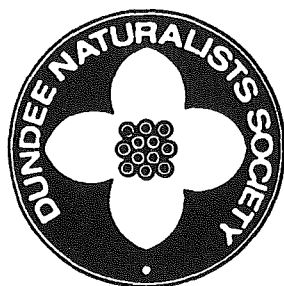


Dundee Naturalists' Society

Instituted 1874



Bulletin No19 1994

DUNDEE NATURALISTS' SOCIETY

ANNUAL BULLETIN No . 19

1994 -1995

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The Bulletin cover illustration is by Leonore Fullerton and shows a selection of our area's alpine plants, including the Society's emblem the Dwarf Cornel. Other illustrations are by Doreen Fraser, Alban Houghton, Brian Allan and Artfile. The illustrations for Operation Orchid, Naturebase and the Red Squirrel article are reproduced by kind permission of Dundee Museums and Art Galleries.

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EDITORIAL

This year your Bulletin has been professionally printed for the first time. I hope that you are as pleased as we are with the finished result. Because of the extra time required by the printers this Bulletin covers the period from May to December 1994. Future Bulletins will cover calendar years, January 1st to December 31st.

As always my grateful thanks are due to all the Society members who submitted the excellent articles, reports and illustrations within this Bulletin. Future Bulletin articles and other items are always welcome and may be submitted at any time during the year.

Jenny Allan

FROM YOUR PRESIDENT

I'm pleased to report that your Society doesn't stand still. We continue to be active in the summer and intend to keep going in the winter. This past year our summer outings were very well attended and the programme of Tuesday evening activities and surveys kept members busy. So far, the winter lectures have been very successful and most were well attended. But we are continually trying to develop new ideas and activities.

On Saturday 26th November we ran the first of what we hope will be a series of short winter walks. In bright sunshine the group set off at 10 am to walk along Carnoustie beach. There was lots of wildlife to see and we ended up in the local hostelry for a very pleasant and convivial lunch. The experiment seems very successful. The plan is to run at least a couple of similar meetings every winter to cast off the winter lethargy and provide a venue so we can get to know each other better.

Another change to the summer outings syllabus in the last few years has been the introduction of occasional Sunday meetings. Members who cannot attend the Saturday bus trips are able to come out with us on the Sunday instead. Good attendances appear to justify the experiment and we will continue with these meetings, at least for the next few years.

A new venture, originally proposed by Bob Philip, was the family fun day that we ran at Crombie Country Park in August. It was very well attended and at times we had to struggle to cope with the numbers. We had great fun, we hope (and think) that the kids - of all ages - did as well and we managed to raise the Society's profile. In future years we may see some more of them as new members. We are very grateful to the staff at Crombie for all the help they gave us, including laying on a barbecue at the end for some food, relaxation and the prize-giving.

A new, and yet old venture is the proposed week trip to Orkney planned for next summer. Some of you may remember the week trip organised by Joan Thomson to Bettyhill in the 70's. We thought it would be a good idea to run another one. Bob Philip has maintained for years that a trip to Orkney would be a very worthwhile and we hope to prove him right, weather permitting. These islands are a superb venue for natural history but also are chock-full of archaeology and other places of interest. We should have a busy week.



**ANNE REID HELPING WITH NATURE
COLLAGE AT CROMBIE**

Our drive for new members continues. We cannot afford to sit around. If you have any good ideas about attracting new members, we would be very pleased to hear them. Or, if you like the Society - and we hope you do - why not encourage your friends to join?

But as always, the great strength of the Society and the council is its very hard-working members. We have strength in depth, an excellent Secretary, a well-organised Excursion Secretary, a Treasurer who is always on the ball and Vice-Presidents on hand to give advice and support, not forgetting the other willing and able council members! But we always need new members. Would anyone like to join in? My best wishes to all members and happy (natural history) hunting in the summer to come!

Jim Cook

OBITUARIES

This year saw us lose two of our longest standing members Mrs Pat Fullerton and Mr A T Millar. Mrs Fullerton had had a lifetime's interest in natural history and was a passionate gardener. Latterly she was unable to attend meetings but always contributed plants to our garden sales and was interested to hear of the Society's activities. In her younger days she was active in the Society and encouraged her three daughters to take an interest in natural history. Leonore, one of her daughters, was a Vice President prior to her marriage. Her late husband, Len, the well-known wildlife artist, was President of this Society and an inspiration to all for many years.

Mr Millar was one of our oldest members, joining before the second world war but has been unable to attend for many years.

SUMMER OUTINGS - 1994

THE FIRST OF THE SEASON

21st May

The fine spring weather of the previous fortnight did not break as some pessimists had forecast, and we were rewarded not only with a full bus (39 in a 35 seater coach!), but with a warm sun and superb blue skies and sea. The numbers problem was easily overcome. Riddler's Coaches fortunately produced a larger vehicle than the one requested.

At the first stop at Stonehaven the brisk wind felt as if it had blown straight off the polar ice-pack but, wrapping up well, we set off north along the cliffs towards Craigeven Bay. The fine selection of spring and early summer flowers on the first stretch diverted attention away from the steep drop onto the shore-line rocks. Plants seen included a superb display of **primroses**, *Primula vulgaris* in the steep cliff grassland, **scurvy grass**, *Cochlearia maritima* and **thrift** or **sea pink**, *Armeria maritima* on the seashore rocks, **bird's-foot trefoil**, *Lotus corniculatus* and **germander speedwell**, *Veronica chamaedrys* in the short grass beside the path, **lesser celandine**, *Ranunculus ficaria*, **pink purslane**, *Montia sibirica* and **willows** in the damper sheltered areas, **red campion**, *Silene dioica* and **common chickweed**, *Stellaria media* at the field edges plus **greater stitchwort**, *Stellaria holostea* and both blue and white **bluebells**, *Hyacinthoides non-scripta* further along beside the golf course. However we were careful to keep off the course and away from the golfers.

The majority of the party made it along to the bay, to admire the real reason for visiting this spot, the tiny valley marking the place where the highland boundary fault meets the cliffs. We couldn't see the fault line on the beach because it has been covered by sand and pebbles in recent years but the hardened fault rock of the other side of the bay stuck out like the proverbial sore thumb and marked the line of the great fault. A fine show of **meadow saxifrage**, *Saxifraga granulata* provided further interest along that stretch of the cliff but only a few intrepid souls made it past the pillow lavas and along the jagged rocks on the shoreline.

After a snack lunch we left Stonehaven and arrived at the **Cruickshank Botanic Gardens** a little ahead of schedule but the welcoming committee was ready. Anne Reid made the introductions and the benefit of having contacts was very clear. The party was split into two and Dr Gordon Smith, secretary of the 'Friends of the Cruickshank Gardens' and Mr Bobby Rutherford, head gardener, very kindly agreed to show us around. By this time the weather had improved and, in the shelter of the trees, the air was (at last) distinctly warm.

After admiring the fine double-flowered **gean** near the entrance we were led into the maze of paths and beds full of fine plants, which were far too numerous to be listed here. A few of the outstanding specimens were the fine display of **Tibetan poppies**, the superb pink of the *Podophyllum*, the wonderful **tree peonies**, the wild flower meadow and the **fritillaries**, the sunken rock garden with an intensely blue *Lithospermum*, the water garden

and the arboretum with its fine specimens of *Nothofagus* or southern beech, poplars, cedars and rowans. Most of us finished off what was a superb first outing of the year with a much needed cup of tea or an ice cream to restore the circulation.

Jim Cook

SKYE WEEKEND

10th to 13th June

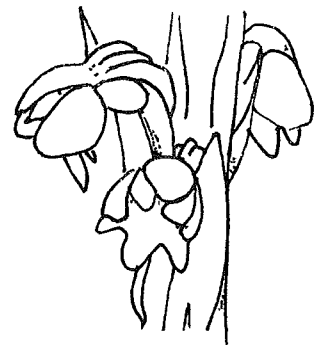
The Nats have generally been lucky with their weather for the summer weekend outing, but with Skye, the destination this year, an extra slice of good fortune was needed. How many of the four days would be wet? One, as it happened, that was the day we were to go to the Quirang, a mass of towering cliffs and broken-off pinnacles, this day totally engulfed in mist. We approached it from the east, the north and the west - not a glimpse, and by now wind and rain was thrown in. We settled for a visit to a museum of Life at Kilmuir - the crofter's cottage with the peat fire going, seemed more popular than the other buildings. Returning along the same road, some **moss campion**, *Silene acaulis*, was spotted, but there was nowhere for the bus to stop. Going back on foot, the pink cushions could be seen all the way up the hill, but also by now no room for even George to turn for the benefit of the rest of the bus. That was before he knew about Flodigarry! When we got there, the rain was really heavy, one by one, drenched souls turned back from the path and sought refuge in the hotel where a log fire and home baking awaited them - the high spot of the day. Down on the shore, Jenny found a piece of **cemented breccia**, and just when we thought that all the fossils had gone home and we would too, Alistair spotted three bits that saved the day. After dinner, some of us went to a ceilidh.

A grey start next morning, and unexpectedly Dunvegan Castle and gardens were not opening before 1pm, so some people who had no previous intention of doing so, found themselves walking to the Coral Beaches and quite enjoying it. Although they didn't get the full Caribbean effect, since the sun was only just beginning to break through, it stayed with us from then on. At Ullinish the orchids were poor compared to the masses seen the previous year, but Brian found one, first thought to be the **small white orchid**, but later identified as an intergeneric hybrid. The **small white orchid** and the **heath spotted-orchid** being the likely parents. This record is only the second for this hybrid from Britain, the first being found on Orkney during 1977. The seabirds on Isle Oronsay were in small numbers too as a lot of the previous year's eggs had failed to hatch, and all the time the clouds were lifting, revealing more and more of the panoramic views.

By evening there wasn't a cloud anywhere. Late sun caught the boats in the harbour and the rooftops of Portree, sharp outline of the Cullin was clear in the south. Perfect for going back to the Quirang, but we had a long day ahead of us, especially George our driver. So we shall never know whether the flowers there were better than elsewhere on the island. A dry but uncharacteristically hot spring had meant scanty growth and a lot of that had been nabbed, so flowers weren't too plentiful. However, one of our keen eyed Fifers found a **three-cornered leek**.

