

Dundee Naturalists' Society

Instituted 1874



Bulletin No13 1988-89

Summary of Accounts : Year to 15th February 1989.

INCOME

BROUGHT FORWARD:

Current A/c 6021419	23.25	
Deposit A/c 5404632	103.85	
Deposit A/c 0121632	1.17	
Cash in hand	1.50	
	129.77	129.77

SUBSCRIPTIONS:

Session 1987/88	33.00	
Session 1988/89	712.50	
Session 1989/90	16.00	
	761.50	761.50

INTEREST:

War bonds	1.74	
Deposit A/c	10.26	
	12.00	12.00

DONATIONS:

Dr Robertson	10.00	
Miss Mitchell	6.00	
Mrs Krol's Estate	10.00	
	26.00	26.00

FUND RAISING:

AGM '88-Tea/Coffee	31.20	
Raffle	19.30	
Book sales	6.90	
Autumn plant sale	109.50	
Car Stickers	23.00	
Xmas '88-Tea/Coffee	28.50	
Raffle	46.35	
	264.75	264.75

TOTAL INCOME

1194.02

EXPENDITURE

BULLETIN AND SYLLABUS:

Printing Bulletin	80.16	
Print Syllabus/Enc.	64.85	
Postage	17.76	
Stationery	14.44	
	177.21	177.21

OFFICE BEARERS' EXPENSES:

Secretary	27.61	
Treasurer	10.92	
	38.53	38.53

LECTURE ROOM RENTAL:

Room T9 Jan-Mar 88	60.00	
Chaplaincy centre	15.00	
	75.00	75.00

LECTURERS' FEES ETC.:

Fees + Expenses	135.85	
Fees Donated CGM	16.00	
	151.85	151.85

INSURANCE:

Public Liability		65.00
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MISC. EXPENSES:

Photo Comp. Prizes	15.00	
Overlooked 1987/88	1.00	
Get Well Flowers	60.00	
Barbecue + Tools	43.10	
	119.10	119.10

SUBSCRIPTIONS:

Rights of Way Soc.	7.00	
FFWAG	10.00	
Habitat	7.50	
S. W. T.	15.00	
	39.50	39.50

CASH IN BANK/HAND:

Current A/c 6021419	3.72	
Deposit A/c 5404632	521.13	
Deposit A/c 0121632 Clsd. Mar. 88	0.00	
Cash in Hand - Secretary	1.39	
Cash in Hand - Treasurer	1.59	
	1194.02	1194.02

TOTAL:

1194.02

CARSEGOWNIEMUIR ACCOUNT

Balance at Feb 1988	332.13	
Donations	44.00	
Interest	11.77	
Total Income:	387.90	
Expenditure:	-161.19	
Balance at 15th Feb 89	226.71	

OUTINGS ACCOUNT

c/f	2.26	
Income	1817.59	
Expenditure	-1796.40	
Net profit	21.19	
Balance at 15th Feb 89	23.45	

WEEKEND ACCOUNT - Glencoe

Income	1918.82	
Expenditure	-1911.31	
Net Profit	7.51	
Balance from Feb 88	57.26	
Balance at May 88 c/f	64.75	

WEEKEND ACCOUNT - Aberdeen

Deposits received	270.00	
Refund to Cur. A/c -10.00		
Interest	1.14	
Balance at 15th Feb 89	325.89	

Excess & found correct
[Signature]

Frances T. 24/2/89

DUNDEE NATURALISTS' SOCIETY

ANNUAL BULLETIN No. 13
1988-89

Hon. President : Dr. John Berry

Hon. Vice Presidents : Mr. James D. Boyd
Dr. D. A. Robertson

President : Miss. Eileen Kidney

Vice Presidents : Mr. Richard K. Brinklow
Mr. James K. Cook

Hon. Secretary : Mrs Jennifer H. Allan, 18 Grangehill Drive
Monifieth, (0382) 533132

Editor : Miss Mary Galloway, 23 Baldovan Terrace,
Dundee, (0382) 454431

Treasurer : Mr Brian Allan, 18 Grangehill Drive
Monifieth, (0382) 533132

Excursion Secretary : Miss Leonore Fullerton, The Castle
Newport-on-Tay (542249)

PRESIDENT'S REPORT

Dear Fellow Members,

I must first record my thanks to our energetic and cheerful secretary, Jenny Allan, who sometimes has a hard job keeping me up to scratch.

Our financial position has improved quite considerably and we owe a debt of gratitude to Brian Allan not only for all the work he has put in as treasurer, but for all the extra jobs he so willingly undertakes. Our distinctive new notepaper heading, our car stickers and the art work on the Bulletin we owe to him - 'a lad o' pairts our Brian.'

Mary Galloway has taken over the editorship of the Bulletin from Bob McLeod and I should like to record our appreciation of all the hard work Bob put in - not least in persuading reluctant contributors to do their bit.

Our thanks are also due to Gordon Kirkland and Frances Towns who have agreed to act as auditors. A fuller version of last year's accounts is available for anyone who wishes a copy.

I am most grateful for all the hard work and co-operation of members of Council. In particular I must thank Leonore Fullerton, Dorothy Fyffe and Marjorie Tennant for organising a most successful spring weekend, Leonore for organising the summer outings, and Margaret Duncan for all her hard work in connection with Carsegowndiemuir, and to Jim Cook for the displays he produced at our winter meetings.

Thanks are also due to all who led outings, organised capers and barbecues, showed slides, worked at Carsegowndiemuir and to all our members who have turned out to our winter meetings which covered a good variety of topics.

At our Christmas Meeting we were extremely fortunate in having Mr Colin Cosgrove to show us his slide-tape programmes; the one on May Island was superb.

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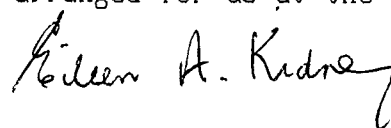
Our thanks are due to the following who produced the mince pies, fruit cake, coffee etc. :- Dorothy Fyffe, Jenny Allan, Marjory Tennant, Doreen Fraser, Ina Fraser and Margaret Duncan.

Our funds benefited considerably from the plant sale held in the Allan's garden. Carol Milton, one of our newer members, started a full time course of study at the College of Technology in October. Because of the extra work entailed she gave up part of her Law Hill allotment and donated a large number of plants to the Society for sale. Doreen Fraser and Barbara Tulloch also contributed plants. In addition Carol produced chrysanthemums for sale at a number of our winter meetings.

We have agreed to make a survey of the property at Barry Mill, recently acquired by the National Trust, and we shall be calling on volunteers to help list the species present.

Finally I hope members will enjoy the varied programme of summer outings Council has just drawn up and the weekend which has been arranged for us at the end of June.

Eileen A Kidney



Once again we are sorry to announce the death of three of our longstanding members, Miss I Henderson during June, Mrs Krol in October and Miss Booth in November. All will be sadly missed.

***** SUMMER OUTINGS *****

THE BLACK SPOUT, PITLOCHRY 7th MAY

A glorious sunny May day accompanied our first bus load of Naturalists along the scenic route to Pitlochry. On arrival Colin, our leader, attempted (with difficulty!) to gather up a straggling contingent of around a dozen people (plus one enthusiastic puppy) from the Edinburgh Natural History Society, who were joining us for the day.

At last both parties were heading along the short path to the Black Spout Waterfall. On the way a delightful show of Spring wild flowers was greatly admired by everyone. These included **Wood Anemone**, *Anemone nemorosa*, **Greater Stitchwort**, *Stellaria holostea*, **Wood Sorrel**, *Oxalis acetosella*, **Cuckoo Flower**, *Cardamine pratensis*, and lovely purple clumps of **Common Dog violets**, *Viola riviniana*.

Around Mid-day the cascading torrent of the Black Spout was at its photogenic best, and those Members with cameras clicked away appreciatively while others simply sat around enjoying the view, many opening flasks and lunchboxes under the disapproving eye of the leader who announced that lunch was to be partaken of at 1-00pm! However, in the best Naturalists' tradition there was enough food to feed a regiment, and the "official" lunch, on the bonny banks of the River Tummel, was also noisily enjoyed, much to the chagrin of the many fishermen actively engaged in catching and barbecuing their own lunches!

During the remainder of the afternoon everyone was happily occupied exploring the many attractive and well signposted walks around Loch Faskally, admiring the handsome male **Mallards** and the little ducklings, foraging under the watchful eyes of the mother ducks. An excellent start to the season, and a credit to the organising skills of our new Excursion Secretary.

J. H. A.

Continued/...

GLENCOE WEEKEND 20th - 22nd MAY

Though we returned to Glencoe for our weekend, the programme was completely different from that of our previous visit. Leonore, Dorothy, and Marjory are to be congratulated on their arrangements for what turned out to be a most successful and happy trip even blessed with good weather. On Saturday we all visited the slate quarry. **Frog spawn, Tadpoles and Water Boatmen** were seen at the edges of the deep pools.

