

Dundee Naturalists' Society

Instituted 1874



Bulletin No 32 2007

DUNDEE NATURALISTS' SOCIETY

ANNUAL BULLETIN No 32

2007

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The Bulletin cover illustration is by Leonore Goodliffe (née Fullerton) and shows a selection of our area's alpine plants, including the Society's emblem, the dwarf cornel. Other illustrations are by Anne Reid, Jim Cook, Doug Palmer, Bede Pounder, Mary Reid, Christine Reid, and Artfile. The illustration on page 33 is reproduced with the permission of the Minister of Monifieth South Church.

EDITOR'S NOTE

Thanks to all members who have submitted articles and reports, it makes Bulletin production much easier, though there is always space for contributions from new authors. Thanks to Mary Reid for typing and other computing help, and to Jim Cook, and Mary and Christine Reid for proof reading and helpful comments (Mary via e-mail again this year!).

Contributions for the next Bulletin, both articles and line drawings, are always welcome and may be submitted at any time during the year.

Anne Reid

SOCIETY REPORTS

PRESIDENT'S REPORT

Gie me ae spark o' Nature's fire
That's a' the learning I desire
(*Epistle to J Lapraik* by Robert Burns)

I am writing this close to Burns' Night, so please allow a Lancastrian to quote a Scots icon Burns was inspired by Nature just as we Nats are. Like him, we learn and delight in Nature's fire. I wondered as I read these lines how the Dundee Naturalists' fire was burning at the end of my presidential term? I reckon that it's burning brightly, though not exactly roaring away. If I can use the barbecue analogy, more fuel and coaxing are required to keep it that way – but more of that later.

2007 was a gey queer year - a very wet summer with sunny April and October school holidays. Were we bovvered? Certainly not. Sheila Brinkley spirited away the showers for our July mid-week expedition to Moray - a gorgeous **oyster plant** show and a good number of **butterflies** basking in the sun. Three trips which seemed to promise foul, wet weather were amazingly dry - Killiecrankie, Ben Lawers and the Elliot to Easthaven walk. Carsegowniemuir achieved its majority - how it has grown (the planted trees that is) with a lot of help from numerous volunteers over the years. The 21st anniversary was suitably celebrated with a barbecue - thank you Jim and Anne.

You may have noticed that a certain golfing competition was held at Carnoustie in 2007. Fears that a hovercraft bearing hordes of spectators would eliminate a newly established **sea pea** colony were unfounded. Indeed the gowfers have produced a glossy brochure extolling their green credentials.

Society excursions and lectures are, of course, detailed elsewhere in the Bulletin. Among their number, notable talks by our own members include: the gem on Dumbarnie Links by Gordon Corbet, our Hon. President; Jim Cook's innovative 'Microscopic Marvels' with digital projection, and Gordon Maxwell's Wednesday Afternoon 'Tayside Wildlife'. The Society joined with other national and local nature conservation organisations, RSPB, SWT, SOC and ADBC, to stage Dr Algirdas Knystautas' Russian lecture - a most successful enterprise. There were technical difficulties in projecting the old-fashioned analogue slides, for which I apologise.

I am indebted to all our leaders, lecturers and Council members who make all Nats' activities so successful. Did you know that there were 16 winter meetings in 2007 and 14 summer excursions too? My heartfelt thanks go to the hardy perennials who have kept the show on the road - standing in for me when absent among other things my vice-presidents Brian Ballinger and Anne Reid, who also produces this excellent Bulletin, Dorothy Fyffe our treasurer; our secretaries Margaret McLaren and Alex Rollo. We were very grateful to Alex for taking on the secretary's job which Margaret had held for seven years. She gave sterling service and is still helping the Society in so many ways. Thank you one and all for all the support you have given me.

To return to the idea of keeping the Society's fire burning brightly. Over the years successive presidents have asked for two things and they are linked, if you think about it. The first is more new members so that the Society can renew itself and not wither away. Spread the word please. The second is attending the excursions. Please use the booking form to book your bus or car seat. I am not the first president to point out that the greater the number of bus passengers the cheaper the cost.

Alban Houghton

TECHNICAL CONVENOR'S REPORT

The main activities this past year have been the Tuesday study and survey evening meetings in the spring plus a number of visits along the Angus coast, particularly to Arbroath cliffs. In the autumn small groups took several weekends to survey the **fungi** in local

woodlands Unfortunately, the dry weather in autumn suppressed their growth compared to the magnificent displays last year

15th May Wormit Foreshore The evening turned out to be very pleasant, although rather cool, and was rewarded by a good turn-out of members and friends. Over 20 people attended We left our cars at the foreshore car park at Wormit and headed along the south Tay shore path towards Balmerino. The numerous singing birds attracted the attentions of the bird watchers and the botanists were kept busy recording the numerous plants Although we didn't find any **cowslips** or **false oxlips**, one of the potential objectives of the evening, probably because nobody walked far enough, the party did find a number of good clumps of **meadow saxifrage** (*Saxifraga granulata*), another of the species we were particularly looking for. The **blackthorn** (*Prunus spinosa*) along the path was thriving, along with the usual crop of field weeds and others including **spurrey**, **field pansies** and **pignut**

As we walked along the top of the steep bank down to the shoreline, members of the party also kept a sharp eye open for the possibilities of **bluebells** (*Hyacinthoides non-scripta*) The party found a number of good patches, but none that could hold a candle to some of the woodlands in central Fife or Perthshire The growth of these plants seems to have been checked over the last 20 or so years, but it is difficult to say whether this is due to increased shading by the trees or to climate change

On the way back several members explored along the shoreline, finding a number of interesting plants including **wild onion** (*Allium vineale*) and **wild celery** (*Apium graveolens*) However, we'll have to organise a walk next year along from Balmerino to find the false oxlips

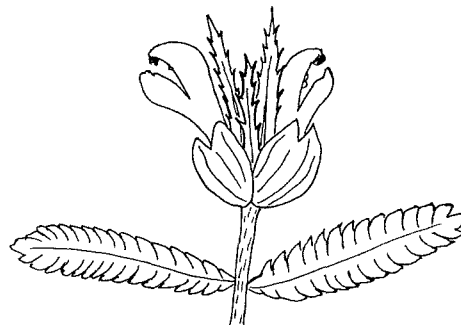
22nd May Easthaven It was a rather airy and chilly evening but there was an excellent turn-out We recorded large numbers of the usual plants expected along the shoreline and dunes but our objective was the far end in front of the last of the row of houses We spent more than half an hour looking around the large patch of rough grass searching for the **greater yellow-rattle** (*Rhinanthus angustifolius*). We are glad to report that the remedial work undertaken by the work group last year seems to have had a beneficial effect The turf cut-outs have obviously encouraged the plant and virtually all specimens were found around the edges or even on the bare ground inside We recorded over 60 plants distributed around the area

Meanwhile David Lampard and Anne Reid, with her F₁ generation in support, had walked further along to an area of rocky shore and spent some time checking under large stones and searching with nets through the pools and masses of **seaweed**. They found a good selection of **worms**, **crabs**, **molluscs** and even one or two small **fish** Most members joined them and we all finished by walking further along to a small stream before returning to the car park.

29th May Balgay Hill This was our one miserable evening, it was very dull and wet and most members sensibly stayed at home Only Joy Cammack, Margaret McLaren, Brian Ballinger and one or two other stalwarts braved the weather – but it wasn't so bad once we were out and walking. We explored the dripping woodlands on the hill around the observatory but it was too wet to spend much time recording

19th June Tullybaccart The last outing was honoured with good weather and an appropriate turn-out The cars met at the small Laird's Loch car park but there wasn't enough room and we soon decamped to the road end opposite Little Ballo. From there the party moved along through the wood in the direction of Redmyre Loch Gordon Maxwell, Davie Stein, Brian Williamson and several others found a number of interesting **bracket fungi**, **insects** including **bees**, **wasps** and **hoverflies** and one or two good **spiders**

The wider views possible at the far end of the wood allowed sightings of several interesting birds, particularly a **buzzard** at fairly close quarters and a distant **osprey**, and we moved on to the edge of the marshy ground on the right. A number of note-worthy species were recorded, including **bottle sedge**, **oval** and **star sedges**, **yellow sedge**, **carnation sedge** and **bog sedge** (*Carex limosa*), several **rushes**, **willows**, **marsh lousewort** (*Pedicularis palustris*) and **bogbean** (*Menyanthes trifoliata*)



Greater yellow-rattle

CARSEGOWNIEMUIR CONVENOR'S REPORT

This past year work at the quarry has continued but on a reduced basis. A dozen trees, a mix of **ash** and **birch**, were planted over the winter and spring. The rather wet summer hindered a number of work visits but time was found to clear some of the paths and improve others by digging out half-buried rocks. At least the trees grew well in the damp conditions.

The highlight of the year was the 21st anniversary barbecue, which was attended by a good crowd of hungry naturalists and friends (see full report on p 15 Ed). Members spent time exploring the quarry and hearing tales of earlier days while Anne Reid lit the fire and soon were able to tuck into a feast which appeared as if by magic. Ronnie and Lorraine Young joined us to celebrate the occasion and the 'twa dugs', Milly and Purdey, were only too glad to join in as well. We were lucky that the rain held off until the very end but the gazebo and the barbecue had to be packed up in a hurry.

The wet weather has suppressed the **ragwort** growth this past year and clearing it was less of a chore than usual, fortunately. A much greater problem, though, was the burgeoning **rabbit** population. The dogs do their best but don't seem to dent the 'horde' at all. The first enclosure, at the far end, was penetrated by one burrow but this was fairly easy to block. Exclosure 4, nearest the cottage, was another matter, though. A lot of time was spent collecting large stones and almost paving the area over and around the burrows emerging inside but although the work did reduce damage, there was always some more. We have had to protect, as much as possible, the trees inside the wire but a number have been damaged and two **rowans** died due to ring-barking. Eventually, at the end of the year, lengths of chicken wire were laid and weighted down with large stones in an effort to deny entry to the rabbits. Another measure taken was to collect a couple of dead rabbits and drop them down separate burrows to try to drive the animals out. It remains to be seen how effective these efforts will be. In the autumn a **ferret** group visited the Youngs at the cottage and cleared 20 or 30 rabbits out of one of their field corners. We hope that they will visit several times in the winter and begin to work through the quarry.

Dutch elm disease still remains a problem and another of the **elms** planted 20 years ago succumbed in the last year. Only two of the original elm trees are left and we wonder for how many more years they will survive.

To end on a more positive note, Ronnie Young used his contacts to buy, on our behalf, a powerful motor-driven strimmer, or rather brasher, to help us clear the paths of rampant **willowherb**. Although, due to the summer weather, it's only had one or two outings this last year, we look forward to using it to clear the paths much more quickly and easily in the future.

Jim Cook

OBITUARY

BILL WATSON

Bill Watson died in November, but (surprisingly, as he had been well-known in various walks of life - as a schoolmaster, and as a respected musical soloist and accompanist), this went unremarked by the *Courier*. Although he was not a member of the Naturalists' Society, he had been familiar to many members as the last secretary/treasurer of the Dundee Tree Group.

Colin McLeod

WINTER MEETINGS

BARRY MILL BARBECUE

2nd January

After the cancellation of Edinburgh's Hogmanay celebrations due to high winds and rain we felt very lucky to awake to a bright sunny morning, with just a touch of frost but no wind - ideal barbecue conditions. As usual we arrived early in order to set up the quiz and get the barbecue ready to light. When everyone else arrived they were supplied with mulled wine and

Christmas cake which Brian and Jenny had brought, before they headed off on a walk aiming to find and identify the pictures of animals which we had distributed around the property. With over thirty Nats and friends on the loose, the real wildlife seen was, in general, not very exciting. After some debate the identification of a large group of **fungi** on a **sycamore** stump was deemed to be **oyster fungus** (*Pleurotus ostreatus*), though no one was certain. A total list of 24 birds, including a **grey wagtail** and **great spotted woodpecker**, were seen along with a solitary flowering **daisy** spotted by Jack Moody. Christine pointed out that nobody had noticed the flowering **gorse** bush near the bridge and Bob McCurley was pleased to see a **siskin** to add to his already long 2007 list.

Throughout the day Peter had up his mist nets in the garden in order to catch birds to ring. Most of the catch was **goldfinches** and **blue tits** but many people had never seen these birds at such close quarters before and enjoyed being able to see the detail of their plumage. In addition a **wren**, a male **greenfinch**, a male **house sparrow** and a **chaffinch** were ringed while Peter regaled everyone with his ringing stories. Gordon had brought some fine specimens of **earth stars** (*Geastrum* sp.) which he had found at the Esplanade Gardens in Broughty Ferry and these were duly admired by all and photographed by those with new technology to try out!

When everyone had returned from their walks the usual wide range of food was prepared on the barbecue. Peter provided some baked potatoes and a pot of soup to supplement rations, and all was consumed with enthusiasm. Margaret McLaren won the quiz, in competitive mode having forgotten that she may be expected to provide one for next year!

The tidying up was easy, especially since we just left the hot barbecue to cool down and collected it the next morning. The few people remaining were invited into the cottage by Peter for coffee and more Christmas cake, enjoyed in front of a log fire. The final bird on the list, a **coal tit**, was added after being seen through the window on one of the bird tables. A very heartfelt vote of thanks was given to Peter for his hospitality on such a lovely winter day.

Anne and Mary Reid

OMAN - MORE THAN A DESERT?

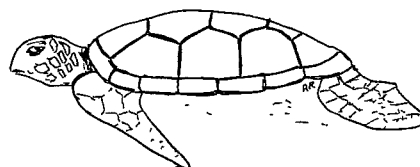
Eric McCabe - 16th January

Photographer and ornithologist Eric McCabe transported the audience to a part of the world about which few, if any, present had any knowledge.

Oman is an oil rich state on the south coast of the Arabian Peninsula of some 300,000 sq km and is mostly desert with a population of only 2 million. Eric and Lesley, his wife, flew to the capital, Muscat in late October 2005 to tour with a friend. Permits were required to visit areas, but once checked there were no restrictions and they encountered no problems with gaining access. One reason for the visit was to record the large number of species of bird in the area. It is on an important migration route into Africa from Europe and has Indian, European and African birds present.

Their first trip was north from Muscat up the coast where they visited a dairy farm. The **cows** were kept indoors but the fields were cultivated to provide fresh **grass** for feeding. The birds were, of course, attracted to the fields and irrigation ponds and they were able to get many photographs from close quarters.

Visits were also made to the local refuse tip which is a favourite spot for birdwatchers because of the **eagle** and **vulture** species which it attracts. An early morning excursion to a beach was rewarded with photographs of hatching **green turtles** which were protected from the onlookers by dedicated 'turtle wardens'. The rare nocturnal **crab plover** was seen nearby - the only wader in the world which nests in a burrow.



Returning to Muscat they then travelled south and west to Oman's second city, the industrial Salalah. At the dump there they saw large numbers of **white storks**, one of which Eric had managed to photograph actually preening (or scratching) under its wing while in flight. The mountainous region inland here was more vegetated than areas visited in the north and there were more birds with African connections. Water birds, including **sand grouse**, congregated at the oasis at Muntasar.

This was an outstanding lecture illustrated by Eric's superb photographs to which Jim Cook gave a heartfelt vote of thanks on behalf of an appreciative audience

Dorothy Fyffe

MEMBERS' NIGHT

30th January

There was the usual sense of anticipation from those present as we waited to find out what was on offer from fellow members. Gordon Maxwell and Davie Stein had brought albums of photographs on a range of natural history topics, while Dorothy Fyffe had specialised and brought her photographs of **moths** trapped in her garden. There was a considerable 'scrum' around the front table at the end of the evening as everyone admired the prints.

The other contributors had brought traditional slides or electronic versions, which we managed to show without too many technical hitches. The nine sets of photographs shown were:

Kim Eberst Favourite Photos from Natural History Holidays. A wide range of places and subjects including **red cardinals** in Central Park, New York and a cheeky **North American red squirrel**, a **basilisk** or **green iguana** in Mexico, **poppies** and **birds** from Lesvos (Greece) and **macaques** near a temple in Thailand.

Dorothy Fyffe New Zealand Seabirds. Everything from **blue penguins** and **black petrels** to **white-capped albatrosses** and a single **Australasian gannet**. Also **variable** and **piebald oystercatchers** and the very rare **king shag**.

Gordon Maxwell Miscellaneous Nature. A backlit **spider** (*Araneus quadratus*) on its web and the **emerald damselfly** (*Lestes sponsa*) at Morton Lochs. Colour varieties of **beadlet anemones** in rock pools and a fungus with the intriguing name of **plums and custard** (*Tricholomopsis rutilans*) due to its colour. A **raven** flying at Lundie Crags and a **beautiful golden-Y moth** on the Trossachs outing.



Brian Allan Mediterranean Natural History. Despite annual visits since 1977 there is always something new to find. Several *Orchis* and *Ophrys* species were shown and the newly discovered **tulip** on Cyprus. We also saw some of Sid Clark's secrets of flower photography which include a white tent so that the light is diffuse, and a lot of patience.

Brian Ballinger Mediterranean in September. A **pasha butterfly** and **hummingbird hawkmoth** in north Majorca and endemic **crocus** and *Hypericum balearicum*. **Autumn squill** and **southern grayling butterfly** on Corsica and a **tortoise** on Menorca.

Marjory Tennant Nats in Summer 2006. **Toothwort** in the Glasgow Botanic and the pink **fairy foxglove** (*Erinus alpinus*) naturalised in the quarry at Arnside Knot in the south Lake District. The solitary **fly orchid** in Silverdale Quarry and **viper's bugloss** at Aberlady. Nats at Clatto Country Park on the Dundee Mystery Tour, including the "secretary bird" (!) (Margaret McLaren Ed) on playground equipment there.

Sheila Brinkley Winter Landscapes. A **sunrise** to start with as the house has no window which faces the sunset. The riverbank of the Isla at Coupar Angus in the snow and a frozen waterfall above Dunkeld. The snowy reflection of Ben Lawers in Loch Tay at Kenmore and the winter outlines of **alder** and **birch** trees, some highlighted by freezing fog.

Jim Cook Carsegowniemuir Quarry. Some shots which Margaret Duncan took 20 years ago from places where sightlines are now blocked by tree growth, especially at the east end of pond five. The use of plastic mesh in 1986 to protect trees, an experiment which was never repeated as the **rabbits** found it too easy to chew through, and illustrations of the hard work entailed in the fencing of enclosures, small and large.

Doug Palmer Petra, Jordan 2006. Access to this amazing ancient site is via a narrow **gorge** through the **sandstone**. There are tombs carved out of the solid rock and some very impressive buildings. Throughout, the stone is highly coloured with distinctive banding.

After this wide ranging selection of images Brian Allan was thanked for his organisation of the evening and for keeping things running (fairly) smoothly

Anne Reid

JAMES HUTTON - THE FOUNDER OF MODERN GEOLOGY

Dr Rob Duck - 13th February

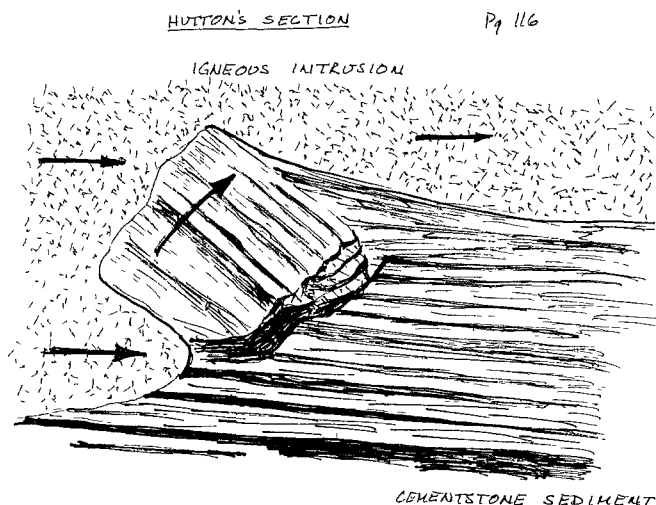
A lecture on the history of geology could be dull and boring but, when delivered by Dr Rob Duck, from Dundee University, the subject comes alive. He is well known to members of this Society as an excellent lecturer and attracted a good audience of almost 50 members, who were held fascinated for nearly an hour by this tale of the early history of scientific geology.

James Hutton was a major figure of the 'Edinburgh Enlightenment' of the 18th century (being born in that city on 3rd June 1726 and dying there on the 26th March 1797) and is acknowledged as the founding father of modern geology. He originated the concept of 'deep time' and demonstrated conclusively that the earth was far older than ideas current at that period. Most people, for instance, accepted the ideas of Archbishop Ussher in Ireland who in 1650 had determined that the earth was created during the night before Sunday 23rd October 4004 BC.

Hutton gained a medical degree on the continent and when he returned helped a school friend to set up a chemical works that provided a steady income for the rest of his life. Instead of taking up the practice of medicine, Hutton became a gentleman farmer, bought an old rundown farm, Slighhouses near Duns in Berwickshire, and spent the next 30 years improving it. During his time exploring the Borders and other parts of Scotland, and while traveling extensively in England, France and Belgium in the 1750s, Hutton gradually became attracted to the puzzles of geology. In 1764 he toured north Scotland with John Clark of Eldin, the artist and a great friend, and further formulated his ideas. In 1767 Hutton moved back to Edinburgh. A brilliant conversationalist, with a bawdy sense of humour and a considerable intake of brandy, he became a significant figure in the cultural life of Edinburgh.

Rob Duck told us that Hutton's ideas solidified around the concept of the volcanic origin of many rocks and his followers ('plutonists' or Huttonians) became embroiled in a dispute with the 'Wernerians', named after the German geologist Abraham Werner, who believed that most rocks originated by crystallisation from seawater. Hutton searched hard to find geological formations that supported his own ideas, such as an outcrop of highland schist found in Glen Tilt in 1785 which showed intersecting granite veins that could have been intruded only in the molten state.

Rob explained that another of Hutton's major advances was his formulation of the concept of the great age of the earth, expressed in the famous statement "No vestige of a beginning, no prospect of an end". Again, he supported this concept with crucial geological evidence, including the unconformity found in 1787 along the river near Jedburgh. An unconformity is a sedimentary formation that has been folded or tilted, then partly eroded away and much later had another succession laid down on top of it. The unconformable nature of the deposits clearly demonstrates an immense period of time.



Explanation: Block of sediment is clearly torn upwards. This can be explained by intrusion of sill and not by sedimentary processes.

between the two sedimentary formations, far longer than can be explained by an age of only a few thousand years and is proof of a "succession of worlds". Perhaps the best known of Hutton's unconformities was located in 1788 at Siccar point in Berwickshire during a boat trip from Dunbar with friends James Playfair and Sir James Hall, the experimental geologist. Playfair later wrote "The mind seemed to grow giddy by looking far into the abyss of time while we listened". Another of Hutton's key insights was that of the continuity of geological processes, or 'uniformitarianism', expressed as the famous quote from Charles Lyall, "The present is the key to the past".