In spite of these shortcomings, everyone seemed to enjoy their time on Skye. On our way to the ferry we made a detour to the marble quarries and limestone pavements of Ben Suardal, where the **mountain avens** was in full bloom. We travelled home via Glencoe, with continual vistas of mountain and loch sparkling in the sunshine. A cry of "Bustard" became "Sorry, helicopter!" and there were no midges for the four days. They had all moved down to Dilty Moss, and were ready for us the following week.

Doreen Fraser



SMALL WHITE ORCHID

THE BASS ROCK

18th June

Wildlife Spectacular or Keep Taking the Tablets.

Surf crashed onto the rocks as the boat heaved in the south-westerly swell just offshore. The cliff above our heads soared more than a 100 metres sheer out of the water and the top was capped with a carpet of white dots of nesting birds. **gannets** hung in the wind and wheeled round over the cliff and the cries of the **kittiwakes**

echoed off the rock faces. We were about to land on the Bass Rock. The party was visiting the principal east coast nesting colony of 50,000 of one of Britain's most spectacular seabirds, *Sula bassana*, the **North Atlantic gannet**. The boatman spent a few moments giving us the latest facts and figures. Many of the birds were sitting on eggs but a number had hatched young and were flying up to 50 miles to bring in food.

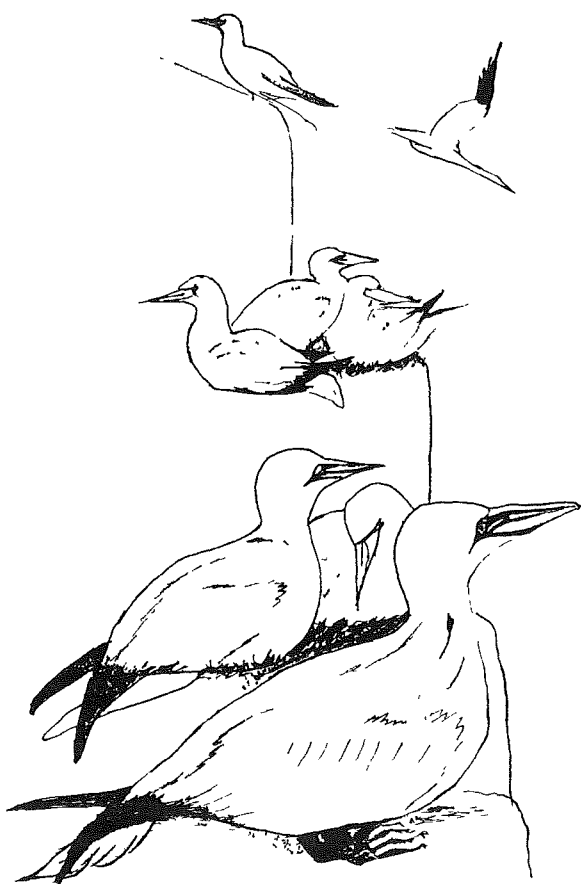
Once ashore, the strong wind and slippery rocks made progress difficult up to the ruins but from then on the going was easy. The first **puffins** were seen on the lower rocks along with a number of **shags** drying their wings. On the rocks beside the path were clumps of the shining leaves of **sea beet**, *Beta maritima* and **hastate orache**, *Atriplex hastata*. A little further on we found isolated plants of **tree mallow**, *Lavatera arborea*, bearing a few pinky-purple flowers and then an almost complete cover of the Maritime race of **red fescue**, *Festuca rubra*.

On the left, the small cliff visible from the path harboured numerous pairs of those most attractive of British seabirds, **kittiwakes**, along with a few pairs of **fulmars**. **Herring gulls** cried raucously from above the path and swooped occasionally over the intruders, always on the lookout for an easy meal. We saw a few of the fluffy spotted young but they must have had others concealed among the tussocks.

What we had come to see were the **gannets** and there they were - not in hundreds but in thousands evenly and neatly spaced out over almost every patch of reasonably level ground below the walkway. At first we found that the edge of the colony was some 10 metres from the path but further up, near the top, some gannets were nesting very close. One bird was sitting in the shelter of the hand rail within 30 centimetres of the path's edge and showed not a trace of fear. Quite the opposite, it hissed and lunged at every passing ankle.

Seen close up the **gannet** is strikingly handsome and large, fully the size of a goose. The body is pure white and grades up into a tawny yellow colour on the nape of the neck and back of the head. From the front the eyes can be seen to point downwards and the eyelids are an amazing blue colour. The thickness give the birds an almost goggle-eyed look, obviously for protection when the power-dive into the sea. The lined bill is long and looks alarmingly sharp. The wing tips are black and the dark webbed feet seem far too large for the size of the body. After careful scrutiny we could see that some of the birds had pale bluey-greenish lines along the bones of the feet, presumable males, the others, the females, had pale yellowish-green lines.

Doris said she had never seen **gannets** so close nor from above. The flying ones showed a small white dot in the black area at the top of the leading edge of the wing, perhaps the alula, which none of us had noticed before. The best views were of the birds hovering over the densely packed masses of sitting birds and the dark spotted juveniles looked even more striking than the adults. On the windy side of the rock the birds' control in the air seemed effortless and the landings neat and easy but on the sheltered lee side birds coming into land seemed to stall and lose control at up to 2 metres above ground and positively thump down in between or onto their fellows.



NESTING GANNETS

Every landing bird attracted aggression from the birds round about but in most cases only for a few seconds. At times the greatest aggression was between the newly landed bird and its mate. One bird would grab the other tightly round the tawny yellow area at the back of the head and hang on for up to a minute. The more usual greeting ceremony was a series of harsh braying calls and a short period of head wagging. Considering how tightly packed they were there was very little aggression, we saw only two birds that we could consider were fighting. They had grabbed each others' open beaks and were wrestling and pulled and flapped their wings for more than five minutes. However, protection was good. There were very few eggs lying about, not green but a muddy brown, and we saw only one young bird exposed,

muddy brown, and we saw only one young bird exposed, presumably one parent was dead - there was a dead bird close by beside the railing at the path - and the other was off feeding

We spent three hours on the **Bass Rock** enjoying the birds but then had to troop down to the boat for a very rough ride back to the shore. At times the boat seemed to roll almost over onto its gunwales and spray broke over the tightly-packed throng but we made it back safely. Because of the low water of the neap tide the boat dropped us off onto slippery rocks covered with brown and green seaweeds on the foreshore to the east of the harbour. Several members of the party looked greener than the rocks but all managed to retain their dignity - and everything else as well. As Sabine said, "I felt OK I just kept taking the tablets"

Jim Cook

DILTY MOSS

21st June (Evening outing)

"I've found them" Margaret called out. None of us needed to ask what she had seen. We had all been keeping an eye out for the plants, some of the most intriguing members of the Angus flora. These were **coralroot orchids**, *Corallorhiza trifida*, and they appeared abundant in places in the dried-out wet willow and birch woodland. The plants grow as pale greenish-yellow stalks topped by up to a dozen tiny pale pinkish-white flowers which need to be examined with a hand lens to appreciate their beauty. The plants bear no green leaves, simply light yellow-brown sheathing leaf bases at intervals up the stem, since the plants depend on special fungi in the swollen white coral-like roots for their food supplies. The fungi are saprotrophic, able to extract nutrition from organic matter in the soil. The habitat is very specialised - generally on bare soil or among grasses near or at the bases of willow or birch trees in wet ground that floods seasonally during the winter. Habitat conditions must have been nearly ideal this year. We eventually counted over 160 spikes, a good total but not as many as in one or two years past when botanical surveyors stopped counting at 200 spikes!

Other orchids found included good clumps of **lesser butterfly-orchid**, *Platanthera bifolia* and numbers of **northern marsh-orchid**, *Dactylorhiza purpurella* scattered over a wide area. Richard Brinklow and Barbara Hogarth settled down to a concentrated session of plant recording and there were plenty to record - a wide range of grasses, rushes, sedges and other marshland plants. We spent a considerable amount of time among the willows and around the pond in the north east corner of the site but walked right across the domed top of the raised bog to the south east side, returning by circling back through the western scrubland.

Jim Cook

BEN VRACKIE

2nd July

Well, it was a nice day to start with and a keen bus load of Nats headed for the hills to climb this near 'Munro', 2760 ft which on clear days dominates the scenery around the Pitlochry area. The bus driver obligingly took us up the narrow winding road to the village of Moulin to begin our walk - saving us a climb to begin with. Keen botanists soon spotted plants of Royal Fern in a nearby garden which had been noted on a previous outing in 1977, somebody has a long memory! Further up in the wooded start to the walk the attractive **common wintergreen**, *Pyrola minor*, was found but due to changes in the path route, not as many as in previous years. The dry summer also contributed to the small numbers but Marjory's assiduous searching revealed one or two spikes hidden well off the path.

Further up the track on to rather bleak heather clad moorland we found a number of plants characteristic of this habitat, **petty whin**, *Genista anglica*, **lousewort**, *Pedicularis sylvatica*, and **cross-leaved heath**, *Erica tetralix*, to name but three. In boggy flushes among the heather we were to find two orchids, the **heath spotted orchid**, *Dactylorhiza maculata* subsp. *ericetorum*, and **fragrant orchids**, *Gymnadenia conopsea* subsp. *borealis*, the most common Fragrant Orchid sub-species to be found in Scotland. Also of great interest to many were the two insectivorous plants, **common sundew**, *Drosera rotundifolia* and **butterwort**, *Pinguicula vulgaris*. Jim - keen and enthusiastic as ever led a concerted expedition to find the very rare **brown bog rush**, *Schoenus ferrugineus*, - failed on the way up but eventually located on the way down!

However, the real botanist's paradise lies near the summit where a myriad of rare alpine flowers grow on an outcrops of Dalradian calcareous schists. These include clumps of two rare members of the pea family, **alpine milk vetch**, *Astragalus alpina*, in the short turf and in the nooks and crannies the spectacular **purple oxytropis**, *Oxytropis halleri*. **moonwort**, *Botrychium lunaria*, was searched for and finally one plant was

triumphantly located near the cliff face - then when everyone had 'got their eye in' as botanists say, we found lots of it.