Thereafter the B group had a walk in the vicinity of Glencoe Village.

The A party set off to walk through Glen Duror. The track led uphill through a farm out to the hillside above the River Laroch. Numbers of small birds were seen and heard here. The route continued through the wooded Glen Duror until it joined the forest road leading to Auchindarroch and the bus. This stretch was also alive with birds.

On Sunday the B party walked through the shore of Loch Tulla to Forest Lodge.

Meanwhile the A group had been dropped at the end of the road leading to the White Corries ski tow which they followed to Blackrock Cottage, where they joined the West Highland Way which they followed to Forest Lodge.

From Blackrock Cottage the track rises to the highest point on the West Highland Way near where stands a memorial cairn to Peter Fleming who died in 1971 while out shooting. The terrain here consists of wild boggy flats with lochans on the flattest part of the moor through which the River Ba flows. We picnicked at the Ba bridge and were rewarded by the appearance of a **Mink** among the rocks on the river bank.

The track continued past great recess of Coire Ba floored by peat hags once under a huge ice field. Here and there the remnants of ancient pine woods were visible where the underlying peat was exposed. The final part of the route led through a pine plantation to Forest Lodge.

The wide variety of habitats visited on Saturday and Sunday produced a list of plant species numbering 84, a goodly list of birds and the fauna already mentioned.

Eileen Kidney

FORTH AND CLYDE CANAL 28th MAY

Naturalists' luck again - a superb day; warm and sunny, not a drop of rain. But in the first part of the canal, not a drop of water either. It had been drained to clear out a residue of tar prior to being opened as a country park. We were able to see it in the "before" state. Fortunately the outing leader had visited the place and was able to take us straight to the start where there was a fine display of the very plants we had come to see - specialities, rare in this part of the world, **Frogbit** (looking a little like miniature water lilies) and **Ivy-leaved Duckweed**, characteristically chains of leaves floating a few centimetres below the water surface.

Further along there were good selections of other waterside plants, **Branched Bur-reed**, **Great Reed-grass**, a variety of **Pondweeds**, **Water Lilies** and a host of others. A good selection of birds was either on view or could be heard. **Willow Warblers** flitted in and out of the bushes, **Curlews** wheeled overhead and even a **Grasshopper Warbler** made an appearance.

Starting off near Falkirk, the party made its way to the Seabegs Wood site of the Antonine wall where we had lunch and explored the remains. Continuing, we crossed under the M8 motorway and then on 4 miles towards Kilsyth.

Jim Cook

Continued/...

RARE BREEDS 7th JUNE

The finest summer evening of the year was reserved for our visit to Wester Ballindean on June 7th, when twenty or so members were shown round by Mrs Rettie. Among the many breeds of sheep and fowls, a little coal black Shetland orphan was an example of curious animal behaviour. It had to be taught to graze by its companion, a paralysed white lamb. And graze it did, but always got down on its knees to do so, copying its crippled pal.

Members will be glad to know that the group of **Belted Galloways** which had enjoyed? a shampoo and brush up that day for the Highland Show achieved an honourable place in the judging ring.

Several members returned to Ballindean when Mrs Rettie later held an open day. Mrs. Friedel Liebscher bought a spinning device, and later acquired a fleece. We look forward to seeing her in a blackfaced pullover!

*Members who visited the rare breeds farm at Wester Ballindean in June will be interested to know that the **Belted Galloways** have recently had four calves, two browns and two blacks. Mrs Rettie is especially pleased that the blacks are bull calves.*

Bob Mcleod

THE BASS ROCK 11th JUNE

It was with a little apprehension we set off on our excursion to the **Bass Rock**. Sailings from North Berwick on the previous two days had been cancelled due to a very heavy swell. However the Boatman was hopeful that the trip could be made today.

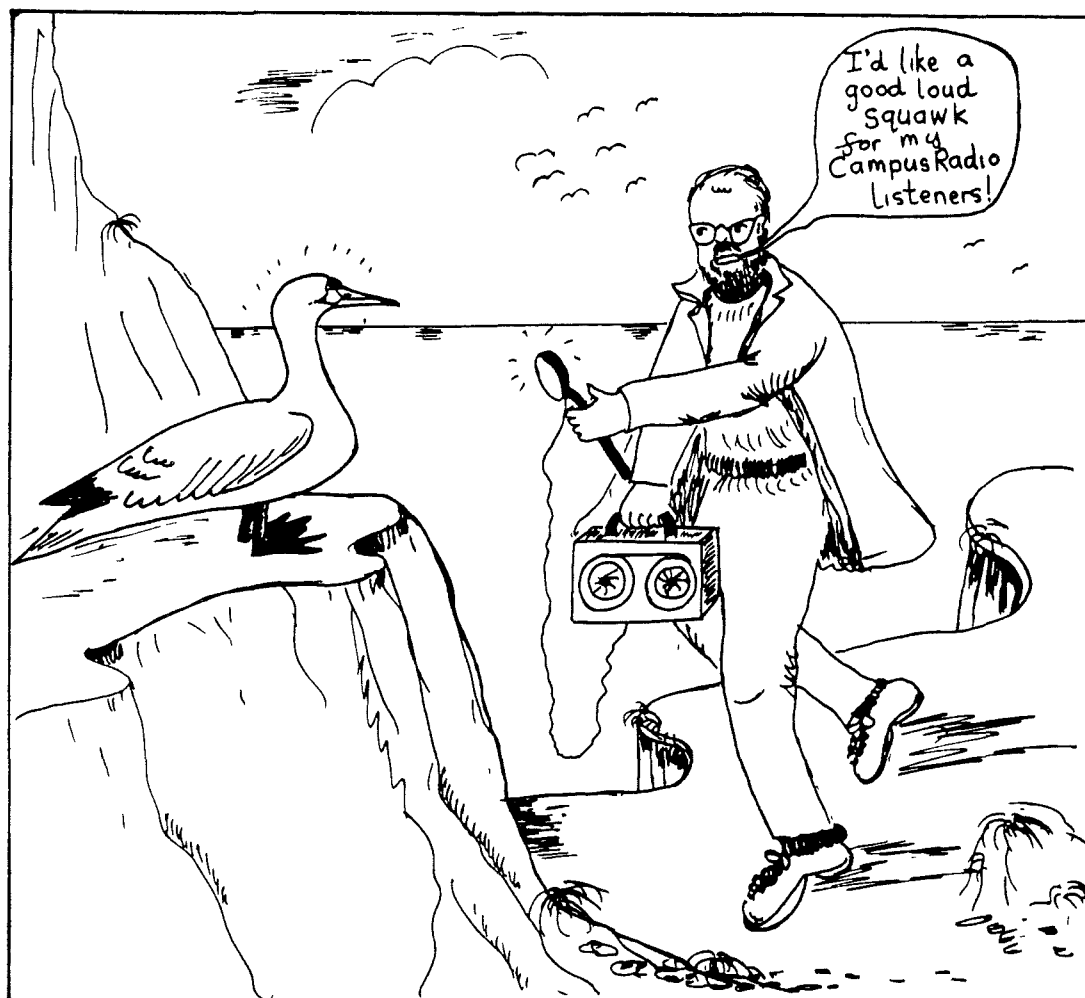
On our arrival at North Berwick harbour the wind had risen but we were told to get on board and set off into the open sea. The crossing was a bit rough but quite exhilarating.

On approaching the pier, in the lee of the rock, we were observed by the nesting **Shags** and roosting **Puffins**, then, as we jumped ashore we climbed up the steps of the rock, past the Lighthouse Keeper's garden and the beautiful **Tree Mallow**, *Lavatera arborea*, an extremely rare plant which appears to have increased since our last visit, we came to the first of the groups of **Gannets**. A thrilling spectacle to see these magnificent birds at such close quarters. As the day was cold they were sitting tightly on their nests and it was only with patience we saw the egg or chick under the brooding bird. They have a long rearing period, 19 weeks from the time the egg is laid until the young bird leaves the nest. The first eggs are laid in April and last year it was recorded that the last chick fledged on 30th November.

The beautiful **Kittiwakes** had also hatched out chicks and the **Fulmars** were sitting patiently as were the **Guillemots** and **Razorbills**. Alas our visit had to be a short one due to the sea conditions but a memorable experience especially for our new members.

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THE COOK REPORT!!



SOME GANNET STATISTICS

WING SPAN 2 metres

One egg laid from April is incubated by both parents for 44 days.

Chick takes 90 days to fledge.

Gannet takes 4 years to reach maturity, spending this time in mid Atlantic off West Africa most of the year.

