Reports

FIELD MEETINGS 1969

ENGLAND

GUERNSEY. 11TH-20TH APRIL

A visit by any Botanical Society to Guernsey was very long overdue, none having ever before taken place to this rich and underworked island. Since Babington's time 130 years ago streams of visitors have come to see the rarities and there have been few resident botanists with time and skill to make continuing observations since Marquand's Flora was published in 1901. As a result, the run-of-the-mill plants have been almost wholely neglected, and areas away from those known to be good have been unsearched.

The extent to which this was so was demonstrated when, in nine days in April, no less than 18 new taxa of reasonable status were added to the island list plus 13 dandelions and about 25 Narcissi. A further 10 were recorded which need re-seeing for assessment of wildness or name—who will undertake *Erophila*? There was also a hairy form of *Vicia lathyroides*, which Dr Coombe, who was in Guernsey at the time, has taken for study. As to wildness, how should one evaluate two undoubted and well grown seedlings of *Olearia forsteri* in an old quarry? The Narcissi cultivars were named by local growers and samples exhibited, so that gatherings could be matched. They made a remarkable living museum of plants cultivated commercially up to 70 years ago, which have naturalised themselves gayly and often plentifully in fields and hedges without, apparently, having in any way hybridised or been modified.

This achievement was helped by a force of over 60 participants at one time or another, with about 40 out on most days. Between them, these visited at least once each of the 79 squares on the island map and amassed about 10,000 records. That there were not more was due partly to a commendable caution in noting only what recorders were sure of, and partly to the extremely late season. As an example, only a fortnight later in 1958 *Orchis laxiflora* was in good flower, whereas in 1969 nobody even spotted a rosette.

Nevertheless, much useful basic work was done, especially among the more ordinary plants. Of the additions, the best was, at last, a small patch of *Poa bulbosa* on the western side of L'Ancresse Common. Mr A. Copping knew it in Suffolk, but deserves credit for recognising its barely sprouting bulbils. Since no-one subsequently revisited it, it is uncertain if it is of the viviparous form, but it looked likely to be so.

More remarkable perhaps was a larger patch, in Cobo, of a white-flowered *Romulea*, larger than the well-known *R. columnae* (of which an albino example was seen on L'Ancresse) and skilfully named by Mr R. D. Meikle as *R. rosea* Eckl. He sent the specimens to Dr de Vos at Stellenbosch who confirmed the identification. A separate note on this interesting plant will be published later. Clearly it had been in this locality for a considerable time, there being corms and seedlings at all stages of vigorous growth. A New Zealand fern, *Microsorium diversifolium*, is grown in a few Guernsey gardens, but a good colony found on a wall was well away from any known in cultivation and happily naturalised. The source of *Cyrtomium falcatum* on the other hand was clearly in a bed above a retaining wall, behind the Royal Hotel.

Lady Anne Brewis and her uncle, the Hon. L. Palmer spotted *Prunus cerasifera* in three or four hedges in the south, and *Sedum stoloniferum*, which is rarely to be seen anywhere, in a wild area east of the reservoir. *Montia sibirica, Tellima grandiflora* and *Trachystemon orientale* were found as weeds in shrubberies etc., *Anemone nemorosa*

'Vestal' was in hedges near Town, and several good plants of *Clematis balearica* on one or two walls. There were three or four tall old trees of *Salix daphnoides* in a field at Les Maingys—but is this species ever other than planted? *Salix basfordiana*, whatever the category of that taxon should be, was sorted from *S. fragilis* following the lead of Mr and Mrs Howitt (who considered *S. aurita* × *cinerea* to be frequent). The bamboos *Arundinaria anceps* and *Sasa veitchii* are better, both of them spreading vigorously by rhizome, the former into quite a miniature forest. *Ficus carica* was recorded three times as apparent seedlings on walls. This is a regular wall plant further south and these occurrences need closer investigation. A small colony of *Myosotis sylvatica* was an unexpected find in arable fields east of the Airport. *Veronica sublobata* was looked out for, and plants matching it seen in two places.

All these taxa are new to Guernsey. Many more were seen in new places, including a sixth plant of \times *Asplenophyllitis microdon* in a fifth locality, or rediscovered after a long interval, like *Luzula forsteri*—all this as well, of course, as the standard seasonal rarities. This experience suggests that there are plenty of species remaining undetected which might readily be refound. But the intention has to remain to finish field work on the island for the Flora in 1970, and with it a last chance of easy and wanted records.

The excursion began with a joint meeting with the Société Guernesiaise and a packed hall of 200, when Mr McClintock commented on a superb set of colour transparencies of Guernsey plants taken by the island's colour photographic club, Spectrum. The Club has in hand the business of photographing every wild plant in Guernsey, which would make a unique record. The States of Guernsey also entertained the participants to a fine Vin d'Honneur, a generous and much appreciated welcome, while Elizabeth College gave us the hospitality of its laboratory, and car park. Such kindnesses, and all the work that was put in generally, gave cause for much gratitude. D. McCLINTOCK

ROANHEAD AND ROUDSEA, NORTH LANCASHIRE. 4TH MAY

On the Sunday following the Society's Annual General Meeting, members and guests drove west from Grange-over-Sands to the Roanhead sand-dunes on the east side of the Duddon Estuary. It was a dull, overcast day and the exceptional lateness of the spring meant that very few of the many specialities of these dunes were evident. *Equisetum variegatum* was plentiful in the rather dry dune slacks. *Viola tricolor* and the dwarf sand-dune form, subsp. *dunensis*, of *Valerianella locusta*, were in flower, the latter being much admired. The rich dandelion flora included *T. faeroense*, *T. brachyglossum* and *T. euryphyllum. Pyrola rotundifolia* subsp. *maritima* was frequent and a few stems of *Corallorhiza* were found.

