

Dundee Naturalists' Society

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Bulletin No 39 2014

DUNDEE NATURALISTS' SOCIETY

ANNUAL BULLETIN No 39

2014

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The new Bulletin cover illustration is by Shelagh Gardiner and shows the Society's emblem, the dwarf cornel. Other illustrations are by Anne Reid, Jim Cook, Brian Allan, Bede Pounder, Christine Reid, Mary Reid and Artfile. Two pages of colour photographs have been included this year. All unacknowledged photographs are by Anne Reid.

EDITOR'S NOTE

Thanks to all members who have submitted articles and reports, especially those who have done so for the first time this year. Thanks to Colin Reid, Jim Cook, Christine Reid, and Mary Reid for proof reading and helpful comments (Mary and Christine via e-mail).

Contributions for the next Bulletin, articles, line drawings and photos, are always welcome and may be submitted at any time during the year. The **deadline for submissions** is usually the end of the calendar year.

Our website is www.dundeenats.org.uk .

Anne Reid

SOCIETY REPORTS

PRESIDENT'S REPORT

It has been a great honour to have been elected President of our Society for a second term at the last AGM. However, I could not have contemplated taking on this challenge, without the support of the many friends I have made, during the 45 years I have been a member of the Dundee Nats.

I would like to thank, as they say on 'Strictly Come Dancing', in no particular order, Lorna for keeping me on the straight and narrow, since my memory is not as it was; likewise Anne, our past President for all her help throughout the year, with her organisational skills and editing of our annual Bulletin, and Davie for ensuring the smooth running of the summer outings' transport arrangements. Our accounts are very ably managed by our long serving Treasurer, Dorothy, and she deserves my special thanks. Also due thanks are Jim Cook, for his continued commitment to our reserve at Carsegowniemuir, and David Lampard for overseeing the many technical initiatives, as well as being our Vice President. Last, but not least, I thank all our Council members for their unstinting support.

This year has been, I think, one of the best, with the usual high quality winter lectures, on many interesting and diverse topics, as you will see in the coming pages. Member participation in the summer outings is up on last year, and it was good to see so many new members and friends attending. The Kim Eberst Memorial Photographic Competition was again well supported, with a range of excellent wildlife images. The 2013 winner was Jim Smith with 'Bracken Buck' which was printed in the 2013 Bulletin.

One thing that has taken off this year is our dedicated Facebook page, and I would urge those who have not already joined us to sign up. Please contact Secretary Lorna, who will ensure you are safely added to the Nats' section, which only members can access. For those who are not yet registered with Facebook, this is a simple procedure and is free.

<https://www.facebook.com/groups/dundeenaturalists/>

Our dedicated website contains information about our current programmes and other activities. An archive of past Nats Bulletins can also be accessed here.

<http://www.dundeenats.org.uk/>

Since we keep the Society fresh, by having members elected democratically on to Council for three year spells, I would ask anybody who feels they would like to get more involved in the running of our Society, to contact any current member of Council. We are actively looking for a new Treasurer and a new Vice President. So if you can help please let us know.

Before I sign off, I thank you, the Membership, who, after all, are the Dundee Naturalists. Without you there would be no Society, so thank you all very much, for coming to our outings and meetings, bringing food to eat at our special meetings, and bringing fellowship in bucket loads.

Brian Allan

Stop Press: The 2014 photographic competition was won by Stevie Smith with her close-up shot of an **adder**, titled "Freckle", which is reproduced on page 25. A full report will appear in the 2015 Bulletin.

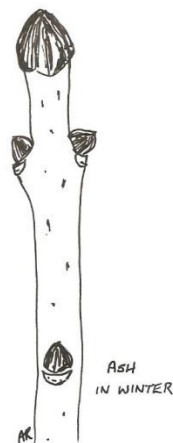
CARSEGOWNIEMUIR QUARRY REPORT

Once again, it's been a fairly active year at the quarry. A total of six more trees were planted in March to reinforce the number planted in the previous autumn. The paths were cleared by the brasher in a number of sessions, much delayed on several occasions by heavy showers, in July and August and the young trees mulched by the **willowherb** cleared from around them. The good weather, though, has promoted the grass growth and this seems to have out-competed much of the **ragwort**, which didn't need much pulling. In fact, the clearance of the **rabbits** by the ferret group three years ago has reduced the numbers to such an extent that much of the lower vegetation has been rampant and the grass on the plateau has been up to knee-height; a very different appearance from those days in the past when we can remember it cropped as closely as a snooker table. The self-sown **ash** trees in the dumped stones are doing well, even those that we haven't protected inside a wire shelter (how long can this continue?), and one of them has made tremendous growth of over 30cm.

One of the highlights of the year was the barbecue on 5th August when 20 members and guests came along to explore and enjoy the quarry and make the most of the **wild strawberries** and **raspberries** on offer - as well as the feast of food and drink available on a wonderfully mild and calm evening. (See report on page 22. Ed)

The other, frustrated, feast that *didn't* occur was in the hide. Once or twice a few **mouse** droppings had been found in the hide but, although the animals obviously could smell the stored bird food, they were unable to get at any because we've learned our lesson and it's all firmly secured inside metal containers. Just as well! Then in October, the corpse of a very dead **wood-mouse** was found inside the rolled up piece of carpet we put down for Milly the lurcher. It was promptly ejected outside! Not to worry, though, the hide is perfectly habitable and doesn't smell.

The planted trees are growing well and appear healthy. We've been fortunate that none have been lost to wind-damage, drought or rabbits in the last two years. However, the large **pine** beside the main path at the far end (planted back in the 1980s) that lost a very large branch to the weight of snow three years ago has now lost the other part of its top. The rest is still alive but the broken stump is exposed to water ingress and it will be interesting to see what happens to it and to the fallen wood in the years to come. The first fallen branch already has a good crop of **bracket fungi** on it. The very bad news that came in the late summer was that **ash die-back** disease has been reported from the SWT Balgavies reserve, literally just over the (Turin) hill, and it can only be a matter of time before it reaches Carsegowniemuir. Many, although not all, of our **ash** seedlings and trees have been checked in the autumn and none show any signs of the disease - so far. We have a small number of **ash** to plant this coming spring along with **oaks**, **alders** and **hawthorns**, but these will have to be the last. We'll just have to keep our fingers crossed and hope that our trees stay disease-free for as long as possible!



The very wet spell at the end of the year meant that the quarry flooded, once again, to a depth of between one and one and a half metres although the water stayed like this for only about a fortnight.

The several strong gales did help flatten a few more of the older elders and rowans but none of our own trees were affected. They all stood up well to the icy blasts - but we'll have to see what the rest of the winter will bring.

Jim Cook

CARSEGOWNIEMUIR RECORDS 2014

(Compiled from the notes in the folder from the hide)

The quarry and hide haven't attracted as many human visitors this past year as in 2013 but, still, a number of interesting records were made. Early in January, the **buzzards** were active as were a number of smaller birds and a new fungus record turned up, a **velvet shank** (*Flammulina velutipes*), which is one of the few that can withstand being frozen solid. It's common enough elsewhere but the first time it's been noticed in the quarry. By the next month **hazel** catkins were shedding their pollen already, hopefully to connect with the female flowers (which look a little like tiny, bright-red shaving brushes) and there was a notable increase in the activities of small birds. By the middle of March many of them were singing lustily to establish and hold their territories and the **frogs** had already deposited many clumps of **frog spawn** in the ponds.

There were few visitors in April and May but by mid-summer wildlife was abundant, with butterflies and other insects flitting, flying or crawling about. A **tawny owl** had left a 'calling card' of a fat pellet of food remains on the wildlife wall beside the hide, **swallows**, **swifts** and **martins** swooped and dived overhead and a riot of wild flowers swayed in the breeze. Perhaps the highlight was a visit to the cottage by a **red squirrel**, only the second ever recorded there, and it almost certainly visited the quarry at the same time. The Nats barbecue was well attended and we were all able to feast on the abundant **wild strawberries** and **raspberries**. A **sparrowhawk** was seen at the far end the same evening by Barry Caudwell. The early fungi of the season were appearing, including a new species at the site. Davie Stein sighted a good clump of what turned out to be the **hazel milk cap** (*Lactarius pyrogalus*).

In the autumn Anne and Mary Reid made good sightings of a flock of beautiful **bullfinches**, noted one of the rare visits of a **great spotted woodpecker** and that the usual autumn migrants such as **redwings** were appearing. In the winter the local **foxes** were active, both leaving numerous 'calling cards' along the paths and also making their presence felt vocally. The total count of species recorded at the quarry now stands at 677 - so, let's hope that more interesting sightings turn up next year!

Jim Cook

TECHNICAL CONVENOR'S REPORT

2014 was another year in which we encouraged members to record animals and plants and send their records on to appropriate record schemes. Butterfly and moth records were forwarded to Butterfly Conservation, plant records to BSBI and bird lists put on the BTO's Birdtrack database.

A number of our Tuesday evening walks were dedicated to recording wildlife in areas of Dundee and training members how to identify animals and plants. Members took part in a number of bioblitz events, including one at the Riverside Nature Park.

The coming year will include a bioblitz at Balgavies Loch SWT reserve in July, and an attempt to localise records of a variety of organisms on the Barry Buddon open day, while continuing to train and inform Nats on our regular outings.

David Lampard.

OBITUARY

DUNCAN MILLER

We record, with sadness, the passing of long-time member Duncan Miller in January 2014. Many members will remember him with his energetic wife Roma, who passed away last year, and recall his genial and open personality. He occasionally talked of his experiences in the wartime merchant navy but loved the outdoors and was a penetrating observer of nature. Neither of them had been able to attend Society meetings in recent years.

Jim Cook

WINTER MEETINGS

DUNDEE BOTANIC GARDEN

2nd January

Our New Year barbecue looked certain to be blighted by stormy weather - the whole country had suffered two weeks of rain, gales, floods and damage over the holiday period and we feared for more of the same. In the event we got the only completely dry day for a while and, with the temperature a balmy 5°C, the Dundee Botanic proved to be an excellent place to be.

Clare provided us with use of a gazebo, chairs and a table from garden stock and we set up near the evolution beds with their intricate stone walls. Brian and Jenny once again plied all with mulled wine and cake on arrival and soon all went on a stroll to explore and see whether the wildlife was going to show itself.

Several saw **red squirrels** and Anne saw a **grey** - both are known to be present and the garden encourages the reds by having a selective feeder for them. The bird life was somewhat shy with 25 Nats roaming around but **siskins**, **goldcrests** and a **redwing** were seen in addition to several **robins**, **blackbirds** and **great tits**. A **sparrowhawk** made three passes overhead, at intervals, before being spotted by Barry in hunting mode - low down and at speed through the trees.

Stevie found a number of fungi to photograph and Jim found a very unusual-looking blue seed pod lying on the grass. Unable to find its tree of origin, he took it back to where we were all enjoying our barbecue lunch. Clare identified it as **dead man's fingers**, *Descaisnea fargesii*, a shrub of Chinese origin, which always fascinates visiting schoolchildren as the insides of the blue pod contain a gooey jelly encasing the seeds.

The nearly complete Eco-studio, a collaboration between the Architecture and Engineering departments of the University, was a talking point. It is 'off-grid' and will only export surplus electricity to the grid from its turbine and solar panels. The nearby greenhouses were also open for us and were visited by most of the party.

A surprising number of plants still had flowers, including the humble **daisy** and some very lush **groundsel**. Blue **periwinkle** flowers were seen in several places and a number of more exotic species also showed colour. We all thoroughly enjoyed our barbecue in the gardens and our thanks must go to Clare for her organisation and to curator Alastair Hood for giving permission for us to use the garden on a day when it was closed to the public.

Anne Reid

FLOWERS AND OTHER WILDLIFE OF SOUTH AFRICA'S DRAKENSBURG MOUNTAINS

Richard Brinklow - 14th January

Richard described a two week visit to South Africa in January 2013. The Drakensberg Mountains make up one of Africa's largest alpine areas and the range spans the South Africa and Lesotho frontier about 200 miles south of Johannesburg.

Communications are better on the South African side of the border, so three routes were taken into the area from the east. The rugged mountains are mainly composed of **sandstone** capped with **basalt**. Some good roads and also some dirt tracks led up to the high altitudes and stops were made in various places, sometimes in sunshine and sometimes in wind and rain. The frontier into Lesotho was crossed and people there were seen to lead a much more traditional life. In many places the scenery was splendid.

Richard showed a selection of fine pictures of the very varied flora, which includes 400 endemics. Some genera and species may be familiar to gardeners, but many were not and the flora has little in common with our European plant life. Identification had often presented problems and we were impressed by Richard's work and skill in labelling his photographs. We saw examples of *Pelargonium*, *Gladiolus*, *Eucomis*, *Disa*, *Habenaria*, *Satyrium*, *Disperis*, *Helichrysum*, *Brunswigia*, *Kniphofia*, *Agapanthus*, *Sebaea*, *Protea* and many more. Around 40 species of terrestrial **orchid** were identified on the trip.

As well as plants there were examples of the bird life, including some with a very local distribution. Commoner species included **speckled pigeon**, **malachite sunbird** and **red-winged starling** and there were endemics such as **bush blackcap** and **knysna turaco**.

We saw pictures of mammals such as **rock hyrax**, **eland**, **Burchell's zebra** and **Sluggett's ice rat** (Yes, really! Ed.). Richard also described a selection of reptiles and invertebrates, including some spectacular red and black **grasshoppers**. There were examples of bushman's rock art featuring animal images, some ancient and some probably more recent.

In summary these mountains are very rich in wildlife and rewarding to visit. The quantity and diversity of wildlife seen in two weeks was quite amazing and Richard's account led many of those present to wish they could have been there too.

Brian Ballinger



Protea

MEMBERS' NIGHT

28th January

The evening was in two parts. We started with the results of the photographic competition before moving on to members' slides.

Photographic Competition 2013

The subject for the competition for 2013 was 'Natural History, Home or Abroad' and this attracted 12 entries from members. In order of receipt, these were:

Bob McCurley: Autumn Crocus
Davie Stein: Great Crested Grebe
Dorothy Fyffe: *Soldanella pusilla*
Alban Houghton: Black-necked Crane, Bhutan
Brian Allan: *Primula latifolia*, Italy
Jon Cook: Common Sandpiper, Islay
Stevie Smith: Paralytic Purple (a tropical sea anemone)
Jim Smith: Bracken Buck
Joy Cammack: Canada Geese with Goslings
Anne Reid: Quarry Wren with Quarry
Adam Olejnik: South African Yellow Orb Spider
Elaine McLaren: Sunlit Webs

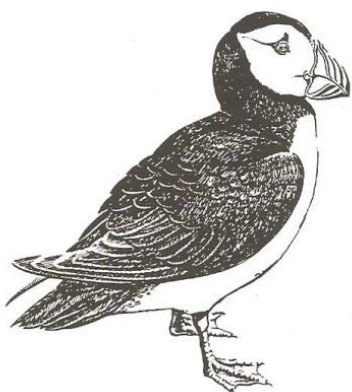
The competition was judged by local photographer Ken Drysdale and Lorna Ward, from the Nats Council, and all administration was done by Brian Allan. These three must all be thanked for contributing to the success of this third year of the competition, as must all the members who submitted entries. Though not able to be present at the meeting, Ken said that the standard was very high and that the choice for second and third places was extremely difficult.

The winner was Jim Smith, with his stunning photograph of a **red deer** buck, and he was presented with the Kim Eberst Memorial Trophy and a certificate by Brian. (Photograph printed in 2013 Bulletin.) Second and third places were Anne Reid and Stevie Smith, respectively, who were both presented with certificates.

We then moved on to the compilation of members' photos which Brian had put together for the main part of the evening. Slides shown included:

Davie Stein 'Clatto and Beyond' Ranging from **swans** and a **cormorant** at Clatto and a **red squirrel** at Templeton to **lizard** and **slow worm** at Glen Esk via a **sparrowhawk** in the garden (which had just devoured a favourite **blackbird**) and a fat **woodpigeon** on the washing line.

Alban Houghton 'Shetland Sojourn 2013' A pictorial account of a trip north with Brian and Jenny, reminding us of the delights of Shetland from clifftop scenery to **puffins**, **bonxies** and a **red-throated diver** via **oyster plant** and the special plants of the Keen of Hamar (illustrated in Bulletin 38, page 23).



Jim and Stevie Smith '2013 Medley' Since both were going to show similar photos, Stevie and Jim combined their contribution and showed a wide range from around Scotland. We started with four **otters** seen at Arbirlot and then moved west. **Puffins** on Lunga have learned that people keep the **bonxies** away - it makes photography easier. The **black guillemots** at Oban harbour were nesting in pipes in the wall and a series of **red deer** photos, in the rain, were excellent portraits. We then moved on to a mother and baby series with **common seal**, **bottlenose dolphin** and **osprey** alongside juvenile **crow**, **sea eagle** and **oystercatcher**. The star of the show was the **pine martin** and family which made nightly visits to a holiday cottage for the prescribed food offerings!

Brian Allan 'Alps West to East' A set of beautiful photographs of classic alpine plants, many grown in our gardens, including **martagon lily**, **moss campion**, the obligatory **primulas**, **alpine aster** and, surprisingly, even a new (to Brian) **orchid**, *Chamorchis alpina*.

Bob McCurley 'Out and About in 2013' A range of portraits of plants and birds including a **kingfisher**, a **cuckoo** in Glen Lethnot and **pintail** at Loch of Kinnordy plus **melancholy thistle**, **elderberries**, **common wintergreen** and **teasel**.

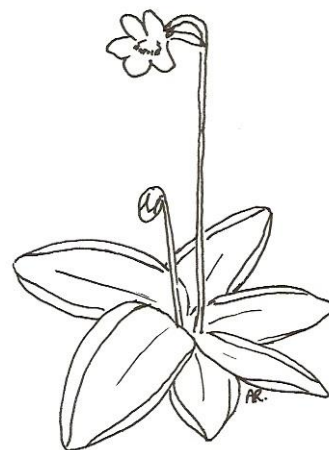
Anne Reid 'Autumn in Angus' The delights of trees in their autumn finery enhanced by sunshine, and well-hidden **fieldfares** in stubble fields. Better views of both **redwings** and **fieldfares** in **hawthorn** bushes at Forfar Loch and the Lurgies and our own resident **blackbirds** taking advantage of the heavy berry crop. Portraits of other birds seen incidentally while recording winter thrushes included ringed **dippers**, a patient **heron**, **curlews** and **turnstones**.

Dorothy Fyffe 'Italian Alps' In the Dolomites at the end of June snowfall restricted botanical forays at the start of the holiday but later on **trumpet gentians**, **spring gentians**, **alpine butterwort**, *Campanula barbata*, *Soldanella pusilla* and **rampion** were all found and photographed. Birds were scarce but we were shown **ring ouzel** and **alpine chough** and though **black redstarts** were seen they were not photographed.

Brian Ballinger 'Honduras 1998' A whistle-stop tour of this Central American country with examples of Spanish style architecture, village life, waterfalls, mountains and cloud forests and some plant and animal inhabitants including **parrots**, **resplendent quetzal**, epiphytic **bromeliads** and exotic **orchids**.

Clare Reaney 'Crete 2013' Plants seen on a week led by Brian Allan, including *Cephalanthera longifolia*, *Ebenus creticus*, *Dracunculus vulgaris* and *Cynoglossum creticum*. All shown with their habitats and with the rugged scenery of the Samaria Gorge and the coast.

Jim Cook 'I just don't believe it!' Some quirky and humorous photographs which opened with what looked like a single, striped **clematis** flower but was part of a decoration made in sugar - a very convincing likeness made with obvious care. We were also shown some shots of Nats in action, a tail-less **cat** (a Manx) in Whitby and a ring around the **moon**.



After such a wide-ranging mixture of photographs we all thanked Brian most warmly for the considerable amount of work he had put in to make everything run so smoothly.

Anne Reid

WOODLAND WOES - WHAT IS WRONG WITH OUR TREES?

Dr David Cooke - 11th February

This was a rather alarming talk given by David Cooke from the James Hutton Institute at Invergowrie. As a plant disease specialist, he reminded us of historical cases of massive loss of trees due to pests and diseases that dramatically changed our landscapes, such as **Dutch elm disease** (a vascular wilt disease caused by the fungus *Ophiostoma novo-ulmi*, accidentally introduced to the UK from the USA, and spread by bark beetles).

