotland. Specimens of other

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<sup>1</sup> See also Craig's article in *BRISC Recorder News* no 53 April 2004



### Editorial

Please ensure that you read the Chairman's notes on the following page. They contain critical information for the future of BRISC, and every member is urged to let Patrick know what they think about the role of BRISC: to be or not to be. Please do respond!

As anyone who was present at the AGM can confirm, BRISC has achieved quite a bit in the past year, what with the e-petition, the pilot scoping project and, together with Glasgow Natural History Society, four bursaries of £150 were provided to young budding naturalists. Read about all these projects on page 11 and especially the account of how one recipient got on at Kindrogan earlier this year.

The What's special about ... slot has been splendidly filled by Thomas Huxley who, with his wife Helen, has been studying some local woods near Perth. I hope his very interesting article will inspire other readers to write about an area they have studied, big or small, - and offer their efforts to *BRISC Recorder News*!

Also in this issue, Craig Macadam invites us all to send in records of mayflies and describes the proposals in the newly published Scottish Invertebrate Strategy, while Peter Maitland shows how the declining fortunes of the Arctic charr can be tracked.

As is clear from the Chairman's notes, that the annual conference at Chatelherault was very enjoyable, and the minutes of the AGM are published on p. 10 of this issue. The indoor proceedings were followed by two excellent excursions and below are a few photos giving a flavour of the one to Lower Nethan Gorge. AMS



So what have we here? Gordon Corbet investigates.



Kenn Watt on the hunt!



Got ya'!



View across Lower Nethan Gorge to Nethan Castle ruins © AMS



Steve Blow explaining a management points © AMS



Some of the wildlife recorded: clockwise from top left: micro moth *Caloptilia syringella* © Duncan Davidson; Snail *Arianta arbustorum*, Common Carder bee and Turkey Tail fungi © AMS



## Notes from the Chair

June 2009

Our combined Annual Conference and General Meeting on the 29<sup>th</sup> April at Chatelherault Country Park, near Hamilton was much appreciated by those able to attend. An excellent venue I thought, for both facilities and location, and our thanks to Louisa Hancock and Gill Calder for their time in putting the venue and speakers together.

Whilst the main title, *Data In Action*, could, if read quickly, sound rather negative it was in fact a most appropriate and positive one, as all the talks highlighted just how useful and important environmental data is for a wide range of projects. In many ways all attendees were already well aware of this but the talks were, none the less, both very interesting and informative.

Unfortunately the designated Chair for the day, Craig Macadam, had had to call off due to a leg injury, hopefully now well on the mend. I stepped in but, as I was enjoying the talks, I allowed them to run on rather longer than I should have and, as a result, lunch and the AGM were slightly rushed; the lunch in particular is something we try and ensure is not hurried, as it is an excellent time to catch up with personal and business acquaintances. At the AGM, I had been intending to announce that **I am retiring as your Chairman at the next AGM** but, partly due to constraints of time and partly due to the limited numbers at the meeting, I felt it more appropriate to inform all Members in this edition of the newsletter.

By next year's AGM I will have been Chair for five years, not long in itself but there have been a number of contributory factors to my thinking this would be an appropriate time to hand over. The downside of this is that we do not have a replacement Chair lined up. The Committee is due to discuss this but, quite frankly, we do need a volunteer. As I have mentioned several times, for a small society it is difficult for members to give time to the administration of it; not that it is particularly time consuming but more because it is yet another job in a pretty hectic working life that we all lead these days. However, if members feel that BRISC has a role to play in helping the environment, through the encouragement of 'recording', then I hope that they will be prepared to give a bit of their time to its running.

Your Committee prepared a longer-term Business Plan and has been working to that plan. A prime objective was to raise funds to put us on a more secure footing for administration purposes, and then to follow this through with more specific projects to promote 'recording'. In spite of the work put into trying to find the core funding we failed to achieve this, but other aspects of the plan have been implemented.

The projects that BRISC has undertaken to assist with the promotion of recording have been well received and I think they have been highly successful, albeit at a fairly small scale in national terms. These projects include the **Wildlife Counts Project**, which raised the awareness, quite significantly, of local communities to recording and its uses; our **e-petition** to the Scottish Parliament which has been highly thought of as it continues to receive attention from the Petitions Committee which, in turn, is encouraging the Scottish Government to take up the points raised. Our financial well-being has enabled us to contribute the Society funds to underwrite the undertaking of projects, including the provision of **two bursaries** for attendance

at training courses and the **Data Scoping project** that we have just concluded.

Whilst our remit does not take us south of the Border we do try and ensure we work in the national context too, particularly where there can be an impact onto Scotland. BRISC is a co-opted member of the National Federation for Biological Recording (NFBR), and I try to attend two or three of their four annual meetings, which has an input to matters on a much wider scale, and this keeps us abreast of such activities.

Within the recording network there have been changes that have directly impacted on the work of BRISC. For instance, we stepped back from representing Scottish Local Record Centres, as they were establishing their own national society. Also, over the last few years, there has been an increase in the number of specific recording societies, or they have raised their own profile, and this has led to a greater awareness of recording and the recruiting and training of recorders in both those specific interests and recording more generally.