After lunch the party moved on to Roudsea Wood on the east side of the Leven estuary where we were fortunate in being taken around the Reserve by the Nature Conservancy staff. Specialities which we saw included *Carex digitata*, a few vegetative clumps of *Carex flava* and *Andromeda polifolia* in full-flower on the Holker mosses.

G. HALLIDAY

MIDHURST, SUSSEX. 24TH-26TH MAY

This meeting was held jointly with the Sussex Naturalists' Trust for the collection of records for the Sussex Flora survey. The beautiful and interesting area around Midhurst with its diverse habitats ranging from chalk downland to acid heath was chosen because it was remarkably underworked.

Twenty-six members of the B.S.B.I. and/or the S.N.T. attended the meeting and a hard-core of experienced recorders enabled nine or ten parties to record each day. Twenty-seven two-kilometre 'tetrads' were visited, resulting in 4485 records.

The heavy rain of the first morning proved to be of short duration and the parties enjoyed excellent weather for the rest of the meeting.

Through the kindness of the Headmaster, the dining-room of the Lower School, Midhurst Grammar School, was available in the evenings, where the abundance of

tables and the excellent lighting greatly facilitated the examination of specimens and the completion of cards. Use of the kitchen enabled welcome refreshments to be supplied. Several local Trust members, who were unable to join the parties in the field, attended the evening sessions; it is hoped that some of these will have been encouraged to continue recording in this area.

The records made during the meeting form a valuable addition to knowledge of the distribution of the flora and the Sussex Flora Committee is grateful for the help given by the B.S.B.I.

P. C. HALL

FLATFORD MILL, ESSEX. 28TH JUNE

About 40 members met at the Field Centre for an excursion devoted primarily to grasses and ably led by Dr C. E. Hubbard; 55 species were seen.

The meadows on the north bank of the River Stour contained anthocyanin-less variants of Cocksfoot and Yorkshire Fog, and on the edge of the tidal reaches possible hybrids between *Agropyron pungens* and *A. repens* were noted. *Alopecurus bulbosus* was seen scattered on the river bank and brackish marshes on the south side of the river. Crevices in the sluice of the sea-wall supported *Puccinellia fasciculata* with both lax and compact inflorescences.

In Stour Wood a distinctive woodland variant of *Anthoxanthum odoratum*, with lax inflorescences, was observed and an interesting mixed population of *Holcus mollis* and *H. lanatus* was seen, though no certain interspecific hybrids were recognised.

Finally, at Wrabness Dr Hubbard and Dr Marchant recounted the interesting story of *Spartina* \times *townsendii*. Although the *Spartina* plants were not in flower, it seemed likely that both the sterile diploid *S*. \times *townsendii* and its fertile polyploid derivative were present.

B. M. G. JONES

EAST NORFOLK. 26TH–27TH JULY

Thirty-two members joined this joint excursion with the Norfolk and Norwich Naturalists' Society. Saturday morning was spent on the sand dunes at Winterton where *Corynephorus canescens* and *Ammocalamagrostis baltica* were frequent on the drier areas. In the dune slacks there was a surprisingly calcifuge flora, *Erica tetralix*, *Nardus stricta* and *Sieglingia decumbens* occurring widely. Much *Calamagrostis canescens* was seen but only an occasional patch of *C. epigejos*, raising a doubt as to the parentage of *Ammocalamagrostis*. In one area of the slacks *Pyrola rotundifolia* subsp. *rotundifolia* was found, not the previously recorded dune form, subsp. *maritima*, found on the west coast.

Horsey maritime fen, visited in the afternoon, proved very dry. However, *Osmunda* regalis was seen, looking out of place among the sand hills, and more *Ammocala-magrostis* was found, this time growing in the wetter *Calamagrostis* habitat.

On Sunday morning at Horsey the party was shown *Dryopteris cristata* growing with *Thelypteris palustris* and *Dryopteris carthusiana*, and large stands of *Sonchus palustris* and *Peucedanum palustre* were seen, complete with caterpillars of the Swallow-tail butterfly.

The final visit of the weekend was to Hickling where *Naias marina* was fished from the dikes and a large area of flowering *Utricularia vulgaris* admired.

G. TUCK

BELVOIR AND CHARNWOOD FOREST, LEICESTERSHIRE. 1ST-3RD AUGUST

A total of 22 members and guests attended this meeting. On the Friday evening all assembled at the meeting headquarters in Loughborough for welcome and briefing. Mr I. M. Evans gave an account, illustrated by colour slides, of Leicestershire and its flora, and explained how and why the present Leicestershire Flora Committee had come into being. The Rev. A. L. Primavesi outlined the methods being used for

recording, and explained the procedure for recording in the field. Recording areas were then assigned and record cards distributed.

On the Saturday morning members dispersed to unrecorded tetrads in the northeast of the County. This was a beautiful summer day. The whole party reassembled for picnic lunch at Eastwell, by courtesy of Mr J. M. Stanley. After a further spell of recording all returned to Loughborough where the whole party had dinner. After dinner each group reported on their experiences; all had succeeded in recording well over 100 species in their tetrads, some recording over 200.