Now there are a number of newly introduced diseases and pests in the UK that are causing real concern because of the way they affect entire natural ecosystems. **Ash die-back**, first recognised in Poland, is devastating **ash** woodlands across Europe. It is caused by *Chalara fraxinea* (the sexual form is called *Hymenoscyphus pseudoalbidus* and appears as tiny off-white stalked cups on dead ash twigs), a fungus that was brought to the UK most probably on thousands of ash saplings raised in commercial nurseries in The Netherlands and distributed widely from Buckinghamshire in 2012 before the infection was detected. Although this fungus was known in Europe only as a harmless endophyte (living inside plants without causing disease), a new strain has arisen, perhaps due to a new mutation, or arrival of a new strain from Asia. This new aggressive strain has reached most areas of the UK. It causes deeply penetrating lesions in the wood, starting from wilting leaves and diamond-shaped lesions on the trunk. Apart from the loss of wood, the huge loss of biodiversity associated with ash, such as the lichens, mosses and liverworts, insects and birds supported by these trees is of great concern. We were all urged to take photographs of suspected outbreaks in Scotland and send them to the TreeAlert website (www.forestry.gov.uk/treealert). The Forestry Research scientists advise that only dangerous and unsafe trees should be felled at this stage to allow them to



identify the surviving trees and collect their seeds for detailed field trials so that one day we can replant die-back resistant **ash** trees.

Dr Cooke then introduced the Oomycetes, pathogens causing devastating new tree diseases that are related to **potato late blight** (*Phytophthora infestans*) - the genus name *Phytophthora* means 'plant destroyer' in Greek. Because of modern molecular studies, this group of 'water moulds' is now recognised as being more closely related to brown algae and diatoms than to true fungi, and they have about 500 'effector genes' that enable them to deploy numerous infection strategies. Some of them are able to infect a wide range of host plants once introduced to a habitat; they produce exceedingly long-lived spores that can survive in soil, making their eradication almost impossible. These organisms produce asexual spores (sporangia) that can be dispersed long-distance on air currents or in water. When the sporangia germinate they release numerous swimming zoospores that are attracted strongly to young root tips where sugars are being released. David presented a fascinating video clip showing motile zoospores amassing around a tube releasing sugar as an example of **chemotaxis**.

Phytophthora ramorum was first recorded in mainland Europe in 1993, and was most probably spread to the UK via nursery trade in host plants such as *Rhododendron*, *Viburnum* and *Camellia*. Outbreaks in the wider environment were initially in SW England but then it spread to many western areas of the British Isles with *Rhododendrum ponticum* regarded as a 'driver' for this phase of the disease. Since 2009 *P. ramorum* has attacked **larch** trees on a landscape-scale with widespread damage to forests in Dumfries and Galloway District and recent spread to Aberdeenshire and Fife. The pathogen also infects members of the Ericales, such as the **blaeberry** (*Vaccinium myrtillus*) and **cowberry** (*V. vitis-idaea*), but the good news is that in trials at the James Hutton Institute several strains were unable to infect **heathers** (*Calluna* or *Erica* species) in controlled environments.

Other *Phytophthora* species are of concern. *P. alni* causes lethal root and collar rot of **alders** and has been unwittingly spread upstream in tanks carrying fish spawn to headwaters. *P. austrocedrae* attacks **juniper**, a plant already in serious decline, and has damaged these trees in Teesdale and other remote sites. *P. quercina* attacks the fine roots of **oak** trees causing **oak decline**, a worrying discovery when oak is a climax species supporting a very large range of insects. David explained that they have developed a novel water sampling and molecular test procedure that can be used to detect any species of *Phytophthora* in an ecosystem. This is being used to assess risk and prevent further incursions to help take the appropriate measures to safeguard important forests and ecosystems in the future.

Brian Williamson

SOCIAL EVENING

21st February

We decided to have a change for this year's Social Evening and moved from Carnoustie and a full meal to the Invercarse Hotel with a finger buffet. This meant that more entertainments were required but everyone rallied round and a good selection of quizzes, of varied degrees of difficulty, kept the 25 or so members happy for the whole evening.

To begin with, Margaret Bainbridge produced a list of animal and plant malapropisms for us to work out what was really meant. There were some alternative answers allowed, limited mostly by the imagination of those present. Lorna had produced a quiz based on symbols from the 1:25,000 (2 ½ inch) Ordnance Survey maps which proved remarkably difficult. Seeing the symbols out of their map context puzzled even those who thought they were good at maps (me included!). Anne's contribution at this stage was a sheet of trees, shrubs and birds, all with only the vowels shown - harder than it looked since our clues to words mostly come from the consonants.

Perhaps the most enjoyable test of all was Stevie's photographic natural history quiz. Many were close-ups or parts of photos and were of a wide range of organisms. Those whose competitive spirit was flagging by this time just sat back and enjoyed seeing more of Stevie's excellent

photography. The cerebral part of the evening concluded with a plant anagram test which was recycled from several years ago - it didn't make it any easier!

The hotel provided us with an ample buffet part way through proceedings and nearly everyone went home with a raffle prize from items generously brought by participants. A most enjoyable evening.

Anne Reid

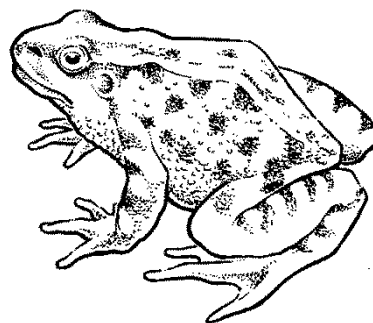
SCOTTISH AMPHIBIANS AND REPTILES

Chris Cathrine - 25th February

Chris introduced us to the several and various organisations which are involved in Amphibian and Reptile Conservation in Scotland. He is a representative on ARG-UK, Amphibian and Reptile Group - UK, of which there are a number of regional groups to which one can belong. He also encouraged us to attend the walk in Glen Esk where we hope to see some amphibians and reptiles "in the flesh". (See report on page 14. Ed.)

We were introduced to the amphibian and reptile fauna of Scotland, many of which were familiar, although we were not aware of the presence of the **Alpine newt**. And the largest reptile in the form of the **leatherback turtle** (up to the size of a small car) is more often around than you might think. Recent tagging has shown that it can dive to 1000m, swim 12,000 km per year and travel to Scotland from Trinidad and Tobago.

Our most abundant amphibian is the **common frog**, and it tends to breed earlier than the **common toad**, which is however less common. The **toad** has more specific habitat needs than the frog, with toads preferring larger water bodies for breeding. Chris had an excellent PowerPoint presentation containing photos of all the species that he mentioned, as well as the different types of spawn produced by **frog**, **toad** and **newts**. This year some **frogspawn** had already been seen on 22nd February. Frogs and toads are susceptible to a number of predators and the different ways in which these predators dealt with them was interesting. For example **herons** and **otters** will prey on **toads** despite the poisonous glandular skin. **Herons** pierce them and then feed on the insides while **otters** are skilled at "peeling" them and leaving the skin. The **natterjack toad** occurs only along the Solway where the population now numbers less than 400 individuals. The reasons for the decline may include the prevalence of a **chytrid fungus**.



We learned that the commonest **newt** in Scotland is *Lissotriton helveticus*, the **palmate newt**. It is the species most often found in acidic water whereas *Lissotriton vulgaris*, the **smooth** or **common newt** prefers quarries and alkaline water. There are, however, some **smooth newts** to be found around the Dundee area. Chris's tip for identification is that the throat of a **palmate newt** is pink, translucent and unspotted while the male has webbed larger feet and a tail filament. The male **palmates** lack a wavy top edge to their crest. **Newts** can be confusing when they go into their terrestrial phase. They then lose their crests and are sometimes mistaken for **lizards**. The **great-crested newt** is distributed mainly in the Central Belt, Solway and Inverness areas. The northern populations have been shown to be genetically distinct from those further south. Newts can turn up in larger water bodies such as lakes and it is worth looking for them there as well as in the ponds with which they're more usually associated. The **Alpine newt** is an interesting introduction. We need to be wary of such introductions, particularly when they originate from pet animals which may carry **chytrid fungus**. Chris clearly liked the **Alpine newt**, which is a most attractive animal and luckily it is free of chytrid in Scotland. It is found around Edinburgh on Arthur's Seat, in the University and in the Union Canal. They haven't spread much from these places.

Moving on to the terrestrial reptiles, the commonest is the **common lizard**, *Zootoca vivipara*, which has a wide distribution from sea level to mountain. Hibernacula are often in collapsed stone dykes. Like the other reptiles which have a northern distribution, they are viviparous and distributed as far north as the Arctic Circle. **Lizards** are under-recorded so there are some opportunities for us out there. We were encouraged to make new records since the distributions are likely to have changed since many old records were made. Lizards are protected species.

I did not know that we had an introduced population of **sand lizards**, *Lacerta agilis*, in Scotland. In 1971 39 individuals from Dorset were by some means introduced to an island "close to Tiree" in which location they are apparently still alive and well.

Slow worms, *Anguis fragilis*, are larger in the west of Scotland. Also blacker individuals occur on the west side (this is also true of **adders**). They can be surprisingly adept at diving into the ground, and are most frequently encountered during turfing work or on railway embankments.

The **adder**, *Vipera berus*, is widely distributed, locally it is found in the west Sidlaws and Dundee area. Black **adders** are found in Argyll and the west. A good way to watch them is with binoculars on warm days in spring. At that time they are more sluggish and come out to bask in the sun. I had not heard before about the legendary Dr Norman Morrison (1869-1949) - Tormod an t-Seoladair - also known as "The Adder Man" who grew up in the Isle of Lewis in the last quarter of the 19th century. Despite a very short education, and through his own scientific enthusiasm, Norman became a great expert on and advocate for adders. In 1924 he published "The Life Story of the Adder" which was just one of his many scientific pursuits.

Chris told us about the enormous amount of research which he has carried out to determine the true distribution of the **grass snake**, *Natrix natrix*, in Scotland. Tips for identifying this, our largest snake, are to look for the round rather than vertical pupil and distinctive cream collar. This is of course an egg-layer and has been thought to be largely absent from Scotland - the other native reptiles being viviparous. Chris took up the task of checking up on any verifiable records of the **grass snake**. In 2010 he saw one himself in Dumfries and Galloway, in an area from which a number of other records had been made by estate workers in the past. Since there are reliable records for grass snakes just south of the border, it seems unlikely that grass snakes would be confined by a political border! It is also known that 200 young grass snakes were released by Loch Lomond. Some unlikely records have been eliminated owing to the confusion between the common names of grass snake, slow worm and adder - all of which can be known as "grass snakes" in some areas. The frequent transportation of silage and other agricultural materials containing eggs or snakes around the UK may account for other records. Chris has certainly clarified the likely distribution of grass snakes in Scotland by verifying records. This is work in progress so if you see a grass snake, photograph it and let Chris know the details.

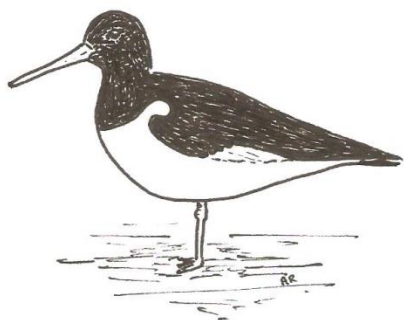
The future threats to the herpetological fauna of Scotland were considered. Windfarm development can cause disruption to sites during construction and, importantly, to hibernacula. Although the animals are protected, the hibernacula are not, although they could be moved to new hibernacula. The best way of surveying for reptiles is to put out mats of roofing felt or corrugated iron sheet under which reptiles like to bask. Close cover by afforestation, muirburn, persecution, road casualties and chytrid disease are other major threats to be contested in the defence of native amphibians and reptiles. If we know of areas of road where death of toads occurs regularly, then we could give toads a helping hand by reporting them to ARGS for assessment as "toad crossings".

Cathy Caudwell

BIRNIE AND GADDON LOCHS, FIFE

8th March

This was our first outing of the year, though still part of the winter programme, and although the morning arrived wet and grey-looking, the strong wind from the previous day had fortunately dropped. We met at the car park in front of Birnie Loch where the smooth grass bank slopes down towards the loch edge, and could immediately see a group of **wigeon**, **oystercatchers**, some **mallard**, **black-headed gulls**, **mute swan** and a **moorhen** at the far side.



There were 24 of us as we set off for our walk. The two lochs are old sand and gravel pits which have filled up naturally, the area around has been landscaped, and paths have been created. Two bird hides have been added and various benches placed at intervals for the public to be able to rest and enjoy the view. The ground is level and the path is amongst bushes and trees which makes a very pleasant walk suitable for wheelchairs and for people with mobility

problems. Luckily the rain stopped as we began our walk and although muddy underfoot in places it was very enjoyable. We stopped at intervals to note the **hawthorn** coming into leaf, the **blackthorn** just into flower and the **pussy willow** catkins. The **hazel** and **alder** trees were laden with their dangling catkins showing a lovely bright mix of red and green.

In certain places it was possible to see onto the loch and we recorded **tufted duck**, **goldeneye**, a **goosander**, **redshank**, a pair of **gadwall**, **heron** and two **common gulls**. **Gorse** bushes were in full bloom and the vivid yellow flowers were bright and cheery. In the bushes behind we spotted four pairs of **bullfinches** and nearby a pair of **long-tailed tits** flitting about, along with **dunnocks** and **blue**, **great** and **coal tits**. Higher overhead **crows** and **rooks** were calling and busily collecting up nest-building material. **Song thrushes** sang from tree tops which really did make it sound as though spring was truly on the way.

A visit to a hide provided closer views of the ducks and a short rest before moving on. At the sides of the path were some lovely **snowdrops** but no other early flowering plants. Almost back at the cars a pair of **goldcrests** was seen low down in bushes very close by. They busily moved from one branch to another, hunting for food and showing off their lovely head stripes. Just behind here, and a few feet up the trunk of a **silver birch**, a flash of light caught my eye and I realized it was a **treecreeper** working its way up and around the trunk, disappearing then re-appearing at intervals higher and higher up as it looked for minute insects to feed on.

On reaching the car park just as the sun came out a combined bird list was drawn up and in total we had seen 36 species. One **redpoll** only had been seen and only by two or three members, but all in all it had been a lovely walk.

We then retired for soup and sandwiches to the Deer Centre three miles away towards Cupar which was very nice, especially as the staff had reserved several tables together for the party.

Before our return to Dundee some of us stopped off at Letham ponds, a large area of flooded fields. Here we saw good numbers of **greylag** and **pinkfoot geese**, **wigeon**, **teal**, and also quite a few **lapwings** on a sandbar in the water. About 20 **linnets** flitted along the hedgerow until we disturbed them. At my feet on the roadside verge I glanced down to see the first **coltsfoot** of the year in flower. It had been a pleasant day out and enjoyed by all members.

Liz Olejnik



SUMMER OUTINGS

MURTON WILDLIFE RESERVE

26th April

This privately-run reserve has steadily matured into an attractive haven for flora and fauna and, with its steadily maturing arboreal areas and small lochs, it is now attracting an increasing number of species.

Around 15 members and friends turned up on the day (to see, of course, what turned up). We were not disappointed and a fair selection of wildlife soon manifested itself. On the lochs ducks were well-represented by **mallard**, **tufted duck**, **teal**, **wigeon**, **goldeneye**, **gadwall** and **shoveler**. Other water birds seen included **coot**, **oystercatcher**, **lapwing** and **redshank**. Overhead, **sand martins** (resident in nest holes provided on the reserve), **swallow**, **house martin**, **buzzard** and a number of other birds were seen or heard, and, although an **osprey** was not recorded on this visit, they are often seen on the reserve.

While all this avian activity was being observed, David Lampard and others were trawling the edge of a loch for whatever they could find. They turned up a **palmate newt** and invertebrates which included **damselfly nymphs**, **mayfly larvae** and **water beetle larvae**.

The botanical members were well-provided for by a fair selection of wild flowers including large numbers of **cowslips**. Tree enthusiasts could have spent a long time deciding the ancestry of the large number of planted trees, both species and hybrids.

However, time marched on, and some of the company had not missed the fact that there was a cafe on the reserve. The majority answered the pangs of hunger and availed themselves of coffee, cakes and buns (despite just having had lunch - Ed.) and a good time was had by all.

Gordon Maxwell

SEATON CLIFFS, ARBROATH

3rd May

Fifteen enthusiasts participated in a joint meeting of Dundee Naturalists' Society and the Botanical Section of Perthshire Society of Natural Sciences (PSNS), starting in the Victoria Park, Arbroath. Led by Mark Tulley and Colin McLeod, we decided to make careful monad recordings and so skipped the initial tempting area of St Ninian's Well to start on the cliff top. Progress was slow in the fairly mild, calm air, with magnificent displays of **sea campion** (*Silene uniflora*) and **thrift** (*Armeria maritima*). After much discussion, we decided that the **scurvy grass** was the common species (*Cochlearia officinalis*) rather than the smaller roadside **Danish** one (*C. danica*). Despite the early spring, flowering species were not abundant and identification was mainly of leaves and last year's seed-heads. Swards of **primroses** (*Primula vulgaris*) covered the steep grassy sections and we even found a few **cowslips** (*Primula veris*), probably sown, at the far end of the walk.

After lunch, and a few early departures, we descended the newly-installed steps to Carlingheugh Bay to discover sheets of **sea sandwort** (*Honckenya peploides*) in flower, edging the beach. The red sandstone cliffs there were dotted with the slightly obscure **pellitory-of-the-wall** (*Parietaria judaica*), and in a shallow cave we confirmed that a small colony of **sea spleenwort** (*Asplenium marinum*) still survives.

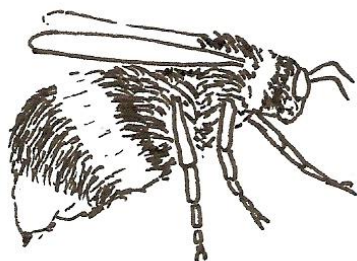
By way of adventure, Colin led us through a long cave using a mobile phone for light, to bring us out into the next bay. After a quick scan for new flowers, we plunged back into a different, less dark, cave to return, urged on by Colin telling us that the rising tide would cut off that route.

The party had dwindled to four by the time we made a brief excursion into Seaton Den, recording various trees and passing above the **butterwort** (*Pinguicula vulgaris*) recorded earlier in the day.

Our foraging returned over 70 plant species, five different **bumblebees** and about 20 species of bird (see below), a reasonably good total for an early excursion.

Mark Tulley

Skylarks were singing over the fields beside the path and **linnets** haunted the **gorse** bushes, rarely giving us a good view. **Yellowhammers** were singing too and a male **reed bunting** was exactly where predicted, close to the path. **Fulmars**, **kittiwakes** and **house martins** had nests on the cliffs and various **gulls** were also seen with **razorbill** and **eider** offshore. David saw a **wheatear** and a **heron** put in a brief appearance.



The only **butterfly** was a **green-veined white** but a **ruby tiger moth** obligingly posed to have its photo taken by many of those present. **Bumblebees** seen were **white-tailed**, **buff-tailed**, **garden**, **early** and **common carder** - in order *Bombus lucorum*, *B. terrestris*, *B. hortorum*, *B. pratorum* and *B. pascuorum*. **St Mark's flies** (*Bibio marci*) were common with their weak flight making them easy to see and identify.

Anne Reid

BARRY BUDDON OPEN DAY

4th May

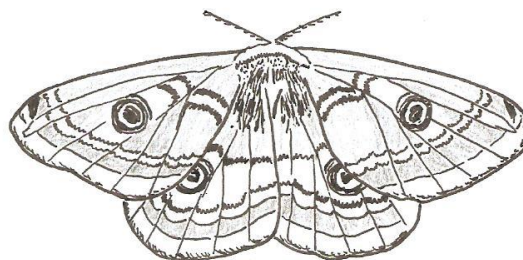
An excellent turn-out of over 60 associated members of the usual five local groups plus, this year, members of PSNS, assembled to be greeted and welcomed by the new Commandant, Capt. Harry Roy, who outlined relevant health and safety factors to be observed when on the training area, and wished us all a good day.

The various groups then went their separate ways with Bob and Graham leading the birdwatchers and Jim Cook leading the botanists. The May date had been dictated by the use of Barry Buddon as the venue for the shooting competitions in the Commonwealth Games in July. We had never held our outing so early in the year, so were full of curiosity as to how we would fare compared to our usual month of August. We were not disappointed!

The birdwatchers headed for the coast and the Monifieth reed bed collecting, on the way, **wheatear, skylark, meadow pipit, pied wagtail** and coastal birds including **red-throated diver, sanderling, dunlin, eider** and **sandwich terns**. Arriving at the reed bed the call of **sedge warbler** was picked up and then to our delight the reel of the **grasshopper warbler** was clearly heard! This was an unexpected treat enjoyed by all who could make out the unfamiliar call - what a bonus! Also in same area was **reed bunting**, a great start.

Next we made our way to the Barry Loch and Yeomanry Pond area and here we came across a first for the joint outing - not a bird but a butterfly. In fact, 12 **green hairstreaks** were seen, a bonus of our early visit! In the same area we added **orange tip, peacock** and several **green-veined whites**. Birds seen here and nearby were **dabchick, mallard, willow warbler, blackcap, chiffchaff** and **bullfinch**.

Next stop was the Lighthouse for lunch as hunger pangs were being felt. These were quickly forgotten when we discovered that Anne and David had a very big surprise waiting for us in the shape of another first for most of the party - a female **emperor moth** - what a beauty! As Anne said, not quantity but most certainly quality! Three cheers for the moth trapping team!



