

## Reports

### CONFERENCE REPORT

#### HEDGES AND LOCAL HISTORY

Some four years ago the Meetings Committee decided to extend the scope of the Society's regular annual programme by holding special meetings from time to time jointly with other national bodies. The aim of this was twofold: to provide members with a greater variety of indoor meetings, especially during the largely uncatered-for winter months (without, if possible, duplicating programmes already arranged under other auspices); and to extend the Society's range of contacts with bodies sharing at least a part of its particular field of interest. The first experimental venture of this kind was a joint evening meeting in February 1967 with the History of Pharmacy Section of the Pharmaceutical Society of Great Britain. This was sufficiently successful to encourage a search for other appropriate topics, of fairly general interest—ideally to both bodies in equal measure—that would lend themselves to a symposium-type discussion of either an evening or a day in duration.

Accordingly, the news that Dr M. D. Hooper, of Monks Wood Experimental Station, had developed a method of dating hedges by means of a simple count of the number of shrub species contained in them could hardly have come at a better moment. Here, clearly, was a topic which could not merely serve to bring the field botanists and the local historians together (as it later transpired, apparently for the very first time ever), but which was sufficiently important in itself to warrant a meeting specially for the purpose at this juncture. An approach was thereupon made to the Standing Conference for Local History, who duly agreed to act as co-sponsors of a one-day conference on the subject. And at the instance of Dr Hooper, and by kind permission of the Director, Monks Wood was decided on as the venue.

Some 90 people—almost exactly half botanists, half local historians—in the event attended, on Saturday, 14 June 1969, filling the lecture-hall at Monks Wood to more than capacity.

Dr K. MELLANBY opened by welcoming those present to the Station and read out a message which the Society had received from its Patron, expressing her keen personal interest in the subject of the conference.

The following five talks were then given:—

Professor W. G. HOSKINS (University of Leicester): Hedges and the Local Historian.

Dr M. D. HOOPER (Nature Conservancy, Monks Wood): Plants and Hedges.

D. E. ALLEN: Bramble-dating: a Promising Approach.

R. H. RICHENS (Commonwealth Bureau of Plant Breeding and Genetics): Elms as Historical Indicators.

Professor A. D. BRADSHAW (University of Liverpool): Hedges and Hawthorn Hybridisation.

Professor A. M. EVERITT (University of Leicester) contributed the final summing up.

A half-hour following the break for lunch was given over to an inspection of the tall hedge fronting the Station, which documentary evidence indicates was planted by William the Conqueror's niece. This provided all those attending with an opportunity to try out for themselves the 'Hooper Method' of dating.

Throughout the day the community of interest between field botanists and local

historians was much in evidence, and it came as no surprise that at the close of the conference there was a general call for another joint meeting on the topic reasonably soon. This, it was suggested, might perhaps be focussed on the results of some of the more intensive, localised surveys of hedges which it was confidently expected that teams of local botanists and historians would now be undertaking in collaboration—and which it had been a particular aim of this conference to promote.

The full proceedings are to be published as a booklet by the Standing Conference for Local History. A short account appeared in *Nature, Lond.*, 223: 18 (1969).

D. E. ALLEN

## FIELD MEETINGS, 1970

### SWITZERLAND AND ITALY

#### BOURG ST PIERRE. AUGUST

A party of four attended the third B.S.B.I. meeting to be based on Bourg St Pierre. Botanising began on the Furka Pass where two stops were made during the long drive from Zürich. Below the Tiefenbach hotel were rich slopes where we examined such typical plants as *Campanula barbata*, *Rhododendron ferrugineum*, *Tofieldia calyculata* and *Trifolium montanum*, and were delighted to find *Polygala chamaebuxus*. *Pedicularis tuberosa* was the yellow-flowered member of this genus on the acidic soils of this region. At the top of the pass, *Soldanella alpina*, *Alchemilla pentaphylla* and *Cardamine resedifolia* marked areas where the snow had only recently melted.