A **Gannet** can live for 20 years.

The only discernible difference between the sexes is apparently the greenish lines on the toes which are yellower on the male and more turquoise on the female!

Dorothy Fyffe

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FALLS OF UNICH AND INCHGRUNDLE 25th JUNE

As we wound our way up the long road to the small car park at the top of Glen Esk, the sun broke clear and heralded a fine day for our walk. After passing the castle at the road end we walked alongside the picturesque Loch Lee. By the track side many fine flowers were admired, including **Rockrose**, *Helianthemum nummularium*, **Heath Spotted Orchid**, *Dactylorhiza maculata*, **Lousewort**, *Pedicularis sylvatica*, and many more. Of special interest were the two insectivorous plants we found, **Butterwort**, *Pinguicula vulgaris*, and **Sundew**, *Drosera rotundifolia*. The former with showy mauve flowers, traps small insects on its sticky starfish shaped leaves and absorbs the protein. The **Sundew** with less attractive white flowers, has sticky globules on its hairy round leaves which, when an insect is trapped, curls round on itself consuming the unlucky victim.

Before we reached our lunch stop at the far end of the Loch we encountered a dead specimen of a **Slow worm** in fine condition, a first chance for many of us to see in close-up this fascinating legless lizard. After lunch some of our group headed back along to the waiting coach while 21 hardy souls headed up the narrow track beside the twin falls of Unich and Damph to see the numerous alpine plants which favour this area. Among them were **Moss Campion**, *Silene acaulis*, **Mountain Everlasting**, *Antennaria dioica*, **Alpine Lady's Mantle**, *Alchemilla alpina*, **Viviparous Bistort**, *Polygonum viviparum*, and some delightful stands of **Wood Cranesbill**, *Geranium sylvaticum*.

Only when we reached the top did the weather close in, and after some excitement trying to cross the burn, we headed down the Shank of Inchgrundle and back, wet but happy, to high tea at "The Retreat".

B. Allan.

STORMONT LOCH AND REDMYRE 28th JUNE EVENING EXCURSION

Eighteen intrepid Naturalists turned up at the Stormont car park for an evening ramble around Stormont Loch and Redmyre. The S.W.T. hide at Stormont Loch was a little crowded as Members scrambled to focus binoculars on a handsome but uncooperative **Great Crested Grebe** which invariably managed to dive at the opportune moment! There were also **Coots**, **Tufted Ducks**, and **Mallards**, many with chicks, to admire; but the water show was stolen by the **Mute Swan** mother and her six well grown cygnets gliding proudly across the loch in perfect formation. At the lochside fine specimens of the rare **Tufted Loosestrife**, *Lysimachia thyrsiflora*, and blue **Skullcap**, *Scutellaria galericulata*, were observed, and a yellow splash of the Buttercup-like **Greater Spearwort**, *Ranunculus lingua*, made a fine show.

On the way to Redmyre the two front markers in the party were rewarded with a rare sighting of a beautiful but shy **Jay** flying around the undergrowth. The colony of **Black-headed Gulls** at Redmyre was easy to locate by following their noisy squawking which was audible for miles; many of the Gulls were happily roosting in the waterside trees, while at the water's edge a young **Little Grebe** was feeding.

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Twinflower

A large swarm of mega-hungry mosquitoes precluded sitting around for long at Redmyre, and soon the botanists in the party were heading off into the dense undergrowth to relocate the rare and lovely **Twinflower**, *Linnaea borealis*, which was at the height of its flowering beauty. On the way another unusual plant, **Amsinkia**, *Amsinkia intermedia*, a member of the Borage family, was literally stumbled over. As dusk was by now fast approaching, it seemed expedient to return to the cars via the Redmyre quaking bog. As usual the hooligans in the party made everyone's nerves quake when they used the bog as a trampoline! Not to worry, everyone returned safe and sound, give or take a few wet feet, scratches, and innumerable mosquito bites!

J. H. A.

FESTIVAL BARGAIN 9th JULY

Was it a shrewd committee that so organised our visit to Glasgow Garden Festival that it coincided with the International Flower Show? As there was no further charge, the whole busload of Naturalists took advantage of the chance to tour the flamboyant arrangements of massed flowers and pools in the exhibition centre, as well as tramping to exhaustion in the Garden Festival itself. Everyone had his or her favourite exhibit, but we placed in the top three the Forestry Commission's imaginative display, the G.A.'s Highland video, and the pool with its beautiful wild flowers such as the rarely seen Corn Cockle. Leonore had made all arrangements, but was herself absent, on holiday. The only sad note was when the leader-for-the-day took his first lick at a gigantic icecream arrangement, and the tempting, glistening mountain fell off the cone on to the ground. Alas!

Bob McLeod

LINN O' DEE, CLAIS FHEARNAIG AND GLEN QUOICH 23rd JULY

The Dundee Naturalists set out on a fine morning and, refreshed by coffee in Glen Shee, arrived at Linn o' Dee. One bus remained in the car park while the second bus proceeded to Linn of Quoich. This meant there could be various walks to suit all members.

One party took a direct path into Glen Lui while the main party detoured through a woodland higher on the hillside which afforded good views through the trees. We met for our picnic lunch at the entrance to Clais Fhearnaig. I must thank Alastair Fraser for guiding us into the right valley, one turn looks very like another! The narrow glen with several small lochans is a quiet place among the hills.

The path into Glen Quoich among the Scots Pines made a pleasant walk back to the bus. Nobody seemed to mind the final sprint in heavy rain and we were all in good spirits as we rejoined the others.

Marjory Tennant

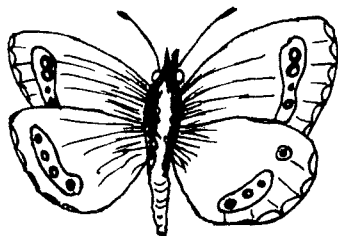
GLEN GIRNAIG 6th AUGUST

This outing provided quite a variety of habitats. We left the old A9 about three quarters of a mile past Killiecrankie. The first part of the route led

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uphill through open ground and was bordered on one side by a damp ditch. It then passed through a mixed deciduous wood with the ground falling steeply to the Allt Girnaig on the right. Soon after leaving the wood we descended to the stream and crossed it by a footbridge. The way then led across open moorland, passing a group of empty croft buildings, and eventually we visited an abandoned settlement. On the return journey we abandoned the track and traversed an open slope through scrub and reedy areas until we came to another track which led us down to the A9 near the National Trust Visitor Centre.

In the wood we found some fifteen species of fungi including *Amanita muscaria*, (Fly Agaric), *Agaricus macrosporus*, (a field mushroom of hill pasture), *Botulus edulus*, (Cep or Penny Bun), *Clavaria rosea* (a small rare, bright rose pink fungus), *Coprinus comatus*, Lawyer's Wig or Shaggy Ink Cap), *Cantharellus cibarius*, (Chanterelle which is edible and smells of apricots), *Lepista rhacodes*, (Shaggy Parasol Mushroom), and *Piptoporus betulinus*, (the hoof shaped Razor Strap Fungus).



Scotch Argus

Out of the wood butterflies were active, Scotch Argus, Small Tortoiseshell and Green Veined White.

The trees included Sycamore, Birch, Hawthorn, Ash, Aspen, Bird Cherry, Blackthorn, Creeping willow and Wych Elm.



Field Gentian

Over sixty species of flowering plants were found including three species of Veronica, Field Gentian, Rockrose, Slender St John's Wort, Bog Asphodel, Grass of Parnassus, Marsh Lousewort, Ribwort and Marsh Violet.

We are indebted to Margaret Duncan for a comprehensive and extensive list of all the species found, and to Lynette Borradaile, countryside ranger, for leading us. Eileen Kidney.

NORMAN'S LAW AND ABERNETHY GLEN 20th AUGUST

The Syllabus said " South Bank Tay to Flisk, - Shore Walk." As this proved impassable due to encroaching reed beds, overgrown incoming streams, etc., it was decided instead to climb Norman's Law, followed by a short walk thro' Abernethy Glen.

Leaving the coach at Wester Kinsleith Farm, we strolled along a pleasant lane - not many flowers in evidence, being rather late in the season, but a few spikes of **Agrimony**, *Agrimonia eupatoria*, were spotted. The ascent of Norman's Law proved quite steep towards the top, but everyone agreed it was worth the effort to sample the superb views in all directions. It made us all realise how fortunate we are to live in such a scenic part of the world. Unfortunately there was no sign of the Fox and **Green Woodpecker** seen on an earlier "recce".

On we went to Newburgh, stopping only to sample the local shop's ice cream, while wandering round the wee town. Back on the coach and on to Abernethy. Some opted to climb the Round Tower - one of only two such towers existing in Scotland, then partook of tea and scones at the little cafe opposite.