After lunch we headed for Happy Valley where everyone wears a big smile! We found **orange tip butterfly** which was on the lovely **cuckoo flower**, its food plant, of which there was a plentiful supply available. We returned to the car park to add an over-flying **grey heron** to our day list which had now reached a very respectable 61 species. Five butterflies were recorded, and eight species of moths. All this added up to a highly satisfying Open Day success story and all present indicated they had thoroughly enjoyed their day out on Barry Buddon. My thanks, as organiser, on behalf of all groups present, goes out to Capt. Roy and his staff for their help and cooperation in helping to make our visit so enjoyable.

Bob McCurley

TROTTICK PONDS

13th May

This was meant to be a recording meeting, so all present were encouraged to note everything seen. We succeeded in getting a good range of records of all kinds - it does help to focus the mind when a list is being made.

Only a short distance from the cars we spotted a juvenile **dipper** on the Dighty - they are very early breeders as there is plenty of food available under the stones of the burn. Beside the path was a very striking white flower which caused a lot of debate until someone suggested that it might be the 'normale' form of the **few-flowered leek**, *Allium paradoxum*. A check after returning home confirmed this identification.

Most of the party then walked round the ponds, at a variety of speeds, often pausing to watch or listen to the wide variety of birds present. **Song thrush, willow warbler, reed bunting** and **sedge warbler** were singing lustily while **chiffchaff, blue tit** and **blackbird** were already busy feeding young. **Swallows, swifts** and **house martins** were seen overhead and someone spotted a **kingfisher** on the nearby Dighty.

Though the temperature had dropped, Daphne found a roosting **green-veined white butterfly** and there were still **St Mark's flies** and **mayflies** on the wing. We saw only **buff tailed bumblebees** but the damp grass enabled the **black slugs** (*Arion ater*) and various **snails** to be active.

In the marshy area a purple-flowered plant, with leaves rather like water cress, caused some further debate. It turned out to be **greater cuckooflower**, *Cardamine raphanifolia*, which most of us had never seen before - not native but easily naturalised.

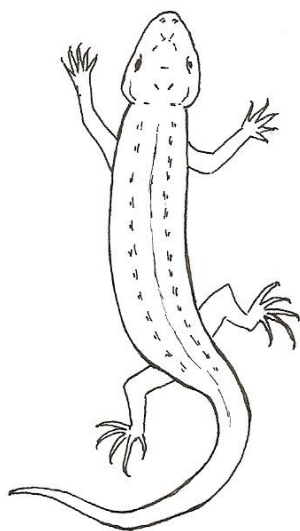
As dusk fell, and the stragglers eventually decided it was time to leave, a single **bat** was seen to fly along the edge of the trees beside the Dighty. This very successful meeting resulted in a list of 27 bird species being put onto the BTO BirdTrack website - adding more information to this extensive database.

Anne Reid

REPTILE WALK, GLENESK

18th May

All available places were filled for this outing in Glenesk, looking for reptiles and amphibians, along with any other nature which happened to put in an appearance. The weather was pretty much perfect for the purpose, warm and mainly overcast, with just a few gusts. After meeting at Invermark car park, we were given an introduction by local expert Trevor Rose of Friends of Angus Herpetofauna and set off at a slow pace. We didn't have to go far before Trevor's daughter, Abigail, appeared with an adult **slow worm** she had found under a rock. We moved into the riverside field, first to check under Trevor's refugia - corrugated metal sheeting. Trevor explained that this attracts reptiles to bask on and under as it attracts heat and provides shelter. We then fanned out to search the field, walking carefully to spot camouflaged reptiles. Trevor located a calm, brown-patterned female **adder** near the riverbank, which gave us all our first snake sighting of the day. This one was noted to be preparing to shed its skin, which they do about every 6 weeks, apparent by the milkiness of the eyes.



We made our way along the path towards Loch Lee, finding further **slow worms** and a **frog**, hearing **cuckoos** and seeing two **lapwings** in adjacent fields, both with very young chicks. Several **wheatears** were spotted, flashing their white rumps as they flew off and a single **ring ouzel** was seen feeding high on the rocky hillside, which was a challenge to see, even with binoculars. Alban informed us that this is the type of habitat they breed in. Carrying on, yet more **slow worms** were spotted and a second female **adder**. This one was more feisty than the first. All the way along the track, exotic-looking hairy **moth caterpillars** were visible - **garden tiger**, **northern egg**, and **dark tussock**. A bird of prey was seen high above the summit with several songbird-sized birds flying round in alarm. The dry ditch running along the side of the track provided a plump, basking **common lizard** which remained still for us all to admire. Further along, where some water had collected from the hill runoff, were small still pools containing **tadpoles** and our second amphibian of the day, several **smooth newts**. Insectivorous **round-leaved sundews** were growing in the dampness and their companion, **butterwort**, was evident in purple flower.

After a pleasant lunch on the banks of the loch, we headed along the estate road, where an **osprey** was seen flying over. A few birders peeled off at this point to add to their sightings with a visit to the woodlands. The main group were treated to a male **adder**, distinguished by its different colouration of greenish grey with black zigzags, beautifully plump, having recently ingested a good meal. A large **toad** was noted apparently sunbathing and Trevor confirmed that this was the case though most people would not have been aware of this behaviour. Further **lizards** were sighted briefly, but didn't linger.

By the end of a very full day, having experienced all three Scottish reptiles and three amphibians, we definitely had our "eye in" for reptile spotting and found many more specimens and several courting **slow worm** couples on the return walk - indeed so many that we lost count! Trevor was thanked for his time, enthusiasm and knowledge as well as his skill in hook-wrangling the **adders** into position so we could all get a good view and photographs.

Stevie Smith

LOCH OF KINNORDY

27th May

Kinnordy is always worth visiting at any time of day or year as there is always something different to see. We were not disappointed on this occasion and, though most of our records were birds, everyone found something of interest.

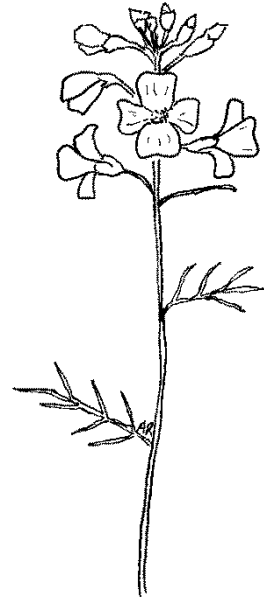
The fact that it was an evening visit reduced the possibilities for flying insects, but Cathy found an **orange tip butterfly** egg on **lady's smock**. **Star of Bethlehem** (*Ornithogalum umbellatum*) was in flower which enabled it to be recorded - it is almost impossible to find at other seasons amongst grasses, unless there are seed heads.

From the hides we very quickly had a respectable bird list including singing **blackcap**, **sedge warbler** and **willow warbler**. There were young **mallard** ducklings on the water and a **swallow** was making repeat visits to what must have been a nest underneath the Gullery hide. We quickly added most of the common ducks and **greylag geese** with young before scanning more carefully. Out on the mud at the edge of the **bogbean** rafts a **little ringed plover** was seen and, more surprisingly, a **dunlin** in breeding plumage - presumably still on passage. The **osprey** put in its statutory appearance and Barry saw a **marsh harrier** and heard **water rail** squeals. Those who walked over to the lily pond at the north-east of the reserve added **cuckoo** to the list and Stevie saw a **treecreeper** and a **great spotted woodpecker**.

As dusk began to fall most headed for home but the remainder were treated to a close sighting of a **roe deer** in front of the East hide and **bats** along the path. We then settled down to watch the sunset from the Gullery hide and observed **starlings** and **sand martins** coming in to roost in the reeds opposite - effectively falling down and out of sight. A **brimstone moth** flew past with its yellow paleness unmistakable in the failing light and we captured another moth which was against one of the hide windows. After being unable to identify it by what little light was available we eventually hit on the idea of a flash photograph which, though not good quality, was enough to identify it as a **small angle shades**, another common moth.

Everyone enjoyed the walk and birdwatching on such a lovely evening and the result was an impressive 45 species of birds which were duly entered on the BirdTrack database.

Anne Reid



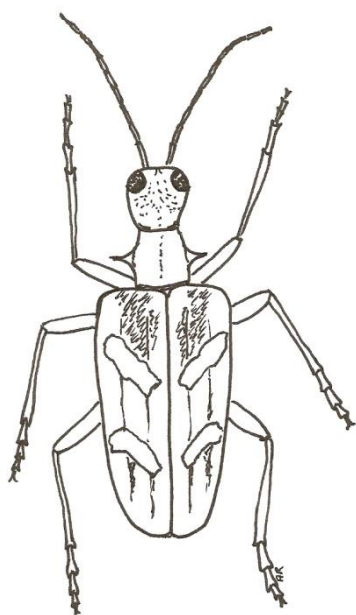
STRATHPEFFER WEEKEND

30th May - 2nd June

The weekend's forecast had promised fine weather and our bus, with JP driver Charles at the wheel, left on time at 0930hrs from Sensation, Dundee, after commencing in Arbroath at the crack of dawn. This was our first outing using JP Coaches, Forfar, our previous owner/driver Charlie Riddler having retired at the end of the previous season.

We set off in good spirits and after a very brief stop at Dobbies, Perth, due to our tight schedule, we were off, en route to our first destination, Glenmore NNR Visitor Centre, near Aviemore, followed by the Cairngorm Reindeer Centre for our own private visit, outwith their normal trip time. Unfortunately, due to a rather severe malfunction with the air conditioning in the bus, all of us were overheated, some nauseous and most more than a bit crotchety by the time we disembarked. Not the best of starts to our first hire with the new company, though Charles did attempt to rectify the problem himself, unsuccessfully, while we carried on with firstly some free time to explore. Glenmore is a forest of ancient, native, **Caledonian pine**, said to be the best of its type in Scotland, with specialised bird species such as **crested tits** and **crossbills** - neither of which showed their beaks on this occasion however. The newly refurbished visitor centre attracted some members for an audio-visual presentation and refreshments in the cafe, also with the promise of **red squirrels** at the feeders, but most of us were only too pleased to get out in the fresh air and there were several peaceful forest paths available through the ancient 'granny pines', with the option of Loch Morlich with its golden, sandy freshwater beach.

For our visit to the Cairngorm Reindeer Centre, next door, we split into two groups, those who wished to hike with a guide to visit the herd on the hill and those who wished to visit the Reindeer Exhibition and paddock at the centre, where a few (rotated) **reindeer** are kept on display for the public. The Cairngorm **reindeer** are Britain's only free-ranging herd, able to roam over 7,000 acres of tundra-like habitat, though some are also kept in a 1000 acre hill enclosure - which is where we visited them. Initially a few animals were re-introduced to Scotland by Mikel Utsi, a Swedish reindeer herder, in 1952 and the herd now numbers between 130-150, through controlled breeding. The hillwalk group were driven a short distance before commencing our hike. Though this had been well recce'd and deemed suitable terrain for most - involving a 20 minute walk on uneven, boggy ground, our guide explained that they had changed the route very recently and this would now be easier than before and even more suitable. (NOT! Our fit young guide obviously did not have the experience of dealing with age constraints.) Unfortunately, sprightly though most Nats are, the trek was too much for some, being steep, and they had to turn back shortly after crossing Utsi bridge. Our youthful guide was very knowledgeable, however, and with the remainder of us reaching the reindeer, spoke well and informatively on the history of the herd. Before sharing out the kibble for hand feeding, she explained a few safety rules - not to approach any of the reindeer from the front, let them approach us, nor to touch any of their developing velvet antlers, due to them being extremely sensitive at this stage. Both males and females grow antlers. The friendly reindeer



had commenced their summer moult and many were looking moth-eaten and appreciated us giving them a helping hand to remove their loose hollow fibre hairs, revealing a very attractive sleek summer coat underneath. Dorothy took home a big handful for her garden birds to line their nests with - wish I had thought of that. We noted how even the nostrils of the reindeer were lined with hair and listened to the clicks from their ankle tendons - their method of staying in communication with each other. Additionally a stunning, colourful **longhorn beetle**, *Rhagium bifasciatum*, was spotted lurking on a fencepost.

We met back with the remainder of our party, who had also had an informative experience in the paddock, then back onto the stifling bus once more, which had to be endured until we could disembark at The Bay Highland Hotel, our accommodation for the weekend in the spa town of Strathpeffer, following which, our driver Charles had to return the bus to Inverness for repair. First impressions of the hotel were favourable and we were all efficiently checked in, with time to freshen up prior to our evening meal. Following this, there was nightly entertainment in the main lounge for those who wished, but also a couple of quiet lounges to relax in

or the opportunity to explore several local walks, with the possibility of spotting the **red kites**, frequently seen in this area.

Saturday dawned bright for our second day. We had a brief comfort stop at Golspie and a quick opportunity to refuel with coffee prior to arriving at Loch Fleet SWT NNR, (coincidentally featured in the March issue of the SWT publication), all relieved that the bus had been successfully repaired. Again the members split into two groups, those who wished a short walk through woodland to visit the new bird hide looking over the tidal basin of the loch, searching also for botanical species on the way (kindly led by Anne Reid) and the remainder who chose to explore Ferry Links dune habitat at the coast. Within a short time on the dunes, a day-flying **Mother Shipton moth** was spotted by Gordon, then several more. Flighty beauties, brown with a pale pattern on forewing, said to resemble a witch's face! I don't think any of us managed to get close enough for photos of them, unfortunately. The butterflies were more co-operative and both **small coppers** and **green hairstreaks** were happy to pose. Several developing orchids were seen, also a **St George's mushroom** and some kind of attractive dandelion-type plants, while a **skylark** serenaded us lustily from the heights. Offshore, several **seals** were seen and a leaping **salmon**. On regrouping, we were delighted to hear of the successes of the woodland party, who not only had enjoyed a variety of birds, including **osprey** and **shelducks** over the loch, but had also managed to locate fascinating botanical specimens of **one-flowered wintergreen** (*Moneses uniflora*), **round-leaved wintergreen** (*Pyrola rotundifolia*) and **creeping lady's tresses** (*Goodyera repens*). I much admired Dorothy's photos of them.

On then to dolphin-famous Chanonry Point for our packed lunch stop. We were lucky to be in position when a large tanker sailed past and were able to view several **dolphins** riding the bow wave.

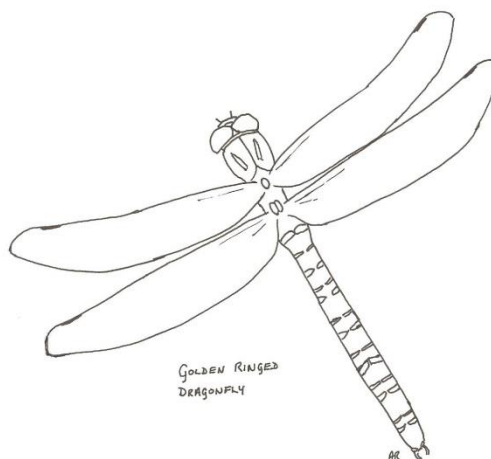
The Moray Firth pod has around 70 individuals. Leaping clear of the water close to the shore, as is their habit, would have been perfect, but I for one, was happy they had put in an appearance at all.



Our final stop of the day was to Fairy Glen, RSPB reserve, a short distance away, for wild flowers, birds and pond life. A pretty there-and-back path beside a burn, three miles in total, rugged in places, with stunning waterfalls at the end, to enjoy as much or as little walking as wished, or a visit to the local museum. **Large red damselflies**, **bumblebees** and **shield bug** nymphs were seen basking on the foliage near a small **frog** pond. Several **grey wagtails** were foraging along the **bluebell**-lined burn and a **red kite** was seen briefly from the platform of the large pond. We noted a male **orange tip butterfly** on the far side too - quite a late individual. Those who reached the path end were treated to a parent **dipper** feeding a well-camouflaged youngster at the final waterfall. On the return leg, fascinating **slime moulds** were spotted on decayed wood along the path, which had Pat Gaff and myself whipping our cameras out.

Following our evening meal, we made our way outside to the town square, already thronged by visitors and locals, where we were entertained by some rousing traditional Scottish music from Strathpeffer Pipe Band who play there every single Saturday come rain or shine, and local highland dancers too. Wonderful performances.

Sunday 1st June - another packed lunch and our third day. The first stop was to Corrieshalloch Gorge NNR (translation from Gaelic is ugly hollow!), a deep, tree lined **box canyon** or **slot gorge**, which was eroded 2.6million years ago during the Ice Age by glacial meltwater. A there-and-back walk leads over a swaying suspension bridge crossing the River Droma, which forges through the narrow gorge in a dramatic series of falls, with the 45m high Falls of Measach thundering down. From the bridge itself (maximum of six persons allowed on at any one time), we had magnificent views of the gorge and also the steep, dizzying drop below. On the far side, the path led to a viewing platform projecting, it seemed, precariously. Excellent views were had here too, and looking down, we could appreciate why this habitat would be a haven for shade and damp-loving **ferns**, **mosses** and **liverworts**. Due to the lack of rain, the falls were not as impressive as they had been during the recce, however the viewpoint platforms and bridge showed them at their best. Returning, some opted to walk the path which followed along the sheer-sided gorge top, which then led onto Lady Fowler's Fern Walk. One of the species found here is **Wilson's filmy fern** - Britain's smallest, but it proved elusive on the day. A beautiful **golden-ringed dragonfly** was spotted resting and a **brimstone moth** and wood boring **musk beetle** showed themselves. The yellow matchsticks of the summer fungus **bog beacon** shone above the water in a ditch. They do like to keep their feet wet. Though heedful that it was time to return to the bus, we noticed both **butterwort** and **round-leaved sundews** and attracted attention from other curious visitors as we admired them. Soon Dorothy was surrounded by an enthusiastic audience as she described the behaviour of the carnivorous plants. What a great ambassador for nature. As we approached the bus, the cronking of **ravens** ringing in our ears, it was to find that Liz Olejnik had spotted a **golden eagle** soaring in the distance and binoculars were out, following its progress. Great excitement.



Back onto the bus then and a short detour was taken to drop off several Nats who wished to explore Ullapool town. On then to Knockan Crag NNR, a geological formation, to eat our packed lunch, prior to visiting the turfed roof, open air exhibition and explanatory boards describing how the Moine Thrust, with its 500 million years older rock atop a younger band, was created. While some Nats chose to explore the level area to the right of the car park, where a variety of plant life, small birds and butterflies was to be found, others ascended the steep path, with bumbling **dor beetles**, and perky **pipits** for an exhilarating, strenuous, steep, circular walk with sculptures and poetry along the way. We posed for photos at the top of the crag and admired the spectacular views over Assynt. Further

carnivorous plants were seen and developing **orchids** on high ground and a **red deer**, surprised by some of us, took off, leaping over the **heather**. In the car park, Pat Gaff found a **figwort** plant and carefully showed me the tiny **weevils**, named after their host plant, going about their business. Exquisite tiny creatures.

Our final stop was Rogie Falls. Can one ever have too many waterfalls? These, too, had looked better when the recce was done, but the water levels had dropped so the falls were slightly less active. Just a short walk is needed through pretty mixed woodland to reach the falls with viewpoints. Less dramatic than Corrieshalloch, but scenic all the same. **Larch bolete fungi** were spotted - a species edible if the cap is peeled. From previous experience, I knew that the toilet block in the car park here tended to attract a great variety of moth species and we weren't disappointed. A huge **poplar hawkmoth** was spotted high up in the "ladies" and I decided that this would be a lovely thing to share with all on the bus. Catching it proved a little tricky, but aided and abetted by Dorothy, who loaned me her hiking pole and borrowing Anne Reid's butterfly net, I attached both together with my hairband to extend the reach, much to the amusement and curiosity of a bus full of German tourists who had newly arrived to use the facilities. What a glorious moth - it was much admired as it was passed round the bus in a sandwich box, then duly safely released into the woods before we left - definitely a more fitting habitat than the "ladies". Anne photographed all the other inaccessible moths on the walls and ceiling and sent a list of eleven species to the local moth recorder.

We had a leisurely start for our last day in Strathpeffer, with free time to investigate the local attractions, or walk to Blackmuir Wood to see the collection of stones at the Touchstone Maze, a modern construction based on an ancient concept using stones from all over Scotland. Though we had checked out after breakfast, the Bay Highland Hotel had very kindly offered us continued use of their facilities until we were due to leave. On then to our penultimate stop, Kingussie, where the majority of us opted for a bar lunch, though exploring the wildlife along the tumbling, golden Gynack Burn was an option. Then lastly on to House of Bruar, where our bus was prebooked. Options included retail therapy, refreshments or a beautiful but steep circular walk through mixed woodland, with yes, even more waterfalls. Some impressive water erosion was seen, the river having carved smooth bowls under the falls in places. Pretty **vetches** were seen amongst the **blaeberry** and **heather**, remnants of the original moorland of this area, and some fascinating bolete fungi, spotted by Gordon Maxwell, possibly **ghost boletes**. And finally it was time to board the bus again for the last leg back to Dundee and beyond. Thankfully the weather had been kind to us throughout the whole time. Lorna Ward, Dorothy Fyffe and myself were thanked for the organisation of the weekend.