The first two days at Bourg St Pierre were spent in splendid weather mostly in the vicinity of the village. Two excursions were made in the Valsorey where several uncommon British plants were frequent, notably *Phyteuma spicatum*, *Peucedanum ostruthium* and *Polystichum lonchitis*, and *Lilium martagon* under a clear blue sky kept the photographers busy. During the ensuing thunderstorm which enlivened the evening, the smaller Caryophyllaceae and *Euphrasia* spp. were identified.

An afternoon at the Great St Bernard Col produced four buttercups: *Ranunculus acontifolius*, *R. pyrenaicus*, *R. acris* subsp. *steveni* and *R. glacialis* in both white and pink forms, the latter being noticeably more vigorous. *Gagea fistulosa* also occurred above the lake. Across the border into Italy *Doronicum grandiflorum* occurred in abundance on an area of block scree, not far from a small patch of *Senecio doronicum*, a far less spectacular plant. On an area of scree six dwarf willows and *Adenostyles leucophylla* were among plants identified, while a stream-side produced *Pedicularis rostrato-spicata*, the most handsome of the seven members of this genus seen during the week.

After the earlier excellence of the weather, it was disappointing to wake up the next day to find the village shrouded in cloud, and armed with pullovers and anoraks we hurried south through the St Bernard tunnel to the relative warmth of Italy.

On a south-facing slope in the Val di Gran San Bernardino lists made were at first surprisingly familiar to some of the party: *Artemisia campestris*, *Silene otites*, *Phleum phleoides*, *Medicago falcata* and *M. × varia* with *Herniaria glabra* and *Alyssum alyssioides* on bare patches. However the occurrence of *Melica ciliata* and *Bupleurum ranunculoides* helped us to become re-orientated. A short stop was made above the Val d'Aosta to admire *Eryngium campestre*, and the rest of the day was spent in the Cogne Valley near the Gran Paradiso National Park. Here the flora had a much more southern appearance with *Juniperus sabina*, *Ononis natrix* and *Astragalus exscapus* on the hill-sides, and areas of *Myricaria germanica* on the shingle ridges by the river.

Monday began with a quick exploration of the sadly overgrown alpine garden of La Linnaea, belonging to the University of Geneva. Only the stronger growing plants

have survived, and beautifully inscribed labels are all that remain of the less invasive plants. From this rather melancholy spot we drove down the valley to Vichères and then worked our way up the Combe de l'A. Below the tree-line the streamside path was blocked by a tangled mass of spruce trees brought down by a recent avalanche, one of many which occurred in this area of the Alps during the spring. Above it the water flowed beneath deep snow beds, an indication of both the severity of the previous winter and the cool summer. In the spruce forest the ground flora was dominated by *Melampyrum sylvaticum* and *Luzula nivea* with occasional plants of *Epipactis atropurpurea*, *Ajuga pyramidalis* and *Cicerbita alpina*. Above the spruce was a small wood of *Alnus viridis* with *Adenostyles alliariae* beneath.

The stream which flows down the valley follows a fault line, one which must have caused considerable displacement, as the western side is of steep limestone, in contrast to the darker, acidic rocks opposite. Once across on to the limestone, the flora changed equally abruptly, and an area of scree produced *Coronilla vaginalis*, *Kernera saxatilis*, *Polygala alpestris*, *Helianthemum alpestre* and *Pedicularis adscendens*, while the lime-flushed ground by the stream had *Viola rupestris*, *Veronica aphylla*, *Draba aizoides* and *Pinguicula alpina* amongst its many plants.

The weather on the last day, during which we returned to Zürich, was more like a caricature of an English November, and crossing the high pass at 'snail's pace' in thick mist meant that a brief stop to examine *Digitalis grandiflora* and *Campanula thyrsoidea* was all the botanising possible.

Although no completely exhaustive list was kept during the week, over five hundred plants were identified, and a wide range of alpine and sub-alpine habitats examined.