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Those who tackled the dreadful underfoot conditions in the Glen, were then subjected to nasty overhead conditions as well! Just about the highest point of the walk, a large patch of **Betony**, *Stachys officinalis*, was identified. The hardy few who "made it" to the Castle Law were rewarded by fine views of Strathearn, the Grampians and the Firth of Tay.

I. and A. Fraser

ACTIVITY WEEKEND : SPEYSIDE 26th-28th AUGUST

The weather dominated our activities. Saturday's wind blew gale-force all day and prevented any work on the slopes of Cairngorm itself. Instead the group changed its plans and went through the pinewoods of the Pass of Ryvoan. This section of the Old Caledonian Pine Forest was fascinating in its variety of plants with a good scattering of fungi and mosses. The structure of the wood on two one hundred metre squares was investigated in more detail. This gives us more information on old woodlands in comparison to Carsegowniemuir Quarry.

The rest of the weekend followed an aquatic theme, starting with a swim in the evening in the pool of the Aviemore Centre.

Sunday was a very much improved day and the group took the opportunity to hire boats for the exploration of Loch Morlich. One group took a series of plankton trawls to investigate the range of tiny animals in the water. Nearly all turned out to be **Daphnia**, the 'water-flea'. Another group investigated the temperature profile of the loch. In the deepest part the surface temperature was measured at 12.5°C. At a series of depths, down to 22m, the temperatures were the same. The bottom temperature was 12°C. If there had been a thermocline, with warmer water floating over cold bottom water, it had obviously 'turned over' and reverted to the winter condition. A third investigation was to use a Secchi disc to estimate water turbidity. The disc generally faded from view at around the 2m mark.

Later a group canoed round part of the shore line and took a brief look at the fringing vegetation. There were good stands of **Common Spike-rush**, **Bottlesedge**, **Reed-grass** and **narrow -leaved Bur-reed**.

Together with a leisurely lunch on the strand and short visit to the Loch Garten reserve (no **Ospreys** but a very hungry **Squirrel**!) the rest of the day passed very enjoyably. We all felt sorry for those members of the Society who had missed the activity weekend, and look forward to the next one.

Jim Cook.

MYSTERY TOUR 3rd SEPTEMBER

Naturalists' luck was with us again! Rain showers deluged all around us but none on us. This was the day to keep moving, but what a pity there were empty seats on the bus. Our triangular course took us first through Brechin, past a presumed motte, and on to a very distinctive earthwork - the motte near Edzell Castle, passing by a beautiful corner of the West Water. A **Red Squirrel** isolated in the top of a small tree was the highlight of the stop at the Pirnie Brig.

Where would the bus go next? The betting was the coast and Montrose Basin. Wrong again! On the back roads to Forfar we slowed to admire the Aberlemno standing Stones and then stopped to climb to the breezy top of Balmashanner Hill for a picnic lunch. Strathmore lay on display at our feet along with a good view of heavy showers around about.

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Where to next? Caddam Woods, by Kirriemuir, where a pleasant stroll in the pines beckoned. A host of fungi thronged the woods, these were much admired but few were identified. The striking orange **Stag's Horn Fungus**, *Calocera viscosa*, the **Violet**, *Laccaria amythestea*, **Fly Agarics**, *Amanita muscaria* were a few of the more interesting specimens found, along with numerous **Stinkhorn**, *Phallus impudicus*, eggs. A few explorers even found the Roman road. The day ended with a scenic trip on the high road above Lintrathen Loch and on to Reekie Linn. The falls, following recent rain, thundered mightily, the spray covering all the nearby rocks. After a short visit to this spectacle we finally reached our mystery destination - South Lindsay Street! Lets hope we can look forward to further 'Cook's Tours'.
Jim Cook / Bob McLeod

OCHIL HILLS COUNTRY PARK 17th September

Despite a few preliminary hitches, it looked as though the lack of a Greyhound compass might lead to an early return to Dundee; we eventually arrived at the Ochil Hills Country Park on a day of warm autumnal sunshine. The Country Park Ranger had thoughtfully arranged for a local enthusiast from the Mycological Society to accompany us on our Fungus Foray. Although Mr Ian Munro deprecated the title of "expert", he had had time to scour the woods for interesting specimens before our arrival, and was able to impart his knowledge (not only fungal) in an interesting and entertaining manner. It is easier to remember the common names of the fungi we saw e.g. **Coral spot** and **Glistening ink-cap**, than *Nectria cinnebarina* and *Coprinus micaceus*. Not so easy to recall *Xylaria polymorpha*, but it took little imagination to picture the scrabbling of those blackened **Deadmans fingers**, crawling their way up through the leaves of the woodland floor. Happily our own expert discovered a good specimen of *Fistula hepatica*, the **Beefsteak fungus**, growing on a chestnut tree at the edge of the wood, but previously unrecorded in the park. Although it covers a small area, sheltering at the foot of the Ochil Hills, it enjoys a Southerly aspect, there is a nicely laid out play area for the younger members, and plans are in hand for conversion of the stables to a Visitors Centre. In the spring the woods are lush with **Bluebells**, **Lilac** and **Rhododendron** and a helpful ranger suggested a future excursion to the "sister" park at Gartmorn Dam, a rich haven for wintering birds. Following the success of the Vane Farm outing, this might be a winter supplement to the Summer Excursion programme.
Leonore Fullerton.

OUTING TO CARSEGOWNIEMUIR and FORFAR LOCH COUNTRY PARK 29th OCTOBER

This visit began with a demonstration of our current method of planting and protection by two members of the Carsegowniemuir Subcommittee, Jim Cook and Alastair Fraser. They planted two **Hawthorns** after driving posts. Mulch mats of old carpet squares were laid and wire-netting protectors stapled to the posts. A label to identify the bushes was added. Several groups set out with record sheets and metre rules to carry out the annual measuring of the planted trees. The rest of the party toured the quarry inspecting progress.

Continued/...

Several parties of small birds were seen including **Bullfinches**, **Goldfinches** and **Siskins**. Birds which are usually seen on every visit included **Yellowhammer**, **Chaffinch**, **Robin**, **Bluetit** and **Moorhen**. **Kestrel**, **Short-eared Owl** and **Sparrowhawk** sightings were also recorded.

The cold wind experienced at Carsegowriemuir had disappeared by the time we reached Forfar Loch so a pleasant circuit was enjoyed. Waterbirds were seen in large numbers and good variety. Some tame **Geese** greeted us on the shore. Then we saw hundreds of **Coot** which seem to be a speciality here. **Mute** and **Whooper Swans** were seen and **Shoveler**, **Cormorant**, **Little Grebe** and **Goldeneye** caught our eye. **Redpoll** and **Long-tailed Tits** were noticed along the path. Forfar Loch impressed with the variety of mainly native plantings of bushes and trees around the edge. At one point the walkway leaves the shore and allows the birds one undisturbed area. This could be important during the summer when there would be many more people and boats about.

Margaret Duncan.

VANE FARM R. S. P. B. RESERVE 5th NOVEMBER

It was glorious weather for our extra outing to this lovely reserve on Loch Leven in Fife.

On arrival we were met by the assistant warden, Gareth Morgan, who told us a little of the history of the reserve and then took a party down to the main hide, while others watched a video about the reserve. From this we learned that the loch is famous for its **Brown Trout** and a hatchery keeps up the stock. The loch is carefully monitored for pollution from farm chemicals and waste from Kinross woollen mill. On the reserve itself a busy education program runs throughout the year.

From the hide there are fine views over the loch. On the closer stretches were a good number of ducks, including **Tufted Duck**, **Teal**, **Pochard**, **Mallard**, **Shoveler**, and **Gadwall**. Several **Moorhens** were pottering in the shallow water.

Further out a large flock of **Pinkfooted** and **Greylag Geese** were drifting on the water or grazing on the rough grass at the edge of the loch. Apparently there are two or three **Barnacle Geese** with the flock but they were keeping out of sight. In the fields, too, there were several **Hérons**.

In the afternoon Gareth led a walk up the hill - after a false start when a large bunch of naturalists pursued an unfortunate gentleman thinking he was the warden. (Brian Allan said it was Edna Slidders's fault).

On the way up various nestboxes were pointed out, some with **Woodpecker** damage. There were a few **Bluetits**, **Greenfinches** and a **Coal Tit** in the woods. On top of the hill a flock of **Fieldfares** flew over. Later a **Kestrel** was seen circling. The shop did a roaring trade and many members were spotted clutching large bags of Christmas cards and other goodies.

Finally, as usual, a few members failed to turn up at the bus at the appointed time. They were tracked down to the observation room where they were eagerly watching a **Short-eared Owl** flying over the reserve.

