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Century, mainly as a result of over-exploitation. There are small, scattered low density populations fringing sea lochs around the west and north coasts of Scotland, but these stocks are threatened from poaching.



A live native Oyster specimen found on the Firth of Forth  
© the author

## THE NATIVE OYSTER REDISCOVERED IN THE FIRTH OF FORTH

By Elizabeth Clare Ashton

The native oyster, *Ostrea edulis*, also known as the flat or European oyster, is a priority Biodiversity Action Plan species in the UK; it is included on the Scottish Biodiversity list, and on the Scottish Natural Heritage (SNH) Species Actions Framework as a threatened species of socioeconomic value requiring action to ensure sustainable use. Native oysters are the property of The Crown Estate and their collection from the wild is unlawful without a licence, but native oyster populations in Scotland have declined significantly in abundance and distribution since the 19<sup>th</sup>

The Firth of Forth was once the major oyster fishery of Scotland, exporting high quality oysters all over Europe, with an annual production at its height in the 18<sup>th</sup> Century of around 30 million oysters.

**Continued on p.3**



## Chairman's Column

On behalf of the BRISC Committee I wish all of you the best for 2010. I hope that you have not been too inconvenienced by the snow – perhaps even taking advantage of it. We have had 15 to 18 inches of snow on the ground since well before Christmas, together with some wonderful clear sunny days, and the countryside around Kinross has been looking quite beautiful. However, that quantity of snow does tend to slow down usual outside activities – moving several inches of snow to create a path from back door to stables is good exercise but takes quite a time, particularly when it seemed to require action virtually every day.

These wintery spells do come along on a pretty regular basis and it is surprising how surprised people are when they do arrive. If only I had kept a record I would be able to check exactly when in the 1950s we skated on frozen lochs for what seemed like weeks; when in the 60s I milked cows which had to be brought in daily through monumental snow drifts; when in the 70s I skied at Aviemore from before Christmas till May; when in the 80s we skated for weeks on Loch Leven; when in the 90s we were unable to get out for a couple of weeks, because the roads had been filled in to many feet worth of snow drifts. The memory can play tricks but records can prove a point.

'Postie' has generally been able to get through and has brought a collection of monthly magazines and a number of Annual Reports. Amongst these has been the National Biodiversity Network Trust. Prior to my taking on the Chair of BRISC in 2005 I had expressed strong support for the principle behind the National Biodiversity Network and the concept of all Biological Records being held on its 'Gateway'. To see what it has been up to and its plans for 2010 and beyond I would highly commend looking at their Annual Report at <http://www.nbn.org.uk/Useful-things/Publications.aspx#AR>.

As a small sample of what the NBN has achieved during 2009 I summarise from an email from Jo Purdy and Mandy Henshall of the NBN.

*The Gateway now holds almost 48 million species records.*

*To understand some of the issues faced by organisations that hold data in an un-digitised form a species record digitisation trial took place; this will help to inform anyone considering digitising species records. This is part of the work to improve data flow across the NBN and will continue into 2010.*

*Non-natives have been big news in 2009, with Great Britain Non-native Species Information Portal launching and International Biodiversity Day focusing specifically on this interest group.*

*The NBN has been working to enable individuals to build their own species recording website; whether a simple data entry system or an extensive recording scheme site. You will find more at the NBN on-line recording section of its website. Also included in this section is a webcast by Stuart Ball on how to set up a recording site using the very popular OpenSource content management system – Drupal.*

*Since their digitisation, the Vice County Boundaries have been provided on a CD but now can be downloaded from the NBN website.*

Scotland's biological issues are part of Great Britain's biological issues and to that end I do feel it is important that BRISC does maintain contacts with organisations in other parts of GB. Both Ordinary Members and Committee Members are actively involved with UK wide societies and between us we can hopefully continue to feed in the necessary Scottish perspective 2010.

**With Best Wishes for 2010.**  
Patrick Milne Home



## Editorial

Can I remind all readers that this is the time of year when everyone should be getting down to submitting all their wildlife records gathered over the last year. From personal experience I am well aware that this amounts to quite a task, but please make a special effort and send your records to your Local Records Centre or any other recording group or recording scheme of your choosing. Conservation efforts are all dependent on good, up-to-date, data, so the future of our wildlife really deserves it of you.

One of the really lovely things about the natural environment is that new and unexpected discoveries are always just round the corner. For instance, who would have guessed that our oysters would be rediscovered in the Firth of Forth, having been thought extinct for nearly a century? Dr Elisabeth Ashton, who made the discovery, tells the tale.

The feature 'What's special about..' this time takes us to the Isle of Skye, where John Phillips writes a fascinating account of the outstanding and varied fauna and flora recorded here over the years. How very fortunate we are in Scotland to have such richness and diversity – not to mention the fabulous scenery – and to have people like John and his long list of experts and field naturalists doing their bit. It is also good to read that oysters are still present in these parts.

I am very indebted to Paul Harding for his personal appreciation of Charles Copp, who sadly died last September.

Simon Scott describes the restored Fife Nature LRC, what they are up to, and echoes my plea above for submitting records, while Heather McHaffie is whetting everyone's appetite for pursuing new taxonomic skills or improving old ones with her list of exciting courses run at Kindrogan, the Field Studies Council's centre in Scotland. Read more about bursaries on offer toward these courses on p.10. Heather's lists also include a number of courses run by the Royal Botanic Garden Edinburgh, so there is no shortage of opportunities for anyone wanting to learn.

The date for our Annual Conference and AGM is Saturday 27 March, which this year will take place at Montrose. The theme is "Biodiversity: Then and Now", with four excellent speakers in the morning and, following the AGM and lunch, a series of fascinating local excursions to choose from. A booking form is enclosed with this mailing. If there is enough interest, a further excursion will take place the following day, Sunday. See the booking form for details. AMS

### ERRATA

I must apologise for some errors in the printed October issue (no. 75) of *BRISC Recorder News*, entirely my mistakes: the photo of the moth on p.7 shows of course a Scorched Wing, **not** as the caption has it Scorched Carpet, and it should have been attributed to Roy Leverton, not the author. Also in the caption to the photo 'Looking NE from An-Dubh Aird' on p.5, the three letters should have been NTS (i.e. National Trust Scotland). Corrections have already been made in the electronic version. AMS

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**Continues from p.1** But the fishery collapsed by 1920, and surveys of the Firth of Forth in 1957 reported that oysters were biologically extinct. However, on a low tide in August 2009 I managed to find two live specimens attached to rocks 100m apart in the intertidal zone on the Firth of Forth, providing some hope that they could once more be restored. I was working at the time, funded by the Scottish Aquaculture Research Forum, Scottish Natural Heritage and The Crown Estate, on preparing a plan for oyster restoration, and one of our proposed sites was the Firth of Forth.



Close up of another native Oyster found by the author

If you are interested in helping with the restoration of native oysters to the coasts of Scotland, you can report any sightings to your local SNH office, and any removal of native oysters to the police or contact Liz Ashton or Janet Brown at the University of Stirling on [la17@stir.ac.uk](mailto:la17@stir.ac.uk)

## WHAT'S SPECIAL ABOUT SKYE

By John Phillips

### Introduction

Skye lies between latitudes 57°03' and 57°44' N and has an average rainfall ranging between 65 inches, 1651mm (Duntulm) and 113 inches, 2870mm (Broadford) per annum. Climatically it is very different from the 55°52' N, 35 inches, 889mm per annum rainfall Glasgow area, where I grew up and ultimately ended up studying botany and ecology. On Skye, MAMBA acquires a new meaning – Miles And Miles of Boggy Area.

A Countryside Ranger for over 20 years now, I maintain a broad interest in things natural. I am not, however, master of the many disciplines it would take to be a good all-round naturalist, and I am perennially poor at submitting records. I am therefore extremely grateful that the area I work in has been blessed with exceptional practitioners in a great number of fields, without whom the knowledge and appreciation of the wildlife around us on Skye would be very much less rich than it is.

Some of these people have established websites (listed below<sup>1</sup>) which I often refer to in the course of my work. The serious recorders can skip the rest of this article and go straight to the

<sup>1</sup> [www.skyebirds.com](http://www.skyebirds.com)  
[skyeerasayplants.wordpress.com](http://skyeerasayplants.wordpress.com)  
[www.plant-identification.co.uk/skye](http://www.plant-identification.co.uk/skye)  
[website.lineone.net/~trotternish/plants1.html](http://website.lineone.net/~trotternish/plants1.html)  
[www.skyeferns.co.uk](http://www.skyeferns.co.uk)  
[www.bsbi.org.uk/html/north\\_ebudes](http://www.bsbi.org.uk/html/north_ebudes)  
[www.jmt.org](http://www.jmt.org)

websites now if they like! I would like to thank the following people (and apologise to the ones I missed out) for their contribution to my understanding of the wildlife of this area: Bob McMillan, author of *Skye Birds* and owner of the [www.skye-birds.com](http://www.skye-birds.com) website; Catriona Murray, formerly botanical recorder for Skye and author, with H.J.B. Birks, of *The Botanist in Skye and Adjacent Islands*; Andrew Currie, former regional officer for Skye with the Nature Conservancy Council; Stephen Bungard, botanical recorder for VC 104; Carl Farmer, botanist, plant photographer and web wizard; Neil Roberts, Principal Teacher of Science at Portree High School; Roger Cottis, Mammal Society and current chair of Scottish Badgers; Alison MacLennan, RSPB Area Officer; Brian Neath, South-West Ross Field Club; Dr. James Merryweather, again of South-West Ross Field Club; Martin Benson, ornithologist; Sue Scott, marine biologist; Mike Taylor, pteridologist and owner of the website [www.skyeferns.co.uk](http://www.skyeferns.co.uk); and Paul and Grace Yoxon, International Otter Survival Fund.