G. TUCK

#### ENGLAND

##### CONSERVATION OF CHALK GRASSLAND IN BEDFORDSHIRE. 15TH-17TH MAY

The object of this field meeting, which was attended by 34 members and visitors, was to study problems of the conservation of chalk downland in various stages of its development. Extremes were seen in two small nature reserves. The first, visited on the Saturday morning, was Knocking Hoe National Nature Reserve, claimed as virgin downland and of great interest for its assemblage of rare plant species. As it is now undergrazed, experiments are in progress to estimate the value of mowing as an alternative to grazing. The second, visited on the Sunday morning, was Totternhoe Knolls Local Nature Reserve, a medieval castle site with spoil heaps of previous workings for Totternhoe Stone. Here the turf is at most six centuries in its development and until management was undertaken by the Bedfordshire and Huntingdonshire Naturalists' Trust it had become overgrown with scrub. Sheep will be re-introduced, which may maintain the population of the Man and Musk Orchids but destroy butterflies in their pupal stage. To remedy this, grazing will be at different times of the year in fenced-off sections. At a third site, Barton Hills, visited on Saturday afternoon, there is a greater expanse of scenically attractive downland which had until about twelve years ago suffered badly from scrub invasion. Part was ploughed for a ley on which sheep were put and at a later stage allowed to graze on the downland from which scrub had been cleared. Much of the site is now overgrazed, to the benefit of the flowering plants but to the detriment of the insect life, which is the subject of continuous study both on the downland and in enclosures. Attention was drawn from time to time in these visits to the need to have a clear objective in conservation.

In the passage to and from these sites, a chalk stream, a beech plantation and arable fields were studied in less detail. The meeting ended with a visit to beech woods near Tring which are probably the eastern limit of natural woodland in the Chilterns.

J. G. DONY & T. C. E. WELLS

GUERNSEY. 29TH MAY-7TH JUNE

The exigencies of term-time meant that only about 25 people took part in the follow-up of the previous year's visit to Guernsey, and as a result, under 60% of the Island's squares were listed. But this perhaps made the haul all the more remarkable. The gathering again had local support. H.E. The Governor regretted he was away and could not attend, but invited a party into the grounds of Government House, an area hitherto unvisited, where 140 plants were listed. There was a special service at St James the Less, with the Lesson read by the Leader; a joint meeting with the Société Guernesiaise on the first Friday evening, at which plants were discussed and transparencies shown; and several Guernsey people participated in the field for some or all of the time.

What was found? Nothing dramatically new, but plenty of value in filling gaps and getting greater accuracy. For example, *Aphanes arvensis* had hitherto always proved to be *A. microcarpa*; the typical subspecies of *Pilosella officinarum* was at last detected in several places; and '*Juncus bulbosus*', not noted for nearly half a century, when found at Saints Bay proved to be *J. kochii*. Better, new indeed to the Channel Islands, were two fine tufts of *Fumaria purpurea* on soil dumped, from where? Everyone seemed delighted at the perennial *Amaranthus deflexus* in good quantity at the Vale Power Station, Sampsons, which is therefore no longer only a Jersey plant. The same is true of *Ranunculus ficaria* subsp. *ficariiformis* at Caledonia; and of *Potentilla anglica*, at last. *Montia perfoliata* is almost certainly new to Guernsey. There was a 1929, unvouched, record at La Favorita, in St Martins, but only *M. sibirica*, which was noted nowhere in the Island till 1968, is now there (where another new weed was *Meconopsis cambrica*). *M. perfoliata* was in fact in at least three different spots in the north of the island, one of them, again, on dumped soil, which begs the question. The *Carpobrotus* with small pink flowers, which has been erroneously called *C. acinaciformis* (but may prove to be *C. glaucescens*), was found on the north coast. Previously it was known only in Alderney and Herm. *Ribes uva-crispa* was spotted in a hedge, also new to the Island; and half-a-dozen or so casuals and throw-outs were noted for the first time, plants such as *Hypericum calycinum*, *Lupinus polyphyllus*, *Atriplex hortensis*, *Spiraea japonica*, *Chrysanthemum maximum* and *Polygonatum × hybridum*.