Mary Galloway

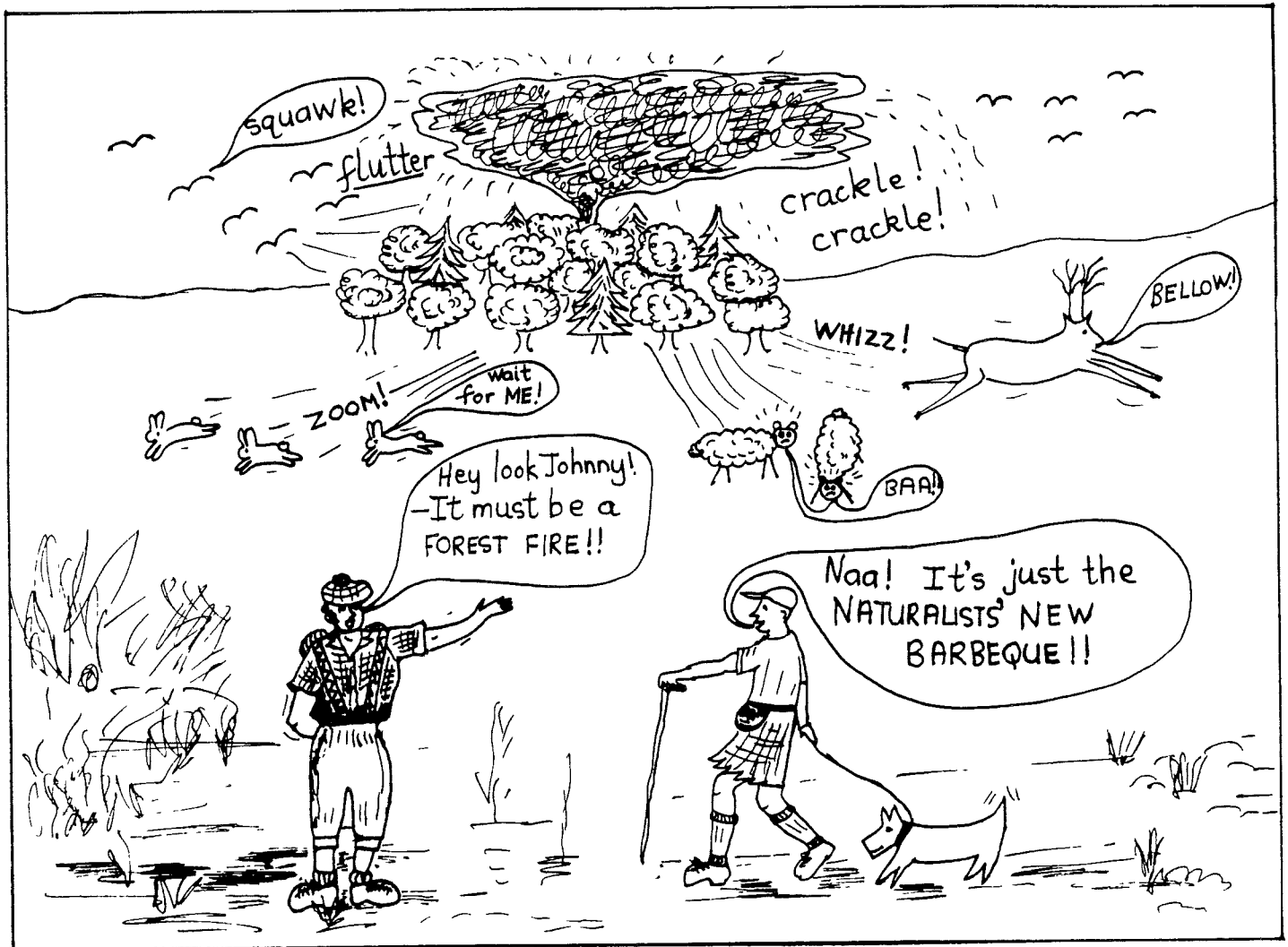
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BEACH CAPERS : 2nd JANUARY 1989

Our New Year capers left the shelter of the woods this year and moved to Easthaven. But the gods were kind and the morning dawned mild and calm. A large turnout ranged from Primary to very Senior classes, all well happit up. An industrious hour was spent seeking seashells, seaweeds, flowers in bloom (there were ten species reported), listing birds etc. In the class for specimens of driftwood, a pat on the back to the young contestants who carried back a sample about twelve feet long! Special thanks to Brian and Jenny for providing the mulled wine (it was tasty) and keeping the barbecue going. R. T. McLeod.

* The "resident supply" of mulled wine was supplemented this year by donations of several extra bottles of red wine plus a new innovation of "mull teabags!" Thanks folks! Thanks are also due to Jim Cook for his splendid organisation of this event.

J. H. A.



Continued/...

I would like to thank the leaders for their help and enthusiasm on the 1988 Summer Excursions. Thanks also to all the members who regularly turn out to contribute to the success of these outings. A considerable amount of preparatory work is involved for each outing, but suggestions for future venues, or topics are always welcome.

Next summer we are happy to introduce some new leaders with some new ground to cover, which we hope you will enjoy.

Leonore Fullerton

******* WINTER PROGRAMME 1988/89 *******

The lecture season got off to a superb start with a delightful talk on October 4th by Don and Bridget MacCaskill. Bridget spoke about their studies of otters, and Don about St Kilda and general aspects of wildlife in the Highlands.

The subject on October 18th was the "Natural History of Flies" - a topic which ranged from identification and adaptations of species to their uses in medicine and agriculture. On November 1st Joy and Alf Ingram whisked us off to Greenland and Iceland with lovely slides and entertaining anecdotes. Then on November 15th Darroch Donald of the SSPCA showed heart-rending slides of oiled seabirds and told of the painstaking work done at Middlebank Farm to clean and return them to the wild. The centre also works with seals. A collection from members present raised £36.96 for the centre.

Nick Gubbins of the NCC spoke to the Society on December 6th on the subject of "Wildlife Conservation". He illustrated wildlife sites in the Dundee and Angus areas and explained the designation of Sites of Special Scientific Interest and their protection. At our Christmas meeting on December 20th Colin Cosgrove showed two superb slide/tape presentations, one on a visit to the Isle of May and the other the changing seasons set to music. A buffet supper followed.

On January 17th Dr Alan Owen lectured on "Scottish Fossils" from the earliest Pre-Cambrian stromatolites to huge tree ferns and primitive amphibians. Members' Night on February 7th brought the usual interesting slide show by members plus the results of the photographic competition. Congratulations to the winners - Mr A R Philip, Miss M Donaldson, and Dr A Houghton.

Sandy Forgan ably covered the topic of "Fishing and Wildlife" on February 21st and last but by no means least on March 7th we enjoyed superb slides and an entertaining talk by Adam Ritchie on his travels in Pakistan and China.

M Galloway

KWIK KWIZ

The first letters of the answers to these clues forms the name of a 1989 summer outings venue.

- | | |
|-------------------------------|--|
| 1. Polysaturated lepidoptera | 2. Yew, Holly and Fir are all this, |
| 3. Our kind of history | 4. Loch Leven's Farm |
| 5. By any other name... | 6. ? Vegetable or Mineral |
| 7. You may plant trees here | 8. No strings on this bird of prey |
| 9. This flower flies the flag | 10. This flower puts a sparkle in your eyes. |

Answers at the foot of page 20.

Continued/...

CARSEGOWNIEMUIR QUARRY RESERVE ANNUAL REPORT 1988

A written agreement entitled "Memorandum of Understanding: Carsegowniemuir Quarry" was signed on 15th August 1988 - effective for ten years with review after five years (1st April 1992). The main provision of the agreement is that both parties shall consult each other on proposed activities on the site. Access for up to three work party cars is automatic. Copies of the agreement can be supplied to members by the Secretary, or Margaret Duncan, for 20p each. There were 18 work party visits in 1988.

TREES AND SHRUBS PLANTED 1988

53* PINE
54** BIRCH
15 ASH
12 BIRD CHERRY
12 GORSE
6 HAWTHORN
4 ELM
3 ROWAN
2 ASPEN
2 SWEET BRIAR
1 HONEYSUCKLE
2 ALDER



Briar Rose



Honeysuckle

166

* 28 survivors

** 15, 2½ ft trees with spiral rabbit protectors supplied by Major Young.

Most of the square plastic tree shelters, and rather small posts, used to protect the **pinest**, did not withstand the high winds of the storm on 25th July 1988. Current policy is to use stronger posts and wire-netting. Fortunately three members of the Society have been growing on **Glen Tanar native pines** in their garden nurseries, so it will be possible to replace the storm losses at our next planting day on 9th April 1989. After this the Subcommittee proposes to reduce planting and concentrate financial and physical resources on repair and maintenance of existing stock.