Unfortunately Hutton wrote very poorly and his seminal work, "Theory of the Earth" published in 1795, was and is virtually unreadable. However his ideas were continued and developed by others, particularly by Charles Lyall (born at Kinnordy) in his highly regarded book "Principles of Geology" which was a major influence on the thinking of the youthful Charles Darwin among many others.

The interest of the audience in the subject was shown by the number of questions asked and points debated with Rob Duck after the lecture – and a number of us retired to a local hostelry afterwards in an effort to encourage our own enlightenment.

Jim Cook

SOCIAL EVENING

23rd February

Thirty-three members supported the Social Evening at the Queen's Hotel. A welcoming tape of birdsong became overwhelmed by the chatter of the human species as they settled by the bar, with plant names to identify attached to their backs.

Our President, Alban Houghton, welcomed everyone and explained the allocation to the four tables by means of drawing a playing card. Silence followed over a card game of pelmanism then memories were further tested by a light-hearted bird quiz sourced from the Isle of May.

The familiar fare of stovies and trifle was supplied buffet style. While a coffee and tea bar was being set up, Helen Blackburn and Wynne Tennant entertained with readings from "Alice in Wonderland", a playing card nightmare and Ogden Nash snippets referring to animals. The evening ended with a repeat of "Call my Bluff" – equally skilful and masterful as it had been in 2003. Brian Allan, Liz Houghton and Bede Pounder gave wonderful and dubious meanings of the chosen Scottish words including **gweedie**, **bregwort**, **baise**, **raird**, **splorrock** and **freazock**. Laughter abounded and finally a lucky draw using our entry ticket numbers provided more prizes and our thanks to those who contributed to them.

Alban Houghton thanked everyone. Brian Ballinger endorsed this and made a special thank you to Alban and to Jean Colquhoun who had made the tables most attractive, their efforts made the evening so enjoyable.

Jean Colquhoun and Margaret McLaren

DUMBARNIE LINKS

A Gem in the Fringe of Fife
Gordon Corbet - 27th February

Gordon Corbet, our Honorary President, described the Dumbarnie Nature Reserve, facing Largo Bay in South Fife. He is convenor for this site of seven hectares which was acquired by the Scottish Wildlife Trust in 1998 and is remarkably rich in animal and plant species.

This narrow strip of land is adjacent to the sea and improved pasture and part of it is subject to seasonal flooding. It consists of calcareous grassland, rare in east Scotland, and supports 200 species of vascular plants. **Cowslips** (*Primula veris*) are abundant and a small bank of **primroses** (*Primula vulgaris*) is also to be seen on the north face of a dune. There is a good display of **purple milk vetch** (*Astragalus danicus*), as well as some **viper's bugloss** (*Echium vulgare*) and a few plants of **houndstongue** (*Cynoglossum officinale*). On the shore

are **orache** (*Atriplex*) species and **sea rocket** (*Cakile maritima*) **Dog rose** (*Rosa canina*) has escaped the onslaught of **Japanese rose** (*Rosa rugosa*), so prevalent elsewhere. Relatively few **moss** (20) and **lichen** (27) species have been recorded and only 27 different **fungi** have come to light so far, although more undoubtedly await discovery.

Skylark and **meadow pipit** and a few other bird species nest here, although species known to breed in the 19th century, including **shelduck** and **dunlin**, no longer do so, perhaps because of human disturbance. Many other bird species are to be seen nearby on the sea, outside the reserve. The **rabbit** is the most frequently observed mammal and provides useful grazing, preventing over-growth of rank vegetation. The lack of an adjacent golf course and associated rabbit control is an advantage.

32 species of **snail** graze the rich grassland, including one, *Truncatellina cylindrica*, at its only current site in Scotland. 14 different **butterflies** are found here, particularly **meadow brown**, **ringlet** and **small heath**, although **dark green fritillary** and **painted lady** also occur. Their caterpillars are important grazers.

Gordon has identified or arranged for the identification of **bees**, **sawflies**, **beetles** (220 species) and **flies** (365 species), using various capture techniques and making a grand total of 860 insect species. 100 different **spiders**, 10 **harvestmen**, 10 **millipedes** and 10 **centipedes** have been found and beetle **mites** have been studied (perhaps protecting beetle larvae by eating other larvae).

Our speaker ended his survey by emphasising the importance of getting down on your hands and knees to study nature and the inter-dependence of all life. Gordon was thanked for his description of a fascinating and exceptional study.

Brian Ballinger

LOCH OF KINNORDY

3rd March

The weather was kind to the group which met at East Whale Lane for the Saturday morning outing to the RSPB Reserve at Loch of Kinnordy. Once we arrived, 25 naturalists spread out to observe the bird life from the three hides around the loch.

In the space of two and a half hours the group saw an interesting variety of birds. Stars of the show were the **whooper swans** which put on a noisy performance. Supporting players included **pintail ducks**, **goldeneye**, **tufted ducks**, **gadwall**, **wigeon**, **shoveler** and **mallard**. The fresh water birds included **moorhen**, **coot**, and two saw-billed ducks, a female **smew** and a **goosander**.

Lifting our eyes to the hills behind the loch we observed **kestrels** and **buzzards** as well as a selection of **gulls**, including **black-headed** and **common gulls**. A walk through the woodland around the loch gave sightings of **grey** and **pied wagtails**, **song thrush**, **blue tits**, **long-tailed tits**, **coal tits** and **wren** together with the more common **blackbird**, **chaffinch**, **greenfinch** and **dunnock**.

Some of the party strode out along the new path that leads to Kirriemuir and, after exploring, rejoined the group in the car park in time to set out for lunch. Jean Colquhoun, however, took the intrepid route to her meal by walking all the way to Kirriemuir! Twenty of the party enjoyed a hearty lunch in the Airlie Arms before returning home.

John Campbell



ANIMAL AND PLANT OF THE YEAR

For the entertainment at the AGM on 13th March I presented photographs of a selection of 40 of my animals and plants of the year. Members were then asked to nominate their own species and 18 replies were received. As might have been expected, we had a very wide

variety of choices and only two of my items were repeated (**dwarf cornel**, the Nats emblem, and **centaury**)

Animals included vertebrates and invertebrates, and mammals, birds, butterflies and moths were chosen. Two votes each were cast for **otter**, **roe-deer** and **wren** and one apiece for **badger**, **red squirrel**, **fox**, **grey wagtail**, **pheasant**, **bullfinch**, **goldfinch**, **golden eagle**, **yellowhammer**, **comma butterfly** and **hummingbird hawkmoth**. With the partial exception of otter, the sea and sea-shore did not come into the picture.

With regard to plants, two votes went to **primrose** and **camellia** and one each to **Scots pine**, **twinflower**, **dwarf cornel**, **fumitory**, **buttercup**, **sea-pea**, **centaury**, **feverfew**, **butterbur**, **bladderwort**, **frog orchid**, *Dactylorhiza elata* (a continental European orchid), **snowdrop** and **mountain bog sedge** (*Carex rariflora*). This represented a wide range of common and rare species, with camellia and the *Dactylorhiza* as the only non-British wild plants. No lower plants such as **mosses** and **lichens** were nominated.

As with many elections we would obviously need a second round of voting to produce a clear result. However, one can perhaps conclude that we get pleasure from a great variety of wildlife including birds, mammals, insects and plants of many different families. Thanks to all who took part.

Brian Ballinger

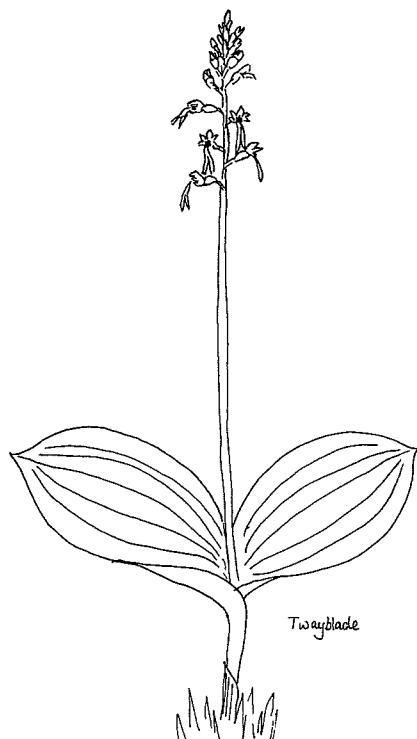
(If she had not been serving teas, your editor would have voted for otter, having seen one for the first time in autumn 2006. Ed.)

SUMMER OUTINGS

CRAIGHALL DEN, CERES

21st April

We left Dundee, 33 of us, in sunshine and arrived at the attractive village of Ceres where, in the car park, interesting information boards and the old pack bridge made the atmosphere of times gone by. The Fife ladies swelled our numbers and we all set off up the road, in and out of the woodland looking at the plants. This was a path I personally hadn't been on before and wild flowers were abundant along the burn. **Goldilocks** were growing by the roadside and **great wood rush** in the wood. **Wood sedge**, **lesser periwinkle** and **few-flowered leek** were all noted.



We entered the Craighall Den and followed the burn. The **bluebells** were still in bloom and the leaves on the trees were a beautiful fresh green, with **ground ivy** growing over the fallen tree trunks. We climbed up the path above the burn leading to the old lime kilns and there we found **twayblade orchids** and **yellow figwort**. This area had a very peaceful atmosphere and a few members sat down to have their 'cuppa', viewing majestic and ghostly dead **elms** at the top end of the valley. There is also a circle of lovely **beech** trees just above the lime kilns.

On the return journey, passing through the farm we admired the young calves and, further on, an old Clydesdale horse. Gordon gave the horse a treat of some carrots and its pal, a sheep, enjoyed a carrot too. On looking up a row of **swallows**, newly arrived, were lined up along the telephone wires - summer is a coming!

We passed behind the houses to arrive in the village near the museum. Here some members enjoyed a bowl of soup while others visited the museum. The rain came on and we left early for St Andrews.

Margaret McLaren

ST ANDREWS BOTANIC GARDEN

21st April

Our guide for the afternoon's walk was Mr Ian Douglas who began by giving us a brief history of the gardens. He then led us to the rock garden where we saw areas of limestone pavement, plus a new bed which has been designated for Scottish native plants and already has two rare **ferns** in position. These are *Woodsia ilvenis* and *Cystopteris dickieana*.

The aims and the construction of the scree bed were carefully explained. We then walked to the pond to see water-loving plants emerging into growth and were able to identify a grove of native trees nearby. A couple of paces forward and we were into the glories of the woodland dell with its layer of humus rich soil. **Camellias** and **rhododendrons** in full flower were at their best. I was careful to make a photographic record of *Rhododendron emasculum* which was exquisite and new to me.

Some trees in this area not only provide an essential canopy of semi-shade but are extremely interesting in their own right. They included **coast redwood** (*Sequoia sempervirens*), the **strawberry tree** (*Arbutus menziesi*) and one of the so called fossil trees **dawn redwood** (*Metasequoia glyptostroboides*), already in fine leaf. The latest find of these fossil trees, the **Wollemi pine** (*Wollemia nobilis*), was proudly produced for our inspection. It was only discovered in Australia in 1994 and this potted version is housed at present in a temperate house until it grows larger. Viewing the various glasshouses, some with tropical scents and flowers, was the culmination of a very enjoyable and instructive tour.

Sheila Brinkley

MURTON NATURE RESERVE

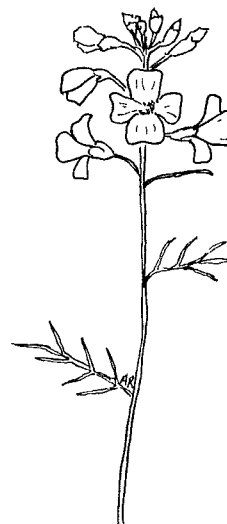
1st May

The Murton Nature Reserve near Forfar was visited by around 30 of our members on a sunny but cool evening. We were greeted by the ranger, Al Borland, who guided us round the 1.5 mile circuit giving an interesting and lively description of the site. As well as engaging in nature conservation, the Murton Trust has been undertaking environmental education for young people from Scotland and overseas. A community garden has also been opened for growing organic fruit and vegetables.

The reserve has been established over the last six years on a former sand and gravel quarry of about 86 acres and includes four ponds, woodland and grassland. The land had been leased to the quarry company on condition that it was restored as a nature reserve. A farm with an educational role is also planned and a large new car park has just been opened. At present the car park and bird hides are open 4 days per week but it is hoped shortly to extend this to daily.

Many species of birds have been seen including the scarce **little ringed plover**. Looking over the ponds from a raised area (there were too many of us to fit in the hides) we viewed the birds with guidance from Bob McCurley. Species seen included **ringed plover**, **pied wagtail**, **wigeon**, **lapwing** (with young), **gadwall**, **tufted duck**, **coots** and **mallard**. We were delighted to see and hear a **skylark** singing lustily nearby.

The next section of the track was coloured with wild flowers, including **wild pansy** (*Viola tricolor*), **field pansy** (*Viola arvensis*) and **cuckooflower** (*Cardamine pratensis*) whereas further on **cowslips** (*Primula veris*) were at their best. Anne Reid spotted a **buff-tailed**



bumblebee (*Bombus terrestris*) There are plans to use cattle and sheep to graze this area

The well developed **sand martin** nest banks and boxes were visited and they are already occupied by 300 birds this year. Al described the management of the nest area including the need to clear old nest material at the end of the season as it is laden with parasites.

The trees planted around six years ago in the woodland area are doing well on the whole, although the woodland grant scheme has proved to be inflexible. **Rabbits** have been a major problem and various control methods have been adopted.

Right at the end of the circuit Jim Cook pointed out a large patch of **yellow figwort** (*Scrophularia vernalis*), very unusual in Angus. We got back to the car park just as the sun set in a red haze. Al was thanked for his presentation and we were impressed by all the work carried out on the site. The reserve only opened a few months ago, but is proving popular, with 4,500 visitors to date (counted electronically)

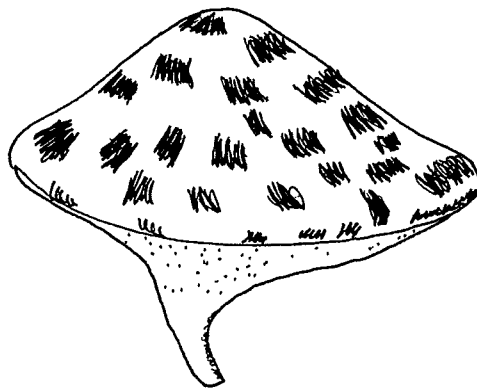
Brian Ballinger

LADY MARY'S WALK, CRIEFF

12th May

As the coach carrying 30 of us made its way to Crieff, the outlook was not good. The drizzling rain that had been falling in Dundee when we left had become persistent as we headed for Perthshire. On arrival in Crieff we sought shelter at the Visitor Centre where we enjoyed refreshments and watched as the weather improved.

Lady Mary's Walk, a scenic pathway beside the River Earn, was gifted to the town by Sir Patrick Murray of Ochertyre and named after his daughter who was very fond of the walk. We began our explorations as we followed the River Turret towards the start of Lady Mary's Walk itself by finding **ramsons**, **tuberous comfrey**, **meadow saxifrage**, **water avens** and



Dryad's saddle

sweet Cicely. Jim Cook made us aware of a **blackcap** singing nearby. Turning right took us alongside the River Earn where we saw **mallard**, **goosander**, **grey wagtail** and **dipper**. The riverbank provided specimens of **bugle**, **crosswort**, **butterbur**, **herb Robert**, **dog's mercury** and the invasive alien, **Himalayan balsam**.

Veering away from the river we began the ascent of Laggan Hill, spotting first **oak maze-gill fungi** and then, on higher ground, **dryad's saddle fungus**. There was plenty of birdlife in evidence at this point including **willow warbler**, **whitethroat** and **jay**. The striking features at the mature wooded summit of the hill were the trees of **beech**, **field maple**, **horse chestnut** and **sweet chestnut** - all 'incomers' here.

Returning to the coach via the upper path, we were pleased to have had the opportunity to enjoy the beauty of Lady Mary's Walk - and we were dry, thanks to the improvement in the weather!

John Campbell

ARBUTHNOTT ESTATE

26th May

Dundee Naturalists' visit to Arbuthnott Estate was a new venue on an overcast but dry morning. We arrived at the Grassic Gibbon Centre, which had opened early for our arrival, at 10am.

After tea, coffee and scones we set off on our walk down the brae to the kirk and a look around the graveyard. The Kirk of St Ternan is situated by the River Bervie and is one of the very few churches in rural Scotland that dates from pre-reformation times and is still used for public worship. It is dedicated to the memory of St Ternan who is believed to have been born to a Pictish family in the Mearns. The church is thought to have been founded in the 11th century, prior to the present building, and later reconsecrated, the chancel having been dedicated on 3rd August 1242.

The part of the walk down to the river was where most of the plants were found. More than 250 species were identified, including **wood** and **water avens** and the hybrid result of their cross pollination. We had now crossed the bridge over the river where we saw hundreds of **tadpoles** in the shallow water and one or two **butterflies**, including **small copper** and **small tortoiseshell**.

With the wind freshening and a dark cloud appearing, it was time for lunch break. The rain did then come but most members took the opportunity to visit Arbuthnott House gardens with its masses of plants and trees. There was so much to see here that it is possibly a venue for a return visit sometime. Back at the Visitor Centre we had more tea, coffee and cakes and a well earned rest before returning home.

Peter Middleton

GAGIE MARSH

12th June

The evening was heavily dull and very wet with a continuous drizzle but 19 dedicated (or daft?) members appeared out of the murk to gather in front of Gagie House and were welcomed, briefly, by the owners, Mr and Mrs Smoor. We began by pressing through the tall grasses around the main pond. Peering through the **reeds**, only a few **mallards** and a single **moorhen** were visible. The edge of the pond was lined with **reeds** and **rushes** with a few open spaces, which allowed us to see banks of **pond weed** growing in the water but they were difficult to approach closely.

Mr Smoor soon joined us. On the marsh itself were clumps of **bottle sedge** (*Carex rostrata*) in the wetter patches and **oval sedge** (*Carex ovalis*) on slightly drier ground. In places **common sedge** (*Carex nigra*) was abundant. One of the **watercresses** (*Rorippa* sp.) grew in clumps along the main ditch with **cuckoo flower** (*Cardamine pratensis*) lining the bank and a few small clumps of the pink flowers of **lousewort** (*Pedicularis sylvatica*) spotting the grassy areas.

We found a number of pinky-purple spikes of **northern marsh orchid** (*Dactylorhiza purpurella*) on the marsh but there were only one or two plants of **early marsh orchid** (*D. incarnata*) with its distinctive salmon-pink flowers and folded-back lower lips.

The large three-lobed leaves of **bogbean** (*Menyanthes trifoliata*) were fairly common in the highly marshy spots but there were only a few of the wonderfully fringed white flowers. Along with it were **common cotton grass** (*Eriophorum angustifolium*) and a few thin plants of **marsh arrow-grass** (*Triglochin palustris*).

The rain eventually eased off but by then we'd had enough and headed back towards the house. Mr Smoor conducted some of the group back through his orchard and down towards his pond garden at the back of the house. We were all very impressed, he's obviously done a power of work and there was a superb range of species to admire. Although it was rather late in the season there were many still in flower, **campanulas**, **spireas**, a variety of **thistles** and many others.

The evening rapidly improved as the group was very pleased to accept an invite into the house for a cup of tea. The refreshment was very welcome, along with the cakes and biscuits, and we were able to spend time admiring the historic house and its contents.

Jim Cook



Marsh arrow-grass

KILLIECRANKIE

16th June

Leaving a wet and windy Dundee, it appeared that the planned long walk would have to be modified. When we arrived at the National Trust for Scotland Visitor Centre, it was dry and the clouds were high - Ben a' Ghlo living up to its name of 'hill of the veil'. A small group of seven tackled the 'yellow' RSPB route which passes above the cliffs to the west of the A9. The threat of rain, which did not in fact materialise, and the prospect of 1000 feet of ascent persuaded the majority of Nats to follow a low-level River Garry walk led by Brian Ballinger.

On the way down to the 'Soldier's Leap' a **woodlark** was belting out its song. The beautiful **wood vetch** and clumps of **common wintergreen** were admired. The 18 foot-wide rocky gorge of the Garry, which redcoat Donald McBane leapt to escape pursuing Jacobites in 1689, was most spectacular. Beyond Killiecrankie village, the bridge over the Garry was clothed in **fairy foxglove**. **Goldenrod** and **harebells** brightened the rocks below. Near a group of **common** or **mew gulls** a **roe deer** stood in the river, browsing overhanging leaves. A **goosander** flew off.

Going clockwise round the yellow-posted route, **heath-spotted** and **northern marsh orchids**, **lemon-scented fern** and **marsh arrowgrass** were found in a marsh to the right of the path. Scanning the high cliff for the elusive **sticky catchfly** growing at its northern limit we had excellent views of a noisy **peregrine**. Clumps of **beech fern**, **alpine bistort** and **melancholy thistle** appeared as we climbed. The **small pearl-bordered fritillaries** seen earlier in the week sipping **bugle** nectar were hiding away, though a **parasitic wasp**, a **crab spider** (*Mitsumena vatia*), and **chimney sweeper** and other **moths** were spotted.

The **heathery** plateau offered excellent views of the hills to the north and the following flowers. **petty whin**, **bell heather** and several groups of **lesser twayblade**. Descending, we heard a **raven** and a **cuckoo**, which was seen later on. **Yellow saxifrage** and **butterwort** grew in wayside flushes.

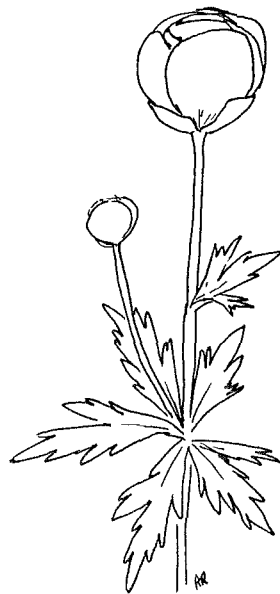
Returning to the NTS car park a baby **wood mouse** scuttled around the feet of a group of Nats which caused great amusement. Another bonus to add to an unexpectedly dry day.

Alban Houghton

KILLIECRANKIE

The Shorter Walk

16th June



Globe flower

The shorter walk chosen for the larger group was still about three miles long, but after an initial steep descent to the River Garry, was relatively level. We paid our respects to the Soldier's Leap and then moved on to the woodland flowers. There was plenty of **bugle** (*Ajuga reptans*), **common cow-wheat** (*Melampyrum pratense*) and **wood cranesbill** (*Geranium sylvaticum*) and Pat Gaff's keen eyes spotted the attractive grass **wood melick** (*Melica uniflora*). The escaped **Pyrenean valerian** (*Valeriana pyrenaica*) was putting on a good show by the river and **fungi** were beginning to appear, including **chicken of the woods**.

Birds were relatively few, but **grey wagtails**, **oystercatchers**, **common sandpipers** and **mallards** were spotted. The day was cool and overcast so no **butterflies** came into view, but we were grateful that the rain held off during our walk.