No less, or even more, satisfactory, were the plants refound after many years, many decades even. *Carex laevigata*, of which there were only two, 75- and 80-year-old, records was found well away from its previous, long-lost, locality; and who would have guessed that the next day it would also be found in two more places. A chance deviation at last located *Sambucus ebulus*, still in the area where it was known in the 1830's. *Peplis portula* and *Apium inundatum* were half a century ago in a pool near Fort Doyle, where there is now no pool. Both were found in a small pond hidden among gorse on the opposite side of L'Ancrese Common. *Silene alba × dioica*, also collected, had only one earlier definite record, in 1907.

But most satisfactory of all was the *Gaudinia* story. This grass is the subject of a separate note, so suffice it here that specimens were produced from the area of its only previous, 1928, record. Wholesale search the next day failed to locate the plants. But later a patch 20 yards across was found two miles away in native turf on L'Ancrese Common.

To be fair, several yearned-for plants were not refound. *Gaudinia* came to light when *Ononis reclinata* was being re-re-searched for (experience in Alderney suggests it was having a year off, but it does seem to be rarer). None of the three old localities for *Trifolium strictum* seemed still to hold it, while surely Druce's 1906 specimen of *Hornungia* must be mis-labelled. *Erodium glutinosum* remains unconfirmed—all the plants like it were *E. cicutarium* subsp. *dunense*; *Myosurus* defeated much search, although its locality still seemed suitable.

Nor was *Geranium pyrenaicum* to be seen in the south-east; but it was in the north-

west, near to where *G. cf. submolle* was recorded in 1968, which itself was found in a brand new locality, on a hedge bank 1,000 yards to the north. *Stellaria graminea* was yet again searched for in vain in the south-east, but was discovered  $\frac{3}{4}$  mile to the west, also in a new place. *Sanguisorba minor* subsp. *minor*, long known in the north-west, was seen in the north-east and, surprise, surprise, on the cliffs on the south-west.

*Allium roseum* was gay and increasing in its 1957 locality at Rousse and also found in two new places. *A. neapolitanum* proved not to be rare, nor *Nothoscordum inodorum*, in sweet fragrance at the foot of at least half a dozen walls. The very rare and elusive *Anthyllis vulneraria* was seen *in situ*, where it proved to be of the same subspecies, *corbieri*, as in Sark and different from those in Jersey and Alderney. *Ranunculus parviflorus*, *Sisymbrium orientale*, *Trifolium squamosum*, *Vicia bithynica*, *V. lutea* and *Lactuca serriola* were all in new places. On one of the two available dumps in the island were bushes of *Centaurea diluta* up to 4 ft high. Two good colour forms seen were Hyacinth Blue (H.C.C.40) *Polygala vulgaris* and Rose Madder (H.C.C.23/2) *Silene gallica*.

Useful work was done recording fresh places for such plants as *Trifolium occidentale*, *Spergularia bocconeae*, *Asparagus officinalis* subsp. *prostratus* and *Gladiolus byzantinus*; and the oh, so slow spread of *Senecio squalidus* and *Veronica filiformis* was noted. *Lavatera cretica* showed itself widespread and often plentiful. *Orchis laxiflora* was mapped in some detail. It is no longer in some places where it used to grow, one at least of which had been ploughed, for potatoes; and it was said to be a bad year for orchids anyway. But even so, it was found in over half a dozen different places, with perhaps 2,500 plants in all—over 2,200 of them in one district of St Peter-in-the-Wood, beautifully mapped by Mrs BurrIDGE. The albino re-appeared. But *O. morio* could not be refound, nor its hybrid, *O. × alata*.