BRISC has aimed to represent the interests of all recording societies and recorders in a general context. However, we can only do so if both societies and individuals support us by being members of BRISC. Our Membership has remained virtually static over the last few years and we have not been too successful in persuading either additional Societies or their members to become members of BRISC. This leaves BRISC to fight the wider benefits of recording without being certain that we really do speak on behalf of both societies and individuals involved with recording.

In a short note like this it is difficult to rehearse all the arguments for the rationale of BRISC. Personally I do feel that there is a very definite place and role for BRISC in the promotion of the wider aspects of recording, **but do you?** I would really appreciate some basic feedback from all members indicating what they feel; **yes, keep BRISC going; no, it has served its time.**

Either to [milnehome@btopenworld.com](mailto:milnehome@btopenworld.com)

or by mail to Craigow, Milnathort, KY13 0RP.

To that end if you yourself would like to play a pivotal role in its continuing existence or know someone who might be approached, whether an existing member of BRISC or not, I would love to hear from you.

Patrick Milne Home

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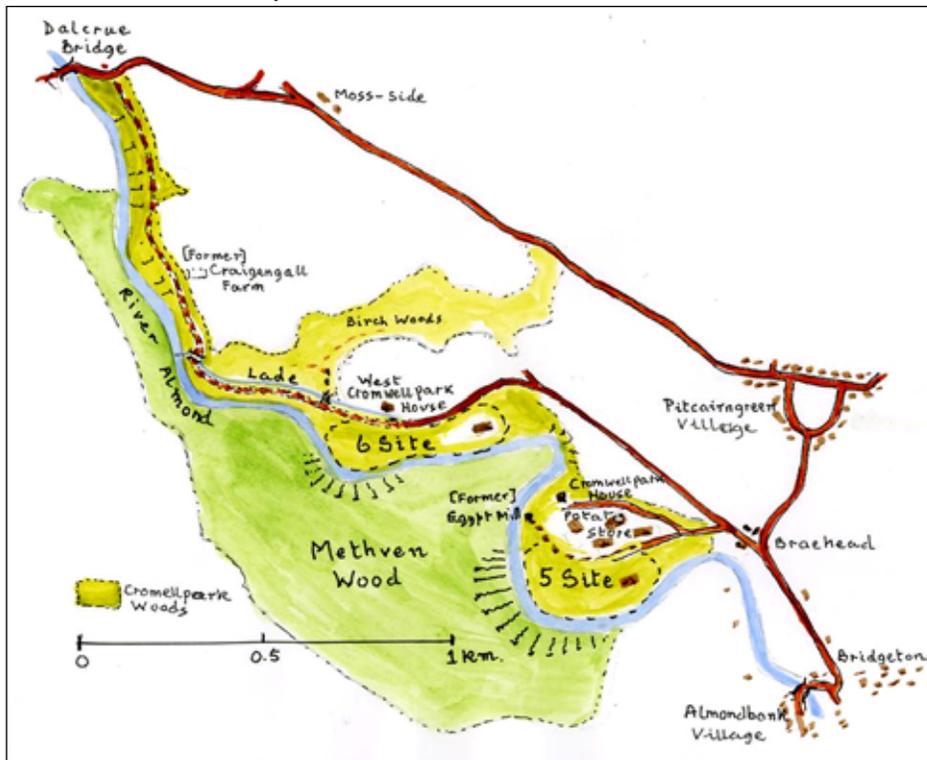
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**Deadline for the October issue is 19/09/2009**  
**All material in electronic format to the editor - see above**

## What's special about Cromwellpark Woods

By Thomas Huxley

Readers may think the Editor has lost the place (or scraping the barrel) by asking for an article in this series about a scrap of riverside woodland near Perth. In earlier accounts we have learnt about Assynt, the Black Isle, Glen Feshie, the Firth of Forth, Glasgow, Scottish Borders, the Uists and 3 woods and a pond separated by hundreds of miles; whereas the Cromwellpark woods are less than two and a half kilometres in a straight line and for the most part just a few hundred metres in width. However, what they lack in size, they demonstrate – at least to me - a remarkable wealth of interest both for their natural and human history.



Hugging the right bank of the River Almond four miles west of Perth, the Cromwellpark woods embrace several separate areas of haughs and steep slopes on the opposite side of the river to the famous Methven wood. Long ago the latter was designated an SSSI whereas Cromwellpark woods survive in their benignly unprotected and much harassed state, but with a history going back over 200 years. The Almond itself is a typical spate river which can change from a shallow ripple to a roaring torrent overnight when there is a heavy fall of rain in its catchment waters to the west. Its sinuous course runs through alternating layers of Old Red Sandstone sandstones and mudstones, cutting down through high cliffs on the convex side of bends and flat haughs on the concave side. At several places the river is vertically sliced by igneous dykes which, because they are harder than the sandstones, create both a narrowing of the river and relatively tough places on which to build such structures as the two nearest bridges: in Almondbank village downstream and at Dalcrue upstream, or other structure such as weirs. On the bed of the river lie occasional massive igneous rocks

brought down through long periods by the forces of ice and water and in places extensive areas of shingle hold a variety of water-worn pebbles transported from great distances up stream. Incidentally, the name Cromwellpark has nothing to do with the Lord Protector, despite statements in one of the Statistical Accounts that it was where he quartered troops, but derives (I am assured by a local expert) from the Gaelic for a sharp bend in the river.