A solitary spike of **bird's nest orchid** (*Neottia nidus-avis*) was lurking in the deep shade up a steep slope and Davie Stein scrambled up to photograph it. We admired the fine view of the river gorge from the footbridge, while trying to avoid exceeding the maximum recommended load of 10 people, with varying success.

The return walk was along the road and Gordon Maxwell pointed out various **moths**, including male and female **clouded borders**, a probable **light emerald** and a fine **northern eggjar**.

Some of the party then crossed the road to follow a farm road fringed by **northern marsh orchid** (*Dactylorhiza purpurella*) A damp meadow displayed a profusion of **globe flower** (*Trollius europaeus*) and various **marsh orchids** and **sedges**, all at their flowering best.

Brian Ballinger

21st BIRTHDAY QUARRY BARBECUE

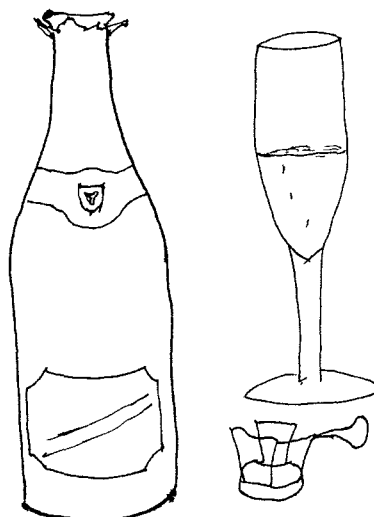
30th June

Much of the previous two days was spent writing lists Not only were we trying to remember everything for the barbecue, we also had to help Christine to gather, and pack, her stuff for Cadet Camp Once we had delivered her to her bus we set off for the quarry

We arrived early and were able to set up in dry, sunny conditions Our luggage was increased by the need for rain protection as the forecast predicted a downpour in late afternoon This necessitated extra trips back to the car for such items as our small tent (to keep the charcoal dry!) At this point we took a walk to see what was about and found two **large red damselflies** near pond two A **painted lady** and a **large white** flitted past nearby and we also saw a **red admiral** and **ringlet butterflies** further along the quarry Three species of **damselflies** are now well established and a pair was seen mating by pond five By the time everyone gathered at the appointed hour of 2pm the sun had gone and no more butterflies were seen

Jim had also brought rain protection in the guise of a gazebo which was big enough to protect the barbecue itself At an early stage a toast was drunk to the 21st birthday of the quarry in sparkling elderflower cordial which Jim had brought, and not in paper cups either - some classy plastic champagne glasses were produced, with a flourish, from the depths of his rucksack

At an early stage most of those present were guided on a walk by Jim This was at an unusually sedate pace dictated by a leg injury which was slow to heal The growth of the trees was admired and it was observed that some parts are now quite wood-like By the time everyone returned the barbecue was up to cooking temperature and, as the rain duly arrived, the novelty of cooking under cover was deemed to be a success Packing up the soaking wet tent and gazebo afterwards was not fun, but the rain helped to cool down the remaining charcoal embers very quickly Everyone seemed to enjoy the party despite the weather and we look forward to the next 21 years of the quarry



Anne Reid

MORAY COAST EXCURSION

A MID-WEEK 'WEEKEND'

3rd - 5th July

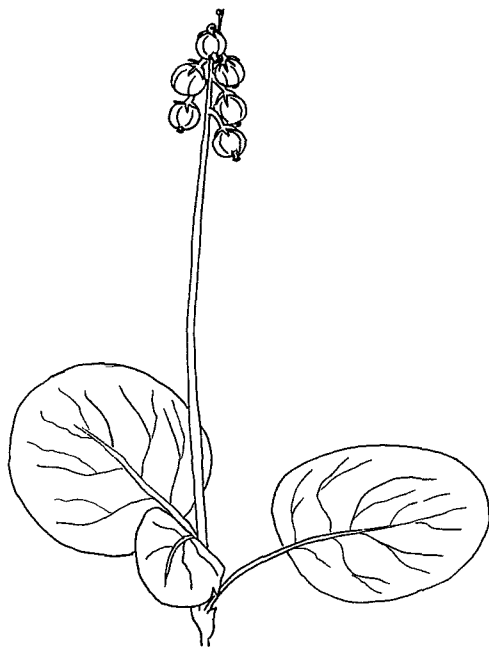
I joined the coach load of the Nats at the Blair Atholl Water Mill for coffee and excellent home baking However it was not an auspicious start to our trip as the rain poured down in torrents while we partook of an in-coach picnic alongside the moorland road between Carrbridge and Forres This area is notable for the great mats of **bearberry** (*Arctostaphylos uva-ursi*) on the banks lining the road

A rapid change of plans proved unnecessary as the rain ceased just as we arrived at our original venue of Randolph's Leap The River Findhorn was in full peaty spate forcing its way through the rocky ravine A stone marker resembling a gravestone recorded the height of

the massive flood (nearly 60ft at that cleft) in 1829. This wooded area boasts some beautiful trees including the **grand fir** (*Abies grandis*) and interesting plants such as a spreading clump of **serrated wintergreen** (*Orthilia secunda*). Several **green tiger beetles** (*Cicindela campestris*) generated excitement and proved to be photogenic.

There was sufficient time later that first afternoon for a short visit into the centre of Elgin. Members had a quick look at the museum or cathedral, including the Biblical garden where the coloured foliage of many trees was looking attractive. These included the **maple** *Acer drummondii variegata*. I kept an eye open for a **mulberry tree** which I had been told was growing in nearby Cooper's Park and managed to find it. This could be the most northerly station for this species. Early evening found us settling into our Eight Acres Hotel and enjoying an excellent meal. Some folk took advantage of the facilities offered by the leisure club, including the jacuzzi!

We were delighted to welcome Brian Ballinger on Wednesday morning as he was able to join us for the day. The breakfast time rain ceased just before we commenced our walk and the day remained dry and warm. We were expertly driven to Findlater Castle on the coast. The ruins that we looked down on have an interesting history and Jim Cook was persuaded to read out the details from an information board which stood in a deep pool - he was the only one in wellingtons! Beautiful **lichens** were seen in the area and they included **sea ivory** (*Ramalina siliquosa*) on fence posts. Energetic walkers were encouraged to reach a coastal bay noted for a good spread of **oyster plant** (*Mertensia maritima*) which come into flower in July. About ten folk achieved this aim facing considerable hazards. At one point the grass had become a watery burn after the heavy rain. Other members enjoyed sightings of numerous birds from the cliff top walk including diving **gannets**.



After a picnic lunch we drove on to Kingston on Spey. Just beyond the village lies an important nature reserve with areas of raised pebble beach, mineral-rich **carr woodland** and **lichen heath**. The circular walk had to be abandoned owing to large areas of flood water but everyone picked their way here and there and many interesting plants were noted. These included a deep mauve **eyebright** (*Euphrasia* sp.), **sheep's bit scabious** (*Jasione montana*) with beautiful sky blue flowers, **bird's foot** (*Ornithopus perpusillus*), one **coral root orchid** (*Corallorhiza trifida*), **intermediate wintergreen** (*Pyrola media*), **burnet rose** (*Rosa pimpinellifolia*) and two clumps of a pink **sedum** which resembled a rosy *Sedum acre* - very strange. Deep crimson-purple spikes of **northern marsh orchid** (*Dactylorhiza purpurella*) were submerged or protruding from flood water, an unusual sight.

We were extremely lucky to have fine weather again for our final morning on the Moray coast. The rain only commenced as we left for home at 1.30pm. The coach dropped us all off at Baxter's "village" near Fochabers. Some non-walkers visited the centre and its attractions

before joining the rest of the party at Spey Bay Wildlife Centre. Walkers meantime had tackled a five mile stretch of the Spey Way alongside this mighty river. **Butterflies** were seen appearing in the increasing warmth and included a superb specimen of a **dark green fritillary**, plus some **speckled woods** and a **ringlet**. Waterside birds such as **common sandpiper** were in evidence and Dorothy introduced us to the 'grating saw' note of a **sedge warbler's** song. Unusual albino flowering plants of **melancholy thistle** (*Cirsium heterophyllum*) were admired plus an attractive pink form of **canary reed grass** (*Phalaris arundinacea*). We also saw **field garlic** (*Allium oleracium*) sporting two very long leaf-like bracts. The walk progressed through varied habitats including woodland and **gorse** "tunnels" and opened out alongside the great river in places. It wound around areas of arable land until we arrived at the Wildlife Centre for lunch. Some members were lucky in spotting an **osprey** busy fishing and others enjoyed a

video presentation about the ice house. However everyone joined in the concentrated **dolphin** watch out to sea. We were unlucky but there is always next time! Our trip was rounded off by a visit, on the way home, to the House of Bruar on the A9 for an evening meal together

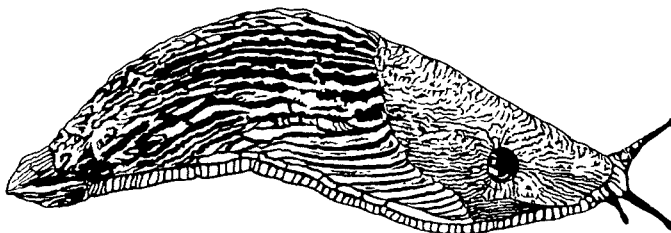
Sheila Brinkley

BEN LAWERS

14th July

Starting from the NTS Visitor Centre, our destination was the famous Ben Lawers flower cliff, though there was plenty to see on the way. The summits were capped by cloud but there were occasional patches of blue. Eight Nats climbed via the Nature Trail and the shieling path into the northern corrie of Bheinn Ghlas to finally gain the bealach below Ben Lawers at 1,000m.

David Lampard spotted a pair of coupling **black slugs** producing eggs. A butterfly conservation group had netted a rather dilapidated **small pearl-bordered fritillary** and we spotted several **small heaths**. David swept areas of **mat grass**, which is the food plant of the **mountain ringlet**,



but the butterflies were lying low. As we climbed we discovered that a quadrathlon was in progress. Had these descending runners really swum across Loch Tay and climbed six Munro summits? It made us tired just thinking about it.

We had to leave the Nature Trail and its bumper crop of **blaeberrries** to Jim Cook and his low-level group (altitude, not intellect I hasten to add). Jim was nursing an injured calf muscle and so was unable to instruct us on the mountain **rushes** and **sedges** found in the corrie. The corrie was misty with a cool wind so we could not linger. It is a lovely spot in better weather when there is a spectacular profusion of **alpine mouse-ear**, **moss campion** and **cyphel**. The main flowering of the latter two species was over but the plant cushions remained.

We progressed over the bealach to the crumbling cliff of **mica-schist** dripping with mountain plants. The astonishingly blue **alpine forget-me-not** (*Myosotis alpestris*) and the purple **mountain pansies** were magnificently abundant. The **forget-me-not** and **cyphel** reach their northern limit on Scotland's mountains. As most of our mountain plants grow in the arctic these two species are a bit special – proper alpinists! **Roseroot**, **net-leaved willow**, **grass of Parnassus**, excellent **ferns**, four species of **saxifrage** and **rock whitlow grass** were some of the plants we noted.

We had an excellent day and did not get wet. A return visit in brighter weather is indicated if one wishes to see the **snow gentian** and the **small mountain ringlet**.

Alban Houghton

BEN LAWERS

Lower Level Walk

14th July

Despite a rather dull morning our President, Alban Houghton, led the fit and active group up towards the species-rich cliffs and the summit of Ben Lawers.

Meanwhile, a small but keen group with the other co-leader, Jim Cook, explored the nature trail just above the Visitor Centre. There was plenty to see, although not quite all the exciting species to be seen higher up. Along the short length of boardwalk were such plants as **tormentil** and **cross-leaved heath** on drier ground and in the sopping wet areas **common cotton grass** and **deer grass** thrived along with numerous **butterwort** and **common sundew**. We crossed a small bridge and headed uphill beside the tumbling waters.

The heavy clouds reduced the light illuminating the scene but Marjory Tennant picked out tufts of **yellow mountain saxifrage** (*Saxifraga aizoides*) on the stream side rocks. Along with them were **marsh thistles** and small **willows**, **cuckoo flowers** and **lousewort**, with clumps of **male fern** and **golden-scaled male fern** (*Dryopteris affinis*)

Further on Wynne Tennant spotted **stag's-horn clubmoss** (*Lycopodium clavatum*), laden with prominent 'fertile clubs' or strobili, creeping through the **heather** on a slope above the path. In wet patches beside the stream were spikes of **marsh arrow-grass** amongst **rushes** and **sedges**

The party stopped for lunch on some large boulders overlooking the stream. We were hoping to see a **dipper** but had no such luck. Meanwhile, the weather had been improving gradually and the clouds lifted. Eventually there were even a few blinks of sun and it wasn't long before several butterflies appeared. Margaret McLaren saw a brown **butterfly** sweep past, almost certainly a **mountain ringlet**, and then a **small tortoiseshell** fluttered by. A **buzzard** floated over the moorland in the distance, a nearby **wheatear** protested at our presence and from a bush on the other side of the stream a **blackbird** sang. We found a number of **northern marsh orchids** (*Dactylorhiza purpurella*) and a solitary **heath spotted orchid** (*D. maculata* ssp. *ericetorum*). Near the top of the path several of us stopped to admire and sniff the sharp fragrant scent along the rachis of **lemon-scented mountain fern** (*Thelypteris limbosperma*) and, in the short **heather**, found much more **stag's-horn clubmoss**.

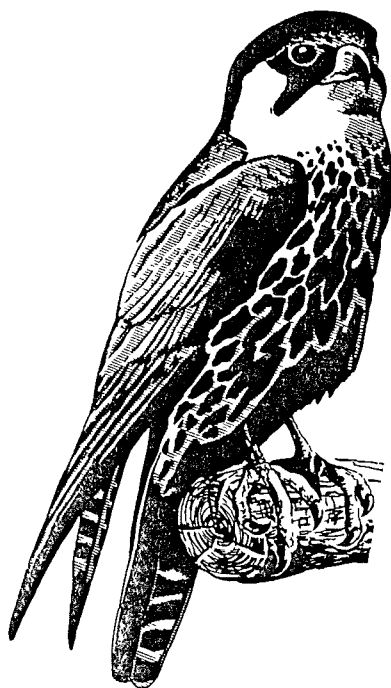
On the way back we bumped into several members of PSNS (Perthshire Society of Natural Science), who were on a butterfly hunt on Ben Lawers. After comparing notes, we wished them luck – at least the sunny spells continued – and moved off. Further down the track several of the party picked up good pieces of **mica schist** with small but reasonably well-developed **garnets**. There's a wealth of interest to be found when you keep your eyes open!

Jim Cook

FALLS OF CLYDE AND NEW LANARK

28th July

The day dawned brightly as we set off on the longish drive to New Lanark Heritage Centre and the Scottish Wildlife Trust Falls of Clyde Nature Reserve



The Heritage Centre is a large mixture of mill buildings and workers' houses lovingly restored to their former glory. The complex, in its day, was a state of the art industrial enterprise that gained many plaudits for its new and innovative methods and for the way the workers and their wellbeing was catered for.

However, the main objective for the day was to visit the SWT Falls of Clyde riverside nature reserve where we were told to keep a lookout for **peregrine falcons** which breed on the reserve. The warden said the young birds had flown the nest but should still be in the vicinity. Things looked good on the bird-watching side when, just as we were leaving the start of the walk we had excellent views of a **dipper** feeding at the side of the fast flowing River Clyde. Things got even better when, as we reached the site of the **peregrine's nest** we were amazed to see that one of the recently fledged youngsters was sitting on the nest ledge and posing for all to see, just what we had all hoped for.

The river itself was in spate and from the many viewpoints along the way we saw and photographed the many waterfalls that the area is famed for. On the plant side Jim Cook tried in vain to educate the writer to recognise the subtle differences between the many **ferns** found by the path. As a

plus however, we did see two or three spikes of **common-spotted orchid** near the small hydro-electric scheme a little way up the track. We smelled, and then found, a fine specimen of **stink horn** and saw a number of other early **fungi** as we walked the length of the reserve.

To round off the day we took delight in sampling some delicious ice cream before climbing back up the hill, passing a wedding in progress, complete with piper, to our coach in the car park.

Brian Allan

BARRY BUDDON OPEN NATURE DAY

12th August

Despite the off-putting early morning weather (Very heavy rain Ed), 30 enthusiasts gathered at Monifieth Football Pitch car park at 10am to begin what turned out to be a most enjoyable day. The annual search to seek out the Barry Buddon natural history "Specials" proved once again to be both rewarding and exciting. Who would have been brave enough to predict two new records for the Estate on such a gloomy morning? The first record was the finding in the overnight moth trapping exercise of a **moth** new for Angus in the shape of a **shore wainscot**. We were assured this would almost certainly be a 'first' both for Angus and Barry Buddon! We will wait confirmation of this in due course (see below). The second new record was the sighting of 77 bird species, a new one-day record for Barry Buddon. The highlights in this amazing total being **kingfisher**, **great northern diver**, and early-returning **grey plover** and **golden plover** from their northern breeding grounds. In addition, four species of raptors, **peregrine**, **kestrel**, **sparrowhawk** and **buzzard**, were seen. The lepidopterists also enjoyed a large measure of success with sightings of 11 species of **butterfly**, four down on last year but we had more sunshine last year! We also saw **common hawker dragonfly**, **red darter dragonfly**, and **emerald**, **blue-tailed** and **common blue damselflies**. Jim led the botanists with his usual enthusiasm and recorded Barry Buddon specials such as **gypsywort**, **wild basil** and **adder's tongue fern**, difficult to spot in the lush tall grasses. This rich mixture was more than enough to send everyone home with that feeling of a job well done and, I am sure, the feeling of wanting to return to Barry Buddon next year. A note of appreciation will be sent to the Commandant of Barry Buddon, Captain Tom Graham, on behalf of the five local conservation groups involved.



Bob McCurley

NEW MOTH RECORD FOR BARRY BUDDON

Hugh Bell took the opportunity of operating a light trap at Barry Buddon light house on the 11th August and many people saw the results during the joint outing on the 12th. Amongst the catch was a small straw coloured moth which was tentatively identified as a **shore wainscot** (*Mythimna litoralis*). The specimen was preserved and sent to Keith Bland, the moth expert at the National Museum of Scotland, who kindly confirmed the identification. The shore wainscot is a nationally scarce species restricted to coastal sand dunes where the **caterpillar** feed on **marram grass**. According to 'The Moths of the British Isles' by Bernard Skinner, the shore wainscot is locally common in Great Britain and found up to Angus on the East Coast. However, the National Biodiversity Network shows a record at St Cyrus in Aberdeenshire.

David Lampard

ARBIRLOT - ELLIOT - EASTHAVEN

18th August

As the venue was near Dundee and there was a regular bus service it was decided to suggest cars or service bus. However, we were surprised to discover that the bus service to Easthaven had been withdrawn a week before the outing and there was insufficient time to change our plans.

On the day 13 members made it to the car park at Easthaven on what was forecast to be a very wet day indeed, although the weather kindly allowed us a few dry hours in the middle of the excursion. Nine opted for the longer 5-6 miles walk and were ferried up to Arbirlot. The walk alongside the Elliot Water is now a part of the Arbroath paths network and provided views of a range of plants, **butterbur** (*Petasites* sp.) being particularly widespread. **Dippers** were spotted by Dorothy Fyffe.

The Elliot coastal area was reached by crossing the road, railway and new river footbridge. Lunch was enjoyed watching the **little gulls** at the water's edge and **sandwich terns** were also seen. We then walked along the botanically rich coastal walk. Widespread species included **purple milk-vetch** (*Astragalus danicus*), **goatsbeard** (*Tragopogon pratensis*) and **lesser meadow rue** (*Thalictrum minus*). The **small scabious** (*Scabiosa columbana*), scarce in this area, was seen and **knotted pearlwort** (*Sagina nodosa*) was present in a short form.

By the sewage treatment plant we viewed the dead-heads of **pyramidal orchid** (*Anacamptis pyramidalis*) and the still very recognisable **frog orchid** (*Coeloglossum* or *Dactylorhiza viridis*) spikes. **Waxcaps** were glowing in the turf and Pat Gaff identified *Hygrocybe conica*. Few **butterflies** showed their faces, but some **meadow browns** braved the elements. We finally got back to the car park and the welcome shelter of our vehicles just as the rain got really heavy.

Meanwhile the short walk party had visited the Arbirlot church before going for a stroll down the Elliot Water. They had then enjoyed a day in Arbroath visiting the harbour and other attractions.

Brian Ballinger

THE EDDERTY DEN AND KINPURNEY HILL

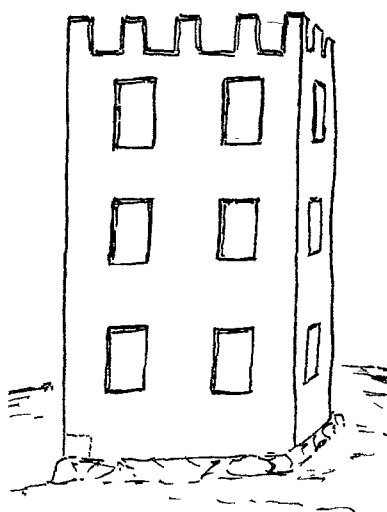
28th August

This evening meeting was by car and 16 of us met at the car park next to the Newtyle Park. Peter Middleton led us off at the start of the walk. Unfortunately there was about a mile of road to begin with, so everyone was advised to walk single file, facing oncoming traffic. It was lovely walking up as the sun was shining on the golden fields. The turning into Edderty Den is at Denend Farm - going through the gate and into the woodland, keeping the burn on the right, and on to a well marked path.

At the mill pond we watched a **heron** - or was the heron watching us? Plant-wise there wasn't anything special. At the seat half way up the view was open onto Strathmore and a well grown plant of **teasel** was seen. It was lovely walking up the path to the kissing gate at the top.

Peter guided us further up the hill path, noting **turkey tails**, **slippery jack** and **sulphur tuft fungi** beside the path, coming out onto an open knowe. From there the view was splendid and we stood until the sun had set over the fields. Coming down we made a careful descent in the gathering gloom and heard birdsong in the trees, arriving back at the car park just as darkness fell.

Margaret McLaren



Kinpurney Tower

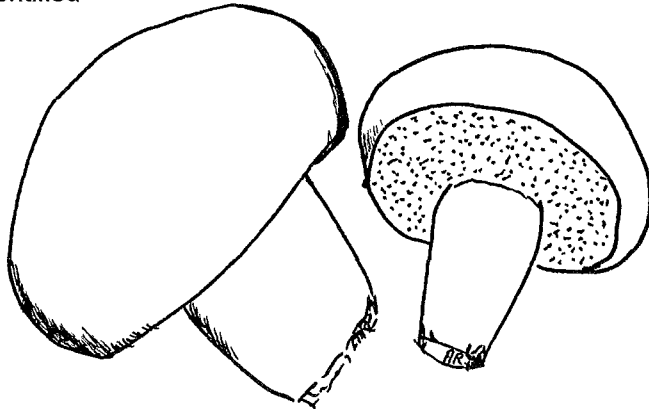
ALYTH DEN AND CADDAM WOOD

22nd September

After an excellent autumn for fungi in 2006, followed by a number of successful forays, it was perhaps too much to ask for a repeat in 2007. Unfortunately, on a recce a few days before this excursion, the worst scenario was revealed - a sad lack of all but the more common fungi. The lack of rain of any duration to really soak the ground was probably the main factor, but fungi do not pop up to order and one just has to make the best of a bad day.