There was much else. In all, perhaps 9,000 records were entered in the cards, helping in the knowledge of distribution; but some task to assess and enter! With so much useful and enjoyable work, and so much obviously still awaiting finding in these 24 square miles, is it surprising that the visit is to be repeated again in 1971, from 9th–17th July?

Finally, thanks are due to at least 16 specialists, so far, who have confirmed or made all the important critical examinations.

D. McCLINTOCK

#### WESTMORLAND. 11TH–12TH JULY

This field meeting was arranged to satisfy a number of members who had had their botanical appetites for v.c. 69 whetted during the A.G.M. excursion in May 1969.

On the Saturday morning we visited Cunswick Scar, near Kendal, a continuation northward of the better-known Scout Scar. We started well by finding *Stachys × ambigua* and *Hieracium strumosum* in the car park. The latter is here near its northern limit as also is *Hippocrepis comosa*, which was growing in profusion along the scar. The Sorbi (*S. lancastriensis*/*S. rupicola*) growing on the face of the scar provoked much discussion; *Carex ornithopoda* was found in the shallow limestone grassland. We descended to Cunswick Tarn to admire *Cladium mariscus*. After lunch some drove to Sunbiggin Tarn and climbed up to the limestone pavement to the north, finding *Dryopteris villarii* and *Thelypteris robertiana*. The rest of the party looked for alpinism near the road at the head of Longsleddale; as is so characteristic of the Lake District, *Alchemilla alpina* and *Cryptogramma crispa* were growing in profusion.

The more energetic of the party ascended the fells above Kentmere on the Sunday. The weather was superb and there were sufficient of the Lake District rarities to keep the alpine enthusiasts happy: *Epilobium alsinifolium*, *Myosotis brevifolia*, *Hieracium anglicum*, *H. leyi*, *Juncus triglumis* and *Salix herbacea*.

The second group visited Roudsea Wood, by the Leven estuary, and Roanhead dunes, by the Duddon. These had also been visited the previous year. At Roudsea



the Nature Conservancy wardens described the woodland management policy and discussed the problem of saline flooding from the estuary at high tide. The dunes were disappointing as a result of the June drought. *Pyrola rotundifolia* subsp. *maritima* and *Epipactis palustris* were still fairly abundant but *E. dunense* was virtually absent.

G. HALLIDAY & L. T. HYDE

#### EAST SUFFOLK. 3RD-5TH JULY

The purpose of this meeting was to collect records in underworked areas of East Suffolk for the Nature Conservancy, under the leadership of Mr P. Nicholson, former deputy regional officer, East Anglia.

Thirteen members met at the 'Swan Hotel', Southwold, on Friday evening, when Mr Nicholson outlined the geology of the Sandlings area of Suffolk. Colour transparencies were used to illustrate local problems of conservation.

On Saturday, members were divided into four groups. One group visited Benacre Broad where *Lathyrus japonicus* was noted. Among other places visited were Iken heath and marsh, and Fen Wood. Each group visited one or two hornbeam coppices and notes on these were compared in the evening. It was agreed that the ground flora was altogether very uniform and sparse, owing to the poor drainage and the density of the canopy. An exposure value of 5½ was recorded in one wood. An area near one coppice had been cleared and replanted with poplar, and had become recolonised with a large number of marsh and heathland species. *Sorbus torminalis* was found, as well as *Allium ursinum* and *Sedum telephium*. Three members were fortunate enough to find *Trifolium ochroleucon*, en route.

On Sunday, members collected records for the Suffolk Naturalists' Trust at their newly acquired reserve at Hollesley heath. The party then drove to Redgrave fen. *Utricularia vulgaris*, *Rumex palustris* and *Epipactis palustris* were among the many interesting plants listed. The lateness of the flowering of *Gymnadenia conopsea* var. *densiflora* compared with its dry chalkland counterpart, was remarked upon. It was interesting too, to be able to compare the calcicole and calcifuge floras, respectively, of the fen and an adjoining area of wet, acid heath. A few members went on to another fen to try and refind *Liparis loeselii* but were disappointed to discover that the fen had been drained.