Stevie Smith

DUNKELD

14th June

The group was dropped off at Loch of the Lowes, which gave everyone the chance to see the **ospreys**, as well as a number of small birds on the feeders, including **great spotted woodpecker**, **siskins**, and **goldfinches**. On the loch there were sightings of **mute swans** and **great-crested**

grebes. Many people also spotted **red squirrels** in the woods and visiting the feeders.



The group then set off for a walk into Dunkeld along part of the Fungarth Trail, taking us alongside the golf course and through woodland. A variety of wildflowers were seen including **northern marsh orchids**, **ragged robin**, **yellow iris** and **chickweed** **wintergreen**. A specimen of the fungus *Boletus calopus* was found beside the path. The group also spotted a **buzzard** and **roe deer**. The weather turned and we had a short sharp shower;

fortunately we were able to shelter under the trees until the shower cleared and then continued our walk into Dunkeld.

Once in Dunkeld some groups walked along the riverbank and were lucky to see a pair of **treecreepers**. Others visited the community orchard, or the Cathedral, and some took advantage of the facilities in Dunkeld.

Lorna Ward

ARBROATH AND FORFAR RAILWAY, FRIOCKHEIM

17th June

Nineteen members of the Society met on a warm evening at the car park at Friockheim. We walked through the playing fields, along the road and through Border Farm to a footpath to Border Quarry. The quarry lies on the old Arbroath to Forfar railway and is owned by Geddes. The old workings were for sandstone and the area where we were looking was called Border Hole, which has now been filled in with quarry waste and capped off.

The quarry was covered with **broom** and **gorse** with areas of open grassland and there were some very damp areas. The evening was also part of a survey for **small blue butterfly** and its food plant, **kidney vetch**. We found a quite extensive patch of **kidney vetch** but no **small blue**. The quarry is close to sightings of small blue from the 1980s. Small blue has been found elsewhere along the railway but it looks as if most sites have now been overgrown by **gorse** and **broom**. Reports indicate that this part of the quarry was filled in around 2006 and probably has never had a small blue colony. However the presence of kidney vetch suggests that this could be a potential introduction site although it is now isolated from other small blue colonies in Angus.

The quarry proved interesting for birds with records of **yellowhammer**, **bullfinch**, **goldfinch** and **whitethroat**. **Willow warbler** and **song thrush** were identified by song and Anne and Barry heard a **garden warbler**. A number of **gold swift moths** were flying amongst the **kidney vetch** and **yellow shell** and **silver-ground carpet moths** were also seen. There was a diverse plant list including **northern marsh orchids**.

David Lampard

EARLSFERRY TO LOWER LARGO

Fife Coastal Path

28th June

We had a slightly late start due to the bus being held up while the Commonwealth Games baton relay went through Monifieth. The bus dropped off more than 30 Nats members at Earlsferry, adjacent to the golf course, before continuing on to Lower Largo, where it took two or three others who didn't want to do quite such a long walk and where it would pick up everyone later in the afternoon.

The weather started off quite pleasantly for our walk south along the coastal path. The wild flowers were out in good measure as we walked by the golf course and the edge of the beach. These included **restharrow**, **lady's bedstraw**, the remains of **cowslips**, **thyme**, **sow thistle**, **orache** and **valerian**. On the **ragwort**, we found a few **cinnabar moth** caterpillars and **meadow brown** and **ringlet butterflies** were plentiful on the banks covered in wild flowers.



Out on the water we saw groups of **eider ducks** with their ducklings and **gannets** fished further out. **Oystercatchers** were everywhere and overhead **starlings**, **swifts**, **swallows** and **house martins** soared through the skies. **Grey seals** sunned themselves on the rocks and nearby **cormorants** stood, wings open, to enjoy the sun. We spotted many **meadow pipits**, **skylarks**, **goldfinches** and **sedg warblers**. Further on, we had wonderful views of **linnets**, as they sat close by, on top of tall plants. Many **reed buntings** and **yellowhammers** were also around.

The footpath took us on towards Shell Bay and the adjacent caravan park, where, unfortunately, we did have a short shower. We passed by many more varieties of wild flowers, including **meadowsweet**, **hare's-foot clover**, **thrift**, **heartsease**, **green alkanet**, **stonecrop**, **fumitory** and some late-flowering **hawthorn** blossom.

All around us were birds singing, butterflies flitting and the colourful wild flowers. One **small tortoiseshell butterfly** was spotted but we also saw about five **common blue butterflies**, a striking blue only on their backs, but with a narrow white trim to the edges of their wings. A **fulmar** was seen gliding, stiff-winged, off the cliff edge and a **kestrel** over farmland nearby. **Burnet rose** and **gorse** bushes provided cover for smaller birds, including **wrens**, **whitethroats** and **dunnocks**.



Arriving at the SWT site at Dumbarnie Links, just a mile short of Lower Largo, we met up with our Hon President, Gordon Corbet, who lives nearby and had kindly agreed to meet us there. Gordon had been one of the leading SWT campaigners involved in saving this area and for which he was Reserve Convener. He told us a bit of the background of the reserve and that it was bought in 1998 by the SWT, with help from Fife Council. It is an area of dune slacks, behind which a hummocky hinterland is host to over 160 different species of beetle, despite the apparent uniformity of habitat, many birds and flowers. **Marsh marigold**, **northern marsh** and **early purple orchids**, **grass of Parnassus**, **cowslips**, **cranesbill**, **vetches** and other wetland plants flourish. **Viper's bugloss** was growing well and Gordon showed us some **hound's tongue**, growing at the northern limit of its distribution.

The last mile, towards Lower Largo, along the old railway line, brought us back to the coach park and everyone seemed to have had a good day. Some even managed an ice cream before our departure for home.

Liz Olejnik

LINKS WOOD, WORMIT

8th July

About 15 members met up for an evening wander around what was once a sand quarry but is now an open grassy area, rich in wild flowers and with a pond which is surrounded by trees and has a variety of ducks. It is situated just off the main Dundee to Kirkcaldy road, adjacent to Links Wood and is part of the St Fort Estate.

Following heavy rain earlier in the day, the evening turned out to be beautiful. Access is via a wood yard where indeed some rather notable fungus was seen growing on old tree trunks. Also present were **Himalayan balsam** and **greater** and **rosebay willowherbs**. A **small tortoiseshell butterfly** settled close by.

Passing on and along the track, a **blue-tailed damselfly** was spotted in the long grass and many **ringlet** and **meadow brown butterflies** flitted about in the sun. There were various flowers evident, including **hedge woundwort**.

A flooded field on the left, produced sightings of a **moorhen** and two large chicks, **mallard** and ducklings and a **common sandpiper**, which eventually became unsettled and flew off overhead. A stand of **reedmace**, coming into flower, was seen right next to the fence.

On the main pond, we spotted a **heron** and two **dabchicks**, along with a dozen **tufted duck**, looking less than handsome in their eclipse plumage, and also a single female **tuftie** with seven small ducklings, which were busy darting to and fro. (Later on in the year, there is a greater variety of ducks and geese here, and a **kingfisher** has also been seen.)

Walking on in a wide sweep of the grassy area, a few members got good views of **common blue damselflies**, a **six-spot burnet moth** and, on the many **ragwort** plants, lots of **cinnabar moth** caterpillars. **Peacock butterfly** caterpillars were seen, large, hairy and black, on **nettles**.

Two kinds of **orchids** were found in amongst the grasses. A darker, sturdier orchid with unspotted leaves had finished flowering and a pale lilac orchid, with spotted leaves, was thought to

possibly be a hybrid. Some of these grew together in a tightly knit clump, with the central one taller than the rest; it was quite lovely.

Other flowers included different **vetches**, **cudweed**, **spear thistle**, **creeping thistle**, **green alkanet**, **fool's parsley**, **birdsfoot trefoil**, **clover**, **dove's foot cranesbill**, **lesser stitchwort**, **self-heal**, **red bartsia** and **figwort**. Unfortunately, one area has been colonised by **Japanese knotweed**.

Other birds included **mistle** and **song thrush**, **yellowhammer**, **chaffinch**, **swifts** and **swallows**, feeding over the ponds. Also spotted were a young **bullfinch**, **oystercatcher** and **coots** with young.

Round the far side of the pond, the path is rather overgrown and narrowed at this time of year, but having struggled round, it does then open out again, to allow completion of the circuit, to rejoin the original path.

The evening proved very popular amongst the insect, bird and botanical enthusiasts.

Liz Olejnik

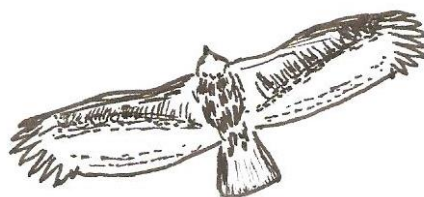
STRATHARDLE

19th July

A group of 23 members came on the coach to Strathardle. Two were dropped off at Enochdhu to follow the low level footpath along the River Ardlie to Kirkmichael.

The rest of the party were dropped off at the recently-closed school in Straloch and followed the farm track north, along the west side of Allt Fearnach. The primary aim of the morning was to follow the geology trail written by Carol Pudsey of Tayside geodiversity. The first feature to see was the loch at Straloch which was originally a **kettle hole**. This is a relic of the Ice Age, formed when a piece of glacier breaks off and is left stranded. It is surrounded by other glacial deposits and eventually melts leaving a water-filled hole. As we walked up the valley Carol was able to point out the remains of glacial features such as a **terminal moraine**, which marked the end of a glacier, and **lateral moraines** along the hillside which marked the edges of a glacier coming down the Glen. The Glenfergatie glacier merged with another coming from the west along Strathardle. Streams that flowed at an angle down the hillside indicated old meltwater channels. One of the more noticeable features was the impact on modern day agriculture and vegetation. In the bottom of the valley where glacial sediment was deposited, fine soil has developed along the terraces and arable crops are grown. Higher up where bare rocks were exposed the vegetation is poorer and more sparse and is used as upland grazing.

After lunch several members returned along the same track back to the coach. The rest continued along over rough ground past a forest plantation and along the river to an estate bridge and then back along a path on the far side of the valley down to the coach. This middle section was quite challenging, with some strenuous going and a crossing of a steep-sided stream. The final section along the river to the bridge was quite soft going. This was not helped by a turn in the weather with heavy rain showers. Although there was very little wildlife visible there were a number of **orchids** and some **bog asphodel** along the route, along with **sundew** and **butterwort**. **Peregrine falcon** (but see below. Ed.), **buzzard** and an **osprey** were amongst the few birds seen. This was unfortunate because during the recce trip **golden-ringed dragonfly**, **green tiger beetle**, **ringleet** and **northern brown argus** were flying. However this was a memorable outing for 2014.



David Lampard

Up the track north of Straloch I saw a raptor fly by with pointed wings but flapping then gliding, during which the head was bent down to the feet as I've seen **black kite** do in France when eating insects. The tail was spreading at times and the wingtips were slightly upturned - it didn't seem like **peregrine** (though others said they'd seen peregrine). Having looked at video online and consulted with 'experts' it has been confirmed as a **hobby**!

Daphne Macfarlane Smith

CARSEGOWNIEMUIR BARBECUE

5th August

A warm and sunny afternoon helped to attract 20 Naturalists and friends to our annual summer barbecue, this time in Carsegowniemuir Quarry near Aberlemno. Anne already had the fire lit in a sheltered hollow when Brian came along, leaving Jenny, Tracey and Mo to dispense their always-welcome libations of hot mulled 'Chateau Allan'. It just wouldn't seem to be an occasion without it! Then most of the rest of the party walked in along the main path to join the fun. Some immediately continued on to the hide close by and admired its interior. As Barry remarked, "I've never seen such a comfortably-fitted hide. ...And you've even got a dust-pan and brush!" Nearly everybody made the most of the abundant and luscious wild **raspberries**, Brian, Margaret, Peter and his brother and wife, among them. Several people, Linda, Roslyn and others, sampled the delights of true wild **strawberries** for the first time, from 'Strawberry Hill', and agreed they were different but still delicious.

A small party went off on a tour around the quarry, reaching pond 5 at the far end, while the rest concentrated on the item most in their thoughts - the food. It was much enjoyed by all. Liz came along to join the tour, although unfortunately Katie couldn't find them, and the group returned along the winding back paths. Cathy continued to catch small moths in her insect net while others stopped to examine overhanging **oak** leaves for the **spangle galls** underneath. David and Lorna, Gordon and Davie, meanwhile, had explored around and Davie spotted some interesting fungi - one of which eventually was identified as *Lactarius pyrogalus*, the **hazel milk-cap**, which had been found for the first time at the quarry only a few weeks before. Ronnie and Loraine came along to the main group at the barbecue after a while and joined their two lurchers, Milly and Purdey, who'd been enjoying our hospitality from the start. As the light started to fade, members gradually began to drift away, fully satisfied, after a great evening. Anne, Barry, and David put the fire out and dealt with the ashes. We all helped to pack up the barbecue and carry the equipment and materials out back to the cars parked close to the cottage. Many thanks indeed to all who'd helped to make it such a successful event! And to end the late evening on a high note, a **pipistrelle bat** flitted overhead around the cottage trees.

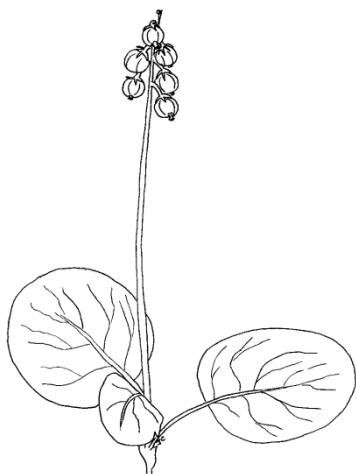
On the way home the rain started and it was pouring heavily by the time Dundee was reached; the barbecue party had been just so fortunate!

Jim Cook

MORRONE BIRKWOOD

9th August

This was a return visit to the Birkwood, no longer a National Nature Reserve, but still a wonderful place. We had wondered if we had left it too late in the year, but we need not have worried as there was plenty to see and enjoy. The weather had been very wet on the day of the leaders' preliminary visit but it kindly stayed dry for the outing.



We stopped on the way at the Cairnwell ski centre and many of us went into the somewhat improved cafe. Others looked for bird records and found nesting **swallows** on a pipe by the kitchen door and heard a **ring ouzel** nearby.

Having arrived at Braemar the larger party walked round the Birkwood track whereas a vigorous few (Joy, David and Mike) headed for Morrone hill (a Corbett of 850 metres). Another small group followed the level walk around the River Dee and enjoyed the flowers there.

The **downy birch** and **juniper** habitat was impressive and there was a fine outlook from the view point with its direction indicator. We were once more made aware of the diversity of the flowering plant species to be seen along the way and the colourful display of late summer. Pat Gaff made some interesting comments on the classification of the several **lady's mantle** (*Alchemilla*) species which were found, some of which do not fit the descriptions in the books very well. On this visit (after considerable debate)

nobody ventured up to the crags to search for the rarities there, but we were pleased to find **intermediate wintergreen** (*Pyrola media*) by the path.

The wet flushes were particularly rewarding with a good show of **yellow mountain saxifrage** (*Saxifraga aizoides*) and a variety of **sedges** and **rushes**. The drier areas were rich in **petty whin** (*Genista anglica*) and **lesser twayblade** (*Neottia* or *Listera cordata*) lurked under the **heather** in places. An unexpected find was **maiden pink** (*Dianthus deltooides*) on the edge of the pond - perhaps of garden origin here as there are houses nearby.

We were recording in tetrads (2 x 2 km squares) and each of the two tetrads yielded around 100 plant species with some overlap between the two.

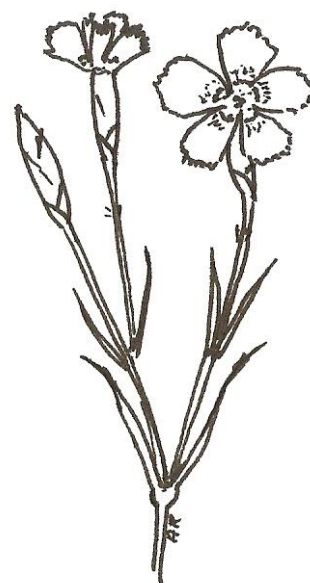
As the weather had been wet, fungi were in evidence including **chanterelles** and the **hedgehog fungus**. A number of impressive **birch boletes** were seen along the route, each one seemingly larger than the last.

With some persistence, 20 or so bird species were seen and heard including a pair of **ravens**. It is much harder to find small birds amongst the foliage once they have stopped singing at this time of year, but **robins**, **willow warblers** and various **tits** were identified. A few **moths** were in flight including numerous **twin-spot carpets**, a **northern spinach** and an unidentified **ear moth** (probably **large ear**) and **pugs**. **Butterflies** were few but several **Scotch argus** and a **red admiral** were spotted. **Roe deer**, **rabbit** and a **mole** (dead) were also seen.

There was a little time to spend in Braemar before departure and we enjoyed a variety of refreshments and shopping experiences.

Brian Ballinger

Note: **Swifts** were still screaming over Coupar Angus on the Saturday morning but none were heard or seen on arrival in Braemar, though they had been present and obvious on the recce on the previous Wednesday, despite the rain. Ed.



GUARDBRIDGE

19th August

The first we knew was Davie waving from the other side of the main bridge. "I've got one here - an **egret**", he called. We'd been standing in a line along the parapet of the old bridge looking downstream at the variety of birds, hoping for a **kingfisher**, but saw **redshanks** and **oystercatchers** (of course), a few **cormorants**, lots of **gulls**, a scatter of **bar-tailed godwits**, possibly a few **terns** far out in the estuary and several **herons**. In fact Barry and Cathy had counted eight of them, but we didn't stay long. Davie's call had us streaming across the road - carefully, to avoid the traffic - to take in the view up-river. Again there were lots of **gulls**, several **curlews** and five more **herons** but best of all, the striking white shapes of not one but two **little egrets**. We feasted on them and the view and then set off up the path on the eastern bank. A small and deformed half-grown fungus on the path attracted Stevie's attention, perhaps *Amanita excelsa*. The vegetation included such species as **amphibious bistort**, **sow-thistles**, **sea club-rush**, **marsh woundwort**, its hybrid with **hedge woundwort** and masses of **greater** or **hoary willowherb** or, to use its attractive English name, **codlins and cream**, on account of the plum-coloured petals and the creamy centre.

Just then Liz called out, "There's an **osprey** flying over with something in its talons!" and we all swivelled around to peer up into the sky further along the Eden. And there it was, with something hanging underneath. Liz said she thought it was a fish, which is most likely, but none of us could make it out. Rather late in the year, wasn't it? Maria led the way up the path and into the wood. Davie found a small dead common **wood-mouse** but what we were really looking for was a **badger sett**. There seemed to be some disturbance across on the other side but the steep and very rough nature of the terrain and the light starting to fade under the trees deterred us from exploring more. We'll need to go back some other time.

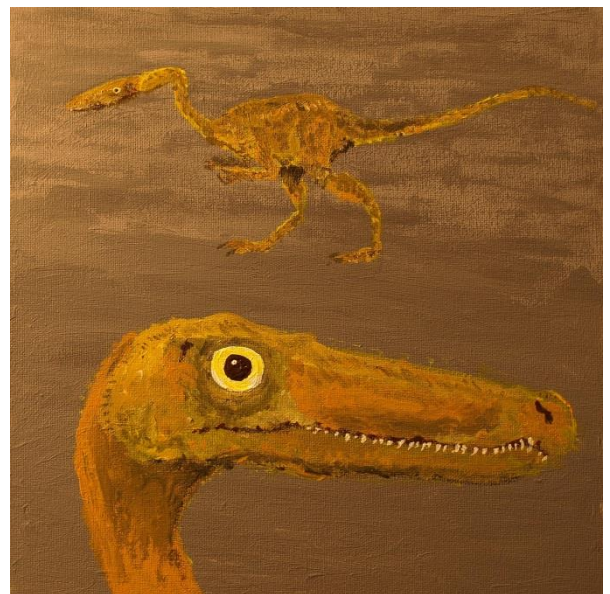
At the top of the wood we took the branch off to the right to take a look at the fishing pond. It was obviously well used although there were no fishermen in residence at the time. What was more interesting was a very strange-looking bifurcated white flower sticking up out of the water, surrounded

by floating leaves, on the other side. None of us could make it out but Barry was able to make his way round and secure a specimen and its large flat pondweed-like leaf. It was identified later, after a bit of searching through various books, as *Aponogeton distachyos*, **water hawthorn** (Why? It looks nothing like **hawthorn** in any way and has no spines) or, more appropriately, as **Cape pondweed**, introduced from South Africa and hardy in Britain. Another rather unusual species in the pond was **greater duckweed** (*Spirodela polyrhiza*), in masses around the sluice. On the way back we saw the two **egrets**, their shining white plumage gleaming in the dusk, perched on a tree on the other bank and obviously settling down for the night.