At this point mist and drizzle descended, but even so a few masochists groped their way to the summit to admire the view of, yes you've guessed it, more mist and drizzle

On the gloomy descent the thought of the warm welcoming ambience of the bar in the Moulin Hotel kept us going. Once there the usual pints of beer were forsaken, for hot broth, tea and coffee along with tots of rum, whisky etc to warm us up while we dripped all over the floor.

Back at the bus my toddler grandson who had a great day in Pitlochry with his mum, was temporarily amused by feeding most of his fish supper to the seagulls - an activity duplicated by the bus driver shortly afterwards. It must get boring waiting around all day in the rain for Nats to climb high damp mountains looking for wee plants!

Notwithstanding the poor weather most folks declared that they enjoyed the day - we Nats are a hardy lot!
Jenny Allan

ELLIOT DUNES & LAGOONS

12th July (Evening Outing)

After parking near the golf course clubhouse a ragbag of naturalists crossed the level crossing to begin our evening study visit to Elliot Dunes. Close to the crossing we spent a half hour or so searching in vain for the elusive **frog orchid**, *Coeloglossum viride*, last seen here by Bob and Margaret Philip during June 1978. Doesn't time fly when you are enjoying yourself!!

Having failed with the orchid our next objective was to see the rare legume, the **sea pea**, *Lathyrus japonicus*. This was much simpler and we did find a number of plants with one or two bright pink flowers. Known only from a few sites in Britain, two in Angus, this is mainly a plant of more northerly climes being fairly common in Scandinavia and North America. Close by we also saw a striking display of another attractive pea, *Astragalus danicus*, the **purple milk-vetch**.

Able led by Margaret Duncan we then moved on to study the extensive reedbeds where a number of interesting plants were seen. These included the **great water dock**, *Rumex hydrolapathum*, and **northern marsh orchid**, *Dactylorhiza purpurella*.

Brian Allan

ST. CYRUS

Sunday 17th July

What a day we had. Sun, sand and ice-cream, the ingredients for a perfect outing. St Cyrus is always a super place to visit, so when it was chosen as the venue for our joint meeting with our friends from the Edinburgh Natural History Society it was one outing I was determined not to miss.

We were met at the new visitors centre by an enthusiastic warden and invited to view the static displays and the excellent audio/visual presentation before we were taken on a guided tour of the saltmarsh and duneland areas of the reserve. It was explained that in recent years the high tides had not breached the line of dunes and consequently the saltmarsh area was slowly but surely reverting to stabilised dune, a situation where the experts are to let nature take its course since the cause was not influenced by man.

St Cyrus is a reserve in part because of the number of plant species which occur here which are at the northern extent of the British distribution. We were to see a number of these species, the most spectacular being **clustered Bellflower**, *Campanula glomerata*, and **maiden pink**, *Dianthus deltoides*. The number of spikes of the bellflower in a myriad of colours from the most common bright blue through violet and pink to pure white. The tiny bright pink of the **maiden pink** was also a joy to behold.

After lunch we were left to our own devices and some took up beachcombing while others scoured the sky for any of the many bird species recorded from the reserve. A surprise for the birdwatchers was a clear sighting of a **green woodpecker**. A small number of Nats climbed the steep path up to St Cyrus village which was rewarded with fine sights of **wood vetch**, *Vicia sylvatica* and the unusual **wild Liquorice**, *Astragalus glycyphyllos*.

One highlight that must be noted was that some enterprising cottage owner had started selling ice-cream to reserve visitor and our two groups alone must have seriously depleted their stocks, the writer himself pigged out with two helpings. The good weather meant that the car park was overflowing and this meant our bus could not return to the visitor centre but the short walk to the main road was not a hardship in the evening sunshine.

Brian Allan

MUIR OF DINNET NATIONAL NATURE RESERVE

30 July

The excursion started at the Burn o' Vat car park where we were met by the assistant warden, Edwin Third, who gave us a short talk about the reserve and its recent history. We had a look at the display in the small visitor centre and then followed a gentle path up to the 'Vat'. This is a near spherical erosion feature carved out in the coarse-grained Ballater biotite granite by the action of grit and debris-laden melt water at the end of the most recent ice age. The Vat is believed to be the largest and best formed example of its kind in Britain and is quite spectacular.

Some people had a walk up the burnside above the falls and Jim Cook spotted a colony of **toothed wintergreen**, *Orthilia secunda* on an inaccessible rock overhanging the pool. The return trip from the Vat to the car park through regenerating pine, birch and juniper woodland included a diversion to an excellent view point. A sunny picnic lunch was enjoyed beside the visitor centre.

After lunch the bus took us a mile along the road to the start of the walk skirting Lochs Davan and Kinord. Early in the walk several adder skins were found by Gordon Maxwell and a live adder was spotted. It soon took cover but was seen again at the end of the circular walk.

A fine stand of aspens near the Warden's house was admired. Other plants recorded on this walk included **petty whin**, *Genista anglica*, **marsh cudweed**, *Gnaphalium uliginosum*, **bog myrtle**, *Myrica gale*, **shoreweed**, *Littorella uniflora*, **pennywort**, *Hydrocotyle vulgaris*, **yellow water lily**, *Nuphar lutea*.

The bus stopped at Ballater for tea, mostly fish and chips on the village green, to round off an enjoyable outing.

Doug Palmer/Margaret Duncan

TAY WALK

Sunday 14th August

The bus disgorged its contents into a promising sunny morning at Dunkeld and the Nats were soon strung out along the half mile to the Old Toll House on Dunkeld Bridge, the Start of the walk. About a dozen Goosander were spotted from the bridge and many more binoculars had their first airing of the day. These birds are a common sight in this area stretching from the mouth of the Braan to below the bridge. A few members at this stage seemed determined to head downstream towards Birnam but were soon shepherded back by a few willing "sheepdogs".

Onwards up the south bank of the Tay and many paused to admire the fine stands of **oak**, **Douglas Fir**, **larch** etc, before and after the crossing of the Braan by the new footbridge. It was hereabouts that Alistair Fraser spotted a **red squirrel** which promptly went down in the record. Perhaps a mile into the walk near an avenue of Beech and Oak evidence was seen of the floods of recent years in the debris still lying up to approximately 10 feet above normal river levels. A few **peach-leaved bellflowers** (both purple and white) were seen here.



KINGFISHER

and also an Oak associated **beefsteak fungus** which attracted comment and Jim Cook obliged with information on both.

A diversion from the main path was made halfway up the south bank in the hope of seeing the **kingfishers** previously seen early that week but they failed to show - however - read on Some people

commented on the noise from the nearby bypass before the flyover was reached This was however, soon left behind or at least drastically reduced as we crossed over to the north bank Immediately a few butterflies were spotted here including **small coppers, dark green fritillaries, common blues** and **green-veined whites** The strung out nature of the group by now meant that some missed the highlight of the day when three **kingfishers** were spotted by David Stein and many of the tailenders had fine views as they flew back and forth across the river Not to be outdone Hasso Cezanne spotted a bat in ferns near the river bank near the Dunkeld House Hotel This was a most unusual sighting and the resulting photographs taken may prove it to be **Daubenton's bat**, a species which is never found far from water



DAUBENTON'S BAT

At this point some elected to follow the river as far as the Dunkeld Cathedral to see some magnificent **larch** and **cedar**, others carried on down the main drive to the bus in the car park Everyone I spoke to seemed to have thoroughly enjoyed their riverside walk

Gordon Maxwell

PITMUIESMOOR & BARBECUE

23rd August (Evening Outing)

After a days solid rain it decided to fair up for the evening's activities at Pitmuiesmoor It was surprising how many members risked bumping their cars along the track to arrive complete with sausages, burgers, etc , for sizzling.

A short walk through the fir wood did not uncover too many items of interest - just the odd fungus and **wood pigeon** or two.

The barbecue was going full tilt and everyone was talking and eating An excellent evening ending in a sing-song before bumping off in the direction of home

Mo Thompson

SEATON DEN / ARBROATH CLIFFS

27th August

The short walk had been planned to give plenty of time to study the varied wildlife of this Scottish Wildlife Trust Reserve. Soon after we left the bus, however, a shower caught us, sending the butterflies, bumblebees and hoverflies which usually teem around the **knapweed** and other flowers into hiding and members moving at a pace that would have taken us into Arbroath before lunch! Luckily though, it was short lived.

As we proceeded, the ground flora changed from areas of heather and blaeberry to more usual den woodland, with a mixture of deciduous trees, typical woodland flowers and ferns. Among some planted beech trees, the large, firm, domes of the bright yellow-green moss *Leucobryum glaucum* grew in some profusion.

The stream bed was dry for virtually its entire length, enabling a few of the more energetic members to scramble over the fallen tree trunks along some of the short "gorge" sections past quantities of **harts tongue ferns**. At least one nameless member even sampled the rope swing near the foot of the den.

Emerging into Carlingheugh Bay, a picnic lunch among the flowers was most people's top priority, although some enthusiasts back tracked slightly to the mouth of the small gorge, where, on a seepage cliff, oozing with water and green with algae, a colony of **butterworts** had recently been discovered.

After lunch, there was time for a quick look at some of the local seashore life. A good variety of seaweeds, crabs, chitons and other "sea shells", **brittle stars** and small fish were all caught and viewed. However, I may be mistaken, but the shore seemed rather more silty and not as rich as a few years ago.

With the aid of one or two torches, some of the party then found their way through the "dark cave" with its impressive band of **barytes**, returning through the rather easier "light cave".