Other plants of interest found during the meeting were: in woods *Asplenium adiantum-nigrum*, *Crassula tillaea* and *Iris foetidissima*; in a salt-marsh *Sonchus palustris* and on Southwold shore *Lupinus arboreus*.

H. M. PROCTOR

#### WALES

##### KIDWELLY, CARMARTHENSHIRE. 13TH JUNE

18 members and guests attended this meeting. The vegetation of the disused ports—our intended objective—was desiccated by drought, wherefore the meeting was switched to Towyn Burrows. Under Corsican Pine in the Forest a patch of *Pyrola rotundifolia*, forward in bud, measured some 8 ft by 10 ft, whilst *Ophioglossum vulgatum* and *Eleocharis quinqueflora* had enough moisture in the rides for survival. On the open dunes, though many *Dactylorhiza* species were in abundance, the *Orchis morio* of a month earlier had gone to ground completely as also had *Centaureum pulchellum* and *C. littorale*. It was too early for *Gentianellas* or for *Liparis loeselii*. *Calystegia soldanella* was much reduced but great mounds of *Lathyrus sylvestris* were unharmed by the drought.

A pool which a month earlier had held *Ranunculus tripartitus* had disappeared without trace save for one disconsolate frog.

At nearby Pinged Halt *Linaria supina* had seeded freely despite British Rail's dose of weedkiller. Thence to Moat Llandyry where the party was entertained to a mag-

nificent tea by the kindness of Mr and Mrs Tallowin. We then toured their interesting wet woodlands (*Galanthus nivalis* and *Impatiens glandulifera* extensively naturalised) and took *Ranunculus trichophyllus* and *Potamogeton pusillus* from their pond. A torrential thunderstorm made a sudden end to the meeting.

Mrs H. R. H. VAUGHAN

#### SHROPSHIRE UNION CANAL (MONTGOMERY BRANCH). 14TH JULY

A party of 11 met to record plants of the S.S.S.I. sector between Tan House bridge and Burgedin Lock and of the Guilsfield Arm. A stop was made where road and canal run parallel to see *Ranunculus circinatus* in flower and look for *Luronium natans* previously located here but not refound.

In the S.S.S.I. sector the banks were partly choked with *Glyceria maxima* despite which plants such as *Cardamine amara*, *Oenanthe fistulosa*, *O. crocata*, *Rumex hydro-lapathum*, *Scrophularia aquatica*, *Butomus umbellatus*, *Sparganium erectum*, *S. emersum*, *Acorus calamus*, *Berula erecta* and *Mimulus guttatus* were well represented. Sedges included *Carex pseudocyperus*, *C. riparia*, *C. acutiformis*, *C. paniculata*, and *C. muricata*. *Hypericum tetrapterum* here supplants the locally more common *H. maculatum*.

Eleven species of *Potamogeton* have been recorded but owing to the heavy growth of *Ceratophyllum* only four were collected on this occasion: *Potamogeton natans*, *P. compressus*, *P. obtusifolius* and *P. friesii*. Three species of *Lemna* were found, *Lemna minor*, *L. polyrrhiza* and *L. trisulca*, and in an adjacent marsh *Oenanthe aquatica* grew with *Stellaria palustris*.

In the Guilsfield Arm *Luronium natans* was found but not *Dactylorhiza praetermissa*, present here in 1969. About 154 plants were recorded in the S.S.S.I. and 56 along the Guilsfield Arm but time prevented a full coverage of the latter, which urgently needs clearance of overgrown alders.