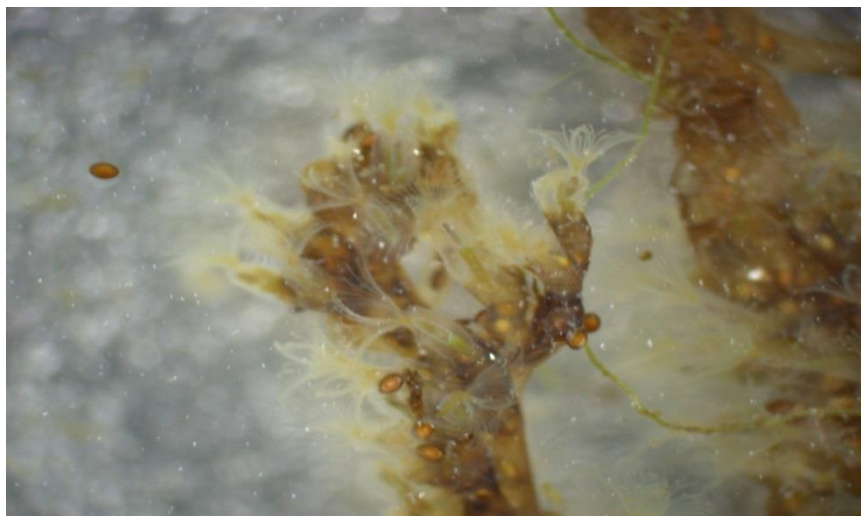
Although threatening dark clouds had come over at the start of the outing, it had been a most interesting and rewarding evening and, as Lorna said, "The rain stayed away!"

Jim Cook

PHOTOGRAPHS



Two of Mike Sedakat's paintings of British Dinosaurs from his lecture. (See page 31) Above, front to back, are Thecodontosaurus, Pantydraco and Asylosaurus; right is Coelophysis.



The freshwater Bryozoan *Plumatella fungosa*. The brown oval objects are floatoblasts. Photograph by David Lampard. (See article on page 37)



"Freckle" by Stevie Smith
The winning entry in the 2014 Photographic Competition for the Kim Eberst Trophy



Mount Etna and flowers.
Photograph by Brian Allan. (See article on Sicily on page 45)
From left: *Viola aetnensis*, *Cyclamen repandum*, *Lupinus angustifolius*, *Dactylorhiza romana*, *Orchis brancifortii*, *Anchusa arvensis* and *Asphodelus ramosus*.

SUMMER OUTINGS (continued)

ROYAL BOTANIC GARDEN, EDINBURGH

28th August

We had chosen a weekday to make a guided tour by one of the staff feasible, so all travelled to Edinburgh independently (many using bus passes! Ed.). The group had arranged to meet at the John Hope visitor centre which includes a shop and large interpretation area. Here we were met by Kate Barnard who gave us a brief introduction and overview of the current projects at the garden. Kate has responsibility for the native plant garden and is involved in the ongoing conservation work at the garden.



The New Alpine House by M J Richardson
from www.geograph.org.uk

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The new Alpine house is a modern steel structure which provides shelter for a large tufa wall. The rare mountain plants, often cushion plants, are susceptible to overwatering so the combination of free draining tufa rock and controlled watering provides a good substitute for their original habitat. As the plants are displayed on this vertical growing surface it enables the visitor to get a good view of how the plants might appear in the wild. In contrast the old Alpine house has beautiful displays similar to how the plants were grown in Victorian days. Rows of clay pots, sunk into a sand bed and top-dressed with fine grit, ensures immaculate presentation. As the display is continually refreshed there is always something in flower here.

Our guide then led us through a locked wooden door into the inner sanctum where all these wonderful plants are grown. It was an eye opener to see how much 'behind the scenes' cultivation and care went into maintaining the high standards at the garden. The glasshouse here had a special removable roof so that bulbs from Asia could have as much Scottish sunshine as possible!

The native plant area, near the East Gate, has been under development since 2013. Here are **willow** species normally found only in Corrie Fee or the higher parts of the Cairngorms and *Artemisia norvegica* found only in Torridon. As part of an international conservation effort it has been agreed to grow at least 75% of threatened plant species in ex-situ collections so RBGE (and others like University of Dundee Botanic Garden) are gathering some of these rare plants in order to help secure the wild populations. It was great to see some of these rarities looking so healthy and flourishing.

Clare Reaney

LADY MARY'S WALK, CRIEFF

20th September

This outing was primarily our annual Fungal Foray, but there were many bird and mammal species also to be seen.

We set off in the bus as the morning mist still swirled round, but after a brief stop at Dobbies Garden Centre, Perth, this began to clear, with the promise of a very fine day. Lady Mary's Walk,

which runs through woodland along the banks of the River Earn in Crieff, was named after Lady Mary Murray of Ochertyre, whose family were local landowners in the early 19th century. The three mile there-and-back route features an avenue of mature **oak**, **beech**, **lime** and **sweet chestnut** trees, some of which are over 150 years old. Autumn colours were hoped for, especially along the beautiful tree guard-of-honour, but the particularly mild weather had delayed the onset of seasonal change.

On exiting the bus, we firstly visited MacRosty Park, where there was a wealth of assorted fungi, mainly **Russulas** of many colours, to be examined growing underneath some of the trees there, including **larches**, with their edible boletes, *Suillus grevillei*. I was pleased to find *Mycena pura* too, really common, but one which I had never found before. Some samples were taken for closer study later in the day - no thanks to myself who kept forgetting to pick my mushroom basket up and had to be reminded by others, where I'd left it last! We made our way to the narrow path which followed the Turret Burn to its confluence with the River Earn. Our first interesting find on this section was a **weeping bracket**, growing just above head height on a stump, which had several of us on tiptoes, hoping for a good photo of the droplets on top. A few paces on, precariously overhanging the burn was a trunk sporting a beautiful display of *Chlorociboria aeruginascens* - the **green elf cup fungus**, which though seen frequently as a wood stain, shows the tiny exquisite cups less often.

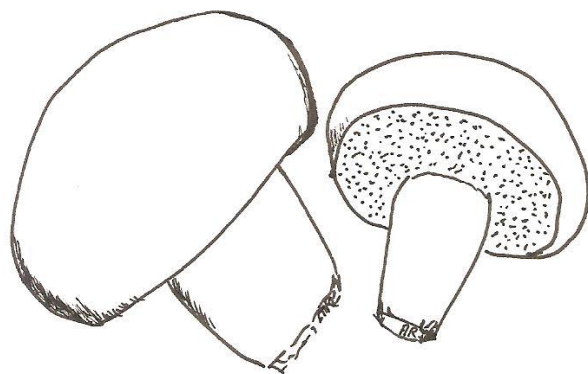
Herons, **kingfishers**, **grey wagtails**, **oystercatchers** and **dippers** live on the river and **otters** have been seen at dusk. On the recce, accompanied by Davie Stein, we were lucky to spot a **roe deer** on the opposite bank, but it did not show itself on this occasion. We did, however, see a pair of **goosanders**, beautiful sawbilled ducks, and watched as they dived for fish.

There are many well placed seats and viewpoints along the walk, which has been upgraded, and it was nice to sit and watch the River Earn flow by in between looking for fungi. Gordon Maxwell spotted a young developing **beefsteak fungus**, a stunning shade of red, which we all admired. An edible species, but it would have been a shame to have picked one so glorious, better to leave it in situ for others to enjoy looking at. Disappointingly there was no sign of the very rare *Aleurodiscus wakefieldiae*, **pink disco**, a pretty pink-coloured encrusting fungus which Jim and I found when we did a recce in the autumn of 2013. Possibly 2014 was too dry for it. We settled for our packed lunches on the bank of the river and enjoyed the peace while we ate. Near the far end of the walk, we found a fallen log festooned with one of my favourites, **black bulgar**, a jelly fungus, which I find very tactile. Under the **beech** trees, in amongst the substrate of leaf litter, growing on decaying **Russulas** we spotted diminutive **silky piggybacks**, *Asterophora parasitica*, well worth a closer look with a hand lens. Again we found a single large stunning mushroom-type specimen growing below a tree, which was photographed from all angles, but we were reluctant to pick it for the sake of identification and the more expert of us were now ahead (either that or I was behind - again!). I strongly suspect it was a **deadly webcap**, which I hope yet to have confirmed.

Much of the riverbank in places was thick with the invasive **Himalayan balsam**. All the same, a rather attractive plant, very popular with several late **bees** and **wasps** which we noted were well dusted with white pollen on emerging from the helmet-like flowers.

Some of the group favoured a longer walk, led by Anne Reid, turning right through a gap in the old railway embankment at the end of Lady Mary's Walk, the circular route onto nearby Laggan Hill being well signposted. This walk goes through mixed woodland and gives splendid views to the surrounding countryside.

We returned to the picnic tables next to the car park to re-group and closer examine our haul and complete and share the identification of the specimens we had collected. We were all fascinated with the speed at which one of the freshly cut boletes instantly turned a deep shade of blue on the cut surface. Some of the more interesting specimens included **beech jelly disc**, **woolly milk cap**, **red cracking bolete**, **rooting shank**, the beautifully translucent **porcelain fungus**, **hen of the woods** and the very poisonous **panthercap**. Such a great day out and so many enthusiastic Nats. Grateful thanks to Gordon Maxwell, Pat Gaff and Davie Stein for helping with identifications and Aldi for clarifying how to prepare some of the edibles.



Stevie Smith

AUTUMN LECTURES

THE TAY:

Scotland's Longest River, Europe's Cleanest Estuary

Professor Rob Duck - 14th October

The first talk of the winter season was very well attended with over 50 in the audience. Professor Duck's talk covered the history, geology and geography of the Tay estuary. Professor Duck started by describing how difficult it is to define an estuary. One of the most acceptable methods, which is based on measurements of salinity, was invented by Rev J Fleming of Flisk in Fife along the south bank of the Tay in 1811.

The Tay catchment covers 6,500 km² and two thirds of it are in the Highlands. It has the largest volume of water of any UK river. Today the estuary contains a high amount of sediment. Most of this is brought in from the sea not, as is commonly supposed, derived from the land.

The Tay estuary valley was originally formed between two fault lines. During the Ice Age, starting about 2.5 million years ago, the valley was deepened to a depth of 70m by glacial action. On the retreat of the glaciers this channel was buried by sediment. The present day channel cuts its way through the upper part of this sediment. Terraces visible along both sides of the Tay are raised beaches, formed as the sea level changed during different periods of the Ice Age.

The Tay has flooded many times in the past with the highest water level recorded in 1814. Although there was less water in 1814 than in some more recent floods, bridges were blocked with ice. The last major freeze on the Tay was between 1979-1982 when there were ice-floes in the river.

The estuary is the winter home for large numbers of **geese**, **ducks** and **wading birds**, and has the longest reed bed in the UK. This was planted in the 19th century between Perth and Invergowrie to reduce erosion and reclaim land.



Waders on the Tay mudflats. (Photograph Anne Reid)

Between Dundee and Perth the Tay catchment has a rural character, but around Dundee there has been much land reclamation. With the building of the railway line across bays of the estuary the area behind it was all reclaimed. This reclamation continued up to the 1960's and there were even plans to infill Invergowrie Bay.

At the seaward end of the estuary the northern bank is subject to erosion and features such as sand dunes have been reduced. On the south side, however, Tentsmuir Point is the fastest growing area of land in the UK.

Like many estuaries the Tay is subject to pollution from industry and human waste. Since the completion of the Hatton treatment plant and long sewer outfall in 2001 the estuary has a much improved water quality and it appears no coincidence that the now-familiar sight of **dolphins** during the summer is a consequence of this.

Looking to the future there is the possibility of sea level rise and an increase in storms affecting the estuary.

David Lampard

WILDFLOWERS OF THE GREEK MAINLAND

Brian Allan - 28th October

Brian presented a wonderful travelogue covering a large part of mainland Greece, from the Macedonian border in the north to the most southerly point of the Mani peninsula. This talk gave us an overview of the diversity of bulbs and orchids which can still be found in mountainous areas.

With over a hundred slides we were able to see some of the great sites of antiquity, which often shelter a good range of plants as they are protected from grazing. The site of Mycenae harbours many *Sternbergia*, as well as the tomb of Agamemnon. As the snowline retreats in spring many bulbs emerge such as *Crocus sieberi* ssp. *nivalis*, looking tiny and fragile amongst the rock and snow. A terrific range of **bee orchids** (*Ophrys* sp.) and other beautiful **orchids** were presented.

Showing the plants in their natural habitats, often surrounded by forbidding mountains, gave us a real insight into the effort and persistence required to locate these species. There were some great pictures of Dundee Naturalists also in their natural habitat, a social species known for its curiosity and commitment to Latin names!

Clare Reaney

URBAN BOTANY OF SCOTLAND - A CITIZEN SCIENCE PROJECT

Professor John Grace - 11th November

Joint meeting with the Botanical Society of Scotland

John Grace, emeritus professor at Edinburgh University and president of the Botanical Society of Scotland, described the Scottish urban botany project which starts in 2015 after a series of pilot studies this year. The aim is to involve people with various levels of expertise, from individuals with only a limited knowledge to those with greater experience.

Urban flora is of considerable interest and is often under-recorded in spite of its close proximity to most of the population. Urban habitats are varied and include micro-climates that are often warmer than the surrounding countryside, enabling colonisation by more southern species (which may appear more widely with future climate change). As well as native plants many alien species are often to be found.

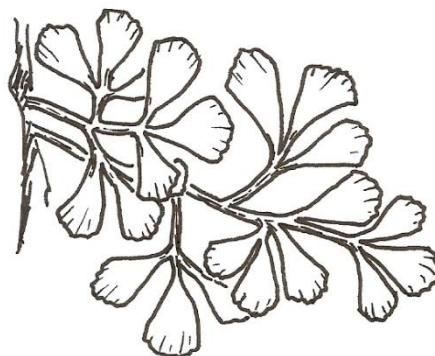
Professor Grace described the childhood games with plants that many of us played, such as **daisy** chains and **dandelion** clocks, which are not being followed by many youngsters these days, who are more preoccupied with electronic devices. The aim of this project will be to re-engage the wider community with the plant life all around us. It must be fun but it must also be scientifically robust.

Some city floras have been produced in the past, notably Edinburgh and the Lothians, Glasgow and Birmingham, but these were mainly the work of experts. Cities contain a wide variety of habitats within their limits, including some rural areas and a final decision is required as to whether to include these or limit the project to the built up environment.

A telephone app. is being developed for data entry, although for many of us a computer input will be more usual and some may prefer pencil and paper. Websites are available to aid identification. Participants will be encouraged to photograph plants and seek help with identification. Procedures will be in place to ensure the accuracy of recording. It is hoped that much of the data will also be useful for the Atlas 2020 of the Botanical Society of Britain and Ireland.

John described the pilot projects of 2014 including allotments, **bryophytes** and wall plants. Some other organisations have agreed to cooperate, others are being approached. The Dundee Naturalists' Society has included an urban outing in its draft 2015 programme. We look forward to hearing about and hopefully participating in the progress of this project.

Brian Ballinger



Wall rue

ARTIST IN RESIDENCE AT TENTSMUIR

Derek Robertson - 25th November

Well-known local artist, Derek Robertson, was asked to participate in this project as part of the celebration of the Year of Natural Scotland in 2013. Its aims were to encourage people to get out and explore the natural environment of Tentsmuir and, perhaps, to look at it in a different way than previously.

Derek has been both artist and naturalist since he was a boy and remembers first sketching in Tentsmuir Forest at the age of 12. He was thus eminently suited to the task of recording such a well-known place for the project. SNH sponsored the year with cooperation from the Forestry Commission who gave full access and continue to do so long after the formal end of the project.

Though most of his sketching and painting is done outdoors, Derek has a trusty blue van which doubles up as transport, hide, studio and shelter. His understanding of his subjects, through long observation and bird ringing, helps to add an extra dimension to his artwork. In addition, the sketches have extensive notes on behaviour and setting to help with studio-based follow-up paintings.

We were shown images of artwork of a wide range of plants and animals from all of Tentsmuir's habitats and also gained further insight into Derek's working methods which included the use of remote cameras to help him to pinpoint 'hot spots' and to determine the timings of some nocturnal animals' behaviour.

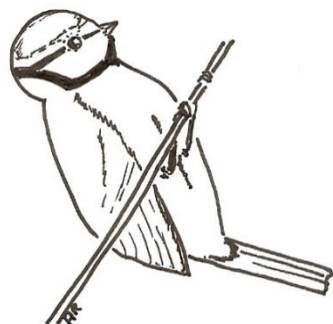
Fortuitously, there was an exhibition of Derek's work in the Lamb Gallery, one floor down from our lecture venue (not known when the lecture was booked), so at the end of the lecture we all moved downstairs to complement what we had been told and to see some of the artwork for ourselves, with the artist available to answer our questions.

Anne Reid

BACKMUIR WOOD

29th November

Despite a less than favourable weather forecast, around 20 Nats turned up for this Saturday morning walk, enticed, perhaps, by the prospect of lunch at the end of it. All had been warned of very muddy underfoot conditions so a high proportion were in wellies. There were options of a short circuit, staying within the wood, and a longer one which led from the west end of the wood to a track down to Liff village and the party split, roughly half on each walk.



There were still a few fungi in the wood which slowed early progress as we stopped to examine an extensive bracket on a fallen tree and **porcelain fungus** on an upright trunk. Wendy spotted a **red squirrel** nearby which was very hard to see as it retreated from our group, and Barry found a **bullfinch** which was similarly shy. Cathy found a rather damp moth which was later identified as a **scarce umber**. A **robin** appeared beside us, as if to inspect our progress, and **great** and **blue tits** were sometimes accompanied by **goldcrests**, **siskins** and **coal tits** high in the conifers. One of the tall trees on a field boundary just beyond the wood had a small, vocal flock of **starlings** high in its crown and on closer inspection there were a few **fieldfares** amongst them.

More fungi were found as we progressed including *Russula ochroleuca*, *Coprinus micaceus* and **olive oysterling** (*Panellus serotinus* or *Sarcomyxa serotina*) on a **birch** trunk. Perhaps the most interesting find was a cluster of the **false hedgehog fungus** or **toothed jelly fungus** (*Pseudohydnum gelatinosum*) on yet another fallen tree. By this time it had started to rain so we swiftly made our way back to the car park, distracted only by the raucous call of a departing **jay**. Immediately opposite we noticed a small group of **pinkfoot geese** take off from the stubble field. As the rain eased (temporarily) a small group gathered by the large gatepost, all peering intently at a flightless **female moth** in an unusually conspicuous position.

The party on the longer walk added **greenfinch**, **goldfinch**, **house sparrow** and **buzzard** to the bird list and **dryads saddle** and **witches butter** fungi. **Gorse** bushes still had some flowers but little else of botanical interest was seen.

As the rain came on again we retreated to the comfort of the Birkhill Inn for a most enjoyable lunch.

Anne Reid

BRITISH DINOSAURS

Mike Sedakat - 9th December

Christmas Night is always a popular occasion for the Nats. The Baxter Suite provides relaxed, well-appointed surroundings, and there is always a tempting array of 'goodies', most of which is home-baked by members.

This year's Christmas lecture was delivered by Nats member Mike Sedakat. Those of us who were expecting a treatise on fossilised bones, were not only surprised, but delighted to sit back and enjoy Mike's beautifully painted, full-colour reconstructions of how the dinosaurs might have looked during their time on Earth, pictured within their evolving habitats - not a fossilised dinosaur bone in sight! Mike's entertaining talk was filled with humorous anecdotes, and the lecture concluded with an 'Attenborough moment', when Mike demonstrated his art techniques, mostly painting the dinosaurs and backgrounds separately, before arranging and photographing the final assemblages.

The fossilised remains of around 100 dinosaur species have been found in UK locations. The species illustrated spanned three geological eras. The earliest dinosaur fossils were from the Triassic period, around 220 million years ago, when the UK was still part of the supercontinent of Pangea. Many of these early British dinosaur fossil remains were discovered in Wales. Some early dinosaur fossils in the Bristol Museum were lost during World War II bombing raids, but some were 'rescued' by scientists and taken to the US.

There was a mass dinosaur extinction at the end of the Triassic, possibly due to increased volcanism, but a catastrophic meteorite hit is another plausible theory. During the Jurassic era, whilst the dinosaurs slowly recovered, other competing animal species evolved and diversified, including mammalian species. Complete dinosaur fossils, of the marine **Plesiosaur** and **Ichthyosaur** species, were discovered by fossil hunters on Dorset's famous Jurassic Coast, but other locations, including the Yorkshire coast and the Isle of Skye, also yielded good dinosaur fossil specimens. During this era some evolving dinosaur species are thought to have been warm blooded, and a few species may even have evolved feathers.