Without the river, Cromwellpark would not be special. This is the force that has attracted so many to the area: from the salmon making their autumn upstream run, thrilling young and old (and even the BBC from Bristol) with their breathtaking leaps and exhausting failures, to the entrepreneurs from Glasgow and Perth who came in the late 18<sup>th</sup> Century to harness the river for water power, to the Admiralty in the Second World War who chose it as part of a larger area to site storage hangars in support of the Fleet Air Arm. The sandstone bedding is tilted and this creates repeated small falls which, together over, say, half a kilometre, can amount to vertical falls of several metres. Whereby to harness this energy, weirs were built across the river and at each weir much of the water was directed through gates into canals, locally called lades, which, because of their gentle gradient, bring the water to a place where it is able to drive an overhead or breast-height waterwheel. Some of the wheels – all now gone - were massive and could generate sufficient horsepower to drive a multitude of different kinds of machinery connected with retting and processing flax, and spinning, weaving, bleaching, printing and finishing linen or cotton

cloth. At one former mill, this earlier engineering is today brought up to date by a water-driven turbine which generates electricity sold to the grid.



River Almond flooding into woods at high flow © the author



Above River Almond in spate at high spate over weir and below weir exposed at normal flow © the author



Although most of the mill buildings and mill workers' dwellings have long since been pulled down, evidence of their former existence can still be found, and my first two local history publications (now both out of print) described some of the former buildings and mechanisms that once stood where there is now woodland. Understanding this earlier period of man's occupation at Cromwellpark led to appreciation of the amount of intervention that the area had experienced from an earlier period of sheep and cattle grazed flat land by the river, later to become bleach fields, to the surrounding steeper slopes then clothed, I suppose, with scrub woodland. At the same time as the 'manufacturers' were busy trying to create a hub of industrial activity in the low ground at Cromwellpark, the landowner Thomas Graham (later to become Lord Lynedoch) was enclosing surrounding agricultural land and planting considerable numbers of oaks and other kinds of trees, such as beech and Spanish chestnut, on the surrounding higher ground.

The second great wave of change arrived in 1942 with the hangars and other structures built by the Admiralty. Altogether, seven 'Sites' were created, two Sites, numbered 5 and 6 being situated in the Cromwellpark woods. The map above tries to illustrate their spatial relationship but fails regarding the all important up and down topography. Two of my later books, one titled *The History of the Royal Naval Stores and Workshops at Almondbank* and the other *Almondbank Past and Present* can

still be bought in the A K Bell Library in Perth. The former benefited from some extraordinary luck when I chanced upon someone who had rescued four volumes of Admiralty photographs from a skip when the stores closed in the early 1970s. From a time-series depicting the preparation of the ground and erection of a hangar at 5 Site one can imagine a sort of base picture on which to trace the development of plant succession over seventy years to the present day. Where hangars have been removed there is no difficulty in seeing the large platforms of concrete on which they were built. Also with the aid of the photographs and an Admiralty site plan (also discovered by luck), one could learn why there are fragments of burnt coal in some soils, discarded from a massive boiler-house, just one indication of the amount of pollution that has probably seeped into the soils.

Much the same learning about past change applies to 6 Site, although the palimpsest of evidence includes where mill workers' buildings once stood and other former works.



Aerial war-time photograph of 6 Site, courtesy of Hamish Sharp BEM, who rescued Admiralty photographs from a skip.

After more than a decade of walking dogs in the Cromwellpark woods, I learnt that there is hardly a square metre that at one time has not experienced some kind of interference, including much of the riverside land-forms, where bulldozers flattened and pushed broken bits of buildings. West of 6 Site there are two foot bridges over the lade. The nearer metal one leads up a steep path to a field of old grassland behind West Cromwellpark House and woods, all of which at one time have been coppiced or clear felled and replaced by pure stands of birch, self-singling to produce a floor of giant spillikins. Altogether nine species of tree have been coppiced at Cromwellpark. A wooden foot bridge near the end of the lade leads to another high path heading west to Dalcrue through much cut-over hazel and bluebell woods. The wooden bridge

is maintained by Perth Council as part of the Almond River walkway.

Two years ago my wife Helen and I tried to photograph all the higher plants (ferns, grasses, herbaceous things, trees and shrubs) and got up to 170 species with the help of another villager, Dr Rosalind A H Smith, and one ID by the Royal Botanic Gardens for red bartisia. Rosalind is one of the authors of the *Checklist of the Plants of Perthshire*, published in 1992 by the Perthshire Society of Natural Science. The project made us realise how important some of the past interference has been in sustaining certain species, such as biting stonecrop and barren strawberry around the edges and cracks in concrete; how some plants are patchy in their distribution and others dependent on seed or rooting fragments transported by the river. For example we have found only one patch of yellow Pimpernel and ditto of sweet woodruff, whereas water cress has appeared just once by some old steps down to the lade.