Mrs H. R. H. VAUGHAN

#### NATIONAL MUSEUM OF WALES, CARDIFF. 5TH SEPTEMBER

A small group of members was conducted round the 'Man and the Countryside' exhibition, the Museum's main contribution to European Conservation Year 1970, occupying the whole of the Main Hall and parts of the Botany and Zoology Galleries and the Library, from 1st July to 16th September. The exhibition illustrated many aspects of man's impact upon the animals, plants and scenery of the countryside from prehistoric times to the present day. It included exhibition material provided by Welsh Region members and alluded to the work of the B.S.B.I. in recording and mapping the flora of the British Isles.

'Man and Nature', a photographic exhibition prepared jointly by the Nature Conservancy and Kodak Ltd, supplemented 'Man and the Countryside'.

The party visited the Welsh National Herbarium, where members had an opportunity to see the extent of the collections and to examine records and specimens. For the duration of 'Man and the Countryside', part of the Herbarium was used as a reference library, where visitors could read books and numerous pamphlets on topics relating to conservation and the countryside.

S. G. HARRISON

#### SCOTLAND

##### ISLAND OF BUTE. 23RD-25TH MAY

This meeting was organised at the request of members of the Buteshire Natural History Society, and the Andersonian Naturalists of Glasgow were invited to attend.

A party of 14, including the vice-county recorder, travelled to the island, and was joined by 3 local ladies, members of the Buteshire Society.

On 23rd May the party travelled to St Ninian's Bay, where two groups were formed to cover as much as possible of the shore. The area yielded over 160 species, including *Asplenium marinum*, *Ranunculus bulbosus*, *Cochlearia danica*, *Hypericum elodes*, *Carum verticillatum*, *Oenanthe lachenalii*, *Ligusticum scoticum*, *Samolus valerandi*, *Mertensia maritima* and *Listera cordata*.

A small wooded area south-east of Loch Quien proved to have a very limited ground flora.

In the evening, at the invitation of members of the local society, the visitors assembled at the Museum, Rothesay. Here they were welcomed by Mr Harrison, president of the society, and shown round the premises, and later Miss Marshall and Mr Stephen, two society members, showed slides.

The following day opened with a visit to deciduous woodland west of Kames Bay, where nearly 90 records were made; the most noteworthy were *Phyllitis scolopendrium*, *Thelypteris phegopteris*, *Hypericum androsaemum*, *Quercus petraea*, *Betonica officinalis*, *Listera ovata*, *Dactylorhiza purpurella*, *Poa nemoralis* and *Milium effusum*. The steep wooded slopes above the Ettrick Burn in Glen More added *Polystichum aculeatum*, *Hypericum tetrapterum* and *Melica uniflora* to the day's total.

In the afternoon the south end of the island was visited. *Parietaria diffusa* was noted on the wall of Kingarth Church, and the rocky coast of Dunagoil Bay yielded *Polypodium interjectum*, *Ligusticum scoticum*, *Allium vineale*, *A. ursinum*, *Orchis mascula* and *Carex otrubae*. At the little un-named loch east of St Blane's Hill *Nuphar lutea*, *Typha latifolia* and *Carex paniculata* were recorded.

On the final day short visits were made to Loch Ascog, Kirk Dam and Greenan Loch. A small colony of *Ceterach officinarum* was found near Kirk Dam, while at Greenan Loch *Nymphaea alba*, *Nuphar lutea*, *Apium inundatum* and *Potamogeton alpinus* were noted. At Balnakailly Wood, in the north end of the island, young shoots of *Carex laevigata* were showing, and several interesting woodland ferns were seen; these included *Hymenophyllum tunbrigense*, *Dryopteris aemula*, *Thelypteris phegopteris* and *T. dryopteris*.

R. MACKECHNIE

#### GLENDARUEL, ARGYLL. 14TH JUNE

The object of the excursion, at which 8 members and friends attended, was to examine the flora of the serpentine outcrop in Glendaruel, and in particular to try to confirm a suspected occurrence of *Orchis morio*. Unfortunately the *Orchis* turned out to be *O. mascula*. Other species seen were *Cardaminopsis petraea*, which is fairly common on all the serpentine cliffs, and *Dryas octopetala*, which is present in small quantity and confined to a single crag.