Attempts to reconstruct animals from fossil remains invariably involve some guesswork, particularly with incomplete specimens or where bone fragments are scattered over a wide area. Mike made us laugh, with a weird Victorian depiction of **Megalosaurus**, very different to the present day reconstruction of this predatory, **Tyrannosaurus**-like dinosaur.

During the Cretaceous era, the Earth's continents were separating, and the oceans and land masses were beginning to look more like the present day global map, with many countries now identifiable. The dinosaurs had now evolved to include land, aquatic and flying species, with predatory, herbivorous and scavenger species all represented. A few feathered dinosaur species are now known to have existed. Some larger predatory dinosaur species are known to have preyed on smaller dinosaurs. In the UK, these fossils were mostly found in the South of England, including the Isle of Wight. The **Neovenator**, a relative of **Allosaurus** species, is thought to have preyed on **Iguanodonts**.

The Sauropod, **Pelorosaurus**, could weigh up to 30 tons and have a neck 10 metres long. Surprisingly, this herbivorous dinosaur is thought to have mostly eaten **pine** needles, the long neck



Saltopus

enabling the reptile to reach the juicy young shoots near the tree tops. Several other large dinosaur herbivores were present, including **Polacanthus**, a species with spikes on its back. This dinosaur could grow up to five metres long and weigh more than 700 kilograms.

Perhaps these huge dinosaurs eventually became too large for their habitats to sustain. There are many theories about what caused the dinosaurs' eventual extinction, including 'catastrophic' meteorite/asteroid Earth collisions and volcanism. The most likely explanations involve a combination of circumstances, including both destruction of habitats, and perhaps other evolving animal species, successfully competing with the dinosaurs for food and habitat niches.

Mike concluded his lecture with a depiction of *Tyrannosaurus rex*, not believed to have been a British species, but nonetheless an iconic dinosaur, which has helped to raise the previously rather 'dusty' profile of Palaeontology. Several British predatory dinosaurs were closely related to *T. rex*.

Many thanks to Nats Secretary Lorna Ward for efficiently organising the excellent spread and refreshments, and to Anne Reid for ensuring the smooth running of the audio-visual technologies in the Baxter Suite. Mike has very kindly allowed us to reproduce some of his excellent artwork in this Bulletin. (One painting above, two more in colour section on page 24. Ed.)

Jenny Allan

GARDEN WILDLIFE

10th December

The Dundee Naturalists' speaker for the Wednesday afternoon lecture series was our immediate past President and Bulletin Editor, Anne Reid.

A goodly crowd attended and, as always, Anne presented a well-structured lecture. We were all amazed at the amount of wildlife, literally on our own doorstep. Anne's well-taken images took the audience through the complete range of species, from mammals and birds through to the tiniest insect, a true revelation.

From the reactions heard following the lecture, those present found the talk to be fascinating in the extreme.

Brian Allan

MEMBERS' ARTICLES

INTERESTING SIGHTINGS 2014

This compilation is intended to let people know what has been seen locally. All contributions are welcome. Each entry is followed by the initials of the recorder. The location of garden records is noted on the list below.

The start of the year was not cold but was very wet, though we did not get the catastrophic floods and storms experienced in southern England. January was, however, generally very dark and dull so that a few partly sunny days at the start of February were most welcome. April was mixed with some warm spells, but never hot, and there were a few nights of near frost at the end of the month.

Summer was unremarkable, apart from a wet spell in August (when I was on holiday! Ed.). Record temperatures of 15°C were noted at the end of October in Dundee. The first hard frost of the winter was not until early December and a few snow flurries were also recorded, and the Sidlaws were lightly dusted with snow.

Margaret Bainbridge	MB	Monifieth
Brian Ballinger	BB	Dundee, West End
Jim Cook	JC	Broughty Ferry
Colin McLeod	CM	Johnston Avenue, Dundee
Liz Olejnik	LO	Wormit
Anne Reid	AR	Monifieth

Colin Reid	CR	Monifieth
Daphne Macfarlane Smith	DMS	Broughty Ferry
Stevie Smith	SS	Arbroath, St Vigean
Brian Williamson	BW	Law area, Dundee

1st January At the start of a BTO Winter Thrushes survey walk, west of Glamis, the first bird I saw was a **raven** flying overhead. I did find **mistle thrush**, **fieldfare** and **blackbirds** towards the survey too! AR.

2nd January Two male **blackcaps** squabbling over the fat blocks in the presence of a female in our garden. BW.

6th January Adam and I saw a **sea eagle** flying over St Fort Estate, Wormit. LO.

7th January I disturbed a **woodcock** just into the field up from Wormit Bay. As I came down towards the kissing gate it shot out of the bushes in front of me. LO.

12th January Saw my first **redwings** of the winter (six) on *Sorbus* bushes on Balgay Hill. BW.

13th January While on a walk along the shore path near the mouth of the Dighty I found two **dandelions** in full flower, admittedly south facing. On the small patch of shingle by the Dighty Bridge there were over 20 **turnstones** scuttling amongst the stones, shells and seaweed busily looking for food. They never stopped for a second and were almost impossible to photograph. AR.

14th January Two **otters** seen swimming in the Tay about half a mile west of Wormit. LO.

19th January Adam and I were at Morton Lochs in the afternoon and saw a **sea eagle** flying overhead and then two **otters** in the loch fishing and then eating their catch up on the bank. It is the first time we have seen them there. LO.

22nd January Bill and I were delighted to see two elegant **cranes** (birds!) in a field west of Glamis Castle. DMS.

23rd January Low tide at the Eden Estuary brought over 200 **black-tailed godwits**, about 500 **lapwings**, **shelduck**, **long-tailed ducks**, **red breasted merganser**, **curlew**, **oystercatcher** and **redshank**, together with all the visitors on the feeders, including **siskin**, **tree sparrow** and **great spotted woodpecker**. BW.

30th January While recording for the Winter Thrush survey at Arbuthnott I came across a large flock of about 100 finches. Most were **chaffinches** and **goldfinches** but there were also **linnets**, **greenfinches** and **bullfinches** amongst them - a wonderful mixture. Shortly afterwards a **woodcock** flew along the road verge ahead of me and into woodland. All that I found for the survey were two **blackbirds**! AR.

2nd February I noted a flock of excited **goldfinches** in a tree in The Howff. BW.

9th February Six **magpies** in a tree in the Miley SWT reserve. BB.

9th February A large queen **bumblebee** seen flying at Riverside sports ground on a warm, sunny afternoon. CR. (Either an early emergence from hibernation, or one which has been active all winter in the generally mild conditions. Ed.)

12th February Once or twice, very late at night, a few sharp barks caught the ear. At this time of night and with that tone, it must have been the local **foxes**. JC.

22nd February A walk round the lower Dighty, near home, was punctuated by birdsong - the beginnings of spring. **Duncock**, **wren** and **song thrush** were most prominent but the **goldfinches** were twittering overhead in several places. Though I saw no **dippers** on the Dighty I did hear their alarm call twice, both times near to where a female **goosander** was making her way downstream, fishing as she went. AR.

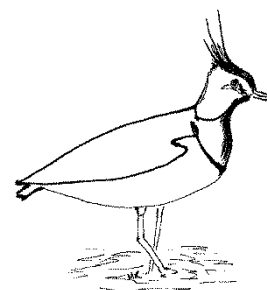
28th February On the cherry trees on Law Crescent, I counted four pairs of **bullfinches**. BW.

1st March Despite frost overnight, two sunny days had brought out a **peacock butterfly** seen flying around the strand line at Tentsmuir Point. AR.

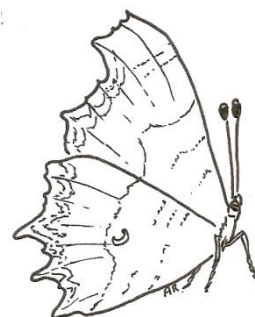
1st March At Loch of Kinnordy I was pleased to have good views of 14 **snipe** on the **bogbean** islands, a male **smew** in full sunshine, and **oystercatcher** (c. 50), **lapwing** (c. 50), **mallard**, **tufted duck**, **goldeneye**, **gadwall**, **teal**, **wigeon** and **scaup**. Only 20 **whooper swans** were present, but four **buzzards** were quartering the hillside to the north for rabbits. BW.

5th March **Frog spawn** in the garden pond. BB.

12th March My first sightings this year of a **small tortoiseshell butterfly** and **bumblebee** in our garden. BW.



- 12th March** The female **goosander** still on the lower Dighty and all the **dippers** seen were busy building nests. I also heard a **chiffchaff** singing for a short time, possibly just passing through the area but very early after the recent mild weather. AR.
- 15th March** Had a close encounter with a male **sparrowhawk** that alighted on the wall along Adelaide Place before diving into a neighbour's garden. BW.
- 21st March** Saw an **otter** cross the road just east of the Tay railway bridge at about 12.30pm. I guess a female, of average size and darkish colour. It disappeared down a hole in the wall to reach the foreshore. MB.
- 22nd March** In a blink of warming sunshine, a small whitish-coloured butterfly, perhaps a **green-veined white**, flitted briefly through the garden; the first of the year for me. JC.
- 24th March** Heard a protest cry from a **herring gull** across the road from our house and saw a **carriion crow** apparently on top of it, knocking it down towards the ground. They were hidden from view behind a wall so I rushed to see the outcome but both birds had vanished! DMS.
- 25th March** A **green woodpecker** yaffling and a **chiffchaff** singing at Crombie Country Park. SS.
- 26th March** At Vane Farm and Findatie I recorded 52 bird species, most notably 12 **snipe**. Heard the call of a **chiffchaff** (my first summer visitor) and saw **grey wagtails**, a pair of **long-tailed tits** collecting nesting material, 30 **whooper swans** feeding on a nearby field and **skylarks** rising. **Redpoll**, **siskin**, **tree sparrow**, and **finches** and **tits** were on the feeders, and a **glossy ibis** was obligingly feeding in a meadow near the road south of Kinross! BW.
- 26th March** In St. Vigeans Den I saw a **comma butterfly** on **pussy willow**. It must have overwintered! Also saw a **small tortoiseshell** and a **peacock** and heard another **chiffchaff**. SS.
- 29th March** Four **swallows** seen at Balgavies Loch. My first of the season. SS.
- 5th April** Delighted to spot a pair of **song thrushes** nest building in the garden. Unfortunately they were not successful. AR.
- 9th April** At Riverside Nature Reserve on a mild windy day I saw a **reed bunting**, **skylark**, **starling** and **oystercatcher**. On the estuary mud there were **shelducks**, **teal**, **mallard** and the usual **gulls**. BW.
- 13th April** Finally, my first **willow warbler** singing slightly half-heartedly and a single **sand martin** over the water, both at Clatto Reservoir. AR.
- 14th April** Four **bumblebees** - one **white-tailed**, one **early**, one **carder** and one **red-tailed** - plus two **butterflies** - one **small tortoiseshell** and one **peacock** - in our garden. DMS.
- 14th April** For about 20 minutes, starting at about 8.20 am, a **chiffchaff** sang its distinctive song from a tree in the garden next door; a first in this immediate area. A few days later I heard one calling from the tall conifers in the grounds of the Gardyne Road Campus of Dundee College, at the bottom of Strathern Road, where they were calling last year. I've since heard them several times at the same site. Presumably they're nesting. JC.
- 17th April** My neighbour saw two **swallows** over field by Ashludie farm, Monifieth. MB.
- 21st April** A **crow** pulled a **frog** out of the garden pond and flew away with it. BB.
- 27th April** On the Rosemill Road path along the Newtyle Railway track I saw several **skylarks** in flight, four **willow warblers** (and several heard), **yellowhammer**, **chiffchaff**, a **song thrush** singing 2m above my head in a **hawthorn** bush and a pair of excited **hares** in boxing behaviour! BW.
- 7th May** Two **stock doves** were on the lawn - never seen in our garden before. Slightly smaller than **wood pigeon**, two dark bands on wings and attractive dark brown eyes. (They returned several times over the next two weeks then vanished.) DMS.
- 7th May** A visit to Morton Lochs provided the first **swifts** of the year, flying fairly low over the water until a heavy shower set in and they moved on. By chance, I met Liz there and we were both excited that we had seen the birds. More **swifts** heard screaming in Broughty Ferry the following day. AR and LO.
- 12th May** A small flock of **swifts** were wheeling and screaming above Broughty Ferry. It's great to see them back, proof that summer's here at last. JC.
- 13th May** In Glen Lednock I was delighted to hear three **cuckoos** calling, and saw a male **wheatear**, **grey wagtail** on the river and a **common sandpiper**, amongst several other species. BW.
- 21st May** A **jackdaw** flew over our house, unusual sighting for us. DMS.
- 23rd May** On the M90, heading south, I had a glimpse of the unmistakable silhouette of a **red kite** on the stretch near Glenfarg. AR.
- 2nd June** A large skein of 42 **Canada geese** were seen heading out over the



Stannergate into the Tay estuary. They continued south over Fife and gradually disappeared over the hills behind Tayport. Did anyone else see them? JC.

4th June A **magpie** was heard and seen to feed a young bird in the Eastern Cemetery; a sign that they are breeding there or in the close vicinity. JC.

10th June A **jay** visited our rowan tree. A second bird was seen on 18th June. BW.

10th June An unusual find, **fern grass**, *Catapodium rigidum*, was found growing in hard-packed rubble beside Mid Craigie Road (at NO 427319). JC.

11th June At Fife Ness watched **puffin**, **guillemot**, **gannet**, **cormorant**, **shag**, **dunlin** (in summer plumage), **eider**, **fulmar**, **sandwich tern** (first sighting) and **arctic terns** on the move. Also observed **yellowhammer**, a **whitethroat**, the usual **gulls** and a **small copper butterfly**. At Kilminning SWT Reserve I saw my first ever **corn bunting** singing on the fence wire only 3m from the car! BW.

18th June Found **hedge bedstraw**, *Galium mollugo*, in a small area being reclaimed as a public car park in the Hilltown (NO 401314). JC.

18th June A young **grey squirrel** was seen running along a garden fence bordering the Arbroath Road close to Dawson Park. They seem to get everywhere! JC.

26th June A freshly-broken and cleaned out **garden snail** shell (*Helix aspersa*) lay on a path at the back of the garden. Although I hadn't seen who or what was responsible, it was typical of the work of a **thrush**. JC.

4th July Two **bats** were circling our garden at 22.30. One or two appeared off and on for the next two weeks. Unusual to see them so much. DMS.

9th July **Swifts** and **house martins** circling over our house. A **jay** seen, and a **sparrowhawk** that took a **house sparrow** on the feeder. BW.

10th July A **large white butterfly** was flitting around a garden along Arbroath Road, one of the very few butterflies seen so far this year. JC.

11th July Saw 15 **swifts**, the most seen this year, high above Forthill though it was raining. I'd always been told seeing them fly high was a sign of fine weather! DMS.

18th July An unusual weed for the area, **prickly poppy**, *Papaver argemone*, was found in Wallace Street, Dundee (NO 410308). JC.

23rd July In the outer Tay Estuary and sand bars, on a sailing trip, saw **arctic terns**, **guillemot** (including one juvenile), **eider**, **red-breasted merganser** (>100), **curlew** (>300), **oystercatcher**, **cormorant**, **herring gull**, **black-headed gull** and **great black-backed gull**. BW.

31st July A **small tortoiseshell butterfly** was flitting around the **buddleia** in the garden, the first one I'd seen since the spring. JC.

7th August On our neighbours' **buddleia** and our **Bowles mauve** (perennial wallflower) were six **small tortoiseshells**, two **peacocks**, one **red admiral** and one **green-veined white**. DMS.

9th August An adult **common brown grasshopper**, *Chorthippus brunneus*, was seen in a rough grassy-weedy area along Constable Street, Dundee (at map reference NO 412309). JC.

11th August Six **swifts** were high above our garden heading west into the wind. The last sighting of the year. DMS.

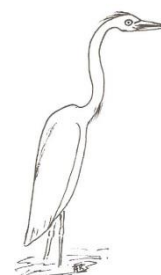
11th August In the evening two **pipistrelle bats** were flitting up and down the path and around the trees beside the Dighty at the Michelin factory, even though it was cool and still fairly breezy. They must have been hungry after the very wet and windy weather of the previous night and morning, the remnants of Hurricane Bertha from across the Atlantic. JC.

24th August At Letham Ponds in Fife I enjoyed watching a pair of **ruff**, a **little egret**, **mallard**, **moorhen**, **gadwall**, **teal**, **lapwing**, two **herons** and some **black-headed gulls** and **common gulls**. BW.

25th August On our neighbour's **buddleia** were seven **peacocks**, two **red admirals** and a **painted lady**. The latter a rare sight this year. DMS.

3rd September At Lunan Bay there were more than 100 **kittiwakes** (adults and juveniles) on the beach, **fulmars** gliding above and a few **arctic**, **sandwich** and **common terns** fishing amongst the waves. Already there were some **common scoter** and a **velvet scoter** farther out on the water. BW.

17th September A flight of **geese** could be heard going over the house towards the Tay. They may have been **pink-feet** but it was difficult to hear them clearly and too dark to see. JC.



- 24th September** Saw a **comma butterfly** in Wormit, and a second one two days later. LO.
- 25th September** Several **red admiral** butterflies were sunning themselves on the front of the house and enjoying the warmth. They appeared in fine condition and must be the products of this summer's larvae. (They continued to appear in almost every sunny spell until the end of October.) JC.
- 28th September** A **fox** died in my back garden at Johnston Avenue - a large adult vixen, but severely underweight. CM.
- 29th September** A **comma butterfly** seen by the River Almond at Perth. Also a **kingfisher**, four **dippers** and numerous **goosanders**. LO.
- 30th September** Over 300 **pink-footed geese** seen over Invergowrie Bay - my first sighting of these welcome migrants. BW.
- 30th September** Opened the back door to hear a **chiffchaff** singing in the garden. By 3rd October there were two **chiffchaffs** chasing each other round the trees and these two stayed around the garden until about 8th October. AR.
- 1st October** I had a male **sparrowhawk** across my garden today, he disappeared under the **sweet peas**, but I don't know where he went after that! LO.
- 5th October** At Loch of Kinnordy enjoyed the sight of the first arriving **whooper swans** and counted 11. BW.
- 10th October** At Fife Ness looking for migrants I was surprised to spot a **kingfisher** sitting on a rock on the shore at high tide. Others have reported this bird too! BW.
- 12th October** A walk by the Deil's Cauldron waterfall at Comrie to the summit of Ben Chonzie gave sightings of several **roe deer**, a **dipper**, two **red kites**, **red grouse** and more than 30 **golden plover** near the summit area. BW.
- 16th October** A **grey squirrel** ran along the fence between us and our neighbours' house. We rarely see one here and were not sorry when it didn't come back! DMS.
- 22nd October** A single **tree sparrow** put in an appearance at my feeders, about a week later than last year's visit. AR.
- 23rd October** A flock of approximately 40 **goldfinches** were in our neighbours' birch tree. Maybe the collective noun should be 'a twitter' instead of 'a charm' as they seem to twitter noisily all the time! DMS.
- 28th October** A walk around Clatto Reservoir gave a surprising view of 14 **goosander**, 18 **pochard**, a **great crested grebe**, a pair of **tufted ducks**, a **grey wagtail** and more than 20 **coot**, besides the usual **gulls** and **mallard**. BW.
- 29th October** A **great spotted woodpecker** and **redwings** in the garden this morning. BB.
- 3rd November** Two **kingfishers** seen at the Guardbridge Hide. LO.
- 4th November** On Balgay Hill saw my first **redwings** (10) of winter feeding on **yew** berries, and heard a pair of **jays** calling in an **oak** tree. BW.
- 9th November** At Loch of Kinnordy winter has really arrived with more than 500 **pink-footed geese** on the meadows, 200 **greylag geese** on the Loch and several **fieldfares** and **redwings** feeding on crop waste in the fields. I was also pleased to see two pairs of **bullfinches** and a **treecreeper**. BW.
- 10th November** A **sea eagle** seen at Tentsmuir. Also spotted at Kinshaldy on 27th November and 4th December. LO. (They are now resident so sightings should become more frequent. Ed.)
- 27th November** Recorded my first **blackcap** (male) in our garden today. BW.
- 28th November** Three **magpies** flew over our house. BW.
- 3rd December** Now we have two female and one male **blackcap** coming to the fat feeder on a frosty day. BW.
- December 3rd** I saw a **peacock butterfly** at Drummie Wood, north of Blairgowrie, flying despite it being a cold day, but the sun was out and it was quite sheltered in the sun. Also saw a dozen **grey partridge** and three **snipe** in the same area. LO.
- 10th December** Glanced out and saw a small brown bird on the fence and first thought was a **dunnock** but then realised its plumage was plainer and it had a black cap - yes! - a male **blackcap**. Not seen one in garden for several years. DMS.



13th December A walk over North Inch, Perth and beside the River Tay to River Almond gave many surprises on a cold afternoon, including a **goldcrest**, **kingfisher**, **redwing**, several pairs of **goosander**, three pairs of **goldeneye**, **moorhens**, a **jay** calling and a **wren**. BW.