However, all was not lost and, in Alyth Den, a number of bracket species were found on trees, such as *Coriolus versicolor* and **hoof fungus** (*Fomes fomentarius*). A number of the commoner *Russula* species were recorded such as *R. ochroleuca*, *R. cyanoxantha* and *R. emetica* in addition to *Lactarius blennius* and *L. rufus* which are both bitter to the tongue. A fairly uncommon fungus, found growing on broadleaved tree stumps, *Lentinellus cochleatus*, smells strongly of aniseed and is easily identified.

Caddam Wood did not fare much better. A few edibles were found, such as **chanterelle** and the odd **bolete**, but were in the main rather stunted specimens. But every cloud has a silver lining, and the discovery of a goodly number of nice **blaeberrys** growing at a convenient height had everyone filling containers or consuming the aforesaid. On returning to Dundee, a casual observer might have been forgiven for thinking that blue-tongue disease had spread to Dundee and Angus.



Gordon Maxwell

AUTUMN MEETINGS

COLIN GIBSON - NATURE DIARIST

Gillian Zealand - 9th October

This was a talk with a difference. Our speaker was Colin Gibson's daughter and she brought along a wide range of examples of his varied art work for us to see instead of the projected images which we normally have. This necessitated those present moving to the front of the lecture room to enable them to see the, often quite small, examples shown.

Born in 1907, Colin Gibson attended Arbroath High School and from there went on to Gray's School of Art in Aberdeen. He held various teaching posts, including one at Dundee High School where he stayed for 12 years. He also wrote for the Scots Magazine and provided his own illustrations, while still in full time employment as a teacher.

Colin Gibson was best known for his weekly column in the Saturday Courier called 'Nature Diary' which started in 1954. These short, well observed pieces were always of interest and struck a particular chord with Nats' members. They have been much missed since his death in 1998. The most notable feature of the columns was the original illustration which accompanied each one, most of which were originally executed on scraperboard which gave a good, clear image which was easy to reproduce in the paper. We learned about various scraperboard techniques and the ease with which corrections could be made and were shown a selection of original illustrations.

At the end of the lecture we all gathered round the front table to get a closer look at all the things which we had been shown and to note down the details of the books of compilations of the Courier columns which have been published as memorials to Colin Gibson. John Campbell gave the vote of thanks on behalf of the members present.

Anne Reid

A NATURALIST'S JOURNEY ACROSS RUSSIA

Dr Algirdas Knystautas - 17th October

This was a lecture organised jointly by Dundee Naturalists' Society, Angus and Dundee Bird Club, the RSPB local group, Scottish Ornithologists' Club and the Scottish Wildlife Trust local group for which a small charge was made to cover costs. It was deemed to be a great success, with over a hundred and fifty people attending which resulted in a small profit which was shared between the organising societies.

Dr Al, as he is widely known, is a Lithuanian naturalist who has travelled extensively in Russia and has published books on its natural history. His lecture described a 20,000 mile journey across Russia which he made with two friends in a Lada car. We were shown mountains and deserts and plants and animals - nearly all unfamiliar and exotic seeming - and ended up at Lake Baikal in Siberia. This lake is 6,000 feet deep and holds 20% of the world's fresh water - staggering statistics which were just a small part of a lecture full of such information and illustrated by wonderful slides.

A full account of the lecture is available in the local SWT newsletter. Anyone who would like to read a copy please contact Anne Reid or Jim Cook.

Anne Reid

MICROSCOPIC MARVELS

Jim Cook - 30th October

A note on the blackboard from a previous lecture asked "what are presentations for?" and Jim certainly answered the question with a talk that was both instructive and entertaining.

With a dazzling display of equipment (courtesy of Dundee College) and expertise (courtesy of Jim), he projected images of mostly live and a few preserved specimens from a microscope onto a screen, at both high and low magnification. In this he was ably assisted by Anne Reid, demonstrating her scientific training and making fresh preparations from **moss**, **mud** and **hay infusions**.

We began with a view of the **gills** of a live **mussel** showing beating hairs and food particles awaiting capture. Then we saw specimens of **hair** and learnt how to make our hair shine again (lemon juice). Forensic science students are taught to distinguish 16 different patterns of human hair.

Damp **moss** conceals a surprising array of animal life and we witnessed a **rotifer** emerging from a moss squeeze. An early Nats member, John Hood (1831 - 1914), became a national expert in the study of these tiny creatures despite his humble origins. He even constructed his own microscope and became a Fellow of the Royal Microscopical Society.

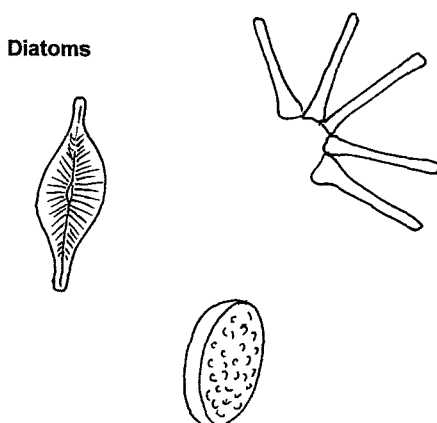
Anne provided a splendid slide of a **plant growing point** (or **apical meristem**), prepared when she was a student and Davie Stein produced a **puff ball** from Templeton Wood, whose tiny **spores** were revealed.

The fascinating anatomy of a variety of **insects** appeared on the screen, including a **greenfly** whose proboscis inflicts such damage in the garden. A **house fly** feeding pad and the nectar sucking tongue of a **bee** were shown, as well as the latter's interlocking wings.

Plankton in sea water consists of a microscopic world of beautiful and strange organisms and we saw **diatoms** of all shapes and sizes. **Bacteria**, both round **cocci** and rod shaped **bacilli**, were swarming in a **hay infusion**, perhaps later to be ingested by an **amoeba**, whose constantly changing shape was demonstrated.

In all, this was a fascinating and very different sort of meeting.

Brian Ballinger



ARBROATH CLIFFS

Saturday 3rd November

"Look right at your feet!" said Margaret and there, in front of us, were clumps of **thrift** or **sea pink** (*Armeria maritima*) in flower. The pink tufts dotting the cliff edge were quite a surprise at this time of year since it normally flowers in spring and early summer. A group of 19 members met at 10 am at Whiting Ness, by the end of the Arbroath esplanade, on an amazingly mild and sunny morning. As the party gathered, several large flocks of **golden plovers** twisted and wheeled overhead. Gordon and Nancy decided to start at the other end of the Seaton Cliffs SSSI and the rest set off from the Arbroath end. Just along the path we started finding a number of plants still in flower, **red campion** (*Silene dioica*), being the most common. The bright yellow flowers of **gorse** (*Ulex europaea*) were no surprise – as the old adage has it "When gorse is not in flower, kissing is out of season" – but the party also recorded flowers on **harebell**, **yarrow**, **scentless mayweed**, **red clover**, **common cat's-ear** and **hawk's-beard**. On the fields beside the path numerous **curlews** and a few **oystercatchers** quietly but earnestly probed the soil for **worms**. More than 40 of the large waders were counted.



A short distance along Dorothy Fyfe joined us because, as she explained, the buses run only once an hour on Saturday mornings. Our Honorary President, Gordon Corbet, spent time examining dying-off leaves and finding several interesting species of **rusts** (*Puccinia* sp.), types of fungi. Near the blowhole the bright yellow dying leaves of **Scots lovage** plants (*Ligusticum scoticum*) dotted the near vertical cliffs, while on the water below a lone canoeist in an open Canadian canoe (but well provided with air bags) moved a group of 20 or so **shags** off a low rock and out to sea. Apart from numerous **gulls** there were few other birds of interest. No **fulmars** were evident either on the cliffs or gliding along the edge.

The best record, by far, was first seen by a guest, Patricia Cosford. She and a few members were lucky enough to catch a glimpse of a large **stoat** running fast down an extremely steep grassy slope on the south side of the entrance to the narrow cleft of Dickmont's Den. Presumably it was hunting **rabbits** which abound in the area and, although several members spent time soon after studying the slopes from the northern side, no further sightings were made.

Further along the path we passed the 'bee bank' with its numerous holes of **mining bees** (*Andrena* sp.). Although it was a warm day and the sun was illuminating the bank there were no bees evident. A few members spent a short while watching but only a few large **flies** were seen basking on the exposed earth. Further on the party reached the small area of maritime heath, with **rushes**, abundant **ling** and a few **bell heather** plants. We stood and counted a dozen **carline thistles** showing clearly yellow against the greenish grass on the slopes below.

Back at the end of the esplanade, we met up with Gordon and Nancy who had walked along to the cliffs from Seaton farm. Their most interesting record was a **painted lady butterfly** in one of the berry fields behind the farm. By 12.45 pm the whole group was sitting down in the Cliffrun Hotel for a good solid lunch. Perhaps it was just as well that the "lumpy-bumpy toffee pudding" was off the menu!

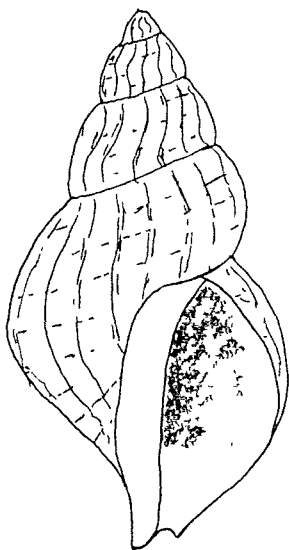
Jim Cook

SHELLS AND MANKIND

Brian Hammond - 13th November

Is it true that left-handed **whelk** shells are very rare and that £10,000 was once paid for a single specimen? And that in the 18th century a French countess exchanged her chateau and 2,000 acres of land for a single **precious wentletrap** shell?

The answer to both questions is "yes" and in a fascinating lecture by conchologist (shell collector and expert) Brian Hammond we heard these and many other fascinating tales. Thirty-four members and friends were entertained and informed in equal measures by Brian's enormous knowledge of all things 'shelly'. He had started collecting as a boy and continued for more than 50 years, amassing a collection of some 7,000 specimens and including, as one of



his special interests, more than 1,000 **cone shells**. He began by briefly describing the six classes of shelled **molluscs** – the two biggest groups, the **snails** or **gastropods** and the **bivalves**, and then the four less significant groups, the **tusk shells (scaphopods)**, the **polyplacophora** including the **chitons** or coat-of-mail shells, the **cephalopods** and a tiny but important group of shells formerly thought to be long extinct but amazingly re-found, as true missing links, by deep water trawls in the 1950s. Only a very few specimens of this group, the **monoplacophora**, have ever been found. In many cases Brian illustrated his points by handing around appropriate specimens. The half-darkness, though, meant that it was difficult to appreciate them at their best.

We heard a little about the importance of shelled life as sources of food and their uses as serving containers and drinking vessels. The stories really began, though, with descriptions of their value in clothing, ranging from the use of strong and sharp **auger shells** to punch holes in tough clothing to small items of clothing actually made from the **byssus threads** of **fan mussels**. This extraordinarily expensive material has the colour of 'old gold' and was perhaps the source of the references to the "cloth of gold" as described in the ancient Greek legends of Jason and the Argonauts. Also extremely expensive was the colour Tyrrian purple, used to dye the robes of Roman emperors and extracted from the crushed bodies of thousands of *Murex* shells from the Mediterranean. We heard about the use of shells in art and decorations ranging from buttons to mother-of-pearl inlays, cameos and ritual and religious items. Brian described the process of **pearl** formation and the production of so-called man-made pearls and told us that the amazing shape of the **miracle shell** (*Thatcheria mirabilis*, no connection with the politician), from deep water off Japan, inspired the architecture of the Guggenheim museum of art in New York.

Brian told us of the use of **cowrie shells** as money in the South Pacific until as late as the 18th century and, also in that century, of the rise of scientific knowledge of shells, beginning with the labours of Linnaeus. Another notable was Hugh Cumming, an apprentice sailmaker from Liverpool who at the age of 19 in 1810 had moved to Valparaiso, the capital of Chile, to make the most of the opportunity afforded by ships needing new sails after 'rounding the Horn'. He was able to retire as a millionaire at the age of only 25 and devote much of the rest of his life to building up a superb collection of shells! We heard tales of his efforts to obtain specimens of the incredibly rare and beautiful '**glory of the seas**' **cone shell** (*Conus gloriamaris*). And there, before our very eyes, was a lovely specimen. Long thought extinct, plentiful supplies were discovered as late as the 1970s and now are easily obtainable and reasonably priced.

At that point our President, Alban Houghton, had to intervene to draw the enthusiastic lecture to a close and Brian finished by reminding us of one of the best known symbols of corporate power, the **scallop** emblem of the giant conglomerate, Shell Oil. The company began by actually carrying cargoes of sea shells, before acquiring an interest in the oil business, and in 1900 their symbol was that rather uninspiring shell, the humble **common tellin**.

Jim Cook

ST KILDA - SEABIRDS, STACKS AND SOLITUDE

Neil Mitchell - 27th November

Neil Mitchell is currently Ranger at Montrose Basin Wildlife Reserve and had previously served in a similar capacity for the National Trust for Scotland for two seasons on the islands of St Kilda. While the title of this talk suggested that it would primarily concern the birdlife of the remote archipelago, Neil's talk covered the whole St Kilda spectrum - geological origin, ancient history, modern history and current activities as well as birdlife, both resident and visiting.

The islands of St Kilda are the visible remnants of a volcanic crater which continues in the form of submerged reefs. The record of human habitation goes back to Neolithic times and has probably continued intermittently up until the 1930s when the islanders were evacuated after it was decided that the islands could no longer sustain the population.

Neil's talk described in detail the hardships endured by the islanders in their everyday life where they had to subsist on fish and seabirds and of how the population was augmented from the mainland after smallpox wiped out the male islanders. From the 1930s, the islands were deserted until the MoD installed missile test facilities in the 1960s with the attendant RAF and Army personnel.

The islands rise sheer from the sea to a maximum height of 1400ft and are the highest sea cliffs in the country. They are home to hundreds of thousands of seabirds including **puffins**, **guillemots**, **fulmars**, **shearwaters** and the largest **gannet** colony in the world.

Following his talk, Neil answered a number of questions from the members before the evening was wound up.

Alex Rollo

TAYSIDE WILDLIFE

Gordon Maxwell - 12th December

This Wednesday afternoon lecture was given by Gordon Maxwell on behalf of the Society. After we had investigated the formidable projection system in the D'Arcy Thomson Lecture Theatre, he wisely decided to use his own slide projector.

Gordon presented a distillation of many years of local wildlife study, illustrated by a wonderful selection of photographs. His pictures were taken in the local area at locations including Carlingheugh Bay, around Dunkeld, the Sidlaws, Glen Doll, Tentsmuir and many others.

Mammals included **roe** and **fallow deer**, **grey seals** and **red squirrels** and in the reptile category there were fine pictures of **adders**, **slow worms** and **lizards**. We saw a variety of birds amongst which were **goosanders** at Perth, the famous Dundee **pelican**, **fulmars** at St Cyrus and **puffins** on the Isle of May. A **heron** at Guardbridge was seen to be captured by a **seal**.

Beautiful **moths** and **butterflies** followed in his presentation, including **emperor**, **vapourer** and **garden tiger moths** and **northern brown argus**, **green hairstreak** and **small pearl bordered fritillary butterflies**. Gordon's keen eye resulted in close up pictures of **bee-flies**, **ichneumon flies** and an **oil beetle**. A selection of our local flora featured **alpine catchfly** (*Lychnis alpina*), **henbane** (*Hyoscyamus niger*) and **purple saxifrage** (*Saxifraga oppositifolia*) as well as a range of local **orchids**.

Once more Gordon ably illustrated the importance of a sustained and careful observation of our varied and interesting local wildlife.

Brian Ballinger



PENGUINS, LEOPARDS AND STINKERS

Alban Houghton - 18th December

For our first meeting in room 36 in the Baxter Suite (one floor down from our usual T9) 46 Nats turned up to hear Alban's talk. This covered his trip from South America to the Antarctic Peninsula via various islands including the Falklands and South Georgia. The cryptic title was quickly explained with leopards referring to **seals** which are the leopards of the sea and stinkers referring to the **petrels** which were attracted to whale carcasses and 'spit' a foul smelling secretion in much the same way as **fulmars**. The abundance of life this far south is

explained by the presence of the Antarctic convergence where warm and cold ocean currents meet leading to upwelling of nutrients and therefore an abundance of small sea life which feeds many other species. Of the 17 species of **penguin** which exist Alban saw seven on this trip. The first stop off was in the Falkland Islands where there are beaches which look remarkably like those at home in Scotland apart from the presence of mines left over from the war and nesting colonies of **Magellanic penguins**.

It was then on to South Georgia where, at the former whaling station of Grytviken, a group of **king penguins** were seen parading around with the boats in the background. At Stromness, where Shackleton and his men arrived after sailing over the Southern Ocean in an open boat, a large number of **gentoo penguins** and **fur seals**, whose numbers have recovered since hunting ceased, were seen. In addition to the penguins other birds including **brown skuas**, **southern giant petrels** and **sheathbills** were seen on South Georgia along with nesting **chinstrap** and **macaroni penguins**. The next destination was the South Shetland Islands where the monument to where Shackleton's men were stranded was surrounded with penguins and where a **pintado petrel** was seen. On Devil's Island, near to the Antarctic Peninsula, a colony of **Adelie penguins** was seen along with a **south polar skua**, **leopard seals** resting on icebergs and some **killer whales**. Nearby Danco Island gave sightings of a **gentoo** colony and **Weddell seals**, the ones which are famous for maintaining holes in the winter sea ice. Also seen was the grass *Deschampsia antarctica*, one of only two flowering plants found in Antarctica, and **humpback whales** gulping krill and then displaying their flukes as they dived.

After Brian Ballinger had thanked Alban, for what all agreed was a very interesting talk, the usual Christmas festivities began with tea and plenty of home baking. It was agreed that the new room made both preparing the refreshments and conversation while consuming them easier and it may well be used again for Christmas meetings and, possibly, for the AGM.

Mary Reid

Footnote Margaret McLaren arrived slightly late, but in full festive mood with brightly flashing earrings which were highly visible in the already darkened room! Ed

MEMBERS' ARTICLES

INTERESTING SIGHTINGS 2007

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 for frequent contributors is noted on the list below.

We had a very hot dry April followed by one of the wettest summers on record. Butterflies and moths were scarce but it was a very good growing season for most plants.

Brian Ballinger	BB	Dundee, West End
Joy Cammack	JoyC	Birkhill
Jean Colquhoun	JeanC	Dundee, West End
Jim Cook	JC	Broughty Ferry
Monica Edwards	ME	Invergowrie
Peter Ellis	PE	Barry Mill
Gordon Maxwell	GM	Dundee, Lochee
Bob McCurley	BMcC	Dundee
Daphne Macfarlane Smith	DMS	Broughty Ferry
Margaret McLaren	MMcL	Barnhill
Bob McLeod	BM	Dundee
Anne Reid	AR	Monifieth
Colin Reid	CR	Monifieth
Davie Stein	DS	Dundee, West Kirkton
Brian Williamson	BW	Dundee, Law area



3rd January I found a yellow **crocus** in flower in the garden, probably the first of many unseasonally early reports. Later, I looked out and saw three **crows** chasing a **buzzard** at low level. It landed, briefly, in one of our **Norway spruce** trees before the crows moved it on. This was another garden 'first', only high level buzzards had been seen before. The year has started well. AR.

5th January A glimpse of **comet McNaught** was seen low down on the horizon. It was first seen from an observatory in Australia and named after Robert McNaught, its astronomer discoverer, who was born in Ayrshire but studied at St Andrews University (and was an active member of the Dundee Astronomical Society, but not, however, a Nats member). JC.

7th January Five **goldfinches** but only one on the nyjer seed, specially bought for them! DMS.

7th January A **fox** ran across Monifieth Road from Reres Hill to Armistead House. He looked in good condition with a beautiful bushy tail and long legs being the most noticeable features in the late evening light. MMCL.

9th January The first **snowdrops** of the year in flower in my garden. Slightly earlier than last year. JC.

10th January 32 **waxwings** appeared in Kirriemuir, avidly eating **cotoneaster** berries. BMCC.

10th January Very surprised to see a **maggie** on a **birch** tree in the garden, and got a good look at it. The first one for me in Barnhill. MMCL.

11th January I saw about a dozen **starlings** having a splash together in a puddle in Tesco (Kingsway) car park. Cheered me up after a tedious shop. JoyC.

15th January A large **frog**, in a rather moribund state, was found in the middle of a path leading to the Science block of Dundee College, Kingsway, at 8.30 in the morning. Perhaps it was a female, full of eggs ready for breeding, confused by the unseasonably mild weather? It was picked up and placed carefully in one of the College ponds. JC.

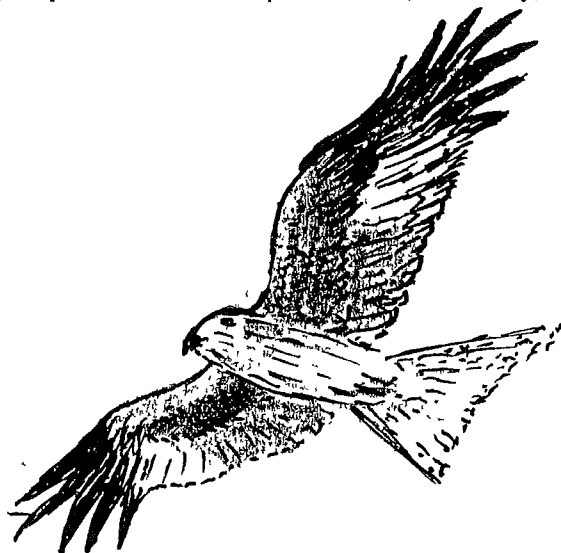
16th January Two **Mediterranean gulls** graced Broughty Ferry Harbour. BMCC.

19th January On a lovely sunny morning, with frost on the ground, I walked through the Shiell Street path to loud birdsong, more like March than January. **Robin** and **thrush** were in full voice and the **blue tits** were twittering in a spring-like way. At the end of the path was a **hazel** bush with its long **catkins** fully open, admittedly south facing but still very early. AR.

23rd January While putting food out for the birds, a **sparrowhawk** flew past me but, thankfully, didn't catch anything. DMS.

24th January I visited Argaty Farm by Doune to watch **red kites**. More than 30 of these magnificent wild raptors gathered before sunset near the hide to take food left at the reserve for them each day. The warm colour of the setting sun under-lit their wings and breasts in a beautiful way. I recommend a visit! BW.