From top left clock-wise, Toothwort, Perforate St John's Wort, Yellow Pimpernel, Herb Paris © the author

Many species have a short above-ground life, such as toothwort and few-flowered garlic. Identification of others remains uncertain; there is not time enough for this amateur to learn about forget-me-nots, eyebrights and hawkweeds. Happily, however, it is not essential to know the names of everything to enjoy the Spring succession: from lesser celandine and wood anemone, to wild garlic, then bluebells in great swathes deeper into the woods, followed by red campion and pink purslane; while later in June there is a sunshine show in the open areas of creeping buttercup, wood cranesbill and ox-eye daisy, later replaced by two species of St John's wort and other plants of open areas. When asking Keith Bland about butterflies (eight species) he told us to look for herb Paris near the Dalcrue Bridge. After an awkward scramble, I found it again by a fallen stump at 6 Site.



Water Avens at 5 Site © the author

5 Site is best for orchids and dense stands of water avens with their occasional double flowers. These surprises are lovely; horrid are the two enlarging clumps of Japanese knotweed, one growing either side of the high path to Dalcrue by the remaining wall of Craiggengall farm and the other close to where there was a mill workers' house by the Upper Cromwellpark mills. Presumably it is no coincidence that knotweed is found close to where gardens once flourished. I uselessly bash the stems; have been more successful in resisting an invasion of giant hogweed by the river's left bank. It took a saw to cut down one plant before the seeds ripened, access across a weir having been temporarily frustrated by high water. But probably the greatest threat is natural succession. If I had more time and energy I would take a strimmer down to Cromwellpark and try to stem the march to shaded woodland. As to more recording, we have tried to tackle fungi and lichens but got little further than that the damp riverside woodlands are good for both groups, probably mosses too.



Fruits of Enchanter's Nightshade (left) and Agrimony (right), both get into dogs' coats © the author

Helen is the bird expert, hearing chiff-chaff and long tailed tits silent to my 80 year old ears. She is also always the first to see the kingfisher, although I can still hear the lovely spring song of the dippers and wonder if their droppings on the big rocks are as important territorial markers as their white throats. The upstanding rocks are important resting places for mallard; goosanders are frequent, grey wagtails and sandpipers in summer; grey herons (who we suspect go for the ducklings),

buzzards, great-spotted and green woodpeckers throughout the year. I expect a good bird person could record many more species; alas we are only just able to be sure of blackcaps amongst the summer migrants. Helen also sees the red squirrels before me, barely hanging on against the greys. I have been told that before the estate (or the Admiralty) cut down a splendid row of Douglas fir, the reds were quite frequently seen by the road down to where Egypt Mill once stood.

To see Daubenton's bat, take a torch down to the shingle area at 6 Site and shine it across the river really close to the surface. On a good night they flutter briefly through the beam. Roe deer are often seen or heard and of course there are plenty of rabbits, subject to myxomatosis.



Goosander with well-grown young © the author

In summer there are plenty of insects to be seen on flowers especially butterflies on the buddleja and on the several kinds of cow parsley: brilliantly coloured leaf and soldier beetles, hoverflies and shieldbugs, and of course bumblebees of which we seem to have recorded at least four species. In short grass by the access roads, there are two species of grasshopper, another animal noise lost to my ears. One day, to illustrate the range of species that one could find even in a small temporary pool at the far end of the weir, I recorded 2 kinds of crustacea, 1 fly larva, 1 mollusc (a kind of limpet), a water mite, 3 species of water bugs, 11 species of water beetles, 2 mayfly and 1 caddis fly larvae; 22 species in total. In leaf litter, after sieving and careful search, I recollect recording about 20 kinds of mollusc, most of them tiny but beautiful under magnification.



Looking down on lade to the lade wood path and beyond to the river © the author

Unlike Gordon Corbet I am afraid I have never kept a running total of species, nor have I the skill to tackle every group. Nevertheless, I hope that the foregoing will explain why this fragment of river-side woodland is special, despite (perhaps even because of) its centuries of battering and lack of any conservation designation!

## ONE DOT CAN MEAN A LOT! Arctic Charr in Loch Grannoch

By Peter S Maitland  
[SavingFish@sky.com](mailto:SavingFish@sky.com)

### Introduction

Many of us in BRISC produce distribution maps of different kinds involving dots to indicate the presence of various species at particular geographic points. Yet these never tell the full story of the records available. The author is presently involved in producing an account, for one species of fish, of all records for all Scottish lochs in which it has been recorded. The species involved is the Arctic charr *Salvelinus alpinus* and the account below covers just one loch - as an example of the approach which is being used to produce an historical account of this interesting fish throughout Scotland.

The Arctic Charr is the most northerly freshwater fish in the world, occurring in lakes across the holarctic region. In Scotland it was previously described as seven separate species. Most authorities now agree that all these stocks belong to a single polymorphic species complex *Salvelinus alpinus* (L.) - though there have been recent attempts to resurrect the original species. In Scotland, where over 200 populations have been recorded, only a small proportion of these has been studied and many are now extinct. There are at least four introduced populations originating from native Scottish stocks.