On the Sunday morning, in pouring rain, we were led by Mrs P. A. Candlish round the Ulverscroft Nature Reserve, by courtesy of the Leicestershire Trust for Nature Conservation. Here we saw regions of unspoilt woodland, marsh and meadow, and were introduced to many of the Charnwood plants which are rare or absent in other parts of Leicestershire. In spite of the rain, all found this visit interesting and enjoyable.

After picnic lunch, taken in the cars because of the rain, all went to The Brand, by courtesy of the Lord Lieutenant of the County, Colonel Sir Robert Martin, who welcomed us on arrival. By this time the weather had improved, and we explored these beautiful grounds in sunshine, led by Mr P. H. Gamble. In the formal parts of the grounds it was significant that the party seemed to be more interested in the garden weeds than the cultivated plants, apart from some fine clumps of *Osmunda regalis* thoroughly naturalised by the streams. Most of The Brand, however, is wild rocky woodland, with long-abandoned slate quarries. Some of the less active members of the party were daunted by the feats of mountaineering expected of them, but all found interest in a fascinating assembly of plant species. It was curious to find plants such as *Origanum* and *Carlina* growing within a few feet of *Calluna* and *Teucrium scorodonia*, and apparently on the same soil. We also saw *Umbilicus rupestris* in what is believed to be its most easterly native station.

We were fortunate in having Dr Dony present at this meeting, with his wide experience of work on Local Floras.

A. L. PRIMAVESI

CONFERENCE EXCURSION. 21ST SEPTEMBER

About 45 members attended this outing, which in the morning visited the Forestry Commission Lands at Alice Holt, Bentley, Hants, where Mr M. Brown showed the party some of the types of planting and management carried out by the Commission and discussed the history of the forests. An area of waste ground provided some interesting ruderals and aliens including *Galinsoga parviflora*, *G. ciliata*, *Antirrhinum orontium* and *Onopordum acanthium*.

After lunch the party visited Thursley Common Nature Reserve where the warden, Mr R. M. Fry, explained some of the difficulties of management and the recovery of the vegetation since the war when the site was used as a tank training area. Some of the interesting features included bogland from which 14 species of *Sphagnum* have been recorded and a large area dominated by *Narthecium ossifragum. Lycopodium inundatum* was found in abundance. Other interesting species seen included Utricularia *minor*, *Rhynchospora fusca*, *R. alba* and *Hypericum elodes*.

I. K. FERGUSON

ALIEN HUNT ABOUT LONDON. 4TH-5TH OCTOBER

On October 4th thirty members of the B.S.B.I. and L.N.H.S. with the aid of a hired coach explored four refuse-tips in west Middlesex, and a very interesting selection of unusual aliens was seen.

Shepperton tip introduced us to a wide variety of typical bird-seed aliens including *Camelina sativa, Cannabis sativa, Carthamus tinctorius, Centaurea diluta, Chenopodium probstii* and *Setaria lutescens* (= *S. glauca). Cucumis melo, Cucurbita pepo, Kochia scoparia, Physalis peruviana* and *Sisymbrium loeselli* were also found, but bulldozers had unfortunately destroyed three grasses present the previous weekend: *Digitaria*

sanguinalis, Panicum capillare (both determined by C. E. Hubbard) and Sorghum halepense, the latter being unusually frequent this year. The fine Amaranthus plant that we saw was later determined by J. P. M. Brenan as one of the various manifestations of the hybrid A. hybridus \times retroflexus.

West Drayton tip provided two unusual grasses: Agrostis semiverticillata and Polypogon monspeliensis. Glycine max, Coriandrum sativum, Polygonum pensylvanicum and Trachyspermum ammi were new to many of us, but the rare alien Amaranthus standleyanus, was, alas, beneath tons of earth.

Harefield tip gave us two identification problems: Digitaria ciliaris (= D. adscendens; determined by C. E. Hubbard) and Polygonum cf senegalense. The pretty knotgrass, Polygonum arenarium (= P. pulchellum; determined at Kew as P. patulum) was also admired, but Londoners in our party scarcely glanced at the familiar Bromus carinatus. Citrullus lanatus (= C. vulgaris) was seen, but not in flower.

With time running out, we had a brief look at Newyears Green tip where we found *Abutilon theophrasti, Ambrosia artemisiifolia* (very young) and *Salvia reflexa*. The Chenopodiums included *C. opulifolium* and *C. ficifolium*.

Our final stop was in the City, opposite the Tower of London, where we searched out the flower-bed weeds: *Sisymbrium irio* in plenty and a colony of *Portulaca oleracea* were of particular interest. Both *Galinsoga ciliata* and *G. parviflora* were also present, but we had already seen these on tips earlier in the day.

On the Sunday the hunt continued, but in Surrey. The party, reduced to nineteen, explored Guildford tip where we collected *Amaranthus blitoides*, *Psoralea americana* and *Silphium perfoliatum*.

After lunch we visited the nearby Worplesdon tip to see *Amaranthus caudatus* and *Chenopodium glaucum*. A quick stop at a sandy nursery beside Smart's Heath, Mayford, confirmed the continued presence of plentiful *Digitaria ischaemum*.

A tip at Send was almost barren, apart from the surprising presence of one plant of *Xanthium strumarium*. Depauperate *Apera spica-venti* was also present.

Our final visit was to May's Green, near Effingham, where the garden escape Chrysanthemum uliginosum (= C. serotinum) was in full flower.