28th January A large flock of more than 300 raucous **rooks** flew low over Carsegowriemuir quarry in the darkening skies at about 4.30pm. Although most were flying in one general direction, a number swirled around and seemed to be going in all directions at the same time and yet the whole flock made progress together. The birds must form a very confusing mass for a potential predator. JC.



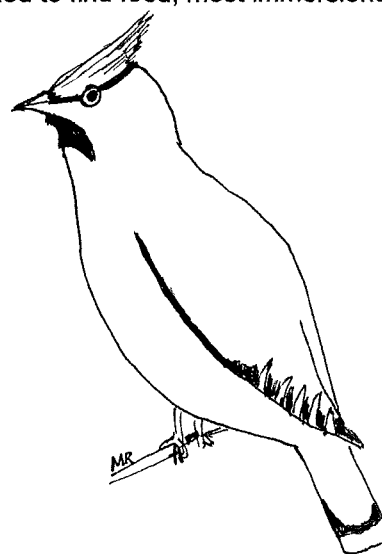
Red kite

31st January Warm and sunny. A **honey bee** on **snowdrops** and a **red admiral** on **mahonia** 'Charity'. ME.

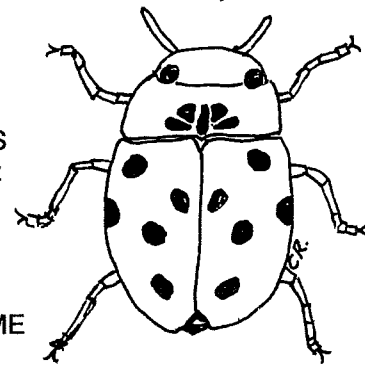
2nd February Heading north I saw a **red squirrel** just before Frockheim and a **stoat**, half in ermine, at Trinity, Brechin. CR.

3rd February 69 **corn buntings** seen at Boghead Farm, near Auchmithie. The highest number ever recorded in Angus. BMCC.

- 3rd February** Four **long-tailed tits** visited a tree in our garden on the Law for the third time this winter BW
- 4th February** At Lunan Bay I found a **cuckoo ray** washed up on the beach. It had large brown spots on each 'wing' and a thorny tail One **peregrine falcon** seen on the cliffs GM
- 6th February** A male **blackcap** visited my garden feeders, my first garden record. It stayed until 27th February and seemed very partial to fat balls. BMcC
- 8th February** I was rewarded for a walk on a very cold day on Balgay Hill, Dundee by a flock of about 30 **redwings** gathering in the **beech** trees near the Observatory and moving to feed on berries near by BW.
- 10th February** A number of **butterflies**, 14 **peacocks** and 48 **small tortoiseshells**, and four **herald moths** were found hibernating inside the cool and cave-like Second World War pillbox overlooking the mouth of the Lunan Water in Lunan Bay JC.
- 13th February** A **peacock butterfly** on the wing in the garden. Possibly disturbed when tidying my shed. DS
- 14th February** A visit to the Reekie Linn waterfall, Alyth gave me a fine study in the behaviour of **dippers**. I watched a dipper plunge into icy-cold fast-flowing water above the waterfall on numerous occasions over a 15-minute period to find food, most immersions lasted only 2 to 6 seconds BW
- 16th February** After looking all winter for **waxwings** without success, I was given the tip-off by the ranger at Loch of Kinnordy that they had been sighted at Longforgan beside the mini roundabout west of the village On my first visit to Longforgan I saw five splendid waxwings in the roadside trees. BW
- 17th February** Three **redwings** feeding on 'Golden King' holly berries in the garden DMS
- 2nd March** Lots of **frog spawn** in my pond under a layer of ice. The **frogs** were ready and waiting from 20th February, but nothing much happening then. JeanC.
- 3rd March** Two **red squirrels** chasing round the trees in Brownie Wood, Gauldry BB
- 3rd March** An **early bumblebee** (*Bombus pratorum*) appeared inside our house Released it outside DMS
- 6th March** An excellent view of **Mercury**, the innermost planet, was obtained for a short time from Jean Colquhoun's living room window (by Dorothy Fyffe and Margaret McLaren as well as by Jean) just before the Nats' Council meeting. It could be seen clearly between **Venus** and the horizon, and thus easily identified JC
- 7th March** Our first **frog spawn** appeared during the day. No direct evidence of **frogs** in the pond though AR
- 8th March** A rather tatty **red admiral butterfly** seen sunning itself on the wall of our local corner shop AR
- 11th March** Two **red grouse** were reported, by a normally reliable hill walker friend, from the cliff top just north of Auchmithie. I can't help thinking that they might have been **red-legged partridges**. JC
- 13th March** The first **Hebrew character moths** of the year in the garden moth trap BB.
- 14th March** Very large amounts of **frog spawn** (at least 50 to 60 clumps) were seen in the upper and lower ponds in Caird Park. JC.
- 14th March** A fox running across Dickson Avenue, Menzieshill BB
- 18th March** While clearing dense **rhododendron** scrub on the Bamff Estate north of Alyth, John Whyman heard a faint but strange call, between a squeak and a croak, from a patch of open ground On investigating we found a pair of mating **toads**, in amplexus, under the leaf litter. The soil was damp but certainly not wet They were about 10m from a tiny rivulet and at least 30m from the nearest large stream On the same day, signs of the escaped **beaver** could be seen further along this stream. JC
- 21st March** In Tentsmuir Forest, at the southern end of the reserve, I was quietly watching **coal tits** in bushes beside a pool when a **red squirrel** came down to the pool and took a long drink close to me before scampering back up into the **pin**es. A magical moment! BW
- 23rd March** The first **puffins** arrived back at Auchmithie BMcC.



- 23rd March** A lot of new **frog spawn** in the ponds at Crombie Country Park Several **palmate newts** observed eating the spawn - highly nutritious! AR.
- 24th March** The first **tick** of the year. I don't know where it came from but it found me BB.
- 24th March** Two **peacock butterflies** seen flying at Forfar Loch - spring has properly arrived
Amongst a long list of birds was a **Slavonian grebe**, still in its winter plumage AR.
- 25th March** Saw a **blackbird** with nesting material in its beak DMS.
- 31st March** A **red admiral** was seen sunning itself on the wall of our neighbour's house and then flew into our garden DMS
- 1st April** Seven **roe deer**, one adult buck, three does and three smaller ones, were seen together at dusk, greatly enjoying the lush new growth in a pea field close to Idvies, by Letham, Angus. JC.
- 2nd April** A **common crane** fed at Scotston of Usan Farm. BMcC
- 4th April** Heard a **chiffchaff** to the south of Camphill Road, Broughty Ferry. One **red admiral** and two **peacocks** seen at Drumoig later on DMS.
- 6th April** A morning visit to Carsegowniemuir gave us excellent views of a small party of **redwings**, and a glimpse of what could only have been a **jay** flying off in the direction of Wilsteed's Wood AR
- 6th April** First **peacock** of the year in the garden and a **buff-tailed bumblebee** (*Bombus terrestris*) DMS
- 8th April** A large and healthy buck **roe deer**, with a fine head, ran across the road a little past Trumperton Forge farm, near Letham, at about 11am JC.
- 10th April** A pair of **grey partridge** (not red-legged) were seen at the road side just a few hundred yards away from the entrance to Darroch **bluebell wood** on the way to Blairgowrie JC.
- 12th April** A **ten-spot ladybird** landed on my washing basket and a **two-spot** was seen in the front garden. ME
- 13th April** My first **swallow** seen near Cromarty (while on holiday) and, the next day, one near Coupar Angus. DMS
- 15th April** The first spring sighting of **house martins** at Elephant Rock, Boddin Point. BMcC.
- 17th April** At least four **seven-spot ladybirds** around the **aubretia** in the front garden. ME.
- 18th April** A pair of **yellowhammers** landed on the hedge at the back of the garden. Unfortunately, they quickly flew off ME
- 26th April** At Balkello in the Sidlaws saw lots of **butterflies** 17
peacocks, two **orange tips**, four **green-veined whites** and three **small tortoiseshells**
Also heard a **cuckoo** and saw **buzzard**, **kestrel** and **sparrowhawk**. GM.
- 27th April** Heard a **blackcap** in Holly Road, Broughty Ferry. DMS
- 27th April** An **orange tip butterfly** in my garden at Johnston Avenue BM
- 1st May** On the Lurgies Walk Dorothy Fyffe and I saw three **otters** on the opposite bank, straight across from us To our great delight all three swam across to where we were standing, seemingly very curious of our presence They approached to within 12ft of where we were standing. We really enjoyed this most unexpected close encounter BMcC
- 2nd May** My first **green-veined white** of the year and eight **sand martins** seen at Drumoig DMS
- 4th May** On passage, some lovely **garganey** were seen at Forfar Loch. BMcC.
- 8th May** Young **blackbirds** were seen hopping around the grounds of Dundee College and demanding food from their parents Surely they were very late for fledglings of the first brood - or were they part of a second brood already? JC.
- 8th May** A fledged young **housesparrow** was out on the lawn DMS.
- 8th May** My first **swift** of the summer, screaming overhead near the harbour at Broughty Ferry. AR.
- 9th May** At Morton Lochs there were three **greylag geese** and five **goslings** on the main loch
Also saw two **orange tip butterflies** GM
- 12th May** **Orange tip butterfly** in the garden ME
- 16th May** One **cinnabar moth** at Drumoig. DMS.
- 27th May** A **whitethroat** in the garden ME



- 9th June** Saw at least ten **small blue butterflies** along paths on Arbroath cliffs and, on way back to Esplanade, saw at least 17 **painted ladies** - never seen so many! (Probably an influx from the Continent, see following two entries Ed) DMS.
- 9th June** After several cool misty days the sun appeared and 11 **painted lady butterflies** were feeding on the **valerian** and **wallflower** '**Bowles mauve**' ME.
- 9th June** On a walk to Lundie Crag via Ledcrieff Wood saw 24 **painted ladies**, 13 **green-veined whites**, one **northern brown argus**, two **roe deer**, two **ravens** and a **red squirrel** GM
- 11th June** A single **painted lady** in our garden and, at 9 30pm, a **hedgehog** was seen near our birdtable (don't know if it has used my hedgehog box!) DMS.
- 13th June** An **orange tip butterfly** in my garden at 9pm The only one seen this year JoyC.
- 13th June** A **garden tiger moth caterpillar** was crawling across a fairway at Drumoig DMS.
- 14th June** Two **pipistrelle bats** were seen in the late evening flitting around the trees and over the open grass at the western end of Dawson Park in Broughty Ferry. JC
- 24th June** Two female **blackbirds** (one with a tail and one without) feeding youngsters in the nest, built in creeper, above our back door. DMS
- 25th June** After several days of trying, caught a **field-mouse**, in a humane trap, and released it in Orchar Park! For several days previously the mouse had been trotting in and out of the trap and enjoying the peanut-butter bait while the 'door' failed to drop! One time it even sat up outside the trap to clean its whiskers! DMS
- 10th July** My first ever **slow worm** seen at Calvine, off the A9 BMcC.
- 12th July** Four or five **pipistrelles** were seen flying around the east end of Dawson Park at dusk, about 10 pm. JC
- 16th July** Three beautiful **black-throated divers** at Backwater Reservoir. They are rare in Angus, but I got good photos BMcC.
- 17th July** A heavy thunder shower at 9 15pm resulted in a **rainbow** and its reflection directly over the river, in a generally southerly direction Perfectly predictable, but never before seen in this direction! AR
- 19th July** A **large emerald moth** seen on a **weigela** shrub in front of the Birkie Inn at 2pm. It was still there at 7.30pm JoyC.
- 24th July** The purposeful to-ing and fro-ing of a **goldcrest** in the garden had led me to suspect that it had a nest somewhere nearby I confirmed this when it dived into a **blue spruce** to be greeted by multiple cheeping, several times in the space of a few minutes By the time I looked again, after lunch, all was quiet and it appeared that the young were gone (They were, in fact, still there and last heard on 31st July.) Goldcrests nested in the garden, and fledged a family, in 2005 also. AR
- 29th July** Six **ptarmigan** at 3,500ft on Glas Maol, Glenshee. BMcC
- 31st July** Two spikes of **common spotted orchid** (*Dactylorhiza fuchsii*) in the grounds of a disused building at the Sinderins, Dundee BB
- 1st August** Saw six **grey partridges** trotting quickly across a fairway at Drumoig In the evening, at about 10pm, a **bat** was circling round our garden DMS
- 15th August** A single **swift** seen flying high over the garden. Also one yesterday This is the latest that I have seen them for the past few years - they are often gone by the first week in August Perhaps their breeding was held back by the rather mixed weather this summer AR.
- 21st August** Two **bats** were seen flying around the large trees at the east end of Trottick ponds One of them was, almost certainly, a **pipistrelle** but the other appeared larger and seemed to spend more time in the vegetation It wasn't seen clearly but could it, perhaps, have been a **long-eared bat**? JC
- 22nd August** I presume that the 16 **greylag geese** which flew over me at Drumoig are residents rather than migrants (See May 9th.) DMS
- 7th September** One **peacock** seen in our garden only the third, and last, in the whole year! DMS.
- 12th September** On Carnoustie Golf Course I caught and ringed 35 **lesser redpolls** and seven **siskins**, with similar numbers of each being caught again on the 19th. PE
- 14th September** The first **geese** of the season seen, and heard, overhead. Some at Monifieth and more at DISC sports centre, Dundee, later on CR.



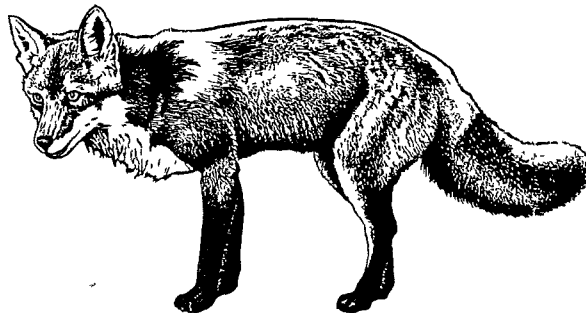
27th September Both **coal tits** and **blue tits** very active around our small, trimmed **conifers**. Not sure if the coal tits were storing **sunflower seeds** and the blue tits were finding them! DMS

29th September A rare **barred warbler** was seen on migration at Fishtown of Usan, near Montrose BMcC

30th September A most attractive and rarely seen mushroom, *Phaeolepiota aurea*, found at two locations in Tentsmuir Forest, one at Kinshaldy and the other near Tayport. The first time I have found this in Fife GM.

1st October A small flock of around a dozen small **hirundines**, probably **house martins**, seen heading south-east in Glen Lyon at about 2 pm. Later on the same day three small **bats**, probably **pipistrelles**, were seen flying among large trees along the road on the north side of Loch Tay, not far north of Lawers village, at around 7pm JC.

3rd October At 3pm there was a **fox** in the middle of our lawn, just looking at me BB



6th October A **black tern** passed Redcastle at Lunan Bay. BMcC

8th October A **mistle thrush** was on the television aerial of a neighbour's house and we had 16 **greenfinches** in the garden - I think a record for us DMS

10th October At about 10pm on a warm evening, there were several **moths** (although I couldn't identify the species) flying around a street light - surely rather late in the year. (No, there are a few species on the wing in October. Ed.) JC

11th October A **chiffchaff** was seen at Auchmithie. Rather late in the season. BMcC

14th October At a garden in Westhaven I caught and ringed 23 **house sparrows** and 12 **tree sparrows**. PE.

20th October A dead **barn owl** found on the embankment of one of the slip roads onto the dual carriageway near Carnoustie. Probably a road casualty, but unmarked. Handed in to Dundee Museum. GM

24th October A **mandarin duck** roosting with **mallard** on River Tay near Dunkeld. Probably an escapee from a private collection. (See article on page 41) GM

3rd November A very late **painted lady butterfly** seen on the path through Seaton Farm, Arbroath. A warm, sunny day - up to 14°C GM.

5th November After I saw three sick **greenfinches**, I sought advice and followed the suggestion of not providing water or food for two weeks to reduce the risk of spreading **Trichomoniasis**. DMS.

10th November After hearing from Bede Pounder that a small **comet** was visible to the naked eye in the constellation Perseus, I went out at about 11pm and there it was, almost overhead JC. (See article on page 44.)

11th November On the Eden Estuary I watched an **otter** going downstream past the hide. It caught a large **flatfish** which it then ate on the bank, giving a good view for 20 minutes. Three **kingfishers** also seen. GM.

25th November The surprisingly large total of 23 **greenfinches** caught and ringed in Alex and Melanie's garden in Carnoustie. PE.

29th November I was surprised to see a family party of **whooper swans**, two adults and five cygnets, just off shore between Easthaven and Hatton. They were obviously resting, some had their heads tucked under their wings, but were still very wary. AR.

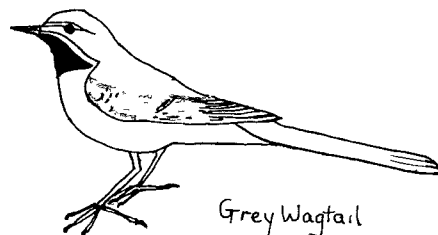
2nd December The first **siskin** for a couple of years seen feeding on our peanuts. Followed by another female on 16th and a male on 23rd December. ME.

2nd December Another surprise, a **magpie** in the garden for the first time ever. There are so few around Angus that they are worth recording. AR.

6th December Nine **long-tailed tits** ringed at Barry Mill. PE.

10th December A **grey wagtail** in Dudhope Park, foraging at the base of large trees. GM.

12th December Two **magpies** on rough pasture near



Evelick Castle on the Kilspindie road to Coupar Angus, via Braes of the Carse GM
19th December Nine **goldfinches** ringed in the garden at Barry Mill. PE
24th December A large **blowfly** came into the house through an open window – presumably to escape the sunny but rather chill conditions. It was rather surprising to see it at all at this time of year. JC
24th December Caught and ringed eight **long-tailed tits** and six **goldcrests** on Barry Buddon PE
29th December On the beach at Lunan Bay we were able to observe a **sanderling** at close quarters. Their little legs go like clockwork as they scurry along the water line, and they seem very reluctant to fly AR

CULLED FROM THE COURIER 2007

After last year's wealth of unusual natural history sightings which made it into the Courier, this year was disappointing. In February, an article on climate change was illustrated by a photo captioned "**Bees** feeding in Buckingham Palace gardens, London", which actually showed **drone flies**, a kind of **hoverfly**, on **blossom**. They are not the first to make this mistake, but should check their identification (as should all Nats - bees have longer antennae and two pairs of wings).

An article in the Craigie Column in March drew attention to sightings of **otters** in, and around, Discovery Quay at quiet times and also mentioned a range of other wildlife spotted there. Readers had also seen an otter in mid-morning along the shore between Stannergate and West Ferry. It is nice to know that people other than Nats do appreciate such things.

The only other two items worthy of note both concerned members of the Lepidoptera and both appeared in the paper in August. A photograph of a **comma butterfly** seen near Inchture, with an accurate article on this and other butterfly species' change of distribution in the last few years, was the only record I heard of in what was a bad year for butterflies, though several Nats saw them in 2006. The second item described the first discovery on mainland Scotland of the **micro-moth** *Lobesia abscisana* at St Cyrus Nature Reserve. Now that there is more moth trapping going on I suspect that quite a few new County or Country records will occur in the next few years.

Anne Reid

NEVER ON SUNDAY

" she didn't think it looked well, she said, to go trapesing about the country on Sundays" – H G Wells, *The History of Mr Polly* (1910)

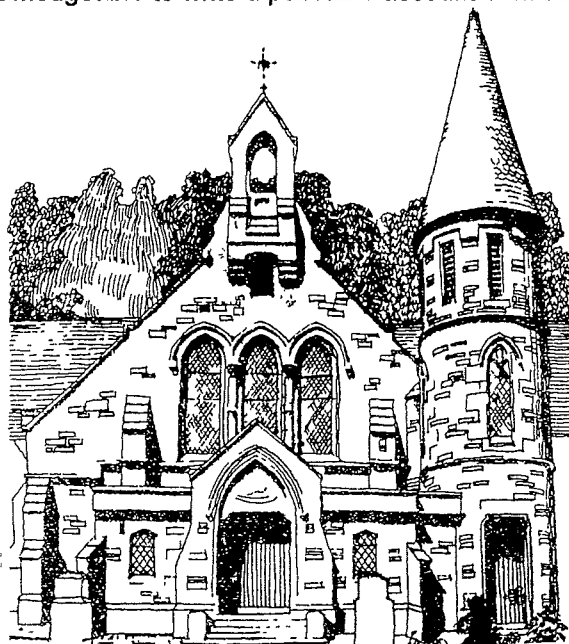
Over the past couple of centuries, those active in the Dundee Naturalists' Society and its various predecessor bodies have come from a wide range of backgrounds. One group that seems to have been rather under-represented has been churchmen. Out of hundreds of members who have served on the Society Council, there seems never to have been even one with the title 'Reverend', and only a handful of our lecturers have used this title, albeit covering topics as diverse as astronomy, geology, molluscs, oceanography, ornithology, and 'Hunting on the Alaskan border'! Yet since the 1500s, some of the most notable naturalists have been clergymen (Gilbert White of Selborne is perhaps the best-known). There is even a book devoted to the topic. *The English parson-naturalist – a companionship between science and religion*, by Patrick Armstrong (2000). The title is deliberate – as Armstrong points out, the tradition of the parson-naturalist was a distinctively English one, and to some extent, a distinctively Anglican one.

Scots seem to have been less tolerant of their ministers pursuing natural history as an interest. Of the Rev Dr John Walker of Colinton (1731–1803) (Professor of Natural History at Edinburgh University from 1779), it was complained that "he spent the week hunting butterflies and made the cure of the souls of his parishioners a bye-job on Sunday." South of the Border,

such behaviour would have been nothing remarkable, but in 18th century Scotland, it would have been both less unusual, and less scandalous, for a minister to join a drinking-club!

Perhaps this is why the rather few Scottish naturalist-clergymen seem to have disproportionately specialised in the study of fungi, a relatively obscure group that (apart from a few weeks in autumn) did not require the carrying of a bulky vasculum, butterfly net, shotgun or geological hammer (even the great Rev Dr William Buckland of Oxford University had to conceal his hammer on geological visits to Scotland). Some important figures were active in our own district. Rev John Stevenson (1836–1903), minister at Glamis from 1873, was one of Scotland's most respected mycologists, author of *Mycologia Scotica; The fungi of Scotland and their geographical distribution* (1879) and the 2-volume *Hymenomycetes Britannici, British fungi (Hymenomycetes)* (1886). Not far away, Rev M L Anderson, minister at Menmuir, was also well-known in the same field, while his friend the Rev John Fergusson (1834–1907), minister at Glenprosen and later at Fern, specialised in another relatively inconspicuous group, the mosses.