1988 has been another good growing year. **Rowans** made the most spectacular growth this season. The best **rowan** grew 78 cm(31"), closely followed by **birch**. Growth in other species was uneven. Many of the very tiny trees planted in the first year have not yet managed to grow away. **Broom** grew excellently in its first year of growth (up to 63cm) but requires pruning to encourage bushiness. The problem is how to protect wide bushes. The large netting enclosure did not prevent 52 **broom seedlings** being pruned to 15cm within a week of planting and so the defences have been raised with the help of some tall posts from Major Young. 'Rabbit/deer-proof' shrubs (**Elder and woody nightshade**) have not proved entirely immune. They have been 'tasted' and sometimes discarded, but therefore do not yet flourish. **Cowslip** seems to be the only plant totally safe from grazing. A dry summer is a threat we have not yet faced. It could be critical on this site.

Margaret G Duncan

Continued/...

1988 ADDITIONS TO SPECIES LISTS

PLANTS

Lemna minor
Filipendula ulmaria
Sinapsis arvensis

BIRDS

Short-eared owl

Two nest boxes have been erected. Several more could be accommodated, as could at least three bat boxes. Information on sources of old timber would be welcome. Each box requires a plank approximately 4'9" long and 6" wide and 3/4" thick. Bat boxes should be 1" thick and of rough untreated timber.

The Subcommittee is appreciative of the help of the many tree planters who assisted on the appointed days. We were able to make good use of the Society's new barbecue. Especial thanks to the loyal helpers who turned out for work parties on long cold, wet days.

1988 CARSEGOWNIEMUIR SUBCOMMITTEE

Margaret Duncan (convenor), 37 Windsor Street, DUNDEE. Tel. 67479
Alastair Fraser, Jim Cook.

TREE PLANTING - A LIST OF TYPICAL JOBS

1. All hands needed to carry tools, posts and wire to site.
2. Carry large flat stones to planting positions (Apprx. 4 metres apart) for holding down newspaper mulch
3. Two strong folk (either sex) to drive stakes with crowbar and mallet.
4. Two strong folk to dig planting holes with pick and spade (birch 4 - 5 metres apart; bird cherry 1.5 metres apart).
5. Two people to search for extra soil (?from rabbit diggings) for planting holes. Bucket and spade required.
6. Treeplanters. Handle roots gently, keep roots covered at all times. Plant at same ground level as in nursery. Plant close to post-check diameter of wire guard.
7. Two people to supply water to planters for watering in. Buckets required.
8. Two people to lay one complete thick newspaper opened out round each tree to suppress weeds. Hold down (and cover from view) with large flat stones or willowherb stems.
9. Two people to scribe label and attach to wire-netting of each new tree. Numbering to begin from 88/300 (Nov '88).
10. Two people to measure and record new trees (must be able to read fine print). Clipboard with plastic bag cover and pencil required.
11. Two+ photographers to record activities.
12. - Enjoy the barbecue!

TECHNICAL CONVENOR'S REPORT 1988

The field study group have not been quite so active this past year. Nevertheless we took part in one major survey of the breeding of amphibians. a total of 5 weekends, together with a number of evening visits, were spent looking for the signs of frog and toad breeding. Members covered a large area, from North Fife to the foothills of the Grampians, but particularly
Continued/...

concentrating on the eastern end of the Sidlaw Range. Lochindores, Lairds Loch and the surrounding areas proved to have healthy populations of both frogs and toads and they were spawning abundantly.

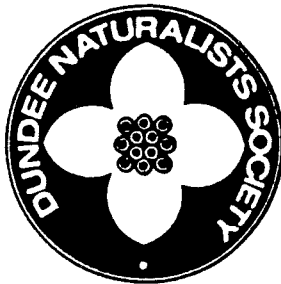
In late summer and early autumn we repeated our surveys on the two sea-pea sites in Angus. These two coastal sites may, apparently, be the last relics of the population of the northern race. In one of the localities the plant is thriving, in numbers almost too large to count. At the other site the population is holding its own, although shifting its centre of growth gradually. In neither place are the plants in immediate danger of extinction, as long as the habitats are not disturbed.

Individual members took part in a variety of other surveys and natural history fieldwork.

Jim Cook

OUR SOCIETY'S BADGE/LOGO

With the recent availability of car stickers depicting our Society's attractive badge, lots of people in Dundee and further afield have admired these and asked about the origin of our badge/logo.



Back in 1977, the Dundee Naturalists' Society held a competition among its Members to design a Society badge. Jim Cook was a worthy winner with his stylised design depicting the "Dwarf Cornel" - a flower familiar to those who walk the "high tops" in our Angus Glens.

The Society then had 100 small enamel badges made to Jim's design and these were offered to members at £1.00 each. Many of these original badges are still seen adorning the clothing of many of our longer-standing members at meetings and outings. However, unfortunately the firm which made the badges is no longer trading and no more badges are left from the original batch. They were all sold.

Jim's design has now been incorporated into our Society's Notepaper, Syllabuses, Membership Cards, and of course our Bulletin cover, giving us a most attractive "Corporate Identity."

** The four white "petals" on the Dwarf Cornel are actually modified leaves called bracts. The actual flowers are the numerous small structures in the centre of each "flowerhead". The plant also produces attractive red berries in the autumn.*

Jenny Allan.

WILD ORCHIDS IN SCOTLAND

"Surely not!" "Don't orchids only grow in the tropics?" "You can't mean real orchids?" These are some of the many disbelieving comments I've received when I mention that wild orchids can be found in the Scottish countryside.

Strange as it may seem, however, there are about 25-30 species of orchids to be found growing in Scotland. Not in the same league, perhaps as some of the counties of south east England, but none the less a fair representation of the British orchid flora which have a northern distribution.

Continued/...

The orchid family, it is safe to say, is the largest family of flowering plants in the world with perhaps 35,000 species occurring in every part of the world from the Arctic circle to the Equatorial regions, nearly a seventh of all the flowering plants on Earth, 52 of which are to be found in Britain. The orchid plant has always been an attraction to botanists, amateur and professional alike, having that special appeal which can only be felt when a species you have never found before is spotted, or when a new location is discovered for one of the more common species. For me, I never tire of seeing orchids in the wild be they rare or common.

What species of orchid can we expect to find during the course of our summer walks or outings? Most have a particular habitat which they prefer. These habitats are many and varied, and a walk in any wild place, be it woodland or meadow, marsh or mountain, should reward the searcher with one or two species. One of the earliest orchids to flower is the delightful **Early Purple Orchid**, *Orchis mascula* whose bright purple flowers on a loose spike prefer a woodland or coastal habitat, and in Scotland the grassy slopes and ledges of sea cliffs are the most likely areas to find this plant; the flowering period for this orchid is May to early June.

A similar, but slightly smaller species, the **Green Winged Orchid**, *Orchis morio*, is found in only one location in south west Scotland, this being an orchid more readily found in southern areas of the British Isles.

The best months, however, for orchid spotting are June and July when most of the species found in Scotland are in flower. A walk or drive in any of the upland glens, should delight those interested with sightings of the commonest of all our local orchids, the **Heath Spotted Orchid** *Dactylorhiza maculata* ssp. *ericetorum* which together with the **Scented Orchid** *Gymnadenia conopsea* can form carpets of many thousands of spikes. Also in the mountain areas some of our rarer orchids can be found, the dainty **Lesser Twayblade**, *Listera cordata* nestling out of sight, no more than 3" high, beneath the high heather, or on high alpine ledges the **Frog Orchid**, *Coeloglossum viride* and the **Small White Orchid**, *Pseudorchis albida* may be found.

In lowland areas in damp pastures or birch scrub the **Northern Marsh Orchid**, *Dactylorhiza majalis* ssp. *purpurella* is prominent with the **Early Marsh Orchid**, *Dactylorhiza incarnata* and the two **Butterfly Orchids** *Platanthera bifolia* and the rarer *P. chlorantha* also preferring this damp habitat. The latter three species, however, sadly can now only be found in a few isolated sites.

Two of the strangest of our native orchids, the **Bird's Nest Orchid**, *Neottia nidus-avis* and the **Coralroot Orchid**, *Corallorhiza trifida* both grow among leaf litter in deep shade and are only to be found in a few localities in Scotland.

Other orchids to be found include the **Common Twayblade**, *Listera ovata*, similar to the **Lesser Twayblade** by having two large oval leaves at the base of the stem, but growing to a height of 12 to 18 inches. Later in the year, around August or September, is the time to search for **Creeping Ladies's Tresses**, *Goodyera repens* and the tiny insignificant **Bog Orchid**, *Hammarbya paludosa*. The **Ladies's Tresses** being found in the pine needle litter of coniferous woodland and the **Bog Orchid** being almost entirely submerged in wet sphagnum moss.