E. J. CLEMENT & T. B. RYVES

WALES

LONG MOUNTAIN, MONTGOMERYSHIRE. 15TH JUNE

Most of the day was spent exploring the steep wooded banks of the Rowley Brook which divides Shropshire from Montgomeryshire. The banks are of base-rich Silurian shale and harbour some very interesting species of which, perhaps, *Astrantia major* is the most notable. Its habitat alongside the road had suffered disturbance but the plant had not been destroyed and several plants were seen though not yet in flower. *Paris quadrifolia* was fairly plentiful amongst *Mercurialis perennis* and a large patch up to 9 ft across and hitherto unrecorded was found in another part of the wood. Two stands of *Lathraea squamaria* were seen, both parasitic on *Corylus; Chrysosplenium alternifolium* was frequent along the streamside, but *Cardamine impatiens*, previously found here, could not be located. The day ended with a visit to the magnificent stand of *Sequoia sempervirens* in Leighton Park.

Mrs D. M. PAISH

TOWYN BURROWS, GLAMORGAN. 5TH JULY

The party of fifteen members and guests followed a route through the Forestry Commission rides to the Observation towers and thence through fixed dunes and dune slacks to the estuary point.

In the rides, despite a regrettable increase in coarse grasses and scrub, good stands

of Ophioglossum vulgatum were seen on the ridges with Anagallis tenella in the ditches. Eleocharis quinqueflora was seen in a boggy cross ride while the open dunes produced Viola tricolor subsp. curtisii and Lathyrus sylvestris, the latter 6 ft high and just coming into flower. In the slacks Dactylorhiza fuchsii, D. incarnata (including subsp. coccinea), D. praetermissa and D. purpurella were plentiful. In addition there were occasional plants of Gymnadenia conopsea and Epipactis palustris was commencing flowering. By the upper Observation tower there was plenty of Anacamptis pyramidalis in the hollows with Centaurium littorale on the hummocks. Liparis loeselii was having a successful season and Sisyrhinchium bermudiana appears to be increasing.

Two members found time to look at *Linaria supina* on the nearby railway halt where it was found to be regenerating freely despite British Railways' efforts with a herbicide.

Mrs H. R. H. VAUGHAN

PEMBROKESHIRE. 16TH-17TH AUGUST

The meeting, a joint one with the West Wales Naturalists' Trust, was attended by eighteen members. The theme was moorland and bog vegetation. The first day was spent on Brynberian Moor, a gently undulating plain, dissected by small streams with associated bogs, beneath the northern flank of Preseli. The soil is a shallow layer of peat overlying boulder clay and, though acid, it is not uniformly base-deficient. Among the commoner bog plants seen were *Hypericum elodes*, *Pinguicula vulgaris*, *Wahlenbergia hederacea* and *Eleocharis multicaulis*. Locally abundant here but far from common in the county were *Drosera intermedia*, *Myrica gale* and *Rhynchospora alba* and beside the streams *Thelypteris limbosperma*. We also searched for and found *Pinguicula lusitanica*, *Hammarbya paludosa* and *Lycopodium inundatum*, the two latter in new sites as well as where previously known. *Galium uliginosum* was a new record for the 10 km square and the third for the county.

On August 17th we met at Ambleston Common which demonstrates that ungrazed wet moorland may become dominated by *Molinia caerulea*. Patches of *Achillea ptarmica* and *Serratula tinctoria* broke the monotony and several clumps of the hybrid *Juncus conglomeratus* × *effusus* were examined. A stream in Wallis Moor had *Rorippa* × *sterilis*, *Myriophyllum alterniflorum* and the aquatic form of *Juncus bulbosus sensu lato* with long trailing red stems. Tre-Rhos Common is part of an extensive moorland and is richer botanically than the other two areas, but it is at its best earlier in the season when orchids and sedges can be appreciated. *Hypericum undulatum* and *Cicendia filiformis* were new records here and *Drosera intermedia* was seen, but search for *Pinguicula lusitanica* where it was seen last year failed. The soil of these moors is much as on Brynberian where habitats for tiny plants are kept open by grazing of sheep and ponies.

T. A. W. DAVIS

CAMDDWR VALLEY, CARDIGANSHIRE. 30TH AUGUST

On this excursion four members visited the upper Camddwr valley now doomed to disappear under the Brianne Reservoir. They were led by Dr J. P. Savidge who has done considerable research in this area. The steep valley sides are mountain pasture (grazed by sheep and ponies) and largely dominated by *Molinia* but intersected by slightly more base-rich flushes.

Typical plants of the streams and flushes are *Pinguicula vulgaris*, *Carex demissa*, *Drosera rotundifolia*, *Thelypteris limbosperma* and, more locally, *Carex hostiana*, *Thelypteris phegopteris* and *Rhyncospora alba*. Here, very locally, in suitable open, wet and slightly sheltered habitats Dr Savidge has found *Selaginella selaginoides*, not recorded before south of Merioneth.

Mrs H. R. H. VAUGHAN

CORS GOCH, ANGLESEY. 28TH SEPTEMBER

Following the Annual General Meeting of the Welsh Region the previous day, Mr R. H. Roberts led 12 members to Cors Goch and nearby areas. Here we found a perfect illustration of the previous day's talks: habitats merging into each other and the association of species with usually specialised requirements. The many interesting plants seen included *Gentiana pneumonanthe*, *Gentianella amarella*, *Parnassia palustris*, *Viola lactea* and the hybrid *Equisetum* × *litorale*.