Arctic Charr from Loch Einich in the Cairngorms - male above, female below © the author

A century ago, Regan (1911) was concerned about the future of Arctic charr: 'it is certain that if char were to die out in the next few thousand years at the same rate as they have done in the last century they would remain only in a very few lakes in the British Isles.' Previously, Harvie-Brown & Buckley (1887) had suggested 'It may be of scientific interest to catalogue all the lochs known to contain charr, against such as have never yielded any to anglers.'

## Information sources

Although there are many historical references to the fish fauna of Scotland, because of its cryptic habits, very few of them refer to Arctic charr. Two exceptions are *The Statistical Accounts of Scotland - Old* (Sinclair 1791) and *New* (Gordon 1845) - and the *Ordnance Gazetteer of Scotland* (Groome 1882). These three publications, together with a few others dealing with specific areas or sites are the only option to gaining an insight into the changing status of Arctic charr in Scotland over the last three centuries (Maitland 1992).

As an example of the valuable story, which it is possible to recount using the information from these sources, together with other information and records available to the author. They have been catalogued below by year for just one water - Loch Grannoch - a loch in south west Scotland, where the Arctic charr is now extinct.

## Loch Grannoch

- 1748.** 'A Cudding is a little fish as big as a large Trout, short but thick-bodied, its belly a pure red in colour, its taste very sweet, and is only found in a lake called Lake Grenoch, in a very wild moorish place, where they abound.' (Macfarlane 1748).
- 1793.** Loch-Grannoch, about 3 miles long, and, in some places, 1 mile broad, remarkable for its vast number of charr, a species of fish rare in Scotland.' (Thorburn 1793).
- 1841.** 'Char, a very rare species of fish, abounds in Loch Greanoch. It is not caught either with bait or fly, but with the net.' (Murray 1841).
- 1853.** 'In the parish of Gorthon there is another loch of the name of Grannoch or Greanoch, which contains charr in abundance. These, it appears, are only to be taken with the net in the spawning season, when they frequent the shallows.' (Stoddart 1847).
- 1882.** 'Its waters, containing char and many small trout, are preserved.' (Groome 1882).
- 1895.** British Museum specimens (3): 'Loch Grannoch, 22 October, 1895' (List sent to P S Maitland, 1966).
- 1909.** 'Loch Grannoch ... eight specimens, 160-230 mm. in total length, three presented by Mr. Robert Service and five by Mr G.R. Murray.' (Regan 1909).
- 1950.** 'Mrs Murray-Usher in reply to my letter said that no charr had been taken recently. She had obtained a net and tried some years ago.' (G. F. Friend research notes, 1955).
- 1978.** 'No Charr taken in gill netting in May 1978.' (Harriman *et al.* 1987).
- 1984.** 'No Charr taken in gill netting in May 1984.' (Maitland *et al.* 1987).
- 2003.** 'No Charr taken in gill netting in 2003.' (Maitland & Lyle 2003).

## Discussion

The above account tells much about the history of Arctic charr in Loch Grannoch. From being an apparently common species there, well known to local people in the 18<sup>th</sup> and 19<sup>th</sup> Centuries, it had apparently disappeared by the 1960s. Unfortunately, there is a gap in its recorded history in the first half of the 20<sup>th</sup> Century, due no doubt partly to the impact of the two World Wars during this period.

Why did Arctic charr become extinct in Loch Grannoch? This sensitive species has disappeared from several Scottish lochs and the causes seem to be varied (Maitland 1992). At Loch Grannoch it seems fairly clear that acidification, which affected many upland lochs in Galloway, is the likely cause. The objective of the recent study there by Maitland & Lyle (2003) was to assess the present status of Loch Grannoch with a view to reintroducing Arctic charr there. However, it was concluded that the loch is still too acidic for such an attempt. Hopefully, one day it may be possible to carry out such a restoration.

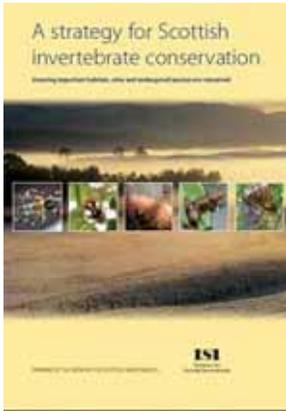
Are there other historical records of Arctic charr in Loch Grannoch? The value of old records in giving us an insight into the past history and status of fish like the Arctic charr is evident from the above account. Perhaps there are some records which are missing from it? If any readers know of other likely sources the author would be delighted to hear of them.

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## Launch of a Strategy for Scottish Invertebrate Conservation

By Craig Macadam



Invertebrates, such as insects and shellfish, make up around 98 per cent of Scotland's animal species. They play a key role in a healthy environment and economy, but are currently in jeopardy from habitat destruction, over-exploitation, pollution and other threats. The launch on 20 January of 'a strategy for Scottish invertebrate conservation' by Michael Russell MSP, then Scottish Minister for the Environment, saw the culmination of a two-year development process

involving the Initiative for Scottish Invertebrates, co-ordinated by Buglife – the Invertebrate Conservation Trust, and with funding from Scottish Natural Heritage.

This strategy developed, through a grant from SNH, has gained wide support and endorsement, and there is now a strong partnership between specialists, non-governmental organisations and statutory agencies. It demonstrates the enthusiasm and resolve of invertebrate conservationists to act together to bring about action for Scottish invertebrates.