15th December A **blackbird** was singing lustily at about 3.30 pm on a rather chill evening in a tree in the grounds of the bank next to the DCA. Surely a bit early to be tuning up for the next breeding season? JC.

28th December Three pairs of **goosander** on the lower Dighty above the road bridge in Monifieth. CR.

29th December I was scraping ice off the car when a very noisy avian lynch mob of **crows** and **herring gulls** came whirling over in pursuit of a **buzzard** which landed, very briefly, in our large **cedar** tree before flying off. A very similar scenario about a week later ended with the **buzzard** being scared off by my presence - presumably I was too near to the potential sanctuary of the trees. AR.

30th December Bill was drawing back the curtain in the lounge (still only half-light outside) when he saw a **fox** heading north through our garden. DMS.

UNSEEN HUNGER

1st January

Only a few feet below the edge of the concrete walkway bordering the sea along Douglas Terrace, Broughty Ferry, a small flock of 15 **turnstones** were ravenously picking through the piles of broken reeds and other flotsam. Most of the people walking along towards the harbour didn't notice a thing; the birds were just so well camouflaged against the background. The tide was high and at times the birds were only a metre or so from the feet of the folk above them but they didn't stop their probing for tasty morsels for a moment. I returned that way about an hour later but the birds had moved on.

Jim Cook



FRESHWATER BRYOZOAN IN ANGUS

In 2011 members of Dundee Nats were taking part in open days at Scotia Seeds. One of the visitors brought in a piece of an organism growing in her garden pond in Careston, near Brechin. It was a mass of branched brown fibres. At the time it was not possible to identify the organism. In 2012 the organism did not appear but in 2013 I was contacted by the discoverer to say that it was back in large numbers. I was able to visit the pond in August 2013 and make some observations and collect some samples. I was able to suggest what the organism was but it took some detective work to make a positive identification.

The site was an old artificial pond fed by springs with a uniform depth and stony bottom. The organism was growing over almost every flat surface around the sides of the pond, along the bottom and on floating boxes. There were a number of growth forms from one which crept along hard surfaces to large bushy structures. Some of the larger specimens looked like they were covered with white fuzz which occasionally disappeared. At first sight the organisms looked like algae. They were, however, firm to the touch so they could have been **stoneworts**, but they were brown. It took an examination with a hand lens to determine that the organism was in fact a colonial animal, a freshwater **bryozoan**. The white fuzz was in fact tentacles of individual animals, called zooids, retracting into long brown tubes. The tubes contain chitin, providing some rigidity.

Bryozoans are more common in the sea; there are only nine species of freshwater bryozoans known from the British Isles and 12 from Europe. They are classified in a phylum of their own, the Bryozoa. However, along with some other aquatic animals such as **brachiopods** (**lamp shells**) and **phoronids** (**horseshoe worms**), **bryozoans** are included in the **lophophorates**. A lophophore is a

horseshoe shaped arrangement of tentacles with the mouth inside. In addition, bryozoans have an anus outside of the tentacles.

Bryozoa are filter feeders catching microscopic particles. They are difficult to identify, because the characteristic features are microscopic. I was able to identify this one as a species of *Plumatella*. However, the features used to identify the species are found on a structure called a statoblast. The statoblasts on this species float so are called floatoblasts. I preserved some examples of the floatoblasts and sent them to the Natural History Museum in London where they were looked at under a scanning electron microscope and determined as *Plumatella fungosa*.

A bryozoan colony starts with a single zooid settling on a hard surface, daughter zooids then form by budding. Colonies grow between March and November after which they die down for the winter. Statoblasts are oval structures made of two chitinous shells called valves that form a capsule. These are produced asexually as an overwintering body. Statoblasts can survive hostile conditions such as freezing or drying out for several years. They can spread to other water bodies by floating away, being blown around in the wind or being stuck to the feathers of aquatic birds.

There are very few records of *Plumatella fungosa* in the UK, so this could well be the first Angus record.

David Lampard

There is a photograph of the Bryozoan on page 24. Ed.

THRUSHES AND BLACKBIRDS

1st January



After returning from watching the 'Phibbies' at their annual dip, a freshly-broken **garden snail** (*Helix aspersa*) shell on the garden path caught the eye. Even although it was relatively mild, surely the snail couldn't have been out this early in the year? It was good to know, though, that at least one **thrush** was still around! And then my attention was drawn to the top of the boundary fence, which had been well 'decorated' with copious rather pale droppings full of seeds, and from there to the garden next door. The neighbours had two **apple** trees that'd been heavy with fruit in the autumn but most had fallen. A total of 14 **blackbirds** were taking advantage of the bonanza on the ground and a further three perched in the trees above. My neighbours were inadvertently benefitting what must have been the whole **blackbird** population of the area.

Jim Cook

THE 'MOUSE AMPHITHEATRE'

February - March

The original idea came from 'Springwatch'. The programme had featured what they called 'Mouse-cam', with a trail camera pointing through a baited hollow log. Since hollow logs are rather few and far between at Carsegowniemuir Quarry, the substitute of a long narrow space was constructed out of a pile of the abundant flat stones in September 2013. This was deliberately sited in a not-very-obvious location under the declining and fallen **geans** near the cottage end of the quarry, some 10 metres from the path and well away from the hide, so as not to encourage any more **mice** into its vicinity. In October this 'hollow stone dyke' was baited with a handful of grain, the camera set up and a number of rather poor clips of **voles** were recorded inside. The 'hollow space' proved to be too small, dark and narrow and too close to the camera to give sharp images. The pile was rebuilt in December and January to be longer and twice as wide, further from the camera and roofed over only at the rear to produce what was, in effect, an amphitheatre for the performance of, we hoped, **mice**, **voles** and **birds**. It had a large flat slab at the rear and, in front was a slightly lower section that was

filled with fallen leaves. The stone slabs at the sides were built up to the back to support the single large slab that acted as a protective roof.

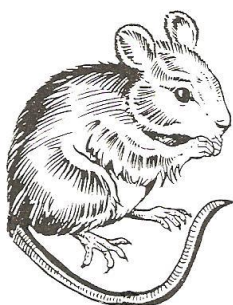
Last February this 'mark two version' was baited with a couple of handfuls of peanuts, a few hazelnuts and three walnuts wedged into gaps in the stonework, but no grain, and the camera set. It was left for three weeks, between 23rd February and 16th March, and an astonishing total of 473 15-second clips were recorded. As you may imagine, it took a good while, almost six weeks of several hours at a time, to go through and analyse all the video material. You may be interested in the results.

Fortunately, a number of clips showed nothing, just the empty amphitheatre. But what had triggered the camera, which has an infra-red detector that responds to movement and warmth? There were 228 of these empty clips, although about a dozen or so of them showed just a flash of a small animal or part of it, not enough to identify the species responsible. Perhaps the other empty clips had been triggered either by a piece of loose moss blowing in the wind, by drips of rain water in one or two cases or, more likely, by fast-moving small animals which had disappeared out of view before the camera could record their picture. (It takes about a second for the dull red lights to illuminate the scene at night.) Certainly, the **mice** in particular frequently showed some nervousness in the dim red glow of the lights and often turned their backs on them.



Of the remaining 245 video clips, a total of 227 (92.7 %) showed **wood mice** (*Apodemus sylvaticus*), with their characteristic head shape, large ears and long tail. A further ten clips (just over 4% of the total) captured **voles** (but never the voles and mice together) and small birds appeared in another seven clips (nearly 3%). Birds that featured were **great tits** (five times, 2%), a **chaffinch** in one of the **great tit clips** and one clip each of a single **wren** and a lone **robin**. Interestingly, the robin hopped when it was almost dark. Three clips (about 1%) showed invertebrates, perhaps a small crawling **moth**, what could have been a **woodlouse** and a very small **beetle** of some kind.

The **wood mice** appeared the first evening almost as soon as it was dark; in fact no mice at all showed during daylight. The first clip recorded was my hand, deliberately done when the camera was set up in the late afternoon. The second clip was of a single **wood mouse**, at 6.46 pm. It found the bait and obviously responded with delight to the bonanza of food, the peanuts especially, because it was back only a minute later and returned many times that night. In fact, the mice had an extremely busy night on 23-24th February and, before dawn one or more mice at a time had triggered the camera a total of 121 times. They may have appeared more often but disappeared from view before the camera could capture them, which means that this total of 121 times is a minimum. Their efforts had cleared all the peanuts off the large rear slab by 11.22 pm and they searched through and recovered virtually all the peanuts from among the fallen leaves well before the end of the night. At the rate they appeared and disappeared, they must have been storing their loot in the spaces among the stones under the slabs. Of the 121 times the camera was triggered by a mouse during that first night, single mice were seen 83 times (nearly 69% of the 121 total), two mice at the same time appeared 35 times (almost 29% of the total) and two clips showed three mice at the same time. Of course, it may not always have been the same mice that appeared in the clips but we know that on at least these two occasions three separate animals were involved. It was very difficult to tell them apart but one mouse did seem to be slightly smaller than the others.



The second night, 24th-25th February, the mice seemed to need a rest as they appeared only 11 times. The next night the total was 17, the next, 25, the next, the 27th-28th February, 15 times, and from then on the number varied from as many as seven to as few as no appearances at all each night (over a total of five nights). Was it colder on those nights? Unfortunately, there are no temperature records. All the later recordings were of single mice, not all the same, (a few small but mostly the larger mice) except one on the 26th-27th February, when two animals appeared together.

The **voles** were difficult to identify as **bank** or **common voles** but, taking the habitat into account and their brown colour, they probably were **bank voles**. Voles were much slower than mice to respond to the offered food. The first one appeared during the first night, but as late as at 1.27 am on the 24th February after the

mice had already cached virtually all the peanuts. In fact, none of the voles seemed to show much interest in the peanuts. Perhaps if grain had been included in the bait, they may have responded more positively.

The first bird, a **wren**, was recorded on the first full day, the 24th, at 3.15 pm, well after the mice had cleared all the peanuts. It briefly looked around and then hopped off, never to reappear. (Wrens had been recorded three times in the first set of recordings.) The first **great tit** appeared two days later, at 7.55 am on the bright morning of 26th February.

As mentioned previously, only a single **robin** was recorded and at 6.02 pm in almost dark conditions. It's a wonder that it was still poking around; you'd think that by then it would already have been roosting in some sheltered location. The bird must have been hungry, although it didn't find anything. The only other bird seen was a **chaffinch**, at 9.41 am on 11th March, while a **great tit** was fully occupied in the background, picking away at the firmly-wedged walnut that had been gnawed open by the mice. The most frequent birds were **great tits**, but they were not commonly seen, only five times in all. Apart from pecking at the opened walnut, they just arrived, had a look around and then departed.

Invertebrates were recorded only three times and all in damp or wet conditions. In each case, they appeared in shots triggered by other causes, twice by what probably were fast-moving mice and once possibly by drips of rain water. Although all specimens were small and difficult to identify, one was thought to be a small **moth** crawling over the stones on the left side of the amphitheatre. Another perhaps was a small **woodlouse** and the third clip showed what was, possibly, a tiny **beetle**. No molluscs at all were recorded; no **snails** or **slugs** were seen even in the backgrounds of recordings of other animals.

No correlation between the recordings and the effects of the weather could be found, apart from the three invertebrates clips, all recorded when it was wet. Certainly, the first few nights, when the mice were most active, were fine and dry but even when it had rained and the rocks could be seen to be wet, the mice still appeared. On one occasion, a mouse was out and about even when rain drops and drips could be seen falling. The site is sheltered by the **geans** and on no occasions could any signs of frost be detected. Anyway, it was fairly mild during the recording period and the slight snowfall was earlier in the winter.

Jim Cook

HINTS OF SPRING

10th March

The back of the Sidlaws, near Charleston and Glamis, can be very bleak in the winter as I have discovered over the past two years when doing BTO Winter Thrush surveys. Today was different. The turbines on Ark Hill were barely turning - a first, as they are in a particularly windswept spot and usually whizzing round. The sun was shining and pleasantly warm and spring-like.



The **snowdrops**, scattered at various places on the road verges, were, however, still in flower and suggesting that winter might not yet be finished. Also, there were still small winter flocks of **chaffinches** around, especially at the woodland edges.

Elsewhere **wrens** were singing and I was rarely out of earshot of a singing **robin**. A few of the **chaffinches** were also singing and a **skylark** had a short attempt at his flight song up against the unfamiliarity of a blue sky.

At the far side of a stubble field, sheltered by conifer plantation, two **roe deer** grazed unconcernedly while, elsewhere, stubble was submitting to the plough now that the ground was drying out a bit after such a wet winter. Further down the road a **hare** jumped up from where she must have been sunning herself on the bank, and disappeared into the safety of the woodland - unseen until I was almost upon her.

Beside the Eassie Burn the expected **dipper** was absent, but a pair of **grey wagtails** were working through the muddy, flood remnants at the foot of the field nearby. There were **coal tits** and **goldcrests** singing, unseen amongst the conifers and, later, I came upon a pair of **goldcrests** working systematically through a hedgerow **honeysuckle** tangle.

Of my target thrushes, there were no **fieldfares** or **redwings**, but I found a pair of **mistle thrushes** feeding on a rough grass field and even saw a **song thrush** with a large **worm** in its beak. **Blackbirds** are always sparse on this patch, but I did see one or two, always singly.

Perhaps the most surprising observation was a single hoot of a male **tawny owl** from deep in the woodland. I almost didn't believe my ears until I heard, later, that Bob McCurley had also heard an owl hoot in daylight on the same day.

Anne Reid



CORNCRAKES AT EASTHAVEN

The Demise of the Corncrake in Angus

Some years ago I was lent notes on 'Some Observations of Wildlife Around Easthaven, 1925-1966' prepared by Hugh Wylie of Carnoustie and based on the handwritten original diary of Alexander Norrie. Alexander had died alone in 1967 at Long Row, Easthaven and Hugh, who was a young assistant at a Carnoustie bank at the time, was involved in dealing with Alexander's will and clearing his effects from his cottage, amongst which was a tattered notebook containing Alexander's nature observations.

Alexander Vannet Norrie was born at Panmure West Cottages, Panmure Estate, Panbride, on 5th July 1881 to parents William Norrie, forester and carter, and Elizabeth Vannet. After school he went to work with a joiner in Barry but by the census of 1901 he was working as a carpenter in London.

Alexander was to have an adventurous time ahead in North America. On 29th March 1907 he departed from Liverpool on the S.S. *Virginian* arriving in Halifax, Nova Scotia, Canada on 6th April. Later in June that year he left Toronto, Ontario for Buffalo, New York. The 1911 Canadian census records him as a carpenter residing at New Westminster, British Columbia. In April 1923 he and his wife Christina sailed from Vancouver, British Columbia to Seattle, Washington. In June 1924 he returned alone to Scotland to visit relatives, departing back for Canada on 8th November 1924 on board the S.S. *Doric* which left Greenock bound for Quebec.

By 1926 Alexander was comfortably off and he decided to retire early and return to his native Angus. Presumably his wife Christina had died and apparently there were no children. He spent his days at Easthaven walking, cycling, bird and weather watching, shooting and gathering driftwood, living in a cottage with no electricity or mains water. Most of the birds that he shot were for the pot but he was also an amateur taxidermist and he recorded his attempts at setting up various birds - mostly the scarce ones! His first recorded attempt was in 1933 "*1st June tried a little taxidermy set up a corncraik fair but neck ruffled*".

Of real interest in his diary are Alexander's comments about the demise of certain bird species and his concerns for the changes in farming practices, especially during the second World War when the pressure was on to improve food yields. In particular he records the gradual loss of the **corncraik** - below are set out his observations for that species which would have still have been a regular summer visitor when he was a young man.

- 1927 Corn Craik [sic] heard May 7th.
- 1928 Corn Craik heard Craigmill Den, May 1st.
- 1929 First Corn Craik May 7th at Panlathie.
- 1930 First Corn Craik seen & heard top of Batties Den on Arbroath Rd. May 4th.
- 1931 Corn Craik on April 2th bottom of Scryne Road.
- 1932 1st Corncraik heard at Cotton Rd., Nether Kelly, May 2nd, heard by me on May 4th.
- 1933 Heard Corn Craik at Cotton Rd., on April 22nd but reported at same place on April 16th.
- 1934 Corncraik seen and heard on Scryne April 30th, but reported on 27th.
- 1935 First Corncraik heard Panlathie April 29th - reported on Scryne April 27th.
- 1936 Corn Craik heard Balmirmer on May 4th, heard by me on May 8th.
- 1937 Corn Craik heard May 8th on Peffers field alongside Downie Burn.
- 1938 Corn Craik heard in grass field from West Scryne next toll road May 29th, reported a week earlier.....I'm afraid owing to the farmers cutting their hay green and about two weeks sooner the nests are destroyed and the Corncraik in this district will become very scarce if not extinct. [Alexander is referring to the change from traditional hay making to that of producing silage].

- 1939 Corn Crane heard May 8th in field at Cotton - those banks of Downie Burn are one of the best places for bird life around here, and certainly the haunt of the Corn Crane - they are now very scarce.
- 1940 First Corncrake heard at Pitcundrum Loan on May 8th, they are getting more scarce than ever.
- 1941 First Corn Crane heard in field below Salmonds Muir May 8th but reported in Pitcundrum Moor May 2nd. Also Corncrake in grass field behind the houses here May 9th.
- 1942 [No mention of Corncrake].
- 1943 First Corn Crane on May 2nd, but I have heard none around.
- 1944 I have not had time to make any observations, it has been a very poor year thru-out for weather etc. No geese, no pigeons or migrating birds, nothing but a hell of a noise with this blite [blight] on the countryside nothing but desolation and destruction and it seems to be there to stay. [Alexander is referring to the war and the activity at the nearby Hatton Airfield].
- 1945 [No mention of Corncrake]. This has been a very wet season, this drome [Hatton] still has all the birds scared away.
- 1946 [No mention of Corncrake].
- 1947 The Drome has finished this place for bird life. Corncrake heard at Hatton Loan on May 15th. I believe that if the Drome was cleared out, they would come again to their old haunts, tho the cutting of the grass so early destroys many nests. May 24th a Corncraik got inside a broken glass float at Mary Lyall's door, a very unusual thing. Around here's so intensely cultivated the poor things have no chance to nest and those birds are so scarce now.
- 1948 [No mention of Corncrake].
- 1949 [No mention of Corncrake].
- 1950 Corncrake heard on Craigmill sometime in May.
- 1951 Corn Craik heard May 20th - the cultivation of land has changed, far more potatoes grown and hedging fences done away with.
- 1952 Corncrake heard May 10th.
- 1953 [No mention of Corncrake].
- 1954 Corncrake heard 11th May on Craigmill.
- 1955 [No mention of Corncrake]. Bird life getting scarce, owing to way of farming and too many carrion crows.
- 1956 No Corn Craiks around here now different mode of farming.

Alexander was obviously disturbed by the radical changes that he observed being carried out in agricultural practices. In 1961 he comments that*"Farmers spraying the ground with poison to kill weeds are killing a lot of birds finches linnets etc"*, and again in 1964 he noted....*"spraying the ground and crops with poison has altered life for insects and birds"*. The 1954 record is the last he notes for Corncrake. His observations continued until 1966 - the year before his death.

The Corncrake no longer breeds in Angus and only occasionally turns up as a rare passage migrant in the county. The Angus and Dundee Bird Reports since 1996 contain only seven records: two in 1996, two in 2000, and one in each of 2002, 2004 and 2010.

With thanks to Hugh Wylie for lending me a copy of his transcription of Alexander Norrie's wildlife observations 1925-1966.

Peter Ellis

(Local naturalist, the late Alf Robertson, reported that he'd last heard corncrakes along near Invergowie in 1948. He also recorded a nightjar locally at the same period. Ed.)

TRAVELS AROUND HARRIS AND LEWIS IN MAY

On a weekend visit to Harris and Lewis, mainly for hill walking, we travelled from Skye on the Uig Ferry to Tarbet. Although the sea crossing was choppy, it was fun to watch **dolphins** (three), the **puffins**, **gannets**, **kittiwakes**, **arctic terns** and **gulls** on the waves before they flew off to avoid the ferry. In the sheltered approach to Tarbet on Harris there was a **black-throated diver** and a **black guillemot** to welcome us. Trips to South Harris from Drinishader to Leverburgh gave views of **tufted duck**, **greylag geese**, **oystercatcher**, a **golden plover**, **red grouse**, **meadow pipits** and **common gull**. At Drinishader, in the still evening light by the bay, I enjoyed the calls of **song thrush** and **willow warbler** in the bushes and busy **starlings** were taking food back to their families.

The 'Uig Hills' of West Lewis seem remote, barren and rather beautiful, giving wonderful views west to the Flannan Isles and St. Kilda. **Cuckoos** were calling in the glens, a pair of **ravens** made their cronking call above us, and **buzzards**, **wheatears**, **skylarks** and **meadow pipits** were frequently seen.