Mrs H. R. H. VAUGHAN

SCOTLAND

PEASE DEAN, BERWICKSHIRE. 8TH JUNE

Pease Dean was once a magnificent Sessile Oakwood but the upper two-thirds were felled and the area replanted with conifers—mainly Larix decidua—some decades ago. The lowest third was left and it is still magnificent. Betula pubescens, Corylus avellana, Ulmus glabra, Alnus glutinosa and Sorbus aucuparia also occur. It has quite a good woodland flora including Geranium sylvaticum, Ajuga reptans, Lysimachia nemorum and Corydalis claviculata. Equisetum telmateia and Marrubium vulgare occur at the mouth of the glen. In the adjacent arm, Tower Dean, there is a fine colony of Orchis mascula.

In the afternoon Dowlaw Dean was explored. The upper part is wooded and the trees have been felled in the lower (seaward) half. The almost perpendicular sides of this dean are covered in June with extensive patches of *Endymion non-scriptus*. Orchis mascula was also seen and there were many plants of Sedum rosea. 12 people attended. E. P. BEATTEE

BYRNE HILL. AYRSHIRE. 15TH JUNE

The main object of this meeting, which was attended by 19 members and friends, was to attempt to refind *Minuartia verna*, which was first discovered on Byne Hill in 1963. In this we were ultimately successful when late in the afternoon Miss E. Conacher discovered a few plants in full flower scattered over an area of about 1 m². A specimen has been deposited in the herbarium of the Botany Department, Glasgow University.

Most of the day was spent examining the flora of the serpentine grassland and boulders, and attempting to fill in some obvious gaps in the record card for the square. Among the more interesting plants seen were *Antennaria dioica*, *Carex dioica*, *Crypto-gramma crispa*, *Helianthemum chamaecistus*, *Helictotrichon pratense* and *Juniperus communis*. Altogether more than twenty new species were recorded for the square (GR.25/19).

H. A. MCALLISTER

THE SHINGLE BEDS OF THE TUMMEL AND TAY, PERTHSHIRE. 21ST-22ND JUNE

Two beautiful days were spent systematically botanising over the rich shingle beaches found between Meikleour on the Tay in the south and Aldclune on the Garry in the north. Only four members (including the leader) attended. Members of the Perthshire Society of Natural Science were present on both days. Lists for the 5 km square records were made at each of six sites visited. These were (Saturday) The Inch near Braecock, a site near Meikleour and another near Kercock, all on the Tay below Dunkeld; (Sunday) near Moulinearn and Ballinluig Island, both on the Tummel, and a site near Aldclune on the Garry.

The Tay shingles were gay with *Lupinus nootkatensis* in a remarkably wide range of colour forms. Not many new records were made but the following are of interest. *Alchemilla vestita* has not been recorded for shingle beds before and suggests that it may have been overlooked. *Tolmiea menziesii* appeared at almost every site on the

Tay and Tummel and clearly demonstrates its recent spread. *Poterium sanguisorba* at Aldclune probably represents the most northerly station for this species. Subsp. *majus* of *Thalictrum minus* occurred at two sites. The danger to these interesting sites was demonstrated at Meikleour where gravel-bed working with modern machinery destroys the natural colonisation patterns, and even when recolonisation takes place the unnatural redistribution of shingle into heaps will prevent for a long time the reappearance of these patterns based upon river movements. On all the sites visited grazing by domestic animals does not occur, but on sites where it exists it reduces considerably their ecological interest.

A. W. ROBSON

ISLE OF RAASAY, INVERNESS-SHIRE. 28TH JUNE-5TH JULY

The purpose of this meeting was to check records appearing in Heslop-Harrison's *Flora of Raasay* (1937) for inclusion in the proposed Flora of Skye. In the 30 years since, many botanists, single and in university groups, have visited Raasay, but little of their work has appeared in print or is in the Monks Wood files.

Our party of eight usually split up to cover more ground, and local transport was arranged, but not for the first day. On the Sunday we covered the area northwest of Inverarish village, as far as Holoman. *Arenaria balearica* was still on its wall, for about 100 yards alongside the road just beyond Raasay House. The short turf at Oskaig Point had *Coeloglossum viride, Gymnadenia conopsea*, and *Botrychium*, but the coast beyond to Holoman looked wet and bleak and the party divided, one group to confirm the acidity of the ground as far as Holoman Island, while the rest returned south, past a good patch of saltmarsh, with *Carex extensa*, *Aster tripolium*, *Puccinellia*, and *Blysmus*.

The following day the party divided near Brae, one group going on to Brochel while the others followed a nameless burn eastwards to Druim an Aonaich, and proved that the sharp bend indicated a gorge. This gorge was one of the best 'finds' of the week, as the list recorded there included *Pyrola secunda* (a rarity we had hoped to confirm), *Viburnum opulus*, not previously seen on Raasay, and *Dryas*, *Draba incana*, *Epipactis atrorubens*, *Thalictrum alpinum*, *Polystichum lonchitis*, and *Gymnocarpium dryopteris*. Meanwhile, the northern group had noticed a pool beside the Brochel road with a large patch of *Cladium mariscus*, and *Utricularia minor* and *U. intermedia*, both in flower. Below the Castle, *Inula helenium* still grew, not yet full-size or in flower. Arnish and Torran turned out to contain more woodland than anywhere apart from Raasay House—mainly birch and hazel, with *Hymenophyllum wilsonii* on the mossy boulders. With the assistance of Mr Malcolm Macleod we located *Lythrum salicaria*—difficult to find when only 4 in. high!