The European Strategy for the conservation of invertebrates was adopted by the Council of Europe in November 2006 and published in January 2008. That strategy identifies the problems faced by terrestrial invertebrates in Europe and provides guidance to decision makers, land managers, scientists and teachers, so that they can raise awareness of invertebrates and promote conservation action for them in countries throughout Europe.

When the Standing Committee to the Berne Convention adopted the European Invertebrate Strategy in November 2006 they made a recommendation that encouraged individual governments throughout Europe to 'draw up and implement national strategies and enhance invertebrate conservation'. The Scottish strategy is the first national implementation of the Standing Committee's recommendation.

The vision of the strategy is for a Scotland in which invertebrates are valued and conserved for their key roles in a healthy environment and for their potential to bring people together better to use, understand and appreciate the natural world. This vision will be achieved through: mobilising expertise and data to ensure that important habitats, sites and endangered species are recognised and conserved; and by highlighting through publicity and education the importance of Scottish invertebrates and the conservation issues they face.

The strategy is divided into three sections: Habitats; Species; and Mobilising support.

### Habitats

The strategy aims to identify important habitats and sites for Scottish invertebrates and ensure they are managed positively.

This will be achieved through the preparation and dissemination of guidance on habitat management for invertebrates. This information will be of use to land owners, SNH area officers and to the broad ecosystem groups established by the Scottish Government and will lead on to the development and implementation of conservation plans for sites and habitats of importance for Scottish invertebrates.

### Species

Habitat and site conservation are sometimes not enough for invertebrates that have highly specific requirements or those that are critically endangered. For species like these, tailored actions are required. To achieve this, the strategy will produce and maintain a list of important Scottish invertebrates, devise and carry out programmes of species assessments and, where necessary, work with partners to implement conservation plans to maintain important invertebrate species. The study of under-recorded groups of invertebrates will also be promoted and the conservation needs of important species assessed.

### Mobilising support

The strategy aims to develop a strong and vibrant invertebrate recording community in Scotland through the delivery of workshops on selected invertebrate groups and opportunities to network and learn from others. The strategy will work with partners to develop ongoing programmes of invertebrate recording in Scotland. Protocols will be developed to ensure that invertebrate information is made available wherever possible, whether through the National Biodiversity Network, local record centres or recording schemes and societies. The conservation needs of invertebrates will be promoted through a programme of talks, events and workshops and invertebrate interests will be represented on relevant fora. Through this representation we will foster a greater awareness of the priorities for invertebrate conservation amongst conservationists and decision makers who are able to determine the future of invertebrate populations in Scotland. The strategy will work with partners to develop ongoing programmes of invertebrate recording in Scotland.

Speaking before the launch, the Minister said:-

"Invertebrates are the unsung heroes of the animal kingdom. From bugs, to shellfish, to the humble bumblebee, many species which we may often dismiss as not being important or even cute enough to protect have a vital role to play in Scottish biodiversity and many are under threat."

"It must also be stressed that many invertebrate species are also critical to the Scottish economy. They clean rivers, pollinate crops, and income from fisheries depends on strong invertebrate populations."

"Langoustine (Norway lobster or scampi), a marine invertebrate, contributed £89.3 million to the Scottish economy in 2007, more than the combined value of cod, haddock and monkfish catches, clearly demonstrating that this is a species that must be treated as of the utmost importance."

“Other species such as freshwater pearl mussels are under threat from wildlife criminals, and the decline in bumblebee numbers has been well publicised.”

“I hope that today’s launch will encourage many Scots to take an interest in what is a fascinating range of species and ensure that we all work together to ensure they have a future in Scotland.”

For more information or to request a copy of the strategy please contact:

Initiative for Scottish Invertebrates  
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Alternatively, a copy of the strategy can be downloaded from <http://www.buglife.org.uk/Resources/Buglife/Documents/PDF/ScottishStrategy.pdf>

## Annual Conference and AGM 2009



Delegates enjoying lunch and meeting up with old friends at Chatelherault



We were very lucky with the weather!

## Minutes of BRISC 2009 Annual General Meeting Held on Saturday 25 April 2009

At Chatelherault Country Park, Nr Hamilton

Present. Chairman, 34 Committee and other Members.

### 1. Apologies

Apologies were received from Craig Macadam, Sara Hawkswell, Andy Wakelin

### 2. Minutes of 2008 AGM

These had been circulated previously and copies were also tabled. They were approved by the meeting without corrections, proposed by Anne-Marie Smout and seconded by Richard Weddle.

### 3. Matters arising

There were none.

### 4. Chairman’s report

The Chairman’s Report had been circulated previously and a few questions were raised on points of detail.

Prior to the AGM, a short presentation had been given by Robert Scott on the Data Scoping Project that had recently concluded, and the Chairman confirmed that the report had been printed and was also available electronically. The Committee would consider how it could be utilized to enable further work to be informed by it. He thanked David Lampard and Anne-Marie Smout for their management of the project and Robert Scott for his research and production of a highly informative report.