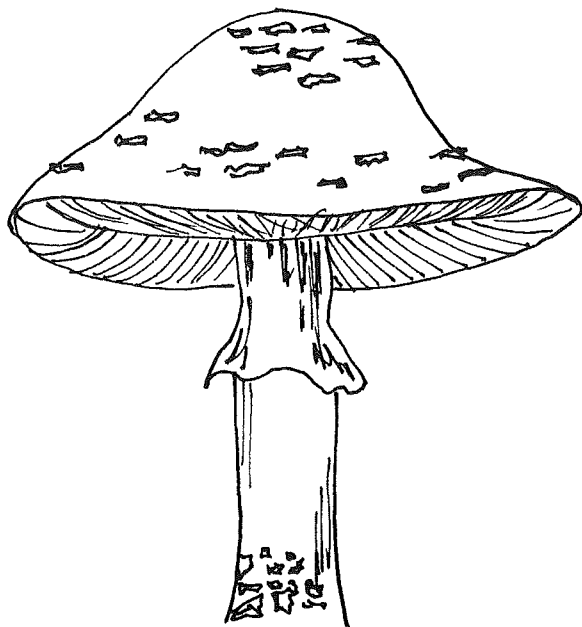
Then it was back along the cliff top path to Arbroath. Although well past their best, a good variety of coastal flowers were seen and the geological highlights admired.

On the return bus journey, a short stop was made at Elliot junction. Here, a field apparently re-seeded with a non-local wildflower mix, was an absolute riot of colour with **poppies**, **cornflowers**, **corn marigolds** and masses of **corn chamomile**, a species not seen growing locally for many years.

Richard Brinklow

FUNGUS FORAY

10th September



FLY AGARIC

The weather had been very dry - bad for chances of finding a good crop of fungi - but at the last minute a few showers of rain had raised hopes. Our first stop was Laird's Loch, usually a good locality, and we weren't disappointed. Under the trees and in the wet grassy areas members found a variety of *Russula* species, **spotted tough-shank**, *Collybia maculata*, *Gomphidius glutinosus*, **grisette**, *Amanita vaginata*, **sulphur tuft**, *Hypholoma fasciculare*, **plums-and-custard**, *Trichilomopsis rutilans* and the **milk-caps** *Lactarius rufus* and *L. turpis*.

The next stop was Blairgowrie and walk up the Erich to find a few species - and a good site for lunch. The fungi were rather sparse. Only a few were seen, including a single **fly agaric**, *Amanita muscaria*, and *Lyophyllum connatum* in the grass along the path, and we had to scramble along river-bank rocks but it was well worth it. A wide flat sunny rock provided a perfect spot for lunch with entertainment laid on - a grandstand view of

salmon leaping in the pool below us. They were large, too, some up to about two and a half feet long. But there were prominent NO FISHING notices all around.

In the afternoon, the bus continued up Glen Shee and stopped at the clan gathering stone halfway up the glen. **False chanterelle**, *Hygrophoropsis aurantiaca* and **brown roll-rim**, *Paxillus involutus* were in plentiful supply in the coniferous plantation but the array of species in the grass verges were more difficult to identify.

Our last stop was the Cairnwell car park. Some of us went along the remains of the Wade Road and found the old pill-box guarding the dragon's-teeth tank traps further down the glen but the keener botanists hunted down the site for **Scottish asphodel**, *Tofieldia pusilla* near the car park. There was a good range of other flush vegetation species present, **yellow mountain saxifrage**, *Saxifaga aizoides*, **long-stalked yellow sedge**, *Carex lepidocarpa*, **bog asphodel**, *Narthecium ossifragum* and **quaking grass**, *Briza media*, to name but a few. And, yes, someone found a fungus up at that altitude - *Omphalina sphagnicola*, on wet peat.

Jim Cook

WINTER MEETINGS & LECTURES

A FEAST OF PLANTS IN N W YUNNAN

Lecture by Fred Hunt - 18th October

Fred went on an expedition led by Kenneth Cox of Glendoick in May 1994 to Yunnan in SW China, a country with an immensely rich flora, where George Forrest and other great plant hunters first discovered so many of the plants which have been introduced to western gardens.

They flew to Hong Kong, then a further 250 miles to the capital Kunming, where the Botanic Garden has strong ties with our own R B G in Edinburgh. They stayed there for a few days, acclimatising to the height and prepared for greater heights to come. Transport from then on was by mini coach, first along the Burma Road (where grain was spread over the road to be winnowed by passing Traffic) north to Xiaguan and then to Dali, their base for exploring the Cangshan. Then still further north to the Chungtien plateau at 14,000 ft close to the Tibetan border. From there they headed back southwards and westwards, crossing the Yangtze to Weisi, and on down to Dali and eventually back to Kunming.

The Rhododendron enthusiasts of the party revelled in the sight of *Rh. racemosum* clothing the hillsides, the pink froth of *Rh. yunnanensis* scrambling through its neighbours to the sky, and many others. But there were countless other flowers to be seen, from the 6 ft lily *Cardiocrinum giganteum* with gorgeous perfume down to tiny *Androsaces*, everything else in between, and only a few which can be mentioned here. There were exotic aroids and orchids, - one of the several slipper orchids, *Cypripedium tibeticum* in different colour forms, and *Pleiones* growing over mossy boulders and grassy banks. *Primulas* grew in damper places, notably the ice blue *P. sonchifolia*, purple *P. chionantha* and the yellow *P. forrestii*. Shrubby *Stelleria chamaejasme* turned the hillside yellow with its flowers, unlike in the Himalaya where it has pink and white ones, but neither plant will grow anywhere else. A rare yellow *Daphne*, *D. aurantiaca* has the marvellous daphne perfume but is not yet in cultivation.

Between the stunning flower slides shown by Fred were shots of local people with some charming studies of children. One little girl stays in the mind, in her scarlet dress, pigtails out sideways, and her wide smile with the missing two front teeth. Less enchanting was the Chinese food. One particular dish, a great delicacy apparently, made from parasitising fungus growing out of dead caterpillar looked quite revolting.

An evening crammed with interest, was as promised, a feast for us all.

Doreen Fraser

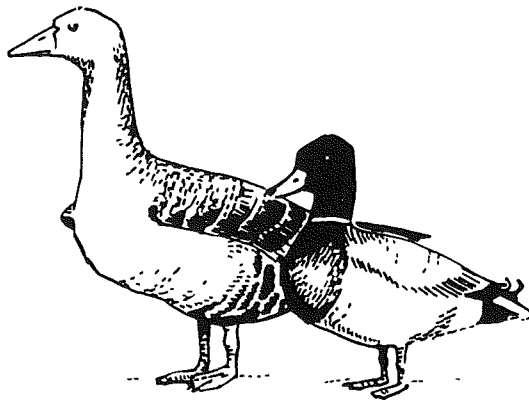
OUTING TO MONTROSE BASIN

29th October

Such are the vagaries of our weather, that a visit by 31 members to spots on the south east and north west corners of the Basin will probably be remembered as having taken place on different dates, in different places, even on different continents!

Conditions on the south east shore, at Rossie 'Island' could not have been better, with dead calm and silver-grey water slowly draining away to expose sand and mud flats on which groups of **eiders** loafed and potted about with their morning chores. Some were sleeping, while others splashed about with their ablutions, preened, or just sat at spots with a good view and watched the world float by on the ebbing tide. It was a scene of

utter peace, backed by a chorus of quiet cooing as males advertised their presence to prospective mates. A single **red-breasted merganser** and three **pinkfeet geese** were seen near the **eiders**, and **oystercatchers**, **curlews**, **redshank** and **bar-tailed godwits** shared the mud flats. **Cormorants** flew across at intervals and a large flock of **pinkfeet** could be seen on a distant sandbar. Much nearer, a large group of **wigeon**, waders and gulls shared a small muddy promontory. The visibility was good enough for **mute Swans** to be picked out on the other side of the Basin and the keen eyes of Rick Goater, the S W T Warden, identified a **Slavonian Grebe** at very long range. This was the first record of this species on the reserve. A very late **swallow** was also seen at this spot.



GREY LAG GOOSE AND MALLARD

From Rossie 'Island', we headed for the car park near Bridge of Dun farm at the north west corner of the Basin, but by the time we reached this site, a steady drizzle had set in and gradually gave way to steady rain as we trudged across farm tracks towards the two hides opposite the Lurgies. There was plenty of autumn colour to be seen at the start and **elders** and **hawthorns** were heavy with berries. Further tiny dabs of colour were afforded by a few wild flowers such as **dandelion**, **nipplewort**, *Crepis sp*, **sowthistle**, a solitary **ragwort**, **bush vetch**, **comfrey**, **scentless mayweed**, **red deadnettle** and **gorse**, and we could almost think of spring at the sight of lots of small but lush shoots of **cow parsley**, which was in abundance along the field edges. On the other hand, yellow and brown expanses of **reed canary grass** and **common reed**, along black muddy creeks, had a marked wintry look about them.

On reaching the hides, we saw Montrose Basin at its worst, acres and acres of black depressing mud, onto which the rain poured from a dark forbidding sky. The Basin at low tide on a dark wet day presents a prospect that does little to uplift the soul. From one hide we could make out two **lapwings** and a solitary bedraggled **Crow**, but from the other a little excitement was added by a group of **goosanders** chasing one of their members in vigorous attempts to relieve it of a **flounder** which dangled from its bill. We also saw a **heron** from here.

A final stop was made at Old Montrose pier where we flushed a few more Herons and could just about see a small flock of **goldeneye**, some **wigeon**, and three **little grebes**.

This was a day that swung from very good indeed to very bad indeed, but that is how nature goes about ordering its affairs, and we were all the better for being made aware of that oft forgotten fact.

Bede Pounder

SPEYSIDE

Lecture by Neil McIntyre - 1st November

Neil McIntyre, the well known nature photographer based in Rothiemurchus on Speyside, led us through all the seasons with his beautiful pictures of birds, plants and animals from the area. He enthralled us with his close-ups of **red deer** and **mountain hares** and we laughed at the antics of the **red squirrels**. Some of the slides depicted the subjects in such close-up that we wondered at the patience, obviously required, to obtain such perfection.