On Tuesday, in low cloud and drizzle, we started from Fearns, and followed the old track to Rudha na'Leac and Hallaig. Our Swiss botanist collected *Neottia* from a birchwood just above the road, and wondered why everyone else got so excited—it is not so rare in Switzerland! The cliffs higher up were covered in *Dryas, Saxifraga* spp. and *Silene* spp., with *Polygonum viviparum*, but they had to be abandoned in thickening mist, as this area is deeply fissured and dangerous. At Rudha na'Leac, *Sorbus rupicola* hadn't grown much in 30 years, and several smaller specimens were seen on the cliffs behind. We failed to find *Asplenium septentrionale* near Hallaig waterfall, but did better on boulder scree below Loch a'Chadhacharnaich, where *Orobanche alba, Draba incana, Arabis hirsuta* and *Listera ovata* were among those recorded. The loch was disappointing, apart from *Potamogeton filiformis*, and one group climbed higher to follow the cliffs (more *Dryas* etc.), while the others took the moorland path below.

The next day was fine enough for crossing to Scalpay. Landing at Camus na Geadaig, we followed the eastern arm of the burn but it was not very exciting apart from *Listera* cordata in quantity and our only record during the week for Carex laevigata. At Loch an Leoid, Carex limosa and C. pauciflora were found on the moor. Three parties

then explored in different directions. At Loch a'Mhuilinn Nuphar lutea (not N. pumila) and Typha angustifolia (not T. latifolia) were still present although both looked planted. Thalictrum alpinum was seen at Sithean Glac an Ime, while in the gorge of the Allt Liath below the waterfall Osmunda, Viburnum opulus, Ilex and Prunus padus were found. Further east, a large patch of Lycopodium annotinum was found in scrub, and a second patch was seen by the group returning down the western arm of the Allt Camus na Geadaig.

On Thursday we again started from Brae. The 'limestone' party followed the burn west of the road and found themselves in what must be Heslop-Harrison's 'Leek gorge'. This was so interesting that they never reached the coast as planned, the highlights in the long list recorded being *Pyrola minor* and *P. secunda* (both in flower), discovered by coming face to face with them among heather and bracken, on climbing out of the gorge.

The "Duncaan" party reached the top with little to record but more *Carex limosa* and *C. pauciflora* around the lochans on the way. *Lycopodium alpinum* and *Salix herbacea* appeared on the last slope below the flat summit, but a careful search on ground to the northwest failed to produce any *Tofieldia*. *Thalictrum alpinum* occurred beside Loch Meall Daimh, and all down the burn running out of Loch na Meilich to about 700 ft.

For our last day the majority vote was for Fearns again. There we separated; one group went to Point of Eyre and back by the woodland above the shore, which was mainly birch and hazel, with *Alnus*, *Fraxinus*, *Quercus petraea*, *Salix atrocinerea*, and *Populus tremula*. Another looked at woodland between North Fearns and the shore, which had scattered plants of *Agrimonia*, *Geum urbanum*, and *Rumex sanguineus* along the edge, with quantities of *Stellaria holostea*. The last group went to test a memory of finding *Hymenophyllum tunbrigense* in fissures above Fearns on a visit 20 years before, and returned in triumph with a specimen—a new Raasay record!

Of the records made during this meeting, seven appear to be new to Raasay, the most interesting being *Neottia nidus-avis*, which is also new to v.c. 104. There were 30 new 10 km square additions, while 36 earlier records, which do not appear in the *Atlas*, many of them ferns, were confirmed. We failed to find *Galium boreale*, *Saxifraga oppositifolia*, *Trollius* and *Rosa pimpinellifolia* on Raasay, all of which are plentiful on Skye, but the latter was seen on Scalpay.

Mrs C. W. MURRAY

BRAES OF BALQUHIDDER, PERTHSHIRE. 12TH JULY

This was a joint meeting with the Andersonian Naturalists of Glasgow and the Botanical Section of the Perthshire Society of Natural Science. A party of 13, consisting almost entirely of members of these two societies, assembled at Balquhidder village before proceeding to the west end of Loch Doine where the cars were left. Glen Carnaig was then ascended towards Stob Coire an Lochain with the intention of examining some exposures of good rock reported to be in that area. However, in the face of rapidly deteriorating weather with poor visibility this plan was abandoned at about 2,500 ft and the descent was made by the same route. Only the commoner mountain plants were seen, perhaps the most noteworthy being *Salix phylicifolia*, a few bushes of which were noted on the banks of the Allt Carnaig.

Species lists were compiled for two 5 kilometre squares to assist the P.S.N.S. recording scheme for flowering plants.

A. Mc.G. Stirling

SHETLAND. 1ST-8TH AUGUST

Seven people attended this meeting which was the second to be held in Shetland (the first was in 1960) and, as then, the object was to assist the leader and Mr Palmer in the compilation of their new Flora of Shetland. The weather was perfect, a fresh

breeze and blue skies every day and not a drop of rain during the entire week. Our headquarters was at Lerwick, and transport was by hired minibus.

On our first day we looked for *Rhinanthus serotinus* subsp. *apterus* in an old station, Ringasta, near the southern tip of Mainland, but without success. The rest of the day was occupied in exploring the large stretches of sandy pasture behind the Bay of Quendale. This produced *Carex maritima* and *Gentianella amarella* subsp. *septentrionalis* but there was no sign of Sea Holly on the shore where it was last seen well over 80 years ago. *Catabrosa aquatica* and much naturalised Spearmint grew by the burn from the Loch of Hillwell, while the very rare (for Shetland) *Silene alba* subsp. *alba* was seen in small quantity bordering a sandy oatfield south of the loch. Back in Lerwick the sharp-eyed Miss Webster added two new names to the local list by finding *Sisymbrium officinale* on the Rubbish Dump and a great quantity of naturalised *Lotus pedunculatus* in a field near the Loch of Clickimin.