In addition to the websites listed below, The Highland Biological Recording Group<sup>2</sup>, established in 1986, is one very useful organisation to which records may be contributed at the conclusion of your holiday of a lifetime.

Skye's Biodiversity Action Plan<sup>3</sup> (shared with Lochalsh and produced in 2003) divided the island into six broad habitat types: Sea and Coast; Freshwater; In-bye Croft and Farm Land; Woodland; Mountain and Moorland, and the Built Environment, and although these provide a good starting point for describing the physical nature of the island - after brief introductions to each habitat - I shall deliberately wander away from these to describe some of the biology in greater detail.



Skye Bridge with the Red Cuillin in the distance © the author

### Sea and Coast

The coastline of Skye is around 500 miles long (approximately 7% of the total coastline of Scotland) with long glacially cut sea-lochs indenting an island which is 50 miles long and between 7 and 25 miles wide. The shape of the island gives rise to one of the Gaelic names for Skye, An t-Eilean Sgitheanach - the Winged Isle. The other, official, name is Eilean a'Cheo - the

<sup>2</sup> [www.hbrg.org.uk](http://www.hbrg.org.uk)

<sup>3</sup> [www.highlandbiodiversity.com/html/counties/skye\\_lochalsh/skye\\_lochalsh.pdf](http://www.highlandbiodiversity.com/html/counties/skye_lochalsh/skye_lochalsh.pdf)



Misty Isle. Rocky coasts abound, sandy beaches are rare, much of the coast of the northern half of the island is bounded by high basalt cliffs, and in the centre the Cuillin mountains slope all the way down to the sea. Two Marine Special Areas of Conservation (SACs) lap the shores of Skye: the Ascrib, Isay and Dunvegan SAC, an “outstanding example of the habitat in a European context”<sup>4</sup> in which the qualifying interest is the common seal, *Phoca vitulina*, and the Duich, Long and Alsh SAC, “an extensive area of extremely sheltered reefs....holding excellent stands of the habitat, significantly above the threshold for SSSI/ASSI notification but of somewhat lower value than grade A sites”<sup>5</sup>.

### Freshwater

There is usually no shortage of fresh water on Skye. There are fourteen major rivers flowing into the sea, many of them fast-flowing ‘spate’ rivers. A survey of twelve of these rivers by J. Watt<sup>6</sup> in 2005 on behalf of Skye District Salmon Fishery Board concluded that “...Skye’s stocks of salmon are currently depleted and in some rivers they are vulnerable to being lost.” However, a number of the freshwater lochs are of more than passing interest to the naturalist. Freshwater protected areas include “two lime-rich lochs, Loch Cill Chriosd and Loch Lonachan, situated over predominantly limestone bedrock... the excellent water clarity is reflected by the presence of long-stalked pondweed *Potamogeton praelongus*. Characteristic of hard-water waterbodies, both lochs support stoneworts *Chara* spp. Other plants of note include the rare pipewort *Eriocaulon aquaticum* in Loch Cill Chriosd and six-stamened waterwort *Elatine hexandra* in Loch Lonachan. In addition, Loch Cill Chriosd and its environs support 34 species of molluscs, three of which occur at their most northerly known locations in Europe.”

### In-bye Croft and Farm Land

Crofting, once an important means of sustaining those with access to a croft, has changed a great deal through recent times of relative plenty. Recognised historically as the determining factor in maintaining land in a suitable condition for some of the UK’s rarest birds – amongst which, the corncrake, *Crex crex*, the UK’s only globally endangered breeding bird must take the top spot – much in-bye crofting ground here is now neglected. Where fields of hay or oats once grew, uncut rank grass dominates, or stock (primarily sheep), which in times past summered on the common grazing – away from the in-bye ground – now graze here year-round. In many places,

Fragrant Orchid © the author



<sup>4</sup>[www.jncc.gov.uk/protectedsites/sacselection/sac.asp?EUCode=UK0030230](http://www.jncc.gov.uk/protectedsites/sacselection/sac.asp?EUCode=UK0030230)

<sup>5</sup>[www.jncc.gov.uk/ProtectedSites/SACselection/sac.asp?EUCode=UK0017077](http://www.jncc.gov.uk/ProtectedSites/SACselection/sac.asp?EUCode=UK0017077)

<sup>6</sup>[www.tripartiteworkinggroup.com/article/uploaded/Skyefisheriesassessmnt1.pdf](http://www.tripartiteworkinggroup.com/article/uploaded/Skyefisheriesassessmnt1.pdf)

biodiversity seems to have suffered, with a decline in wildflowers, butterflies and the birds which once depended on either cover or winter seed from hay or grain crops. There is consolation in that winter flocks of seed-eating birds including twite, *Carduelis flavirostris*, and goldfinch, *C. carduelis*, do well on the seeds of plants such as black knapweed, dock and thistle in this neglected ground. If you exclude the sheep from a piece of such ground, as we did some years back, a host of plants including fragrant orchid, *Gymnadenia conopsea*, will flower, having been kept in vegetative state for years by close grazing. Leave the ground too long without grazing and purple moor grass, *Molinia coerulea* and rushes take over.

Predictably, decoupling of farming subsidies in 2003 led to a decline in sheep numbers on Skye. In their response to the Scottish Government consultation paper on the “Future Implementation of the Common Agricultural Policy in Scotland” (10 Sept 2008), Highlands and Islands Enterprise reported a rapidly accelerating drop in sheep headage in Skye, Lochalsh and Lochaber (-3.87% in 2001-4; -5.72% in 2004-6 and -8.22 in 2006-7). In 2007, the Scottish Raptor Study Group<sup>7</sup> reported a decline in the productivity of golden eagle, *Aquila chrysaetos*, attributing it to the 35% decline in sheep numbers since a peak in 1999 combined with the growth in numbers of the white-tailed eagle, *Haliaeetus albicilla*, being a competitor for some prey and for winter carrion. Ken Crane and Kate Nellist, who have closely monitored golden eagles on Skye since 1984 (and published an excellent book, *Island Eagles*<sup>8</sup>) have also raised a concern about the potential growth in disturbance by wildlife tourists. As John Muir famously remarked, “When we try to pick out anything by itself, we find it hitched to everything else in the universe.” Decoupling/un-hitching – what is the difference?

### Woodland

Mature woodland on Skye is, like anywhere else in Scotland, largely divided into ancient semi-natural and exotic forestry. Recent years have seen a rise in the proportion of newly planted ‘native’ woodland on Skye with climate change concerns spawning the likes of Rebels Wood on the Orbost Estate, dedicated to Joe Strummer, one-time drummer with punk band the Clash. By the way, for a well-informed exposé of carbon offsetting in action at Orbost on Skye see Rob Edwards’ article in the *Sunday Herald* of 25 February 2007.<sup>9</sup> Grazing by sheep has left many Skye woodlands with an impoverished structure with little recruitment of young trees and often overgrazed ground flora, but there are surprises in store for the botanist - of which more later.

### Mountain and Moorland

Skye has twelve Munros, eleven of which (all except Bla Bheinn/Blaven) are on the Black Cuillin ridge. Occupying the central portion of the island and traditionally attributed to the Clan MacLeod, they were designated as the core of the UK’s first Special Protected Area<sup>10</sup> for golden eagle in January 2003. The designation extends to around 29,000 hectares, taking in both the Red and Black Cuillin and surrounding area (excluding homes and gardens) and, depending which report you read,

<sup>7</sup> [www.scottishraptorgroups.org/news.php?month=10&year=2007](http://www.scottishraptorgroups.org/news.php?month=10&year=2007)

<sup>8</sup> [www.nhbs.com/island\\_eagles\\_tefno\\_94936.html](http://www.nhbs.com/island_eagles_tefno_94936.html)

<sup>9</sup> [www.robedwards.com/2007/02/from\\_sunday\\_her.html](http://www.robedwards.com/2007/02/from_sunday_her.html)

<sup>10</sup> [www.jncc.gov.uk/default.aspx?page=1890](http://www.jncc.gov.uk/default.aspx?page=1890)

supports between eight and eleven breeding pairs, around 2% of the British population. Alpine Rock-cress, *Arabis alpina*, occurs at its only UK location in the Black Cuillin.

### The Built Environment

In 2005, the *Biodiversity of Buildings* project<sup>11</sup>, part of the Highland BAP Implementation Programme, set out to assess the importance of one aspect of the built environment of Skye and Lochalsh for wildlife. The project surveyed old buildings, byres or sheds for the presence of wildlife and in 2006 concluded that, “Along with records of barn owls, swallows, house martins, house sparrows and bats, a variety of other wildlife was recorded. Birds were fairly well represented and included blackbird, robin, pied wagtail, spotted flycatcher, wren, jackdaw, starling, thrush, chaffinch, collared dove, tawny owl and tits. Mammals recorded were pine marten (reported in several buildings in Lochalsh), shrew, stoat, hedgehog, rabbit, hare, mice and rats. There was even an otter holt located under the floor of one of the buildings.”