On a rather cold wet day on a visit to Calanais to see the famous stones, I was delighted to see two **snipe** roding over the stone circle at Calanais II, a **heron** and **greylag geese** were visible on the nearby loch and **skylarks** called in the sky above. Before departing for home we took a drive north of Stornoway to explore the east coast of Lewis. This is where Lord Leverhume attempted to build a road up the east coast to the Butt of Lewis during the 1920s to create labour. The project failed, but road construction started and the 'Bridge to Nowhere' still straddles an impressive gorge at the end of this route today. A walk along the unfinished road north of New Tolsta along this rocky coast, on the last morning before catching the ferry, was delightful. A pair of **stonechats** called in the dead bracken close to the track, also **wren**, **wheatears** and **starlings** were present. On a lochan behind the beach at Traigh Geiraha I saw a flock of 20 **greylag geese** and a walk along the sands to see the rock stacks gave splendid views of **fulmar**, **kittiwakes**, and **arctic terns** fishing off shore being chased by an **arctic skua**.

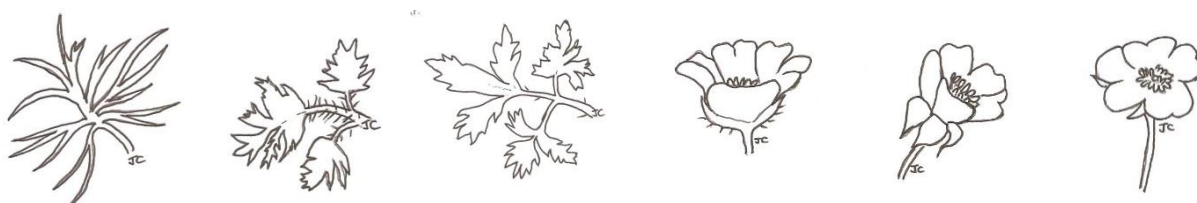
Brian Williamson

BULBOUS BUTTERCUPS

May and June

I don't know about you, but I used to think that **bulbous buttercups** usually occurred within a few hundred metres of the shore line in Angus and only occasionally further inland. The plants can be found scattered from the Stannergate to Broughty Ferry and Monifieth and beyond and occasionally in places such as the Sidlaws and the Glens. They flower early and grow best in basic soils. This past spring I happened to notice some in long grass under the trees at the west end of Dawson Park, not what I would have taken as a typical habitat, and then started to look out for the characteristic flowers.

At this point, a short digression: as you know, there are three relatively common species in this part of the world - **meadow buttercup**, with its heavily cut leaves, **creeping buttercup**, by far the most common, with leaves divided up into three leaflets, and **bulbous buttercup**, the least common and the only one with sepals folded back down the stalk. This feature is very easy to see and completely characteristic. The other two have sepals held underneath and parallel to the petals.



Buttercup leaves and flowers, from left to right *Ranunculus acris*, *R. bulbosus* and *R. repens*

The chance sighting in Dawson Park in May suggested the possibility that the species may be found elsewhere in the vicinity. It turned out to be growing along the west end of Arbroath Road, at the eastern end of the Kingsway and in one or two sites in the city. Has anybody else seen **bulbous buttercups** elsewhere in Dundee? Please let me know!

The intriguing question is why? Perhaps the soil in these places is a little more calcareous than elsewhere and the climatic conditions are not as severe as further inland. The close association with the **daffodils** or at least long grass (and the absence from nearby short-grass areas) suggests that the plants benefit from the lack of mowing in the early part of the summer. The **creeping** species, on the other hand, can grow low enough to avoid the worst excesses of the blades and probably benefits from the removal of taller competition. Perhaps, also, a few **bulbous** seeds were brought to the Arbroath Road or Dawson Park on the blades of a Council mower or on the shoes of some walkers and the colonies of plants have developed and spread from there. The distribution along the Arbroath Road does suggest some connection with the blades of Council mowers.

Locations:

- 1 Dawson Park (map references: between NO 445315 & 444317) - scattered in the long grass under the line of trees at the far west end, close to the Fairfield Road fence. None were found elsewhere in Dawson Park.

- 2 Arbroath Road (between NO 444317 & 440316) - common, even abundant in places and far more common than the creeping species, in the long grass among the daffodils for a few hundred metres beside the road on the stretch between the end of Dawson Park and the narrow section of the pavement beside the road (where the house restricts the width of the verge).
- 3 Arbroath Road (from NO 440316 to 435316) - scattered in the long grass among the daffodils on the stretch from the narrow section, past the back of Dundee College and on both sides of the lay-by nearer to Dundee; creeping buttercups more common, as usual.
- 4 Kingsway (from NO 431316 to 428319) - a few scattered in the long grass among the daffodils in the central reservation in the stretch between the Scott-Fyffe roundabout and the Asda roundabout; creeping buttercups are far more common.
- 5 Kingsway (around NO 425322) - occasional in the grass among the daffodils in the central reservation of the stretch between the Asda roundabout and the Pitkerro Road roundabout. Creeping buttercups are common, even abundant, and a few meadow buttercups can be found.
- 6 Kingsway - no bulbous buttercups were seen either in the central reservation or the long grass at the sides along the stretch of the road between the Pitkerro and Forfar Road roundabouts. Creeping buttercups abounded and the meadow species appeared in places.
- 7 Kingsway - no bulbous buttercups at all could be found either in the central reservation or the long grass at the sides among the daffodils along the stretch of the road between the Forfar and Strathmartine Road roundabouts. The creeping species was abundant.
A cursory look rather late in the season, in June, further west along the rest of the Kingsway failed to locate any bulbous buttercups but the other two species were common. Also a late search in the central reservation of Greendykes Road failed to turn up any more of the bulbous species.
- 8 Crescent Lane/Victoria Street (NO 410310) - scattered among long grass (but in the absence of daffodils) in a small area of park beside and just to the south of Victoria Road; creeping buttercups are more common.
- 9 Near the bottom of the Hilltown (NO 403307) - one or two plants in a small patch of long grass only a hundred metres or so above the junction with Victoria Road.
- 10 Also, as might be expected, the plants are scattered in the late-mown grass among the orchids along the Broughty Ferry Road near the Stannergate (around NO 436310).

I wonder whether **bulbous buttercup** has been growing in these places for years and nobody has noticed or whether it is taking advantage of the stands of **daffodils** and is spreading? We'll have to wait until next year to take another look.

Jim Cook

MONTREATHMONT FOREST 2014

Rarely visited over the course of the year, except by dog walkers, this forest is rich in interest. Half of the area is administered by the Forestry Commission, the other half being privately owned, but accessible. It was originally moorland, as evidenced by the common heathland plants interspersed by rough pasture and damp carr areas.

Because of the major transformations brought about by large-scale tree planting, the area now houses a great variety of plants. Contractors' vehicles have brought new plants into the area which are native to Great Britain but not found elsewhere in Angus. To date some 360 species of vascular plants have been identified, some of which are scarce here in Scotland.

Of mammals, there are ten at least, including a number of sightings of **otters**, mainly at night. **Pine martens** are suspected residents, but obviously rather shy. It has been suggested that putting out bait in the form of marmalade sandwiches would make them more visible. There are plenty of **bats** - species unknown to date.



The **frog**, **toad**, **palmate newt** and **common lizard** also make their home here, but to date no **snakes** have been found. It would not, however, be surprising if these uncommon creatures were here.

Over 40 species of bird were seen in the course of the year, many of which breed here. Perhaps the most interesting residents for many would be the **goshawks**, the **crossbills** and the **nightjars**, although **green woodpeckers** and **great spotted woodpeckers** are frequently seen and

jays are common.

There are, of course, many insects. To date 13 species of **butterfly** and over 130 **moths** have been identified. A large variety of fungi make their home here, not least of which is the **cep**, in great quantity.

Unlike many plantations there are plenty of open areas. There is some **alder** carr, **birch** woodland, old **pine** forest together with more recent plantings, **larch** stands and, fortunately, no great areas of **spruce**.

Pat Gaff

SICILY 2014

The looming presence of Mount Etna dominates the scenery in the east of the island. The mountain top is most often shrouded in low cloud, but on a clear day the views from our little apartment, situated amongst **lemon** trees in the village of Linera, were magnificent, revealing the snow-capped mountain gently smoking from 'crateri' near the summit.

Around 25% of Sicily's population reside on the lower slopes of Etna. The fertile lava soils and benign climate, enable the local farmers to grow and harvest a continuous abundance of fruit and vegetables. The Sicilians have devised various strategies to deal with Etna's frequent lava eruptions. These include building earth walls to divert the lava flows and digging deep pits to contain them. These days, lava model flow imaging technology is used, to predict whether or not lava flows present a danger to infrastructure. The computer-aided modelling techniques enable scientists to accurately predict the speed and direction of the lava flows. These defensive strategies have mostly protected the towns and villages on the lower slopes of the mountain, but nearer the summit, lava damage to the roads and tourism infrastructure, including the cable car to the summit, is a frequent occurrence. The huge Etna tourism industry ensures any damage is swiftly repaired.

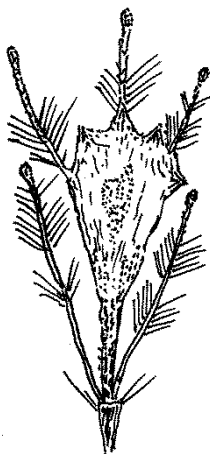
Two excellent winding roads carry the tourist buses and any number of private vehicles, to tourism stations near the summit, on both the north and south flanks of the volcano. Etna is the highest volcano in Europe, 11,000 feet, (3,350 metres), at the summit. The Sapienza Refuge has a large hotel and a plethora of bars and cafes. On our visit, we counted more than 20 buses and dozens of cars, the other tourists, like us, taking advantage of the clear, sunny, though chilly, conditions at the summit. The cable car was closed, so we contented ourselves with a stroll around the two main Silvestri craters, still gently smoking. These craters were formed from a massive eruption in 1892.



Lava bombs on the edge of a crater
Photograph Brian Allan

Brian was very keen to 'refind' the plant treasures recorded on our earlier 1999 visit to Sicily, in particular, many of his favourite orchid species. In the **oak** and **birch** woods on the lower slopes of Etna, we found *Dactylorhiza romana*, growing in abundance, with colours grading from pure white to deepest purple. We also found a few specimens of the impressive **giant orchid**, *Himantoglossum robertianum*, the loose purple flowering spikes of *Anacamptis longicornu*, and the more familiar **green-winged orchid**, *Anacamptis morio*. Other woodland plants included the deep pink flowers of *Cyclamen repandum*, and blue drifts of *Lupinus angustifolius*, and *Anchusa arvensis*.

At higher altitudes, the vegetation becomes patchy, with large expanses of bare lava exposed. Amongst the grassy tussocks, the yellow flowers of **Etna broom**, *Genista aetnensis*, and a showy **spurge**, *Euphorbia carcarias*, were at their spring best. Near the summit, we were delighted to find the endemic **Etna violet**, *Viola aetnensis*, a beautiful sight, the flowers forming deep purple mats, contrasting with the black lava cinders. The distinctive **Corsican pine**, *Pinus laricio*, grows on the lava slopes near the summit. The caterpillars of the **pine processionary moth**, *Thaumetopoea pityocampa*, overwinter in tent-like nests on the **pine** trees (see over for illustration). Surprisingly, the apparent robust health of the pines, did not seem to be affected by the widespread presence of these destructive tree pests.



**Pine processionary
moth tent**

Brian's botanical forays also took us to a local rubbish dump, where a very rare orchid grows. After negotiating some barbed wire, we both managed to fall into lava holes, hidden by vegetation, and ended up as black as coalmen, before our efforts were rewarded with several good specimens of *Orchis brancifortii*, with its delicate sprays of small pink flowers. Also present was the exotic looking **sawfly orchid**, *Ophrys tenthredinifera*, one of the showiest of the insect-mimicking orchid species, and branching flower spikes of *Asphodelus ramosus*, in full bloom.

We found it upsetting to see so many randomly-dumped piles of rubbish, even in some of the most scenic areas, as well as in almost every road lay-by. Here and there a half-hearted attempt had been made to burn some of these rubbish heaps, but this just made them even more unsightly. However, the vegetation seems to thrive on these rubbish piles, which in the spring, were cheerfully colonised by a colourful array of flowering plants. The high winter rainfall quickly breaks down the lavas, forming fertile soils and cinder substrates, which support the diverse and interesting plant colonies, including a number of endemic species.

Our second week in Sicily was based in Cefalu, a resort in the NW of the island, where we made many more botanical and other discoveries. Sadly, our booked excursion to the nearby Aeolian Islands to see Stromboli throwing sparks into the sky at dusk, had to be cancelled due to rough seas. This gives us a very good reason to return to this exciting and beautiful island, maybe next year.

Jenny and Brian Allan

RAMBLES WITH STEVIE 2014

A **tawny owl** hooting in the mature tree at the back of our neighbour's garage was a great way to start off the year. We were able to train the "Clulite" on it for photographs.

Sitting in the comparative warmth of the car, we watched **red-breasted mergansers** at the Southesk estuary at Ferryden, fishing when the ebbing tide turned. **Eider ducks** catching **crabs** were fascinating to watch too as they eat these after removing the legs by holding each in turn in their beak and thrash the body on the water repeating the process till all the legs are off then swallow the body whole, the shell is crushed in the gizzard and passes through the digestive system.

February, and we noticed a recently dead **roe deer** on the road at Letham Grange. I'm still trying to convince Jim that roadkill is a valuable resource. I think he's coming round!

March, and what a joy, three **red squirrels** in three days at different locations - Kinnordy, Balgavies and St Vigeans. We heard **great spotted woodpeckers** drumming each other out. One of my "Flickr" contacts posted a video of one drumming on metal on top of a telegraph pole, which was quite impressive giving out a very loud, vibrating, tinny sound. Wonder how it learned to do that. So far I have been unable to entice "my woodpecker" back into our garden. It's too busy I think - too many starlings. She's still visiting my neighbour who only has a half coconut shell out.

On the way to Dundee we saw the distinctive shape of a single **crane** flying over, unfortunately it was heading for Arbroath and we had nowhere to turn the car on the dual carriageway. Duly reported to Bob McCurley, with the faint hope that it was lurking somewhere local, but no reports. We've seen these before at Kinnordy.

On a trip to Largs, practising night shots in preparation for capturing **aurora**, I perched the tripod on dark low wall down by the Noddsdale Water. Suddenly there was a shout from Jim to look out for a **rat**, and the largest rodent I ever saw hurtled along the base of the wall towards me and flew over my feet, much to the great excitement of the dogs. Needless to say, due to the speed of the creature and the inertia of myself, I missed the photograph.

April, and we visited Glenesk where we were extremely fortunate to witness two combating male **adders**, just emerged from hibernation, attempting to outdo each other with shows of strength, performing the duel known as the Dance of the Adders, where the males raise their bodies up and attempt to force each other down to the ground, to secure territorial rights for breeding. This episode lasted a full 15 minutes. We were feet away from these, on a bank and at one point they fell down the slope still twined and landed at my shoes. I just kept still and they moved off together, more intent on each other than me. When the loser backed off (he didn't go far though), a pretty plump female

slithered out of the bracken and the winning male immediately tied with her. With snakes you get few photo opportunities as they're off before you get near, so it really made a difference so early in the year.

May saw us enjoy scenic Glencoe, where we paused to watch a couple of young **stags** sparring in preparation for the next autumn rut. Awesome to see and to hear the sounds of antlers meeting, though hardly a clash since they were just practising. Later at night, on the way home, hundreds of **deer**, eyes gleaming in the dark, fed disconcertingly close to the roadside, with a couple of casualties having succumbed to the traffic. (More roadkill!)

We shared a lovely day out in Glenshee with our friend and fellow-Nat, Davie Stein where we saw **mountain hares** crouching in their forms - they were very conspicuous against the dead **heather** in their white winter coats. **Red grouse** cackled warnings of our approach as we walked Jock's Road. High on a summit, we spotted a flock of **ravens** cronking and displaying to each other, swooping and diving in pairs. Though they were so distant, Jim and I thought one was carrying nesting material, but through the binoculars we were amazed to see this was in fact the rear half of a **hare** which it was holding in its feet, which it used to court the attention of its intended female. It flew low over the ground, deposited its gift and landed on a rock nearby. The female came in, collected the gift in her beak, flew round the male in a circle and settled nearby to pick at it appreciatively. Successful bonding.

Back home we enjoyed watching a tiny **mouse** as she stripped **pussy willow** buds from our miniature tree, one by one and carried them off. Nesting?

During our time doing the recce for the Nats weekend to Strathpeffer, we came across a dead **pine marten**, which we stopped to look at more closely. There were wild **goats** near Golspie, a mixed tribe of billies, nannies and one youngster, gingerly browsing on **gorse**. See separate report on the weekend.

I went off out with camera in search of the elusive **bee fly** and my favourite butterfly, the male **orange tip**, without success. On my return home, Jim informed me a **bee fly** had visited the garden in my absence - unbelievable!

Mason bees had taken to nesting in the old dry stane dyke across the road from us over the past couple of years. I hadn't been able to spot any nests this year, but the bees had been seen in the garden, mainly sunning themselves on the windowsill and I happened to notice that they are actually nesting somewhere in our roof and crawling under the slates!

We had a walk along the outside of Barry Buddon, where Jim spotted and potted a very large **sexton beetle** feasting on a **frog** corpse and also a **violaceous ground beetle** tucking in to a dead **garden tiger moth caterpillar**. Natures wee cleaners!

Barry Buddon's open day was sunny, which encouraged many assorted insects including **green hairstreaks**, **gorse shieldbugs** and **mining bees**, but the highlight of the day had to be the female **emperor moth** attracted to Anne Reid's moth trap. As you know, one I have lusted after for many a year. Just need to find my own now!

Iona gave us rasping **corncrakes**, **jackdaws**, **cuckoos**, and a nesting **eider duck**. A rare **belted beauty moth**, a wingless female, was seen laying eggs in the crevices of a fencepost. Returning via Mull, we saw an **otter** grappling with a huge **dogfish** on the weedy shore.

On our Nats outing to Loch of the Lowes, a highlight for me before even alighting from the bus, was to see a wild **fallow deer** browsing on the hill, confirmed by the ranger.

Our Dorset holiday was good as always, with a **grayling butterfly** obligingly opening its wings. **White admirals** were out and about, and I was delighted to get shots of a migrant **clouded yellow butterfly**. A **silver-washed fritillary** with colour aberration intrigued us.

Autumn gifted us a **red squirrel** in the garden - just for a matter of seconds, but what a thrill. No time to fetch the camera. Probably a youngster, looking for its own territory.

I always said I would never eat any fungi I identified myself, but now I'm a convert - thanks to my sister in law, originally from Kiev, who took me foraging one afternoon. We concentrated on **chanterelles** and the **boletes** we could identify as tasty! Due to language barriers, (Inna is fluent in English, but does not yet know all the common names beyond generic and doesn't use Latin names) I may not know the exact identity of what I'm picking, but it's "safe"! I trust her. Comparatively so, as I suffered an adverse reaction to edible **meadow waxcaps** - a

good lesson to curb my overconfidence, particularly since I had also mis-identified two poisonous specimens. (Not that I'd intended eating them.) Back to the beginners list and eat nothing with gills!



So much to learn. The Nats fungal foray to Lady Mary's Walk provided many interesting species too - see separate write up.

We enjoyed a winter walk in Glenshee on 22nd December. Unfortunately, we were unable to enjoy refreshments at Spittal of Glenshee as is our habit, as they'd had a roaring fire of a destructive nature. We returned home to find that Jim had acquired a **tick** - seemed a bit late in the year for it. However it hadn't yet attached and was swiftly dispatched by him.

The flooded field at the back of St Vigeans cemetery attracted a male **shoveler** duck, a most attractive specimen. It didn't stay long as the flooding soon turned to solid ice. We then paid a visit to Murton, where we were able to see more of these at closer quarters.

And so we come to the end of another year. A quick look at the 2015 diary shows it's going to be another busy one, with lots to look forward to.

Stevie Smith

MAGPIES

Through the second half of 2014, **magpies** have been regularly present in the Johnston Avenue area - I think at least one pair is establishing a territory. There had only been one or two sightings of transient individuals over the previous 20 years, although they were more frequent in the west end of the city. They also seem to be becoming more common in Perth, with residents of the Kinnoull area reporting that they have appeared in gardens there for the first time.

Colin McLeod



REQUEST FOR OLD PROGRAMME CARDS

Has anyone, particularly some of our more veteran members, got any old **Programme (Syllabus) Cards** tucked away anywhere - particularly those from the late 1960s and early 1970s and even any from the early 1960s or late 1950s, although they may be a bit much to hope for! I've been trying to create a master list (for a forthcoming history of DNS) and there are still some gaps. If by any remote chance you have, I'd be delighted to receive details of them or be able to copy them. Additionally, any old walks leaflets, maps or other Nats related items would also be of interest towards an archive of Nats material covering as many years as possible.

Please contact me or any member of the Council.

Jim Cook