Neil was extremely generous to the photographers among us with advice on how to improve our pictures and how best to get close to the subject concerned without the need to disturb the wildlife, a factor emphasised



RED SQUIRREL



EATEN PINE CONES

strongly throughout the talk

Speyside is always beautiful, but tonight, it was a wonderland. This was felt by all who attended, and indicated by the number of questions at the end of the lecture as well as by the number of Neil's postcards and calendars sold following the meeting

Marjory Tennant

NEW LOOK FORESTRY: CHANGING THE LANDSCAPE

Lecture by David Douglas -15 November

On 15 November David Douglas gave an enthusiastic account of current Forest Authority requirements for grant-aided forestry and persuaded us that a new era was upon us. Grant aid was now available for establishing a more natural forest structure with 70% high forest, 20% open space and 10% shrubs. Previously 95% cover of conifers was funded. Owners were now being encouraged to identify existing landscape features and adapt their planting plans to enhance these. Geometric shapes and straight lines were to be avoided by siting rides diagonally across contours and scalloping edges with shrub infill to vary the fence line views. Planting down to edges of streams was only to be allowed in tongues to avoid shading and cold effects. 50% dappled shade and some leaf fall was desirable. Drain furrows were now to be in curves with a 2 - 3° slope, reducing fast runoff, and silt traps incorporated - all finishing 20 metres short of rivers.

Timber felling design plans now required approval and better landscape effects could be quickly achieved by this means. Owners would be encouraged to fell only one third of a block at one time, and in flowing shapes related to the top contours. Fringe trees were to be retained to screen extraction work. When restocking the species would be diversified.

Mr Douglas also described the recent establishment of the 115 hectare local "Community Woodland" at Balkello on the slopes of the Sidlaws and provided a display of plans and photographs which illustrated very well all his points.

Margaret Duncan

Note. An evening outing to the Balkello Community Woodland is planned for Tuesday 27th June 1995, led by Gordon Maxwell

THE EDEN ESTUARY

Lecture by Les Hatton - 29th November

Mr Hatton is the Ranger for the Eden Estuary Local Nature Reserve, based at Craigton Country Park. He has a very varied background, having been in social work and a factory worker before becoming a ranger. He had been based in the Farnes and at John Muir Country Park before coming to the Eden.

The estuary has a wide range of neighbours, including the Leuchars airbase, the R&A Links, the paper mill at Guardbridge and agricultural land. These create lots of issues, not problems.

The reserve, which is technically all below high water mark, has a wide range of habitats. There are very large lugworm beds, especially at Out Head at the end of the West Sands, and further out there are extensive, though possibly declining, mussel beds. There is a significant area of saltmarsh, the largest in Fife, and areas of reed swamp. At the edges of the reserve there are some areas of both stable and unstable dunes with wet areas. One of these slacks is constantly being colonised by alder, which creates a management dilemma as it will eventually dry out the habitat.

The paper mill was once a distillery, using the clean water from the Motray burn which joins the Eden beside the mill. 100 years ago there was a port at Guardbridge where cargoes were transferred to barges and taken to Cupar. There is some reclaimed land beside the mill where an interpretative centre was to be built for the reserve, however this has so far been prevented by the absence of any firm substrate for the foundations, even at some depth.

The RAF base has been there since 1917, and is a very effective barrier to development on the north shore. It also restricts access and there could be a variety of new pressures on the reserve if the base were to close. There is some plane disturbance to the birds, but most are very tolerant and different species are affected in different ways. The RAF can be very helpful in a number of ways including aerial photography and physical assistance and has shown genuine environmental concern.

Farming has the potential to be the most damaging to the estuary through standard agricultural practices. Here there can be a tendency to lump conservation with officialdom in general which can colour a farmer's reactions.

The Eden estuary reserve is particularly noted for its birds. It has internationally important numbers of **shelduck** and has about nine species of national importance. **Oystercatchers** are very common, but can be a problem on the reserve due to their predatory habits. They have been seen to push both **ringed plovers** and **terns** off their nests and eat the eggs. As many as 40 tern eggs were eaten in one minute on one occasion. **Redshank** are general purpose waders and approximately 2000 can be found on the Eden. They tend to suffer badly in bad weather as the more specialised feeders out-compete them. 500 **curlew** regularly roost on the Eden, though only a few can be found there in the daytime, the majority feed on agricultural land all day. **Black-tailed godwit** are a speciality of the estuary with a wintering flock of around 200. Some of these birds go up the east coast to their Icelandic breeding grounds, however, recent ringing has shown that some birds cross to the west coast of Scotland and to Northern Ireland before heading north. Other important species found are **wigeon**, **lapwing**, **golden plover** and **shelduck**. As on the Ythan, the **shelduck** appear to be declining, possibly due to an increase in algae.

Large numbers of geese use the Eden as a staging post, especially **greylag** and **pinkfoot**. About 12% of **Spitzbergen barnacle geese** use the estuary, and small numbers of **brents** are also found. Other notable sightings include the **whooper swans** which arrive in late November, a few **snow bunting** in the reedbeds and "strays" such as the **Chilean flamingo**.

Significant breeding birds on the estuary include the **oystercatcher** and **ringed plover**. Eider chick numbers have gone down recently, and though terns do breed successfully (2 **little terns** fledged this year) there were once 5 tern species breeding. Predation from species such as fox and crow has increased since the afforestation of Tentsmuir which may explain the decline.

The variety of birdlife is directly related to the richness of the fauna in the mud of the estuary which includes **lugworms**, **green ragworms**, **sand mason worms**, **crabs** etc, which the **eider** and **seals** eat, and a wide variety of bivalves. The **mussel** beds are declining but were once used for longlining bait, and there are good beds of **cockles**.

Other species found include **frog**, **toad**, **palmate newts**, **common blue**, **small copper** and **dark green fritillary** butterflies and **cinnabar moths** on the **ragwort**. Roe deer have a tendency to get into the RAF base, but can't get out, creating a hazard to the planes. **Stoat** and **weasel** mostly feed on **rabbits**, but may also contribute to the predation on bird eggs. **Common seals** have increased since 1988 and they possibly breed on the sandbanks. The occasional **grey seal** is also seen.

The saltmarsh is poor compared with some on the west coast, but is important for Fife and contains such species as **sea aster** and **scurvy grass**. **Marram** and **Lyme grass** have been planted to stabilise dunes, with



STOAT

and tagged while moulting by catching them in a salmon net! It has been found that these birds actually breed in SW Scotland, Derbyshire, Wales and Northumberland. The females go to the E coast of Scotland to moult, while the males go to Scandinavia.

Visitor facilities such as hides and bridges are provided, and work parties are used to put up fences around tern nesting areas and for other such practical projects. Barbed wire has been very effective against motorbikes and horses, both of which present a considerable risk to ground nesting birds. Attempts to stem erosion on the dunes by stabilising with Norway spruce in a Dutch Box pattern have failed, a storm completely removed the lot. Erosion is considered hard to manage and is now mostly allowed to proceed, while human activity is more easily managed. The only conservation management needed on the reserve at present is the spraying of *Spartina* in August or September. Most of the work of the reserve is involved in liaison with its neighbours.

Anne Reid

Note. An day outing to the Eden Estuary Reserve is planned for Saturday 23rd September 1995, led by Bede Pounder.

CHRISTMAS MEETING FAULTY TOWERS AND FAULTY FLOWERS OLD RED SANDSTONE

Lecture by Bede Pounder - December 20th

On a chilly blustery evening nearly sixty members attended this lecture. The speaker on this occasion was our own Bede Pounder who detailed for us the wonders of the cliffs from Arbroath to Stonehaven. He told us of the tremendous variety of rocks and showed us with slides how the erosion of red sandstone over thousands of years creates wondrous sea stacks and caves. His slides of 270 foot Red Head and layered **conglomerates** were something to behold.

He further went on to explain about and show us examples of the diversity of flora on this stretch of coastline. **Wood vetch**, **kidney vetch** and **purple milk-vetch**, **hemp agrimony**, **wild liquorice** and lots more all displayed on superb slides. He made us feel extremely fortunate indeed to have all this on our doorstep. Afterwards those attending were invited to enjoy coffee or tea and Xmas fare provided by members.

Mo Thomson

temporary protection from cut **Norway spruce** to prevent people from walking on them. There are clumps of **restharrow** on the dunes and a notable area of **grass of Parnassus** on one of the dune slack areas.

While one of the major activities on the Eden is now birdwatching, it is also used for wildfowling. It was the poor quality of the shooting which prompted the wildfowlers to propose that the estuary be made a local natural reserve, as this was the only way to control shooting below the HWM. Not much damage is done to bird numbers, the average bag is 0.9 birds per visit.

Research is carried out through bird ringing and recovery. **Goosander** have been ringed.

MEMBER'S REPORTS AND ARTICLES

CARSEGOWNIEMUIR QUARRY RESERVE ANNUAL REPORT 1994

The growing season was dominated by a long dry spell and pond levels were lower than previously seen, right up until December. Exclosure no 2 was completed in time to claim last year's grant before the March deadline. A herb layer flourished inside it and the trees planted within the exclosure did better than single trees. A few birch casualties were replaced by Glen Derry-origin pines grown on in pots by Ronnie Young. 23 Glen Tanar-origin pines, grown on by Alastair Fraser (bare rooted), were planted as late as 13 May. Early May is a good time to move evergreens but these trees did surprisingly well considering the very dry conditions. Pines seem more drought-resistant than birches.

Highlights:

25 Adder's tongue ferns were counted in July, though not seen at all last year.

26 flowering *Dactylorhiza purpurella* were recorded and 10 were actually seen in fruit this year.

Lesser celandine *Ranunculus ficaria*, planted years ago and lost, reappeared in a new location.

The trunks of the older pines have now stiffened up and are self-supporting. We wonder if the dry season did them good.

Further ragwort pulling sessions were organised in July. We are definitely winning against it!

An exploratory collection of spiders by Dr D Robertson and Jim Cook in October suggested that the Quarry was a rich undescribed site.

A preliminary look at hoverflies and bees was taken by Anne Reid.

A tawny owl and two woodcock were spotted on site and a buzzard family took up residence in the nearby oakwood.

Two pairs of bats were also reported at the oak wood.