The survey took place after the disastrous storm of 11-12 January 2005, and the results suggested that “the effects of increasing storm events associated with more chaotic weather patterns may have an ongoing impact on reducing potential nest and roost sites.”

The “streamlined and closed design of new buildings, both domestic and agricultural” was seen as contributing to a decline in nesting / roosting potential of buildings. The project also showed that it was possible, by making minor adaptations, e.g. a vee cut at the top of a shed door, to allow access by swallows to outbuildings whilst retaining the necessary protection from the weather.



Old Man of Storr © the author

### Geodiversity

Skye is a geologically diverse area with features of everything from Lewisian gneiss (3000 million years old) to the relatively young volcanic rocks of the area (60 million years old). The south-eastern coast of the island coincides with the line of the Moine Thrust, and inland from here, 800 million year old Torridonian sandstone overlies 3000 million year old Lewisian gneiss. Between Broadford and Torrin, Durness limestone

<sup>11</sup> Sarah E. Kay, Biodiversity of Buildings Report – October 2006, Highland BAP Implementation Project.

dominates the landscape and, where it has met with intrusive volcanic material emanating from the Red Cuillin complex, marble has been formed by metamorphism. The northeast of Skye is dominated by plateau lavas and the land-slipped east side of Trotternish boasts two of Scotland’s most celebrated landscape attractions, the Old Man of Storr and the Quiraing. Part of Trotternish is capped by a 250m thick sill of dolerite, basically a basalt which has cooled gradually, forming the immense pillars which gave the name Staffin (from the Norse *Stafr* = pillar) to the area. This can be seen at *Creag an Fheilidh* (Kilt Rock), where the vertical pillars of the igneous sill and the horizontal stratification of the underlying sedimentary Jurassic rocks are (faintly) reminiscent of kilt tartan. For the palaeontologist, there is much to delight in on Skye: dinosaur bones from *Bearreraig* bay<sup>12</sup>; dinosaur trackways at *An Corran*; the earliest known aquatic turtles, found in Strathaird in 2004<sup>13</sup>, and the first Jurassic mammal from Scotland<sup>14</sup>.

### Skye botany – the old and the new.

In 1950, a botanical revelation was achieved in a somewhat unconventional way. In the herbarium at Kew Gardens, a Mr B.L. Burt was routinely examining specimens of *Peplis*, (water purslane) and noticed an irregularity. One of the specimens was not the *Peplis* it professed to be but an annual arctic plant, Iceland purslane, *Koenigia islandica*. It had been collected in 1934 on a botanical foray to the Trotternish ridge in Skye and had remained undetected until then (it is a spectacularly nondescript plant to look at so perhaps that is not so surprising). In the UK, it is known only from Skye and the Isle of Mull. Once much more widespread in Britain and Ireland, post-glacial global warming has contracted its range dramatically. What is amazing is that a tiny annual plant like this has managed to survive, year on year in these last few UK refuges. An idea of its occurrence in wider terms can be had by viewing the distribution maps for the species, here listed as Island purslane (confusingly Island being the Icelandic for Iceland) on the Global Biodiversity Information Facility<sup>15</sup>. Some of the places other than Skye to which one might travel to see this plant are Faroe, Disko Island (off West Greenland), Iceland (of course) and Tierra del Fuego. How disjunct a distribution can you get?



Iceland (Island) Purslane © the author

<sup>12</sup> [www.gla.ac.uk/~gxha14/Dino.html](http://www.gla.ac.uk/~gxha14/Dino.html)

<sup>13</sup> [www.ucl.ac.uk/news/news-articles/0811/08112106](http://www.ucl.ac.uk/news/news-articles/0811/08112106)

<sup>14</sup> <http://jgs.lyellcollection.org/cgi/content/abstract/128/2/119>

<sup>15</sup> [secretariat.mirror.gbif.org/species/13740687/commonName/island%20purslane](http://secretariat.mirror.gbif.org/species/13740687/commonName/island%20purslane)



Skye's protected areas of the Sligachan Peatlands Special Area of Conservation (SAC) and Mointeach nan Lochainn Dubha SAC are home to Scotland's largest concentration of an intriguing plant called pipewort, *Eriocaulon aquaticum*, a UK BAP species, listed as 'Nationally Rare' at the UK level i.e. found in between 1-15 10km<sup>2</sup>. Like Iceland purslane, the presence of this plant here hints at the durability of at least some components of our biodiversity. Our pipewort (the only European representative of a genus numbering around 400 species worldwide) is at the eastern limit of its distribution and occurs only on the Atlantic coasts of Scotland and Ireland<sup>16</sup>. It has twice the number of chromosomes as the more widely distributed eastern American equivalent and may be a survivor from before the opening up of the Atlantic Ocean around 130 million years ago, when Scotland was part of a super-continent known to us as Pangea.

At the other extreme, the spread of newly naturalized plants – like piri burr, *Acaena aserinifolia*, an attractive little plant from New Zealand, found on Raasay at Suisnish and nearby on Skye, and New Zealand willowherb, *Epilobium brunnescens* - first introduced as a rock garden plant, now just past its centenary as a British wild plant and common on upland paths and waysides in Skye and Raasay - reminds us that change is inevitable in the biological world, particularly when man has a hand in it. Latest in the growing list of garden escapes into the wild seems to be Gunnera, at one time carefully cosseted by the gardeners of the Armadale Estate because of its alleged susceptibility to frost and now spreading here and elsewhere at an alarming rate. Global warming? Who knows?

For my money, one of the nicest places to botanise on Skye is the Durness limestone of the Strath Special Area of Conservation (Strath SAC), incidentally also the largest area of Durness limestone in the country. In this almost treeless area, a host of woodland plants (e.g. wild garlic, *Allium ursinum*; twayblade, *Listera ovata*; sanicle, *Sanicula europaea*; early purple orchid; *Orchis mascula*) persist, tucked away from hungry herbivores in the shady grykes of ancient limestone pavement. Nearby you will find mountain avens, *Dryas octopetala*, in abundance, here growing almost down to sea level. Other relative rarities in this area include holly fern, *Polystichum lonchitis*; stone bramble, *Rubus saxatilis*; and dark red helleborine, *Epipactis atrorubens*. Last but not least, a plant which I had looked for, off and on, for over 20 years, before finding it – herb Paris, (*Paris quadrifolia*) also grows here.



Herb Paris © the author



Mountain Avens © the author

Some of the old woodlands here on Skye still turn up surprises for the botanist. Narrow-leaved helleborine, *Cephalanthera longifolia*, classified by Plantlife as 'vulnerable and facing a high risk of extinction in the wild'<sup>17</sup>, can be found at a few sites and may have been overlooked in others. Though not rare in UK terms, bird's-nest orchid, *Neottia nidus-avis* (according to the *Britain's Orchids* website 'widespread but uncommon in mainland Scotland'<sup>18</sup>) has only lately started to be noted here too.

The mountain areas of Skye have their own botanical attractions, some common enough, like mountain sorrel, *Oxyra digyna*, (according to Wikipedia, "used by the Inuit to prevent and cure scurvy") others rare like Alpine saxifrage, *Saxifraga nivalis*.

One could do worse than ascend the Storr mountain on a sunny day in late May or early June, when you might hope to find six of the ten Scottish species of saxifrage in the space of an afternoon (i.e. opposite-leaved golden, *Chrysosplenium oppositifolium*; purple, *Saxifraga oppositifolia*; alpine *Saxifraga nivalis*, mossy, *Saxifraga hypnoides*; starry, *Saxifraga stellaris* and yellow saxifrage, *Saxifraga aizoides*). Whilst there you should tick off cyphel, *Minuartia sedoides*, dwarf willow, *Salix herbacea*, goldenrod, *Solidago virgaurea*, roseroot, *Sedum rosea*, - the list is considerable. Although also noted from the Trotternish ridge, I would recommend climbing Glamaig for Parsley Fern, *Cryptogramma crispa* – it grows in abundance there on the acres of high scree. Having long known of its existence, but never having set eyes on it, I was in no doubt what this plant was when I first saw it. It is indeed well-named.

I have touched on the botanical interest of the protected wetlands of Skye already. Other flowering plants found at Mointeach nan Lochan Dubha SAC include bladderwort, *Utricularia australis*; lesser water plantain, *Baldellia ranunculoides*; water lobelia, *Lobelia dortmanna* and the beautiful and sadly collectable white water lily, *Nymphaea alba*.