H. A. MCALLISTER

#### WEST LOTHIAN MOSSES. 11TH JULY

Three West Lothian mosses were visited. In the morning two Edinburgh members visited Raizie Moss which is two miles west of Blackridge. It is a very fine raised bog with an abundance of *Oxycoccus palustris*, *Drosera rotundifolia* and *Narthecium ossifragum*.

In the afternoon when the party was joined by two members from Glasgow, Easter Inch Moss, near Blackburn, was explored. This moss had previously been worked for its peat by a Dutch company and now West Lothian County Council are draining it with a view to converting the area into recreation grounds. It was fascinating to examine the plant remains in the successive vegetation layers which the 12 feet deep



drains had exposed. The County Council have, however, given an area to the Lothians Branch of the Scottish Wildlife Trust as a reserve. This area comprises a birch wood in which *Pyrola minor* was abundant; a tract of moor on which *Drosera rotundifolia* was plentiful; three ponds and adjacent marshes in which *Potamogeton natans*, *Hippuris vulgaris*, *Sparganium erectum*, *Potentilla palustris*, *Myriophyllum alterniflorum*, *Carex rostrata*, *C. hirta*, *C. nigra* and *C. curta* occurred among many other plants; and a pasture where *Platanthera chlorantha* was one of the most abundant species—some 300 plants. *Salix pentandra* and *S. repens* were also present.

Tailend Moss is two miles south-east of Bathgate. This is also a fine raised bog. There are also two ponds and a marsh. In the larger of the ponds fine stands of *Scirpus lacustris* and *Typha latifolia* were noted. *Potamogeton natans*, *Sparganium erectum*, *Hippuris vulgaris*, *Potentilla palustris* and *Salix pentandra* were also recorded. On the moss *Oxycoccus palustris* was found in several places together with *Narthecium ossifragum* but *Drosera rotundifolia* was very rare.

E. P. BEATTIE

#### FORT WILLIAM, INVERNESS-SHIRE. 11TH–18TH JULY

The meeting started on Saturday, 11th July, at Banavie Cross where 10 persons assembled, of whom only the leader and one other was a member of the B.S.B.I. or B.S.E. The party repaired to Glen Loy and in showery weather recorded the 5 × 5 km square 27/18 SW. No plants of great interest were seen but there was an interesting contrast between the south-facing and north-facing sides of the aqueduct carrying the Caledonian Canal across the Loy River.

The following day was wet but four keen botanists (three of whom were society members) submitted to a soaking in Glen Righ.

On Monday, 13th July, a party of 8 set off for Glen Roy where 27/38 NW and 27/39 SW were explored.

Tuesday, 14th July, was hot and sunny but with a strong wind and mist on the hills. A party of 8 explored the 'Dark Mile' of Achnacarry and the shores of Loch Lochy, all in 27/18 NE. *Trientalis europaea* and *Goodyera repens* were two plants seen.

On Wednesday, 15th July, a small party of 4 visited Blarmafalach, where a seam of limestone in 27/06 NE gave a variety of plants including *Listera ovata*, but *Ranunculus bulbosus*, said to be near here could not be found.

Thursday, 16th July, promised to be the best day of this stormy week, and for an hour or two Ben Nevis was clear. An ascent into Coire Leis was made by a party of 5, where *Luzula arcuata*, *Cerastium cerastoides* and others were recorded for 27/17 SE.

On Friday, 17th July, a party of 8 botanized around the head of Loch Shiel whenever it was reasonable to get out of the cars. As the rain increased an early return was made.

Saturday, 18th July, was again inclement and abortive attempts to botanize were quickly abandoned.

Generally the weather set the limits to the work accomplished in the week, but an appreciation of the interest and energy of the Natural History Society at Fort William should be placed on record. It was also interesting to meet a conservation-minded landowner who was reluctant to allow publication of plant records found on his land.

A. A. SLACK