Disappointments: Rabbits - their success is always our NO 1 disappointment. An experiment with nylon stockings as sleeve tree protectors on two fine 7 ft rowans proved unsuccessful against Carsegowniemuir rabbits. The trees were seriously ring-barked and had to be pruned back to ground level. Hopefully they will regenerate within their new wires.

1994 Planting season: Enthusiasm built on the success of the first two exclosures encouraged us to apply for grant again for a third exclosure in the middle of the site. It will have large trees (5 pine, 5 ash), small trees (25 rowan, 5 birch) and twiggy shrubs (20 hawthorn) alternated to give a variable top line and a diffusion effect from ground level. Safe from destructive grazing, the bushy shrubs should prove attractive to insects and small birds. The shelter effect should also improve nearby plantings. Work on the fencing is well under way. If we manage to meet the deadline for accounts on 5 January we will receive 50% of this season's planting costs of £321 (i.e. £160 grant) from the Tayside Tree Planting and Conservation Scheme which is funded by SNH and organised by Tayside Regional Council and FWAG. We were mentioned as recipients (though not by name) in a report in "The Courier" on 30 November.

Approval by Farming and Wildlife Advisory Group: Our previous work was inspected by FWAG before the award was approved and Ronnie Young reports that the Adviser was very pleased with our results.

Individually protected trees: Nine helpers planted 26 trees on 27 November 1994 under very pleasant weather conditions and five helpers on 4 December planted a further 26.

Heartfelt thanks to all who took part in work parties.

SUBCOMMITTEE. Mrs M G Duncan, Mr A J Fraser, Mr J K Cook

BALKAN BOUNTY

"Why go there"? people asked - "Nobody ever goes to Bulgaria". Well, the three of us did last April, on a Natural History Tour rather weighted for ornithologists, but with Polunin's book, 'Flowers of the Balkans' we hoped to work things out for ourselves

In the north among the Balkan mountains there were woods of **black pine**, *Pinus nigra*, **silver fir**, *Abies alba* and **Norway spruce**, *Picea abies*. Around the scattered homesteads, fruit trees were in blossom, with **tamarisk** (so far from the sea) and **false acacia**, *Robinia pseudacacia*, lining the roadside, both presumably introduced, **Oxlips**, *Primula elatior*, grew profusely in the woods with **arums**, **black bryony**, *Tamus communis*, **birthwort**, *Aristolochia clematitis*, *Hepaticas*, and the yellow **wood anemone**, *A ranunculoides*. New to us was a yellow/green **hellebore**, *H cyclophyllus* which interested our bird lovers, and we all thrilled to the **nightingales** in full song

On the Black Sea coast we trudged along muddy paths through reed beds, with only some occasional **wormwood**, *Artemisia maritima* and **vipers bugloss**, *Echium vulgare* in the drier parts, for company. The extra height gained by three inches of mud on the boots was useful for seeing over the reeds to where an **avocet** was wondering what all the fuss was about. It was a lean time for flowers, but there was a wonderful sight of some 300 **white pelicans**, a shaft of sunlight catching their undersides, coming in against a dark thundery sky. They circled lower and lower, finally touching down and folding their wings after the long flight north.

Other days worked out more evenly, *Iris pumila* grew in both purple and yellow forms, with them stout spikes of the **monkey orchid**, *Orchis simia* and in the shady spots *Fritillaria pudica*. There were many different kinds of **euphorbias** and **mulleins**, difficult to identify apart from the **purple mullein**, *Verbascum phoenicium*. Clumps of **summer snowflake**, *Leucojum aestivum* grew among the **Roman nettle**, a painful beast of a plant *Asphodeline lutea* with *Anemone pavonina* brought back memories of Crete and the Peloponnese, while **comfrey** and **burdock** in the ditches and woods, **sea kale** in the sand, were reminders of home. In an oak wood we found the **lady orchid**, *Orchis purpurea* growing in at least 10 inches of pure leaf mould, while **orange tipped butterflies** and **southern swallowtails** played catch me if you can with the camera.

We then moved southwest to the Rhodope mountains near the border with Macedonia and now it was the bird lovers' turn to feel hard done by. They were reduced to photographing flowers, the **elderflower orchid**, *Orchis sambucina* in both colour forms, *Saxifraga strobilata* with purple flowers and silver rosettes growing out of rock crevices, and of course, the endemic, *Haberlea rhodopensis*. This plant has blue flowers that invariably photographs pink if a blue corrector filter is not used, which, of course, we didn't have. We added three more orchids to the list, *Orchis laxiflora*, *Cephalanthera longifolia* and *Traunsteinera globosa*. Meanwhile, hushed whoops of joy were coming from the others - at last a **golden oriole**!

We spent our last day on Vitosha, an isolated mountain almost 7000ft high near Sofia, where carpets of *Crocus veluchensis* and *Scilla bifolia* grew among the snow patches, and an occasional *Soldanella hungarica* hid in the woods. It was 1st of May, Easter Sunday in Bulgaria, and in celebration, families from Sofia took the chair lift up the mountain to walk in the crisp spring sunshine. Lubo our guide brought an Easter cake to share with us, decorated with coloured eggs painted by his family, what a lovely way to end a thoroughly enjoyable holiday.

Doreen Fraser

FRANCIS BUCHANAN WHITE

This year, 1994, is the centenary of the death of one of the most significant botanists of eastern Scotland, Francis Buchanan White, author of the Flora of Perthshire. He also was one of the founder members of the Perthshire Society of Natural Science and that Society organised a number of events in his memory.

Mike Taylor of Perth Museum led one group on a commemorative walk and started by giving a short talk in the grounds of Annat Lodge, Buchanan White's home. Sadly this fine building is now empty but there is some hope that it may be turned into flats and occupied again, rather than left to rot and fall down.

Neil Taylor (no relation) found *Equisetum pratense* in the rockery and we all noticed the *Cardamine impatiens*. Neither are common locally nor very showy and it is difficult to believe that a normal garden enthusiast would introduce them. Only someone keen and knowledgeable about wild plants would have brought them in, giving rise to the intriguing thought that these possibly may be descendants of plants originally introduced by the Perthshire botanist himself. Anne Mathers, a leading member of the PSNS and one of Buchanan White's grand-daughters, said she remembered visiting the house as a small child and seeing the cedar as a magnificent specimen. It is now a sad and mis-shapen remnant.

The party went further up Kinnoull Hill, one of Buchanan White's favourite localities, but the heavens opened and we all took shelter under a handy tree. Dryness, if not discretion, being the better part of valour, the meeting broke up early without ever going up to the top of the hill.

Jim Cook

RED-BACKED SHRIKE IN MY SCOPE

"Stop, stop. Can you go back? Turn round?"

The long-suffering bus driver does as he is asked. He's getting used to the strange antics of his foreign passengers. But the local who hitched a lift a few miles back looks most alarmed. His anxiety is not lessened when, after some manoeuvres, the bus sets off back in the opposite direction to which he wants to go. Then suddenly everyone points and shouts, "Here. Stop. There you are," scrambles excitedly off the bus and starts staring at the tree tops through binoculars and telescopes.

The cause of the excitement is an adult hobby perched on top of a conifer, calling to a young bird which is obligingly perched on top of a nearby tree.

Elena Costella and I are in Turkey, nearing the end of a week's birdwatching holiday based at the villages of Hisonaru and Ole Deniz on the south-west coast near Marmaris. We have been on walks near the villages, bus trips into the mountains and by boat up the Dalyen delta. We have been thrilled by superb views of **honey buzzards** soaring high above us, colourful **bee-eaters** gliding and twisting around us and lots of other species which are new to us, such as **red-backed shrike**, **masked shrike**, **serin** and **Kruper's nuthatch**. It is September but the temperature is exceptionally high and the sun has blazed down every day. The group of around 20 is friendly and the leader Bob Husband is not only a great enthusiast for birds but is eager to make sure everyone is enjoying themselves and getting good views of all the species.

"**Red-backed shrike** in my scope" and "Has everyone seen the **collared flycatchers**?" have become familiar calls, as have "Has everyone got their binoculars and something to drink" when we board the bus in the morning and "Remember not to leave anything on the bus" on our return. At the end of the week we leave feeling we have seen a lot in a leisurely and enjoyable manner and the score of mosquito bites is, Mary - 3, Elena - 0.

The holiday was with sun Med, however they have since become First Choice and discontinued the birdwatching option. Bob is now leading birdwatching holidays for Inspirations.

Mary Galloway

NEW VENTURE

At 10 am on Saturday 26th November a dozen naturalists and friends gathered near the level crossing at Carnoustie railway station for the first trial of a winter walk. The weather was near perfect - sunny and mild with only a slight breeze. We walked down onto the beach and round Carnoustie Bay, looking both up and along at the birds and down at the shells and the other strandline debris. The real prize would have been to find a **tusk shell**, *Dentalium*, but no such luck. There was a great range nevertheless - large numbers of **periwinkles** and flat **periwinkles**, **common top-shells**, **netted** and **common dog-whelks**, remains of **buckies** and their egg cases, **limpets**, **common** and **horse mussels**, **cockles**, **pod** and **curved razor**, and many **thick trough** and **striped venus shells**, **banded wedge-shells**, **pullet carpet-shells** and **blunt gapers**, **common** and **Baltic tellins**, a few **otter shells**, an **Iceland cyprina** and a **smooth artemis**. Dorothy Fyffe, of course, 'got her eye in' and picked up several **cowries**. Other finds included a number of **lion's-mane jellyfish** and pieces of **breadcrumb sponge** but no **dolphins** were seen!

From the mouth of the Buddon burn we strolled downwind, and down sun, towards Westhaven and were rewarded with excellent views on seashore rocks and sand of numerous **dunlin**, **redshank**, **golden plovers** and a few **grey plovers**, **ring plovers**, and a flock of **wheeling knot**, **curlew**, **oystercatcher**, **turnstone** and **bar-tail godwit**. Out to sea were rafts of **eiders** with **great crested grebe**, a few **scoters** (perhaps) and clear views of **goldeneye** and **long-tailed ducks** providing the highlights. The other main highlight was to come.

By this time it was 12.45 pm and the party was ravenous. We repaired forthwith to the Station Hotel and set about laying waste to the menu. All agreed that it had been an excellent outing; an idea well worth repeating!