### Fungi

Despite the relative lack of native woodland, a few people make a seasonal living here collecting wild fungi and selling them on

<sup>16</sup> Lusby, Philip & Wright, Jenny (1996). *Scottish Wild Plants, their ecology and conservation*. The Stationery Office

<sup>17</sup> [www.plantlife.org.uk/uk/assets/saving-species/Cephalanthera\\_briefing\\_sheet.pdf](http://www.plantlife.org.uk/uk/assets/saving-species/Cephalanthera_briefing_sheet.pdf)

<sup>18</sup> [http://www.britainorchids.fieldguide.co.uk/?PP=species\\_account&SPID=15&SHC=4&PSD=2](http://www.britainorchids.fieldguide.co.uk/?PP=species_account&SPID=15&SHC=4&PSD=2)

to local hotels and restaurants. If you know where to look there is a good range of species to choose from, including penny bun, *Boletus edulis*, chanterelle, *Cantharellus cibarius*, and wood hedgehog fungus, *Hydnum rufescens*. However, three non-edible sorts spring to mind as particular to the area and of current interest to biologists. First, two found in some of the old hazel woodlands typical of the coastal fringe: hazel gloves and glue fungus. Hazel gloves, *Hypocreopsis rhododendri*, a UK BAP Priority Species, is currently known from only sixteen sites in Scotland, including two SSSIs and is thought to be parasitic on the glue crust fungus, *Hymenochaete corrugata*<sup>19</sup>. Second, a grand total of 43 species of waxcap, *Hygrocybe* spp., the miner's canaries of ancient unimproved pasture (some of them are even yellow) are found here on Skye including pink waxcap, *Hygrocybe caylptriformis*, one of the two UK BAP species.

### River runners

A few years back I spent a delightful day or so with Iain Sime, one of Scottish Natural Heritage's freshwater biologists. Iain grew up on Skye and was one of the first to put his hand up when the great SNH migration north was mooted. His speciality is freshwater pearl mussels, *Margaritifera margaritifera*, which still occur here and there on Skye and, as in many other places, suffer from the depredations of pearl fishers. Freshwater pearl mussels have a fascinating life cycle. They can live to up to 100 years old, and as larvae hitch-hike on the gills of salmon to return upriver, where they settle down and ultimately breed. Iain also informed me of the presence of dwarf brook lamprey, *Lampetra planeri*, which was discovered not many years ago in the Broadford River. Iain's book *River Runners*,<sup>20</sup> which deals with all of the above, is a worth-while read. Loch Mealt (adjacent to the famous Kilt Rock in Trotternish) has a non-migratory population of Arctic char and (again thanks to Iain Sime for this information) three-spined stickleback. These would migrate seawards were it not for the 180ft high cliff and waterfall in the way. Arctic char are noted for Loch Lonachan and Loch na Dubhraichean in the south of the island. Presumably there they are native and migratory.

### Invertebrate fauna

#### Dragonflies

(below) Beautiful Demoselle © the author



A host of dragonflies and damselflies can be seen here covering a long season including: azure hawk, *Aeshna caerulea*; beautiful demoiselle, *Calopteryx virgo*; black darter, *Sympetrum danae*; blue-tailed damselfly, *Ischnura elegans*; common blue

damselfly, *Enallagma cyathigerum*; common darter, *Sympetrum striolatum*; common hawk, *Aeshna juncea*; emerald damselfly, *Lestes sponsa*; four-spotted chaser, *Libellula quadrimaculata*; golden-ringed dragonfly, *Cordulegaster boltonii*; Highland

<sup>19</sup> [www.snh.org.uk/speciesactionframework/saf-hazel.asp](http://www.snh.org.uk/speciesactionframework/saf-hazel.asp)

<sup>20</sup> [www.snh.org.uk/publications/online/NaturallyScottish/riverrunners/lampreys.asp](http://www.snh.org.uk/publications/online/NaturallyScottish/riverrunners/lampreys.asp)

darter; *Sympetrum nigrescens*; large red damselfly, *Pyrrhosoma nymphula*. Dalavil and Mointeach nan Lochainn Dubha (both in South Skye) are good dragonfly sites – though by no means the only ones in the area.

#### Butterflies

(below) Small Pearl-bordered Fritillary © the author



The orange-tip butterfly *Anthocharis cardamines* is curiously absent from most of Skye though one of the food plants, cuckoo flower, *Cardamine pratensis*, is common. Scotch argus, *Erebia aethiops* is abundant on the hills, speckled wood,

*Pararge aegeria* is common in the wooded areas. Other butterflies recorded on Skye include green hairstreak, *Callophrys rubi*; dark green fritillary, *Argynnis aglaja*; pearl-bordered and (pictured above) small pearl-bordered fritillary, *Boloria euphrosyne* and *Boloria selene*; painted lady *Cynthia cardui*; red admiral, *Vanessa atalanta*; clouded yellow, *Colias croceus* (in 1992, I was here on holiday and was lucky enough to see one). As with Lochalsh, this year there were vast numbers of peacock butterflies, *Inachis io*, on Skye.

#### Moths

Perhaps the most celebrated Skye invertebrate of all is the so-called Talisker burnet *Zygaena lonicerae jocelynae*<sup>21</sup> (before you ask, it does NOT lay its larvae in the cracks in whisky barrels) which is a Red Data Book entity (RDB3 - Rare) and unique to Skye. It was recognised as a subspecies (of the narrow-bordered five-spot burnet) with its discovery on Skye in 1961. The transparent burnet *Z. purpuralis* ssp. *caledonenis*, a nationally scarce species, is found in the same protected area. The Argent and Sable, *Rheumaptera hastata*, a nationally scarce UK BAP species is recorded here, so far in six Skye 10km<sup>2</sup> (all in the mid-south of the island). I assume that the darker form *nigrescens* (the one which is hitched to bog myrtle, not birch as in the larger *hastata* form) is what we have here, something I will have to look out for, if I ever see one.

#### Glow worms

A few years ago I was made aware of a surprising (to me) record for Skye – of glow worms. The only one we are likely to see in Scotland is the common or European glow-worm, *Lampyrus noctiluca*, apparently 'widespread and relatively abundant'<sup>22</sup>. The record states that there were "At foot of Marsco, 'thousands', a few years previous to 1925."<sup>23</sup> Sadly, I still have not managed to get out in the right period (and weather) to check if there are any to be seen now (10-11pm in June or July). One day, perhaps, I will – if no-one else beats me to it.

#### Marine life

Low-tide forays are some of our most oft-repeated Countryside Ranger offerings, both as part of in-school and out-of-school activities. There is intrinsic difficulty in scheduling a visit for a really good low spring tide. However, when such an occasion

<sup>21</sup> [www.butterfly-conservation.org/uploads/Burnet%20leaflet%20final.pdf](http://www.butterfly-conservation.org/uploads/Burnet%20leaflet%20final.pdf)

<sup>22</sup> [www.galaxypix.com/glowworms/Tylerbookpt1.html](http://www.galaxypix.com/glowworms/Tylerbookpt1.html)

<sup>23</sup> [www.galaxypix.com/glowworms/scotland.html](http://www.galaxypix.com/glowworms/scotland.html)



does present itself, a treat is in store and there is never enough time as the returning tide inevitably puts a stop to proceedings.



(Left) Snake Pipefish and (right) Bloody Henry Starfish and Sea Lettuce © the author

I have in the past suggested that the littoral may be, at least in some places, one of our least changed habitats – though I could be far wrong there (it would not be the first time), and as such worthy of greater attention. Common oyster, *Ostrea edulis*, another UK BAP species<sup>24</sup>, occurs here and there around Skye. Other shoreline surprises include lumpsucker, *Cyclopterus lumpus*; Cornish sucker, *Lepadogaster lepadogaster*; Viviparous blenny, *Zoarces viviparus*; spiny starfish, *Marthasterias glacialis*; butterflyfish, *Pholis gunnellus*; 5-bearded rockling, *Ciliata mustela*; snake pipefish, *Entelurus aequoreus*; two-spotted goby, *Gobiusculus flavescens*; squat lobster, *Galathea squamifera*, sea lemon, *Archidoris pseudoargus*, and a strange crab, pictured on next page, that I have up till now failed to put a name to. See what you think! Under-recorded? I should think so.



Mystery crab in the hand (see above) © the author

Basking shark, *Cetorhinus maximus*, are occasionally sighted from the shore during the summer months - they are more abundant out in the Minch than close in to Skye, however. Cetaceans I have seen myself here, include northern bottle-nosed whale, *Hyperoodon ampullatus*, sperm whale, *Physeter macrocephalus*, Minke whale, *Balaenoptera acutorostrata*, Risso's dolphin, *Grampus griseus*, common dolphin, *Delphinus delphis*, bottle-nosed dolphin, *Tursiops truncatus*, and the delightful little harbour porpoise, *Phocoena phocoena*, a moribund individual of which spent its last hours swimming about below our croft before finally beaching a little way downstream of us. The many headlands of Skye (Aird of Sleat, Dunvegan Head, Neist Point, Waternish Point and Rubha Hunish) are some of the best places to watch for cetaceans here,

and records of sightings are always welcomed by the Seawatch foundation.

Both common seal, *Phoca vitulina*, and grey seal, *Halichoerus grypus*, can be seen here. There are a few tour boats specialising in visiting common seal haul-outs around Skye where, as a consequence of their relative habituation to the boats, very close views can be had. The young of the common seal are born in late May-early June and can take to the water on the first tide after they are born, making them inherently better protected (from man) than grey seal pups, which are born later (in October-November) and spend up to three weeks on shore being breast-fed by their mothers before they can swim. That explains the fur coat. Grey seals pup in remote places like the island of Rona (*ron* is Gaelic for seal) north of Raasay.