Although a few ministers had a genuine interest in natural history, many seem to have been compelled to consider the subject for the first time when they were asked to contribute to the Old or New Statistical Accounts of Scotland. In 1833, the Rev Patrick M'Vicar of Dundee's Old and Steeple Churches was sufficiently knowledgeable to write a passable account of natural history for the *New Statistical Account* – although, under 'Zoology' he began "the parish presents little that is interesting", and he went on to say "the botany of the parish is also devoid of peculiar interest". M'Vicar's son became both a minister and Professor of Natural History at St Andrews University. Another ordained Professor of Natural History connected with the city was Rev William Smith, who briefly served as the first regular Unitarian minister in Dundee, later being appointed to the chair at Queen's College, Cork. In the 1840s, Rev John Hunter (1807–1885), was supportive of the Dundee Literary and Scientific Institute, and under the *nom-de-plume* 'The Mountain Muse', contributed a series of articles on 'Plants of the Bible' to the *Dundee Natural History Magazine*. Rev W B Borwick, long-serving minister of the United Presbyterian Church in Dundee in the mid-19th century, "found an agreeable relaxation in the study of plants and flowers", even building up a small herbarium – but this unusual interest was a mere footnote in the accounts of his life, and his hobby apparently a solitary one.



If it was widely considered unacceptable for ministers to pursue an interest in natural science, their parishioners enjoyed little more freedom. *Everyone* was expected to attend church on Sundays. In 1719, the Edinburgh Presbytery had passed an act condemning those who "take unaccountable liberty in despising and profaning [the Lord's Day] idly and wickedly by...withdrawing from the city...to take their recreations in walking through the fields, parks, links, meadows..." As late as 1775, Captain Edward Topham, an English officer posted to Edinburgh, wrote that during Sunday service it was as if "some epidemic disorder had depopulated the entire city". Over the next few decades it became impossible for the Church to enforce attendance at service as it had once done, due the growth of cities, the migration of industrial workers, and the establishment of dissenting churches – so that by 1850 it was estimated that at least one-quarter of Dundee's population did not attend any church at all. Despite this, non-religious activities on the Sabbath continued to be frowned upon. When Baxter Park first opened to the public in 1863, it was closed on Sundays, a rule that was only relaxed after thousands of people forced entry through a gap in the fence! [Older readers may remember swings and other children's play equipment being firmly padlocked on Sundays, even into the early 20th century.]

It is clear from his poems and journals that the Dundee botanist William Gardiner (1808–1852) was far from being an atheist, on occasion even managing to combine fieldwork

with churchgoing "After breakfast Mr R— and I went to the Church of the Mains, and after hearing an excellent lecture and sermon, botanised the Den and other parts adjacent" (April 1827). Nevertheless, only a few miles away in 1833, botanising, even walking, on the Sabbath caused outrage: "At Whitfield we.. wanted some milk to refresh ourselves, which we sought in vain at all the houses, for their inhabitants wore sanctimonious faces as long and gloomy as a December night, so that it was impossible to draw them down from their high hallucinations to the plain exercise of Christian principles. So we quenched our thirst at a stream.. " [The visitor will find Whitfield a very different place today!] This cannot have been the only time that Gardiner and his naturalist friends encountered problems over their Sunday excursions. In April 1835, in a botany lecture to the Dundee Watt Institution, Gardiner attacked those "individuals who have their religious scruples about walking in the fields on the Sabbath day ." The following month, in his *Naturalists Repository*, he was moved to devote most of the editorial to a defence of the Gleaners' Sabbath morning walks against "those little, contracted compounds of ignorance, bigotry and superstition, who would censure us for spending the Holy Sabbath of our God in the contemplation of His beautiful works . There is already a dark enough cloud of gloomy austerity thrown around that day, which ought to be a day of sunshine and bliss. ." The argument was supported by a quotation from 'The Ranter' from *Com Law rhymes* by Ebenezer Elliot "God blames not him who toils six days in seven".

Yet forty years later, when the Dundee Naturalists' Society was formed, churchgoing still held sway over the Society's activities. At a time when most working people had to work six days per week, excursions were invariably held on Saturdays, rather than Sundays, the one day off for most people. The need to work on Saturdays was probably partly to blame for the poor attendance at many of the Society's excursions in Victorian times. Even as late as the 1930s, whole-day outings were generally reserved for Victoria Day or other public holidays – most Saturday outings did not set off until the afternoon, enabling those attending to put in a morning's work first. The very busy railway timetables of the day made it possible to fit some surprisingly ambitious excursions into a few hours – but how much more might have been achieved if more time had been available?

Colin R McLeod

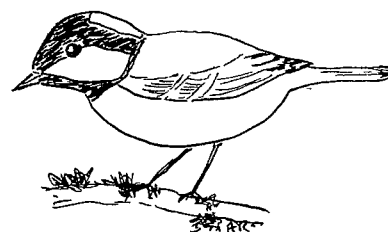
WINTER AT THE QUARRY

4th January

All we needed was the excuse of getting some more fresh air and exercise, so we set off for Carsegowniemuir on a mild sunny winter day. The girls also wanted to see the dogs and to get to know Purdey, now almost too well grown to be called a puppy, but still behaving like one. Millie and Purdey greeted us with bounding enthusiasm and we all set off up the quarry.

At pond two Mary remarked on the amount of **duckweed** apparently moving about on the flat stones, under the water, and was attributing it to water movement because of the strong wind. A closer look revealed large numbers of **caddis larvae** with duckweed built into their protective cases. The rest of the case seemed to be made of other small pieces of vegetation, but when they were crawling on the flat stones it was the duckweed which caught the eye. We found more of the same type of caddis larva in pond four but, despite looking carefully, could not find any in the other three ponds.

We disturbed a small flock of about 30 **fieldfares** from the large **sycamore** and noticed a few **redwings** amongst them, but the windy conditions meant that most other birds were lying low. A pair of **coal tits** did put in a brief appearance and I heard several **blackbirds** which flew up in alarm at our approach. On the sunny, south-facing bank near the far end we found three **seven spot ladybirds** sunning themselves on a tree stake. Presumably the two mild days had tempted them out of hibernation, but it was still a surprise at this time of year.



Anne Reid

AN EXCITING RECORD

31st January

I looked out at my **viburnum** (*V. tinus*) to see a yellow and black striped insect which I thought was a **bumblebee** or **wasp**. However, it was hovering at the flowers and turned out to be a **bee hawkmoth**, almost certainly a **narrow-bordered bee hawkmoth** (*Hemans tityus*) as the other species, the **broad-bordered bee hawkmoth** (*H. fuciformis*) should not occur this far north. Whichever species, this is a highly unusual sighting for any time of year in Dundee, and exceptionally early. We had experienced four consecutive days of warm, sunny weather with daily maxima between 10°C and 14°C. The impression given by the wings was of being a pinkish colour, though this was with them in constant motion.

Margaret McLaren

A NEW RECORD FOR SCOTLAND

Gordon Corbet, our Honorary President, has reported that this past summer he's found a species of **fly** never before recorded in Scotland. While searching for seashore life on the beach near Dumbarnie Links, south Fife, Gordon found some small flies that he at first assumed were **shore flies** of the Ephydriidae family. However, on looking more closely at the specimens some time later he realised that in fact they belonged to the family Canacidae. They could be called **seaweed flies**, probably feeding on the twisted green strands of the common seaweed known as **intestine wrack** (although the larvae have not been found) and they keyed out to the species *Canace nasica*. These are not uncommon along the south coast of England but have never previously been reported further north than Norfolk on the east coast and Carmarthen on the west. Are they spreading north due to global warming or have they been here all along?

Congratulations, Gordon! The find just shows how important it is to keep on looking; who knows what else may turn up?

Jim Cook

A MONIFIETH FLYING SQUIRREL

27th April

Just before eight o'clock in the morning I saw the neighbours' **cat** climbing our blue spruce tree, so I went out to chase him down and away. (The neighbour knows that birds come first in my garden!) As I stepped onto the grass a **grey squirrel** landed with a thump on the grass between me and the tree. The **crow** (nesting in the adjacent tree) was after it from the air, and the cat from below so it had nowhere to hide. The only way out of its predicament was to jump the 30 feet or so to the ground. It landed spreadeagled, looked slightly stunned and then scampered off around the front of the house - it probably won't be back in a hurry!!!

Anne Reid

MULTIPLE OCCUPANCY

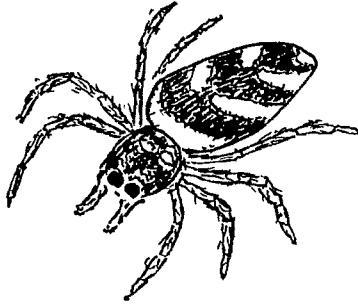
I have an open-fronted little cottage hanging on my back door post. To my surprise, the **wren** built a nest in it in March. A pair of **blue tits** surveyed the nest box, but did not challenge the wren. The job done, in a couple of days, the wren moved on to build another nest in the roof of my shed. Some sharp-eyed **common carder bumblebees** soon took over the deserted home of moss and fibres and spent the summer carrying in their pollen and nectar. The bees gone, my family of **wood mice** quickly found their way into the bees' stores.

Bob McLeod

A WELCOME DISTRACTION

Thursday 14th June

While marking a pile of exam papers (a job that is tedious, taxing and tristful all at the same time) in one of the classrooms in the Kingsway Campus of the College, a slight movement to the left caught my attention. To my mild surprise, it was a **zebra spider** (*Salticus scenicus*) alternately walking and hopping forwards on the bench. The little animal, some 5 or 6mm long, with beautiful dark grey and white stripes on its abdomen (hence its name) moved around confidently, no doubt looking for something edible but instead found my arm. It gravely



inspected the huge obstruction in front of it and then turned and jumped and ran up onto one of the bench electrical sockets. From there it moved to examine my hand minutely and I reciprocated the close inspection. The bright little headlights of the two main eyes were clearly visible catching the light of the room as it scanned its body back and forth and I could just see some of the other eyes around its elongated cephalothorax. Suddenly it leaped onto the back of my hand, a clear jump of 4 to 5cm, an impressive feat for so small an animal but the species is,

after all, a jumping spider. Even more impressive is that its leg extensions are due to hydraulics, not direct muscle contraction. I couldn't feel the feather-light creature except as a slight tickling as it moved around. A slight movement on my part caused it to spring off and scuttle over the page in front of me. I moved my finger round it, at a range of some 20cm, and the tiny creature faithfully followed the movement, turning in tiny but quick jerks to track the moving object. For a spider this is excellent vision. They need it, since jumping spiders hunt by sight, spotting prey at a distance and then leaping on it. As I moved my fingers towards it, the zebra spider ran to the edge of the bench and then leaped off, its fall broken in mid-air and then lowered to the ground in a series of long jerks by a minute thread of silk that glistened in the light. After wishing it good hunting, the pile of paper again summoned my attention.

Greatly cheered by the unexpected but very welcome laboratory wildlife distraction, I returned to marking the scripts and soon finished off a major section.

Jim Cook

AN URBAN(E) SQUIRREL

Summer 2006

A recent report in the Courier claimed that Dundee was the only city in the UK with a resident population of red squirrels. My wife had an encounter which supports this.

I was sitting in the easy chair in our kitchen, reading the Courier, when Lydia burst in asking if there was a **squirrel** with me. "No, but a pink elephant passed through a moment ago," I was tempted to reply, and went on with the local news. Presently my conscience pricked, and I went to check if she was in, or out of, her right mind. I met her returning through the front door. She gave me the following account.

She had been standing on the pavement outside our house in Richmond Terrace, which faces over Magdalen Green in the west end of Dundee, chatting to a friend. Out of the corner of her eye she thought she saw a small creature slip past her into our garden. She was just in time to see a **red squirrel** going into the house. She darted up the garden path after it, but when she entered the hall it was nowhere to be seen. Ahead lay the kitchen door, which stood open. To her left was the lounge door, also open. On learning from me that no squirrel had entered the kitchen, she tried the lounge. No squirrel there either, but the bedroom door beyond was open too. Beginning to doubt her eyes, she went through. There was Nutkin, up on the window seat, admiring the view.

For a few moments she stood, holding her breath, and seized this rare opportunity to admire the beautiful creature at such close quarters. Then, apprehensive of what a house-

untrained animal might do to her soft furnishings, she manoeuvred herself to guide him out again. But this sophisticated town-dweller was not ready to leave. He dodged her, hopped up on to the bed, and sat surveying the room from the bed-head. She stood still; and in a few more moments he decided against a life of domesticity, and left by the way he came.

We have seen reds occasionally on the trees of the Green, and this summer, in mid-afternoon, I saw a young **roe-buck** tentatively making his way eastwards along the grass, from the woods by the railway, below the Harris Academy. About two hundred yards into the open, he encountered a dog-walker with a black Lab, approaching from the east. He turned tail, and a spirited chase ensued, with a magnificent display of bounding flight before he regained the safety of the trees and bramble-thickets.

Morrison Dorward

TRACKING DOWN PLANT RECORDS IN ANGUS

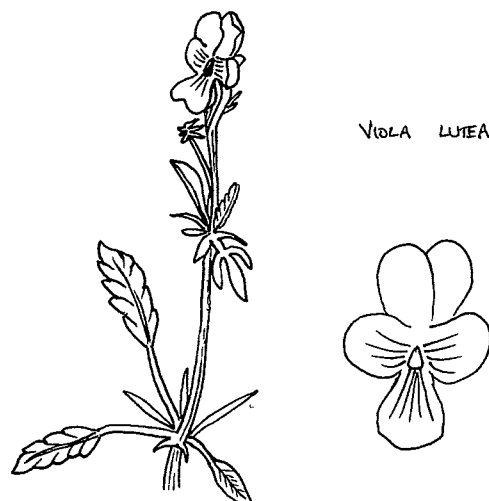
We are recording the Flora of Angus for the BSBI (Botanical Society of the British Isles) and Barbara Hogarth is their current Vice-County Recorder for Angus, an unpaid post. The plants, at present, are recorded in blocks of 10km squares though it has been mooted that tetrads (2km x 2km) would be more meaningful. We have been able to add many new records for individual squares and some new records for the County of Angus. Unfortunately there are very few people to cover the ground here, and the same goes for many parts of Scotland. So few people seem interested enough to make the effort.

I began assisting Barbara on trips last year and this year ('07) I have devoted myself more to things botanic than any other branch of natural history. The result has been an endlessly fascinating time, from early forays in an unseasonably warm April right through to the end of October. We have been out in rain, sunshine and showers, fog, blisteringly hot days and even heavy snow showers and I don't regret one moment of it.

We thought, perhaps foolishly, that we knew the Sidlaws well enough but this year we found the dainty **hair sedge** (*Carex capillaris*) and **alpine club moss** (*Diphasiastrum alpinum*), the story of which you may read in the article 'The Amateur Botanist comes off the Rails' (see page 39.). I found a new colony of **purple milk vetch** (*Astragalus danicus*) on Smithton Hill as well as the **mountain pansy** (*Viola lutea*). We have located two extensive colonies of **globe flower** (*Trollius europaeus*) as well as a new patch of **common rockrose** (*Helianthemum nummularium*) and an enormous number of **lesser twayblade orchids** (*Listera cordata*) together with a colony of **early purple orchids** (*Orchis mascula*).

The day I found the **hair sedge** it was foggy but with blue sky above and the sun slowly dissolving the mist. The air was full of the song of **skylarks**. I put up several **snipe** and spotted a pair of **whinchats** and two pairs of **stonechats**. On the heathery slope above me, no more than 30 yards away, was a **peregrine falcon** coursing the moorland. Such are the delights of being out in the more unfrequented places. On another occasion I put up a '**Katty-face**' (**short-eared owl**) out of the heather right at my feet.

One area I was especially interested in was a tract of hill country in Glen Clova which covers the Mellon and a little fringe around it. I had a hunch that it was probably not well known botanically because, within the district, there are more famous areas that lodge the more well known parts of our arctic alpine flora, which visiting botanists tend to make a beeline for. There exist other problems associated with the Mellon. the terrain is steep and difficult and there are very real dangers of rock fall. The terrain changes from east to west in the nature of its rocks. The eastern end is composed of **diorite** with calcareous blocks and base-rich veins gradually running westward into **granite** by way of **grano-diorite** and, at its extreme end, extremely altered hard country rocks adhering to the granite. So, one would expect the richest floral



element to be on the eastern end, which is, in fact, the case. If you sit across the valley, say, on the Kilbo path facing the Mellon, you can actually detect the change in colour of the rocks from east to west by the change in species of the **lichens**. At the eastern end there has been considerable rock fall. On the north top there is a whole series of trenches formed by the gradual slumping of the rocks, the results of which are embodied in the Skitters - the notable rock fall opposite the old keeper's cottage.

I had convinced Barbara to come with me and have a few small 'reckies'. She has become a convert and we are both enthusiastic about our finds. The plants are not rare, as such, but it is such a rich assemblage of plants and the unusual nature of the ground which fascinated us. For example, the largest patches of **wood vetch** (*Vicia sylvatica*) I have ever seen clothes the rocks and turf on very steep ground. While, in admiration, you rest at such a spot you are surrounded by **butterflies**. Depending on the time and weather you may see **northern brown argus**, **mountain ringlet**, **Scotch argus**, **common blue**, **small pearl-bordered fritillary** and **dark green fritillary** and, if you are lucky, observe a family of young **buzzards** out on training flights. Across the slopes we found large colonies of the **field gentian** (*Gentianella campestris*) together with the **autumn gentian** (*Gentianella amarella*) growing in close proximity. Higher on the slope is a hanging meadow with **rockrose** (*Helianthemum nummularium*) flowering at 2,000ft. On the lower slopes we found colonies of **intermediate wintergreen** (*Pyrola media*) with some in flower.

To finish we have been looking at Montreathmont Forest which has been easily dismissed. We have found new records of **wood small-reed** (*Calamagrostis epigejos*) and one of the most unprepossessing plants you are ever likely to find - **chaffweed** (*Anagallis minima*).

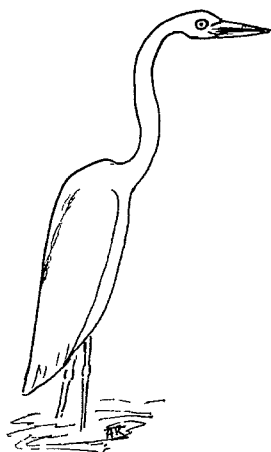
I have only offered here a very small picture of what I have been involved with plantwise. We are already laying plans for 2008. There seems to be so much ground to cover.

Pat Gaff

GUARDBRIDGE

11th August

We'd been in the hide only a few minutes, just settled down with telescope and binoculars. The tide was coming in strongly and the **waders** were being driven onto the rough grass at the top of the small **salt-marsh** on the opposite bank. Flocks of mixed **gulls** with **mallards** and a few **teal** rafted on the open water. Suddenly the gulls rose up in alarm and a **buzzard** flapped heavily in to perch on a dead bush and then a second bird joined it on a near-by fence post. The genial, local, hide 'residents' reported that they'd seen a few **ruff** a short time before and we'd just begun to search through the marshy patches on the other side of the river when Tom called out "Look up, there's a **peregrine** with a kill!" We all peered out, just in time to see the bird whizz over and turn sharply and disappear out of sight. It had obviously hit something, perhaps a **woodpigeon**, as a few feathers drifted down. We couldn't see what happened after that but a few minutes later an adult **falcon**, possibly not the same one, skimmed down and buzzed the **buzzard** on the fence post. The big bird ducked and then rose up and disappeared off to the right.



After the excitement had calmed down we all resumed scanning the estuary and were surprised when, only ten minutes or so later, a **little egret** in its brilliant white plumage suddenly appeared on the opposite side of the river. Had it been hidden in the marsh all

along? It rose lightly into the air, showing its golden yellow feet, and then settled down again, but unfortunately out of sight just round the point. It had been a most productive quick visit.

Jim Cook

Note. If you don't know the hide, it's easy to find, just by the little park at the paper mill main entrance in Guardbridge. It's well worth visiting regularly if you have the time. Ed.

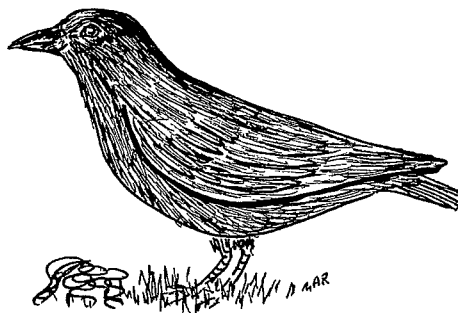
CLEVER CROWS

August

I was sitting having a coffee last Thursday morning, the 9th, when I saw a crow land on the neighbour's roof with a bundle of white stuff in its beak. Curiosity made me reach for the binos, to discover that the white bundle was in fact spaghetti!!!

The clever thing then started to stash portions away in four different crevices, each time wedging little divots of moss behind them to seal them in. I have seen crows on the roof before, removing moss, and I am now convinced there is method in this apparent madness. I am keeping an eye out for a return visit!

Perhaps not so clever crows, when I think about it! Since the 'spaghetti' sighting, I have seen a crow on two occasions caching bread on a neighbour's roof at the back. Since the food was a carbohydrate which isn't going to last, I now have to question these birds' intelligence



Joy Cammack

(Both bread and spaghetti will dry out and keep reasonably well on the roof. Crows are well known for 'dunking' their food to soften it, especially when they are feeding young. It makes a terrible mess of a bird bath! Ed)

THE AMATEUR BOTANIST COMES OFF THE RAILS

Out for a walk one day in the Sidlaws I came upon what I thought to be **alpine clubmoss**. I found it difficult to believe that it would survive at 900ft. (I have subsequently found that it grows at 400ft on a shale bing in West Lothian.) I took a small sample home with me to examine, in detail, the structure of the plant since I had never examined one closely before. This was the start of my troubles. I first checked the blue book of the Angus Flora by Ruth Ingram and Henry Noltie and found that it had been recorded for the Sidlaw Hills by Gardiner in 1848. I also noted that a strange clubmoss called *Diphasiastrum x issleri* had been found in the Sidlaws and a sample of this resides in the British Museum, dated 1846. This is the supposed hybrid between **alpine clubmoss** (*Diphasiastrum alpinum*) and another species called *D. complanatum*. The latter does not exist in Great Britain but is found on the Continent.

I checked out the details of alpine clubmoss in 'Stace', the current standard flora of Great Britain, and found it difficult to understand, with the sample in hand, the fact that it appeared to fit better the description for *D. x issleri*, which, incidentally, is very rare. I have a volume of 'The Plant Crib' published by the Botanical Society of the British Isles (BSBI) which has a section on the clubmosses written by A C Jermy, the referee for this group in Britain. There were diagrams here and other details. I came away feeling that my sample fitted neither plant description.

I phoned Barbara Hogarth, the Vice-County recorder for the BSBI, and she agreed to accompany me into the hills to search for 'good' samples of the alpine clubmoss to compare. We set out up Jock's Road in Clova and headed to Jock's Hut where we branched off on the route to Cairn Lunkard. I led her firstly up to a site where I remembered quite a spread of **interrupted clubmoss** (*Lycopodium annotinum*) to be present. The route I chose was awful - I was essentially much younger the last time I had come up this way! It was steep and bouldery and covered with a deep forest of **heather**. After a lot of huffing and puffing we found the interrupted clubmoss site where it was in full flower. Nearby on a rocky outcrop I spotted alpine clubmoss growing with a stringy and peculiar clubmoss adjacent, very like the descriptions of *D. x issleri*. I took samples of both.