Continued/...

Another, but rarer Lady's Tresses can be found on some of the Western Islands and west mainland Scotland, and is called *Spiranthes romanzoffiana* or **American Lady's Tresses**. This together with some other species from the Dactylorhiza group form an isolated remnant of our flora left from when part of Scotland was joined to North America.

The Helleborines are yet another group of orchids which in general tend to have a late summer flowering period. These include the **Broad-leaved Helleborine** *Epipactis helleborine*, the **Sword-leaved Helleborine**, *Cephalanthera longifolia* and the two rarer species **Dark-red Helleborine** *Epipactis atrorubens* and *Epipactis palustris*, the **Marsh Helleborine**.

This then is a brief summary of some of the orchids to be found in Scotland. Truly a most fascinating and beautiful flowering plant, appearing as it does, in so many differing forms. Alas, due to to their haunting fascination they are becoming scarcer and scarcer through thoughtless picking of their flowers. Also their habitats are gradually being eroded through the need for more drained and ploughed land for food production. So if you are lucky enough to find any orchids in the field, please don't pick or uproot them, rather leave them for others to enjoy.

Brian Allan

WOODLAND SAVED

The purchase of **Moncreiff Hill** by the **Woodland Trust** was good news and ensures the future of a large area of scenic and wildlife importance. Over 330 acres of woodland includes stands of **Larch**, **Douglas Fir** and other conifers, interspersed with areas of **Ash**, **Sycamore**, **Beech** and other species. A rocky escarpment rises on the south side and to the north is rough moorland and ponds. Bird life is abundant - a December visit provided glimpses of **Sparrowhawk**, **Woodpecker**, **Bullfinches**, **Wrens** and a **Fox**. Entry is by a gate on the south Rhynd road from Bridge of Earn. The cost of the purchase was £250,000, and after various grants the Trust is still requiring £150,000.

R. T. McLeod.

UNUSUAL WINTER TEMPERATURES

The British are said to be always conversing about the weather, whither true or not in general, it has been true this winter. **Roses** are still blooming in the third week of February. **Snowdrops** were in flower at Barnhill rockery on the first of January and on the same date crocuses and hepatica were in bloom on sun facing gardens. On the twenty third of January a **primrose** or two were in flower in a Maryfield garden. By the fifth February **cherry-type trees** were covered in blossom at Guardbridge and a week later the **French plum** trees at Stobsmuir ponds, a wind-blown park, were flowering on the tenth of February, some seven or eight weeks early.

The January mean temperature for this year was 4°C, (roughly 7° or 8° F) higher than the average since records were kept in 1922, (if memory of a talk by Mr N. Elkins of Leuchars Weather Station serves me correctly). There had been suggestions that this was caused by the "Greenhouse Effect"; however he pointed out that unusual variations in temperatures did occur. In 1957 the mean average was 3°C, higher than normal. Aberdeen actually had 60°F (15°C) one January day this year.

Continued/...

But Candlemas Day (2nd Feb), was bright and fair. Now by the last week of the month we are having more wintery weather. If very severe weather should come the effect on growth and bird life would be harsh.

E. S. McLure

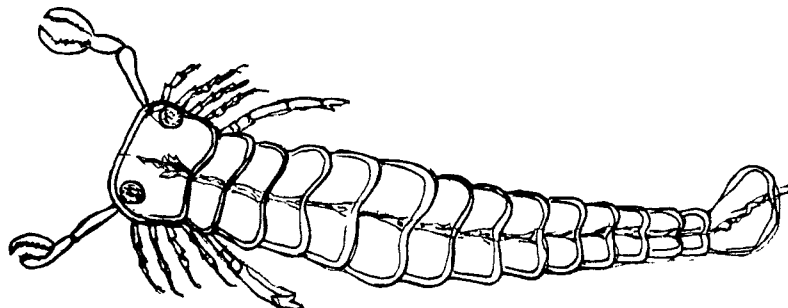
THE WILDLIFE OF CARSEGOWNIEMUIR 450 MILLION YEARS AGO!

The rocks at Carsegowniemuir belong to the Devonian Lower Old Red Sandstone series, and are thought to be around 450 million years old. Those rocks exposed in the quarry and found on the old spoil heaps are a mixture of sandstones and siltstones and are generally grey in colour. The fossil bearing rocks are those composed of the finer grained silts. They are fissile, being easily split into broad flat pieces, and their original use included paving stones and even roof slates. These rocks are thought to have formed in an aquatic, marshy environment with shallow lakes, even although the climatic conditions of the time were thought to have been generally hot and arid, since this part of Scotland was much closer to the equator in those early times.

Primitive fishes and early crustaceans swam in these shallow lakes. During the last century a fossil **Armour Fish**, *Cephalaspis lyelli*, was found at Carsegowniemuir quarry, and some remains from the giant **Water Scorpion**, *Pterygotus* which could grow to more than 3 metres in length were also found. Tiny scorpion-like creatures called **Eurypterids** were abundant and provided food for the larger carnivorous *Pterygotus*. The heavy shield-shaped armour probably provided some protection for the *Cephalaspis* fishes, thought to have been filter feeders.

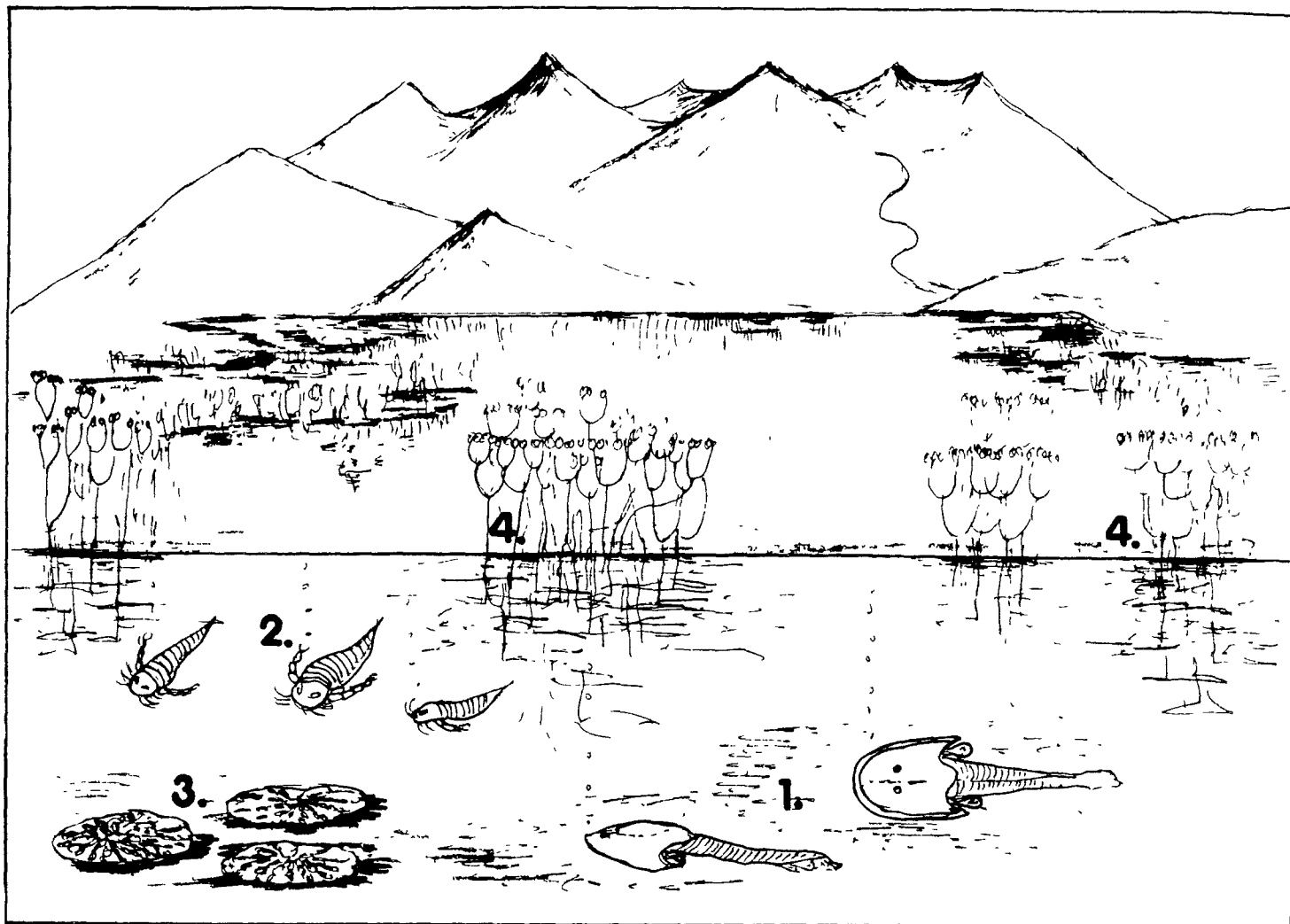
In those days land colonisation by plants was at a very early stage. Virtually all primitive plant life was restricted to aquatic environments and water margins. This was because, for lower plants, water was and still is essential for spore distribution.