### Terrestrial mammals

There are no badgers, *Meles meles*, known of on Skye currently. However, Roger Cottis has demonstrated convincingly that there were badgers here at one time - at least in the south of the island - because distinctive *fossil* setts persist e.g. at Kinloch and Dalavil. Foxes, *Vulpes vulpes*, maintain a presence despite concerted persecution over the years (I was once informed that they play football with lambs' heads). Tactful as ever, I had just been taking part in the National Fox Survey... Brown hares, *Lepus europaeus*, seem relatively scarce but are still seen particularly around some of the crofting areas of Trotternish. Hedgehogs, *Erinaceus europaeus*, are numerous here, recorded for the majority of Skye 10km<sup>2</sup> and presumably native. Otters, *Lutra lutra*, abound and are often seen on the coastal fringe, though at certain times of year they will make their way inland, either to cub or to feed on fish, frogs and toads. Stoat, *Mustela erminea*, and weasel, *Mustela nivalis*, both occur, and to the (growing) list of mustelids we can lately add mink, *Mustela vison*, (for which the early stages of an eradication programme are under discussion as I write). Pine marten, *Martes martes*, has spread across the island rapidly since the opening of the Skye Bridge in October 1995, to the detriment of local poultry. Moles, *Talpa europaea*, were introduced here (reputedly at Lyndale in 1903) and are now recorded in 7 of the 34 10km<sup>2</sup> of the island, all north of the Cuillin, though the barrier to its spread south is probably more the predominance of inhospitable blanket bog than the mountains themselves. Roger Cottis reports a maximum spread of 15km in the 100 years or so they have been here. A pretty slow pace of life. Field voles, *Microtus agrestis*, seem to do particularly well here, being present even in hummocky moraine surrounded by soggy peatlands, as I found during a past Mammal Survey. They provide food for bird species including hen harrier, *Circus cyaneus*; tawny owl, *Strix aluco*; short-eared owl, *Asio flammeus*; barn owl, *Tyto alba*; buzzard, *Buteo buteo* and kestrel, *Falco tinnunculus*, none of which is particularly uncommon here. Wood mouse, despite the perceived lack of woodland, is recorded in 19 of Skye's 10km<sup>2</sup>. Common shrew, *Sorex araneus*; pygmy shrew, *Sorex minutus*, and water shrew, *Neomys fodiens*, are all recorded as present, the latter for 11 of the 34 10km<sup>2</sup> with no apparent bias.

### Amphibians and reptiles

I was lucky to have Chris Glead-Owen (then of the Herpetological Conservation Trust) on Skye a couple of years ago to conduct a training workshop for the ongoing NARRS

<sup>24</sup> [www.snh.org.uk/pdfs/publications/wildlife/nativeoysters.pdf](http://www.snh.org.uk/pdfs/publications/wildlife/nativeoysters.pdf)



(National Amphibian and Reptile Recording Scheme<sup>25</sup>) project. On a visit to a well-known Forestry Commission site in Sleat together, we were able to turn up, within the space of only a few minutes, adder, *Vipera berus*; slow-worm, *Anguis fragilis* and common lizard, *Zootoca (formerly Lacerta) vivipara*. Common frog, *Rana temporaria* and toad, *Bufo bufo* are abundant in the area (it is quite a wet place after all and it has to suit something). The most surprising thing for me is regularly to find frogs right at the top of mountains. They seem quite as fond of them (mountains) as humans, heading up to high lochans in the spring to breed, then presumably back downhill in the late summer and autumn as the upland temperature and food availability declines. Our local newt is the tiny palmate newt, *Lissotriton (formerly Triturus) helveticus*, which also frequently occurs in upland lochans. The male has a distinctive 4-7mm filament at the tip of its tail in the breeding season and nicely webbed back feet. Neither of its UK cousins have as yet been convincingly demonstrated as present here.

### Birds

Top of the list for visiting ornithologists is of course the white-tailed (or sea) eagle. With a quarter of Scotland's 44 breeding pairs established here on Skye in 2008, sightings of these majestic birds are frequent, and casual records of birds (particularly if it has been possible to discern any tagging or ringing details) can contribute useful information about an individual bird's movements and survival.

The birding year on Skye is varied, with a through-put of passage migrants in the spring and autumn months which keeps the regular watcher engrossed with occasional flocks of black-tailed godwit, an annual visit from a flock of Brent geese, *Branta bernicla*, to the south of Skye, whimbrel, *Numenius phaeopus*; knot, *Calidris canutus*; ruff, *Philomachus pugnax*, and even a curlew sandpiper, *Calidris ferruginia*, turning up recently.



Black-tailed Godwits at Ardnish © the author

### Summer visitors

The influx of breeding birds in the spring includes ring ouzel, *Turdus torquatus*, (listen out for these at the Storr and in the high corries of the Cuillin), lapwing, *Vanellus vanellus*; redstart, *Phoenicurus phoenicurus*; warblers including: willow, *Phylloscopus trochilus*; grasshopper, *Locustella naevia*; sedge, *Acrocephalus schoenobaenus*; the occasional chiffchaff,

*Phylloscopus collybita*; whitethroat, *Sylvia communis* and wood warbler, *Phylloscopus sibilatrix*.



Whimbrel at Rubha Hunish © the author

### Winter Visitors

A number of wildfowl visit us in the winter months, some from Icelandic populations: whooper swan, *Cygnus cygnus*; white-fronted goose, *Anser albifrons*; barnacle goose, *Branta leucopsis*; goldeneye, *Bucephala clangula*; goosander, wigeon, and teal are the more common of these. Wintering divers are relatively commonplace with red-throated, *Gavia stellata*; black-throated, *Gavia arctica*, and great northern, *Gavia immer*, being seen in the one sweep of the 'scope over Broadford Bay – with a winter plumage Slavonian grebe, *Podiceps auritus*, or eight, thrown in for good measure. Winter waders regularly seen include bartailed godwit, *Limosa lapponica*; grey plover, *Pluvialis squatarola*; ringed plover, *Charadrius hiaticula*; dunlin, *Calidris alpina*; turnstone, *Arenaria interpres*, and purple sandpiper, *Calidris maritima*, (I once recorded 52 of these on a winter kayak trip around the island of Pabay). We got within 20ft of a sea eagle perched on a skerry that day too.

Some good areas to watch for birds are the wider Broadford bay, noted by Bob MacMillan as “probably the best birding spot on Skye”. Portree bay is also interesting. Both of these are places to watch for migrant and wintering waders. Portree bay is a good place to look out for as Iceland and glaucous gull in the winter.

Climbing some of the hills in the south of Skye will reward the visitor with occasional sightings of ptarmigan, *Lagopus muta*. I have seen a dozen or so whirling around the top of Beinn na Caillich (the Broadford one, there is another above Kyleakin and another again, across the water in Knoydart - the name means hill of the Old Woman) in a snow shower. However, they are adept at avoiding the gaze of BTO Bird Atlas recorders keen to supplement the paucity of records on a winter visit to an upland tetrad. The white wings of the adult male in summer plumage are something to behold, especially if closely followed by a golden eagle hanging less than twenty feet above your head immediately afterwards, as happened to me on a recce up Sgurr na Coinnich above Kylerhea this season!

### The Disappeared

A few species are known to have ‘disappeared’ from Skye. Badger I have already mentioned. The last sea eagle in Scotland - before reintroduction - is reputed to have been shot here on Skye in 1919. Changes in agricultural practice, from (admittedly

<sup>25</sup> [www.narrs.org.uk/](http://www.narrs.org.uk/)

unreliable) grass and grain crops to the afore-mentioned sheep, mean that there is no longer a place for corn bunting or yellowhammer in the in-bye ground of the crofting townships, and the much celebrated but critically declined corncrake has dwindled to a few scattered pairs in the north of Skye. There are no chough, *Pyrhcorax pyrrhcorax*, here, it having disappeared as a breeding bird from Skye around 1918<sup>26</sup>. I dragged my family off to the Isle of Man for a holiday recently, so that I could add this bird to my modest 'life' list, after chatting with a native of Man wondering where to go in Skye to see sea eagle. Now here is a candidate for reintroduction – I am sure they do not spread TB/eat lambs/peck out sheep's eyes/eat fledgling songbirds, or any of those nasty things other less cultured creatures get up to. But wait a minute, of course they are hitched to everything else in the universe...



Moss Campion © the author

What I have written above is my opinion and not necessarily that of my employers, The Highland Council, to whom I am grateful for having shown trust in me back in 1997, when I was interviewed for the post of Skye and Lochalsh Ranger. To conclude, there are people who talk about having a love affair with Skye. I am not one of those... I am one of the ones who actually tied the knot – for better or for worse! Come and visit us some time.

John Phillips,  
Senior Countryside Ranger

## BRISC Projects

### Bursaries

*As has been mentioned in previous issues, four bursaries, each of £150, will again this year be offered jointly by Glasgow Natural History Society and BRISC towards the cost of one of the professional courses run at Kindrogan or at any other of the Field Studies Council's venues. An application form will be available from 10 February 2010, which can be down-loaded from the websites of the two organisations ([www.gnhs.org.uk](http://www.gnhs.org.uk) and [www.brisc.org.uk](http://www.brisc.org.uk)) or if you have no internet access, please contact BRISC's secretariat (see p.2 for details). The deadline for submission is 1 March 2010. A panel of representatives from the two organisations will select the lucky recipients. For a list*

<sup>26</sup> McMillan, R.L. (2009). *Skye Birds*. pub. by skye-birds.com, Elgol, Isle of Skye

*of topics and costs of Kindrogan courses see the end of this newsletter.*

*The piece below is a report by Cathy Fiedler, one of the bursary recipients in 2009.*

I feel very lucky to have been given the bursary to attend the dragonfly and damselfly identification course, and want to say a very big thank you to BRISC and GNHS. The Odonata are a fascinating and striking group of insects, very worthy of study and recording. With the beautiful setting of Kindrogan for our classroom, I thoroughly enjoyed learning how to recognise the Scottish species. Regular questions from our instructor, Jonathan Willet, meant there was no time for slacking, and we soon learnt all about them.