On arriving home I set to examining the plants. I had definitely got *D. x issleri* which, even without flowering cones, had the correct leaf structure with narrow pointed leaflets on the

ventral side of the stem. The equivalent leaflets on *D. alpinum* should be 'trowel shaped', which my samples showed. Now, remember the trowel bit!

I eventually went to Edinburgh to view the examples of these plants housed in the herbarium there. There were plenty of old records of *D. complanatum*, the designation of which had been altered to 'forms of *D. alpinum*'. Most of the *D. x issleri* records had also been readjusted to *D. alpinum*. Even one record of *D. x issleri* submitted originally by Jermy had been redesignated *D. alpinum* by himself. The samples of *D. alpinum* were so varied that I still had no really clear idea of what I was looking for.

Barbara, in the meantime, had submitted samples to Jermy himself. He wrote back explaining that the trowel shape was that of a builder's trowel which is flat and arrow-shaped, unlike a gardening trowel. So, there we have it, it's not just any old trowel.

The variation in alpine clubmoss is very great - something I was not prepared for, and nor does the Flora prepare you for this. I am still left wondering if the experts are right. There seems to be a range between *D. x issleri* and *D. alpinum*. All this bother can perhaps be explained by my relative inexperience, but I'm keeping an open mind.

Pat Gaff

IN THE RIGHT PLACE AT THE RIGHT TIME

18th August

At about two o'clock, we were walking along the old harbour wall beside the Tay at Newburgh, just looking around to see if there was anything of interest, when the group of people in front of us suddenly turned and stared out over the river. There, fairly close in, was the head of a young **seal**. But then it dived and a long brown hairy body came up followed by a question mark of a tail. It wasn't a seal at all, but a large **otter** and totally unconcerned with the groups of walkers close by along beside the harbour wall.



We were thrilled to have such wonderful views of an unconcerned otter at such short range in broad daylight. The animal repeatedly dived, often leaving a thin trail of bubbles in the water, came up for 30 seconds or so and then, with a sinuous fluid movement, plunged down again. At times the otter was only some 30 to 40 metres out and binoculars were hardly needed. It gradually moved west towards the **reed beds** at the far end and caught a small **fish**, which was quickly dispatched, and then another item, perhaps a small **crab**. We were able to watch it for about ten minutes until it eventually disappeared into the reeds. One of the dog walkers along the wall said that she'd been fortunate to see the same animal, she thought, once before.

Later on, towards evening, we passed Lindores Loch and pulled into the fisherman's car park just on the off chance of interesting wildlife. We'd not even got our binoculars up when one of the fishermen standing there said "Here comes the **osprey** again!" and there, soaring out over the wooded hill in the background, came the familiar shape of a 'fish hawk'. As we watched, the bird glided out over the loch, did a sharp turn, hesitated for a moment and then plunged down and into the water. After a few seconds it flapped heavily up, splashing water in all directions, but with empty talons. The osprey regained height and resumed its quartering of the loch. The fishermen seemed pleased to see it and didn't appear to regard it as a competitor. The bird came past us several times, rewarding the watchers with good views and plunged down once more, again without any result. Eventually, after about 20 minutes, and only visible with binoculars at the far end against lowering clouds, the osprey's luck held and it flew heavily off with a **fish** into the woods to the south of the loch.

Twice in one afternoon our own luck had held and allowed us wonderful sightings of such charismatic wildlife, bringing us to just the right places at precisely the right times. Serendipity strikes again!

Jim Cook

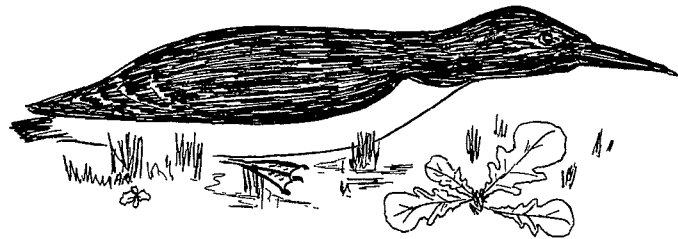
FAR FROM HOME

Saturday 22nd September

Late in the afternoon, when walking round our **turnip** field, I came upon a bird on the end rig in a patch of **fat hen** and **redshank**. It was grey, black and white, had a pointed bill and a distinctive dark streak running back from its eye and also had webbed feet. On returning to the house and consulting the bird book a **guillemot** seemed to fit the description, although the illustrations were a bit confusing.

Returning later with my wife we found the bird still in the same spot and took some photographs. I then picked up the bird which offered no resistance, though it did not seem to have any injury and appeared in good condition. We took it home and, as we were both golfing in the morning, decided that the best thing was to give it B & B for the night - a wire netting run, water and some defrosted frozen trout. Most of the fish was gone next morning.

I decided the best place to return the bird to its natural habitat was to take it to Auchmithie, so late on Sunday afternoon we travelled from Kettins to Auchmithie. Thankfully it was very quiet down on the beach south of the harbour and the tide was in. We released Guille into the water and then stood for about an hour watching the bird preening, splashing and dancing on top of the water. I am sure it was delighted to be back at sea and I was glad for it!



The photographs were shown to Gordon Maxwell and Bob McCurley and both were sure that it was in fact a guillemot, but how it came to be flying over Coupar Angus and come down in my field so far from the sea no-one will ever know.

Peter Middleton

MANDARINS ON THE TAY

On the 24th of October, on a walk up the Tay about half a mile upstream from Dunkeld bridge, fellow Nat Nancy Middleton and I almost simultaneously spotted a most unusual **duck** in the company of the local **mallards**. My first, knee-jerk identification was "It's a **harlequin**" then I immediately realised my mistake. The male **mandarin duck** can hardly be mistaken for any other and is probably the most beautiful duck likely to be seen in the wild in Scotland. It is, of course, an introduced species and is native to eastern Asia, as the name would suggest. Both Nancy and I speculated on where this one had come from, perhaps a pond on a private estate, an escapee from a wildlife park - it was anyone's guess. The almost certain definitive answer was to come almost three months later.

I'd been on a day trip to Perth and was sauntering around with no definite purpose in mind except for a bite to eat, when the sky darkened and down it came, yes, the wet stuff. Being near the museum, I made a dash for shelter. Now Perth Museum has a very attractive natural history section and as I walked around I spotted a **mandarin duck** in one of the exhibits. Now it gets interesting. I read the descriptive plaque, and there was the answer to my questions.

Mandarin ducks had been introduced by a J Christie Laidley of Perth and bred in nest boxes in a riverside garden in 1946/47. They fed regularly on the Tay on **insects**, **frogs** and **water plants**. By 1977 the population was estimated to be about 60. That was all the information on the description. This begs the question "How many are there now?" I have walked the area frequently and have so far seen only this one duck. I would like to take this further and will probably contact Perth Museum soon. watch this space.

Gordon Maxwell

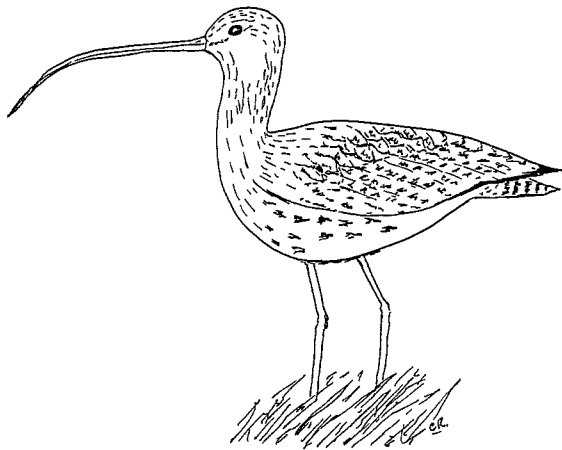
FEEDING STRATEGIES

4th November

The **heron** was obvious. As soon as we'd sat down at the Guardbridge hide window, the bird was right there in front of us in the middle of the river Eden. The tide was nearly out, the water was flowing rapidly and the evening was drawing in. The heron stood stock still for a few minutes and then made a sudden lunge but came up with nothing. The grey shape stalked to the other side of the clump of seaweed and froze in alert concentration. Although it stood there, occasionally shifting to a different position around the clump, for the 45 minutes we remained in the Guardbridge hide it caught nothing. A heron on the opposite bank a little further upstream, had better luck and snapped up several small **fish** for its supper.

A small flock of **black-headed gulls** soon landed in the water and began paddling energetically upstream in the swiftly-flowing shallow water but the birds were still moving slowly downstream. The one directly in front of the hide plunged forwards several times into the water up to its chest, while partly spreading its wings. It did this three times in a row and each time came up with a small **fish**. At any one time up to a dozen of the birds were attempting to feed like this. Some also caught a few fish but one, over towards the other bank, plunged in more than a dozen times and came up with nothing. Yet another spent a few minutes lob-tailing, almost like a duck, but we couldn't see if it caught anything. Several juvenile first year **herring gulls** were also using the same method of paddling vigorously upstream while moving downstream, presumably also trying to catch small fish. However, none of them had any success while we were watching.

A few **curlews** probed the mud on the far bank a short distance downstream for **worms** and **crustaceans** in the mud. Immediately in front of the hide another bird waded upstream in



water right up to its body. Reaching down the full length of its beak until its head just cleared the surface, the curlew vigorously probed among small stones. Through binoculars its eyes could be seen to be tight shut, showing the pale eyelids, but the bird only held its head down for a one or two seconds at a time before lifting up to inspect the surroundings for danger. Within a few minutes the curlew caught two small **shore crabs** which were manoeuvred expertly in its beak for a few seconds and then in one quick motion tossed down its throat. Supper was served!

Eventually it flew over to the opposite bank and joined the other curlew in shallow water. Separated by only a few yards, both birds spent time stalking the shallow water and every so often speeded up into a short curving run followed by a peck into the water. We couldn't see what they were after and neither bird could be seen to catch anything. What were they after? Was it a small crustacean, a **shrimp** perhaps, a **mollusc** or a **worm** that was on the menu, surely not a small fish?

Suddenly a bright blue flash zoomed up and perched on the post directly in front of the hide. Wonderful, a **kingfisher**! We all intently watched the magnificently bright and squat little shape as it sat, occasionally turning its long beak from one side to the other and jerking its head up while scanning the water. And then the bird suddenly plunged down with a splash but within seconds returned to its perch with nothing. After about five minutes it launched swiftly off and sped low over the water to a seaweed-covered rock further down and over the other side of the river. After flitting from view for a short while the bird then reappeared back on the post in front of the hide. Again it plunge-dived off its perch and came up with nothing. After a few minutes the kingfisher zoomed a short distance upstream onto a tiny stick just above the water. This time it caught a **fish** and, after beating it into submission, quickly popped it down the hatch and flew off upstream below the road bridge.

Further downstream, near the bend in the river, we could see several **mallards** steadily making their way up against the flow of water. They were probing among seaweed clumps and occasionally lob-tailing in the deeper water. In the middle of the stream a male and two female **goldeneye ducks** were diving and disappearing for 30 seconds or so but didn't appear to come up with any fish or crustaceans.

Overhead, a sparse but steady stream of **woodpigeons**, all seemingly with full crops, made their way into thick woodland, seeking cover for the night. A short while later a **buzzard** landed in the rough grassy field opposite the hide and began stalking around. Every so often the big bird leaned forward and probed the grass tufts in front of it with its beak. What was it catching? None of us could see, even through a telescope, but the consensus was that the bird was picking up **insects, beetles** perhaps, or **worms**. Whatever the menu, a second **buzzard** joined in after ten minutes or so, as the light began to fade, and both continued the stalking and probing. Perhaps there was a shortage of larger food items and the birds thought it better to have at least something in their crops for the night.

Jim Cook

RUSTS IN MY GARDEN

The 2006 season was notable for the number of rust fungi that appeared on plants in our garden. These parasitic fungi causing pustules on leaves, stems, flowers or fruits can be quite colourful and many cause disturbances in normal growth patterns in plants. Rusts have complicated life cycles with a maximum of five stages (**macrocyclic** rusts), though some have evolved shorter life cycles (**microcyclic**). Rusts are very specific to the family of host plant they infect. It is generally true that if you know the plant, you can identify the rust attacking it. A hand lens or microscope is needed to see some stages in the life cycle, but here I make reference to only the conspicuous stages. Some rusts must alternate between two different plant species to complete the life cycle each year, whereas others can complete the life cycle on a single plant.

Some rusts to look out for in your garden.

On **groundsel** (*Senecio vulgaris*) the rust *Puccinia lagenophorae* forms conspicuous yellow pustules on the upper surface, spore-producing structures called **aecia**. This rust is a native of Australia introduced into the UK in 1961!

On **daisy** (*Bellis perennis*) a newly discovered rust called *Puccinia distincta* suddenly erupted recently causing yellow pustules (**aecia**) on leaves; it is devastating to some ornamental daisies. I found this rust for the first time in 2006. A common related rust species on daisies is *Puccinia obscura* whose alternate host is a **wood rush** (*Luzula* sp.). It is most probable that *P. distincta* is a microcyclic form evolved from *P. obscura*. It seems the rust from groundsel does not infect daisy, although both plants are in the Compositae.

St John's wort (*Hypericum* sp.) in our garden are infected every year by the rust *Melampsora hypericorum* that forms conspicuous yellow or orange pustules on the upper surface of leaves (**aecia**), and later in the season it forms reddish-brown or dark brown pustules (**telia**).

Several species of closely related macrocyclic rusts occur commonly on members of the Rosaceae. On **roses**, the rust *Phragmidium mucronatum* forms yellow **aecia** on the upper leaf surfaces, then yellow pustules on the underside (**uredinia**), and finally black pustules (**telia**) develop from the old uredinia. On **blackberry**, *Phragmidium violaceum* produces a similar series of pustules and causes dark brown lesions on leaves that when inspected on the underside show either the yellow uredinia in summer, or black telia in autumn and winter.

Our **hollyhocks** (*Althea rosea*) are always severely attacked by the rust *Puccinia malvacearum* that forms only conspicuous yellow or orange telia on foliage.

Houseleek (*Sempervivum tectorum*) is infected by the rust *Endophyllum sempervivi* that perennates in the stems of the plant (systemically infected) to erupt each spring causing distortions in the normal leaf development. Affected leaves are more erect and elongated and yellowish at the base compared to the healthy compact plant habit. Pale yellowish-brown sunken telia develop on leaves each spring.

I decided to comment about rusts because last year on the walk with the Nats up Dollar Glen (top end), I found a splendid rust on a **strawberry**. Puzzled by this appearance on a wild strawberry, after a 30-year career in soft fruit pathology when I had never seen such a rust, I showed the rust to members during our picnic. They immediately told me that this was the

barren strawberry (*Potentilla sterilis*) rather than *Fragaria vesca*! Here the rust nomenclature gets confusing because the rust found on barren strawberry is called *Phragmidium fragariae* (first named in 1808), whereas the rust on other **potentillas** is called *Phragmidium potentillae*! Interesting that this nomenclature is 200-years-old

Brian Williamson

COMET HOLMES

10th November After hearing from Bede Pounder that a small comet was visible to the naked eye in the constellation Perseus, I went out at about 11 pm and there it was, almost overhead. The sky was clear and the comet showed as a small splodge close to the bright star Mirfak. The view through binoculars showed a glowing hazy spherical shape

11th November Although there had been some cloud earlier, the comet was clearly visible again in Perseus, although it hadn't noticeably moved

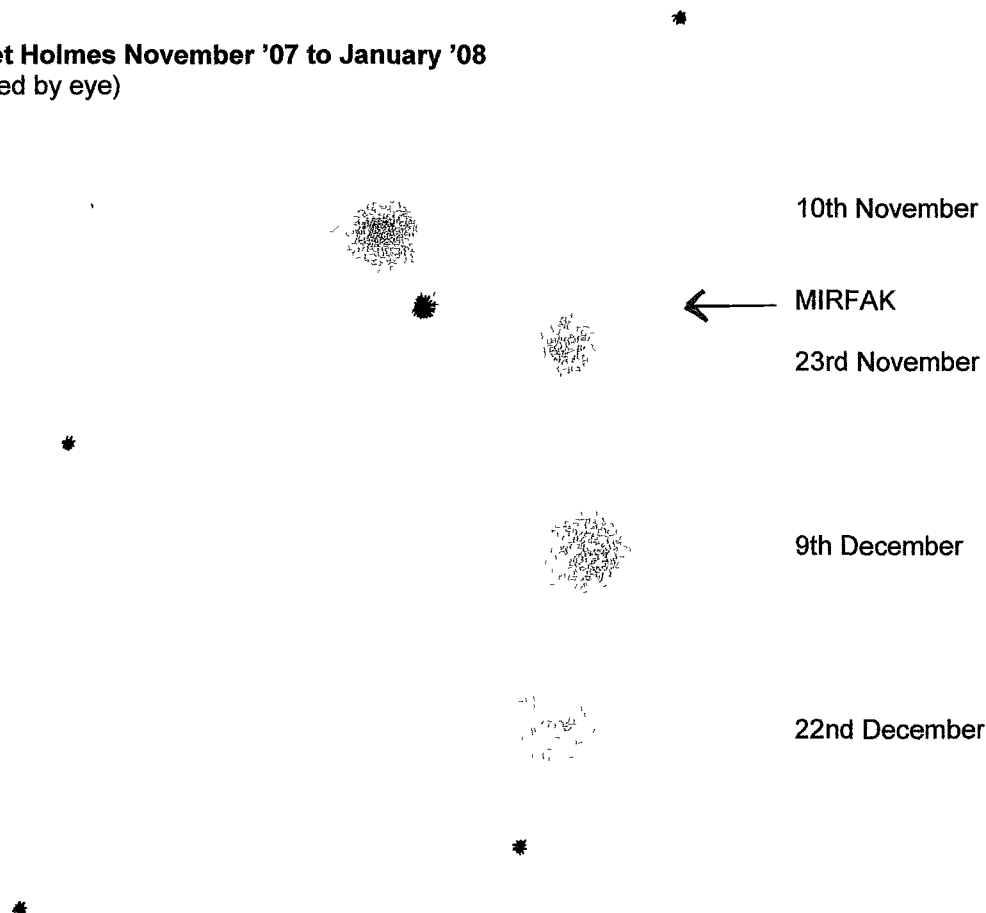
23rd November After nearly a week of rain and cloud, a clear evening allowed another view of Comet Holmes in Perseus. However, the bright light of the full moon made viewing more difficult. This time it could be seen to have moved and also appeared to form a rather more diffuse spot

9th December After the usual periods of rain and heavy cloud, a fairly clear night allowed another glimpse of the comet. It had clearly moved this time, compared to the first sightings, but was much fainter to the eye, although still clearly visible through binoculars.

22nd December Comet Holmes was seen again, but this time as a large diffuse and faint blob visible only through binoculars. Again, it had moved a little against the starry background of the constellation Perseus. Unless it brightened dramatically again, it soon wasn't going to be visible at all

Jim Cook

Comet Holmes November '07 to January '08 (Judged by eye)



NEW BOOKS

Two biographies of notable early local naturalists appeared during 2007.

Readers of last year's Bulletin (page 39) will remember Dr Patrick Blair, who, three centuries ago, was the driving force behind Dundee's first museum, first botanic garden, first naturalists' club, and first (and only?) dissection of an elephant! The Tay Valley Family History Society has reprinted a memoir by A P Stevenson first published in 1907 as a booklet, with additional editorial notes by Jack Blair *Patrick Blair, Surgeon Apothecary, Dundee, Scotland* is available from TVFHS at £3

Local historian Dr Edward Luscombe has produced a book *George Don, the Forfar botanist*, with the subtitle 'Man of genius' Don, who was first to systematically study and list the flora and fauna of Angus, is already well-known in botanical circles, but this new biography usefully brings together all aspects of his life and work. It is a shame that most potential purchasers will be deterred by the price of £11.99 for something that is little bigger than a booklet (perhaps it could have been kept more affordable by omitting the colour plates?), but a copy should certainly be in every local library. It is published by Pinkfoot Press in collaboration with Angus Council Cultural Services, and copies can be found for sale in the Meffan Institute and various other outlets in Forfar.

Colin R McLeod

BOTANICS SURPRISE

21st December

I had made an arrangement to meet Marjory Tennant at the University Botanic Garden. Our plan was to wander around the pond known as Loch Machar which was named after the first Curator. The surrounding area is delightful in all seasons, I particularly enjoy early summer when the *Meconopsis*, by the slender *Ginkgo biloba*, are in their prime, and on the opposite side, the giant leaves of the *Gunnera* are resting spots for **moorhens** and **terrapins**. Thence we planned to walk via the south facing slope of the Mediterranean garden, on to the geometric layout of the herb garden and, finally, through the hothouses.

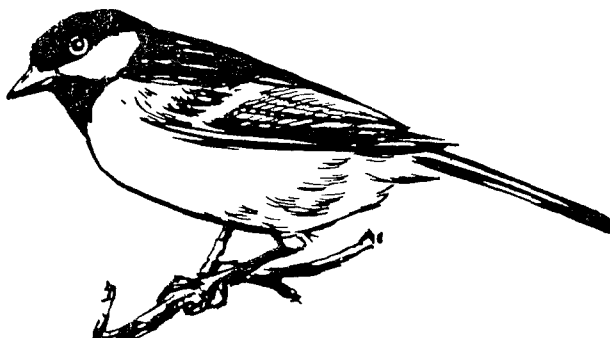
The 21st December turned out to be a bitterly cold day with freezing fog. This forced us to alter our plans, and we made a beeline for the warmer hothouse. Inside the first trees on our right were **paw paws** and on our left various **citrus** trees. The **grapefruit** on the tree were the largest we had ever seen - I wonder if they were juicy and tasty.

We were then approached by a girl who asked us if we would be interested in watching a bird ringing session. She and another student were assisting Dr Alan Barclay with this project in the cooler of the two hot houses. Naturally we agreed to this opportunity.

One student kept a lookout for any small birds that had flown into the traps in the garden. They were instantly retrieved and brought inside to be weighed and measured. This was duly recorded in a note book plus species, sex and age, before ringing and releasing them. That morning **robins**, **blackbirds**, **blackcaps** and **great tits** were on the list. Several other species had also been seen around.

When a bird was brought indoors it was placed, head first, into a cotton bag, like a shoe bag with tape drawn together at the top. The bags were hung on hooks on the wall and there they joined a queue. For the weighing procedure each bird was placed head first into a tube on the scales - they were remarkably still and quiet during this unusual experience.

We were then given the opportunity of releasing them after being instructed as to how they should be held. We had to pick up our respective birds with our left hand, with the bird's head peeping out between index and middle finger. Once outside one



placed the right hand, palm up, under the left hand and let go and off they flew. Marjorie was given a female **blackcap** and I released a male **great tit**. For us, the freezing conditions proved to be beneficial and a real bonus.