The Chairman confirmed that two Bursaries had been awarded by BRISC to enable the recipients to attend appropriate courses. Funding for the bursaries had come from contribution from *The Scotsman* to BRISC for articles relating to their quarterly Wildlife Watch survey. This survey will in future be reduced to just one a year, and consequently funds for future bursaries may be affected.

### 5. Annual Accounts

The Annual Accounts had been circulated with the Annual Report. The Treasurer, Duncan Davidson, was available to provide further information and after some small points for clarification the accounts were proposed for adoption by Gill Calder, seconded by Claire Seymour and approved by those present.

No proposal was made for any change to the Annual Subscription.

### 6. Membership

Membership remains similar to last year, i.e. 97 individuals and 32 corporate.

### 7. Committee Members

There have been eight elected officers on the committee and four co-opted during the past year. Brian Boag had tendered his resignation after serving seven years and the Chairman reluctantly accepted it noting that Brian has contributed enormously to the deliberations during his time on the committee..

As there were no nominations for election the Chairman intimated that he would seek to co-opt someone to fill the vacancy. All remaining committee members were re-elected.

## 8. AOB

The Chairman thanked Louisa Hancock and Gill Calder for all the work they had put into organising the venue and the speakers for the Conference and for arranging the excursions to take place in the afternoon.

The meeting Closed and the draw for the raffle prizes was undertaken.

The day continued with two very enjoyable and informative Field Excursions to

- Lower Nethan Gorge, Clyde Valley Woodlands National Nature Reserve and SWT reserve. Led by Steven Blow (SWT) and Martin Twiss (SNH)
- Chatelherault Country Park, Clyde Valley Woodlands NNR. Led by Malcolm Muir and Tom McGregor (SLC Countryside and Greenspace Service)

## BRISC Projects:

### e-petition PE1229

After some false starts, the text of the e-petition was eventually agreed and went on-line in late November 2008. It received 730 signatures, and was considered on 27 January 09 by the Public Petitions Committee, when Craig Macadam gave evidence, supported by Murdo Macdonald and Patrick Milne Home. Following this meeting a number of organisations were asked to provide written evidence. The petition was then debated at a Parliamentary meeting on 5 May, where there was also a good debate and some specific questions were asked, in particular inviting the Government 'to take the opportunity to make improvements in the collection, analysis and sharing of biological data'. The committee agreed to write to the Scottish Government seeking responses to specific points by 27 July 2009. For the petition, the evidence given and the responses from other organisations, see the Scottish Parliament website (<http://www.scottish.parliament.uk/business/petitions/docs/PE1229.htm>).

### Data Scoping Project:

This project was conceived to establish what relevant biodiversity data are held by Scottish museums and universities in Scotland, much of which may not currently be easily accessed or available outside the individual institutions. Following discussion with SNH, it was decided to run a pilot study, focusing on Dundee. A grant was successfully obtained from SNH to help appoint a graduate student, Robb Scott, to carry out the research, write up the findings and the method pursued. The report and details of the data are now available from BRISC's website [[www.brisec.org.uk](http://www.brisec.org.uk)]

### Bursaries:

Four bursaries were offered (two by BRISC and two by Glasgow Natural History Society) to anyone living in Scotland aged 18 - 30 of £150 toward going on a course run by the Field Studies Council at Kindrogan or any of their other venues. Applications had to be in by 1 April 2009 and a panel selected four out of the six applications received. The successful recipients were also requested to write a short piece on how they got on at their chosen course. Below is the first account from Andrew Sloss. It is hoped to offer similar bursaries next year but perhaps without age restrictions.

## Sphagnum Moss workshop, FSC Kindrogan, 23-27 April

By Andrew Sloss

I had a brilliant time on the course, and I can not thank BRISC and GNHS enough for giving me the opportunity to attend. It was a sobering experience for my sphagnum knowledge, as it highlighted how little I really knew about habitats, reproduction, identification, etc., but with that said, I have now come away with a wealth of knowledge and understanding, which is way beyond what my initial expectations were.

On the Thursday night we were in the lab learning about all the different sections and species of *Sphagnum* we would be looking for over the weekend. This in itself was quite daunting, as I have no background in biology, let alone botany or bryology; however I took in the information and looked forward to applying it in the field.

With that said, combining the aspects of the initial lecture, field work and lab work, it really all came together in the end. From being pretty lost on the Thursday night through to identifying some species on the Sunday without even needing to pick them up is a remarkable achievement, which I am extremely pleased with.

The people I met on the course were a great bunch, some of whom were there from consultancy groups and universities, while others were there purely for their interest in bryology. Meeting everyone there was just as beneficial as the course itself, as I was given loads of information on who to get in touch with for more courses, books, information, etc.

I have now got somewhere in the region of 30 samples of *Sphagnum* moss at home, which I will keep for when I get a microscope and continue my work. I am looking forward to getting up to Langlands Moss, where I can now look at the different types of *Sphagnum* and start identifying them.

I am really excited at the prospect this course has given me now and feel incredibly more comfortable with the subject. Many thanks once again for giving me this wonderful opportunity.

## BOOK REVIEWS

**Elliott, J.M. (2009). *Freshwater Megaloptera and Neuroptera of Britain and Ireland: Keys to adults and larvae, and a review of their ecology*. Freshwater Biological Association. 71pp. ISBN 0-900386-77-0. £19.00**

Many people will never have heard of the Megaloptera and Neuroptera. Even to use their common names: alderflies, spongflies and lacewings might mean little more. Nevertheless these small insect groups are fascinating to study and relatively easy to identify.