I think that learning to identify a new group of invertebrates can be a little daunting, but the course was broken down into what you might expect to find given the habitat type, geographical location, and time of year. This means you are left with a more manageable number of species that it could possibly be.

The highlight was of course to see them in the field. We saw adults of the northern, the common blue and the azure damselflies, and were treated to seeing adults of the large red damselfly emerging slowly from their larval cases. Seeing them flying around enabled me to fully admire these stunning creatures, and with all the facts from our classroom session still swirling about in my head, they even demonstrated the things we had just learnt, such as when they move around the stem to try to hide from you.

We identified them in their larval stage and learnt how to sample for them. This involved dipping a colander into the water, which lets the water drain out and leaves the larvae behind. But take note if you would like to try this technique – choosing the right equipment is a very important matter as colanders vary in how well they drain the water out, so shop around. You may need to try out a few before you find the right one, as it is a careful balance of the right number and sized holes.

Looking at the records from the National Biodiversity Network, we were shown the need for more recording, which is the case for so many of our much-loved invertebrates. So now that I have been inspired, it is time to go off into the field with a book and binoculars to practise my identification and get recording.

Cathy Fiedler

### Scoping project

A subgroup of BRISC is currently looking into the possibility of running a new and simpler 'scoping' project, which will aim to research what kind of datasets and what amount of data may still be around out there but not digitised and therefore outside the public domain. It will also look into the reasons for this, such as cost of digitisation, difficulty in deciphering hand-writing, etc. It is anticipated that the cost of this project will be met entirely by BRISC. Further details will be provided at the coming AGM

### E-petition

BRISC has been invited to give evidence to the Scottish Parliament's Science Group, and BRISC will be fielding a team of four. The meeting has not yet taken place as this letter goes to press. However, a report of the meeting will be provided for the AGM on Saturday 27 March at Montrose.



## LRC update

### Fife Nature Records Centre - 2009 and Beyond

By Simon Scott

In the October 2008 issue of *BRISC Recorder News* Dr Gordon Corbet reported that Fife Nature Records Centre had been restored. Significant steps forward have been made since then and we have completed many valuable projects with many more planned for 2010 and beyond.

The key aim of Fife Nature Records Centre has always been to gather wildlife information together and make it available to all who can help protect Fife's wildlife. We try to gather as much information as possible in a 'one stop shop'. This makes it easier for people to obtain information quickly and easily, rather than having to piece it together from many different sources. Since January this year we have helped well over 100 individuals and organisations to put wildlife information to good use in Fife and beyond.

The centre holds huge amount of information about Fife's animals, plants, habitats, and important sites. This information is used to protect wildlife by: informing decisions on planning applications, contributing to local and national wildlife projects, contributing to local and national research, and helping to shape local and national policy on wildlife protection.

We would like to thank all those who have supported Fife Nature Records Centre throughout 2009. We appreciate that the information held is merely the tip of the iceberg, and we have worked hard in 2009 to improve both our information holdings and the range and volume of users we are helping. As such, a number of exciting projects have been completed in 2009 and there are a number of interesting new ones on the horizon.

### Projects

#### *Recording Projects*

Where possible we try to work together with local recorders and recording groups to get the most out of their efforts. Currently we are working with Fife & Kinross Bat Group to develop a Fife Bat Database and to deal with a backlog of digital and paper records. We have also agreed to assist with the production of the Fife Flora Atlas by George Ballantyne, and support for the Fife Amphibian and Reptile Group continues. In 2009 we developed a data-sharing partnership with RSPB, and we are looking to develop a similar data-sharing agreement with Scottish Badgers. A significant dataset has recently been received from SEPA. We will be supporting the Fife Orchards Project in 2010 in identifying traditional orchards in North Fife.

#### *Staff*

Alexa Tweddle has been in post as Natural Heritage Support Officer since February 2009. 50% of Alexa's time is spent helping Fife Nature Records Centre. So far Alexa has made significant progress digitising records, completing information requests and developing projects.

### Location and Contact Details

Fife Nature Records Centre is now located in Pitcairn Centre's classroom with the Biodiversity and Red Squirrel Officers. Our new e-mail addresses are [simon.scott@fifecountryside.co.uk](mailto:simon.scott@fifecountryside.co.uk) and [alexa.tweddle@fifecountryside.co.uk](mailto:alexa.tweddle@fifecountryside.co.uk).

#### *Funding*

Fife Nature Records Centre is part of the Fife Coast & Countryside Trust (FCCT), a not-for-profit registered environmental charity that delivers a range of countryside services. We are funded by the Trust, Fife Council and Scottish Natural Heritage, and recently we have been looking for additional funding, in order to make more resources available to the centre and protect against potential cut-backs in Fife Council's funding. A charging policy for retrieving information will be implemented in 2010, this will include a series of reductions in the charges for various users of the Records Centre.

#### *Species Database Checking/Verification'*

Work continues on verifying records sent to Fife Nature Records Centre with local experts. In addition, our records can be viewed online through the NBN Gateway (<http://data.nbn.org.uk/>). We are happy to receive comment on any of our records. Our NBN Gateway dataset is called **Records for Fife Nature**. This dataset was fully updated with new records and edits in November 2009, but in order to view our online dataset users must register with the NBN and request access from Fife Nature Records Centre.

#### *Website development*

The Trust is currently designing a new improved website. There have been some changes made to Fife Nature Record Centre's pages in recent months, and all our content will be transferred to the new website. In addition, we will have front page presence on the new website. We are also currently developing an online recording form for ad hoc individual record submission.

#### *Recorder Software Update*

We have recently installed the software Recorder 6, and having completed all required checks we are now looking to develop appropriate links between Recorder 6 and ArcGIS.

#### *Association of Local Environmental Record Centres (ALERC)*

Fife Nature Records Centre has applied for membership to ALERC. This will mean improved support from our colleagues in other UK LRCs and also hopefully lead to professional accreditation.

#### *Miscellaneous*

We completed a training event in August, whereby Fife Countryside Rangers were re-introduced to Fife Nature Records Centre and encouraged to help with record collection. I have also been working with the Senior Ranger to update Ranger patrol boundaries. We have recently completed design of an electronic thank-you card and leaflet. These are intended to acknowledge the support we receive from existing information suppliers while also engaging new supporters and users.

### Helping each other

Fife Nature Records Centre can provide you, your organisation, or your local group with wildlife information for Fife. We can help with environmental reports, wildlife projects, academic research, and wildlife recording. Requests for information can be submitted by e-mail, electronic form, telephone or letter. We may also be able to offer help with information analysis, project planning, and publication of materials etc. Just give us a call.

If you have got a report or survey that contains wildlife records for Fife, please let us know. Existing surveys and reports can be sent directly to us. We are in the best position to put wildlife

information to good use in Fife and make it as visible as possible.

We receive thousands of records each year. Therefore, to make our record collection simpler and more efficient, please send any surveys or individual records electronically if you can. The recording forms and electronic templates offered on our website can help with this. If you do not have access to a computer you can also send records by post.

For more about Fife Nature Records Centre please go to our website [www.fifenature.co.uk](http://www.fifenature.co.uk)

## Obituary

### Charles James Thomas Copp (1949 - 2009)

#### A personal appreciation

Some 300 people packed into the Curzon Community Centre at Clevedon, Somerset, on 8 October 2009 for the memorial celebration of the life of Charlie Copp. He died peacefully on 23 September surrounded by his family. Charlie had suffered from heart problems for some years and was diagnosed with a brain tumour two years ago. Charlie had always wanted to perform a 'gig' at the Curzon – it was tragic but fitting that it had to be his final appearance, in a wicker coffin.

Without Charlie's commitment to the development of biological recording over the last 30 years, it is probable that many of the concepts, practices and methodologies that we all take as accepted norms would not be in place. There can be few people working in biological and geological recording and data management in the UK that have not encountered Charlie, drawn inspiration or ideas from his work or, perhaps unknowingly, benefited hugely from his lifelong commitment to recording in many ways.



Charlie could be perplexing to those that operated in a more conventional universe than his, but at his best he was a brilliant communicator of complex, often challenging, ideas.

My own first encounter with Charlie was in September 1984 at the Biology Curators' Group seminar *Biological recording and the use of site-based biological information* held at Leicester. In his lecture he was overtly critical of the entire community of national recording initiatives and local records centres. Underlying everything that Charlie did was an interest in and deep knowledge of natural history in the broadest sense: he saw clearly the opportunities that biological recording offered to nature conservation, planning, and research.

Charlie had been at Bristol Museum as Assistant Curator of Natural History since 1976, where he had set about making the putative local records centre into a reality, mainly using Manpower Services recruits. His interest in computers had

begun years earlier whilst doing a geology degree in Staffordshire and in subsequent geological research.