Jim Cook

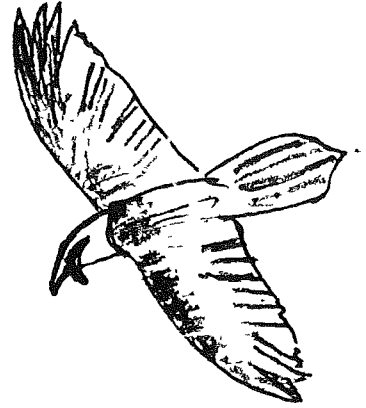
RHINOS & RAPTORS IN NEPAL

November in Nepal is the driest month of the dry season, so the brochures say. For most of our trip to the Annapurnas, clear blue morning skies and moonlit nights confirmed this. The 6am cup of tea meant we did not miss magical mountain dawns when camping. Lower down in the Terai jungle, dawn and dusk elephant rides were special too.

The Kopre ridge of Annapurna South is easily seen from the lake at Pokhara - a mere 35km as the vulture flies. We trekked for 5 days to gain the ridge since, alas, we could not soar over ridges to 12,000 feet. Raptors can always be seen soaring alongside or overhead - **kites, eagles, harriers, falcons** and 4 species of **vulture**. One **Lammergeier** stooped around just overhead as we lunched. Altitudinal migrant birds were coming down to the subtropical plains as we walked up to their summer home. One bamboo thicket a 12 species 'wave' of **warblers, tits, bulbuls** and a magnificent **sunbird**.

Leaving behind the paddy fields and the higher terraces of millet, corn, barley we entered extensive **rhododendron** forests, then scrub and finally grassland. The 60 feet high **rhododendrons** and the underlying shrubs (every garden variety you can think of) flower in the spring, but some epiphytic orchids bloomed. Dry spikes of grassland **orchids, meconopsis, edelweiss** etc. remained but some **primulas** and **gentians** were in full flower.

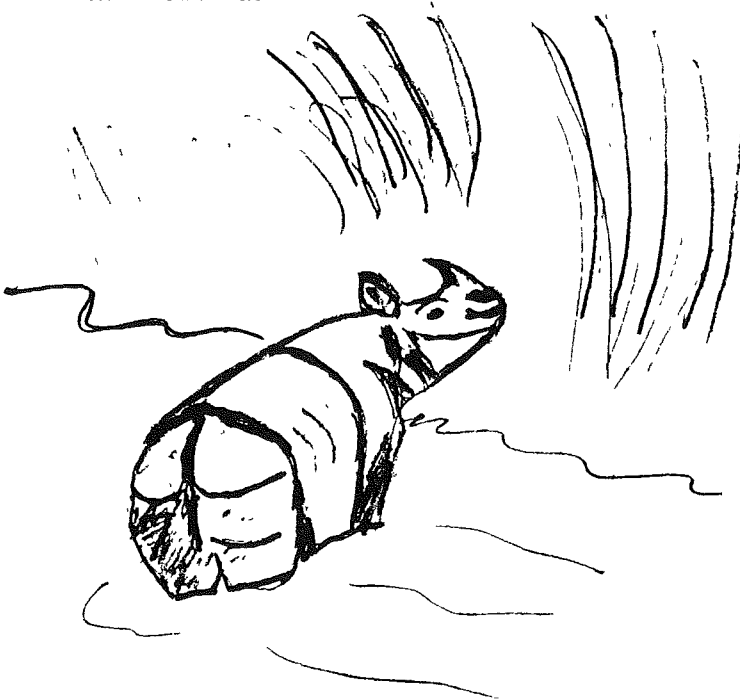
Being in the midst of 8,000 metre mountain giants was a spiritual experience. Dhaulagiri (6th highest peak in the world) was opposite us and below, the Kaligandaki, the deepest gorge in the world, the river flowed before the Himalayas were formed. The sacred Fishtail mountain, Machhapuchhre, would come into view again as we returned south-east.



LAMMERGEIER

The Annapurna region is a conservation area and our party of 10 plus 20 sherpas, cooks, porters 'left only footprints' and used kerosene fuel. Three conservation points:

- 1 Nepal's population has doubled in 20 years
- 2 96% of Nepal's energy needs comes from forests.
- 3 Tourists can aggravate these environmental stresses



ONE-HORNED INDIAN RHINOCEROS

Despite being one of the world's poorest countries, Nepal guards and supports the National Chitwan Park, which is near the Indian border. King George V killed 39 **tigers** and 18 **rhino** there in 1911. TV wildlife presenters, Bob Hoskins and David Attenborough, recently visited the park, now one sixth of its pre-1950 area. Chitwan's **rhino** population is increasing and now stands at 4000, so each elephant ride can guarantee a sighting, we saw four deer and two monkey species, lots of **butterflies** and **birds** (**racket-tailed drongos!**),

those wonderful trees and tiger pug-marks Tibetan migrant birds were spotted on a glowing evening canoe trip down the Rapti river

The Nepalese are industrious and very friendly, there are monkeys at the temples and fruit bats at the palace Cows and dogs are everywhere There are no leeches in November but the street traders cling on throughout the year Beware of salads

Alban Houghton

ON THE ROCKS

In April, Doreen Fraser and I were invited to join Jenny and Brian Allan on an Open University Geological Society weekend on the Balmoral estate Such fun, we thought and such fun it was.

The high hills were snow-capped and the air felt pure as we set out from Crathie to study the ground at the foot of the huge granite mountain of Lochnagar We saw how country rock had melted and bent and twisted as the great eruption took place How successive eruptions produced finer grained granites Many of these can be seen in Crathie Church We looked at old, rotten rocks crumbling into sand and being windblown into curious shapes

Of course it all got a bit 'over our heads' and Doreen and I opted out sometimes to look at plants However, we were invited to a second weekend in September to study the Assynt country near Ullapool We came to understand unconformities, thrusts (as in Moine Thrust), piperocks and faults We donned hard hats to visit a marble quarry and saw huge lumps, 8-12 cubic metres, of sparkling white marble sometimes veined with grey or green or pink and so exotic among the Highland hills Assynt has a wonderful landscape of strange mountains, peaceful lochs and beautiful shore

We thank Jenny and Brian and the Open University for the opportunity to explore our countryside in depth Our NATS Summer outings will take on a new dimension as we think about why the plants grow in their particular places

Marjory Tennant & Doreen Fraser

TREE GROUP BRANCHES OUT

Members who have already read our booklet "First Leaves Fifteen Years of Dundee Tree Group" will have an idea of the campaigning, planting and propagandising we have engaged in defence of the environment But the work must go on

Our latest campaign - to save the sugar maples at Boots corner has failed, but we do not regret the effort put in, and thank the many hundreds of people who signed petitions or wrote to the council. More heartening is the steady headway of our aluminium can collection Late in 1994 we reached the £1000 mark, and since then we have so far collected a further £60 towards (we hope) the next £1000 All the money goes to help save tropical rain forests We continue to support the Woodland trust by keeping a watch on woodlands under threat, and have been in touch with Jill Aitken, who is now the Trust's representative in this slice of Scotland since Graeme Morison swapped roles to join the Scottish Wildlife Trust The Woodland Trust has taken on a huge task in looking after the numerous Glenrothes woods Naturalists will also find much interest in the community woodland just established at Balkello, on the slopes of the Sidlaws, where 125,000 little trees are just peeping through the grass We are happy to report a number of new woods, mostly conifer, in the district, including several fields just north of Templeton woods Whatever you may think of spruce, these infant woods are grand for birdlife, especially in their earlier years Our group talks and slide shows, held in the Society of Friends rooms, have maintained a high quality over the years, and so far this year we are looking forward to hearing Dr Derek Robertson on wildlife sites in Dundee, and Doris Malcolm talking on her visit to the Ecuadorian rain forest Anyone is welcome to come, even if only for a particular subject

We pride ourselves on being one of the most active environmental organisations in Dundee, and certainly the cheapest - annual subscription has remained at £1 for over fifteen years! That does not prevent us finding financial support for campaigns such as the Woodland Trust's purchases of threatened woods, and the efforts to replant the Caledonian Forest in Glen Affric

If you would like a copy of "First Leaves" I always bring a few copies to the Naturalists' meetings The cost is £1 and any profit goes to woodland campaigns

Bob McLeod

RED SQUIRRELS

Certainly Britain's most popular rodent, if not its most popular animal, the **Red Squirrel** has seen its range contract northwards to the pine and spruce forests of Scotland and the north of England. By no means confined to



GREY SQUIRREL



RED SQUIRREL

these it will happily eat a variety of food including nuts, insects, birds eggs and even nestlings if available.

Much has been said of the competition from the **Grey Squirrel** and there is no doubt that in the quest for resources the grey is a bigger, bolder and more opportunist competitor. However, the unpopularity of the grey with forestry interests and the popularity of the red with the general public and conservation bodies must help in the preservation of the latter. A recent pessimistic forecast by one of our recent lecturers that the red would all but disappear from the scene in the next 10 years or so would seem to me to be a great exaggeration and I am confident that the **Red Squirrel** will be with us for a long time to come.

Recent sightings over a wide area from Tentsmuir in Fife to the Glens of Angus suggests that they are more than holding their own. Recent sighting in Dundee alone include gardens near the Perth Road, Camperdown Park and Templeton Woods where three were seen recently consuming Oyster fungus on a decaying tree stump.

Let's face it, there are more out there than some would have us think. One does not walk in the trees with one's head in the air and sometimes the only indication that our little red friend is there is the rattle of branches or the unceremonious pine cone on top of the head.

Gordon Maxwell

LATE NEWS

PAISLEY INTERNATIONAL COMPETITION

Just before Christmas we were very pleased to hear that one of our newer members, Miss Sheila Taylor, had won the McCance Trophy for the best Scottish entry in the Paisley International Colour Slide Exhibition. Our congratulations go to Sheila and we hope she will continue in the same winning way.

MBE

Congratulations, also, to Miss Bessie Henderson, a long-standing member, for the announcement in the New Year's Honours List, of a Member of the British Empire award for services to Tayside Health Board.