The Freshwater Biological Association (FBA) has been publishing taxonomic keys on freshwater species for over 75 years. Their first key to these groups was published in 1944 and since then there have been three further editions. The fourth edition, published in 1996, has been out of print for some time and this new edition is most welcome. The current

key covers the seven species found associated with freshwater habitats in the Britain.

The key follows the style of other FBA publications with nice clear couplets and detailed line diagrams. It is perhaps a shame that the key does not include photographic plates of the features described. I believe that this is the way forward for keys such as this, and it would make the keys far more accessible to non-specialists. Perhaps the FBA could dedicate a section of their website ([www.fba.org.uk](http://www.fba.org.uk)) to providing images to complement their keys?

One of the main features of FBA keys is the wealth of ecological information which is included and this key is no exception. There are 27 pages of detailed information on the life cycles and ecology of these insects, together with a comprehensive list of references for those that want to take their study further.

Craig Macadam



An alderfly *Stalis lutaria*

**Harris, S. & Yalden, D.W. (eds) 2008. *Mammals of the British Isles: Handbook, 4<sup>th</sup> edition*. The Mammal Society, Southampton. 799 pp. ISBN 978-0-906282-65-6. Hbk £70.**

Despite mammals having been more intensively studied than any other animals except birds there seems to be no let-up in the flow of new information. Compared with the previous (1991) edition of the *Handbook of British Mammals* this one has 211 more pages and is twice the weight at a massive 3.2 kg, in spite of retaining the telegraphic style of the previous editions. This reflects the huge amount of new information that has been generated over these 17 years, arising from a great variety of sources, for example studies related to the conservation of protected species, others made possible by new technologies of remote sensing and analysis of DNA. The number of contributors has also increased, to 118, many of the accounts of individual species being multi-authored, and the amount of new information is also reflected in the number of references cited: 1593 for the rodents alone, compared with 893 in the 3rd edition. As in the previous editions (and in contrast to another well-used set of *Handbooks*) the information in each species account is easily findable with clear headings and subheadings – unfortunately the species headings are no more prominent than the rest.

This edition is enhanced by the inclusion of sixteen new plates of excellent coloured art-work by Guy Troughton. There are also colour photographs, but in some of these the colour is positively misleading, as with the museum skins depicting the five subspecies of bank voles, four of which appear almost black. Other areas of expansion are in the introductory chapters, with a very comprehensive account of ‘Mammals and the law’,

and fuller treatment of the Pleistocene and subsequent history of the mammal fauna. More recently extinct species such as the beaver, lynx, wolf and brown bear are treated in the main text, and only ephemeral escapes and exotic introductions relegated to a final chapter.

There has been no comprehensive 10km atlas of the distribution of British mammals published since 1993. Distribution in the British Isles is therefore shown by two degrees of shading on the maps, with some misleading results. In spite of the intensive study of the distribution of squirrels in recent years, the map shows no reds in the central belt of Scotland – there are certainly several discrete but substantial populations surviving in Fife and probably elsewhere – and greys are shown as absent from most of southern Scotland where they are very widespread. The data on distribution in the Hebridean islands also needs to be treated with caution. There are several discrepancies between the maps and the text, e.g. mole mapped on Arran, which is not included in the list of islands in the text; pygmy shrew mapped for Lewis but specifically stated as absent in the text. I was interested to note that in the very extensive account of the wood mouse, including almost a page on ‘Relations with humans’, no mention is made of their presence indoors. Relations with this human show a very different picture: in the 17 years I have been in my present house. I have trapped several hundred wood mice indoors and only 12 house mice. It could be that the apparent scarcity of house mice in local recording schemes reflects reality more closely than is often supposed, rather than reluctance to report seemingly ubiquitous species.

Although bats are poorly represented in Scotland the few species here have attracted a lot of attention, and recent work is well represented, including the relationship of the two common species of pipistrelles. Statistics of the echolocation calls of all species of bats are tabulated, along with sonograms. Other chapters in which Scotland is well represented are of course the marine mammals and the carnivores. The rise of whale-watching in the Hebrides, the relocation of the Sea Mammal Research Unit to St Andrews, and the establishment of Aberdeen University’s Lighthouse Field Station at Cromarty have all boosted knowledge of the distribution and ecology of our marine mammals. The accounts of otter, wildcat and pine marten will be of particular relevance in Scotland in view of their volatile status. The account of red deer is obviously dominated by Scottish data; at the other end of the deer spectrum is the introduced Reeve’s muntjac, expanding its range in England and shown on the map in two areas in Scotland: Fife and adjacent Tayside, and north of Loch Ness. But the text gives no indication of its status in these areas beyond ‘A few records from .... Scotland’.

This will clearly be the primary source of information on the mammals of Britain and Ireland for many years, and all concerned in the Mammal Society can be proud of the achievement in not only assembling the information but in publishing it themselves. But its sheer size and cost must leave a niche for a short version summarising the data in a more concise format.

Gordon Corbet