In 1985, a small group of biological recording activists under Charlie's chairmanship formed a Steering Group, which led a year later to the formation of the National Federation for Biological Recording. Charlie was a life-long member of NFBR, with long periods on the Committee and as an office holder, including Chairman (2004 to 2008). The second NFBR Conference in 1987 was hosted by Charlie and his team at Bristol Regional Environmental Records Centre (BRERC), and discussions at this conference were the catalyst for the development of a prototype of 'Recorder' by Stuart Ball.

In February 1989, Charlie left the security (and constraints) of employment at Bristol Museum to become self-employed in information technology. Working from home, he extended what was originally a wall cavity into a broom cupboard, which became his office. Charlie lived on his wits and his considerable abilities with information-related contracts, lecturing and writing.

Charlie secured the contract to work with me (overseen by Sir John Burnett) to plan, research and prepare the report of the Coordinating Commission for Biological Recording. This was pivotal for biological recording in general and also for Charlie in developing his career. It had been a considerable achievement for him to get that contract – a one-man-band in competition with half-a-dozen prestigious consultancies – but Charlie knew what he was talking about, whereas the consultancies clearly did not. Quite apart from the eventual consequence of the CCBR study – the development of the National Biodiversity Network – Charlie was able to strengthen contacts with agencies and local records centres in his new role as EIM - Environmental Information Management.

It is difficult to pick out highlights of Charlie's career once the NBN process had begun. There were so many. Recorder, in its many manifestations, came to play an increasingly important part in his work, and this continued into his last year. He was instrumental in the systems analysis for new versions of Recorder, seeking the input of potential users, such as Fife Nature. He always seemed to be developing new aspects, data models and add-ons, and took every opportunity to communicate these developments, for example through *BRISC Recorder News*. Expansion into the management of geological and collections data and into the software's development for use overseas saw him promoting ideas and methods that were often years ahead of the thinking of others. He also worked on development plans for some of the more successful new LRCs. Later, he became increasingly involved with international projects and was particularly proud of his role at the Natural History Museum on the Thesaurus for the BioCase project.

Much remains unfinished, including a book *Bare Bones Buddhism* that he was working on until he could no longer write. His detailed thinking on the accreditation of local records centres, an eminently practicable piece of work, was prepared as a report and presented in several seminars. It was well received by practitioners, including by members of BRISC at the specially convened seminar at Edinburgh. Although the study fell on deaf ears among administrators at the time, it is now being revisited by Association of Local Environmental Records Centres with backing from Natural England.



The contribution that Charlie made to biological recording in the UK is unique - nobody else has contributed so much over so many years. It is good that this was recognised by the NBN Trust by awarding him Honorary Membership of the Trust in 2006. Charlie will be sorely missed by all that knew him, and his absence will be felt by many that did not. He is truly irreplaceable.

But his work was only part of his life: his long marriage to Judy, and their daughters Alex and Lizzie, were at the real centre of his life. They shared his many interests and triumphs, and dealt stoically with the inevitable set-backs that life threw at him. The loss of this vibrant, amusing, stimulating and loving focal point in their lives is unimaginable.

Paul Harding

## Book Reviews

**Ashmole, Myrtle & Ashmole, Philip, with members of the Wildwood Group (2009). *The Carrifran Wildwood Story*. Borders Forest Trust. Monteviot Nurseries, Ancum, Jedburgh TD8 6TU, UK. 223 pp., ISBN 978-0-9534346-4-0. Softbk £15.**

This is a symposium describing how, over some two decades, a group of people associated with the Borders Forest Trust decided that they would like to see a natural woodland again, raised cash and seedlings, sought and acquired a valley, squared the authorities, installed a boundary fence, evicted native and feral animals and modern human artifacts, and planted it up - there are pictures of the site before and after their work on the front and back. The mind boggles at the gale of talk that must have occurred beforehand and the amount of work afterwards.

The site seems well-chosen, accessible, with a better range of altitudes than most of England to the south, but not on the unmanageable scale of the Highlands to the north. It was initially rather bleak, but this was presumably all they could get and enabled them to start from scratch. Fate presented them with a handy totem, a broken 6,000-year old yew bow, found in one of the highest bogs, and they set about restoring its original environment. The most interesting element is an attempt to recreate the upper tree-line, almost entirely lost in Scotland. Appendices list changes in the birds, and plants considered for reintroduction.

In general it seems a magnificent project. While it is hardly practical to return the whole country to a state of nature, surely everybody should try and maintain a bit of it. My main reservation is that, in their puritanical desire to eliminate all traces of man, they are doing away with paths. Surely the main message left by their bowman was that he was up on the tops of the hills, because the wildwood down below with its rocks and swamps and fallen trees was impenetrable. One of the main principles of conservation is that, if it is hoped for public support, people should be able to see what is done, so some paths are needed - if it is left in peace, wildlife soon comes to tolerate them. We need more such sites.

W.R.P. Bourne



**Butler, K., with photographs by Crossan, K. (2009). *Wild Flowers of the North Highlands of Scotland*. Birlinn, Edinburgh. 189 pages. Landscape format. ISBN 978-1-84158-832-2. Softbk. £14.99.**

For years, visitors to the north of Scotland have been asking for an illustrated guide to the flowers of the area, and this excellent one is now available. Ken Butler is the Botanical Society of the British Isles Vice-county Recorder for Caithness and formerly for East Sutherland, and his collaborator, Ken Crossan, is an experienced wildlife photographer based in Caithness. Between them they have produced a book that is visually stunning, reader-friendly, and informative. There is a Foreword by HRH Prince Charles, who has inherited an interest in the area from his grandmother, the Queen Mother, who spent nearly fifty summers at the Castle of Mey in Caithness.

The book covers the counties of Caithness and Sutherland, together with that part of Easter Ross north of the Cromarty Firth. It is aimed at those living in or visiting the area who are looking for a 'fairly detailed but not comprehensive understanding of North Highland plants', and it describes and illustrates about 250 of the 1500 or so species found in the area.

Following a brief Introduction, there are five chapters on the flowers of the Sea Coast, Peatlands and other wet places, Woodlands, Grasslands and Uplands, Waysides and Farmland; finally, one that sets all of these in their geographical, geological, climatic, and historical contexts, illustrated by a series of maps.

Where this book scores is in the skilful marrying of illustrations and text, and the authority of the text. This draws on Ken Butler's first-hand knowledge of the botany and vegetation of the area going back over three decades, although he deploys his expertise with a light touch. Although there is a very reasonable emphasis on the commoner and more colourful species, characteristic trees and shrubs are not neglected. Grasses, sedges and rushes are not covered in detail, but are included where 'they add something really useful'. There are also some helpful drawings on the diagnostic characters of, for example, the leaves of scurvy grasses, buttercups and sundews, and the flowers of field and autumn gentians.

Readers with some existing knowledge are introduced to specialities of the area such as estuarine sedge *Carex recta* and its relatives, and the challenging small-reeds *Calamagrostis stricta* and *scotica*. There are also sections devoted to the special plants of Invernaver and the peatlands of the Flow Country. Precise grid references are given in the text for accessible localities for some species of interest, and the comprehensive index usefully includes grid references for all the other localities mentioned.

Ken Crossan's photographs are a carefully selected mix of striking landscapes, colourful portraits of plants in their habitat settings, and superb close-ups. Amongst the last are some detailed studies of smaller plants, such as purging flax, moschatel and alpine meadow-rue, as if seen through a hand-lens. Those of species such as the thistles also remind us of the often overlooked beauty of the commonplace.

This book contains a wealth of accessible information on the North Highlands, its landscapes, plant communities and wild

flowers, and the illustrations are an absolute delight. It is a reminder of what starts many of us out on the road to 'serious' biological recording, marvelling at colourful organisms in their natural environment. A copy should be in every bed-and-breakfast establishment in the area, and it is whole-heartedly recommended to anyone with an interest in Scottish flowers, at whatever level of expertise.

Ian & Pat Evans



**Mercer, J., Buckland, R., Kirkland, P. & Waddell, J. (2009). *Butterfly Atlas of the Scottish Borders*. Atropos Publishing & Butterfly Conservation. 132pp. ISBN 978-0-9551086-2-4. Softbk £14.99.**

The principal motivating factor behind the production of this significant book was to summarise and set down the current knowledge of butterfly distribution in the Scottish Borders. It is hoped that this will encourage recording of butterflies in the region, whilst also promoting the consideration of butterflies at sites where land-use and habitat may change.

The main body of this book consists of the species accounts, with their associated distributions mapped at the tetrad scale. Of the 34 species of butterfly recorded in the region, 28 are covered in this way, while the remaining 6 extremely rare or extinct species have a map and a couple of paragraphs describing their historical status. A vast amount of work has clearly been done to sort and sift records going back over 170 years, giving over 14,600 validated records, 82% of which have been collected since 1995, and 55% collected since 2000. Many of these records only documented presence/absence and so there was no opportunity to give any indication of abundance in the maps. The distribution data have been split into three time-periods in order to give an indication of how the situation has changed: pre-1970, 1970-1994 and 1995-2006, and these are indicated on the maps by different coloured dots. A minor quibble is that it is not possible to see whether a record from the most recent time period overlays a record from a previous time period, or if it is a new record for that tetrad. This information could have been included by using a different coding system or including a 'change' map (as in the *New Atlas of Breeding Birds in Britain and Ireland*, T & AD Poyser, 1993), though, of course, this would have entailed even more data sorting and is not really the point of this publication. Alongside the map, a section on history and trends and a photo, each species section includes: paragraphs on distribution; food-plants; habitat and ecology; life cycle and colony structure. Most species sections also include a graph showing the number of records by week, using data from 1995-2006. These give a good indication of likely flight periods and should help to target further survey effort.