At Carsegowniemuir fossil plant fragments are plentiful, but so far appear to belong to only two species. The distinctive **Parka Decipiens** was thought to have been an aquatic encrusting alga, the fossil remains resemble mats of mini-frogspawn! The other fossil plant has not yet been positively identified, but is likely to have been a dichotomous branching early plant called **Cooksonia caledonica** (not named after our junior Vice-President!), positively identified in rock beds at nearby Aberlemno. This plant was similar in many ways to our present day mosses and grew around water margins, reproducing from spores produced in swollen organs called sporangia borne on the tips of the stems.



The fierce Pterygotus

Continued/...



A RECONSTRUCTION OF EARLY DEVONIAN TIMES AT CARSEGOWNIEMUIR

- | | |
|--------------------------------------|----------------------------------|
| 1. ARMOUR FISH, (Cephalaspis lyelli) | 2. WATER SCORPIONS (Eurypterids) |
| 3. ENCRUSTING ALGA (Parka decipiens) | 4. (Cooksonia caledonica) |

* A small exhibition of fossils including some from Carsegowniemuir, was seen at the lecture on "Scottish Fossils" delivered to the Society by Dr Alan W Owen on 17th January 1989. These are presently in the Secretary's possession but can be made available to Society members on request.

J. H. ALLAN

QUIZ ANSWERS

1. Butterfly 2. Evergreen 3. Natural 4. Vane 5. Rose 6. Animal 7. Carsegowniemuir
8. Kite 9. Iris 10. Eyebright
BEN VRACKIE.

Continued/...

WILDLIFE PHOTOGRAPHY COMPETITION 1988

More than 12 different members of the Society put slides in for judging by Mr Niall Benvie during early January 1989. The competition was very successful and the standards high.

The winners of this first competition for a set of 3 slides on a Wildlife Theme in Britain were:-

- 1st - Mr Bob Philip who won the £10 prize.
- 2nd - Miss Maureen Donaldson, awarded the £5 prize.
- 3rd - Dr Alban Houghton, the winner of the free bus trip.

Congratulations to the winners and many thanks to all entrants. More power to your camera-button finger for this year!

WILDLIFE PHOTOGRAPHY COMPETITION 1989

Because of the success of the competition in 1988, the council have decided to run it again this year. Closing date 31st December 1989. There are, however, some rule changes.

The main competition is for :-

A set of 3 slides on one theme of British wildlife photographed in the British Isles in 1989.

*1st Prize - £10 : 2nd Prize - £5 : 3rd prize - Free Nats' outing bus ride.
A certificate may be awarded for the best slide not in a winning set.*

Subsidiary competitions :

1. Best individual print (postcard size) of British Wildlife, photographed in the British Isles in 1989. *A prize of £5 will be awarded to the winner.*
2. Best set of 3 slides on a Wildlife Theme photographed outside the British Isles in 1989. *The winners prize is again £5.*

Only paid up members of Dundee Naturalists' Society may enter, and one entry is allowed in each section. There is no entry fee.

All slides or prints must be labelled A,B,C, with the title but NOT with the entrant's name. They will be numbered by the organisers.

Although we haven't yet selected our judges, here are some general comments on improving your photographic techniques by knowing what judges look for:-

Firstly, the aim of the competition is to stimulate members to go out and about to observe wildlife, especially in their local area. We would prefer to see a good photograph of some common animal or plant in your area rather than a poorer photograph of some rare species. A well observed photograph of a common organism would gain good marks.

Secondly, there are several distinct areas of judging :-

(a) Wildlife/Natural History interest. Good examples of the special features of an organism, the species in its typical habitat, interesting features of behaviour or other natural history subject matter are all looked for. They will be awarded good marks.

Continued/...

(b) Marks will be awarded for the closeness of the slides to the stated theme.

(c) 'Impact' is difficult to define but very important nevertheless. The judges will be looking for 'striking images' that leap off the lightbox', or are at least 'eyecatching'.

(d) Composition is another essential feature in a good photograph. The picture should be well balanced with the subject filling a suitable portion of the frame. There should be no intrusive elements to distract the eye.

(e) With modern cameras it goes without saying that all photographs should be sharply focussed on the subject and well-exposed. Natural history subjects are often tricky to capture but exposure and sharpness are still important.

Jim Cook

COME TO CROMBIE

Tayside Region are holding an "Environment Day" event at Crombie Country Park on Sunday 28th May, from 2pm - 5pm. There will be lit barbecues available along with musical entertainment. Our Society will be represented in one of the marquees. So why not come along and join in the fun?

A NOTE FROM THE SECRETARY - Last year we invested in new A4 size envelopes for your Bulletins. The catch was - we asked for them back to re-use! I was delighted that 50% of you managed to comply. Those who did not manage to hand in envelopes need not feel too badly however, since we have now unearthed a supply of used A4 envelopes for future use. This makes good economic sense and also helps to conserve trees, so I trust that no one will mind receiving a re-cycled envelope.

Grateful thanks to all contributors, especially Brian and Jenny Allan who also typed the copy on their word processor.

Mary Galloway.

DUNDEE NATURALISTS' SOCIETY

Excursion Secretary Miss L F Fullerton
57, West Road
NEWPORT-ON-TAY
Fife DD6 8HN Tel 542249

The two copies of the Booking Form for the 1989 Summer Excursions will enable you to keep a copy of your bookings for your own reference while sending the other to the Excursion Secretary, but remember this is a firm booking and any alterations or cancellations should be notified to Miss Fullerton at least by the Monday prior to the outing, otherwise members will be charged full fare

REFERENCE COPY FOR 1989 OUTINGS

			ADULTS	JUNIORS
Sun 9th April	Carsegowriemuir Tree Planting	*****OWN TRANSPORT*****		
Sat 29th April	Pollock park	Bus 8 30 am		
Sat 13th May	St Monans	Bus 9 00 am		
Sat 27th May	Pitmedden Forest	Bus 9 00 am		
Sat 10th June	St Cyrus	Bus 9 00 am		
Tues 20th June	Harecraigs	Meet 7 00 pm	*****OWN TRANSPORT*****	
Sat 24th June	Aberlady Bay	Bus 8 00 am		
Sat 8th July	Ben Vrackie	Bus 8 30 am		
Tues 11th July	Tayfield	Meet 7 00 pm	*****OWN TRANSPORT*****	
Sat 22nd July	Queen's View	Bus 9 00 am		
Sat 5th August	Ericht River	Bus 9 30 am		
Fri 18th Aug	Belmont/Moths	Meet 8 00 pm	*****OWN TRANSPORT*****	
Sat 26th Aug	Black Woods	Bus 8 00 am		
Sat 9th Sept	Methven Woods	Bus 12 00 noon		
Sat 23rd Sept	Guinevere's Walk	Bus 9 00 am		

DUNDEE NATURALISTS' SOCIETY

Excursion Secretary Miss L F Fullerton
57, West Road
NEWPORT-ON-TAY
Fife DD6 8HN Tel 542249

Please complete the form below and return it to the above address
This will be accepted as a firm booking and any alterations or cancellations should be notified to Miss Fullerton at least by the Monday prior to the outing, otherwise members will be charged full fare

For the purposes of this form, a junior member is a student or school pupil and will pay half fare

BOOKING FORM FOR 1989 OUTINGS

		ADULTS	JUNIORS
Sat 29th April	Pollok park/Burrell Collection		
Sat 13th May	St Monans to Elie		
Sat 27th May	Pitmedden Forest		
Sat 10th June	St Cyrus		
Sat 24th June	Aberlady Bay		
Sat 8th July	Ben Vrackie		
Sat 22nd July	Queen's View/Loch Tummel		
Sat 5th August	Ericht River Walk		
Sat 26th Aug	Black Woods of Rannoch		
Sat 9th Sept	Methven Woods		
Sat 23rd Sept	Queen Guinevere's Walk		
THE FOLLOWING OUTINGS DO NOT REQUIRE PRE-BOOKING			
Sun 9th April	Carsegowriemuir Tree Planting	*****OWN TRANSPORT*****	
Tues 20th June	Harecraigs (evening outing)	*****OWN TRANSPORT*****	
Tues 11th July	Tayfield (evening outing)	*****OWN TRANSPORT*****	
Fri 18th Aug	Moth Trapping/Belmont	*****OWN TRANSPORT*****	

NAME

ADDRESS

Tel No