The highest land in Shetland, Ronas Hill, 1,486 ft, in the north of Mainland was the target on the second day. On the way a stop was made at Mavis Grind to see some of the hawkweeds on the high rocks of Cliva Hill. The endemic *H. hethlandiae* was in full flower and a mile north another endemic, *H. praethulense*, grew in a cleft of granite rock. Also noted were *H. orimeles* and *H. sparsifolium*, the latter with purple-blotched leaves, its usual Shetland form.

A stop at Heylor enabled us to admire the miles of red granite cliffs and crags on the north side of Ronas Voe. This is one of the most scenic spots in the whole county and home of half the Shetland hawkweeds. The rounded, stone-strewn and extremely exposed summit of the hill provides the only real alpine flora in Shetland. Here *Loiseleuria procumbens, Alchemilla alpina, Vaccinium uliginosum, Juncus trifidus, Luzula spicata, Salix herbacea* and *Diphasium alpinum* were seen. *Saussurea alpina,* usually represented by a few flowerless rosettes, stubbornly refused to put in an appearance.

On the Sunday the party was back at the south end again, this time searching for *Eleocharis acicularis*, which Druce dredged from the Loch of Spiggie in 1924. Mr Dupree and the leader obtained a boat and spent some time dredging the shallow sandy north end of the loch. Little was brought up, apart from the masses of stonewort and *Potamogeton filiformis*. It was then decided to examine the entire margin of the loch. Before long Miss Webster found a few minute flowering plants of *Eleocharis* on damp sand near Littleness, on the west side. There is only one other known Shetland station for this plant, the nearby Loch of Brow, also one of Druce's records. The two boatmen somewhat redeemed themselves by finding *Stellaria graminea* on the edge of a cornfield above the east side of the Loch of Spiggie, a new station for this scarce introduction. A single small bush of spreading-leaved Juniper was found by Miss Webster on a heathery roadside bank above the south end of the loch; the normal Shetland plant is the prostrate appressed-leaved subsp. *nana*. At Easter Quarff we admired the fine colony of *Mertensia maritima* on the beach and the beautiful copperyorange hybrid *Mimulus cupreus × guttatus* by a nearby stream.

A long run to the extreme west of Shetland's main island, to a delightful place called Sandness, started the fourth day of the meeting. We stopped en route to see the endemic *Hieracium pugsleyi* on the steep grassy banks of the Burn of Weisdale. At Sandness the party divided, two members worked the immediate vicinity while the rest walked round the rock-bound coastline eastwards to West Burrafirth. The rocky meadows and heathy pastures about Sandness were dotted with *Hieracium attenuatifolium*, *H. vinicaule* (these two endemic), *H. caledonicum* and *H. scoticum*. The beautiful *Parnassia palustris* grew by a tiny loch and *Asplenium trichomanes*, a Shetland rarity, hid its fronds in the crevice of a rock. Native shrubs of any kind are scarce in the islands but on rocks above the Bay of Brenwell the party saw stunted specimens of *Populus tremula*, *Sorbus aucuparia* and *Lonicera periclymenum*, with *Rosa canina* on the sea-cliffs nearby. Two more endemic hawkweeds were seen: *H. dilectum* and *H. zetlandicum*. Hymenophyllum wilsonii was abundant among *Sphagnum* on the

damp east-facing hill-slopes. A loch near Burraview was full of the scarce *Phragmites* australis. The last plant of an exciting day was the recently-discovered taxon *Pilosella flagellaris* subsp. *bicapitata* in dry rocky heathy pasture at West Burrafirth.

On the Tuesday the party travelled north by bus and ferry to the sands of Burra Firth, in the north of Unst. We looked for *Polygonum oxyspermum* subsp. *raii* collected here, its only Shetland station, in 1868 but it soon became apparent that it had suffered the same fate as the narrow-leaved form of Sea Pea which used to grow here. The hawkweeds *H. australius*, *H. gratum* (both endemic) and *H. sparsifolium* were seen at the north end of the Loch of Cliff. Near Baltasound we examined the unique serpentine habitat and its interesting plants *Arenaria norvegica* subsp. *norvegica* and *the* plant of Shetland *Cerastium arcticum* subsp. *edmondstonii*. It was disturbing to see that a large area where the *Cerastium* used to grow had been re-seeded.

On the following day, as also by a strange coincidence in 1960, Lerwick was preparing for a Royal visit. Unlike the 1960 party we decided that plants definitely came first and, leaving the flags and the crowds behind, we made our way to a remote spot on the east side of Mainland. In glorious sunshine half the party worked the Lunna Ness peninsula, the remainder walked the coastline from Lunning to Vidlin. At Lunning Head Lonicera periclymenum was noticed and at Lunning itself the large glossy-leaved Senecio smithii. On rocks west of this tiny hamlet Hieracium gothicoides was making a fine show. In the Lunna Ness area the best find was Gymnocarpium dryopteris among rocks south of Stour Hevda.