There is more to this book than the species sections. The introduction details the geology of the region with a history of land-use and habitat change. This leads into chapter two, which discusses the broad plant communities of the area and their associated butterfly species. As befits a book that depends for its main content on thousands of observer records, there is a chapter on the history of butterfly recording in the Scottish Borders. A short overview of changes in population and abundance of butterfly species in the Borders is an interesting chapter and

considers the ecology of the different species while aiming to explain trends. Finally, there is a list of 50 sites in the region from which most records in the database have been sourced. These are arranged by species richness and provide an excellent resource for any butterfly watcher.

Over and above its aesthetic appeal this is an important work, using all available data to set down what is known, and to provide a baseline for any future assimilations of butterfly records from the Scottish Borders to build upon.

Andrew Dowse



**Sterry, P. & Hughes. B. (2009) *Collins Complete Guide to British Mushrooms & Toadstools: the essential photographic guide to Britain's fungi*. HarperCollins. ISBN 978-0-00-723229-6 Softbk £16.99**

The first impression of this book is that the standard of photography is high. I tend to prefer not to have field guides that use photographs taken in the wild, as they can be of limited use if the subject is slightly different from the norm, or the conditions are less than perfect. The text is clear. Long words have mainly been avoided in favour of terms like "convex", "covered in patches...", "ring". It feels as if very little has been lost in this process as far as the amateur naturalist is concerned. That said it may lose out if it is being used for the purpose of serious identification. There is an excellent 3-page set of illustrations of cap shapes, cap textures, gill attachments, gill arrangements, stipe (stem) features and rings. The front matter ends with a very good seven page index to the main genera, with short texts and a couple of small photographs of each group. Quite useful but no substitute for a proper key.

The start of the book is promising; the descriptions of the characteristics of fungi are some of the best I have seen. The general background of fungi and their biology is concise and informative. One quibble throughout is the lack of reference to edibility, not a serious problem in terms of biological recording but, given that the public's interest in fungi is usually driven by gastronomy it seems an odd lapse.

In an attempt to make fungi more approachable, the book contains English names for nearly all the species listed. Naturalists will be familiar with fly agaric and the blusher, panther cap and destroying angel, but "jewelled amanita" (*A. gemmata*) and "grey spotted amanita" (*A. excelsa* var *spissa*) do have an invented feel to them. I found this distracting, as I date back to an age before the new English names and still have to come to grips with many of them. Any attempt to make fungi more accessible must be applauded, though.

One thing I was pleased by was the inclusion of short sections describing smaller and less conspicuous groups of fungi such as rusts, smuts, and slime moulds (technically not fungi but nice to be included). In particular this book covers a wider range of Ascomycetes than many non-specialist texts.

There are several interesting ecological groupings, including sand-dune fungi, woodchip fungi, dung fungi, burnt-ground (phoenicoid) fungi, lichens, and then fungi of oak, beech, birch, hazel/ash, willow, conifer, bog and grassland. These are helpful, and it is just a pity they are only one or two pages each.



It would be possible to identify a range of fungi to genus at least with this book in the field. The best place to start being the pictorial "guide" to the Main Fungal Genera and Groups at the front of the book, which again brings me to the biggest drawback: the lack of a key.

In terms of size it is a little larger than the standard small field guide, so it may be a little heavy to carry in a pocket. Though no doubt easier than the Roger Phillips book.

To sum up, this is an attractive book with a lot going for it if you are an interested amateur, but it may be too simplistic for serious foraging. It may also be a little misleading for true beginners, being a little quirky. I would add it to my collection, as it has enough merit to act as a support to my usual books, although not in the field, where I will stick to Bon, Courticuisse and Phillips.

Tony Wilson

## FIELD IDENTIFICATION COURSES IN 2010

By Heather McHaffie

I am involved in courses that are run from Kindrogan, The Field Studies Centre near Pitlochry, and the Royal Botanic Garden Edinburgh. The Kindrogan residential courses cover a wide range of organisms at different levels. They can inspire interest, build on existing knowledge, and help in establishing contacts, like people with similar enthusiasms. [See also p.10 for BRISC/GNHS bursaries]



Kindrogan Field Studies Centre

The courses based at the Royal Botanic Garden in Edinburgh are mostly based at the Garden with one residential week that will be on Eigg in 2010.

### Kindrogan Courses 2010

5 – 9 April	Identifying Aquatic Insects and other Small Freshwater Animals	Brian Morrison	£190
5 – 10 April	Special Spring Moths	David Brown	£315
5 – 12 April	Lichen Identification	Rebecca Yahr	£440
19 – 23 April	Sphagnum Moss	Martha Newton	£255
23 – 30 April	Scottish Spring Birds	Russell Nisbet	£440
23 – 30 April	Mosses and Liverworts	Martha Newton	£440
7 – 10 May	Identifying Mosses & Liverworts	Nick Hodgetts	£175
7 – 10 May	Wildlife Sound Recording	Roger Broughton Phil Riddett	£175
7 – 10 May	Finding and Identifying Millipedes and Centipedes	Gordon Corbet	£175
14 – 17 May	Big Tree Country (1) Introduction to Tree Identification.	Jerry Dicker	£175
14 – 17 May	Identifying Stoneflies and Mayflies.	Craig MacAdam	£175
14 – 17 May	NVC Woodlands	Ben Averis	£175
14 – 21 May	Spring Photography	Margaret Sixsmith John Sixsmith	£440
17 – 21 May	Big Tree Country (2) Tree Identification for Improvers	Jerry Dicker	£190
31 May – 4 June	Birds by Character	Jeff Clarke	£190
4 – 7 June	Introduction to Bat Identification and Ecology	John Haddow	£175
4 – 11 June	Freshwater Algae	Dr Eileen Cox Prof Elliot Shubert Dr Laurence Carvalho	£440
18 – 21 June	Introduction to Invertebrates	Craig MacAdam	£175
18 – 22 June	Orchids of Scotland	Martin Robinson	£190
18 – 25 June	Identification of Highland Plants	Bob Callow	£440
18 – 25 June	Grasses Identification	Judith Allinson	£440
22 – 25 June	Dragonfly and Damselfly Identification	Jonathan Willet	£175
22 – 26 June	Discovering and Identifying Wild Flowers	Martin Robinson	£190

25 June - 2 July	Plant communities of the Scottish Highlands	Robert Callow	£440
25 June – 2 July	Aquatic Plants	Nick Stewart	£440
28 June – 1 July	Mountain Flowers	Heather McHaffie	£175
2 – 5 July	Fern Identification	Heather McHaffie	£175
9 – 12 July	Spiders (1) An Introduction to their Identification	Alastair Lavery	£175
16 – 19 July	Introduction to NVC	Martin Robinson	£175
19 – 23 July	Identifying Aquatic Insects and other Small Freshwater Animals	Brian Morrison	£190
2 – 7 August	Identifying Sedges and Rushes	Fred Rumsey	£315
13 – 16 August	NVC Heathlands	Ben Averis	£175
16 – 19 August	In search of Scottish Ladybirds	Jeff Clarke	£175
21 – 28 August	Highland Butterflies & Moth	David Brown	£440
21 – 28 <sup>1</sup> August	Spiders (2) Identification and Ecology	Mike Davidson	£440
27 – 30 August	Scottish Mammals	John Haddow	£175
10 – 17 Sept	Identifying Fungi	Liz Holden	£440
8 – 12 October	Small Mammals	Jeff Clarke	£190
8 – 15 October	Autumn Birds	Russell Nisbet	£440

### Courses at the Royal Botanic Garden Edinburgh

Those marked \* are eligible for ILA grants. This grant means that people earning £22,000 a year or less can apply for grants to help cover costs of up to £200 for these courses. See web link <http://www.ilascotland.org.uk/ILA+Homepage.htm> Many specialist and natural history societies also help people with the costs of courses.



(above) The Palm House at RBGE

#### *Eight day evening courses \**

Beginning Botany	27 Jan - 24 March	£70
More beginning Botany	21 April -30 June	£80
Recognising Plant Families	22 April – 1 July	£80

#### *One day courses*

Winter tree Identification	20 February	£45
Moss Identification – Level 2,	28 February	£45
Lichen Identification	14 March	£45
Fern identification	19 June	£45
Wildflower identification	26 June	£45

#### *Eight day Certificate of Practical Field Botany \**

Edinburgh Thursdays	May – June	£450
East Kilbride, Kittinghside Saturdays	May – June	£450

#### *Residential Week Certificate of Practical Field Botany \**

Based at Eigg Glebe Barn Outdoor Centre	17-24 July	£530
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For more information see the website <http://www.rbge.org.uk/education/professional-courses> or phone 0131 248 2937

#### *Workshop on Scottish Fumitories*

Wednesday 9 June 2010

Free workshop at the Royal Botanic Garden Edinburgh. Examination of fresh specimens in the morning, field visit with shared transport in the afternoon. Bring a hand lens and packed lunch. 10.00 am start. Booking essential via [h.mchaffie@rbge.org.uk](mailto:h.mchaffie@rbge.org.uk) or phone 0131 248 2876.