Incidentally while Dr Barclay was manager of the Loch of the Lowes Reserve near Dunkeld some years ago he gave the Nats a lecture on 2nd December 1986. The title was "An Ecologist in the Scottish Highlands" and this was very much enjoyed by Naturalists of that era.

Jean Pollard

Note Dr Barclay gave us a second lecture - "Otters, Ospreys and Others" on 31st October 1995 based on his experiences at the Loch of the Lowes. It, too, was much enjoyed. Ed.

NATURAL HISTORY SURVEYS

This has been my first year in Dundee and I have enjoyed myself on the evening rambles. I have got to as many of the outings as I could, although not as many as I wanted to. It was enjoyable to watch the number of people sharing their knowledge and noting down lists of species seen and there was much discussion over the finer points of identification.

To my mind one of the most valuable things that members of a local natural history society can do is record the wildlife of their "patch", either by casual observations made during the year, while out on the summer outings or by taking part in national surveys. However, to be useful this information needs to be made available to the wider community. One of the things I have tried to find out over the last year is what information is currently being gathered on the local wildlife and the results are surprising.

Quite a lot of people gather information on their favourite plants or animals and much of this is passed on to long established recording schemes. Many recording schemes are based around the Watsonian vice-county system. It was devised in 1852 by H C Watson as a means of graphically representing the distribution of plants. Watson defined 112 vice-counties (VCs) of approximately equal areas based on sub-divisions of counties. Vice-county boundaries have stayed fixed and independent of administrative boundary changes ever since. Angus is covered by vice-county 90 (Forfarshire), which includes Dundee.

By coincidence a number of new wildlife surveys started in 2007. Comments from nearly all the scheme organisers suggest that there are quite a few gaps in our knowledge of local wildlife. While there was a lot of information from some locations, there are a lot of blank areas on the map, even for some of the more popular groups such as butterflies and moths.

Three surveys started in 2007 with very different aims, the National Amphibian and Reptile Recording Scheme (NARRS - www.narrs.org.uk), the Dundee bat survey organised by the Bat Conservation Trust and the moth recording scheme 'Moths Count' (www.mothscount.org) run by Butterfly Conservation.

NARRS covers the whole of Great Britain and is a long term survey based on specific sites. To make the survey unbiased, a number of random grid reference location points have been generated in each county. The surveyors have to assess the area adjacent to this for suitable reptile habitat and find the nearest pond to the south east. These sites will be surveyed (with the land owners' permission) annually to build up a picture of the distribution of frogs, toads, newts, snakes, lizards and slow worms. In this survey the sites remain fixed and a negative result is as important as a positive one. The aim is to see how distributions of the species change over several years and to see whether species are moving north, or if their area of distribution is increasing, decreasing or staying the same.

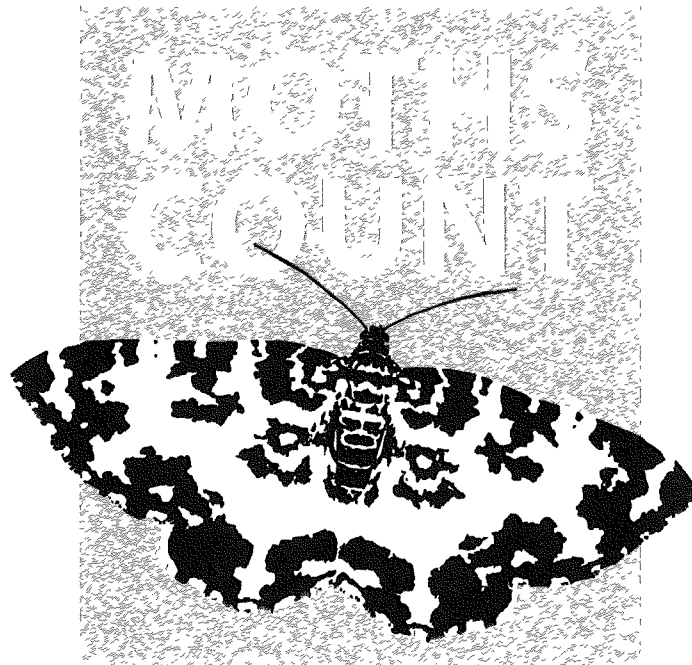
The Dundee bat survey was a one year project to answer a simple question. Where can bats be found in Dundee? The survey method is standardised based on National Grid 1k squares. The surveyor maps a roughly triangular route around the square to cover the widest area possible. Ten locations are chosen and at each location a survey for bat calls is made over two minutes using a bat detector. The number of bats flying past is counted, as is the number of

feeding buzzes A feeding buzz is the sound made when a bat catches an insect, a bit like a burp 27 volunteers have been recruited and started listening out for bats in May The field work stopped in September and the results will be known later in the year. Although we have not been able to completely survey the city, we have managed to cover almost half the squares in Dundee. In fact most of the western part of the city between Invergowrie and Dundee Law has now been surveyed as well as parts of Douglas and Broughty Ferry. It is hoped that the volunteers will be able to continue the survey next year.

Butterfly Conservation's Moths Count, is a four-year project started in earnest at the beginning of 2007. Its overall aim is to stimulate and encourage moth recording throughout the UK and to establish an ongoing recording scheme for the 900+ species of macro-moths. More specific aims include:

Encouraging a greater appreciation and enthusiasm for moths amongst a new, wider audience, including people who have not previously participated in wildlife recording or conservation.

Developing the National Moth Recording Scheme leading to a comprehensive, accurate and accessible database showing the distribution of the UK's larger moths.



As part of the moth recording scheme I have recently become the moth recorder for VC90 (Angus) and would be interested in any moth records from Dundee Naturalists' Society members. A number of training events for recorders have been held this year including a memorable weekend in Glen Doll during April with the temperatures dropping to well below freezing. Despite this five species of moth were found.

There are many reasons for recording wildlife, from personal satisfaction to making contributions to scientific studies. It is the contributions of generations of natural historians that has built up the current picture of the state of our wildlife and shown how its distribution changes over time. Every observation can be a valuable piece to the jigsaw. Perhaps the final aim of the Moths Count project can sum up one of the best reasons for getting involved in wildlife surveys:

Contribute to the long-term conservation of moths by making available the information needed to implement effective conservation policies and action at the local, regional,

national and international levels by members of the public, communities, and public, private and charitable sector organisations (e.g. by shaping policy, informing decisions and contributing to public awareness and scientific knowledge).

In 2008 the British Dragonfly Society (www.dragonflysoc.org.uk) will also be launching a national survey with the aim of producing a new national atlas. If anyone has any records of moths, dragonflies, reptiles and amphibians, bats or anything else, then I would be keen to see them. If anyone is interested in taking part in any of these surveys they can contact me at home or at work

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WIMBY

What's in my Backyard?

Find out about species and habitats where you live

WIMBY is a joint project between Scottish Natural Heritage and the National Biodiversity Trust that provides the facility to view information about species around us. Using the NBN (National Biodiversity Network) web services the site extracts data from the NBN Gateway and presents it in an easy-to-view format. WIMBY has a gazetteer that allows users to search for species found around their home town or village, mountain top or protected area. It will also search by grid reference or postcode. After setting the parameters of the search (for example 5 km around Dundee), a list of species is returned that are present in the search area. As well as linking to data sets with a distribution map on the NBN Gateway www.searchnbn.net, species sightings can also be viewed on interactive Google mapping <http://maps.google.co.uk> with the option of a satellite backdrop. A link to ARKive www.arkive.org has also been incorporated to provide an image along with further photographs and associated information for the species of interest.

SNH is working with an increasing number of non-governmental organisations including RSPB, Scottish Ornithologists Club, Scottish Wildlife Trust, Highland Biological Recording Group and the Botanical Society of the British Isles. Through grant-aid, SNH is helping these organisations to mobilise their records of species onto the NBN Gateway.

WIMBY is part of **SNHi**, the new information service available through the SNH website www.snh.org.uk. The site comprises a suite of interfaces developed to provide access to a wide variety of data and information on the natural heritage.

Please take time to visit SNHi on the website at www.snh.org.uk/snhi and try it for yourself.

Moir Hogg
Scottish Natural Heritage Moir.Hogg@SNH.gov.uk

(Not all groups are covered yet, but worth a look if you have access to a computer. Ed.)

11 MAR 2008

DUNDEE NATURALISTS' SOCIETY

Minutes of Annual General Meeting held on 13th March, 2007 at the Chaplaincy Centre .
Alban Houghton was in the chair and 53 members were present.

1) Apologies for Absence

Received from Brian and Jenny Allan, Edna Slidders, Roma and Duncan Miller and Peter Ellis.

2) Minutes of Previous Meeting.

These were read and adopted as an accurate record. Proposed by Jim Cook and seconded by Melanie Coleman.

3) Matters Arising.

There were no matters arising.

4) President's Report.

Alban Houghton reminded members that the core activities of the last year went well . Good weather being enjoyed on many of the excursions. Particularly memorable was the evening boat trip to Perth organised by Jack Moody the highlight of which was the appearance of the local dolphins. Dolphins were again encountered on Pat Gaff's mystery tour in August. Alban noted that another wildlife bonus of the River Tay's relative pollution free status was the regular occurrence of otters in the dock area of Dundee.

Alban noted that members would now appreciate why Council emphasised the message that safety was everyone's business after two nasty, bleeding injuries were sustained by members (one outdoors and one indoors.) Members were strongly advised to reread the safety advice given in the previous year's Bulletin. Everyone will have to try harder.

The Society's winter programme of talks had been informative and entertaining and the Society's thanks were due to our secretary Margaret McLaren who had orchestrated these lectures so efficiently. Margaret had worked with three presidents during her seven year stint as secretary and now thoroughly deserved to return to the "back benches."

Alban thanked his council for their smooth running of the Society, Jim Cook for his species-recording evenings and for the twentieth anniversary celebrations at Carsegowndiemuir. Dorothy Fyffe, our Treasurer, and Anne Reid , our Bulletin Editor who have both been in post over ten years deserve our heartfelt thanks. Though not a Council member, Gordon Maxwell continues to be a tower of strength to the Society. Similarly, the Reid girls are BBQ stars.

5) Secretary's Report.

The membership is currently at 157, this includes 6 honorary members, 62 family members, 4 past members and 98 ordinary members. The membership has decreased since last year when it stood at 163 members, but all on the list are active.

Interest in the Society has come from the Green Diary, which has now, unfortunately closed, Libraries and friends.

Margaret exhorted the members to be active in promoting the Society by talking enthusiastically about the Society to encourage new members and to welcome "new faces" to the meetings and outings.

The summer programme went very well, due in part to the glorious summer weather – although it would have been nice to have had more members and friends on the outings. The May weekend in the Lake District went extremely well, the hotel being excellent and the walks were wonderful.

Despite the absence of Brian Allan (recovering from surgery) we found the fly orchid and Alban Houghton made the whole weekend very interesting for all.

The trip planned for this year is to Elgin and Morayshire in July.

Members should read the summer Outings Programme along with the Syllabus and note that the bus will leave from North Lindsay Street while the museum is being renovated. Booking Forms should be completed and sent to Davie Stein as numbers are important in view of the spiralling cost of bus hire.

Margaret thanked Alban for his help during her seven "very pleasant" years as Secretary of the Society during which she enjoyed meeting and talking to so many interesting people. Her thanks were extended to all the members for being so pleasant and friendly – but, of course, she will still be around "keeping you all in order."

To finish, Margaret wished to thank Jean Colquhoun for the efficient way in which she attends to the booking of coaches, Anne Reid for her excellent help over the years and Dorothy Fyffe for helping with the photo-copying. She further wished her successor an interesting time as Secretary.

6) Treasurer's Report

Dorothy advised that a copy of the audited Statement of Accounts for the year ended 31 January, 2007, had been issued to all members.

At last year's meeting, it was stated that the accounts then did not include the University account for T9, which had been late, nor the Scottish Wildlife Trust's annual subscription. These are included in this year's statement, but, even with this additional expense, our income from annual subscriptions has comfortably covered our general expenditure.

Dorothy noted that she had not sold any badges this year. However, they are still available at a cost of only £1.50 each – a bargain! (one was available from E-bay at £4.00.)

Acceptance of the accounts was proposed by Anne Reid and seconded by Liz Houghton.

7) Technical Convener's Report and Carsegowndiemuir Convenor's Report

Jim Cook reported a successful series of Tuesday evening outings in spring 2006. A survey of notable trees was proposed for summer 2007 and records were invited.

The quarry was progressing well and the 20th anniversary of planting was celebrated on 25th November with a tree planting ceremony. A 21st birthday barbeque is planned for June 2007. Full details of both these reports are to be found in the Bulletin for 2006.

8) Elections

New Council Members:

Melanie Coleman, Alex. Rollo and Lorna Ward were elected to Council unopposed, Melanie being proposed by Jim Cook and seconded by Jean Colquhoun, Alex. proposed by Dorothy Fyffe and seconded by Jack Moody, and Lorna proposed by Bede Pounder and seconded by Lois Morrison.

Re-appointment of Anne Reid as Bulletin Editor, Jim Cook as Carsegowndiemuir and Technical Convenors and Shelagh Gardiner as Auditor were proposed by Helen Blackburn and seconded by Alison Cameron.

. Melanie will replace Margaret McLaren as Secretary with Alex. to assist.

Davie Stein will take over as Excursion Secretary from Jean Colquhoun – proposed by Anne Reid and seconded by Dorothy Fyffe.

9) Donation to the Dundee Museum Fund

It was agreed to make a donation of £100.00 to the Museum Fund. This was approved by a unanimous show of hands by the members.

10) AOCB

10.1) Places were still available on the excursion to Elgin on 3/9 July.

10.2) There would be a talk on the Re-introduction of the European Lynx to Britain on 18th March at the Meffan Institute in Forfar.

10.3) A survey of the Orange Tip Butterfly had been commenced. Postcards to record sightings were available.

10.4) Announcements were made of forthcoming meetings.

After the meeting closed, the members participated in a quiz compiled by Brian Ballinger. In recognition of her sterling service to the Society, Margaret Mc Laren was presented with a hat and a Border Fine Arts porcelain figure.

Tea and baked treats were served up by Anne Reid and her daughters Mary and Christine.

Alex. Rollo

Hon. Secretary.

DUNDEE NATURALISTS' SOCIETY SUMMER OUTINGS PROGRAMME 2008

Saturday 26th April Vane Farm RSPB Reserve

Bus 9.00am

Leader: *John Campbell*

The RSPB Vane Farm Nature Reserve lies beside the Loch Leven National Nature Reserve. The loch is the largest in lowland Scotland and one of the most important European bird sites, and attracts a variety of native and visiting species. The Visitor Centre at Vane Farm has an observation room with telescopes and three hides which overlook the loch and wetland. There is no optical equipment in the hides but binoculars can be hired from the RSPB shop. There will be an opportunity to take a woodland trail walk through birch woods to the viewpoint at the top of Vane Hill, 248m high. This trail is fairly steep in parts and members should ensure they bring suitable footwear. Within the area there is a wide variety of wildlife, including red squirrels and roe deer and, in season, a number of rare plants, including Holy Grass, found in only a few sites in Scotland.

The Vane Farm complex includes a shop, a tearoom, a picnic area and toilets. Entry charge or bring membership cards. OS Landranger Map no 58 - Perth to Alloa.

Tuesday 13th May Balgavies Loch SWT Reserve Private Cars. Meet at 7.00pm at the hide car park or at 6.00pm at East Whale Lane.

Leader: *Alban Houghton*

A most attractive 2½ km walking circuit round the loch was completed in 2006. Going clockwise, the path is level on the Wielstaves lane and railway sections but there are 12 stiles on the East and South sections. Water, marsh, woodland and meadow habitats are all represented in the SSSI. Early summer flowers and migrant birds show well in May. The loch is situated halfway between Forfar and Friockheim on the A932. Meet at the hide car park (NO529508) at 7.00pm or give/receive a lift from E Whale Lane car park at 6.00pm. There is also a parking lay-by on the circuit ½ km east of the hide car park.

Friday 16th - Sunday 18th May - Oban Weekend Bus 4.30pm from Discovery Point

Saturday 31st May Powmouth and South Esk River

Bus 9.00am

Leaders: *Doroth Fyffe & Alban Houghton*

This is a delightful walk up the River South Esk from Powmouth to the weir, a distance of approximately two miles. It is level walking along reasonable paths used by fishermen. The area has not been disturbed by farming and as a result has a very large variety of wild flowers. At the start the river is edged with willow and alder which is a perfect nesting habitat for many warblers. Approaching the weir we will reach the edge of Kinnaird Park which contains a variety of exotic trees. Common sandpipers, dippers and kingfishers nest along the river and ospreys have been nesting in the parkland.

OS Landranger Map no 54 - Dundee to Montrose.

Saturday 14th June Tulach Hill, Blair Atholl
Leaders: *Brian Ballinger & Jack Moody*

Bus 9.00am

Tulach Hill by Blair Atholl is unusual in having a small area of limestone pavement, which is scarce in this part of the country. It also has alkaline flushes and areas of calcareous grassland. There is heather moorland and, lower down, deciduous woodland. This gives rise to a rich flora including orchids, saxifrages, wintergreens and ferns. We also hope to see various birds, butterflies and, perhaps, dragonflies.

The walk up Tulach Hill (470 metres) from Blair Atholl is not long but is steep with some rough ground near the summit. An alternative low level, flatter walk will also be arranged, probably along the old woodland near the river, where a variety of wildlife should be seen. OS Landranger Map no 43 - Braemar to Blair Atholl

Tuesday 17th June Easthaven rockpools Private cars. Meet 7.00pm at Easthaven Grid Ref (NO591361) or 6.15pm at East Whale Lane car park.
Leaders: *Anne Reid & David Lampard*

We shall explore the rockpools to see what we can find. In the past crabs, prawns, fish and a variety of molluscs have been caught in addition to lots of species of seaweeds. Bring a net and plastic container, if you have them, to examine your catch, though some equipment will be available. **Wellies advised.**

Saturday 28th June Boddin Point to Ferry Den Private cars 9.00am East Whale Lane. Must be booked. Leaders: *Jim Cook & Margaret McLaren*

The coastal wildlife on this stretch is especially rich and varied. We will start by taking a look along the cliff tops at the north end of Lunan Bay for a group of fascinating southern calcareous plants. The party will stop for a short time at the old lime kilns, to look for changes over the winter and to admire the view, then study the coastal plants around Boddin point. The rock formation known as the 'elephant' and the 'man who died before he was born' will detain us for only a short time before the group descends the cliffs to walk along the sea shore rocks to search for interesting seashore species, rocks and birds. We'll hear tales of the 'blue hole' at Usan, of agates of old, of fishing and fishermen, of plants of the past and of birds, insects and fish to be found there at the present time. The walk isn't very long but is very rough in places. Boots or good walking shoes are essential. So, why not come and join us in one of the best areas for wildlife in Angus?

Members wishing to attend this outing should use the booking form or contact Davie Stein on 01382 816863 either to indicate that they require transport or that they have spare seats in their vehicle. OS Landranger Map no 54 - Dundee to Montrose.

Saturday 12th July Corrie Fee Private cars 9.00am East Whale lane. Must be booked
Leaders: *Alex Rollo & Davie Stein* with Angus Ranger

Corrie Fee is a magnificent example of a "hanging valley" created by glacial action during the last Ice Age and as such exhibits a number of the features associated with such action.

The corrie is approached through Glendoll forest but is not, itself, forested, so that the whole panorama can be viewed from the edge of the forest.

The corrie was, until recently, part of the Caenlochan National Nature Reserve which was established to safeguard the alpine botany of the area and includes a number of plants which are found in only one or two other areas of Scotland. Bird life is sparse with only ravens, pipits and red grouse being guaranteed, however, golden eagles, peregrines, kestrels, buzzards, dippers and grey wagtails all breed in the area and may be seen at any time. Mammals include red and roe deer and blue hares.

Members wishing to attend this outing should use the booking form or contact Davie Stein on 01382 816863 either to indicate that they require transport or that they have spare seats in their vehicle.

There is a charge at Clova car park. OS Landranger Map no 44 - Ballater and Glen Clova.

Saturday 26th July Black Wood of Rannoch

Bus 8.30am

Leaders: *Alban Houghton & John Campbell*

The wood is the most extensive relict of ancient Caledonian Forest in Perthshire. We will see venerable Scots Pines, lichens, wood ants and attractive pinewood under-storey plants (wintergreens etc). We may see pinewood species such as red squirrel, capercaillie and Scottish crossbills, Kentish glory moth and, I dare say, slow worm and pine marten – what a day that would be! A lovely, special wood whatever. A short and longer walk will be offered.

OS Landranger Map no 42 - Glen Garry and Loch Rannoch area.

Sunday 10th August Barry Buddon Joint Meeting Meet 10.00am, Monifieth Football Pitch car park, Grid Ref (NO 504323)

Leaders *Bob McCurley & Jim Cook*

Barry Buddon is the largest and best area of sand dunes and dune slacks in this part of Eastern Scotland. By arrangement, we are allowed to spend a day freely exploring the wildlife delights of this valuable array of habitats. The party will divide into several groups, concentrating on birds, plants and butterflies and dragonflies, though all groups will have all interesting natural history pointed out. Why not come and join us for a great day out?

Tuesday 12th August Barry Mill - Barbecue and moth trapping. Meet 7.00pm at Barry Mill (NO 533351) or East Whale Lane at 6.15pm.

Leaders: *Anne Reid, Peter Ellis & Jim Cook*

This will be a sociable evening with a purpose. We intend to set up at least one moth trap and treacle some tree trunks to attract moths. We will then have a walk and the barbecue while waiting for the traps to work. The traps will be checked in the late evening to see what is about. If the weather is suitable it is intended to leave the trap(s) out overnight and to return in the morning to examine the catch. Come back at 10.00am to see what we caught.

Saturday 23rd August Kilminning and Fife Ness

Bus 9 00am

Leaders *Brian Ballinger & Dorothy Fyffe*

This outing will take us to a section of the Fife coast to the east of the picturesque village of Crail. We plan to visit the Kilminning Coast SWT reserve which has a varied selection of habitats and features, including seashore and marsh wildlife communities. Volcanic dykes run to the shore, a variety of coastal birds are seen and there are fine views on a clear day. We then walk eastwards along a section of the Fife coastal path to the lighthouse at Fife Ness. Nearby is the small reserve of Fife Ness Muir, a well known site for passerine birds making their landfall.

The longer walk will continue north along the shore to Kingsbarns via Cambo Ness, passing golf courses where the last orchids of the season may linger on their margins. Being a coastal walk there are no significant climbs, the path is reasonably good with some uneven patches and the total distance is about 5 miles.

A shorter walk will also be arranged around the Kilminning area.

OS Landranger Map no 59 - St Andrews.

Saturday 13th September Glen Quoich

Bus 8.30am

Leaders: *Sheila Brinkley & Lorna Ward*

The Quoich Water is a tributary of the River Dee near Braemar. This will be predominantly a fungus foray, but everything of interest will be studied. Exactly where we go will depend on the fungi but most of the walking is on reasonably good forestry tracks. OS Landranger Map no 43 - Braemar to Blair Atholl