The last but one day of the meeting found the party in the Walls area, on the west side. The leader visited a dozen small islands in the Walls harbour area but nothing exciting was found. *Puccinellia capillaris* grew in many places and a fine show of *Ligusticum scoticum* was seen on a small grassy island near the head of the voe at Walls. The rest of the party examined the Lochs of Bardister and Kirkigarth, finding *Potamogeton rutilus, Subularia aquatica, Ranunculus trichophyllus* subsp. *trichophyllus, Eleogiton fluitans* and *Zannichellia palustris.*

The party spent the last day at the south end with excellent results. *Potamogeton* $\times zizii$, new to Shetland, was found in the Loch of Hillwell by Mr Palmer. One of its parents, *P. gramineus*, is common in Shetland but the other, *P. lucens*, has no reliable record. This loch also supports *Myriophyllum spicatum*, which is known from nowhere else in Shetland. So ended a memorable week both as far as plants and weather was concerned.

W. SCOTT

HANDA ISLAND AND DURNESS, SUTHERLAND. 2ND-3RD AUGUST

Five people attended this weekend meeting in West Sutherland (v.c. 108).

A crossing of Handa Sound and a day botanising on the island were blessed with fair weather. A landing was made on a sandy shore in the southeast of Handa and the first habitats examined were the complex of sand-dunes, cliffs and stacks in this corner of the island. A thorough search was made for the hybrid grass *Ammocalamagrostis baltica* in its only Scottish locality, where it was first seen in 1937, but with no success. A striking feature of the vegetation of these cliffs is the vigorous growth of some species. This is particularly noticeable with *Succisa pratensis*, which bears foliage of great luxuriance when compared with plants in moorland sites. *Botrychium lunaria* (a new species for the Handa list) was found in short turf on the way from the beach to one of the freshwater lochans in the centre of the island. This particular lochan supported a fine display of *Nymphaea alba* in full bloom. *Isoetes lacustris* was seen later in the day in another lochan. A rather rushed return for the boat to the mainland gave little opportunity to look in detail at the machair and dunes of the south coast but we were fortunate in seeing *Catabrosa aquatica* growing in some wet sand.

Instead of visiting the cliffs near Durness on the following day, it was felt that an excursion to a less known area would be more rewarding. Consequently, the party went to Sandwood Bay. Areas of sandy pasture, dunes, small burns and cliffs were

examined; the cliffs were particularly rich in species. A wet area behind the dunes, near Sandwood Loch, supported a fine stand of *Juncus balticus*, while areas of calcareous sand at the northern end of the bay were covered with extensive carpets of *Dryas octopetala*. It was particularly interesting to find this species acting as a stabilising plant of a sandy substrate.

Some members of the party visited the coast near Sheigra during the afternoon; cushions of *Silene acaulis* and a small colony of *Scilla verna* were seen here. Finally, a flying visit to Durness produced plenty of *Primula scotica*, with a few plants still in flower, as well as fruiting specimens of *Dryas octopetala* and *Epipactis atrorubens*. B. S. BROOKES

SKINFLATS, STIRLINGSHIRE. 31ST AUGUST

At Skinflats there is no beach, only mudflats and saltmarsh. We spent the morning investigating the saltmarsh and some inland ponds. Aster tripolium is the dominant plant. Its associates were Plantago maritima, Triglochin maritima, Spergularia marina, Festuca rubra, Glaux maritima, Atriplex hastata, Suaeda maritima and Salicornia in the mudflats. Inland a little, in another saltmarsh, Aster tripolium was again the dominant species but here Puccinellia distans and Ranunculus sceleratus occurred in some abundance. Several fine stands of Calamagrostis epigejos were seen in the area.

The afternoon was spent exploring the extensive area of wasteground at Grangemouth Docks. At the mouth of the River Carron there is a small strip of saltmarsh and here *Aster tripolium*, *Triglochin maritima*, *Plantago maritima*, *Juncus gerardii* and *Cochlearia officinalis* were seen; thus if the Skinflats saltmarshes are drained Stirlingshire will still have a few saltmarsh plants. In one lagoon which had been drained there were rafts of *Salicornia dolichostachya* and in another a grove of *Atriplex littoralis*. Perhaps the best introductions seen were *Chenopodium rubrum*, *Pastinaca sativa*, *Saponaria officinalis*, *Senecio squalidus* (1 plant) and a magnificent patch of *Coronilla varia*. There were also some magnificent stands of *Calamagrostis epigejos*. 12 people attended.

E. P. BEATTIE

ISLE OF TIREE, 1968-A CORRECTION

In the report for the field meeting, Isle of Tiree. 3rd-10th July (1969, *Proc. bot. Soc. Br. Isl.*, 7: 636–637), a portion of the penultimate paragraph was unfortunately omitted. The paragraph should read as follows with an asterisk denoting a species believed to be new to v.c. 103 and a dagger one believed to be new to Tiree.

On July 8th we decided to return to the base-rich Balephetrish area (17/04), where a number of shallow lochs (Loch Riaghain, Cnu Lochanan, etc.) gave us *Hammarbya paludosa*[†], *Juncus balticus*, *Potamogeton coloratus*, *P.* × *nitens* and *P.* × *sparganifolius*^{*}. Crossing into 07/94 we added to our card *Potamogeton perfoliatus* and *P. pectinatus* in Loch a' Phuill, also *Lysimachia nummularifolium*, *Potamogeton filiformis*, *P.* × *nitens* and *P. rutilus*^{*} at Loch an Eilein. Our last day (July 9th) was given up to the Reef, an area of machair partly occupied by an airfield. *Anacamptis pyramidalis* and *Draba incana* were found in very small quantity. Disappointed by the machair, we returned to Loch a' Phuill (07/94), where the *Potamogeton* enthusiast refound Heslop-Harrison's *Potamogeton* × *suecicus*, while the rest of the party got *Gnaphalium uliginosum*[†] and *Platanthera bifolia*[†].

Editor