OPERATION ORCHID

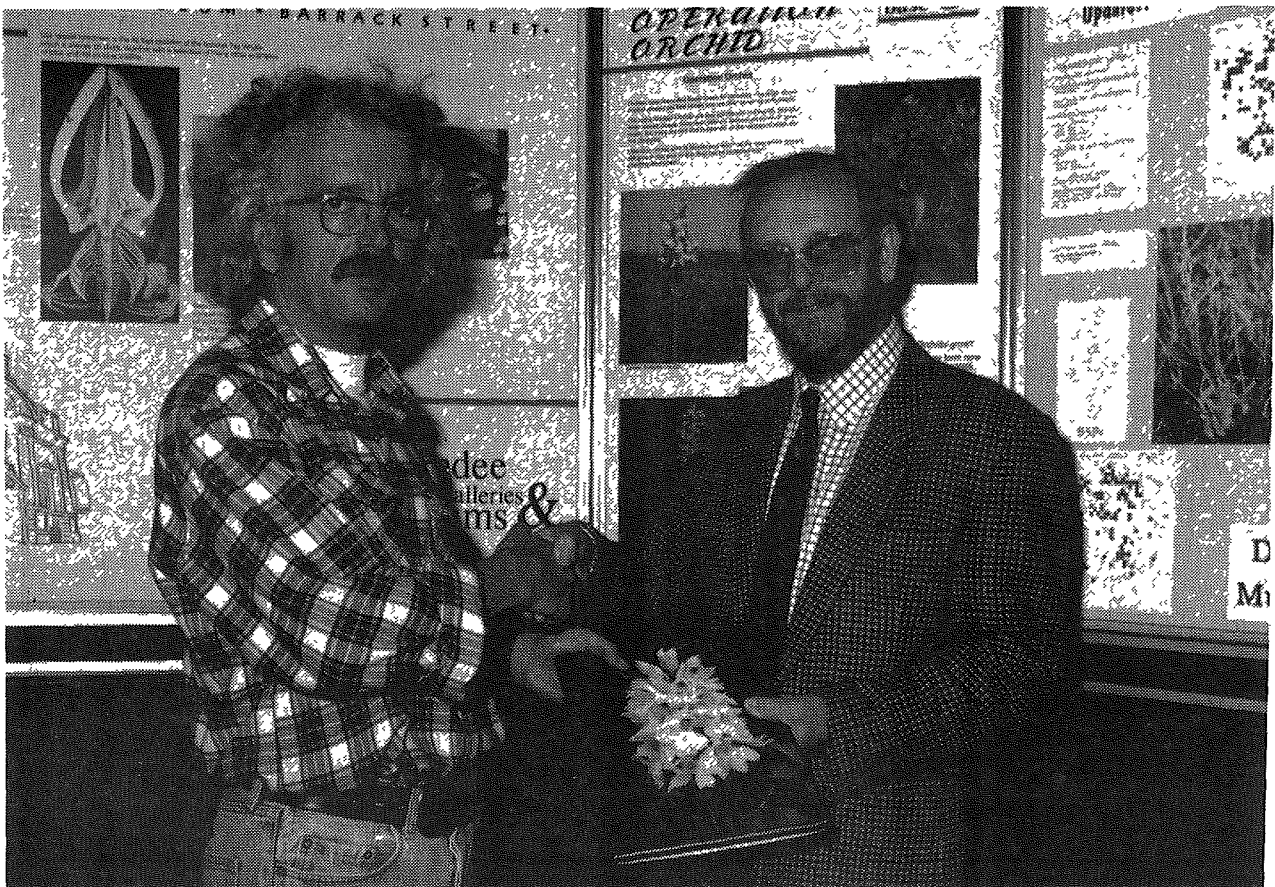
Local Naturalist Wins Orchid Book

During the past summer, tremendous progress has been made by Dundee Museum's local orchid project

Operation Orchid.

Our photograph shows local Naturalist, Arthur Sturrock, Operation Orchid's prize draw winner, being presented with a copy of "Wild Orchids of Scotland" by one of the book's authors, Brian Allan

Operation Orchid's aim is to identify and record all the sites where orchids still grow in this area (Angus and Dundee Districts), so that they can be protected from unwitting destruction



Enthusiastic local Naturalists, with assistance from the general public have succeeded in recording several hundred orchid sites during 1994

All 17 species previously reported have been re-found this year

Lots of additional sites have been found for the two common species, the **heath spotted orchid** and **northern marsh orchid**. However, very few additional sites have been discovered for the rarer species. These generally have only a small number of plants at very few sites

Operation Orchid will run again during 1995 during which time it is intended to complete the fieldwork and produce a small booklet on local orchids

In the meantime, anyone who knows where orchids grow and who has not yet been in touch with the project is asked to give **Operation Orchid** a phone on - **0382 432069**



EARLY MARSH ORCHID



As many of you will know, the **Natural History Museum, Barrack Street, Dundee** has a computerised wildlife database [**Naturebase**] which covers the local area

We are always interested in obtaining any records for inclusion in this project. They can be brought or sent to the museum as extracts from your field notebooks or on one of our many recording forms. The computer is best at processing long lists of species very quickly where details like Grid reference, Date and Observer remain constant

[Please note] Our computer system is very precise and allows data to be entered only if the following detail is supplied - Species - Date - Locality with 6 Fig Grid reference - Observers name and address

We are always involved with special surveys and you are welcome to take part. 1995 surveys include -

- * Squirrels
- * Orchids
- * Garden Birds
- * Summer Insects

Recording forms for these are always available at the Museum

Further Information -

Telephone 0382 432069



DUNDEE NATURALISTS' SOCIETY

Outings 1994

Saturday 21 May

BOTANIC GARDEN, ABERDEEN UNIVERSITY AND STONEHAVEN

The gardens are well worth a visit at this time of year as they have a fine alpine collection. If the weather is kind their herbaceous borders should also be well out. We intend to stop off at Stonehaven and walk along the coast to the line of the Highland Boundary Fault.

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Saturday 18 June

BASS ROCK

This island, off the E. Lothian coast, is a hatching ground for thousands of gannets, which are still being fed by their parents in June. A great opportunity to get really close to these magnificent birds which spend the rest of their lives at sea; also nesting black-backed and herring gulls on turf, and guillemots, razorbills, cormorants and shags on the crags. Plants to look out for: red-flowered tree mallow and wild beetroot. Boat leaves North Berwick at 12 noon. Fare £9.50.

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7 pm Tuesday 21 June

DILTY MOSS

OS Map reference: 522432

North of Crombie Country Park

There are few remaining raised bogs in Angus but this is a good one and very well worth visiting, with a host of excellent plants, insects and mammals. It should be an excellent evening, but bring your wellies and midge repellent!

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Saturday 2 July

BEN VRACKIE

One of our Society's favourite walks, Ben Vrackie has something for everyone. Botanists come to find a range of specially adapted alpine plants on the high crags. These include the fascinating Moonwort fern, Alpine lady's mantle and the rare Alpine milk-vetch. Beside the path lower down, the lovely Wintergreen (*Pyrola media*) should be coming into flower. Upland birds, including raptors such as Buzzards and Short-eared owls frequent the area. Frogs, toads and adders have all been spotted by keen-eyed 'nats' in the past. The walk to the top does require reasonable fitness. However, those less inclined can follow the scenic path as far as desired. Initially, the climb is steady rather than steep. If the weather is fair the climb to the top should be rewarded with excellent views.

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7 pm Tuesday 12 July

ELLIOT DUNES

OS Map reference: NO 619394

A92, 2 miles SW of Arbroath

Our evening walk provides a chance to see an excellent range of shore, dune and freshwater plants, including several local rarities.

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Sunday 17 July

ST CYRUS NATURE RESERVE

This reserve hosts a unique selection of birds and plants found only in a few other localities. St Cyrus is one of the most northerly sites for a number of special plants including Clustered bellflower, Wild licorice, and the delightful Maiden pink. Other species likely to be encountered include Northern marsh orchid, Hairy violet and Carlina thistle. We should also see many bird species such as terns, gannets and duck with, in particular, rafts of young eiders. The walk is a gentle one of only a few miles with plenty of time to study this rich and varied habitat.

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Saturday 30 July

MUIR OF DINNET

This Deeside NNR features landscapes formed by ice and water. It is owned by Kinord Estate and managed by agreement with SNH. It has wildlife, human and geological interest. Birch, pine and oak are now returning to the area following removal of sheep after the war. We hope to meet the Warden and visit some of the varied habitats which include two shallow 'kettle-hole' lochs, reedbeds and wetlands, moorland, woodland and farmland. We will explore the spectacular 20 metre pothole on the Burn o' Vat - walking into it via a shallow stream bed (waterproof footwear usually required). Time to buy a snack tea at Ballater.

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Sunday 14 August

DUNKELD RIVERSIDE WALK

We start from the Old Toll House south of Dunkeld Bridge and make our way along the south bank of the River Tay to the A9 flyover returning along the north bank. Our route includes avenues of fine mature trees, shingle banks, grassy swards and magnificent scenery. Famous trees in the policies of Dunkeld House and the grounds of the Cathedral may be admired. Sightings of a variety of plants, birds and possibly fungi are expected. Some wire fences require negotiation because of river erosion.

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7 pm Tuesday 23 August

BARBECUE PITMUIESMOOR

OS Map Reference: NO 581516

SEE SEPARATE MAP

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Saturday 27 August

SEATON DEN/ARBROATH CLIFFS

A short, leisurely walk about 3 miles in length which will give lots of time to study the rich and varied Natural History of this Scottish Wildlife Trust reserve. We will follow the stream through wooded Seaton Den to the coast at Carlingheugh Bay. The excursion has been timed to allow study of the seashore life here before we make our way along the cliff path to Arbroath.

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Saturday 10 September

BLAIRGOWRIE TO GLEN SHEE

We start in Blairgowrie to look at a range of stream-side and woodland habitats for fungi and other small and fascinating plants. The plan is for a series of short stops up the Glen. How far we go depends on the weather, but we may reach the Cairnwell carpark.

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